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AN ANALYSIS OF A MUNICIPAL BOND BANK  
FOR MONTANA AND ITS IMPACT  
IN LEWIS AND CLARK COUNTY

BY

Eugene F. Huntington

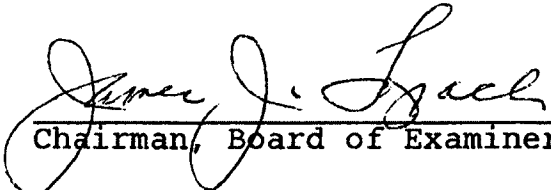
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## INTRODUCTION

National economic policies directed at stemming inflation drove interest rates to record levels in 1980 and 1981. The high interest rates not only affected consumers but also state and local governments. State and local governments were forced to drop plans for capital improvements or to assume long term debt at interest rates more than double the rates paid a few years earlier. The higher costs of public debt arrived just as the pressures for capital expenditures were increasing. Federal deadlines for improved water quality drew nearer, requiring upgraded water treatment and sewage facilities. Federal revenues that have in the past funded local public works were slated for reductions under the Reagan administration budget. Reductions in federal funding and a lack of any significant sharing of state revenues made the assumption of increased debt payments increasingly difficult for local governments in Montana.

State and local governments have traditionally financed major capital improvements by issuing tax exempt bonds. The interest rates paid by local governments to bond holders have skyrocketed in the last five years from around four percent to current rates of nearly ten percent.

The Forty-Seventh Legislature, meeting in 1981, considered three pieces of legislation that were aimed at easing local government credit problems. The legislature quickly approved a bill removing the interest limits on bonds issued by units of local government. The statutory limits had effectively brought the issuing of bonds to a halt in the year prior to the legislature as bond interest rates soared beyond the maximum interest rates envisioned by prior legislative sessions.

Legislative consideration of the other two measures dealing with municipal bonds was not as favorable as elimination of the interest ceilings. Both of the other bills would have established state operated programs to consolidate the marketing of municipal bonds, or as these programs are termed a state bond bank. Both pieces of bond bank legislation met an early demise in the Senate where they were introduced. The fate of the bond bank proposals provides a basis for this paper. The brief testimony offered at the Taxation Committee hearing on the bond bank proposals provided a direct conflict between the claims of the sponsors that a bond bank would save local governments money,

and the opponents' testimony that a bond bank would increase the costs of issuing municipal bonds.

In an effort to determine if a bond bank would potentially aid local governments, this paper will examine the case of a single county faced with a need for several bond issues. The purpose of this case study is to project the impact a bond bank might have in a local jurisdiction. The case study provides some conclusions as to the significance of local government savings to be realized from a state operated bond bank.

## CHAPTER I

### THE BOND BANK CONCEPT

#### State Credit Assistance Programs

The concept of state assistance to local governments in need of credit is not new. Canadian provinces developed general purpose bond banks as early as 1956 and Virginia developed the Virginia Public School Authority in the 1960s.<sup>1</sup> Bond banks are by no means the only types of state aid to improve local government credit. A report from the First Boston Corporation reviews the types of programs to promote and expedite financing of local capital projects and to lower the effective costs of borrowing. The report notes the three general types of credit assistance used by states:

1. State Guarantees--States assume a contingent liability for local debt obligations by promising to supplement or replace local resources as may be required to meet debt service payments.
2. State Financial Intermediation--States act as financial intermediaries in that debt is issued by

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<sup>1</sup>Ronald W. Forbes and Edward F. Renshaw, "State Bond Banks", Municipal Finance Officers Association Special Bulletin (September, 1972):1.



the state, a state agency, or state authority and the proceeds are loaned to municipalities. Local resources alone provide for final debt repayment. Although guarantee and intermediary programs can exist separately, there are numerous examples where state financial intermediation is accompanied by state guarantees or other forms of assistance.

3. Debt Subsidy Grants--States may also bolster local resources by earmarking annual state aid payments or grants to localities for all or part of local debt service requirements.<sup>1</sup>

Under a state guarantee program, the state acts much like a cosigner on a commercial loan. The state promises that, if for some reason the local government unit cannot meet its obligations to the bond holder, the state will make the payment. The strength of the state's commitment varies from a pledge of full faith and credit for some programs to pledges to only make up a portion of any local shortfall. State guarantee programs tend to be directed at specific types of local government projects such as school or sewage plants. The state does not get involved in the marketing of local bonds under guarantee programs.

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<sup>1</sup>Ronald W. Forbes and John E. Peterson, State Credit Assistance to Local Government (New York: First Boston Corporation, 1978) p.3.

The bond bank proposals fall under the general type of assistance termed state financial intermediation. Bond banks in some form exist in the following states: Maine, Vermont, Virginia, Alaska, North Dakota and Puerto Rico. All of these programs share a general concept of a state agency selling bonds and lending the proceeds of the bond sale to local governments. Local governments in turn use the loan to make the capital improvements and their payments on the loan are used by the state to pay the bondholders.

The procedures for passing the state aid to local agencies and the types of local agencies that can receive aid vary a great deal. The most important variation in bond banks is the amount of state credit offered, or level of commitment, that is made in the process. If the state promises to pay the bondholders unconditionally in the event of a local default, the rating of the bonds go up and local government costs go down. If the state makes very little commitment to pay in the case of a local default, the savings to local governments are reduced.

Most debt subsidy programs have been directed at school construction. The New Jersey Qualified Bond Program provides for units of local government as well as schools.

Debt subsidy programs are possible in states that have programs to provide direct financial aid to local governments such as state revenue sharing programs. Under debt

subsidy programs, the local agency sells bonds and pledges a portion of the financial aid that would normally be forthcoming from the state to cover annual payments of principal and interest. Through subsidy programs, the debt may become an obligation of the state, thus lowering interest rates because of the state's superior credit rating. In other local subsidy programs, the state aid pledge serves as a backup to the local pledge, thus improving the bondholders security and the local agency's credit rating. Debt subsidy programs do not attempt to aid the local governments in marketing bonds beyond providing technical assistance directed at improving credit ratings.

#### How The Bond Bank Works

The bond bank concept seeks to lower local government credit costs in three ways: 1) marketing costs are reduced by selling several small bond issues together as one large issue, 2) risks of bond holders are spread among several units of local governments and, 3) the state's superior credit rating is substituted for local ratings.

The greatest variation among general-purpose state bond banks is the strength of the state commitment to pay in case of a local government defaulting. The spectrum of state commitments range from some states where the bond bank serves mainly as a clearinghouse to package many small bond issues into a large issue -- to states that back the bonds with the full faith and credit of the state in the event of

a default.

Much has been written about the Maine Bond Bank; and, for purposes of describing how a bond bank operates, the process used in Maine will be described. The Maine Bond Bank is typical of state bond banks and similar in structure to the proposals made to the 1981 Legislature.

The bond bank is an autonomous instrumentality of the State of Maine and does not receive a state appropriation. The bond bank is governed by a five member board of directors that function much as the directors of a commercial bank.

