STATE DEBT – A PRIMER

Prepared for
the House of Representatives Democratic Committee on Appropriations
Commonwealth of Pennsylvania

Representative Matthew Bradford, Chairman

Anne Baloga, Executive Director

By

Arthur D. Heilman

December 18, 2012

Revised January 10, 2014
Revised January 16, 2015
Revised February 16, 2016
Revised August 8, 2018
Revised June 9, 2020

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

Note on the June 9, 2020 Revision

A discussion on recent significant additional regulatory actions by the Securities Exchange Commission and the Municipal Securities Rulemaking Board on municipal bond issuers has been added. In addition, other minor edits have been made to improve and clarify information presented and revisions were made to make data and information current.

STATE DEBT – A PRIMER

INTRODUCTION

Governmental spending can be classified as either expenditure for currently consumed items or for the purchase of items that are capital investments such as buildings and infrastructure that are consumed over a multi-year period. Current consumption includes expenditures such as the payment of wages and salaries, payment of grants and subsidies to others, the purchase of services and commodities, the payment of current debt service, and the payment of the current cost of future obligations such as pension and other employee benefits. Expenditures on capital investments are those such as payments for the construction of a road, highway, bridge, hospital, public building, park, or other public facility. Spending on capital investments is done with the expectation that the objects being built or acquired will be utilized over many years beyond their initial purchase period to deliver government services or provide some continuing benefit to the a government's residents. Using a categorization of government expenditures in this way provides a basis to consider alternative ways to obtain funds to support these expenditures.

A policy of paying for expenditures completely from current resources is called a "pay-as-you-go" policy. An alternative to pay-as-you-go financing is one where ordinary expenses are paid from current revenues while capital investment expenses, that is, expenditures to acquire or construct multi-year lived assets that provide benefits over several future years, are financed with debt and paid for over a period longer than the period of their construction or acquisition. Such an alternative can be described as a "pay-as-you-use" policy. Debt financing, although more expensive, is justified under this policy because the acquired capital asset will produce benefits to the government and/or its citizens immediately compared to waiting until funds for the full cost are available. Debt financing allows the higher costs to be spread over the project's useful life. Borrowing to spread the costs of a capital investment over its useful life also can provide for a more equitable allocation of cost to the citizens receiving the benefit rather than requiring taxpayers in existence at the time of original investment to pay the full cost under a pay-as-you-go policy.

OPTIONS FOR CAPITAL INVESTMENT SPENDING

- **Pay-as-you-go**
- **Pay-as-you-use**

When governments incur debt, they commit to pay bondholders principal and interest on that debt when due. Pledging future resources to bondholders places the government at greater financial risk than it would otherwise face in that future revenues pledged for debt service are unavailable for other uses. A decision to borrow long-term carries consequences that should be fully recognized and analyzed for affordability and risks over the term of the debt. Such an analysis must also include the purposes for which borrowing is undertaken. Relying on debt financing for intangible assets that may be considered by some as capital assets, but under the usual definition of capital are considered operating expenditures such as education and training, is an invitation for trouble. These kinds of social intangible assets, if financed with recurring debt issues, can lead to over-borrowing and to a destabilization of the issuer's financial condition as the costs of paying interest on the debt and repaying the principal rise in each fiscal year. Care must be exercised in making decisions to borrow. Establishing and following reasonable debt policies may prevent borrowing from leading to an out of control budget.

The Commonwealth, its agencies, authorities and departments from time to time commit substantial sums of money for investments in buildings, roads, equipment and other assets in their adherence to a pay-as-you-use policy for financing these assets. The resources to make these investments are most frequently obtained by borrowing funds through the issuance of debt in the nation's capital markets. The amounts borrowed are repaid with interest from some specific sources of revenue pledged to bondholders for debt service.

The concept and definition of what is included in the term "debt" for state and local governments has been expanded in the municipal financial community, led by the bond ratings industry and the Securities and Exchange Commission ("SEC") and also extending to the governmental accounting area through standards set by the Governmental Accounting Standards Board. These organizations and the investment community in their analysis of risk have increased their focus on the growing, and in some cases significantly large, future costs of providing continuing and promised employee pension and other post-employment benefits and have expanded their concept of debt to include these liabilities together with those associated with a government's bonds and other debt obligations. Bond rating agency comments accompanying bond ratings are using this expanded definition of debt as evidenced by the comments by each of the rating firms' commentary issued with their rating downgrades of the Commonwealth in 2012, 2013 and 2014. The focus of the SEC is on the methodology of computing and accounting for these future obligations of governments and how they are disclosed and communicated to the investing public.[1] The SEC has pursued high profile securities fraud cases against the City of San Diego, the State of New Jersey and the State of Illinois for misrepresenting pension funding risks to investors. While this expanded view of debt for analysis and investment purposes is important for governmental policy makers to understand, the focus of this paper is on the more traditional concept of municipal debt – that is bonds and notes issued by and on behalf of governments.

The Power to Incur Debt

The ability for the Commonwealth of Pennsylvania to incur debt, that is to accept a voluntary loan of resources from others in exchange for a contractual promise to repay those resources at a later time with interest, is an inherent power of a sovereign government. As one of the states that has adopted the United States Constitution, by the terms of that document (the 10th amendment), Pennsylvania retains all sovereign governmental powers except those delegated to the federal government. Thus, the Commonwealth's power to incur debt, to accept voluntary loans, is constrained only by the limitations in the federal constitution and the limitations established in the Pennsylvania Constitution.

Why Is the Power to Incur Debt so Important?

The power to borrow and the promise to repay is linked closely to a sovereign government's power to tax. Borrowing is a substitute method of raising revenue, an alternative to using current tax or other revenues to support current government spending, effectively transferring the burden of paying the costs of current government spending to taxpayers of the future. This generational cost shifting is important because it pledges the Commonwealth's future legislatures and executives to levy, and most importantly the future

1 U.S. Securities and Exchange Commission, Report on the Municipal Securities Market, July 31, 2012, *available at* http://www.sec.gov/news/studies/2012/munireport073112.pdf .

taxpayers to pay, taxes sufficient in amount to repay the principal borrowed and pay the contracted rate of interest. This pledge to tax for debt repayment is in addition to the need to tax at a level sufficient to pay the ongoing costs of government. A promise to repay evidenced by the issuance of debt cannot be treated lightly and should always be undertaken only with a clear understanding of the implications for future taxpayers.

A decision to borrow should always be preceded by answering the question of why these costs should be transferred to future generations.

If borrowing is carried to excess or done without the appropriate amount of planning, governments can find themselves faced with levying overwhelming tax burdens or having to make almost impossible choices between paying bondholders and paying for normal governmental operations and services. Although still rare, recent high-profile municipal bankruptcies and the continuing bond-payment plight faced by the U.S. territory of Puerto Rico have highlighted the difficulties faced by governments under extreme financial distress attributable to excessive debt. A Pennsylvania example of the serious problems that can develop from borrowing programs that are well intentioned but overused and mismanaged, is the Commonwealth's issuance of its bonds to construct a system of canals in the early 1800's.

Pennsylvania's Default on its Bonds.[2]

After the War of 1812 ended, the eastern seaboard states wanted to benefit from the lucrative trade that developed with the interior areas of the United States. Trading agricultural products produced in these developing areas for equipment and other manufactured items produced in Europe or in the more developed states required an efficient and effective transportation system between the coast and the interior. States began to build canal systems to serve this lucrative commerce. The Pennsylvania legislature, responding to public pressure to capture the economic benefits of the jobs and business that accompanied the developing trade routes, authorized an east-west canal between Pittsburgh and Philadelphia. However, areas of the state that would not directly benefit from the canal because they were not located near the canal objected to paying for the canal. To appease the objectors, the Commonwealth constructed a larger system of canals in the state.

Inadequate planning and provisions for financing the completion of the canals contributed to Pennsylvania reaching a point where its debt rose to enormously high levels and its revenues were insufficient to meet its expenses. The canal project had been promoted as a project whose revenues would pay the interest costs of the borrowing and significantly assist in repaying the principal. After five years of operation, the canal produced only 12% of the amount of interest payable. In part due to the objections of the Commonwealth's citizens to pay higher taxes, the state legislature failed to enact tax measures that raised sufficient funds to pay the Commonwealth's debt obligations. In 1841 the Commonwealth failed to make a required interest payment to bondholders and the bonds went into default. It was not until 1844 that a tax measure was enacted that produced revenues sufficient to resume interest payments and allowed the resumption of interest payments in 1845. These events led to the establishment of debt restrictions that were amended into the Pennsylvania Constitution in 1857 and further amended in 1874. The

2 McGrane, Reginald C. Foreign Bondholders and American State Debts. New York: The Macmillian Co, 1935.

most important of these debt provisions were the prohibition of any debt except for several specific emergencies, or for purpose(s) and amounts provided through the adoption of a constitutional amendment. The constitution also contained a limit of $1 million on the amount of debt able to be incurred by the Commonwealth for current year revenue deficiencies.[3] These restrictions on debt remained until 1968 when they were replaced by the constitution adopted in that year[4].

PENNSYLVANIA STATE DEBT – THE LEGAL BASIS

Debt Authorized by the State Constitution

Under the state constitution amendments adopted in 1968, Article VIII, Section 7 prescribes the limits on direct state debt. It provides that debt, defined as "the issued and outstanding obligations of the Commonwealth and shall include obligations of its agencies or authorities to the extent they are repaid from lease rentals or other charges payable directly or indirectly from revenues of the Commonwealth," may be incurred for five purposes:

1. Insurrection suppression or disaster relief
2. Cash flow by tax anticipation borrowings
3. Refunding existing debt
4. Purposes approved by the voters
5. Projects in an approved capital budget

Not all debt issued by or on behalf of the Commonwealth, its agencies, commissions, authorities or other state entities is issued under these constitutional provisions. These other forms of debt are discussed in a later section of this paper titled "Debt Issued by or on Behalf of the Commonwealth."

Constitutional Limitations on Commonwealth Debt

Capital Budget Debt

Debt issued for capital budget purposes (number 5 on the list above) is required by the Pennsylvania Constitution to:

A. Be subject to the Constitutional Debt Limit (described later)
B. Be repaid within the useful life of the project
C. Be repaid in substantial and regular payments over the life of the debt, the first payment of which must be prior to a period equal to 1/10th of the debt's term

Item B means that if a capital project has a useful life (this is usually established in the capital budget bill describing and approving each capital project) of 30 years, debt issued

3 1874 Pennsylvania Constitution, Article IX, Section 4. The $1 million limitation on debt incurred for a revenue deficiency came into play at least once when in 1932 the Attorney General of Pennsylvania in his Opinion No. 51 on the implementation of the Pennsylvania Supreme Court decision in *Commonwealth ex rel. Schnader vs. Alice F. Liveright*, et al., 308 Pa.35, 161 A. 697 (1932), advising the Auditor General and the State Treasurer that valid appropriations for a biennium were limited to the amount of estimated revenues plus one million dollars.

4 1968 Pennsylvania Constitution, Article VIII, Section 7.

for this project must have a term (including the life of any refunding debt) of 30 years or less. Item C has been established in various debt authorization statutes to mean that if the debt financing this project is issued for a term of 20 years, the annual debt service on this debt must be paid in approximately equal amounts over the term of the debt measured either by approximately equal annual debt service payments ("level debt service") or equal annual principal payments ("level principal"). Additionally, the first installment of principal repayment for debt issued for this project must occur before a period equal to 1/10th the term of the debt is reached (in our example, before the second anniversary of the initial issuance of the debt [20 years x 1/10 = 2 years]). The obvious intent of these requirements is to preclude an unreasonable deferring of principal repayment.

Non-Capital Budget Debt

Long term debt issued for non-capital budget purposes (debt for purposes 1 and 4 in the list above) must also meet the above constitutional requirements for Commonwealth debt except for being subject to the Constitutional Debt Limit (requirement A above) unless legislation specifically subjects it to the debt limit.

Tax Anticipation Notes

Tax anticipation borrowings (number 2 on the types of debt listed above) must mature within the fiscal year in which it was borrowed, thus preventing such borrowing from being used to carry operating fund deficits from one fiscal year to the next.

Refunding Debt

Refunded debt is required to mature within the term of the debt originally issued, thus preventing refunding of debt from being employed to delay payment and stretch out its final maturity.

Other Provisions

Finally, as a protection to the Commonwealth's bondholders, in the event of non-appropriation or insufficient appropriation of funds to make timely payment of interest and installments of principal on all debt (as it is defined in the Pennsylvania Constitution) the State Treasurer is directed to take available revenues and make state debt service payments as promised without the need for legislative or gubernatorial action.[5] This provision for continuing payment of debt service has been used to make debt service payments in periods when state budgets have not been enacted by July 1 including most recently for the 2015-2016 budget.

