MUNICIPAL BOND TAX EXEMPTION
IN EMERGING ECONOMIES:

An Overview of the Issues

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EXECUTIVE SUMMARY

1. Introduction

In order to meet sharply increasing needs for infrastructure, officials in a number of emerging economies are exploring ways of accelerating the development of markets in local government bonds, arguable the best means for accessing domestics savings to make large long-term capital investments in many needed public facilities. As part of this exploration, some of these officials are investigating whether or not U.S.-style tax exemption of interest payments on such bonds is a cost-effective way of stimulating municipal market development.

This paper explores this question, by reviewing the history of tax exemption in the U.S., the long legal and political debate over the use of the subsidy, the economic arguments for and against its use, the approach taken toward tax exemption by selected emerging economies, and finally some of the considerations that might argue in favor of using tax exemption in the emerging economy context.

2. Background: Market Characteristics

Unlike policy makers in today's emerging economies, U.S. officials never set out with the intention of developing a municipal bond market. The market has evolved over 200 years, weathering countless ups and down, scandals, defaults, and municipal bankruptcies. A variety of market features developed over that period, which have raised particular questions about abuses of tax exemption to attract investors, including the extensive use of revenue-backed bonds issued by special-purpose local government corporations, bonds sold specifically to finance the activities of private businesses, as well as the widespread practice by local governments of investing municipal bond proceeds in higher yielding taxable securities in order to make investment profits.

3. The Legal/Political Debate

Tax exemption, like the market itself, was not the result of a specific decision my policy makers. Instead it was the largely unintended consequence of a late 19th Century Supreme Court interpretation of the U.S. Constitution, which held that federal and state/local governments were prohibited from taxing each other. The U.S. Congress debated the use of tax exemption almost constantly beginning in 1913 with the enactment of the modern U.S. federal income tax. Virtually all of the political and economic arguments for and against the subsidy were voiced in Congress over the years. Despite the passionate debate, often highly critical of the subsidy, as well as a decision by the Supreme Court in 1988 that tax exemption did not after all enjoy constitutional protection, the U.S. Congress has rarely considered doing away with it. Members of Congress have been receptive over the years to the position that despite possible economic and financial costs, tax exemption represents an effective subsidy over which local governments have control. Lobbying by local officials, wealthy investors, as well as members of the investment community, has strongly supported this view. Instead of eliminating it, Congress has applied limitations and more precise targeting to tax exemption in a series of tax reform measures.

4. The Economic Arguments

Economic Efficiency. Tax exemption is usually viewed as a subsidy that is used to induce local capital investment in public infrastructure. Supporters argue that some kind of subsidy is needed because such infrastructure has many of the characteristics of what economists call "public goods," and is therefore naturally underprovided by market mechanisms. Critics argue that tax exemption is not efficient in an economic sense, because it goes too far, diverting too much capital from more productive purposes. This economic inefficiency is said to generate an overall economic cost to society, not matched by any benefit.

Fiscal Efficiency. Other critics contend that tax exemption leads to fiscal inefficiency as well. In other words, the cost of the subsidy in terms of foregone federal tax revenues is significantly more than the resulting benefit to local governments in terms of lowered financing costs, because some of the subsidy is siphoned off by investors in the form of "windfall" after-tax income. This kind of inefficiency does not lead to an overall social loss in terms of lost productivity (as with economic inefficiency), but it does reflect a fiscal or financial loss to the federal government. Criticisms of tax exemption as a fiscally inefficient subsidy probably have been the most compelling over the years, but a series of qualifications, some resulting from recent economic research, suggest that the level of fiscal inefficiency is not as high as once thought.

Administrative Efficiency. The administrative costs associated with tax exemption are low, compared to other kinds of subsidies like grants (which usually involve targeting, monitoring, reporting costs, etc.). However the administrative efficiency of tax exemption, in terms of benefit per dollar of administrative cost, is less clear. It seems evident that if tax exemption were more carefully administered, particularly by adjusting the U.S. tax code, the economic and fiscal efficiency of the subsidy could be improved. In other words, a larger investment in administration of the subsidy could result in much higher benefit levels and thus higher administrative efficiency, despite higher administrative costs. The principal way in which the tax code erodes the benefits of tax exemption is through measures that have the effect of pushing the nominal interest rates on tax-exempt debt closer to the naturally higher rates on taxable debt.

5. Alternatives to Tax Exemption

As with any hidden, interest rate subsidy, critics of tax exemption ask first, whether or not any subsidy is justified. The second question is, if justified, why not use a more direct form of intergovernmental assistance, like lump-sum grants.

Elimination. The total elimination of tax exemption has been proposed over the years, but rarely considered seriously unless some alternative form of assistance has been proposed to replace it. In other words, most experts believe that some form of subsidy is warranted to promote capital investment by state and local governments.

Replacement with Direct Grants. A variety of alternative grant programs have been considered in the U.S., including mandatory and voluntary programs. However many of these alternatives have proved to be more costly overall, despite improving economic and fiscal efficiency. None of the alternatives have been acceptable to local governments, who insist that they, rather than Congress, determine when and how such a subsidy be used.

Limitations on Tax Exemption. Rather than eliminating or replacing tax exemption, Congress has chosen to limit and better target its use over the years. A series of reform measures, of which the Tax Reform Act of 1986 is probably the best-known example, have altered the types of investors that may take advantage of tax exemption, as well as the types of tax exempt debt that may be issued. These changes have led to some small improvements in the efficiency of the subsidy. For a variety of reasons, Congress has not chosen to significantly limit the kinds of issuers who may sell tax exempt debt.

6. Tax Exemption in Selected Emerging Economies

The issue of tax exemption is often more complicated and even more controversial in emerging economies, than in the U.S., because of the pressing need in many of these countries to make tax systems more equitable and productive.

Adjustments to Tax Codes. Indonesia is an example of an emerging economy that badly needs to develop markets in municipal bonds, but at the same time needs to eliminate many existing unproductive tax exemptions. Tax exemption for municipal bonds is neither politically palatable nor necessary, particularly because over the short run the most likely purchasers of such debt are pension funds that are already exempt from income tax. Nevertheless, Indonesian official are adjusting the tax code to reduce the relative attractions of investment opportunities that may compete with municipal bonds over the long run.

Proposals for Tax Exemption. The Philippines is an emerging economy with many of the building blocks for municipal market development already in place. Although tax exemption on municipal debt existed before the passage of the Local Government Code of 1991, tax exemption was omitted from the Code, probably through an oversight. Associations of Local Government Units are now strongly lobbying to have tax exemption added as the Code is revised, probably in early 1998. However, pressures on the national government to reform its income tax code are making officials at that level less receptive now to proposals for legalizing municipal bond tax exemption.

Refinements to Existing Tax Exemption. In some countries, like Poland, limited forms of municipal bond tax exemption already exist. Polish legislators have chosen not to widen its use, despite efforts to expand the use of municipal bonds. Instead, they have reduced tax preferences that have made national level treasury debt somewhat more attractive to investors.

7. Summary & Conclusion: The Case for Tax Exemption in Emerging Economies

Despite the weight of economic arguments against the use of tax exemption, there are social and political arguments that can be made for its use.

Why Tax Exemption Endures in the U.S. Tax exemption endures in the U.S. because it appears to have been a necessary, if not sufficient, reason why the U.S. municipal bond market developed into one of the most world's most powerful capital allocation mechanisms. U.S. legislators also have been sensitive to political arguments that tax exemption, as a subsidy under the control of local officials, supports and protects the nation's long tradition of decentralized governance. Economic efficiency arguments have not been compelling because of the apparent need for some kind of subsidy; fiscal efficiency gains to the federal government from replacing tax exemption with grants seem uncertain, especially in light of recent research. In addition, the U.S. Congress may not wish to take on responsibility now for large new on-budget grant programs. Limitation rather than elimination or replacement has been the preferred way of dealing with tax exemption problems in the U.S.

The Emerging Economy Context. In emerging economies economic efficiency arguments are, if anything, less compelling because of clearly chronic underinvestment in public infrastructure. Tax exemption is likely to be no less fiscally inefficient than existing intergovernmental grant and loan programs. Administrative controls on private purpose issuance and arbitrage will be required in any national setting--some emerging economies may be able to maintain the administrative efficiency of tax exemption at reasonable levels. Tax exemption also may have significant political value in countries where political and economic decentralization is a high priority.

Finally, the economic crisis currently sweeping Asia underscores the urgent importance of developing robust domestic markets in bonds. Directed credit policies have jump-started these economies, but left them vulnerable to volatile inflows of off-shore capital. Municipal markets are even less well developed than markets in private sector corporate debt, and the resulting impact with regard to underdeveloped local infrastructure is painfully obvious throughout Asia. In these circumstances, the need to accelerate the development of municipal bond markets is critical. These emerging economies may eventually consider the benefits associated with municipal market development tools like tax exemption to be worth the costs, particularly if features like "sunset" provisions could be relied on to terminate the subsidy after a designated period of time.

1. INTRODUCTION

Economic development, population growth, rapid urbanization, and a number of other factors have precipitously increased the need in many countries to extend and improve the provision of infrastructure services. In order to meet the financing challenges posed by these needs a variety of countries have begun to recognize the potential usefulness of markets in long-term local government bonds. The U.S. municipal bond market suggests to many of these countries that such markets can offer a way of helping local governments, particularly urban governments, finance critically needed infrastructure with domestic private capital, rather than by sharply increasing tax revenues or through sovereign borrowing by national governments.

Much of the interest in municipal bonds has come in economies that are transitional in nature. In the developing world these tend to be economies on the verge of industrialization, which have begun to experience infrastructure bottlenecks. Developing countries in Asia and South America are particularly active in studying municipal bond market development. The financial crisis sweeping Asia in late 1997, has been important in renewing interest in municipal bond markets in that region, where an over-reliance on directed bank lending to spur rapid national development appears to have retarded the development of domestic systems of market-based finance centered on debt markets. As a result these economies have been left especially vulnerable to volatile international flows of off-shore capital (see Annex 1). Markets in municipal as well as corporate bonds now more than ever appear to be critically needed parts of the overall capital allocation systems in those countries.

Other countries, in various forms of social and economic transition, but already classified in some respects as developed nations, have also expressed considerable interest in municipal bond markets. Such countries include South Africa and the former Soviet block nations. For the purposes of this discussion, all of these countries are referred to as emerging economies.

The question being asked in many of these countries today is what, if anything, can be done by government to accelerate development of markets in long-term, local government bonds. One feature of the U.S. municipal market that has been under review in several of these emerging economies is the exemption from federal income taxation of the interest income on municipal bonds. Tax exemption has been a feature of the U.S. municipal bond market (often referred to as the "tax exempt" market) since its beginnings in the 1800s, and has been highly controversial for nearly a century. Despite periodic, passionate criticism of tax exemption by leading U.S. policy makers, it has endured and is credited by many experts as having been essential in helping the U.S. municipal market mature into the powerful capital allocation mechanism that it is today. A recent study by the World Bank takes for granted that tax exemption is the reason why such a huge market for local government debt exists only in the U.S. (World Bank 1995).