The bank was begun with a small loan from the general fund and now operates from the interest earnings of its reserve account. The reserve account is generally established by selling additional bonds and placing the proceeds in a reserve account that provides the initial security against a default. Reserve accounts are generally required for all bond issues. The minimum balance of the reserve account is generally equal to the highest annual payment of principal and interest. If the bonds were issued by local governments, the local governments would be required to maintain reserve accounts. The bond bank, however, maintains the reserve account for all its municipal borrowers.

The first step in the process of acquiring capital for local governments is for the bond bank staff to assist units of local government in developing the local bond issue. The

bond bank does not relieve local governments of any statutory prerequisites for selling bonds. Local units of government must still have a local referendum approved and obtain an opinion from a qualified bond counsel. After the local government has properly packaged its bond issue and received voter approval, an application can be made to the state bond bank. If the bond bank directors approve the local application, an agreement is drawn up between the local government and the bond bank specifying the maximum rate of interest that the municipality will pay. If the local government needs to proceed immediately with construction, the local unit may sell bond anticipation notes to the state bond bank.

The Maine Bond Bank makes no attempt to market its securities until at least \$6 million in local bond applications have been approved. When the bank has gathered \$6 million (and preferably \$10 million) in local bond requests, it will issue state bonds. The bond bank will sell state bonds in an amount to cover the total of local bond issues plus extra bonds to provide a reserve fund for the bond issue. The state bonds can then be rated and sold either through negotiations with underwriters or through a bid process. On the same day that the bond bank receives a check for its bond issue from private investors, it issues checks to units of local government honoring their loan requests and the final interest rate is entered in the

agreement between the bank and the local government.<sup>1</sup>

After the locality has received its funds from the bond bank, the locality is responsible for meeting its semiannual principal and interest payments. The principal and interest payments are made to the state bond bank in accordance with the loan agreement. The bond bank, in turn, consolidates all of the local governments payments into a single annual payment to the investors who have purchased the bond bank's bonds.

In the event of a default by a local government, the state bond bank would first fall back on a contingency fund generated from interest earnings on the reserve account. The contingency fund is only designed for temporary replacement of local payments. A longer term or permanent default would then fall upon the reserve fund.

If defaults were to threaten the requirements of the reserve fund, the bond bank could ask the governor for an emergency appropriation of state funds to replenish the reserve account, or the bond bank could begin a legal action to collect the payments from the delinquent locality.

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<sup>1</sup>Jimmy E. Hicks and James E. Garrett, The Bond Bank Innovation: Maine's Experience, (Lexington, Kentucky: Council of State Governments [1977[]), p.9-11.

## CHAPTER II

### MONTANA'S BOND BANK PROPOSALS

#### The Forty-Seventh Legislature

Bond bank bills introduced in the Forty-Seventh Legislature would have created bond banks similar to the bond bank described in the previous chapter. As in the case of Maine, neither of the two bills would have pledged Montana's full faith and credit to the obligations of the municipal bond bank. As with the Maine example, the legislature would only pledge a "moral obligation" to repay the debt from the bonds. A pledge of full faith and credit would have required a vote of two-thirds of the legislature in order to comply with the debt provisions of Montana's constitution. A separate authority was not proposed by either piece of legislation, which, if enacted, would have been administered by existing state agencies.

Senator Tom Towe was the prime sponsor of Senate Bill 476, which would have authorized a Montana Municipal Bond Bank to purchase bonds from all political subdivisions of the state. The bond bank was to be empowered to issue bonds and notes payable from the funds received from loans to local government units and interest earnings on the reserve

account. Senate Bill 476 had a unique additional feature that would have allowed the state Board of Investments to purchase the bonds of the bond bank. This feature would appear to not provide any advantage to the Board of Investments in that the bond bank bonds would have been tax exempt and yield much lower earnings than the commercial securities in which the board currently invests. Senate Bill 476 was eventually approved by the Senate Taxation Committee after amendments removed all political subdivisions except municipalities from the bill. The amendments, however, provided only a short reprieve before the bill was indefinitely postponed for further consideration on the Senate floor.

Senate Bill 423, introduced by Senator Harold Dover, provided for a bond bank to be administered by the State Board of Investments. Senate Bill 423 was tabled by the Senate Taxation Committee and received no further consideration in the 1981 legislature.

Senator Dover's bill had three features that made the bill different from the traditional bond bank approach followed by Senator Towe. The most significant difference was that Dover's bill would have limited assistance to bond issues under \$100,000. The limit of \$100,000 would have nearly eliminated any chance of the bond bank reducing local government bond marketing costs. The issues of the state bond bank would have been so small with the \$100,000 limit that the state could not have marketed the bonds at a



significantly lower cost than the local government could have marketed their own bonds. The bond bank would have to collect over sixty local issues in order to approach the \$6 million minimum bond issue described for the Maine Bond Bank.

In opposing the bond bank legislation, Bruce Mackenzie of D. A. Davidson and Company presented a list of small Montana issues underwritten by his firm in recent years. This list is attached as Appendix A. A review of the D. A. Davidson list of recent issues indicates that only ten of seventy-three issues were in amounts under \$100,000.

A second feature of the Dover bill would have allowed the state to pledge future state aid to the municipality as security for the bond. Under this provision, if a municipality did not meet its bond payment, the state could make the bond payment by deducting the amount needed from some unspecified state aid payment to the municipality. This feature of the bill would have worked much the same way as debt subsidy programs described earlier in this paper.

A final feature of the Dover bill was that only municipalities would be allowed to use the bond bank. This feature, coupled with the \$100,000 limit, would have left the bond bank with a very small market. Of the recent seventy-three issues underwritten by D. A. Davidson and Company, only three were municipal issues of less than \$100,000.

Opponent and Proponent Arguments

Proponents of Senator Towe's Senate Bill 476 generally cited the success of other states and, in particular, the State of Maine in reducing the costs of local bond issues. Senator Dover, in proposing Senate Bill 423, was much more guarded in explaining a bond bank's potential benefits. The minutes of the Senate Taxation Committee summarize Dover's testimony as follows: "The purpose is to save paperwork and possibly interest payments to small entities for small amounts."<sup>1</sup>

The only opponent to the bond bank proposals was Bruce Mackenzie of D. A. Davidson and Company, an investment firm that provides underwriting for a substantial share of the municipal bonds issued in Montana. In representing D. A. Davidson and Company, Mackenzie offered the following arguments against the bond bank:

1. At the present time, issuing entities within Montana are being provided low interest rate money by various bond dealers. Montana had the third lowest average net interest cost of all fifty states and was well below the five states with bond banks. D. A. Davidson rates are in many

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<sup>1</sup>Hearings before the Senate Committee on Taxation on Senate Bill 423, Forty-Seventh Montana Legislature, February 20, 1981.

cases, equal to and often below what A-rated bonds sell for on the national market, even though many of these issues would not be A-rated.