Pennsylvania Constitutional Debt Limit

The current constitutional debt limit is of relative recent vintage having been adopted in the 1968 revision of the Pennsylvania Constitution. It replaced the prior restriction on long-term debt and a $1 million limit on debt for revenue deficiencies that were in the constitution of 1874.

5 Pennsylvania Constitution Article VIII, Section 7(d).

Circumvention of the Constitutional Debt Limit

The constitutional restriction on debt contained in the Pennsylvania Constitution prior to 1968 became an obstacle for the financing of needed highways, bridges and governmental facilities for education and health care in the 1930's and for the participation by the Commonwealth in federal WPA projects. To avoid the constitutional debt restriction, the General State Authority was legislatively established in 1935 and re-established in legislation enacted in 1949. The 1949 legislation authorized the General State Authority to finance and construct state buildings, institutions, airports, state-aided schools and municipal exhibition halls for the Commonwealth. The State Highway and Bridge Authority was also created in 1949 for the purpose of financing and constructing state highways, bridges, tunnels, maintenance sheds, garages and roadside rest stops for the Commonwealth. Through the work of these two Commonwealth authorities, capital projects for state agencies and departments worth many millions of dollars were built and financed with debt despite the restriction on Commonwealth debt in the Pennsylvania Constitution at that time. Projects constructed by these authorities were owned by them and leased to state departments for lease payments paid to the authorities from a departments' annual budget appropriations who would then pay the debt service on the authorities' bonds. The ability of these two state authorities to evade the then existing constitutional debt restriction was made possible by the Pennsylvania Supreme Court's decision in *Kelley vs. Earle* in 1937 that declared both authorities legally independent of state government, although created by the state legislature and governed by boards of directors who were also state officials, and had the power to issue debt of the authority for the purpose of constructing projects for Commonwealth agencies and departments. Authority bondholders could only look to the authority for repayment, not to the Commonwealth, even though the authorities' revenues were almost exclusively obtained from annual state appropriations for lease rental payments to the authorities for the use of the facilities constructed by the authorities. While this work-around of the constitutional debt restriction was effective, it had its costs. For one, the separation of financial liability to bondholders between an authority and the Commonwealth meant that the authorities' bonds had a higher risk element than a Commonwealth direct obligation would have had. This added risk to bondholders was evidenced by the lower credit rating placed on debt issued by the authorities than that on a general obligation bond of the Commonwealth. That lower rating and greater risk brings with it a demand from investors for a higher rate of interest to bondholders to compensate them for that increased risk.

Revisions to the PA Constitution in 1968

Recognizing that the Commonwealth's debt financing needs could be modernized and achieved at a lower cost than under the two authorities, the Constitutional Convention of 1967-68 recommended the debt provisions of the Pennsylvania Constitution be changed to eliminate the restriction for incurring debt and the $1 million limit for revenue deficiencies. Its recommendations resulted in the revision to the constitution that now appears in Article VIII, Section 7 of the constitution amendments adopted in 1968.

The current constitutional debt limit is computed based on the average tax revenues of the Commonwealth over the last completed five (5) fiscal years as determined by the Auditor General. Outstanding debt subject to this cap may not exceed an amount 1.75 times this five-year average of tax revenues. A copy of the latest certification of the debt limit is included as an Appendix in each of the Commonwealth's Official Statements for its general obligation bond issues. A projection of the debt limit is shown in the Capital Debt section of the Governor's annual budget document. The debt limit computation certified by the Auditor General in February 2020 is summarized in Table 1 below.

Table 1
Commonwealth Debt Limit Calculation Summary[6]
(in Millions)

Average annual tax revenues in the five fiscal years ended preceding February 28, 2020	$40,738.6
Times 1.75	$71,292.6
Net debt as of February 28, 2020	$10,026.4
Difference between the limit and outstanding debt	$61,266.2

It can easily be concluded from the information in Table 1 that the current constitutional debt limit is not constraining any debt issuance by the Commonwealth that is subject to this limit. Most financial analysts familiar with the Commonwealth will agree that the current constitutional debt limit, despite the intent of the constitution writers, is not an effective limit and that incurring debt at a level anywhere near the current limit would be unaffordable and a credit negative for the Commonwealth.

Furthermore, the effectiveness of the constitutional debt limit is diminished by only applying to general obligation state debt issued for the financing of approved capital budget projects. Debt issued for other purposes such as for disaster relief or for purposes approved by the voters is not constitutionally required to be included in the debt limit but may be included if the legislation authorizing such debt requires inclusion. Up to the current time, no state debt or other debt, other than debt issued for capital budget purposes, has been made subject to the debt limit. Additionally, debt obligations issued on behalf of the Commonwealth by other entities such as the Commonwealth Financing Authority are not included in the constitutional debt limit calculation.

Statutory Implementation of Constitutional Debt Provisions

Constitutional provisions relating to debt are broad in scope with minimal details. The task of applying these broad policies and directions to the functioning of a government falls to the implementing legislation that has been enacted by the legislature to make the constitutional provisions operational.

Capital Facilities Debt Enabling Act

Of the implementing legislative acts, the most important is the Capital Facilities Debt Enabling Act ("Debt Act")[7]. Originally enacted in 1968 following the ratification of the 1968 constitutional changes and subsequently amended and re-enacted in various versions, the Debt Act provides important definitions including specifying what constitutes a capital project, describes the legislative process of authorizing capital projects, the amount of debt permitted to fund those projects, describes how the debt limit is calculated, sets the

6 Certificate of the Auditor General, February 28, 2020.
7 Act of February 9, 1999, P.L. 1, No. 1, as amended.

procedures to authorize and issue debt, authorizes the refunding of existing debt, appropriates the amounts obtained from the issuance of debt and prescribes many other conditions and requirements of the debt issuance process. The most recent amendment was enacted in May 2020 that changed the maximum amount of redevelopment assistance capital project obligations that may be outstanding.[8]

A detailed explanation and description of the process involved in the development and execution of the capital budget can be found in the Office of the Budget document, "The Budget Process in Pennsylvania." available at www.budget.pa.gov.

Non-capital Budget Debt

Issuing general obligation debt for other than capital budget purposes requires legislation to be enacted for each specified purpose. In addition, voter approval by a referendum is required for all long-term general obligation non-capital budget debt except for debt legislatively authorized to suppress an insurrection or for disaster relief. The most recent referendums to issue debt have authorized debt for water supply and wastewater treatment projects.

Tax Anticipation Notes

The Pennsylvania Constitution provides for the issuance of tax anticipation notes by the Commonwealth.[9] Tax anticipation notes are used to provide short-term cash resources to a fund to finance disbursements from that fund until tax and other revenues are received later in the fiscal year. Implementing legislation for the issuance of tax anticipation notes is contained in separate state legislation.[10] That legislation authorizes tax anticipation notes to be issued for the General Fund and for the Motor License Fund in an amount that does not exceed 20% of the subject fund's anticipated revenues for the fiscal year for which the notes are issued. Further, only current fiscal year revenues may be pledged as security for the notes and the final maturity of all tax anticipation notes must occur within the fiscal year in which they were issued to assure that cash flow deficits are not rolled from one fiscal year to the next.

STATE BONDS ARE NOT ALL ALIKE

The Municipal Bond Market

States, local governments, school districts, other governmental entities, authorities and governmental sponsored organizations issue debt in what is often referred to as the municipal bond market or muni-market for short. It is a national market composed of thousands of issuing governments, governmental entities and other organizations issuing an array of various types of debt purchased by investors such as individuals, banks, corporations, mutual funds and other institutional investors. A wide variety of public projects are financed with municipal bonds including projects that finance non-governmental projects through what are called "conduit financings" discussed further in the section "Revenue Debt."

8 Act 25 2019-2020 Session
9 Pennsylvania Constitution, Article VIII, Section 7(a)(2)(i).
10 72 P.S. § 1601-A et seq.

Characteristics of the Muni-Market

The muni-market is an over-the-counter market; that means there is no organized exchange on which municipal debt obligations are bought and sold. The muni-market is composed of a *primary* and a *secondary* market. The primary market, or new issue market, exists to market and distribute debt securities when they are first issued. Issuers normally sell their debt securities in bulk to one or a group of investment firms that then sell individual securities to the ultimate purchaser, hopefully at a higher price than the firm paid the issuer in order to cover costs and make a profit. This set-up is like a wholesale/retail selling arrangement. The secondary market, or trading market, refers to the market in which previously issued debt securities are bought and re-sold prior to final maturity. There is no organized exchange where buyers and sellers can conduct muni-bond transactions. Purchases and sales of muni-bonds are completed by using a network of dealers and brokers that perform these transactions in order to have a functioning liquid market. The absence of an open organized exchange limits the transparency of the muni-market, increases transaction costs and creates inefficiencies. These difficulties make the muni-market treacherous for individual investors whose transactions involve relatively small amounts of muni-market securities but since the 1990's whose holdings total approximately one-half of the value of outstanding muni-bonds. In an attempt to improve the availability of data on municipal bond trade transactions, the Municipal Securities Rulemaking Board ("MSRB") collects prices and yields at which municipal bonds are bought or sold as reported to the MSRB and makes that information available on a public website. The website is referred to as "EMMA" and is located at www.emma.msrb.org and may be used by anyone without charge.

Muni-bonds are traded over the counter in the following markets:

Primary – for new issues

Secondary – for trading of existing issues

The thousands of issuers in the muni-market are magnified by the usual structure of municipal issued debt. Unlike the corporate debt market where companies normally issue their debt with only one or a few maturity dates, municipal debt is commonly issued with multiple maturities, usually one for each year of its term. Each bond maturity may have a different interest rate and call feature. Call features on a bond describe the conditions that permit the issuer to redeem the bonds prior to their stated maturity date. Each of these multiple maturities of a single bond issue are actually treated and traded in the muni-market as a separate debt obligation. Occasionally, an issuer may combine several maturities of a bond issue into a bond with single maturity date but pay that bond through annual sinking fund payments prior to the stated maturity date of the bond. These grouped maturities are called "term bonds" and are designed to improve secondary market liquidity for the bonds to enhance their ability to be traded in the secondary market. Because of the traditional structure, one 20-year municipal debt issue will trade in the secondary market as 20 smaller debt issues adding additional complexity to the market for individual investors. Each of these individual bond "issues" are identified by a unique identifier called a CUSIP number.[11] A bond issue's CUSIP numbers are used to identify individual bonds in market transactions and for locating information on debt ratings and disclosure filings on the EMMA website.

11 A nine-digit alphanumeric code established under the Committee on Uniform Security Identification Procedures by the CUSIP Global Service.

CUSIP numbers for a bond issue are usually printed in the Official Statement prepared for that bond issue.

Federal Income Tax Exemption

One of the key features of the muni-market is the beneficial treatment of interest paid on qualifying municipal debt under the federal income tax.[12] For many investors, the income obtained from interest on municipal debt is exempt from taxation under the federal income tax. Additionally, many states exempt from state income taxation interest paid on debt obligations issued by them and their local governments or on their behalf. This favorable tax treatment usually results in the issuer paying a lower interest rate than it would without the favorable tax treatment. One consequence of this favorable federal tax treatment of municipal bond interest is that the value of the tax exemption to an investor is directly related to the marginal federal income tax rate and taxable income level of that investor. When federal income brackets and tax rates were lowered by the Tax Cuts and Jobs Act of 2017, the value of the federal tax exemption of interest to investors also fell, triggering an upward shift of interest rates on newly issued tax-exempt bonds. It is important to note that the federal exemption of municipal debt interest from income taxation is not constitutionally protected; it has been ruled by the federal Supreme Court to be granted or withheld at the pleasure of the Congress.[13] As a result, proposals to reduce or eliminate this favorable treatment of municipal bond interest are frequently put forward as suggested reforms to the federal income tax. One such reform included in the Tax Cuts and Jobs Act of 2017 was to eliminate the ability for municipal debt issuers to refund a federally tax-exempt obligation on a tax-exempt basis while the original debt remains outstanding – an “advance refunding.” Advance refunding of an outstanding debt is a tool state and municipal governments had used to achieve interest savings due to market fluctuations in interest rates. All future refunding of outstanding federally tax-exempt bonds using federally tax-exempt refunding bonds are limited to outstanding bonds that may be called and retired within ninety (90) days of the issuance of a refunding bond, *i.e.* a current refunding.