The objective of this paper is to explore the reasons why tax exemption exists in the U.S., what kinds of economic and political arguments have been made for and against the use of tax exemption, as well as the extent to which such arguments apply generally to the situation of emerging economies. The arguments reviewed principally are those expressed in policy studies, academic publications, as well as debates and discussions involving senior U.S. policy makers, particularly Cabinet officials and members of Congress. Examples of how the issue is being considered in some emerging economies are also discussed.

The central question addressed here is, under what conditions, if any, tax exemption or some more limited form of tax preference should be considered for adoption by policy makers in emerging economies interested in promoting the use of bonds for financing capital investment by local governments and local state-owned enterprises.

2. BACKGROUND

Municipal Bonds: The Advantages

The advantages of municipal bonds are well documented. Over-reliance on foreign lenders (either international donors or Euromarket borrowing) can expand the domestic money supply, crowd out private sector borrowers, and fuel inflation (especially as foreign currency is converted to domestic currency for local spending). Heavy borrowing from foreign banks also exposes a country to interest-rate risks that can make debt impossible to service, as much of the developing world discovered during the early 1980s. Taxes are of course one source of revenue that can be used to reduce borrowing costs or make possible pay-as-you-go project financing. However, low taxation is increasingly seen as a significant reason why some of emerging economies, particularly those in Asia, have developed so rapidly.

Various forms of privatization constitute another way of securing financing for infrastructure, but one that appears to work best with power, transportation, telecommunications, and other services that require sophisticated management and technology, and have strong, predictable revenue streams. A number of countries are experimenting with the privatization of traditional urban infrastructure services such as water supply, waste water management, and solid waste disposal. But the preliminary results of such efforts suggest that, as in the U.S., public management of these facilities can be just as cost-effective if bond financing for public works improvement is available. Some emerging economies appear already to have concluded that the availability of reasonably priced municipal bond financing will allow their local public officials to manage their own infrastructure projects as a lower-cost alternative to many privatization schemes.

Under ideal conditions, neither increased taxes nor bank borrowing can compete in cost-effectiveness terms with long-term domestic bond financing (20- to 30-year bonds) for the construction of public works facilities with long-term life spans. Long-term bonds increase the affordability of such projects by allowing the high cost of construction to be amortized over a much longer period, one that more closely matches asset life-spans. Long-term debt also can be a more equitable method of financing such facilities than pay-as-you-build financing that uses accumulated tax revenues. Citizens who pay off the debts incurred to finance construction, via taxes or charges, are paying during the useful lives of the facilities and are thus more likely to be direct beneficiaries.

The U.S. Municipal Market: The Model

All of these advantages are highlighted in the operations of the U.S. municipal bond market, which has provided a number of countries with a model of how an advanced local government debt financing mechanism can work. As a model, it has powerfully attractive features. It is a loosely organized, but reasonably efficient system for buying and selling short- and long-term securities that are in effect IOUs of cities, towns, school districts, and local government corporations of all types. Most bonds sold today are backed almost exclusively by the revenues to be generated by the projects constructed with the bond proceeds, so tax revenues, not to mention higher-level government guarantees, are not routinely required. The municipal market has also been largely self-regulating, unlike the stock or corporate bond market, and it functions very effectively as an over-the-counter market, without the need for a specific location or facility, such as a formal securities exchange, for transactions.

Perhaps best of all, the market is huge and active, with $1.3 trillion in outstanding debt. About $195 billion in new debt was issued in 1995, including short-term and long-term issues, with about the same amount sold in 1996. The market has handled as much as $224 billion in a single year. About 80% of this debt is sold to individuals either directly (30%) or indirectly (50%) through holdings in investment funds. This suggests to officials in emerging economies that a municipal bond market is not exclusively a mechanism to help big business make money, but rather can be a way of effectively accessing the domestic savings of individuals. By the end of the 1980s, it was estimated that half of all state and local capital spending in the U.S. was debt financed (Petersen 1993).

The Evolution of Key Market Characteristics

Unlike policy makers in today's emerging economies, U.S. officials never set out with the intention of developing a municipal bond market. The U.S. municipal market is not a financing mechanism that was built according to a plan. It has evolved over 200 years, weathering during that period countless ups and downs, scandals, defaults, and municipal bankruptcies.

GO Bonds. From the nineteenth century through the 1950s, most issuers of municipal bonds were general purpose government units, such as states, cities, and counties. The security behind their bonds was their "general obligation" to use any and all revenues, particularly tax revenues, to pay interest and principal on a timely basis. Most of the original municipal infrastructure facilities in the U.S., particularly municipal water and sewer systems, were financed with these bonds (known simply as GO bonds).

Secondary Market. As U.S. investment activity in general accelerated, the municipal market evolved in a number of important ways. First, an active secondary trading market in municipal bonds developed to allow investors to sell their bonds prior to maturity, thus providing them with added security and flexibility in connection with their municipal bond investments. The secondary market vastly increased investor interest in instruments of any maturity.

Revenue Bonds. State and local governments also began issuing large amounts of revenue-backed debt because of the need to circumvent statutory and constitutional limits on general purpose borrowing, as citizens increasingly objected to rising tax bills necessary to pay off soaring infrastructure-related debt burdens. By the 1960s, the use of revenue bonds was growing rapidly. By 1975 such debt accounted for 50% of all municipal bonds; 73% by 1983. Revenue-backed debt is typically riskier and therefore more expensive than tax-backed general obligation debt, but its use was increasingly necessitated by tax-payer resistance.

Special Purpose Governments. The rise of revenue-backed borrowing was closely paralleled by another development in the U.S. municipal market, the proliferation of special purpose local government corporate entities (known by an assortment of names, but most often as special districts and public authorities). These entities function as local government owned enterprises to sell revenue-backed debt, and build and manage infrastructure facilities with the bond proceeds. The separate corporate status of these enterprises keeps their debt off state and local budgets, thus satisfying state or local requirements that tax revenues not be tapped to support the debt. The separate status also allows many of these entities to function more like businesses, free from the restrictive administrative rules and procedures that tend to limit regular, general purpose governments.

Private Purpose Municipal Bonds. To some extent hidden as the municipal revenue bond market flourished was the explosion in the latter half of the 20th Century of conduit financing, involving municipal bonds sold to finance activities of non-governmental entities. Conduit financing was apparent in the market from its earliest days when it was used for canal and turnpike construction. In the 1960s states and localities began using "industrial development bonds" to finance construction of factories and office buildings that were then leased to private companies, often in an effort to get such companies to relocate within their jurisdictions. Lease payments were used to by the government units involved to meet debt service payments.

For the next two decades, the variety of private purposes financed by government units expanded rapidly, as did the outstanding volume of such debt. Eventually, municipal bonds were sold to finance below market rate home mortgages, low-interest loans for college students, corporate purchases of pollution control equipment, as well as a host of more controversial financings for things such as massage parlors, racetracks, fast food outlets, and liquor stores. By 1985, a year before the U.S. Congress passed broad federal tax reforms that, among other things, greatly limited the allowable use of such private purpose borrowing, this kind of debt accounted for almost one-third of the volume of outstanding municipal bonds (Fortune 1991).

Arbitrage. Arbitrage is a widely practiced investment technique that exists in many different forms in banking and finance. Basically, the term refers to the practice of profit making by buying a security, currency, or commodity in one market and selling it in another market for a higher price. The tax-exempt nature of municipal debt creates obvious opportunities for arbitrage activities by municipal issuers. By borrowing at the tax-exempt rate, then investing the proceeds in taxable securities with higher nominal yields, state and local governments can make significant profits, especially considering the fact that they are not subject to federal taxation on profits as private corporations are. In fact, some kinds of municipal arbitrage profits are almost unavoidable. For example, municipal issuers quickly discovered that the process of refunding debt presented significant arbitrage possibilities. Refunding refers to the process of paying off outstanding debt with the proceeds of a new issue, as a way of replacing maturing debt or reducing the interests costs on outstanding debt. During the time period between receipt of the proceeds of the new sale, and the redemption of the outstanding debt, issuers have cash that can be invested in short-term taxable securities with higher yields. As public sector cash management techniques became more sophisticated, arbitrage became more profitable and harder to resist. By the 1940s, municipal arbitrage abuses were already being publicized.

Tax Exemption. Perhaps the single most important feature of the U.S. municipal bond market has been the fact that interest payments on these securities are exempt from federal income tax. (Note that when municipal bonds are redeemed or traded prior to maturity, any profit made from an increase in the price of the securities is taxed as a capital gain.) Tax exemption improves the after-tax investment return on municipal bonds (for investors subject to income tax), and thus allows issuers to offer nominal interest rates that seem somewhat low relative to other competing kinds of securities, such as corporate bonds. This reduces the cost to issuers, while helping the bonds to remain attractive to investors. Anything that reduces the costs of debt service can be critical for many municipal borrowers because of factors that naturally push up the cost of issuing and servicing their debt: relatively small borrowing needs at any given time; revenue streams that are not particularly robust; management that may be considered less professional than that of private corporate debt issuers; the lack of signature products or services that help stimulate investor interest; debt service commitments that may be subject to annual budgetary review by elected officials. Tax exemption improves the marketability of municipal debt and, in the view of many local government officials, adjusts the risk/return balance for such debt in a way that clearly promotes the public interest.

3. TAX EXEMPTION: THE LEGAL/POLITICAL DEBATE

Tax exemption, like the municipal bond market itself, was not the result of a specific decision by U.S. policy makers intent on creating an effective system for financing local government capital investment. Instead, it was the largely unintended result of a legal doctrine known as reciprocal immunity, established in 1871 by the U.S. Supreme Court. The doctrine interprets the U.S. Constitution to have prohibited federal and state/local governments from taxing each other. The 1871 decision was handed down after the first federal income tax in the U.S. was enacted during the Civil War. The doctrine took definitive shape in 1895 after enactment of a second federal income tax, when the Supreme Court ruled that federal taxation of state and local interest payments violated the Constitution. It was this decision that established reciprocal immunity as the fundamental justification for tax exemption. It took on special significance for the municipal market when the U.S. Congress began in 1909 to debate what was to become the 16th Amendment to the U.S. Constitution, establishing the modern U.S. federal income tax.

Beginning with passage of the 16th Amendment in 1913, tax exemption became the focus of a often passionate debate that has ebbed and flowed in the U.S. Congress ever since. By 1920, an amendment to the U.S. Constitution was proposed, which would have authorized federal taxation of interest payments on newly issued municipal bonds. With that amendment, the first of many unsuccessful amendments proposed by opponents of tax exemption, the war of words on the issue began. The amendment's sponsor called tax exemption a "rapidly growing evil." The Secretary of the Treasury called it "an economic evil of the first magnitude" (Pryde 1993). This was at a time when the Treasury Department estimated that approximately $10 billion in tax exempt bonds were outstanding.

<u>Arguments Against Tax Exemption</u>. Over the succeeding seven decades, in debates on constitutional amendments and many less sweeping tax reform measures, members of Congress voiced for the public record virtually all of the now-classic economic and political arguments for and against tax exemption. The issue of "tax equity" was raised immediately in the debates on the income tax, when tax exemption was alleged to be a way for wealthy individuals to avoid paying "their fair share of taxes." In 1918, that kind of charge was used to raise the issue of what economists now refer to as "fiscal efficiency" when it was pointed out that a fiscal result of this inequity of tax incidence was reduced federal government tax revenue, at a time when such revenue was urgently needed to pay the costs of World War I. The issue of "economic efficiency" was also raised during the debate on the 1920 amendment, when it was pointed out that tax exemption diverted capital from more productive uses by private enterprise.