2. Operating expenses of the bank must be passed on to the local communities.
3. Because of the low number of small projects issued in the state, it could take a substantial amount of time to collect sufficient issues before the bank could issue the bonds.
4. Since the bank would, in effect, be packaging all Montana's small issues into one large issue, the bank would favor the larger eastern bond firms and not regional firms that have serviced the area for a number of years.<sup>1</sup>

The arguments for and against a state bond bank may be classified under four issues for purposes of discussion. The four issues as laid out by the bond bank opponent are:

1. Will the bond bank save local governments any money?
2. Will the bond bank's operational costs be passed on to local governments?
3. Does Montana sell enough bonds to make a bond bank feasible?

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<sup>1</sup>Ibid.

4. By packaging bonds into bigger sales, would local investors be eliminated?

Local Government Savings

Proponents claiming the potential savings of bond banks often cite the experience of Maine as set out in a Council of State Governments Report. The report stated that, in its initial four issues, the bond bank is estimated to have saved municipalities over \$1,400,000 in interest costs, or approximately 3.5 percent of the \$41 million aggregate value of the four issues.<sup>1</sup> Another report reviewing the experience of Maine and Vermont concluded that savings as a percent of the issue size averaged 4.4 percent in Maine and 3.8 percent in Vermont.<sup>2</sup>

Is there a need for a bond bank if D. A. Davidson and Company can sell bonds below national rates? The testimony presented by the underwriting firm (attached as Appendix A and Appendix B)<sup>3</sup> indicates that, in all but ten of seventy-three issues underwritten since 1975, D. A. Davidson and

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<sup>1</sup>Hicks and Jarrett, The Bond Bank Experience, 19.

<sup>2</sup>Martin T. Katzman, "Measuring the Benefits of Municipal Bond Banks", (paper, Harvard University, 1976) p.10.

<sup>3</sup>Senate Committee on Taxation, February 20, 1981.

Company sold at interest rates below the Bond Buyer Index.<sup>1</sup> D. A. Davidson provided further testimony that Montana had the third lowest average net interest cost of all fifty states and was well below the five states with bond banks (Appendix B).<sup>2</sup> The testimony of D. A. Davidson would seem to suggest that the investment firm is more interested in the costs to local government than in the investors who come to their firm to purchase tax exempt securities. Why would an investment firm sell its investors securities that yield less earnings than securities are yielding on a national average?

A further question might be: Why are D. A. Davidson and Company's investors willing to accept lower earnings from securities that involve greater investment risk? The majority of the issues underwritten by D. A. Davidson and Company are either unrated issues or from local government units that have not been rated. The Bond Buyer Index is made up of rated bonds that have received one of Moody's top four credit designations.

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<sup>1</sup>The Bond Buyer Twenty Bond Index (BBI) is the arithmetical average yield of twenty selected state and city bonds. Each bond is rated within Moody's top four credit ratings. The average rating for the Bond Buyer Twenty Bond Index falls midway between Moody's Aa and A rating classifications.

<sup>1</sup>Bruce A. Mackenzie, letter from D. A. Davidson and Company to Senate Taxation Committee, Helena, February 17, 1981.

A likely explanation for the low interest rates for bond issues underwritten by D. A. Davidson and Company is the special tax treatment given to bond interest earnings of the State of Montana and its political subdivisions. Montana tax laws allow earnings from Montana tax exempt bonds to be deducted from the calculation of adjusted gross income for purposes of determination of individual income tax.<sup>1</sup> Earnings from local tax exempt bonds are also exempt from state taxes in twenty-six other states.<sup>2</sup> The effect of this treatment of income from tax exempt bonds is to make the interest rates on bonds bought and sold in Montana not comparable with national indices of interest rates.

To illustrate why bond issues bought and sold in Montana cannot be compared with national interest rates, it is necessary to look beyond the coupon rate, or the interest rate stated on the bond, to the earnings of the bond when compared to a taxable security. For example, a person in the thirty percent tax bracket would receive the same after federal taxes earning on a taxable security paying ten percent that he would receive on a tax exempt security

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<sup>1</sup>Montana Codes Annotated, Section 15-30-111(a).

<sup>2</sup>Commerce Clearinghouse, Inc., State Tax Guide, Chicago, 1980.

paying seven percent.<sup>1</sup> If the person in the example paid taxes in Montana and the tax exempt security was issued in Montana, the earnings of the bond would also be exempt from state taxes. If the bond were then compared to a security taxed by both state and federal governments, the taxable security would have to pay ten and seven-tenths percent interest to yield the same after tax earnings as the tax exempt security.

States that grant tax exemption to the bonds of political subdivisions are already providing aid to local governments, to the extent that local bonds are marketed and held within the state. The revenue lost by the state granting tax exemption to local bonds is the local units' gain in terms of lower interest rates on their bonds that are locally marketed. To the extent that D. A. Davidson and Company can establish that they can underwrite bond issues with lower interest rates than national indices, it must be noted that the national indices may not be indicative of the interest rates that would be obtained by a bond bank.

The issue of in-state marketing being more economical than out-of-state marketing does raise a point that merits some discussion. An argument often made by bond bank proponents is that more favorable interest rates can be

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<sup>3</sup>Peter N. Goldsmith, Investments for a Changing Economy, (New York: Merrill, Lynch, Pierce, Fenner, and Smith, Inc., August/September, 1980) p.15.

obtained by marketing the bonds in larger issues, rather than in several small issues. If a bond bank were to gather several small, local issues into a large issue, it would probably reduce the potential for marketing the bonds in Montana because Montana lacks large financial and banking centers, and finding investors interested in large issues might be difficult. A bond bank would need to determine if it would be more economical to sell bonds through large issues to out-of-state investors, or through smaller sales to local investors who could take advantage of state tax breaks.

The rates presented by D. A. Davidson may have indicated how well their firm compares to the rest of the nation in terms of municipal bonds, but does not indicate how their bonds would compare to bonds issued by the state of Montana. The interest rates indicated by the Bond Buyer Index include city as well as state bonds. The interest rates on state bonds are generally lower than the rates on local government bonds. . . When compared to state bond yields -- as reflected by Moody's Index of ten year state bonds -- the D. A. Davidson rates are not as favorable. The comparison for the most recent three years indicates that, on an average, the Moody's average rate for state bonds rated Aa was .585



percent lower than the D. A. Davidson rates.<sup>1</sup>

#### Operational Costs

The second objection raised by bond bank opponents was that the costs of operating a bond bank would be passed on to local governments. D. A. Davidson and Company estimated that the bond bank would cost \$154,693 each year to operate, and that these costs would be passed along to local governments who used the bond bank.<sup>2</sup> The estimate of the bond bank's operational cost came from the fiscal year 1978 costs for operating the Alaska Bond Bank.

The D. A. Davidson testimony asserted that the operational costs would be covered by a one percent interest surcharge on loans to local government. In other states, as well as with the State of Montana Housing Authority, the operational costs are paid from the interest earnings on the reserve fund.

Minimum requirements for the reserve account balance generally are equal to the maximum amount of principal and interest to come due in any future year of the bond issue. For example, if the bond bank were to market \$10 million in bonds to be amortized in equal payments over twenty years at

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<sup>1</sup>Moody's Investor's Service. Moody's Municipal and Government Manual, (New York: Dun and Bradstreet Corporation, 1981) Vol. 2, p. a14.