Interest Subsidy Bonds

A different approach to provide the interest cost benefits of tax-advantaged bonds to issuers is an interest subsidy bond – a bond whose interest is fully subject to federal income taxation but whose interest payments are partially subsidized through federal government periodic payments to the bond issuer. The American Reinvestment and Recovery Act of 2009 provided several versions of this type of bond, the most popular of which were known as Build America Bonds or BABs. The issuance of BABs was authorized only during the calendar years 2009 and 2010 and provided for a 35% federal subsidy of interest payments on the BABs in-lieu of tax exemption of interest. Concerns about future interest subsidy payments by the federal government have always been raised, especially about the dependability of federal subsidy payments. The concern by issuers and investors about interest subsidy bonds is the potential for the federal government to reduce interest subsidy payments for BABs in a time of rising budget deficits. Those concerns proved to be valid when beginning in 2013, the federal budget sequestration process withheld a portion of the federal subsidy payment to issuers. The Commonwealth had issued several general obligation

12 Section 103 of the Internal Revenue Code.
13 South Carolina v. Baker, 485 U.S. 505 (1988).

bond issues of the Commonwealth and agencies had issued other debt as BAB bonds during 2010.

Taxable Bonds

Another variation of municipal debt that has gained popularity is the federally taxable bond. Although issued by a governmental entity, because the bond proceeds are not used for a purpose that qualifies for exemption from federal income taxes under federal tax laws and regulations, the interest paid to the bondholders for these bonds is subject to federal income taxes. In 2016 and 2018, the Commonwealth Financing Authority issued Revenue Bonds (Federally Taxable), for the PlanCon Projects Program that provides capital grants and reimburses local school districts for debt service pursuant to the Public School Code. The authority has also issued refunding bonds on a federally taxable basis. Interest paid to bondholders for these bond issues are taxable income for federal income tax purposes as its use does not qualify for federal tax exemption yet it retains a tax exemption for Pennsylvania income tax.

Types of Muni-Bonds

The muni-market is composed of two main types of debt distinguished by the type of revenues pledged for repayment – general obligation debt and revenue debt as shown in Table 2.

Table 2
Types of Muni-Debt

General Obligation	Revenue
❖ Unlimited	❖ User Fees
❖ Limited	❖ Appropriation
Special Revenue	❖ Lease
Tax Assessment	❖ Private Activity/IRB
Tax Increment	❖ Moral Obligation
	❖ Tax Anticipation

General Obligation Debt

Often referred to as GO debt, these bonds are backed by the strongest security a government can give to an investor – its pledge to pay debt service first before other governmental payments and to enact the taxes and revenues necessary to repay its GO obligations. This pledge is often referred to as a pledge of the full faith and credit of the issuer and represents what can be called an unlimited GO pledge. Not all GO pledges by municipal issuers are the same. State constitutions and laws prescribe the form of GO pledge its issuers may offer to bondholders. For Pennsylvania, its GO pledge is contained in the Pennsylvania Constitution stating that:

> "If sufficient funds are not appropriated for the payment of interest upon and installments of principal of all debt, the State Treasurer shall set apart from the first revenues thereafter received applicable to the appropriate fund a sum sufficient to pay such interest and installments of principal, and shall so apply the money so set apart."[14]

14 Pennsylvania Constitution Article VIII, Section 7(d).

This constitutional provision has been employed to pay debt service due at the beginning of fiscal years for which budgets had not been approved by the date of a general obligation debt service due date, possibly as early as July 1.

There is another type of GO obligation that an issuer can give to an investor – a limited GO pledge. This is a GO pledge that is limited to a specific governmental fund and/or revenue source. Common examples of such a limited GO pledge are those given for a special revenue fund such as a fund that receives liquid fuels taxes or lottery ticket sales, or tax assessment debt where a special tax assessment such as for sanitary sewer purposes is pledged to bondholders.

Revenue Debt

In contrast to a GO bond where a debt issuing government pledges all of its taxation and revenue powers to the repayment of a debt obligation, a revenue bond is typically backed only by a specified stream of the issuer's revenues and not the full faith and credit of an issuer having the power to tax.

Dedicated Tax Revenue Pledge

One of the forms a revenue bond can take is where available revenue from a specific tax levied by the issuer is pledged to the bondholders for payment of debt service on the bond. In contrast to general obligation bonds, bondholders of such specific tax revenue bonds are not entitled to look to any revenues of the issuer for repayment of the debt other than to those specific tax revenues pledged to the bondholders by the issuer. Specific tax revenue bonds are used when it is desired that only those paying the specific tax revenue pledged for a debt, whether they are the users of the financed facilities or the subject of the pledged tax, are assessed for the debt service costs. For example, debt issued to finance highway and bridge construction may be secured with liquid fuels taxes paid by motorists. With such a structure the debt issued for roads and bridges is repaid by the users of the financed projects through their payment of liquid fuel taxes.

An example of revenue debt where specific Commonwealth taxes or assessments are pledged for debt service are bonds issued by the Pennsylvania Turnpike Commission to pay for construction costs on the Turnpike to be repaid by its toll revenues or from a portion of state oil franchise tax revenues or from a portion of state vehicle registration fees. An additional example is the 2012 Pennsylvania Economic Development Financing Authority bond issue that provided funds to repay the loan from the federal government to Pennsylvania's unemployment compensation program where the bond debt service is paid from a special state levy on employers paying the unemployment compensation tax.

The feature of revenue debt whereby the issuer pledges only a specific tax revenue and not the full faith and credit of the issuer to bondholders for payment of debt service can provide bond issuers the opportunity to issue debt that avoids constitutional or statutory limitations on debt. For issuers that are unable to issue general obligation debt, either because the financed purpose is not permitted to be financed by general obligation debt under the constitution or a statute, or because a debt limit prevents the needed amount of debt to be issued, or because voter approval for debt is bypassed, possibly due to cost or time considerations, a revenue debt obligation can be structured to avoid those limitations.

Subject to Appropriation Pledge

For the reasons mentioned above and for other reasons, revenue debt is frequently structured as either a lease-back obligation, a subject to appropriation obligation (non-lease or service contract) or a moral obligation. These forms of revenue bonds are specifically structured as an obligation for which the payment of debt service is contingent on a periodic, such as annual, appropriation of funds for that purpose. No pledge of any future year appropriations by the obligor for payment of debt service is provided to bondholders; the obligor retains a legal right to choose not to appropriate the funds for payment of the debt service. It is this contingent payment feature that prevents a revenue bond of this type from being considered a debt of the obligor and as such is not subject to statutory and constitutional restrictions on debt issuance since the obligor has not pledged to make payments in future years. Generally, the obligor of this type of bond has only made a pledge to request an appropriation for payment of the debt service in a budget request and/or use its best efforts to have the funds appropriated in each year. A comparison of the most significant characteristics defining these forms of revenue bonds is displayed in Table 3 below.

Table 3
Significant Characteristics of Subject-to-Appropriation Revenue Bonds

Structure	Issuer	Form	Security	Bondholder Remedies
Leased-Backed	Typically, a public authority, a non-profit corporation or a leasing company	Lease Revenue Bond or Certificates of Participation	Long-term capital lease payments assigned to trustee	Repossession of leased property
Appropriation Backed	Typically, a public authority or a non-profit corporation	Revenue Bond	Agreement to request annual appropriation	Generally no recourse provided by the bond
Moral Backed	May be a public authority or there may be no public debt issue involved	Credit Enhancement pledge by a government to an issuer with a lesser credit quality	Agreement by government providing pledge to request annual appropriation to replenish debt service reserve deficiency	None

Tax Anticipation Notes

Tax anticipation notes issued by the Commonwealth to fund cash flow needs during a fiscal year are a type of revenue bond. Such a categorization is due to the constitutional restriction that tax anticipation notes are payable “exclusively from revenues received in the same fiscal year" the notes were issued.[15] No general obligation pledge is available for Commonwealth tax anticipation notes.

Moral Obligation Bonds

A unique type of revenue debt in the municipal debt market is called the "moral obligation" bond. This type of debt obligation is issued by entities that are not a government but have credit support from a governmental entity. The debt will have a specific revenue source as the primary security for the debt obligation but will also carry a pledge by a supporting government entity that upon the occasion of certain financial stress situations, the issuer will request additional funds from the supporting government who has promised, either in statute or in a contract, to request the additional financial support be appropriated by the legislature from its available revenues. There is no promise or contractual requirement to appropriate or provide the requested additional funds. The bond provision is created to make the likelihood that the appropriation request will be fulfilled because the provider of the moral obligation has a deep, moral self-interest in assuring the financed project and/or the debt issuer not fail. The use of a moral obligation pledge to enhance the credit strength of a debt obligation is likely only effective in limited and specific instances. From an investor's perspective, the moral obligation pledge is not viewed as a strong credit factor by itself but may be helpful where an investor believes there is a strong willingness and likelihood that the supporting government will honor its moral obligation pledge when necessary. Use of moral obligation bonds is very limited today.

Other Revenue Bonds

Revenue debt may also be used for financing an activity where there is no direct connection between the activity financed and the revenue source dedicated to pay the debt service on the debt. Additionally, the dedicated revenue source can be other than a state-levied tax, fee or usage charge. Examples of this kind of financing are not common.

Private Activity Bonds

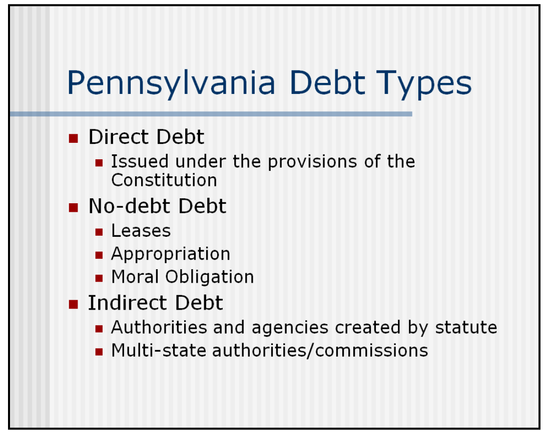
The broad category of revenue bonds previously known as industrial development bonds but now more recently termed qualified private activity bonds, are bonds whose proceeds are used by a non-governmental entity in a trade or business. Government-corporate combinations often exist under the umbrella of an authority – a governmentally established organization that is able to exercise certain governmental powers granted to them in legislation to provide a public service through a private company. Examples of such services are water and sanitary sewer service, multi-family housing, mortgage financing or commuting facilities. Bonds issued for these kinds of projects are described as qualified private activity bonds after the federal tax law categorization for these projects. Debt issued by an authority who serves as a conduit issuer finances a loan to a private business, often in the form of a lease between the authority and the business, for use in constructing and equipping facilities used in the conduct of their business. The borrowing corporation's lease payments to the authority provide the resources to pay the interest and principal on the authority's debt obligations issued for the project. In this way private corporations are able to financially benefit from the federal income tax exemption granted to state and local governments. Bonds issued by the Pennsylvania Industrial Development Authority, the

[15] Pennsylvania Constitution, Article VIII, Section 7(a)(1)(i).

Pennsylvania Economic Development Financing Authority and the Commonwealth Financing Authority are state-established authorities that issue these types of bonds.

DEBT ISSUED BY OR ON BEHALF OF THE COMMONWEALTH

Based on my experience in the analysis and management of debt issued by or on behalf of the Commonwealth of Pennsylvania, I categorize debt issued by the Commonwealth and its related organizations as one of three types depending upon the legal authorization for the debt and the security provided to investors. My names for those categories are: Direct Debt, No-debt Debt, and Indirect Debt. While these category names are useful to help describe and categorize various debt obligations, there are instances where a debt obligation can have elements of more than one of these debt categories.



The Pennsylvania Constitution defines direct debt of the Commonwealth by what it is and by what it is not.[16] Included in direct debt are:

- Obligations of the Commonwealth
- Obligations of its agencies or authorities to the extent they are repaid from lease rentals or other charges payable directly or indirectly from revenues of the Commonwealth

Excluded from direct debt are:

- Obligations to be repaid from charges made to the public for the use of facilities financed as determined by the Auditor General
- Obligations repaid from lease rentals or other charges payable by a school district or other local taxing authority
- Obligations to be repaid by agencies or authorities created for the joint benefit of the Commonwealth and one or more other state governments

Direct Debt

Direct debt is debt that is issued with the guarantee of the Commonwealth pledged for repayment. The Pennsylvania Constitution prescribes the purposes for which direct debt of the Commonwealth may be issued.[17] The strongest pledge to an investor for debt repayment of a direct debt is provided by a general obligation pledge of the Commonwealth. As discussed earlier in this document, the general obligation pledge provides that the Commonwealth will raise taxes or other revenues sufficiently high enough to pay its general obligation debts and it will timely pay those obligations when they come due prior to paying any other expenses of the government which includes school subsidies, income maintenance grants, wages and salaries of employees and other normal operating costs. This pledge is

16 Pennsylvania Constitution Article VIII, Section 7(c).
17 Pennsylvania Constitution Article VIII, Section 7(a).

reinforced by Section 7(d) of Article VIII of the Pennsylvania Constitution that directs the State Treasurer to pay debt service due on Commonwealth direct debt even if insufficient funds have been appropriated to make the payments.