A variety of other criticisms of tax exemption were debated in these early years, included some usually thought of as modern abuses of the municipal market. The use of municipal bonds to provide benefits directly to private businesses had already been much discussed in Congress before passage of the income tax amendment. Municipal defaults in the mid-1800s on railroad and real estate bonds had already led to legal restrictions on the allowable nature of public purpose debt (Spiotto 1987).

Although arbitrage abuses by municipal issuers were not widely publicized until the late 1940s, private investors were realizing arbitrage profits in connection with municipal bond investments as soon as the income tax amendment was signed. In a bill on taxation proposed by the House Ways and Means Committee in 1918, an attempt was made to limit the practice by private corporations of borrowing heavily for the purpose of investing in tax-exempt bonds, an arbitrage technique that Congress felt unfairly exploited tax laws and interest rate spreads. This form of arbitrage was limited by Congress early in the life time of tax exemption; today's better known variety, involving municipalities investing the proceeds of their debt issues in taxable securities with higher nominal interest rates, was not systematically addressed by Congress until the mid-1960s, when the size of arbitrage profits and the extent to which the technique was being used became difficult to ignore. Basic forms of municipal arbitrage were made illegal by Congress in 1969, and federal regulations were amended frequently beginning in 1972, as officials began to recognize and attempt to control the variety of forms in which the technique was being used (Metcalf 1991).

Arguments in Support of Tax Exemption. The fundamental arguments in favor of tax exemption were also articulated during the early decades of the 20th Century, if not before. The legal/political argument was expressed in terms of the doctrine of intergovernmental tax immunity, which although not expressly stated in the Constitution, did reflect a widely held concern about the need to protect the rights of state and local governments (guaranteed in the Constitution) from usurpation by the federal government. "To place the borrowing capacity of the state and its government agencies at the mercy of the federal taxing power would be an impairment of the essential rights of the state," wrote Governor Hughes of New York in 1910 (Pryde 1993).

A second political argument, not unrelated to the first, holds that "bottom-up" government is fairer, more responsive to the needs and desires of citizens, more democratic, as well as more efficient than a system in which decisions are directed from the top down. Therefore, tax exemption is a worthwhile subsidy in part because it is used at the discretion of local governments, unlike subsidies that are decided on and administered by federal-level decision makers.

A third argument, largely economic in character, is more pragmatic. It holds that without tax exemption, state and local governments would produce inadequate levels of public service as a result of making insufficient capital investment. One variation of this argument, voiced as early as 1918, maintains that, all things considered, the value of lost federal tax revenue is less than the economic value produced. "What kind of bargain would this be?" editorialized The Daily Bond Buyer, in response to calls for federal taxation on bond interest income. "What possible excuse could be offered for a tax that destroys in wealth more than it derives in revenues?" (Pryde 1993). A second variation of this argument, implicit in some of the early Congressional debates, holds simply that tax exemption is worth whatever price, because no effective alternative method is available for facilitating critical capital investment decisions controlled by local governments.

Many members of Congress have agreed with these arguments in favor of tax exemption over the years, enough so that Congress never amended the Constitution to put an end to it, and never passed legislation directly challenging the Constitutionality of tax exemption. Strong lobbying from associations of state and local governments, along with various securities industry groups, have also been important factors in the support for tax exemption. This is not to say that tax exemption has not been limited many times by Congress over the lifetime of its application. A series of legislative actions in the 1980s were particularly important in weakening the legislative basis for tax exemption, as it had been established in the Internal Revenue Code of 1954. Throughout the history of the exemption, Congress seems to have been moved to establish such limits by sudden increases in the volume of outstanding municipal debt or types of tax exempt debt, which have highlighted the levels of federal tax revenue losses. Publicized abuses of municipal borrowing associated with arbitrage and private business development have also precipitated congressional action.

Postscript: The Constitutional Argument. In 1986, Congress passed the Tax Reform Act, which imposed severe restrictions on different kinds of municipal borrowing (these and other kinds of limits on tax exemption will be discussed in a later section of this paper). In 1988 the Supreme Court upheld and clarified a decision by a lower court that the taxation of municipal bond interest payments was a matter of legislation, rather than constitutional protection. In other words, by the end of the 1980s, the long-assumed constitutional barrier to the elimination of tax exemption was found by the nation's highest court to not exist. Yet, in the years since, Congress has given no indication that tax exemption is in any kind of legislative danger.

4. THE ECONOMIC ARGUMENTS

Introduction: Tax Exemption as a Subsidy

Arguments about the appropriateness of tax exemption usually center around whether or not it functions efficiently as a subsidy, with efficiency defined relatively narrowly in cost-benefit terms and assessed with regard to its economic, administrative, and fiscal or financial dimensions. Subsidies of various kinds are usually considered appropriate in cases where market mechanisms do not operate to achieve optimal balances between the supply of and demand for particular goods or services. In the case of a so-called "public good," for example, the production of the good has benefits beyond the circle of consumers normally willing or able to pay for it. A subsidy might be appropriate as an incentive to enable or persuade producers or consumers to act differently than they would under normal market circumstances, in order to achieve the social or political benefits resulting from what policy makers consider to be a more optimal balance between supply and demand.

In the case of tax exemption, advocates argue that state and local governments can be said to naturally underspend on many services, if externalities and spillovers are appropriately taken into account. This "underspending" is the result of an underinvestment of capital. Tax exemption is viewed as correcting that underspending by, in effect, lowering the cost of the underprovided services in proportion to the external benefits, by lowering the cost of capital necessary to make optimal levels of investment.

Economic Efficiency

Economic efficiency refers to the resource allocation effects of tax exemption. It lowers the cost of capital by altering the relative prices of factors, like capital and labor, that state and localities use in producing public goods. This in turn, has an effect on the relative prices of public and private goods. Supporters of tax exemption on economic efficiency grounds argue that it maximizes economic efficiency by providing state and local governments with the decentralized decision making flexibility required to adjust to changes in factor prices and optimize the output of public goods, as well as the capital investment necessary to produce those goods.

Critics argue that tax exemption is economically inefficient precisely because it goes to far. Because it provides a capital subsidy to the public sector and not the private sector, it distorts factor prices, leads to an overproduction of public goods, and a higher than necessary capital intensity of public sector production. The result is a diversion of resources from their most productive uses, producing an overall cost to society unbalanced by any benefit. Fortune (1992) uses a general equilibrium model of the effects of taxation on the allocation of resources developed by Harberger (1963) to estimate the social costs of tax exemption. He concludes that over the 1980-85 period, tax exemption reduced the annual aggregate output of the nonfarm, non-federal government sector by about $3.4 billion, which he characterizes as a "mild" social cost amounting to about $14.66 per person in the U.S. at that time.

Fortune notes that the Harberger approach measures these social costs against the alternative of a perfectly competitive market without subsidies. He admits that under actual, imperfect conditions tax exemption could very well increase economic efficiency as advocates contend, particularly if capital services are in fact underprovided at the state and local level.

Tax Equity & Fiscal Efficiency

Equity. Tax exemption is usually considered to be inequitable because it violates the principle of tax progressivity, on which the American income tax system is to a large extent built. The federal income tax is "progressive" in the sense that higher income individuals pay higher rates of tax. Tax exemption makes this system less progressive, and thus less equitable, because it applies equally to all income levels. This in turn allows a higher income investor to receive a larger tax benefit by investing in a particular tax-exempt security than a lower income individual investing in the same security. This fact, combined with the common-sense notion that higher-income individuals are more likely to have funds for investment in the first place, suggests that to the extent that tax exemption benefits individual investors, it tends to disproportionately benefit those with higher incomes. (The equity implications of corporate investments in tax exempt securities are harder to gauge because of difficulties in defining precisely who benefits from the investment. See Beek 1982b.)

Fiscal Efficiency. This inequitable nature of tax exemption, also exacerbates a second shortcoming, in the opinions of many critics. Fiscal inefficiency (sometimes called "transfer" or "financial" inefficiency) refers to the fact that tax exemption, in the process of lowering borrowing costs of state and local governments, also provides investors with interest income (usually referred to as "windfall" income) over and above what they would receive without tax exemption. As a result, the cost to the federal government is more than the benefit for state and local governments, in terms of lowered borrowing rates, because the total benefit must be shared with investors. And the higher the percentage of income paid in taxes by the investor, the greater the windfall income generated, and the larger the tax revenue forgone by the federal government. The more high income investors taking advantage of municipal bond investments, the more federal revenue is lost.

An Example. A simple cost-benefit example illustrates the fiscal inefficiency of tax exemption. Assume that the average interest rate on tax-exempt bonds is 8 percent and the corresponding interest rate on taxable bonds is 10 percent. This means that tax exemption has lowered state and local borrowing costs by 2 percent--this represents the benefit of tax exemption.

The cost of tax exemption to the federal government is measured by the tax revenues foregone. In a situation where investors must pay up to 50 percent of their income in federal income taxes (depending on the total annual size of that income), tax exemption could potentially cost the federal government as much as 5 percentage points of bond income, or half of the interest income on taxable bonds, which normally would be paid in income tax.

In this situation, the cost of the subsidy to the federal government (5 percent) is significantly higher than the interest rate benefit to state and local governments (2 percent). The remaining benefit goes to the purchaser of the bonds in the form of an after-tax investment return that is 3 percent higher than it would have been if the investment had been made in taxable securities. Investors taxed at lower rates (lower income investors under the U.S. tax system), would receive a smaller share of the tax exemption benefit, and by the same token would cause less of a federal tax revenue loss.

Measuring Fiscal Efficiency. Several methods have been used to measure the actual total revenue costs to the U.S. Federal Government, and thus the actual fiscal efficiency, of tax exemption. In 1965, the U.S. Treasury Department used a method developed by Ott and Meltzer (1963) to conclude that the benefit to state and local governments of tax exemption on bonds issued in 1965, in terms of reduced borrowing costs, was $1.9 billion over the lifetime of the bonds. The cost to the federal government in lost income tax revenues was found to be $2.9 billion, implying an index of fiscal efficiency (the ratio of borrowing cost reduction to lost federal tax revenues) of about 65 percent (Joint Economic Committee 1966).

A number of later studies corrected what were found to be mistakes in the Treasury Department's application of the model, which exaggerated the costs of tax exemption. Fortune (1992) used the Ott-Meltzer method to estimate the 1990 interest rate savings to state and local governments at $16.9 billion, and the revenue cost to the Treasury at $22.0 billion, implying an index of fiscal efficiency of about 77 percent. The U.S. Office of Management and Budget, using another method based on the Treasury Department's Tax Expenditure Budget, agreed with the revenue cost side of Fortune's estimate in its 1990 report on federal revenue losses due to municipal bond tax exemption, where the cost to the federal government was estimated at $21.52 billion.