<sup>2</sup>MacKenzie, letter from D. A. Davidson and Company.

an interest rate of nine percent, the annual payment would be approximately \$1,080,000. In this example, \$1,080,000 would also be the reserve requirement held by the bond bank and, invested at twelve percent, would yield \$129,600. If additional issues were sold by the bank and the reserve requirements increased, the earnings of the reserve account would also increase. Both Senate Bill 423 and Senate Bill 476 would have provided for the use of interest earnings on the reserve account to fund the operational costs of the bond bank. If it could be assumed that, in the absence of a state bond bank, the local government would be able to sell bonds and would have reserve requirements similar to the previous example, the interest earnings on the reserve account could constitute a potential source of revenue for the local government. It could be argued that, by allowing the state to hold the reserve requirement, there would be a loss of revenue to local governments. The operational costs of a state bond bank would not be a new cost to Montana taxpayers. The costs of marketing and servicing bonds are currently born by the municipalities. The creation of a bond bank would shift the incidence of these costs from local to state government. So while local governments would no longer collect revenues from investment of reserves, they would no longer be required to pay the costs of administering and marketing municipal bonds.

D. A. Davidson argued that the costs of a bond bank would be passed to local government. On closer examination, it would appear to the contrary that local costs would be passed to the state. In passing their costs for administering bonds to the state, local governments would also pass potential revenues associated with administering the bond reserves.

#### Number of Small Issues

D. A. Davidson, in opposing the bond bank, questioned whether there are enough small bond issues sold in Montana to make a bond bank feasible. D. A. Davidson's testimony was directed at both bills, though only Dover's bill restricted the bond bank to small issues. This may reflect a feeling by the investment firm that the participants in any bond bank program would be primarily smaller units of government.

Historic information on the number and size of bond issues is difficult to evaluate because statutory interest ceilings have almost eliminated the issuance of municipal bonds in recent years. In that local government participation in the bond bank would be voluntary, it would be difficult to predict how many local issues would be initially sold through the state program. The next two years should provide a good indication of the potential number of local bond issues, especially if there is some easing of the

record interest rates. If the capital improvements being planned for Lewis and Clark County are indicative of the rest of the state, Montana will see a brisk increase in borrowing by local governments.

#### Local Investment Firms

The final issue raised by opponents was that, by packaging bonds into larger issues, local investors would be eliminated from buying Montana bonds. Montana does not have the large financial market to purchase large lots of tax exempt bonds. By attempting to reduce local borrowing costs by preparing larger issues, the bond bank would no doubt be looking to national markets.

A bond bank would hurt Montana investors seeking a shelter from Montana income taxes by reducing the local supply of tax exempt bonds. This reduction in bond supply would in turn reduce the business of local investment firms. The state, on the other hand, would benefit from increased out-of-state sales because less personal income would be sheltered and revenue from income taxes would increase. Local governments could also expect to benefit if, in marketing the bonds, the bond bank determined that a large issue sold out-of-state was more economical than a small in-state issuance. The issue of loss of in-state investors would appear to be a question of balancing earnings of some investors and investment firms against potential cost savings

for local governments.

Preconditions for a Bond Bank

The study of bond banks by the Council of State Governments sets out some preconditions that might exist in a state in need of a bond bank.<sup>1</sup> Those preconditions are as follows:

1. a sufficient number of small bond issues;
2. numerous, small, unrated local units of government;
3. lack of demand by commercial banks for local government issues;
4. a market for tax exempt debt from governmental entities; and
5. the state should have a credit rating favorable enough to provide for a significant spread between state and local interest rates.

Montana has numerous local government units, most of which do not have credit ratings from credit rating services. Montana has fifty-six counties of which twenty-eight have outstanding bonded indebtedness and only six counties are rated by Moody's. Montana has 126 cities and towns of which sixty-one have outstanding debts and nine are rated by Moody's. Of Montana's 471 school districts and 312 special

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<sup>1</sup>Hicks and Jarrett, The Bond Bank Experience, 27.

districts, only 22 have a rating from Moody's.<sup>1</sup> The number of issues, as previously mentioned, is hard to evaluate due to the effects of the statutory interest ceilings. Appendix A would indicate that, in the period just prior to hitting the seven percent interest ceiling, D. A. Davidson was underwriting a good number of small issues. In 1977, D. A. Davidson underwrote twenty-five issues totalling \$17,133,500 of just general obligation bonds. Of all new issues underwritten by D. A. Davidson in 1977, twelve percent were general obligation bonds with the balance made up of twelve percent revenue bonds, thirty-five percent industrial revenue bonds, and forty-one percent special improvement district bonds.<sup>2</sup>

Another prerequisite for a bond bank is a lack of demand for bonds by commercial banks. In 1978, eighty-one percent of all general obligation bonds sold by D. A. Davidson were sold to banks. Legislation enacted in 1979 removed the exemption for state tax from bonds owned by corporations. The change in legislation would not probably cause any great change in the ownership pattern of tax exempt bonds in that the federal tax exemption is the major

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<sup>1</sup>Moody's Investors Service. Moody's Municipal and Government Manual (New York: Dun and Bradstreet Corporation, 1981) Vol. 1, p. 2081-6.

<sup>2</sup>Eugene S. Hufford, letter from D. A. Davidson and Company to Montana Legislative Council, August 7, 1978.

consideration in buying bonds.. Nationally commercial banks constitute a decreasing share of the market for municipal securities. In 1977, commercial banks constituted only 4.2 percent of the net investment in municipal securities -- down from 28.1 percent in 1974.<sup>1</sup>

The state should have a significantly better credit rating than local government if a bond bank is to be feasible. The state currently has a Moody's rating of Aa but is bordering on a Aaa rating. A 1979 report from the Continental Bank of Chicago states:

"Montana benefits from a relatively diverse and steady expanding economy. The greater national importance placed on domestic energy sources should enhance the state's economy and stimulate further economic growth. The income levels are below average, but improving. In recent years, the state's resource base has demonstrated good growth in both population and personal income. The debt load remains low and financial operations continue to be adequately maintained. These factors combine to indicate that an upgrade to "Aaa" would seem appropriate."<sup>2</sup>

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<sup>1</sup>John E. Peterson, "Minding the Markets", Governmental Finance (August, 1977) 52.

<sup>2</sup>Continental Illinois National Bank and Trust Company, Comparative Analysis of State Credits, (Chicago: 1979) p. 46.

Local governments within Montana are largely unrated, with only the larger counties and cities having Moody's ratings. Montana's larger local governmental entities are generally rated A by Moody's.<sup>1</sup>

The analysis contained in the next chapter will indicate that the difference in interest rates between bonds rated Aaa and Aa is about .4 percent.

Montana would appear to meet most of the preconditions for a bond bank. The most important precondition being the lack of ratings by the numerous local government units contrasting to state government's very good rating. Due to recent market conditions, the number of issues and demand for these issues is difficult to assess.