The Commonwealth's tradition has been to pledge Motor License Fund revenues to pay debt service on bonds issued for state highway and bridge construction by the Commonwealth. For direct debt issued pursuant to a capital budget or a referendum and secured by revenues of the Commonwealth's Motor License Fund, the interplay of two constitutional provisions creates an interesting debt obligation. When a Commonwealth direct debt obligation is issued with a general obligation pledge and whose proceeds are used for state highways and bridges and Motor License Fund revenues are pledged to the repayment of that debt obligation, a "double barrel security" obligation is created. This occurs due to the restriction in the Pennsylvania Constitution on the use of gasoline and motor license fees solely "for construction, reconstruction, maintenance and repair of and safety on public highways and bridges."[18] This restriction means that the Motor License Fund resources are not available to all Commonwealth general obligation bond investors. However, Commonwealth general obligation debt secured by the Motor License Fund and used for constitutionally permitted purposes does have the backing of the Motor License Fund revenues plus the benefit of the general obligation pledge, giving these debt obligations two separate security sources. Consequently, they have a stronger credit backing than debt obligations issued only with the Commonwealth's general obligation pledge.

Not all direct debt of the Commonwealth carries its general obligation pledge. As was noted earlier, tax anticipation notes are secured only by the then current year revenues of the fund receiving the proceeds – likely best described as a revenue pledge to debt holders.

No-debt Debt

This is my term for a category of debt that is issued by or on behalf of the Commonwealth, one of its departments, agencies or authorities but is not issued under the debt provisions of the Pennsylvania Constitution and therefore not a direct debt of the Commonwealth. I refer to this category of debt as "no-debt debt" because it is frequently deliberately structured to avoid debt limits, voter approvals and other statutory or constitutional requirements often necessary to issue direct debt. Rating agencies, however, consider these no-debt debt obligations as debts of the issuing entity and any failure to timely pay these obligations would have negative credit rating and financial market consequences for the issuer.[19] While proponents of this type of debt point to the constitutional definition to say this is not a debt of the Commonwealth because it is not a direct debt, the disclaimer is one founded more on semantics than of substance. This view is borne out in the published material of the municipal bond rating agencies on leased-backed and appropriation backed debt that says that these debt obligations are normally rated below the general obligation rating of the government financially supporting the debt issue and that failure to appropriate the funds necessary to timely pay these obligations may have credit

18 Pennsylvania Constitution, Article VIII, Section 11(a).

19 See "Lease, Appropriation, Moral Obligation and Comparable Debt of US State and Local Governments," July 9, 2018, Moody's Investors Service, Inc. and "U.S. Public Finance: Issue Credit Ratings Linked To U.S. Public Finance Obligors' Creditworthiness," Standard & Poor's Global Ratings, republished March 30, 2018, all available at their respective websites.

implications and consequences for more senior debt obligations of the obligor and possibly reduce their access to the public capital markets for other debt. This opinion that no-debt debt economically represents a financial commitment of the obligor, despite some legal distinctions that makes it not a direct debt, was also shared by the 1967-1968 Pennsylvania Constitutional Convention that specifically included the lease debt of the General and the State Highway and Bridge Authorities in the calculation of the new constitutional debt limit proposed and adopted in the 1968 constitutional revisions.

General State Authority and State Highway and Bridge Authority

The General State and the Highway and Bridge Authorities were prime examples of issuers of no-debt debt. They issued their own debt to construct state facilities, roads and bridges and leased them to Commonwealth departments who used those facilities and paid lease payments out of their state appropriations. After all lease payments were made, the leased facilities were purchased by the Commonwealth for a nominal amount. Prior to the adoption of the 1968 amendments to the Pennsylvania Constitution, the authorities' debt was not considered debt of the Commonwealth because the lease documents provided that in the event of non-appropriation or non-payment of the lease the authorities could evict the leasing Commonwealth agency from the leased facilities and find new lessees. Since there was no ongoing promise by the leasing Commonwealth agency to pay the leases to their termination date, the Commonwealth's only obligation was to pay annually appropriated funds and hence there was not a promise that constituted debt for the Commonwealth. When the Pennsylvania Constitution's debt provisions were expanded in 1968, the authorities' debt were specifically included as direct debt of the Commonwealth in the computation of the constitutional debt limit together with the general obligation debt of the Commonwealth. The General State Authority and the State Highway and Bridge Authority no longer exist, having been dissolved at the maturity of all of the debt obligations of the two authorities in the 1990's.

Appropriation-backed Debt

Lease-Backed Financings

Following the dissolution of the General State and the State Highway and Bridge Authorities, the category of no-debt debt in Pennsylvania has taken several different forms. The earliest transactions were structured principally as lease-backed financings where a statutorily created special purpose entity such as an authority performed financing and/or construction services for the Commonwealth and its departments or agencies. The facilities financed and constructed by the authority were then leased to a state government department for its use in a governmental program. The lease payments were structured to be sufficient to pay the debt service on the obligations issued by the authority for the facilities. Legislation establishing the financing authority included provisions to issue debt in the name of the authority and pledged the credit of the authority but also included a proviso that the such debt will not create or constitute any indebtedness, liability or obligation of the Commonwealth. Investors in these debt obligations rely for assurance that they will be repaid on the critical importance of the projects being funded to the leasing governmental department or agency and the value to the leasing government for it to remain in good standing with the financial community by upholding its lease commitments. The financing authority for a lease transaction by a Commonwealth state department could be a state authority such as the Pennsylvania Economic Development Financing Authority

("PEDFA") as it was for the financing of the purchase of the Forum Place office building and parking facility by PEDFA in 2012 and its lease to the Department of General Services. However, a lease revenue bond financing a project for a state department does not have to be a state authority. An authority established by a Pennsylvania local government can also function as the source of financing. One example out of several such financings is the Dauphin County General Authority 1998 lease revenue bonds issued for the Riverfront Office facility that are secured by annual lease payments by the Commonwealth.

Certificates of Participation

Financing leases may also be structured using certificates of participation. Certificates of participation are securities representing a proportionate interest in certain specified amounts payable by a state department or agency pursuant to a financing agreement such as a lease or other agreement. A certificate of participation financing will look very much like a lease revenue bond transaction in the way the transaction is structured and issued. The distinctions between these types of appropriation-backed debt are largely subtle legal and structural differences with the primary difference being that certificates of participation represent a pass-through of payments from the issuer to the investor while the lease revenue bond is a direct obligation of the issuer. The statutory framework available to a governmental entity may determine whether lease revenue bonds or certificates of participation are used for a specific financing. The Commonwealth has used certificates of participation in the leases financing the construction of prisons, for financing Harristown state office buildings and for energy savings improvements at state facilities.

Other Forms of Appropriation-backed Debt

While lease revenue bonds continue to be the most effective form of appropriation backed debt for financing the acquisition of real and personal property, other forms of no-debt debt obligations have been developed and used by the Commonwealth in recent years. The impetus for some of these forms of appropriation backed debt has been the need to address current budget needs due to the structural budgetary imbalance cited by rating agencies in rating reports for the Commonwealth. As it is for lease revenue debt, the important characteristic of appropriation-backed debt is that it is structured to <u>not</u> be a direct debt of the entity paying the debt service on the debt. Rather, the debt is specifically structured to be a limited obligation of the issuer, limited usually to amounts annually appropriated for the purpose of the debt. The limited obligation is created by giving bondholders a promise by the entity paying the debt service to annually appropriate the funds necessary to pay the debt service payable in that fiscal year. There is no promise and no legal requirement that the necessary amounts actually will be appropriated in the years that the debt remains outstanding. Thus, investors in this debt rely on the ability and willingness of a government entity's promise to annually appropriate funds for principal and interest, the essentiality to the entity of the project(s) being financed and the importance to the entity of maintaining its good name with investors by fulfilling that promise.

Non-Appropriation Risks

The perils of these lease and appropriation backed structures for governmental entities became very real in 2015 with the Commonwealth's failure to timely adopt its 2015-2016 fiscal year budget. Despite debt structures that were designed to make events of non-appropriation due to late budget enactments a rare event, the more than 6-month length of time the Commonwealth went without appropriation authority to make payments the Commonwealth was forced to take unusual actions to be able to fund the payments required under existing lease or service agreements in order to demonstrate to the financial markets that it is willing to honor its debt commitments. A failure to make these payments could have resulted in unscheduled draws on debt service reserves or other non-payment events that could have critically affected the Commonwealth's standing in the investment community and imperiled its access to the credit market in future years. Mitigation of the risk of late budget enactment for the Commonwealth Financing Authority was achieved in legislation adopted in 2016 that established a continuing appropriation for the authority's debt service payments from state sales, use and hotel occupancy tax receipts.[20] The continuing appropriation does not include debt service on the authority's tobacco settlement bonds issued in 2018 and described below.

Commonwealth Appropriation-backed Debt

A description is provided for each of the currently outstanding obligations that are either lease or appropriation backed debt in a section of each Commonwealth of Pennsylvania general obligation bond official statement labeled "OTHER STATE-RELATED OBLIGATIONS." As of this writing, the Commonwealth has lease or other payment arrangements that secure debt obligations with a variety of non-Commonwealth entities, both public and private as shown in Table 4 below:

Table 4
Obligations Secured by Commonwealth
Lease or Other Payments

Issuer	Purpose	Form or Structure
Harristown Development Corp	Office Space	Certificates of Participation in Dept. of General Services Lease Payments
Philadelphia Regional Port Authority	Port Facilities	Lease Revenue Bonds
Sports & Exhibition Authority of Pittsburgh and Allegheny County	Public Auditorium	Lease Revenue Bonds
NORESCO, LLC	Equipment	Certificates of Participation in Lease Payments by Various Departments
Pennsylvania Economic Development Finance Authority	Convention Center and Office Space	Revenue Bonds for pledged tax revenues and certain appropriated payments
Pennsylvania Economic Development Finance Authority	Unemployment Compensation Loan	Revenue Bonds for pledged interest factor contributions under the Unemployment Compensation Law

20 Act 2016-85, adopted July 13, 2016.

Table 4 (continued)
Obligations Secured by Commonwealth Lease or Other Payments

Issuer	Purpose	Form or Structure
Pennsylvania Economic Development Finance Authority	Rapid Bridge Replacement	Revenue Bonds for pledged loan payments
Commonwealth Financing Authority	Economic Development	Revenue Bonds for pledged service fees paid by Dept. of Community and Economic Development
Commonwealth Financing Authority	Budgetary Relief	Revenue Bonds for pledged tobacco settlement payments and certain state sales tax revenues
Commonwealth Financing Authority	PlanCon Projects Program	Revenue Bonds for pledged service fees paid by the Department of Education
Municipal Real Estate Funding, LLC	Budgetary Relief	Certificates of Participation in semi-annual payments appropriated to the Department of General Services

A prime example of the functioning of no-debt debt using appropriated funds is the Commonwealth Financing Authority ("CFA"), established by statute in 2004. The CFA issues its debt obligation secured by service fee payments paid by the Department of Community and Economic Development to the CFA under terms of a Service Agreement between the Department of Community and Economic Development and the CFA. A component of that service agreement is that the Department of Community and Economic Development is obligated to pay sums in the amount necessary to pay all interest and principal payments on the debt issued by the CFA and has promised to request annual appropriations from the Pennsylvania General Assembly of amounts sufficient to pay the amounts required to be paid to the CFA under the Service Agreement.

The use of financing by state authorities has significantly expanded beginning in 2015. In that year the Pennsylvania Economic Development Financing Authority issued $721.5 million of Tax-Exempt Private Activity Revenue Bonds, (The Pennsylvania Rapid Bridge Replacement Project), Series 2015. This series of bonds was issued to finance a Public-Private Partnership Agreement, often referred to as a "P3 Agreement", between the Pennsylvania Department of Transportation and a private development entity whereby the development entity contracts to develop, design, construct, maintain and finance specific highway bridges within a specified time frame and then maintain those bridges for a stipulated period of time. The bonds are secured by a trust estate established for the bonds that includes, among other sources, various payments by the Department of Transportation to be made from annual appropriations available for such payments.

In 2016 and 2018, the Commonwealth Financing Agency issued their Revenue Bonds (Federally Taxable) in the aggregate amount of $1.17 billion as a portion of a $2.5

billion authorization for funding of the Commonwealth's share of local school district construction costs (PlanCon). Debt service on the bonds is to be paid from annual appropriations to the Pennsylvania Department of Education for such purpose.

In 2018, the Commonwealth Financing Authority issued their Tobacco Master Settlement Payment Revenue Bonds, Series 2018 in the amount of $1,487.2 million that, together with $115.3 million of original issue bond premium provided $1.5 billion of budget relief to the General Fund. Debt service on the bonds is to be paid from service charges payable by the Commonwealth to the authority from payments the Commonwealth receives under the 1998 Master Settlement Agreement with participating cigarette manufacturers and a portion of the state sales, use and hotel occupancy taxes.