Zimmerman (1991) puts these kinds of numbers in perspective by viewing tax exemption relative to other kinds of federal assistance to state and local governments, such as direct grants. He calculated that the federal revenue loss resulting from tax exemption was the equivalent of roughly 12 percent of the total federal assistance budget in 1989, but only about 4 percent of total federal income tax revenues for the same year. Zimmerman pointed out that tax exemption was the only type of federal assistance that experience real growth during the 1980s, with an 83 percent increase over the period.

Qualifications. Charges of fiscal inefficiency probably have been the most compelling of all arguments against the use of tax exemption in the U.S. Dramatic increases in the amount of outstanding municipal debt during the late 20th Century, combined with perennial federal budget deficits, have helped make tax exemption a constant target of critics viewing the issue from a fiscal perspective. However, some qualifications of the argument are appropriate.

First, Zimmerman points out that in the U.S., no available subsidy mechanism succeeds in achieving anything close to 100 percent fiscal efficiency. He cites a variety of studies that examine this phenomenon in the U.S., including many that have investigated the considerable extent to which state and local governments substitute grant dollars for their own tax effort.

Fortune cautions that it is incorrect to assume that the entire investor share of federal benefits provided to state and local governments is "windfall" or "unearned" income. He calculates that only about half of the investor share is an unearned surplus, the rest is a necessary reward for the risks investors face in connection with their purchases of the bonds--it is, in effect, the fair market price for the capital they supply to state and local governments. Using the Ott-Meltzer calculations of fiscal inefficiency, this puts the total excess income of investors from tax exemption at about $2.5 billion in 1990, or about $10.70 per capita.

Some researchers argue that the traditional fiscal efficiency criticisms of tax exemption exaggerate the savings to be gained by eliminating it because of the invalid assumption that taxable bonds represent the only alternative to tax-exempt debt for financing capital investment by state and local governments. Research by Gordon and Metcalf (1991), Holtz-Eakin (1991), and Temple (1994) suggests that, in the absence of other subsidies (such as direct grants) U.S. state and local governments are more likely to turn to accumulated tax revenues than taxable debt to finance the kinds of capital investment projects that would normally be paid for with tax-exempt general obligation bonds. If this research is correct, an elimination of tax exemption for such debt would have a small impact in terms of increased federal tax revenues. (Note also that general obligation debt now accounts for only just over one-quarter of total tax-exempt borrowing.)

Gordon and Metcalf also point out that potential cost savings associated with the elimination of tax exemption are often exaggerated for another reason. The normal purchasers of tax-exempt debt would likely rebalance their portfolios if tax exemption were eliminated. In other words, they would find other opportunities to reduce their federal income tax liabilities if they could no longer purchase tax exempt bonds. This rebalancing could significantly reduce, if not eliminate, much of the actual fiscal efficiencies to be gained from ending tax exemption.

Administrative Efficiency

Administrative efficiency refers to how much benefit is received by lower levels of government per dollar of administrative cost to the federal government. Obviously, some intergovernmental assistance programs cost more to administer than others. Categorical grants in the U.S., for example, are usually accompanied by requirements to provide special services, reporting requirements to insure compliance, and a variety of other provisions requiring minimum service levels, maintenance, monitoring, and reporting. These kinds of administrative costs cut deeply into funds that might otherwise be spent on the direct provision of public services, and thereby reduce the administrative efficiency of the subsidy.

The administrative costs of tax exemption are certainly lower per dollar of foregone federal revenue than for any type of U.S. federal grant. However, the ratio of administrative costs to ultimate benefits received by state and local governments is much more difficult to gauge. It is likely that by more carefully managing the tax exemption subsidy, its economic and fiscal efficiency might be improved. In other words, by increasing administrative costs, it might be possible to increase the ratio of total state and local benefits to total federal government cost.

Administrative Shortcomings. A large part of the problem with more cost-effective management of tax exemption is that it is an interest rate subsidy, as opposed to a lump-sum cash subsidy, and is therefore what economists refer to as a "hidden" subsidy. Unlike a straightforward federal grant to local governments for infrastructure development (i.e. an explicit subsidy), the costs associated with tax exemption are largely invisible to, and therefore beyond the control of, federal officials. Part of the problem is that tax exemption is a subsidy that does not appear in the federal budget. Tax exemption also functions like so-called “open-ended” matching grants, where the matching ratio is set and the federal contribution is determined by the amount of state and local spending. The federal budgetary cost is not fixed and not controllable by Congress, as it would be for a “closed” grant, for which Congress appropriates a given amount, and this amount determines the matching ratio of state-local funds.

Federal officials have also compounded the problem by delaying until fairly recently the development of mechanisms for monitoring or controlling the use of tax exemption in redressing the market imperfections that it is thought to correct for. It was not until 1982 that Congress required municipal bonds to be issued in registered form, thus beginning the process of determining precisely who owns such instruments. Registration rules require that the bond owner's name be recorded by a transfer agency, usually a bank, whose function it is to keep ownership records. Prior to 1982, all municipal bonds were issued as "bearer" bonds, in effect owned by whoever had possession of them, and for which no records of ownership were kept. Filers of income tax returns were not required to provide information on their tax-exempt interest income until 1987.

Effects of Different Tax Code Structures. The U.S. experience with tax exemption suggests that more careful administration, particularly in terms of how the tax code is structured and applied, could have significant positive effects on the degree of fiscal efficiency attributable to tax exemption. The administrative efficiency of tax exemption could increase because higher administrative costs would be outweighed by a more cost-effective use of federal subsidy resources.

One often-cited example of a change in the tax code that would immediately improve the fiscal efficiency as well as equity of tax exemption is a move to a completely "flat" income tax structure, in other words one that applies the same tax rate to all tax payers. An end to progressive structure of the income tax code means the elimination of the higher tax brackets that would take more of a share of the federal subsidy benefit intended for state and local governments (as noted, the most active investors tend to be concentrated among the higher tax brackets). Some fiscal inefficiency would continue because investors would still recieve some "windfall" income, but the overall inefficiency would be less. The benefits of reducing the progressivity of the federal income tax have been debated in the U.S. for some time. The Tax Reform Act of 1986 reduced the number of tax brackets and significantly flattened the income tax, although more in the interests of simplifying the tax code, and making it more transparent, than anything having to do with municipal bond tax exemption. Although a flat income tax increases the equity and efficiency of tax exemption, it raises a host of other, broader equity concerns, and is far from the most often recommended way of adjusting the administrative application of tax exemption.

More meaningful recommendations for tax code adjustments that improve the efficiency of tax exemption relate to the ways in which the tax code structure often contributes inadvertently to a reduction in the interest rate spread between tax-exempt and taxable debt. Remember from the example cited earlier, that the closer the interest rate on tax-exempt debt is to the rate on taxable debt, the smaller the benefit received by state and local governments. At times when this spread is unusually narrow, investors--especially those paying the highest tax rates--gain a larger than usual share of the benefit of tax exemption in the form of wind-fall after tax income, and as a result fiscal efficiency is particularly low.

It is apparent when the interest rate spread is unusually narrow, as it was when tax exemption was under intense Congressional discussion during the early 1980s, because under ideal market conditions, the ratio of tax-exempt to taxable interest rates should not be much larger than the tax rate paid by the highest income investors. In the example cited earlier, an investor paying 50 percent of income in taxes would begin to find tax free municipal bonds attractive as soon as the tax-exempt interest rate reached over 50 percent of the rate on taxable bonds. At that point, such an investor would begin to gain more of an after-tax advantage from investing in tax exempt bonds than in taxable bonds. Investors in lower tax brackets would be happy with even wider interest rate spreads (lower tax-exempt rates relative to taxable rates). Therefore, one would not expect the ratio of tax-exempt to taxable rates to increase much more than the tax rate of the wealthiest tax payer (the most likely to invest in any kind of instrument), because as soon as that threshold was reached, all investors would find tax exempt debt attractive for sheltering income. The rate on tax-exempt debt would not have to move much higher to continue to attract investors, and presumably would quickly reach an equilibrium as demand and supply balanced.

This means that in the early 1980s, when top tax brackets were 50 percent for individuals and 46 percent for corporations, one would have expected tax exempt interest rates to be no higher than roughly 55 percent of taxable rates. In fact, the figure was much higher. The 1979-81 average was 77 percent (Beek 1982a). In other words, the benefit of tax exemption to state and local governments (in terms of lower borrowing costs), and its corresponding degree of fiscal efficiency, were much lower than one would have expected, because an unexpectedly large share of the overall benefit was going to investors in the form of after-tax investment return.

The U.S. income tax code contributed to this narrowed interest rate spread in three major ways. First, it limited the variety potential municipal bond investors who could actually be classified as top bracket tax payers. Many potential investors paid little or no income taxes and were therefore more interested in the higher nominal interest rates on taxable bonds. This group included pension funds, life insurance companies, thrift institutions, nonprofit organizations, foreign investors, and many retired people. This left the municipal market to be supported by a relatively narrow circle of commercial banks, casualty insurance companies, and to a lesser extent high income households (most individual investors were not yet significantly accessing the municipal market via mutual funds). The tax liabilities, income outlooks, and investment strategies of these investors largely determined demand for municipal bonds, and in the 1980s contributed to a narrowing of the interest rate spread between taxable and tax-exempt debt.

Second, the tax code also narrowed this interest rate spread with a liberal interpretation of what borrowing purposes legitimately could be served by tax exempt debt. For example, over half of the total outstanding tax exempt bonds that Fortune used for his estimate of fiscal inefficiency in 1990 consisted of debt that Congress had already re-classified as "private purpose" (and thus taxable) debt. New issues of this debt were required to be taxable by the Tax Reform Act of 1986, but in 1990 the market still held a considerable volume of such bonds issued prior to tax reform, which was allowed to remain tax exempt. Most of this debt consisted of revenue bonds sold at interest rates closer to rates on taxable debt than so-called "public purpose" debt. The huge volume of this more expensive debt in the early 1980s helped reduce the interest rate spread between taxable and tax-exempt debt, thereby reducing the benefit of tax-exemption to state and local governments, as well as the index of tax efficiency.

Debt issued for arbitrage purposes also contributed to this narrowed spread, because it flooded the market and increased the competition to attract buyers from the narrowed investor base described above. This helped to drive up the cost of municipal credit relative to private sector corporate credit, further narrowing the interest rate spread.

Creating and implementing limits on the kinds of allowable municipal debt achieves gains in fiscal efficiency at the expense of higher administrative costs. A key question asked during the U.S. Congressional debate on the Tax Reform Act of 1986, was whether or not the Internal Revenue Service, an agency devoted primarily to collecting revenues, would be able to adequately take on new responsibilities for administering and enforcing the regulations regarding what was to be classified as public purpose municipal debt.

Third, the competition for tax exempt credit, and the resulting narrowed spread between taxable and tax-exempt interest rates, was also spurred by the lack of any targeting of tax exemption to issuers who were in particular need of it in order to make adequate levels of capital investment. By the early 1980s, most of this competition came from special purpose government entities, such as public authorities, created specifically for the purpose of issuing revenue bonds to build public projects (Leigland 1994). Critics have long charged that such entities have driven up the cost of municipal credit, and to some extent "crowded out" more traditional, "general obligation" type borrowing by general purpose units of state and local government (Walsh 1978). The argument is that many of these entities operate like private sector, profit-oriented corporations, and should compete with such corporations for taxable debt financing.