The question still remains: Will a bond bank provide any significant savings to local governments? The following section of this paper will attempt to examine what effects a bond bank might have in Lewis and Clark County.

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<sup>1</sup>Moody's Municipal and Government Manual, 2081-6.



## CHAPTER III

### POTENTIAL IMPACT ON LEWIS AND CLARK COUNTY

#### The Case Study Approach

To assess the fiscal impact that a bond bank might have on the entire state of Montana would require a projection of the future capital expenditures of all 966 political subdivisions. Local government officials often have difficulty in providing details on future plans such as construction cost estimates and proposed methods of financing the projects.

The case study would seem appropriate for assessing the impact of a bond bank for two reasons. By examining the effects in an entire county, it is possible to get some diversity in the types of local government and capital improvements. The second reason is that, for the purpose of this paper, the significance of the impact is more important than the overall fiscal impact. Significance could best be measured by the tax impact the potential cost savings might have on the individual taxpayer and would seem to have greater relevance when viewed for a single county.

In order to assess the impact of a bond bank, it is necessary to make some assumptions about the relative

interest rates for a proposed bond bank and proposed issues of municipal bonds. The assumptions as to relative interest will largely dictate the results of the comparison, so it is necessary to establish this assumption early.

In that no Montana Bond Bank exists to be rated, it is necessary to assign a credit rating to the hypothetical agency. Since the state of Montana's general obligation rating is currently between Aaa and Aa, a rating for the bond bank will be assigned for both conditions.

Bond banks generally receive a rating one grade lower than that of the state's general obligation bonds.<sup>1</sup> If the state's general obligations are to receive the Aaa rating, the bond bank would be rated Aa. The Aa rating is the rating assigned to the State Housing Authority, which carries the same kind of limited state commitment that the bond bank proposals would provide.

It would appear that the Aa rating would be the likely rating the state would receive. If the state, however, were to be rated one grade lower than the rating received on the last general obligation issue of the state, the bond bank rating would be A. For purposes of this analysis, both potential ratings of the state will be included in the analysis.

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<sup>1</sup>Katzman, "Measuring the Benefits of Municipal Bond Banks", 13.

The analysis of the bond bank will use a criterion of cost savings to local units of government to evaluate the bond bank proposals. Considerations such as the impact a bond bank might have on investment firms, investors, or state costs will not be considered. While other aspects of the bond bank impact may be important, the most contested aspect of the bond bank proposal concerns savings to local governments.

#### Description of Lewis and Clark County's

##### Proposed Capital Projects

All of the capital projects included in this evaluation are projects that are being actively planned by local government officials. All projects are currently in the preliminary stages of a bond issue or are being planned with bonded debt as the most likely method of financing.

On June 2, 1981, Helena School District Number 1 will open bids on \$2,966,590 of serial bonds to make improvements in Helena's two high schools. Approved by the voters in 1980, the bonds could not be issued because of the statutory interest ceiling.

Climbing interest rates have also delayed plans by the city of Helena to proceed with improvements to its water and sewer system. By current estimates bringing Helena's aged water system into compliance with the Federal Safe Drinking Water Act will cost \$5,324,000. In addition, design problems with the city's sewage treatment plan has created an

odor problem and a health hazard that will require attention in the near future. The estimated cost of improvements to the city's sewage treatment plant is \$3,300,000. The Environmental Protection Agency would pay eighty percent of the sewer costs, leaving the city with a cost of \$660,000. The total required to make the needed improvements in the water and sewer systems is \$5,984,000. Progress on these improvements has been hindered because of the high interest rates that the city would have to pay on the revenue bonds needed to finance the projects.<sup>1</sup>

In the northern portion of Lewis and Clark County, the residents of the small community of Lincoln have approved a referendum that would create a sewer system for the community. The community now relies on private septic tanks, but community growth and environmental standards are necessitating a public sewer system.

The estimated cost of the sewer project would be \$2,678,707, of which the Environmental Protection Agency would pay \$2,238,262 -- leaving the Lincoln Sewer District with costs of \$440,445. The district had initially hoped to receive a low interest loan from the Farmers' Home Administration; however, recent federal cuts have dimmed that hope. If the federal loan is not forthcoming, the Lincoln Sewer

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<sup>1</sup>(Helena) Independent Record, May 12, 1981, Section B, Page 1.

District will have to finance the project through the issuance of revenue bonds.

Nearly two years ago, Lewis and Clark County and the City of Helena appointed a committee to study the need for new jail and law enforcement facilities. The committee has recommended that a new city-county jail and law enforcement facility be constructed. Planning for the facility has progressed to the point that an architectural firm has been retained to design the facility. The preliminary estimate for construction costs is \$3,750,000.

The current plan for financing the facility would be for Lewis and Clark County to issue general obligation bonds. The staff of the planning committee is hopeful that the referendum on the bonds for the new jail could be placed before the voters of Lewis and Clark County within the next year.

#### Assumptions for Analysis

The assumptions that will have the greatest impact on the outcome of the analysis are those assumptions concerning the interest rates to be assigned to various bonds. For purposes of this analysis, the total interest charged on an issue is not as important as the difference in interest rates between bond ratings. The interest rates for each bond issue will be determined by the interest rate assigned to the rating of the government entity. Interest rates change from hour to hour. For purposes of this analysis,

the interest rates reflected by Moody's long term municipal bond averages on April 17, 1981, will be used. The April 17 date is used as the most current data available at the time of the analysis. The relative difference between ratings remain fairly constant regardless of the change in overall interest rates. The average rate on long term maturities are indicated in Table 1:

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TABLE I

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Moody's Municipal Bond Averages  
April 17, 1981

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Moody's Rating	Aaa	Aa	A	Baa	Composite
Average Interest	9.20%	9.60%	10.00%	10.40%	10.13%

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Source: Moody's Investor Services, Municipal and Government Manual; News Reports; (New York: Dun and Bradstreet Corporation, 1981) Vol. 53, No. 32, P. 2633.

The bond rating and interest rates for each of the governmental units being considered in the analysis are listed in Table 2. The Lincoln Sewer District has not received a rating, and, for purposes of this analysis, will be assigned a Baa rating which is probably the best rating that the district could hope for.

TABLE 2

Interest Rates Assigned Local Government Units		
Unit	Rating From Table 1	Interest Rate
Lewis and Clark County	A	10%
City of Helena	A	10%
High School District #1	A	10%
Lincoln Sewer District	Baa	10.40%
Aa Bond Bank	Aa	9.60%
A Bond Bank	A	10%

Source: Moody's Municipal and Governmental Manual, (1981)  
Vol.1, p. 2083-84.

The difference between the state Aa Bond Bank and the local A rated governments (.4%) is consistent with other estimates of potential interest savings from bond banks with Aa ratings. Separate studies of the Vermont and Maine bond banks indicated savings of .5% and .38%.<sup>1</sup> The comparison, earlier in this paper, of issues underwritten by D. A. Davidson and Moody's state bond averages indicated a difference of .58%.