In 2018, $201.2 million of Certificates of Participation were issued representing interest in the rights to receive payments by the Commonwealth, through the Department of General Services, pursuant to a financing agreement with Municipal Real Estate Funding, LLC ("MRE"). Under the financing agreement, MRE paid $200 million for Department of General Services 2017-18 fiscal year operational costs, and certain agricultural operational costs for the same fiscal year. Debt service on the Certificates of Participation is to be paid by semi-annual payments from funds annually appropriated to the Department of General Services for such payments through 2046.

Moral Obligation Debt

Another form of appropriation-backed debt is the moral obligation bond that was described under the Revenue Bond section earlier. There have been several instances of moral obligation pledges among Pennsylvania debt issues but the oldest and most visible is that provided to long-term debt issues of the Pennsylvania Housing Finance Agency "PHFA". The PHFA partially secures its debt obligations with a capital reserve fund. If that capital reserve fund is not funded at its required level, the PHFA is required to report the deficiency to the Governor who is to request an appropriation of funds to cure the deficiency from the General Assembly. [21] The General Assembly may or may not appropriate the funds as requested by the Governor. In 1976, although not required under the law to act, the General Assembly appropriated sufficient funds to the PHFA for it to avoid a default on certain of its debt obligations not covered by a moral obligation pledge. While the Commonwealth had not committed to appropriate funds to PHFA's debt, by doing so, the Commonwealth likely avoided a possible blemish to its standing in the municipal bond market. Those appropriated funds were subsequently repaid by PHFA to the Commonwealth.

Indirect Debt

Indirect debt is debt issued by agencies and authorities of the Commonwealth but does not directly rely on special or general tax revenues for paying debt service on the debt. These debt issuing entities usually have the authority to levy fees, charges or obtain revenues to pay their debt obligations. A comprehensive list of these entities (including those that issue debt I have categorized as no-debt debt), showing the amount of outstanding indebtedness for each is included annually in the Public Debt section of the Governor's annual budget document.

21 Housing Finance Agency Law, Act of 1959, P.L. 1688, No. 621, as amended, Section 504-A (c).

Debt of Local School Districts

Although the debt obligations of Pennsylvania's local school districts are not state debt obligations, the state government as a provider of substantial subsidies to local school districts, including subsidies for debt service payments on certain local school district debt obligations, is an important component of the security investors look for in local school district debt. The importance of the state's subsidization of local school district debt to investors is increased by a provision in state law often referred to the state subsidy intercept program.[22] Under the provisions of this state subsidy intercept program if a local school district fails to timely pay a required debt service or sinking fund payment, the Secretary of Education may "intercept" any state education subsidy payable to that school district and use it to pay the required debt payment. Because of this mechanism that protects school debt holders, some bond rating agencies have in the past and may continue to assign a minimum rating on a school district's debt. That means that while the rating agencies assign a rating on the debt obligations of a school district based on an analysis of the school district's finances, the "underlying rating" for the district's debt, that debt obligation may have another rating applied to it that is this minimum rating because of the state subsidy intercept program. The ability for Pennsylvania's state subsidy intercept program to provide substantial credit support to a school district's debt obligations has been severely hampered by delays in enacting annual state budgets. Without the availability of current appropriations to fund periodic school subsidy payments, there are no subsidies available to intercept to pay school district bondholders, making the program ineffective in accomplishing its objectives. Indeed, in late 2015, both Moody's Investors Service and Standard & Poor's Global Ratings announced downgrades to Pennsylvania's school subsidy intercept program. These downgrades to the intercept program were brought about by the program's ineffectiveness in providing credit support to school districts when liquidity is disrupted by the inability of the Commonwealth to timely adopt a budget that funds the source of the subsidy. As a consequence of these rating actions, a number of school districts have had ratings on their debt obligations reduced. Previous to the 2015 revision, the enhanced rating on a school district's debt based on the subsidy intercept was usually one step below the rating on the direct debt issued by the Commonwealth. Under the revised ratings of the intercept program the rating agencies will provide an enhanced rating that provides a floor and a ceiling rating that may or may not be higher than the school district's underlying rating. If the intercept program's rating is above the school district's rating, interest rates on the school district's bonds should be lower than if the intercept program was not available. Due to the design of the intercept being based on state payments, Commonwealth revenues may be viewed by investors as an ultimate backing to a school district's bonds.

RATING AGENCIES AND COMMONWEALTH DEBT

Rating firms provide investors with an independent analysis of the credit quality of state and local government debt obligations. The rating and opinion of each rating firm is based on their evaluation of the issuer's capacity and willingness to meet their financial commitments as they come due and is synthesized into an alphabetic letter grade designating its relative quality among other municipal bonds. The rating a debt obligation is assigned partially determines the interest rate on the obligation and the type of purchaser that will

22 Public School Code of 1949, P.L. 30, No. 14 Sections 633, 785 and 790 .

consider the obligation as an investment. The cost of obtaining a bond rating is paid by the issuer, a feature that has been criticized by some as a threat to rating agency independence.

There are three major national rating firms that rate state and local government debt -- Moody's Investors Service, Inc., Standard and Poor's Global Ratings and Fitch Ratings. In 2006, an amendment to the Securities and Exchange Act of 1934 provided for Nationally Recognized Statistical Rating Organizations ("NRSRO") that would be registered with the Securities and Exchange Commission ("SEC") who would exert oversight on the NRSROs. All three of these firms became a recognized NRSRO. Bond rating firms and their rating methodology and monitoring policies had come under increasing criticism and scrutiny following the financial crisis of 2007 and 2008 and are the subject of increased regulatory activity.

Rating Criteria

Each rating firm has its own rating process and areas of the rating investigation that they stress as having the most importance. Generally, the major groupings of factors considered by the firms in making their ratings on long term obligations are:

- The amount and nature of debt and debt service requirements (debt is broadly defined to include liabilities for future pension payments and other post-employment benefits)
- The economic strength of the issuer and the region of which it is a part
- The management strength of the issuer
- Results of financial operations and strength of financial planning
- Social factors

In 2007 and 2008 some major municipal bond issuers argued that the bond rating firms rated municipal bonds on a different, more stringent, scale than corporate bonds. These issuers pointed to the lower rate of payment defaults on municipal bonds than on comparably rated corporate bonds. Despite an initial hesitation to change their rating process, in 2008 both Moody's Investors Service, Inc. and Fitch Ratings announced a recalibration of their ratings on municipal bonds. Standard and Poor's Global Ratings stated that they already maintained a "global" rating for municipal bonds. The Commonwealth's bond ratings were raised in 2008 by both Moody' Investors Service, Inc. and Fitch Ratings as a consequence of their recalibration of municipal bond ratings.

The rating classifications and letter designations used by each of the rating firms for investment grade debt are:

Table 5
Investment Grade Rating Categories

Moody's	Standard & Poor's	Fitch
Aaa	AAA	AAA
Aa	AA	AA
A	A	A
Baa	BBB	BBB

Ratings below these are considered speculative investments or investments in default and are symbolized by other letters and letter combinations. No states currently have bond ratings below an investment grade rating.

Standard and Poor's and Fitch indicate relative ranking within each rating category with a modifier represented by (+) positive and (-) negative signs. Moody's uses a number modifier from "1" (highest) to "3" (lowest) to indicate ranking in the letter rating. In addition, rating firms provide a trend designation for its rating to indicate whether the rating is considered to be stable, improving or deteriorating.

The current general obligation bond rating and outlook from each of the three major municipal debt rating firms is shown in Table 6.

Table 6
Current Commonwealth of Pennsylvania Long-Term Debt Ratings

Firm	Rating and Outlook
Moody's Investors Service	Aa3 / Stable
Standard and Poor's Global Ratings	A+ / Stable
Fitch Investors	AA- / Stable

Commonwealth's Rating History

The Commonwealth's general obligation debt ratings had been at the "double A" level since the mid-1980's, having been increased from the "single A" category of ratings that prevailed in the 1970's and until 1985 when the Commonwealth's debt ratings began to be raised due to improvements in its financial condition. Rating upgrades for the Commonwealth last occurred in 1997 and 1998. A strained financial condition for the Commonwealth that was in many respects, but not entirely, a consequence of the national economic recessions in the decade of 2000 resulted in a downgrade of the Commonwealth's bond rating by Moody's in 2012 and by Fitch in 2013. Additional bond rating downgrades during 2014 were a result of a growing structural fiscal imbalance exacerbated by reliance on non-recurring resources, a lack of financial reserves and growing unfunded liabilities for pensions and other benefits according to the rating reports that accompanied the rating firms' decisions. The most recent rating change for the Commonwealth's general obligation debt was in September 2017, when Standard and Poor's lowered its rating of the Commonwealth to "A+" from "AA-" explaining the rating change was due to a chronic structural budget imbalance, late budget adoptions and a weakening of its liquidity position.

CREDIT ENHANCEMENT FOR MUNICIPAL DEBT

The desire by bond issuers to obtain the highest possible bond ratings (and consequently the lowest interest rates) on the bonds they issue led to the development of forms of credit enhancement provided by private corporations for municipal debt. Credit enhancement most frequently was provided by a bank through a letter of credit or by an insurance policy issued by a bond insurance company. The strategy for the use of credit enhancement on a bond issue is that a triple-A rated bank or bond insurance company would agreee to pay debt service payments on a covered bond, when due, if the issuer was unable to make those payments. The triple-A rating of the bank or insurance company is transferred through the credit enhancement to the issue of the covered bonds effectively placing a triple-A rating on those bonds. Bond insurance began in 1971 growing dramatically to the point such that by 2007 more than one-half of newly issued bonds were credit enhanced. Bond insurance in particular was popular because a number of firms were competing for business and it lowered costs for bond issuers and provided comfort for insured bond purchasers that in the event of a payment default on the bonds, they would be paid by the insurance company. This assurance was premised on the belief that the policy issuing companies would retain their triple-A rating. The 2008 banking and mortgage crisis destroyed that belief as bond insurance firms were rocked by losses in their investments and the firm's credit ratings tumbled, often to below investment grade. At that point the value of bond insurance was zero. Today, the triple-A rated bond insurance market is a mere shadow of its prior coverage although recently it has been increasing its penetration into the market as investors become more comfortable with the credit quality of the bond insurers that remain in the market.

While the Commonwealth has not directly purchased bond insurance on its general obligation debt, a number of Commonwealth bond issues or portions of issues were insured through insurance policies purchased by underwriters of Commonwealth bonds at initial issue. However, some bonds issued by agencies, authorities or other entities whose debt service payments are paid from Commonwealth appropriations have used bond insurance to enhance those bond issues. The importance of the decline in bond insurance for Commonwealth debt is that the municipal bond market analysis of credit worthiness, especially by smaller investors, has become more directly focused on the issuer of the bond and its ability to make timely payments.

REGULATORY CONSTRAINTS ON COMMONWEALTH DEBT

Federal regulation of the muni-market is a relatively recent event. While state and local governments have issued their debt since the middle of the 1800's, most federal regulatory efforts have occurred since the early 1970's. Federal regulation of the muni-market is conducted through the Securities and Exchange Commission ("SEC"), the Municipal Securities Rulemaking Board ("MSRB") and the U.S. Treasury Department/Internal Revenue Service ("IRS"). Many times new regulatory efforts by Congress and federal agencies have been in response to activities in the muni-market that were considered abusive or unfair. As regulatory efforts in the muni-market are expanded or enhanced, state and local governments have strongly fought to restrain those efforts. By and large, their efforts have prevailed only at the margin. The tempo of activity by the federal agencies with regulatory authority over the municipal bond market has increased substantially since the 1990's and in the view of some observers, is expanding more rapidly today. In recent years the SEC has brought a number of enforcement actions against issuers and municipal bond dealers, including a number of high-profile cases involving large cities and states. Areas of enforcement activity by the SEC were focused on fraud associated with the issuance of debt and the accuracy of disclosure information provided to investors, tax or arbitrage fraud, pay-to-play, public corruption, pension and disclosure fraud, and bond pricing issues. Some of these actions touched the Commonwealth, its municipalities and school districts.

Likewise, enforcement activity of tax-exempt bond requirements by the IRS has expanded in recent years. The IRS had pursued broad efforts such as the "yield burning" activities during the 1990's and now appears to focus on issuers' post-issuance compliance with tax-exempt bond regulations. These efforts have led to additional compliance costs for issuers as these IRS efforts continue and expand.

Securities and Exchange Commission Regulatory Efforts

The Securities and Securities Exchange Acts were enacted in 1933 and 1934 in response to fraud and deceitful practices in the securities markets that occurred in the 1920's. They established the modern system of securities regulation in the U.S., including the basic anti-fraud provisions, and created the SEC to oversee the regulatory system. Both acts contained broad exemptions from its provisions for municipal securities except for its anti-fraud provisions. The principal method of enforcement of securities regulation is registration and filing of security offering materials with the SEC and a review of those materials by the SEC prior to their sale to investors. But, due to their exemption in the securities assets, municipal bond issuers, unlike issuers in the corporate market, are not subject to SEC securities registration and reporting requirements.