A similar phenomenon has been observed more recently within the category of general obligation borrowing. Research cited above, by Temple (1994) and others, suggests that many, if not most, active general obligation borrowers are able to substitute the use of accumulated tax revenues for tax exempt debt in order to finance the kinds of capital investment projects that would normally be paid for with tax-exempt general obligation bonds. Borrowing to finance such projects has many advantages, and tax exemption appears to make debt much easier to use than taxes, however for many jurisdictions these projects can proceed whether or not tax exemption is available. This research suggests that the overall level of capital investment is much more dependent on the basic level of economic resources available to the jurisdiction in question, along with the demographic components of the demand for services.

Designing and administering a system for screening potential municipal bond issuers based on an evaluation of their need to use the subsidy represents a huge challenge, politically as well as conceptually. Among other things, the system would require a mechanism for “graduating” entities deemed to have outgrown the need for tax exempt financing. However, such a system also offers the possibility of much more careful targeting of the subsidy and correspondingly much higher levels of efficiency.

5. ALTERNATIVES TO TAX EXEMPTION

Critics of tax exemption from the perspective of economic and fiscal efficiency ask the same questions of it that are asked of any indirect or hidden subsidy, particularly any interest rate subsidy: First, is a subsidy justified? Second, if justified, what is to be gained from a broadly applied tax exemption that a more limited or direct form of intergovernmental assistance could not do as well and less expensively? In other words, critics do not necessarily question the value of the projects being built with tax-exempt debt. Such projects generate considerable fiscal as well as economic benefits for different levels of government, most directly in the form of a variety of increased tax revenues. However, critics question whether or not tax exemption is the most cost-effective method of subsidizing these kinds of capital investments.

Elimination of Tax Exemption

Some critics suggest that tax exemption is simply too expensive to the federal government, and too inefficient a subsidy. They argue that tax exemption should be ended, that state and local governments should learn to cope with higher borrowing costs, or make more prudent use of "pay-as-you-go" financing that relies on accumulated tax revenues.

Although some recent research, cited above, suggests that many GO bond issuers would still be able to proceed with projects after the elimination of tax exemption, total elimination for revenue bonds as well as general obligation bonds would cause tangible difficulties for U.S. state and local governments, as well as tens of thousands of special purpose government units, such as public authorities and special districts. Taxable bonds would mean higher borrowing costs. The use of accumulated tax revenues rather than debt for financing is ultimately less economical and equitable for large public infrastructure projects. The need to sharply increase tax revenues in some cases to initiate facility construction, would of course be politically unpopular. Overall, less debt would be issued and members of the financial services community that specialize in the underwriting, trading, insuring, rating, and providing legal opinions in connection with municipal debt sales would lose income as well as investments made in human resource development. They would of course also vigorously lobby against such a move.

Replacement with a Direct Subsidy

Other critics of tax exemption see value in providing a subsidy, because of what appears to be a natural underprovision of capital-intensive public services at the state and local levels of government. However these critics ask why tax exemption should not be replaced with a system of direct federal grants that make up the difference between interest rates on taxable and tax-exempt debt for any particular project? In terms of the example cited earlier, this means that state and local governments would use taxable bonds to build the same projects, therefore the federal government would not lose the 5 percent worth of bond income in foregone income taxes. A direct federal cash grant would be given in an amount equal to the 2 percent reduction in state and local borrowing costs previously made possible by tax exempt borrowing. State and local governments would use the same cost savings to build the same projects, while the federal government would dramatically lower its subsidy costs because of higher fiscal efficiency. Investors are the losers in this scenario, with their bond income fully subject to federal income taxation.

Mandatory Replacement. One method of applying a direct subsidy would be to eliminate all tax-exempt debt and provide the direct federal subsidy to any and all state and local governments who issue taxable bonds for qualifying "public purpose" projects. Congress would in effect commit the U.S. Treasury to pay each state and local government a direct subsidy related to the size of its interest payments on taxable debt. Theoretically the subsidy rate could be set so that state and local government would receive a higher capital cost subsidy than they do with tax exemption, while still reducing the overall costs to the federal government.

State and local governments oppose such a change largely because by giving up tax exemption in favor of direct grants, they turn control of the capital subsidy over to

Congress. After adopting the direct subsidy, Congress could eliminate it or reduce it drastically. State and local governments prefer to remain as insulated as possible from the vagaries of the federal budget process. High-income investors subject to income taxation and the investment services community would of course also strongly oppose such a change.

Taxable Bond Option (TBO). TBO was first proposed in the 1940s, and began receiving special attention in Congress beginning in 1969 when it was endorsed by the Nixon Administration. TBO gives state and local governments the option of issuing either tax-exempt or taxable debt. If they choose the latter, they would be eligible to receive a direct reimbursement from the U.S. treasury linked to the interest costs on the bonds. As proposed in the 1960s and 1970s, the reimbursement would be equal to a fixed proportion of the interest cost on the taxable debt. The reimbursement would be paid throughout the lifetime of the outstanding debt.

The key to the use of TBO is the reimbursement rate, which amounts to a direct interest subsidy associated with the use of taxable bonds. That rate must be higher than the indirect interest subsidy to be gained by the issuance of tax-exempt bonds, in order to induce issuers to choose the taxable option. In other words, use of the TBO would be more expensive than tax exemption alone in terms of lost federal tax revenues. That fact was confirmed by an economic study of TBO in the early 1970s carried out by the Boston Federal Reserve Bank, and reconfirmed by the Congressional Budget Office in 1979 (Beek 1982b). The equity and efficiency problems associated with tax exemption are eliminated for all taxable bonds issued as part of such a program, but would of course remain for tax exempt debt.

During the debates on TBO in the 1970s, brokers and dealers of tax exempt securities favored a reimbursement rate that would establish a federally supported floor under the subsidy rate available through tax exemption. This would protect the tax-exempt sector during periods of tight money, but would not dramatically affect the supply of tax-exempt debt over the longer run. Tax reformers advocated a much higher subsidy rate to drive tax-exempt debt from the marketplace and end the windfall profits of high income investors. A compromise rate in the range of 35-45 percent eventually became widely accepted.

Despite the fact that interest savings enjoyed by state and local governments would probably increase overall with the introduction of TBO, these issuers opposed it largely on the grounds that it was the first step in establishing federal control over the subsidy and might eventually lead to reduction or elimination of the subsidy. State and local critics of TBO noted however that the subject of possible federal guarantees of municipal borrowing had been broached, in effect, with the TBO proposals. If the use of interest reimbursement proceeds were restricted to making interest payments, TBO would provide a partial federal guarantee for that debt. State and local governments took the opportunity to advocate some kind of more straightforward federal guarantee.

Ultimately, TBO was rejected by Congress because of its implications for increased federal costs. Use of the option meant that the federal government could be locked into high interest subsidy payments for the 20-30 year lifetimes of long-term bonds. In addition, Congress had not yet limited the kinds of municipal debt legitimately classified as "public purpose," as they were to do later in the Tax Reform Act of 1986. Many members of Congress feared that TBO would contribute to an even more rapid expansion in the use of private purpose and arbitrage debt by state and local governments, with greater cost impacts on the federal treasury.

Taxable Income Option (TIO). TIO was finally proposed in 1978 as hopes for TBO were fading. Under this program, each investor in municipal bonds would have the option of treating the interest income from purchased bonds as either taxable or tax-exempt. If the taxable option was taken, the investor would receive a supplemental interest payment that would be added to taxable income. This would be a reimbursement from the U.S. Treasury in an amount equal to some fixed proportion of the taxable bond interest rate. If the reimbursement rate provided the investor with an after-tax income that was higher than with tax-exempt debt, the investor would of course choose TIO. The calculation would depend on taxable and tax-exempt interest rates, as well as the investor's individual marginal tax rates.

The basic arguments for and against TIO were similar to those in the case of TBO. However, differences in implementation would lead to some different impacts. TIO would probably broaden the investor base somewhat by attracting tax-exempt or low tax liability investors with large cash holdings to municipal debt investments, particularly if the interest supplement were made refundable rather than simply a credit against taxes owed. By the same token, these institutional and individual investors (pension funds, non-profits, retired people with large financial assets, but low current income) would reap large windfall gains from TIO, raising new kinds of equity concerns.

The initial impacts of TIO on the federal budget would be much harder to estimate and control for and might be much larger than the initial impacts of TBO. This is because all holders of outstanding municipal debt would be eligible to participate, while under TBO, only new debt issues would be affected. By the same token, TIO could be much more expensive in the short-run. But TIO would be easier to adjust, with the federal government not forced into a long-term subsidy commitment as it would be under TBO. Finally, administrative costs would be much higher for both TBO and TIO than for the broad use of tax exemption, especially prior to new restrictions on tax exempt borrowing imposed by federal tax reform in 1986. The necessity of making millions of new reimbursements to tax payers, as required by a TIO program, would impose substantial new burdens on the Internal Revenue Service.

<u>Limitations on Municipal Bonds -- Debates over U.S. Tax Reform in the 1980s</u>

The U.S. experience with TBO and TIO demonstrates that reform of tax exemption involves trade-offs among reform objectives. Improvements in equity and fiscal efficiency do not necessarily translate into lower overall costs to the federal government. By the end of the 1980s, the U.S. Congress had begun to focus more on broader cost control measures, and less on proposals that, while improving equity and efficiency measures, nevertheless allowed continued municipal market expansion and committed the federal government to new and possibly more expensive kinds of subsidies. In particular, Congress began to consider ways of reducing the overall supply of municipal bonds by more carefully targeting the tax exemption mechanism, and finding ways of exercising more budgetary control over the subsidy.

These efforts largely culminated with the Tax Reform Act of 1986, although a number of important, but less sweeping, legislative changes preceded and followed it. Zimmerman found that the Tax Reform Act improved fiscal efficiency by 23 percent and succeeded in making municipal bonds "a more attractive intergovernmental subsidy alternative to grants-in-aid" (1991, 103). Other experts have found the fiscal efficiency improvements of tax reform in the late 1980s to be much less dramatic, pointing out that the spread between tax-exempt and taxable interest rates narrowed only very slightly (Petersen 1993; Green, 1993). Of course, tax reform also involved much higher administrative costs, in ways already described above in connection with the discussion of administrative efficiency of tax exemption.

Types of Investors. The Tax Reform Act of 1986 affected the circle of likely municipal bond investors in a variety of sometimes conflicting ways. The 1986 act, as well as the 1990 Revenue reconciliation Act, both significantly "flattened," or reduced the progressivity of, the income tax and thereby reduced the fiscal inefficiency and inequity associated with tax exemption by reducing the demand from investors motivated largely by the need to reduce large tax liabilities.