For purposes of analysis, all bond issues will be assumed to be twenty year issues of serial bonds in maturities that allow for equal amortization payments. In the current bond market, serial bond issues of up to twenty

<sup>1</sup>Katzman, "Measuring the Benefits of Municipal Bond Banks", 10.

years maturities are the most common method of financing public works. The time frame for the analysis of the bonds will be the life of the bond issue or twenty years from the date of issue.

The analysis shall proceed on the assumption that the bond bank was authorized by the 1981 Legislature and that the high school and sewer and water issues would be marketed in 1981 and the jail and Lincoln sewer issues in 1982.

Assumptions for savings in marketing costs will be taken from Katzman's paper on measuring the benefits of state bond banks.

The major marketing costs which can be pooled through the bond bank include: financial advice, printing of the notice, prospectus, bond printing and rating services. All of the marketing costs are subject to economics of scale (see Table 3).



TABLE 3

Costs of Marketing General Obligation Bonds  
by Cost Category and Issue Size\*  
(per \$1000 of bonds)

Size of Issue (\$1000s)	Finan. Advis.	Bond Notice	Bond Prospts.	Bond Prntng.	Bond Rating	Sub- Total
0-499	\$9.09	\$ .62	\$ .95	\$1.02	\$2.01	\$13.69
500-999	6.86	.45	.71	.71	1.16	9.89
1000-1999	4.69	.26	.76	.64	.65	7.00
2000-2999	3.70	.13	.59	.34	.46	5.22
3000-4999	2.40	.13	.26	.24	.29	3.32
5000-9999	2.68	.10	.15	.28	.16	3.37
10,000-24,999	1.45	.05	.07	.17	.09	1.83
25,000 & over	.20	.04	.05	.16	.30	.48

\*Includes only costs that are pooled by a municipal bond bank.

Source: Municipal Finance Officers Association, MFOA Special Bulletin, "Subject: Costs Involved in Marketing State/Local Bonds," no date. This survey of January, 1973 resulted in 481 responses from localities in 44 states. It is not clear whether the sample or the respondents were randomly selected.

Some assumption must be made as to size of any future bond bank offering. The minimum size recommended in the study of Maine was \$6 million with \$10 million being desirable. In that just the Lewis and Clark County bonds would be \$8,950,590 in 1981 and \$4,190,000 in 1982, some assumption other than \$6 million must be used. A conservative estimate would be that the Lewis and Clark County issues would comprise one-fourth of all bonds

issued by the hypothetical bond bank. The state issues would be \$35,802,360 in 1981 and \$16,760,000 in 1982.

For purposes of determining present value, a discount rate of eight percent will be used.

#### Bond Bank Comparison

Table 5 sets out the projected costs for issuing the bonds for each project for local government as well as for bond banks with both Aa and A ratings. A bond bank with the Aa rating would appear to provide significant savings to all levels of local government (see Table 5). The savings to all local units, in terms of present value of all costs of borrowing money, could be reduced by five percent. The cost to the small unrated special district in Lincoln could be reduced by eleven percent by the Aa bond bank. Annual savings in interest costs would be five percent for all units with the Aa bond bank and nine percent for the Lincoln Sewer District.

The A bond bank would not produce any significant savings for any unit of local government except the Lincoln Sewer District. The A bond bank would reduce the total present value cost of borrowing for all units by six-tenths of one percent and six percent for the Lincoln Sewer District. The A bond bank would not create any annual interest savings except for the Lincoln Sewer District, where savings would amount to five percent.

The annual savings to a resident of Helena from the A Bond Bank would be nonexistent. The Aa Bond Bank could provide savings to a Helena resident who is taxed in all jurisdictions except the Lincoln Sewer District. With a Aa rate bond bank, the owner of a home with an appraised value of \$30,000 would have his property taxes reduced by \$.96, and sewer and water fees could be reduced by \$2.66, for a total savings of \$3.62. The owner of a home in Lincoln with an appraised value of \$30,000 would receive an estimated savings of \$8.89. The users of the Lincoln sewer would reduce annual charges by \$4.00 with the services of an A rated bond bank.

TABLE 4

Potential Savings to Local Government  
From a Hypothetical Bond Bank

	High School Improvements	Helena Water and Sewer	City- County Jail	Lincoln Sewer	Total
<u>Annual Interest Cost Savings</u>					
A Bond Bank	\$ 0	\$ 0	\$ 0	\$ 1,409	\$ 0
Aa Bond Bank	9,381	18,921	11,857	2,801	42,960
<u>Total Interest Savings</u>					
A Bond Bank	0	0	0	28,235	28,235
Aa Bond Bank	187,607	378,419	142,288	56,089	764,403
<u>Marketing Cost Savings</u>					
A Bond Bank	14,062	17,294	5,587	5,218	42,161
Aa Bond Bank	14,062	17,294	5,587	5,218	42,161
<u>Present Value All Savings</u>					
A Bond Bank	14,062	17,294	5,587	19,051	55,994
Aa Bond Bank	106,165	205,936	122,001	32,718	466,820

TABLE 5

Comparison of Issue Costs for Local Governments  
and a Hypothetical Bond Bank

	High School Improvements	Helena Sewer and Water	City-County Jail	Lincoln Sewer	Total
<u>Average Annual Interest Costs</u>					
Local Government	\$ 195,208	\$ 393,761	\$ 246,759	\$ 30,391	\$ 866,119
Aa Bond Bank	185,827	374,840	234,902	27,590	823,159
A Bond Bank	195,208	393,761	246,759	28,982	864,710
<u>Total Interest</u>					
Local Government	3,904,160	7,875,228	2,961,108	607,882	15,348,378
Aa Bond Bank	3,716,553	7,496,809	2,818,820	551,793	14,583,975
A Bond Bank	3,904,160	7,875,228	2,961,108	579,647	15,320,143
<u>Marketing Costs</u>					
Local Government	15,486	20,166	12,450	6,023	54,125
Aa Bond Bank	1,424	2,872	6,863	805	11,964
A Bond Bank	1,424	2,872	6,863	805	11,964
<u>Present Value All Costs</u>					
Local Government	1,932,066	3,886,167	2,435,166	304,406	8,557,805
Aa Bond Bank	1,825,901	3,680,231	2,313,165	271,688	8,090,985
A Bond Bank	1,918,004	3,868,857	2,429,579	285,355	8,501,795

## CHAPTER IV

### CONCLUSIONS

#### Findings From Lewis and Clark County Comparison

The finding of other research on bond banks would appear to be confirmed by the analysis of Lewis and Clark County. The first finding is that bond banks offer no great advantage to local governments unless the bond bank's credit rating is substantially better than the ratings of local government. The second finding would be that a bond bank is most beneficial to smaller units of local government who have low credit ratings or lack credit ratings. It would appear that, even with a poorly rated state bond bank, smaller units of government would benefit.

The third finding concerns the impact of the bond bank. The savings to larger rated units of government would appear to be of no great significance in terms of reducing taxes and should not be viewed as any panacea to relieve the financial problems of local government. The impact on smaller units is significant enough to be viewed as a form of state financial aid.