The first principle of the regulatory system is "full disclosure" – preventing fraud by requiring those who sell securities to tell investors the whole truth. The seller has the duty to disclose the facts necessary for the buyers to analyze the risks it faces in making a specific investment.

The basic anti-fraud provisions of the federal securities laws have always applied to municipal securities. When the securities acts were enacted in the 1930's the number of investors in the market was small and there was a widespread belief that municipal securities involved little risk and a slight opportunity for fraud. With the expansion in the uses of municipal debt and growing issuance, those assumptions about the market's risks and credit quality have changed beginning in the 1970's.

New York City Crisis of 1975 and Establishment of Municipal Securities Rulemaking Board

In 1975 a financial crisis engulfing the City and State of New York highlighted the potential for state and local governments to default on their debt obligations. The attention of the SEC was drawn to the muni-market; its staff report noted that as issuers of securities, governments are subject to the statutory prohibition of false and misleading disclosure accompanying the issuance of debt. Also, a widening universe of investors in municipal debt became more keenly aware of how little information was provided by issuers of municipal bonds compared to that provided by corporate issuers. The events of 1975 ended the period of regulatory neglect for municipal securities. Amendments to the securities acts in 1975 established a regulatory scheme for the municipal bond market through the establishment of the Municipal Securities Rulemaking Board ("MSRB") to regulate dealers and brokers of municipal securities and the addition of the so named "Tower Amendment" to the securities acts codifying the exemptions from filing and registration of municipal debt issuers with the SEC.

Washington Public Power System Default of 1983 and Adoption by SEC of Issuer Disclosure Rule 15c2-12

When the Washington Public Power System defaulted on its debt in 1983 the regulatory machinery of the SEC then focused on municipal debt was further enhanced with the adoption by the SEC in 1989 of Rule 15c2-12 ("Rule"). The Rule placed requirements on the firms purchasing and underwriting municipal debt that required action by the issuers, thus indirectly regulating a state and local government bond issuance activity that could not be done directly because of the Tower Amendment. The Rule required underwriters to obtain a complete official statement from the issuer before any sale of bonds. The issuer had to certify that the official statement "contains no untrue statement of a material fact and does not omit to state a material fact necessary in order to make the statements made therein, in light of the circumstances under which they were made, not misleading" and that the issuer's financial statements "accurately reflect the conditions and facts they purport to reflect, that the estimates contained therein in light of the information available, are believed to be reliable and that there have been no material adverse changes in the financial position of the issuer since the dates of such financial statements that has not been disclosed."

The Rule was amended in 1994 to require underwriters of municipal debt, prior to purchasing debt from an issuer, to obtain a promise from the issuer that it will regularly and continually provide relevant financial and operating data on the issuer to the public. An electronic filing system (Electronic Municipal Market Access or EMMA)[23] provided by the MSRB supports this reporting requirement to the muni-market and to the public. Annually and upon the occurrence of significant credit events such as incurring additional debt, debt defaults, rating changes, and adverse regulatory events, the Commonwealth files the notices and reports as required by its disclosure agreements adopted for each debt issue subject to the Rule. These reporting requirements have placed considerable additional responsibilities on the Commonwealth and other issuers of municipal bonds.

Securities Fraud Charges on Issuers

Enforcement of the Rule by the SEC appears designed to provoke municipal bond issuers to comply with securities law through filing high-profile securities fraud charges against government office holders, issuer board members, underwriting firms, financial advisors, and bond counsel firms. An expansion of SEC enforcement actions seemed to increase since the mid-2000's against large bond issuers, including some of local interest, that included New Jersey, San Diego, the Dauphin County General Authority, Illinois, Miami and various officials of these governments and firms hired by them. Securities fraud charges were also made against the City of Harrisburg, the Commonwealth's capital city. The SEC used the Harrisburg case to issue a caution to municipal officials through a special report.[24] Using direct language in the report, the SEC cautioned public officials who make public statements concerning the municipal issuer and its financial condition to be sure those public statements do not omit or misstate material information regarding the financial condition and operations of the municipal issuer. The SEC emphasized that public statements considered by the SEC to be a component of an issuer's disclosures to the market include information by issuers provided in budgets, financial statements, and speeches and statements by government officers and officials in addition to that provided in required debt disclosure documents. An extension of SEC regulation to governmental officials has resulted in a fraud filing in 2014 where the SEC gave notice that municipal officials and administrators can be held liable for securities law violations by persons over who they exercise control as defined in the Securities Exchange Act.[25] In that filing, a former mayor and a former city administrator were charged with making material misstatements about a proposed project, the projected revenues available to pay bondholders and the city's financial health. These expanding regulatory efforts, make it important for municipal issuers

23 www.emma.msrb.org

24 Securities and Exchange Commission: Release No. 69516, May 6, 2013, *available at* *http://www.sec.gov/litigation/investreport/34-69516.htm*

25 Securities and Exchange Commission, November 2014, available at https://www.sec.gov/news/press-release/2014-249

to clearly understand the need for accuracy in their public messages, the potential effect on municipal investors of those messages and the potential for personal liability for themselves as office holders and officials.

SEC Municipalities Continuing Disclosure Cooperation Initiative

In what has been another step in the SEC's increased regulatory efforts, in March 2014, it announced a Municipalities Continuing Disclosure Cooperation initiative "MCDC Initiative."[26] The MCDC Initiative was designed to encourage municipal bond issuers and underwriters of municipal bonds to voluntarily self-report material misstatements in official statements by municipal issuers as to their compliance with required annual and event disclosure to the investment community under Rule 15c2-12. To encourage municipal bond issuers and underwriters to self-report potential materially inaccurate statements made in offering documents regarding continuing disclosure obligations, the SEC offered participants in the MCDC Initiative consideration for standardized favorable settlement terms for self-reported violations. In addition, the SEC warned that municipal issuers faced increased surveillance and the possibility of sanctions for unreported violations. MCDC Initiative settlements between the SEC and 72 municipal bond underwriting firms and broker dealers have resulted in over $18 million of fines and required remedial actions to be taken by the firms. In a large part these settlements focused on the failure of the underwriters to discover and disclose the failure by the municipal issuer to file required annual reports or to report late filings of required reports. Moving beyond these settlements with bond underwriting firms for violations uncovered through the MCDC Initiative, the SEC brought enforcement actions in 2014 and in 2016 against 71 municipal issuers for their failure to comply with continuing disclosure obligations that they voluntarily self-reported through the MCDC Initiative. The enforcement actions were settled under the favorable terms offered to issuers under the MCDC Initiative. In 2017, in the first charges resulting from information not self-reported but uncovered by the SEC from the MCDC Initiative, the SEC charged a California city manager and the municipal authority, where the manager also served as executive director, with making false statements about compliance with continuing disclosure obligations in prior bond offerings. This violation was not voluntarily self-reported in the MCDC Initiative, consequently SEC settlement terms included financial penalties and a bar against participating in municipal bond offerings. The SEC has continued to pursue enforcement actions against governments, their officials, investment banks, and other bond participants found in violation of its rules and regulations.

Dodd-Frank Wall Street Reform and Consumer Protection Act

Federal regulation of the municipal bond market was put under review by provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act enacted by Congress in 2010 as a sweeping overhaul of the U.S. financial regulatory system following the widespread financial crisis in the late 2000's. Among its provisions affecting the municipal bond market was the requirement for the Governmental Accountability Office ("GAO") to study and review municipal disclosure as to its effectiveness and usefulness to investors and suggest options for improving information provided to investors. GAO was specifically requested to study the advisability of retaining the Tower Amendment that has provided

26 U.S. Securities and Exchange Commission, Municipalities Continuing Disclosure Cooperation Initiative, modified November 13, 2014, *available at* http://www.sec.gov/divisions/enforce/municipalities-continuing-disclosure-cooperation-initiative.shtml

municipal issuers exemption from many SEC regulations. GAO issued its report in July 2012.[27] While the report did not contain any recommendations for increased regulatory activity in the municipal bond market, it did describe further actions by the SEC and the MSRB that would encourage, support and produce improved disclosure of material information to municipal bond investors. Subsequent to the GAO report, the SEC issued its "Report on the Municipal Securities Market" in July 2012.[28] The SEC in that report made a number of recommendations for legislative and regulatory changes that significantly affect the issuers of municipal bonds. Many would add significant costs to bond issuers such as periodic disclosure requirements, adoption of standards of accounting and auditing, and application of enforcement sanctions to increase compliance with regulations. A recommendation to expand the types of secondary market event disclosures required by Rule 15c2-12 to include disclosure relating to new indebtedness was included in the report.

The SEC, in 2018, adopted changes to Rule 15c2-12 to become effective in February 2019 that expanded the list of events for which municipal bond issuers were responsible for providing to the investment community within ten (10) business days of their occurrence. Generally, these events include taking on any financial obligation, making a financial covenant or any change to a financial obligation that may affect current security holders or may reflect financial difficulties. The types of events and transactions that may be covered by these additional rules are numerous. The addition of these new reportable events has required issuers to develop compliance procedures and internal controls that will enable an issuer, especially a large issuer such as a state, to collect such information and promptly make the required reporting.

A new era of disclosure by municipal bond issuers has been prompted by the economic consequences arising from the 2020 COVID-19 pandemic. In May 2020, the SEC issued a statement that encouraged municipal issuers to voluntarily provide to the investment community through EMMA disclosures regarding the impact and potential impact of the pandemic on operations and financial condition. Uncertainty about the length and severity of the pandemic will make an estimate of the financial impact to issuer's financial condition difficult and will require issuers to make forward-looking disclosures, statements that are carefully developed in the corporate world and virtually unknown in the municipal market. This is an expansion of disclosure responsibilities for municipal issuers that most issuers are unprepared to undertake.

U.S. Treasury and IRS Regulatory Efforts

The one signature feature of state and local debt securities is their tax-exempt status. Interest on municipal debt obligations generally is exempt from income taxation by the localities and the states in which they are located, but the most important exemption was the exemption, at least until 1968, from taxation under the federal income tax.[29] Relatively high marginal federal income tax rates provided a powerful stimulant for investors to purchase muni-securities and also reduced the interest costs of borrowing by issuing state and local governments.

---

27 Government Accountability Office, Municipal Securities: Options for Improving Disclosure Report 12-698, July 2012, ***available at*** http://www.gao.gov/assets/600/592669.pdf.

28 U.S. Securities and Exchange Commission, Report on the Municipal Securities Market, July 31, 2012, ***available at*** http://www.sec.gov/news/studies/2012/munireport073112.pdf.

29 Internal Revenue Code, Section 103.

The year 1968 saw the beginning of what has become a continuing political struggle between the desire of the federal government to limit the use of federal income tax exempt debt by states and local governments and the efforts by state and local governments' to continue and expand the use of such debt. Generally, states and local governments have been on the losing side of the struggle as new and expanded restraints, restrictions and requirements are regularly imposed on municipal debt. Indeed, taxable municipal debt is a growing sector of the muni-market. As an example, portions of the debt issued by the Commonwealth Financing Authority have been issued as federal taxable securities. Those federal taxable securities issued by the Commonwealth Financing Authority, however, retained their exemption from the Pennsylvania state income tax.

Under current tax law and the regulations of the IRS the exemption from federal income tax for interest on state and local debt is conditioned on:

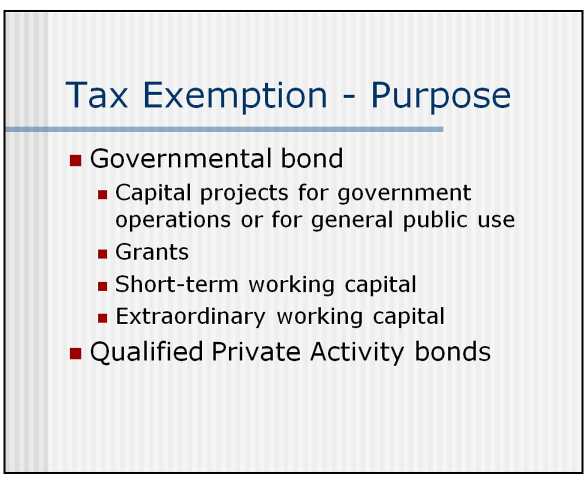
- The purposes for use of the proceeds of the debt
- Actions taken by the issuer and the ultimate recipient of the debt proceeds
- The tax status of the bond's purchaser.

What Purposes are Permitted for Federally Tax-exempt Debt?

The federal income tax code separates state and local debt into "Governmental Bonds" and "Qualified Private Activity Bonds" depending upon how the proceeds of debt issues are used.