However tax reform also narrowed somewhat the pool of municipal bond investors, thereby counteracting some fiscal efficiency and equity gains. For example, as noted earlier, prior to the late 1980s, financial institutions like commercial banks and property and casualty insurance companies had the most to gain from investing in municipal bonds, and were in fact the dominant investors, with high income households following in third place. The 1986 Tax Reform Act virtually eliminated the advantages for banks of tax-exempt securities, by completely disallowing deductions by banks of interest paid to hold municipal bonds, and reducing corporate income tax rates. From 55 percent of all outstanding municipal bonds in 1980, commercial banks had reduced their share to 25 percent by 1990. But tax reform also reduced other kinds of tax shelters, and thereby made tax exempt debt attractive to new types of potential investors, offsetting somewhat the disappearance of commercial banks from the municipal market.

Other developments in the marketplace during the 1980s also changed the types of investors attracted to municipal bonds. The share of outstanding municipal bonds owned by individual investors jumped dramatically, from 25 percent in 1980 to over 60 percent in 1990. The increased demand from households came about largely because of the emerging role played by mutual funds and unit trusts in providing households with diversification opportunities and liquidity services necessary for most of them to conveniently access the municipal debt market. The rapidly growing role of municipal bond insurance also began reducing the default risks associated with municipal bonds, and this also helped attract individual investors to the market. Finally, issuers and underwriters also began to more aggressively structure municipal debt instruments to attract individual investors and the funds that represented many of them.

Types of debt. Tax reform enacted a series of restrictive measures to control the types of capital investments for which tax exemption could be used, in many cases extending and strengthening restrictions enacted through earlier legislation. First, it lowered from 25 percent to 10 percent the amount of bond proceeds allowed to benefit, or be secured by, a non-governmental entity. Bonds exceeding those limits were classified as "private purpose" and subject to each state's per capital volume limit on such debt (established in earlier legislation). Second, each state's volume limit for private purpose debt was lowered to $50 per capita or $150 million total, whichever was more. This represented a 50 percent cut in the per capita volume of private purpose debt that each state could issue on a tax-exempt basis. Third, tax-exempt status was revoked for a variety of capital financing purposes involving participation by the private sector. Such purposes included pollution control facilities, parking facilities, sports and convention centers, and industrial parks.

In addition to limiting tax exempt debt for private purposes, Congress also strengthened requirements limiting the use of tax exempt bonds for arbitrage purposes. The first limits on arbitrage had come in the Tax Reform Act of 1969 when the issuance of tax-exempt bonds was prohibited in cases where more than 15 percent of the proceeds were to be invested in higher yielding taxable securities. Restrictions enacted in 1984 had required the rebate of certain, remaining kinds of arbitrage profits. The Tax Reform Act of 1986 called for a rebate of all arbitrage profits earned on all public purpose debt issued after September 1, 1986.

These limitations on private purpose and arbitrage borrowing were designed to increase the fiscal efficiency of tax exemption by limiting the competition among issuers of tax exempt bonds that had helped drive up interest rates. This limited competition, in turn, tended to widen the spread between taxable and tax-exempt interest rates. However, as noted above, these limitations would have to be maintained at the expense of significantly higher administrative costs. The Internal Revenue Service was suddenly faced with new responsibilities for administering and enforcing the new regulations (Zimmerman 1991).

Even more extreme proposals on limiting the types of municipal debt enjoying tax exemption had been widely discussed earlier in the 1980s, but were not included in the 1986 Tax Reform Act. For example, David Beek of the Federal Reserve Bank of New York proposed that tax exemption be eliminated for most revenue bonds, on the grounds that most of these instruments financed projects with low social priorities, and enjoyed access to alternative financing sources because of their capacity to generate substantial user fees (Beek 1982a). In this general category Beek included power and housing projects, toll roads, bridges, airports, and industrial parks, as well as water and sewer bonds. He argued that projects with high social priorities, which could not as easily generate user fees, be financed with GO bonds. He also argued that the range of GO-financed activities could and probably should increase, because some kinds of projects appropriately financed with GO bonds, like public schools and municipal buildings, had increasingly been financed with revenue bonds.

Beek pointed out that cutting back on the flow of revenue bonds in this way would dramatically improve the economic and fiscal efficiency of tax exemption. Not much was to be gained by significantly cutting tax exemption for GO bonds, because municipalities would simply raise taxes in order to proceed with "pay-as-you-go" financing. Because state and local taxes are deductible from federal taxable income, part of this higher tax cost would be passed on to the federal government in any case, thus limiting the fiscal efficiency gains of eliminating tax exemption for these bonds.

<u>Types of Issuers</u>. The idea of limiting tax-exempt borrowing by focusing restrictions on the kinds of entities authorized to sell such debt has a long, but largely unsuccessful history in the U.S. In early 1941, as President Roosevelt was initiating a major campaign to eliminate tax exemption, the Treasury Department sent notes of deficiency to seven holders of bonds issued by the New York Port Authority, saying that interest on the debt was taxable. The Port Authority is usually considered to have been the first and for many years the most powerful of the modern variety of "public authorities" in the U.S., enterprises owned by state and local governments that exist as separate corporate entities in order to finance and manage "special purpose" government activities. The Treasury

argued that the Port Authority, and later the New York City Triborough Bridge and Tunnel Authority, were not true “political subdivisions” of New York State and thus not legitimate issuers of tax exempt bonds. In 1944, a decision by the U.S. Tax Court (and a subsequent decision by the Supreme Court not to review the case) ended the debate in favor of the public authorities.

Special purpose government entities of all kinds proliferated rapidly over the next fifty years, under a variety of names and serving a variety of purposes. By the mid-1980s, they were responsible for over half of all long-term tax-exempt borrowing, almost all of it in the form of higher yielding revenue bonds that have significantly contributed to the persistent narrowing of the interest rate spread between taxables and tax-exempts (Petersen 1993). The federal government long ago abandoned its efforts to restrict borrowing by these entities, and does not now even specifically track their borrowing activities. The U.S. Census Bureau routinely ignores the separate corporate status of many of these entities, classifying their debt as direct obligations of “general purpose” governments like states and cities (Leigland 1990). Arguments made in the early 1980s by Beek and others to limit the issuance of revenue bonds, are the closest thing to a recent attack on the borrowing activities of special purpose governments.

A case can be made for limiting tax exemption on GO debt to weaker state and local governments that cannot afford to sell taxable debt, and for whom accumulated tax revenues seem an impractical or inequitable method of financing. However, the development and implementation of systems for discriminating among these entities based on an evaluation of their economic and financial condition would be highly sensitive politically, and controversial at best, with no one system clearly better than all the rest. The consideration and adoption of such a system could be carried out by the U.S. Congress only with great difficulty.

6. TAX EXEMPTION IN SELECTED EMERGING ECONOMIES

The issue of tax exemption is often more complicated and even more controversial in emerging economies than it has been in the U.S., because of different market dynamics as well as growing pressures on these governments to make taxes more equitable and productive. A variety of approaches have been taken or are being considered in a variety of emerging economies (see Leigland 1997).

Indonesia: Adjustments to Tax Laws

In some countries the pressure to rationalize tax systems will likely mean that gradual adjustments in tax treatment of interest income will be a more palatable way of attracting investors than efforts to institute a U.S.-style tax exemption. The issue is illustrated in Indonesia, with one of the smallest bond markets in Asia. The central government does not sell bonds or other treasury securities, but the country does have a modest corporate bond market catering mostly to private sector companies and some state banks and other national level government-owned corporations.   Maturities have ranged up to 12 years for some toll-road bonds guaranteed by national government agencies, but the vast majority of issues have maturities of five years. Of the 48 issuers who accessed the bond market between 1988 and August 1995, seven were Regional Development Banks, owned jointly by provincial and local governments. These five-year Issues, backed by general system revenues, and sold to finance on-lending to local governments for small projects, have been the nearest thing to municipal bonds sold in the market.

However, despite the recognition on the part of many government officials that Indonesia needs a much more developed municipal bond market, the government has also given priority to eliminating a variety of tax exemptions. It is not inclined to consider one for municipal bonds. Nor does the government have reason to feel that tax exemption is of immediate critical importance in attracting investors to municipal bonds. This is because in the near future, the most aggressive purchasers of such bonds will likely be large pension funds who are not taxed on income, and are attracted to bonds because they lack alternative long-term investments to match their long-term liabilities. Thus tax exemption is neither currently necessary nor politically acceptable in Indonesia. Nevertheless, because of concerns about long-term bond market development the government recently has made smaller adjustments in tax laws, for example by reducing tax rates on interest income from bonds to the same level as rates on bank deposit interest, and exempting mutual funds from income taxes, leaving individual investors to pay the taxes on their mutual fund profits.

The Philippines: Proposals to Adopt Tax Exemption

In some other emerging economies, such as the Philippines, support for tax exemption is strong, particularly at the local level. The Philippine bond market is dominated by national government issues, particularly Treasury Bonds and Notes, with most maturities now ranging up to seven years, although 15-year and 20-year issues recently have been sold. Bonds are also sold by government banks and other government-owned corporations. Some blue-chip private companies have issued bonds, but most of the private sector relies for financing on banks or the stock market. Only a few municipal issuers have sold bonds, the best known of which are the Cebu Equity-Bond Units, sold in 1991 by the Provincial Government of Cebu.

After the passage of the Local Government Code in 1991, local governments were given greater discretion in arranging their own bond deals. However other than some housing-related mortgage bonds sold with guarantees by a central government housing corporation, and a revenue bond issue prepared but not sold by Naga City, municipal bond activity has been virtually non-existent.

Prior to the adoption by the Code, local governments could sell debt for which interest payments were not taxed as income, but complex oversight rules made the sale of such debt difficult. The Local Government Code liberalized the procedures for selling such debt, but did not contain provisions for tax exemption. Various Philippine Government officials say this omission was an oversight, but admit that the pressing need to increase tax revenues via a reformed and rationalized national tax system, may make it difficult to reinstate full tax exemption for municipal bonds when the code is revised in late 1997 or 1998. Nevertheless, a variety of local government associations in the Philippines, including the new League of Leagues, established to represent all major local government units in policy negotiations with national officials, are committed to pressing their case for tax exemption as an essential tool in facilitating local debt issuance for capital construction.

Poland: Refinements to Tax Exemption

Finally, some emerging economies already have varieties of tax exemption. The challenge in these countries is often to refine the use of the subsidy in order to maximize its productive impacts. In Poland, for example, the bond market is dominated by national government debt instruments, with most maturities ranging from fifty-two weeks to five years, although variable-rate bonds with 10-year maturities have recently been sold on an experimental basis. Corporate bond issuance has only recently begun to accelerate, with most private sector firms traditionally relying on banks for financing. Some general obligation bonds for special projects have been privately placed by cities such as Warsaw, Plock, Mokotow, Miedzyrzec, etc., and a few revenue bond issues have been sold by municipal-owned enterprises. However nationwide, only a very small fraction of local government capital spending derives from borrowed funds, and most of that comes from banks or government-subsidized environmental loan funds.

Poland makes use of a limited form of tax exemption. Interest income from municipal bonds issued by local governments is exempt from taxation for individual investors, but not for corporate investors. Interest income from municipal bonds issued by local government-owned companies or enterprises is subject to full taxation. Rather than dramatically extend the benefits of tax exemption to new investors or issuers, the national government decided as part of the new 1997 Tax Law, to maintain those existing limits, but eliminate tax incentives enjoyed by national government treasury securities, which tended to make that debt more attractive to investors than municipal securities, and therefore may have crowded out some municipal borrowing.