#### Other Considerations for State Aid

In considering the need for a bond bank or other form

of state aid for local capital improvements, other factors must be considered.

The need for local government capital construction may be accelerating. Federal requirements have created needs for many capital improvements. In the case of the projects examined in Lewis and Clark County, three of the four projects were, in some degree, a response to federal requirements. In recent years, there has been growing concern that the industrial plants and capital facilities of the private sector of the economy have been neglected to the detriment of national productivity. A recent study by the Council of State Planning Agencies raises the issue of worn out facilities in the public sector.<sup>1</sup> The study suggests that there is a need at all levels of government for repair and replacement of public facilities. The need for capital funds for local governments may be increasing.

The tax exempt bond itself has been undergoing increased scrutiny in recent years as a method of financing local capital improvements. There is increased awareness that the tax exempt bond is really a form of federal subsidy to local governments. The lower interest rates enjoyed by local governments on tax exempt bonds are at the expense of the federal treasury. Because people who buy tax exempt

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<sup>1</sup>Pat Choate and Susan Walker, American in Ruins, (Washington D. C.: Council of State Planning Agencies, 1981).

securities tend to be in the highest tax brackets, the tax exemption leads to a regressive tax policy. Increased scrutiny of tax exempt bonds has largely resulted from the growth in industrial revenue and housing bond issues. Not only have industrial revenue and housing bonds brought increased scrutiny -- they have flooded the tax exempt market, increasing interest rates for municipalities.

The growing need for public capital and the growing problems with tax exempt bonds may require that new approaches be developed for the capital needs of state and local governments.

A final consideration that should be taken into account concerning a bond bank is the potential technical assistance that a bond bank could offer smaller units of government that seldom issue bonds.

#### Recommendations

Future legislatures should authorize a state bond bank. The potential benefits that a bond bank might offer smaller units of local government justify its authorization. Participation by larger units of government would be voluntary, and they would not need to use the bond bank if it offered no benefit.

The legislature should consider authorizing a bond bank that pledges the state's full faith and credit to the bond bank bond issues. The state's risk with the use of reserve accounts would be minimal but the savings in



interest rates could be significant. The pledge of full faith and credit could offer a great deal of assistance to local governments with little or no cost to the state. A pledge of full faith and credit would assure the bond bank a credit rating that would allow the state to have a significantly lower interest rate than any unit of local government.

If the executive branch of state government supports the bond bank concept, efforts should be made to obtain a prospective credit rating of the proposed bond bank. If a prospective credit rating could be obtained for a bond bank, the legislature could have a much firmer estimate of potential savings to local governments.

## BIBLIOGRAPHY

Campbell, John, Clerk, School District, Helena, Montana. Interview, May 1, 1981.

Choate, Pat, and Walter, Susan. America in Ruins Washington, D. C. Council of State Planning Agencies, 1981.

Commerce Clearinghouse, State Tax Guide, Chicago, 1980.

Continental Illinois National Bank and Trust Company of Chicago. Comparative Analysis of State Credits Chicago: Continental Bank, 1979.

Ecker-Racz, L. Laslo. "State/Local Financial Crisis: With Benefit of Hindsight", National Civic Review, December, 1979, pp. 605-612.

Forbes, Ronald W. and Peterson, John E., State Credit Assistanceto Local Government New York: First Boston Corporation, (1978).

Forbes, Ronald W. and Renshaw, Edward F., "State Bond Banks" Municipal Finance Officers Association Special Bulletin, September, 1972.

Goldsmith, Peter N., Investments for a Changing Economy New York, Merrill, Lynch, Pierce, Fenner and Smith Inc., 1980.

Hicks, Jimmy E., and Garrett, James E., The Bond Bank Innovation: Maine's Experience, Lexington, Kentucky: Council of State Governments, 1977.

Hufford, Eugene S., to Montana Legislative Council, September 5, 1978, and August 7, 1978.

Katzman, Martin T., "Measuring the Benefits of Municipal Bond Banks", paper, Harvard University, 1976.

McCaulley, Tim, Planner, City-County Jail Project, Helena, Montana, Interview, May 1, 1981.

MacKenzie, Bruce A. letter to Senate Committee on Taxation, Forty-Seventh Legislative Session, February 17, 1981.

Montana Legislature, Senate, Committee on Taxation, Hearings on Senate Bills 423 and 476, Forty-Seventh Legislature, February 20, 1981.

Moody's Investor's Service. Municipal and Government Manual; News Reports. New York: Dun and Bradstreet Corporation, Vol. 53, No. 32, 1981.

Moody's Investors Service. Pitfalls in Issuing Municipal Bonds, New York: Moody's Investors Services Inc. 1963.

Nisbett, Dick, Director of Utilities, City of Helena. Interview, May, 1981.

Peterson, John E. "Minding the Markets", Governmental Finance, August, 1977, p. 52.

APPENDIX A

<u>1976</u>	<u>G.O.</u>	<u>DATE</u>	<u>NIC</u>	<u>BB1</u>
\$ 828,000	Culbertson Hospital G.O.	03/15/76	5.81%	6.92%
750,000	Eureka Hospital District G.O.	11/10/76	5.34	6.39
55,000	Scobey, MT G.O. (est. Baa)	03/10/77	6.00	6.00

S.D.

1,046,000	Rosebud County HSD #19	02/08/75	6.605	7.15
1,847,750	Rosebud County SD #19	12/08/75	6.605	7.05
215,000	Lake County HSD 7J	03/22/76	5.97	6.92
215,000	Lake County SD 7J	03/22/76	5.97	6.92
319,400	Stillwater County HSD #5	03/29/76	5.73	6.72
279,700	Stillwater County SD #5	03/29/76	5.73	6.72
325,000	Madison County SD #52	05/19/76	5.52	6.83
100,000	Cascade Co. SD #97	06/08/76	5.34	6.89
25,000	Flathead Co. SD #20	07/06/76	7.00	6.87
30,000	Flathead Co. SD #26	08/30/76	7.00	6.58
95,500	Flathead Co. SD #15	12/01/76	5.69	6.16
708,000	Pondera Co., SD #10	12/16/76	4.9398	5.96
1,164,450	Big Horn Co. SD #17H	12/20/76	4.57	5.95
935,540	Big Horn Co. HSD #1	12/20/76	4.57	5.95

<u>1977</u>	<u>G.O.</u>	<u>DATE</u>	<u>NIC</u>	<u>BB1</u>
\$ 230,000	Bridger G.O.	05/19/77	5.46%	5.70%
755,000	Madison County G.O.	03/25/77	5.25	5.88

S.D.