Governmental Bonds

Generally, governmental bonds include debt issued for capital projects for governmental operations and for general public use – schools, government hospitals, government office buildings, highways and bridges, making grants for a public purpose and funding short term cash flows. There is no definition of governmental bonds in the tax code or regulations, but rather they are described as what they are not. If more than 10% of the proceeds of a debt issue (and that includes all investment earnings and any of the issuer's funds that are considered to have been replaced by the debt proceeds) are used by a non-governmental entity in a trade or business; and if more than 10% of the debt service is paid, either directly or indirectly, by the ultimate beneficiary of the debt proceeds who is other than the general public, than the entire debt issue providing these funds is considered to be a private activity bond and its interest is federally taxable to the recipient.

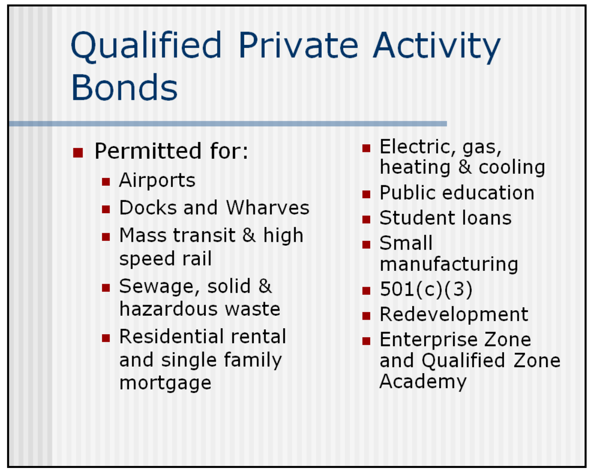


An oversimplified example may help to clarify this complicated definition. Assume the Commonwealth issues a general obligation bond in the principal amount of $50 million for various capital projects. One of those projects is a ski area at a state park whose cost is $5.5 million to be paid out of the proceeds of the bond. Instead of operating the ski area, the Commonwealth contracts with a private firm to operate the ski area. In return the

Commonwealth is paid by the ski operator for the use of the area. The conduct of its business of operating the ski area by the private ski area operator is a private use of the Commonwealth's bond proceeds and if their payment to the Commonwealth exceeds 10% of the debt service of the bonds, the entire $50 million bond issue is a federally taxable bond despite the fact that 89% of the bond's proceeds were used for purposes that qualify for governmental use under the federal income tax code.

Qualified Private Activity Bonds

A governmental debt obligation that meets the above definition of a private activity bond cannot benefit from the exemption from federal income tax available to governmental bonds. Congress, however, has granted exceptions and made the benefit available for certain types of projects. Debt issued for the purposes permitted by these exceptions are called Qualified Private Activity Bonds. The kind of projects able to be funded as Qualified Private Activity Bonds is shown in the box to the right. Qualified Private Activity Bonds also have to meet certain restrictions and prohibitions. Some of these restrictions are:



- The debt must mature within 120% of the length of the facility's useful life
- There are limits on how much may be spent on the purchase of land
- No airplanes, skyboxes, stadiums, golf courses, gambling or liquor facilities may be financed
- There must be a public hearing held on the project
- Approval must be given by an elected official of the area in which a project is located
- An allocation of the annual volume cap for Qualified Private Activity Bonds issued in a state must be obtained in the amount of the debt to be issued.

Private Loan Bond

The Internal Revenue Code also prohibits the use of the tax-exemption benefit for bonds used to finance loans to non-governmental entities or to individuals. If a debt issue of a government funds any loans to non-governmental entities or to individuals, the total amount of such loans cannot exceed 5% of the proceeds of the debt issue. If that limit is exceeded, the entire bond issue becomes a federally taxable issue. Debt issued to finance loans to governmental units is permissible under the Internal Revenue Code. However, the arbitrage restrictions on tax-exempt debt (discussed below) effectively limits the interest rate payable on any loans funded from tax-exempt debt to be below the interest cost of the bonds, thus effectively requiring the issuing government to subsidize the loan interest rate.

Issuer Requirements for Tax-Exempt Debt

In order for any debt issued by a government to receive and retain the benefit of federal income taxation, that debt must meet the following requirements at the time of the issuance of the debt and continue through the entire term of the debt:

- The debt must be issue in registered form, that is, it cannot be in the form of debt paid to the bearer and the debt issuance must be reported to the IRS
- The debt cannot carry any guarantee by the federal government
- The proceeds of the debt must be expended for facilities constructed or acquired after the issuance of the debt, that is, proceeds of debt may not be used to reimburse anyone for prior expenditures from its own funds for facilities financed
- During the term of the debt, no deliberate action may be taken by the user or issuer to change the use of the financed facility including a sale or lease to a non-governmental user
- Arbitrage calculations for investment earnings on the proceeds of debt while awaiting disbursement on the financed project must be performed and the value of investment earnings above the computed yield of the debt must be periodically paid to the federal government.

The final bullet point above is probably the most onerous of the requirements on issuers to keep the interest payment on their debt exempt from federal income tax. The requirement to compute and pay to the federal government all investment earnings realized from the investment of debt proceeds that exceed the interest rate (for IRS purposes the "yield") on the debt obligation is called arbitrage rebate and represents a 100% tax on investment earnings above an obligation's yield.

Documentation to indicate compliance with all post-issuance requirements must be maintained for the life of the bonds plus 3 years. Current expanded IRS enforcement efforts are focusing on post-issuance compliance. Failure by the issuer to continually meet these requirements may result in the debt obligation being determined to be taxable, even retroactively to the date of issuance. The increased enforcement effort by the IRS includes post-issuance audits of bond issues for compliance with federal tax law and regulations. With that increased enforcement effort, the IRS has offered compliance programs that encourage issuers to voluntarily self-report violations and agree to settlements of these violations. These efforts place further demands on issuers to monitor their continuing compliance with IRS requirements of tax advantaged obligations.

Investor Requirements for Tax-Exempt Debt

The beneficial treatment of interest of governmental debt under the federal income tax law is also conditioned on the investor's status as to income and sources of income. First, the tax exemption only applies to the interest paid by the issuer to the investor. After the original issuance of the debt, the security evidencing the debt may be bought and sold at the then current price. If the purchase price is below the original offering price because a higher yield on the security is demanded by the purchaser and a portion of that yield will be received by the purchaser in the form of the appreciated price of the obligation, that portion of the security's yield obtained from appreciation is taxable to the recipient for federal income tax purposes.

Second, investors who are subject to the federal alternative minimum tax may be required to pay federal income tax on interest payments received from Qualified Private Activity Bonds that otherwise would be tax-exempt to a recipient not subject to the Alternative Minimum Tax.

Third, recipients of Social Security benefits may be required to pay federal income tax on a greater proportion of their Social Security benefits because of their income level and the amount of federally tax-exempt interest payments received.

Finally, the receipt of federally exempt interest payments may increase the tax liability for certain corporate tax payers.

DEBT MANAGEMENT POLICY

The authority to commit future tax revenues to repay debt with interest has to be employed responsibly so as to not unfairly burden future generations of taxpayers. One of the important tools used to manage debt obligations is the development and use of debt policies for the governmental issuer. The adoption of a formal debt policy is promoted by government finance organizations, state and local budget councils, other finance professional organizations and good government proponents.

Debt Management Policy Benefits

- An explicit policy frames decisions for effective financial management and long-term planning
- Provides guidance on issuance and management
- Ensures capital market access at reasonable cost
- Maintains flexibility and control in financial management
- Links to capital and long-term planning

A significant benefit of a debt policy is the help it gives in laying out the elements important to deciding between using a "pay as you acquire" vs. a "pay as you use" approach to paying for capital investments. Framing these decisions against a carefully and thoughtfully developed debt policy is an important budgetary and policy process that leads to the best financing decisions. Having a written debt policy is recognition that borrowing increases financial risk and reduces financial flexibility for the borrower.

Definition of Debt

A first step in the development of a debt policy needs to be determining what constitutes debt. In Pennsylvania, the term has been usually defined as direct, general obligation debt. A more comprehensive definition of debt such as used by rating agencies, accounting standards organizations, and investment analysts in an analysis of debt affordability will better serve the Commonwealth. Such a definition would include varieties of non-general obligation debt are being issued using certain state revenues and appropriations as security, the future financial obligations of municipal and state pension systems, future costs for other post-employment benefits, and other obligations payable over time.

Debt Affordability Analysis

One of the major components of a debt policy and also one of the factors used by debt rating firms over which an issuer has the most direct control is the amount of debt it has incurred and plans to incur in the future. In establishing their ratings, the rating firms consider how the issuer plans for future use of debt financing, its purpose, amount, and type so that the rating firms can form a view of whether those debt plans may become a source of financial stress in coming years. An analysis of debt affordability is a tool used by issuers of debt to assess their current level of debt, to guide plans for future debt issuance and to be the foundation for the development of a debt policy.

An analysis of debt affordability is a process by which a governmental entity quantifies the amount of debt prudently able to be incurred on behalf of its citizens. The difficult problem is to define "prudent." Quite often debt affordability criteria are expressed as debt limits contained in constitutions or statutes. Being included in law does not, however, mean that the debt limit was developed through rigorous analysis. Constantly changing financial conditions and investment needs require that a debt affordability analysis and debt policies need periodic review and revision. Such reviews could include stress tests on the debt policy, a consideration made apparent by the 2019-2020 pandemic that seriously damaged government finances. There is always the budgetary tension between what is desired and what is affordable; a debt affordability analysis component of a debt policy needs to reflect that tension.

> **Debt Affordability Analysis Recognizes -**
>
> - Affordability should be a key component of and effective infrastructure financing and debt management plan
> - That the amount of debt is one factor that has an impact on borrowing costs and the budget

There are many good reasons for periodically analyzing a debt issuer's debt affordability other than to impress bond rating firms. As an important component of a complete debt policy, it should be used to improve the quality of decisions on the appropriate allocation of public resources through the budgetary cycle, assist in the formation of long term financial plans and provide a benchmark on which actual results can be compared.

There is no "cookie cutter" process approach available to conduct an analysis of debt affordability. Because of legal, economic, political, demographic and social differences between governments, a single approach cannot be effective. Each government must tailor its analysis to its particular conditions. That does not mean that the efforts other governments have made cannot be helpful to another government's task. It does mean that substantial thought as to the particular trends and circumstances a government faces must be thoroughly considered in the analysis and the development of the resulting policy. It is important to remember that debt affordability analysis, to be effective, should be incorporated into a fully developed debt policy for the government.

Once a debt policy has been framed, a decision must be made whether to implement its elements in a legislative act or through an executive order. On one hand, legislative buy-in will help promote its acceptance, but on the other hand, once enacted, it will likely become more difficult to revise the policy and its limits as conditions underlying the analysis change.

Whatever adoption approach is taken, the debt policy should be rigorously used in making decisions. There is nothing more corrosive to effective policy enforcement than selective adherence to the policy. Selective enforcement of an established policy is a symptom that the adopted policy is not the policy actually desired.

Other than the constitutional and statutory requirements for Commonwealth general obligation debt, the current debt policies of the Commonwealth are contained in the Governor's annual budget document normally as shown on the title page of the section on Public Debt.

FINAL THOUGHTS

I have tried to describe a highly complex subject with words most people will understand. Naturally, the condensed nature of this document means that not all of the details of municipal debt, the muni-market, the effects of court decisions and the full effect of SEC and IRS regulations have been presented. My hope is that this document successfully conveys a basic understanding of the topic.

To my knowledge, there are very few books of recent vintage that discuss the topics from the issuer's perspective for the ordinary person. Many brokerage firms publish brochures explaining municipal bonds from the perspective of the investor. The major municipal bond rating agencies are also valuable sources for detailed information on the analysis of municipal debt. Unfortunately, because these firms rely on the commercial sale of their work the availability of much of this information to the public without charge is limited. For an issuer's perspective the best sources of good additional information are the various professional organizations such as the Government Finance Officers Association, the Council of State Governments, the National Conference of State Legislatures and the Rockefeller Institute of Government. The Internal Revenue Service, the Securities and Exchange Commission, the Securities Industry and Financial Markets Association (SIFMA) and the Municipal Securities Rulemaking Board are also excellent sources of information about regulatory efforts in the municipal debt market.

# # #

About the author

Arthur D. Heilman completed nearly 36 years of public service when he retired as the Deputy Secretary of the Budget in the Pennsylvania Governor's Budget Office. Previous to holding the Deputy Secretary position he was the Director of the Bureau of Revenue, Cash Flow and Debt in the Office of the Budget. For over 30 years and the administrations of four Governors, he was responsible for the development of debt policies for the Commonwealth and the issuance and management of Commonwealth debt. Upon his retirement from the Office of the Budget he maintained a professional consulting relationship with the office until 2018. Following his work with the Office of the Budget, he has served as the Treasurer for a central Pennsylvania township for the past 14 years.