7. SUMMARY & CONCLUSION: THE CASE FOR TAX EXEMPTION IN EMERGING ECONOMIES

The economic arguments against the use of tax exemption as a subsidy are reasonably straightforward. These arguments dominate most of the literature on the subject in the U.S. Policy makers in any emerging economy considering tax exemption as a way of lowering the borrowing costs of local governments ultimately will have to contend with arguments about the efficiency of tax exemption as a subsidy, particularly fiscal efficiency. However, it would be incorrect to say that there are no arguments in favor of using tax exemption in the emerging economy context. After all, despite clear and convincing economic arguments that tax exemption is a somewhat costly and difficult to control subsidy, the U.S. Congress has never found reasons compelling enough to do more than limit and better target its use.

Tax Exemption in the U.S.-- Why It Endures

Before reviewing possible arguments about the conditions under which tax exemption might be appropriate in the emerging economy context, it may be useful to summarize briefly the reasons why it continues to be used in the U.S.:

- Courts and Constitutional Doctrines. Court decisions early in the century presented Congress with the politically difficult problem of eliminating a subsidy already in place, rather than deciding whether or not to create a new subsidy mechanism. Moreover, those court decisions presented tax exemption as a constitutionally protected right of state and local governments. Amendments to the U.S. Constitution require far more consensus that normal legislation. For a subsidy benefiting so many U.S. government entities, wealthy taxpayers, as well as powerful private sector financial interests, such a consensus could only be won after considerable public debate and broad political scrutiny. As the municipal market grew, the political risks to legislators willing to challenge the constitutionality of tax exemption grew accordingly. By the time the U.S. Supreme Court ruled in 1988 that tax exemption did not afterall enjoy constitutional protection, Congress had already decided to limit and better target its use rather than attempt to eliminate it, for reasons reviewed below.

- The Political Debate. Congressional legislators, as representatives of state governments, tend to respond favorably to the depiction of tax exemption as a subsidy largely under the control of state and local officials, rather than determined and administered by federal authorities. As such, tax exemption can be seen as a financing mechanism that supports and protects the country's long tradition of decentralized federal governance by empowering local officials to make capital investment decisions as they and their constituents see fit. This has been a compelling political argument in favor of tax exemption over the years.

- Economic Efficiency. The view that municipal infrastructure suffers naturally from chronic under-investment is widely held in the U.S., therefore arguments that tax exemption is economically inefficient (that it directs resources away from more productive private sector purposes) have not been compelling. Most urban infrastructure projects financed with municipal bonds are viewed as appropriate targets of some kind of subsidized financing, because the projects are needed, they are more readily and easily built with such financing, and they ultimately generate considerable economic returns of various kinds.

- Fiscal Efficiency. Criticisms of tax exemption on fiscal efficiency grounds became more compelling as the volume of outstanding municipal debt grew. But by the same token, this growth was evidence that tax exemption was helping to build the municipal market into one of the most powerful capital allocation mechanisms in the developed world. The qualifications to the arguments on fiscal efficiency, cited earlier in this paper, also tend to reduce the estimates of federal revenue gains likely to be generated by an elmination of tax exemption, as well as the overall force of the fiscal efficiency argument.

- Limitation vs. Elimination. Nevertheless, some degree of fiscal inefficiency associated with tax exemption is undeniable. This has suggested to many critics that, because some kind of subsidy seems appropriate to help reduce state and local borrowing costs, direct grants should be used rather than a hidden interest rate subsidy like tax exemption. Decisions regarding funding levels for this new subsidy could be better made as part of the annual federal budget process. And, as an on-budget subsidy, it could be more effectively monitored and controlled. However, in many respects, the responsibility for making these kinds of decisions would not be something that many congressional legislators would be eager to take on. Yearly public debate about funding levels for one more, very large federal subsidy, as well as the continuing need to try to balance federal expenditures with revenues, would likely make the annual federal budget process even more painful for legislators than it already is. This would be particularly true if the elimination of tax exemption in favor of some kind of direct subsidy did not lead to the increases in federal revenues that the Treasury Department has long predicted, as some recent research by Metcalf (1990) and others now suggests.

The Emerging Economy Context. There is of course no "right" answer to the question of whether or not to employ tax exemption in the emerging economy context. Much depends on the situation of specific economies, including the status of tax laws and capital market regulations. It is clear, however, that any effort to institute such a subsidy must contend with a considerable body of economic literature firmly opposed to its use. Final decisions might require economic modeling to estimate precise cost/benefit impacts of using some form of the subsidy. Of course, in the final analysis, policy makers must weigh a complete range of social, political, as well as economic factors in such decisions.

Based on the U.S. experience, as well as the experience of countries such as Poland that make use of limited forms of tax exemption, it is possible to speculate about the conditions under which the use of tax exemption could be appropriate in the emerging economy context.

- Economic Efficiency. In countries where infrastructure is chronically underprovided, economic efficiency arguments against tax exemption (or any other form of subsidy to lower local government borrowing costs) tend to be even less compelling than they are in the U.S. In fact, most emerging economies do appear to face severe bottlenecks in infrastructure finance, and such bottlenecks already may have begun to retard economic growth, according to a variety of international development experts. Assuming that infrastructure projects to be built by local governments and enterprises are reasonably well planned, the resulting facilities appear to offer benefits that outweigh the economic (as well as financial) costs of a subsidy such as tax exemption.

- Fiscal and Administrative Efficiency. Direct grants to reduce local government borrowing costs involve the kinds of significant fiscal inefficiency and administrative costs that already plague intergovernmental grant programs in many emerging economies. Studies of tax exemption in the U.S. suggest that careful administration of the subsidy, particularly in terms of targeting via the tax code, can substantially increase its fiscal efficiency (although achieving the political consensus necessary to make such "administrative adjustments" is often difficult, as the U.S. experience underscores). Controls on arbitrage, private purpose borrowing, and in some cases borrowing by local enterprises (as in Poland), would be appropriate, but also would involve regulatory costs. Measures such as the Taxable Bond Option and the Taxable Income Option are probably beyond the administrative capabilities of central ministries/agencies in most emerging economies. The key task in these countries would be to craft policies and procedures for limitation and targeting that would keep administrative costs within tolerable limits, while optimizing fiscal and administrative efficiency. Reforms of systems for tax administration and capital market regulations, already necessary in many emerging economies, would probably make possible reasonably cost-effective administration of tax exemption.

- Political Development Needs. In countries where the decentralization of urban infrastructure planning, finance, and management is a priority, tax exemption offers one kind of subsidy over which local officials have substantial control. Unlike direct grants or intergovernmental loans, funding cannot be siphoned off for "administrative expenses." In other words, the actual fiscal efficiency of tax exemption is likely to be as high or higher than alternative kinds of subsidies in many of these countries. Because the financial impacts of tax exemption on local governments are not subject to arbitrary change from above, tax exemption also offers local officials the kind of consistency and predictability that is often lacking in grant or loan programs. To the extent that bond proceeds can be used in discretionary fashion, tax exemption contributes to the overall decision making authority of local officials.

- Economic Development Needs. The economic crisis facing Asia at the end of 1997 highlights the critical importance of robust bond markets in sustaining high levels of economic growth in emerging economies (see Annex 1). Tax exemption appears to have been an essential, although arguably somewhat expensive and by no means sufficient, factor in making the U.S. municipal bond market by far the largest and most active in the world. Tax exemption also offers a particular benefit for many emerging economies, in which a growing problem is how to more effectively move high levels of individual savings into the most productive domestic capital investments. Markets do this better than bankers, and tax-exempt municipal bond markets provide individuals with incentives to move capital from banks to markets. Looked at from this perspective, any so-called “windfall” income earned by investors might be justified as a subsidy to promote much needed investor participation in capital markets. In some emerging economies, the need to accelerate the development of municipal bond markets may be critical enough that the benefits associated with municipal market development tools like tax exemption seem worth the costs, particularly if features like "sunset" provisions could be relied on to terminate the subsidy after a designated period of time.

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ANNEX 1

One Lesson from Asia's Economic Turmoil: The Need for Bond Markets

The Impacts of Directed Credit on Bond Market Development; the Role of Market-based Municipal Finance

Introduction

The threat of economic stagnation posed by the current financial crisis in Asia demonstrates dramatically the risks of relying too heavily on directed bank lending to spur rapid national development, while neglecting domestic systems of market-based finance centered on debt markets. Market-based mechanisms for financing municipal infrastructure, including markets in municipal bonds, constitute especially underdeveloped, but critically needed, parts of the overall capital allocation systems in these countries. This paper assesses the impacts of directed credit on the development of corporate debt markets in Asia, and argues that municipal bond markets have suffered perhaps even more damage for similar reasons.

Directed Credit Approach

The Asian reliance on directed bank lending was described in September 1993, when the World Bank issued its long-awaited report analyzing the economic development successes of Japan and some of the other "miracle" economies of Asia, including Singapore, Taiwan, South Korea, and Thailand.[1] The report was prepared partly in response to criticism of the World Bank's traditional free market development prescriptions. Japanese officials and others have long argued that government intervention could play a productive role in guiding the economic growth of some developing nations.

The World Bank's report conceded that some aspects of economic growth in East Asia were attributable to government intervention, but argued that while some kinds of intervention had succeeded, many of these successes were short run in character and entailed significant longer term risks. The implication of the report was that capital allocation mechanisms in these countries are now being restructured, but not necessarily in ways that will sustain levels of growth that have been jump-started with government help.

The World Bank study, and other sources, suggest the outlines of the potential for a boom-bust development scenario in Asian countries employing this directed credit approach, what is sometimes referred to as the Japanese model for allocating capital. That potential appears to have been realized, at least in part, over the latter half of 1997. The elements of the scenario include the following:

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[1] World Bank, *The East Asian Miracle: Economic Growth and Public Policy* (Washington DC: World Bank, 1993).

Government-led Capital Allocation. In many of the rapidly developing economies of Asia, government leaders have tended to think of the banking sector and state-owned or controlled enterprises as two major components of government-led capital allocation systems. Government officials in these countries have described this approach for guiding and sustaining key early stages of economic development in terms not unlike those used by Michael Porter and the Harvard Business Review/Council on Competitiveness, to describe the "dedicated capital systems" of Germany and Japan.[2] In these systems, Porter found that long-term owners of significant corporate shares help to optimize long-term social returns as well as profits by insuring that adequate amounts of capital are dedicated to targeted purposes for sustained periods of time. Short-term profit performance does not play as dominating a role in capital allocation decisions in such systems as it does in more market-oriented economies, such as the United States.

Traditional Justification: Few Alternatives. Such systems were originally justified in these economies because of shallow domestic capital markets, non-existent stock markets, and negligible foreign investment. Most of the early, rapid growth in these economies came via labor-intensive, export-oriented manufacturing. Governments in these countries tried to use their control over, and often ownership of, banking and enterprise as a way of directing capital to sectors deemed to be of strategic importance for economic development, with state-owned banks distributing capital, state-owned or state-controlled companies putting it to use.