215,000	Flathead County SD #50	01/11/77	4.17	5.78
980,000	Flathead & Lake Counties HSD #38	01/06/77	4.88	5.83
145,000	Flathead County SD #9	01/12/77	5.15	5.78
650,000	Lewis & Clark County SD #3	01/13/77	4.97	5.89
775,000	Flathead County HSD #5	01/11/77	5.02	5.78
300,000	Big Horn County SD #27	01/18/77	5.45	5.89
2,825,000	Big Horn County SD #2	01/18/77	5.70	5.89
1,400,172	Lake Co. SD #30	01/20/77	5.28	5.90
600,000	Silver Bow Co. SD #3	11/15/77	6.00	5.89
980,000	Cascade Co. HSD #3	02/14/77	5.19	5.86
120,000	Cascade Co. SD #38	02/14/77	5.48	5.86
260,000	Jefferson County SD #1	03/29/77	5.15	5.88
195,000	Yellowstone Co. SD #52	05/18/77	5.31	5.82
845,000	Powell Co. SD #1	05/24/77	5.47	5.70
98,000	Missoula Co. SD #20	06/13/77	5.31	5.65
1,000,000	Lewis & Clark Co. SD #9	07/18/77	6.00	5.64
1,100,000	Gallatin Co. SD #44	07/25/77	4.93	5.62
745,000	Gallatin Co. HSD #44	07/25/77	4.93	5.62
507,000	Carbon Co. SD #7	08/01/77	4.88	5.63
92,500	Gallatin Co. HSD #69	08/02/77	4.62	5.63
2,651,000	Flathead Co. HSD #44	11/28/77	4.89	5.45
325,000	Ravalli & Missoula Co. SD 15-6	11/29/77	5.09	5.45
325,000	Ravalli & Missoula Co. HSD 15-6	11/29/77	5.09	5.45

APPENDIX A (Continued)

<u>1978</u>	<u>S.D.</u>	<u>DATE</u>	<u>NIC</u>	<u>BBT</u>
\$ 375,000	Sanders Co. SD #6	01/04/78	5.06%	5.71%
1,296,700	Powell Co. SD #1	01/31/78	4.86	5.63
110,000	Missoula Co. SD #7	05/15/78	5.34	5.99
590,000	Lincoln Co. SD #1	05/22/78	5.24	5.98
330,738	Lincoln Co. HSD #1	05/22/78	5.29	5.98
265,905	Gallatin Co. SD #35	05/31/78	5.63	6.16
125,000	Richland Co. HSD #3	06/05/78	5.14	6.19
225,000	Richland Co. SD #3	06/05/78	5.14	6.19
1,150,000	Yellowstone Co. SD #26	07/10/78	6.00	6.31
590,900	Missoula Co. SD #4	08/15/78	5.90	6.03
150,000	Flathead Co. SD #58	08/26/78	5.68	6.11
	<u>G.O.</u>			
100,000	Fort Benton G.O.	03/10/78	5.32	5.61
75,000	Broadus G.O.	06/15/78	6.00	6.16
<u>1979</u>	<u>G.O.</u>	<u>DATE</u>	<u>NIC</u>	<u>BBT</u>
\$ 2,642,481	Gallatin Co. GO	02/13/79	5.57%	6.50%
90,000	East Helena GO	01/25/79	6.15	6.30
125,000	Stevensville GO -	07/26/79	6.40	6.19 -
133,334	Three Forks GO (odd amounts) -	05/17/79	6.71	6.30 -
1,800,000	Laurel GO -	08/01/79	6.30	6.19 -
850,000	Lewistown, MT GO	12/31/79	5.69	7.77
	<u>S.D.</u>			
350,000	Yellowstone Co. SD #37	02/22/79	5.98	6.31
40,000	Flathead Co. SD #39 -	03/15/79	7.00	6.33 -
431,100	Teton Co. SD #30	06/26/79	6.05	6.13
503,300	Teton Co. HSD #30	06/26/79	6.05	6.13
250,000	McCone Co. HSD #1 -	06/07/79	6.17	6.13
149,000	Missoula Co. SD #20 -	06/08/79	6.75	6.13
379,500	Lewis & Clark Co. SD #38	05/23/79	6.03	6.25
<u>1980</u>	<u>G.O.</u>	<u>DATE</u>	<u>NIC</u>	<u>BBT</u>
99,000	Belgrade G.O.	12/08/80	7.00%	9.84%
	<u>S.D.</u>			
550,000	Richland Co. SD (Lambert)	01/20/80	7.00	7.28
350,000	Jefferson Co. SD (Montana City)	01/10/80	6.90	7.30
268,000	Flathead Co. SD (Cayuse)	01/10/80	6.81	7.30
304,000	Flathead Co. SD (West Valley)	01/15/80	7.00	7.30

73 Total Issues.

10 sold above national & rated market

APPENDIX B

TABLE 7 - VOLUME BY STATE - JAN THRU NOV 1980

*** STATE ***	ALL ISSUES		
	SALES	AMOUNT	ANIC
50 States .....	4,934	42,956,509	8.50
Alabama .....	106	615,722	7.84
* Alaska .....	11	809,675	9.82
Arizona .....	71	921,072	7.46
Arkansas .....	65	333,200	7.68
California .....	181	3,424,040	8.57
Colorado .....	160	1,047,327	8.52
Connecticut .....	39	770,342	8.60
Delaware .....	12	181,086	7.94
Florida .....	103	2,000,946	8.89
Georgia .....	51	751,038	7.82
Hawaii .....	7	296,500	6.96
Idaho .....	27	226,730	8.04
Illinois .....	238	2,173,376	8.29
Indiana .....	110	885,951	8.43
Iowa .....	278	486,834	8.42
Kansas .....	183	878,488	7.69
Kentucky .....	93	353,423	7.94
Louisiana .....	68	1,007,081	6.90
* Maine .....	22	136,250	7.74
Maryland .....	34	966,280	7.34
Massachusetts .....	89	1,173,999	8.41
Michigan .....	250	1,244,521	9.07
Minnesota .....	287	1,156,879	8.00
Mississippi .....	54	387,469	7.37
Missouri .....	88	509,846	8.71
Montana .....	18	113,570	7.06
Nebraska .....	115	437,404	8.08
Nevada .....	21	201,298	8.37
* New Hampshire .....	18	166,786	7.49
New Jersey .....	123	869,922	7.87
New Mexico .....	50	388,397	7.40
New York .....	111	3,148,495	9.17
N. Carolina .....	62	577,225	7.93
* N. Dakota .....	49	69,716	7.25
Ohio .....	308	1,406,528	8.22
Oklahoma .....	122	948,179	7.93
Oregon .....	110	1,458,279	8.70
Pennsylvania .....	173	1,605,660	8.73
Rhode Island .....	21	154,680	8.30
S. Carolina .....	35	333,185	8.52
S. Dakota .....	43	216,042	8.33
Tennessee .....	82	839,674	7.95
Texas .....	412	3,660,509	8.14
Utah .....	54	436,565	7.58
* Vermont .....	18	161,118	7.56
Virginia .....	45	521,195	7.21
Washington .....	134	1,296,096	9.39
W. Virginia .....	24	413,170	7.99
Wisconsin .....	121	683,273	8.01
Wyoming .....	38	111,468	7.34

- Amounts in thousands.  
 - ANIC - average net interest cost weighted by  
 average maturity (life) and size of issue.

\* Have Bond Banks