Mr. Heilman served on the Debt and Fiscal Policy Committee of the Government Finance Officers Association of the United States and Canada for eleven years, serving as vice-chair or chair for five years. In his work with the GFOA, Mr. Heilman has presented oral testimony and participated in meetings with US Treasury personnel regarding proposed tax regulations and other financing matters, participated in forums sponsored by the Securities and Exchange Commission and consulted with members of Congress on behalf of the Commonwealth and the GFOA.

Mr. Heilman was responsible for a number of financial innovations for Pennsylvania. He developed and executed the Commonwealth's first bond refunding and bond advance refunding that has led to millions of dollars of interest savings for Commonwealth taxpayers. He developed a bond anticipation note financing program, developed legislative authorization for and completed the first Commonwealth commercial paper borrowing program, developed a master lease program for equipment, and assisted in the creation of a leased prison financing program.

APPENDIX

Pennsylvania Constitution – Article VIII, Section 7

§ 7. Commonwealth indebtedness.

(a) No debt shall be incurred by or on behalf of the Commonwealth except by law and in accordance with the provisions of this section.

(1) Debt may be incurred without limit to suppress insurrection, rehabilitate areas affected by man-made or natural disaster, or to implement unissued authority approved by the electors prior to the adoption of this article.

(2) The Governor, State Treasurer and Auditor General, acting jointly, may (i) issue tax anticipation notes having a maturity within the fiscal year of issue and payable exclusively from revenues received in the same fiscal year, and (ii) incur debt for the purpose of refunding other debt, if such refunding debt matures within the term of the original debt.

(3) Debt may be incurred without limit for purposes specifically itemized in the law authorizing such debt, if the question whether the debt shall be incurred has been submitted to the electors and approved by a majority of those voting on the question.

(4) Debt may be incurred without the approval of the electors for capital projects specifically itemized in a capital budget, if such debt will not cause the amount of all net debt outstanding to exceed one and three-quarters times the average of the annual tax revenues deposited in the previous five fiscal years as certified by the Auditor General. For the purposes of this subsection, debt outstanding shall not include debt incurred under clauses (1) and (2) (i), or debt incurred under clause (2) (ii) if the original debt would not be so considered, or debt incurred under subsection (3) unless the General Assembly shall so provide in the law authorizing such debt.

(b) All debt incurred for capital projects shall mature within a period not to exceed the estimated useful life of the projects as stated in the authorizing law, and when so stated shall be conclusive. All debt, except indebtedness permitted by clause (2) (i), shall be amortized in substantial and regular amounts, the first of which shall be due prior to the expiration of a period equal to one-tenth the term of the debt.

(c) As used in this section, debt shall mean the issued and outstanding obligations of the Commonwealth and shall include obligations of its agencies or authorities to the extent they are to be repaid from lease rentals or other charges payable directly or indirectly from revenues of the Commonwealth. Debt shall not include either (1) that portion of obligations to be repaid from charges made to the public for the use of the capital projects financed, as determined by the Auditor General, or (2) obligations to be repaid from lease rentals or other charges payable by a school district or other local taxing authority, or (3) obligations to be repaid by agencies or authorities created for the joint benefit of the Commonwealth and one or more other State governments.

(d) If sufficient funds are not appropriated for the timely payment of the interest upon and installments of principal of all debt, the State Treasurer shall set apart from the first revenues thereafter received applicable to the appropriate fund a sum sufficient to pay such interest and installments of principal, and shall so apply the money so set apart. The State Treasurer may be required to set aside and apply such revenues at the suit of any holder of Commonwealth obligations.

Pennsylvania Constitution – Article VIII, Section 11

§ 11. Gasoline taxes and motor license fees restricted.

(a) All proceeds from gasoline and other motor fuel excise taxes, motor vehicle registration fees and license taxes, operators' license fees and other excise taxes imposed on products used in motor transportation after providing therefrom for (a) cost of administration and collection, (b) payment of obligations incurred in the construction and reconstruction of public highways and bridges shall be appropriated by the General Assembly to agencies of the State or political subdivisions thereof; and used solely for construction, reconstruction, maintenance and repair of and safety on public highways and bridges and costs and expenses incident thereto, and for the payment of obligations incurred for such purposes, and shall not be diverted by transfer or otherwise to any other purpose, except that loans may be made by the State from the proceeds of such taxes and fees for a single period not exceeding eight months, but no such loan shall be made within the period of one year from any preceding loan, and every loan made in any fiscal year shall be repayable within one month after the beginning of the next fiscal year.

(b) All proceeds from aviation fuel excise taxes, after providing therefrom for the cost of administration and collection, shall be appropriated by the General Assembly to agencies of the State or political subdivisions thereof and used solely for: the purchase, construction, reconstruction, operation and maintenance of airports and other air navigation facilities; aircraft accident investigation; the operation, maintenance and other costs of aircraft owned or leased by the Commonwealth; any other purpose reasonably related to air navigation including but not limited to the reimbursement of airport property owners for property tax expenditures; and costs and expenses incident thereto and for the payment of obligations incurred for such purposes, and shall not be diverted by transfer or otherwise to any other purpose.

Housing Finance Agency Law, Act of 1959, P.L. 1688, No. 621, as amended

Section 504-A. Reserve Funds and Appropriations.--(a) The agency may create and establish one or more special funds, herein referred to as "capital reserve funds," and shall pay into each such capital reserve fund (i) any moneys appropriated and made available by the Commonwealth for the purpose of such fund, (ii) any proceeds of sale of notes or bonds to the extent provided in the resolution or resolutions of the agency authorizing the issuance thereof, and (iii) any other moneys which may be available to the agency for the purpose of such fund from any other source or sources. All moneys held in any capital reserve fund, except as hereinafter provided, shall be used, as required, solely for the payment of the principal of bonds secured in whole or in part by such fund or of the sinking fund payments with respect to such bonds, the purchase or redemption of such bonds, the payment of interest on such bonds or the payment of any redemption premium required to be paid when such bonds are redeemed prior to maturity. Moneys in any such fund shall not be withdrawn therefrom at any time in such amount as would reduce the amount of such fund to less than the minimum capital reserve fund requirement established for such fund, as hereinafter provided, except for the purpose of making, with respect to bonds secured in whole or in part by such fund, payment when due, of principal, interest, redemption premiums and the sinking fund payments with respect to such bonds for the payment of which other moneys of the agency are not available. Any income or interest earned by, or increments to, any capital reserve fund due to the investment thereof may be transferred by the agency to other funds or accounts of the agency to the extent it does not reduce the amount of that capital reserve fund below the minimum capital reserve fund requirement for such fund.

(b) The agency shall not at any time issue bonds, secured in whole or in part by a capital reserve fund; if upon the issuance of such bonds, the amount in such capital reserve fund will be less than the minimum capital reserve fund requirement for such fund, unless the agency at the time of issuance of such bonds, shall deposit in such fund from the proceeds of the bonds to be issued, or from other sources, an amount which, together with the amount then in such fund, will not be less than the minimum capital reserve fund requirement for such fund. For the purposes of this section, the term "minimum capital reserve fund requirement" shall mean, as of any particular date of computation, an amount of money, as provided in the resolution or resolutions of the agency authorizing the bonds with respect to which such fund is established. In no event, however, shall such capital reserve fund requirement exceed an amount equal to not more than the greatest of the respective amounts, for the current or any future fiscal year of the agency, of annual debt service on the bonds of the agency secured in whole or in part by such fund, such annual debt service for any fiscal year being the amount of money equal to the aggregate of all interest and principal payable on such bonds during such fiscal year, calculated on the assumption that all such bonds are paid at maturity or if any amount of such bonds is required to be redeemed on any earlier date by operation of a sinking fund, then on the assumption that such amount of bonds is redeemed on such earlier date and that such amount is considered principal payable on such bonds during the year they are to be redeemed for purposes of this calculation.

(c) To assure the continued operation and solvency of the agency, for the carrying out of its corporate purposes, provision is made in subsection (a) for the accumulation in each capital reserve fund of an amount equal to the minimum capital reserve fund requirement for such fund. In order further to assure the maintenance of such capital reserve funds, the agency, at least thirty days before the beginning of each legislative session, shall submit to the Governor and the

General Assembly a written statement of the obligations of the agency falling due within the succeeding twelve month period and of the manner in which the agency anticipates providing for such obligations by way of payment, extension, renewal or otherwise and an estimate of the funds, if any, expected to be necessary during the following year to restore to each such capital reserve fund any deficiencies in the minimum capital reserve fund requirement for such fund or otherwise to avoid default in the payment of interest or principal upon bonds or notes issued by the agency, or in sinking fund payments required to be made, and the Governor shall cause the amount of such moneys, if any, to be placed in the budget of the Commonwealth for the next succeeding fiscal year, so that the General Assembly shall be enabled to provide appropriations sufficient to restore any such deficiencies or otherwise to avoid any default. Such appropriations, if any, shall be repaid to the Commonwealth as soon as possible by the agency from moneys of the agency in excess of the amount required to make and keep the agency self-supporting.

(d) In computing the amount of any capital reserve fund for the purposes of this section, securities in which all or a portion of such fund are invested shall be valued at par if purchased at par, or if purchased at other than par, at amortized value, which when used with respect to securities purchased at a premium above or a discount below par, shall mean the value as of any given date obtained by dividing the total amount of the premium or discount at which such securities were purchased by the number of days remaining to maturity on such securities at the time of such purchase and by multiplying the amount so calculated by the number of days having passed since the date of such purchase; and (i) in the case of securities purchased at a premium, by deducting the product thus obtained from the purchase price, and (ii) in the case of securities purchased at a discount, by adding the product thus obtained to the purchase price.

(504-A amended Apr. 7, 1976, P.L.73, No.33)

Public School Code of 1949, P.L. 30, No. 14 Sections 633, 785 and 790

Section 633. Reports to Secretary of Education; Withholding State Appropriations.--It shall be the duty of the Secretary of Education, to require, as part of the annual financial reports of all of the school districts and charter schools, a list of the amount of bonds or other indebtedness that becomes due during the fiscal year, together with the amount paid on each item of indebtedness. In case of failure on the part of any school district or charter school to furnish such report at the required time after the close of the fiscal year, the Secretary of Education may withhold any State appropriation that may become due to any such school district or charter school until such report covering information regarding the maturities of indebtedness and payments on same during the preceding fiscal year, as required herein, and any other information which he may require of a school district or charter school, has been received. In all cases where the board of directors of any school district fails to pay or to provide for the payment of any indebtedness at date of maturity or date of mandatory redemption or on any sinking fund deposit date, or any interest due on such indebtedness on any interest payment date, or on any sinking fund deposit date in accordance with the schedule under which the bonds were issued, the Secretary of Education shall notify such board of school directors of its obligation and shall withhold out of any State appropriation due such school district an amount equal to the sum of the principal amount maturing or subject to mandatory redemption and interest owing by such school district, or sinking fund deposit due by such school district, and shall pay over the amount so withheld to the bank or other person acting as sinking fund depositary for such bond issue.

(633 amended July 4, 2004, P.L.536, No.70)

Section 785. Failure to Pay Rent or Make Payments; Withholding Appropriation.--(a) In all cases where the board of directors of any school district fails to pay or to provide for the payment of any rental, payment or rentals or payments due the State Public School Building Authority for any period in accordance with the terms of any lease, loan agreement or other lending instrument or contract, entered into under the terms of subdivision (f) of this article, upon written notice thereof from the Authority, the Secretary of Education shall notify such board of school directors of its obligation and shall withhold out of any State appropriation due such school district an amount equal to the amount of the rental, payment or rentals or payments owing by such school district to the State Public School Building Authority and shall pay over the amount so withheld to the Authority in payment of the rental or payment.

(b) In order to provide additional security for the prompt payment in full of any rentals or loan contract payments by school districts to the State Public School Building Authority, the school district for whom the State Public School Building Authority has issued its bonds, notes or other obligations is authorized to enter into an agreement with the State Treasurer which provides for the withholding of any State appropriation due such school district and the payment directly to the State Public School Building Authority in full satisfaction of such rentals or loan contract payments due from the school district during the fiscal year.

(785 amended Dec. 21, 1998, P.L.1194, No.154)

Section 790. Grants, Conveyances, Appropriations to, Contracts with, and Leases from, Municipality Authorities.—

. . . .

(7) In all cases where the board of directors of any school district fails to pay or to provide for the payment of any rental or rentals due any municipality authority or nonprofit corporation for any period in accordance with the terms of any lease entered into under the provisions of this section, the State Superintendent of Public Instruction shall notify such board of school directors of its obligation, and shall withhold out of any State appropriation due such school district an amount equal to the amount of rental or rentals owing by such school to the municipality authority or nonprofit corporation, and shall pay over the amount so withheld to the municipality authority or nonprofit corporation in payment of the rental.

((7) added Feb. 14, 1956, 1955 P.L.1043, No.333)