The extent to which these efforts actually were successful is still a matter of debate. The World Bank study says that when these countries tried to use industrial policy to target specific sectors for development, in order to improve their international competitiveness, their efforts usually failed. Where industrial policy involved heavy public investment directed through banks to state-owned enterprises, as was the case in Malaysia during the 1980s, deficits eventually threatened macroeconomic stability. But the report admits that when these countries made more limited efforts to intervene in

[2] Michael E. Porter, "Capital Disadvantage: America's Failing Capital Investment System," *Harvard Business Review* (Sept-Oct, 1992).

domestic financial markets in order to provide lower cost capital and directed credit, they were more successful. In countries like Malaysia, Singapore, and South Korea, credit seems to have been directed with productive results.

New Capital Financing Needs. Although these capital allocation systems may have been moderately successful, they were insufficient to provide the kind of capital needed as these economies began to expand. The demand for capital has increased precipitously in all of the dynamic Asian economies because the character of their competitiveness in the international marketplace has changed. As real wages rise, these economies are shifting from labor-intensive to capital-intensive industry in an effort to spur more productivity growth. Japan is well ahead of all of these countries in these areas, so the challenge (simply in terms of competing with Japan)--and the need for capital to meet it--are both extremely large in countries like South Korea, Taiwan, and Singapore, as well as in the second tier of emerging Asian economies like Malaysia, Thailand, Indonesia, and the Philippines.

Over-reliance on International Capital. Much of this growing need for financing has come from the international capital market in the form of direct investment, portfolio investment (i.e. equity shares purchased on domestic stock exchanges), and especially off-shore loans. However in return for this capital, these countries have also had to accept significant exposure to increased volatility in capital flows. The global system for allocating capital allows governments little leeway to close or control their financial markets as effectively as countries such as South Korea and Taiwan did two decades ago. To a large extent they are at the mercy of a global capital allocation system that shifts money rapidly, and in zero-sum fashion, with international private capital picking winners and quickly abandoning losers in the developing world. Economies that lose their attractiveness to international investors may have difficulty in quickly regaining their competitive positions, as well as their access to capital, vis-a-vis competing investment opportunities elsewhere.

Implications for Bond Market Development

In the interests of rapid, competitive growth, most of these Asian countries neglected, or intentionally retarded, the development of domestic bond markets that might have helped them cushion, if not totally avoid, the kinds of economic shocks the region is now experiencing. Governments in the region, like those of many other emerging economies, have routinely protected bankers' control over capital by restricting the development of free-wheeling credit markets through capital market controls and laws that encourage share ownership and even bank deposits at the expense of bond sales.[3] As a result, bond markets in the region are severely underdeveloped, as Table 1 indicates. This situation has had a number of impacts.

Bankers vs Markets. First, as the World Bank study underscored, directed bank lending involves severe limitations and long-term risks. Relatively narrow circles of bankers and government bureaucrats rather than market forces make major investment decisions. These bankers have substantial capital to invest, particularly in East Asia, where potential bond market investors are encouraged to put their money in banks, and leave it there. The result is some of the highest saving rates in the world, led by Japan where net savings amount to over 130 percent of annual GNP (as opposed to 16 percent in the U.S.). In Thailand for example, bank lending amounts to about 110 percent of GDP (as opposed to 54 percent in the U.S.), with just four banks accounting for half of this lending total.

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[3] Ajit Singh, *Corporate Financing Patterns in Industrialising Economies*, Technical Paper No. 2 (Washington, DC: International Finance Corporation, 1995).

Table 1
Bond Market Borrowing vs.
Bank Lending

Countries	Bond Market Capitalization*	Bank Lending*	Index of Bond Market/ Bank Lending
Thailand	10%	110%	.09
Indonesia	6%	57%	.11
Japan	74%	152%	.49
Malaysia	56%	100%	.56
Philippines	39%	54%	.72
U.S.	110%	54%	2.04

* As a percentage of GDP, 11/95.
Source: Asian Wall Street Journal, 10/15/97.

Poor Investment Decisions. Bankers and bureaucrats tend to be much less adept at assessing and rewarding investment risk than are robust bond markets. Directed bank lending is sensitive to planning priorities, but often ignores wider competitive realities. For example, in an effort to recreate industrial successes of Japan, bankers in many Asian countries have over-lent to consumer electronics and automobile sectors, contributing to what many economists estimate will be a severe oversupply of production in these sectors by the turn of the century. Even without government direction, many of the region's banks have made exceptionally poor investment decisions, over-emphasizing loans for property development, as well as excessive follow-up lending to borrowers already in default. The poor quality of investment decisions produced by systems depending heavily on directed bank lending helped precipitate the current exit of international capital from the region.

Capital Allocation Bottlenecks. Another impact of underdeveloped bond markets is the lack of an efficient, powerful mechanism to allocate domestic savings for investment purposes and reduce what in Asia has been an over reliance on international credit. An added benefit of domestic bond markets is that they can help cushion sharp reductions in off-shore capital in-flows, when such reduction occur. The capital allocation bottleneck created by bank lending in Asia is apparent from a comparison of the region's exceptionally high domestic savings rates with the overseas borrowing levels of private businesses. It is clear that domestic savings are not being channeled adequately into domestic investment. The shortfall in domestic financing has been made up by much more volatile off-shore borrowing.

Inadequate Infrastructure finance. An additional, and sometimes overlooked, impact of underdeveloped bond markets has to do with special types of financing needs that only bond markets are uniquely able to meet. All of these economies, including the newly emerging economies of Malaysia, Thailand, Indonesia, and the Philippines, require huge amounts of capital for infrastructure improvements, educational development, and environmental protection. Such investments are critical for sustaining productivity and competitiveness. The World Bank estimates that infrastructure investment needs in Asia amount to $1.5 trillion over next five years. However because of their size and the long-term nature of the project financing needed, neither bank borrowing nor increased taxes can compete in cost-effectiveness terms with long-term domestic bond financing (20- to 30-year bonds) for the construction of public works facilities with long-term life spans. Long-term bonds increase the affordability of such projects by allowing the high cost of construction to be amortized over a much longer period, one that more closely matches asset life-spans. Long-term debt also can be a more equitable method of financing such facilities than pay-as-you-build financing that uses accumulated tax revenues. Citizens who pay off the debts incurred to finance construction, via taxes or charges, are paying during the useful lives of the facilities and are thus more likely to be direct beneficiaries.

Impacts of Directed Credit on Municipal Finance

Municipal infrastructure, including facilities for providing water supply, waste water management, flood control, solid waste disposal, etc., is an essential area of infrastructure that has been particularly hard it by the absence of market-based finance in these countries. In industrialized countries, bond markets provide capital for municipal infrastructure investments directly in the form of municipal bonds (via individual bond sales or pooled financing), or indirectly by capitalizing municipal funds that on-lend to local governments and providing finance for various forms of privatization. By retarding the development of robust bond markets, the directed credit approach dramatically reduces opportunities for these kinds of facilities to be financed with capital from domestic credit markets.

In the absence of bond markets, financing for this kind of infrastructure has come via mechanisms that parallel the directed credit model used for private sector development. In other words, instead of encouraging markets to help make financing decisions to the maximum extent possible, most countries have directed capital to local governments, with key decisions regarding investment-worthy projects made unilaterally by central level bureaucrats who dispense intergovernmental grants and loans.

Intergovernmental Loans. Loans are typically administered by central bank accounts that on-lend donor funds to local governments and enterprises, or by municipal development funds (MDFs) that operate revolving loan funds capitalized by donors and central government budgets.   In the interests of promoting specific development priorities, few of these centrally-administered loan facilities actually operate like banks, efficiently providing credit to local entities capable of paying off the debt at near commercial rates of interest. Instead they typically offer soft or subsidized loans, often given as incentives to weak entities that may not be good credit risks or who have even defaulted on previous loans. As a result, these funds usually do little to help strengthen credit histories (in preparation for later borrowing), or responsible local attitudes toward borrowing. Many function largely like grant programs.

To insure that such credit can be directed at the discretion of central level policy makers, must of these facilities cannot capitalize themselves from domestic financial markets. Instead they are limited to funds from donors or central government budgets, sometimes with loan disbursements approved as part of the annual budget process. As a result, most of these funds remain undercapitalized and provide inadequate levels of municipal credit.

Intergovernmental Grants. Intergovernmental grant programs exist in virtually all of these countries, and are necessary for a variety of reasons, including as a way to provide financing to local governments unable to borrow. Unfortunately these grant programs are also often victims of unclear or shifting central-level priorities, as well as various administrative problems. Local governments cannot always estimate annual grant levels with any certainty, and therefore cannot make accurate estimates of borrowing needs or carry out other aspects of effective financial planning. Budget expenditures by central government ministries on local infrastructure, often referred to as "grants in kind," represent the ultimate in guided investment decision making, with local officials often playing minimal roles in decision making about project selection, design, or management. Finally, grant and credit programs often operate as competitors rather than collaborators in many of these countries, with grants given to local governments and enterprises that are capable of borrowing, thus crowding out the use of credit. Opportunities for collaboration are also routinely lost. Grants could be used as incentives to promote local borrowing. Grant transfers could be used effectively as collateral for various types of loans or bonds, but such arrangements are often prohibited as part of misguided policies to enforce fiscal discipline on local officials.

Conclusion: Market-based Municipal Finance

The solution to municipal infrastructure shortcomings is not just to develop markets in municipal bonds, any more than active corporate bond markets will by themselves solve private sector financing problems. The other mechanisms currently in place for financing this kind of infrastructure must be reformed to help facilitate market-based municipal financing, just as the commercial banking sectors in these countries must be reformed as a first step toward overall private sector financial health. In other words, the reform of municipal finance requires an integrated approach that simultaneously improves a number of different financing mechanisms, including some, like intergovernmental grant and loan programs, not normally associated with market-based financing.

The key to the development of a market-based system for municipal finance is to coordinate and integrate all of these mechanisms in a single national system, with a functioning bond market at its core. Successful integration means that municipal bonds or MDFs may be emphasized as the predominate credit mechanisms in a given country, but both are typically in place and operate in a mutually supportive fashion. Intergovernmental grant systems support, or at least do not actively undercut, these mechanisms. For example, in countries like Belgium, Denmark, France, and the U.K., municipal development funds are the most important providers of municipal credit, but they are capitalized largely with bonds and other forms of capital market borrowing. In the U.S., many local governments and local enterprises have direct access to the capital markets through municipal bond sales, but bond banks and pooled financing schemes make the benefits of bond financing available to smaller local governments that otherwise could not access the capital markets in cost-effective fashion.

In the short run, the challenge for these emerging economies is to adopt policies that allow bonds, grants, and loans to develop in an integrated fashion. In particular, this means changing the policies of MDFs to more carefully target their loans, in order to avoid crowding out other forms of financing, such as bonds. This may mean prohibiting access to soft MDF loans by borrowers with strong signs of creditworthiness. It also means clearly distinguishing loan and grant programs, and coordinating their implementation. It may mean viewing MDFs as facilities that may eventually have to fully compete with other sources of finance for local governments, without government capital. Finally, it means removing the official and unofficial controls on capital market development to allow municipal bonds to begin playing a productive role in these economies.