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Towards A New Understanding of Debt Management: Adopting Practices and Technologies That Meet The Expanding Obligations of Debt Issuers

Writing for the World Bank, Abha Prasad and Malvina Pollock assess the status of debt management practices and performances among developing countries. Their report, *Measuring Performance in Debt Management: Key Findings from the Debt Management Performance Assessment (DeMPA)*, employs 15 indicators to determine the performance of individual country debt management practices.[1] To do so they have defined Debt Management as "a multi-faceted process that encompasses the governance and managerial framework, institutional and staff capacity, coordination with macroeconomic policies (fiscal and monetary), the policies and procedures for borrowing from external, domestic sources and the issuance of loan guarantees, cash management, the management of operational risk and the availability of systems for debt data storage, compilation, analysis and reporting." While some of the indicators used in their study are not applicable to non-sovereign governments they do provide an expanded view of debt management that better reflects the obligations public agencies take on when issuing debt.

The concept of debt management as used by public finance professionals and debt issuers incorporates a relatively limited set of assignments. In the narrowest sense, it applies to meeting the financial and regulatory obligations imposed by contracts and federal or state laws. We argue for a more expanded understanding of the tasks and duties associated with managing a public debt portfolio. A broader understanding of debt management, one that accounts for the interplay between organizational, economic, and political forces helps issuers in three ways: 1) It increases the likelihood that they will identify the risks associated with managing their debt portfolio; 2) In doing so, they are more likely to develop strategies to eliminate or mitigate that risk; and, 3) They will be better able to plan and manage their obligations.

In the next few pages we consider what debt management is or should be and how public agencies should respond.

THE CHALLENGE FACING PUBLIC AGENCIES

Public agencies issue debt to finance the cost of capital facilities, to refinance existing obligations, and to meet cash flow needs. Refundings and short-term cash financing may not significantly increase the size of the agency's debt portfolio over time, but capital financing will. The cost of building, repairing, and replacing public facilities in California is estimated to be $850 billion. The U.S. Environmental Protection Agency reports that the state will need to invest $44.5 billion in drinking water infrastructure over the next 20 years. $26.2 billion will be needed for wastewater infrastructure during the same 20 years.[2] The Center for Cities and Schools at the University of California, Berkeley estimates the state's K-12 school will require approximately $117 billion in capital investment over the next decade.[3] The Department of Transportation's April 2015 *Ten Year Planning Report* indicates the state will need $80 billion between 2016 and 2026 for rehabilitation and operation of the State Highway System.[4] Much of this will need to be funded or partially funded by local agencies.

There is no single source of funds to cover the cost of constructing, replacing, and repairing the state's public infrastructure. To help fill the gap, the State has imposed a gas tax on fuel purchases and tapped its Cap and Trade funds. But, additional solu-

[1] Abha Prasad and Malvina Pollock, Measuring Performance in Debt Management: Key Findings from the Debt Management Performance Assessment (DePMA), available at http://siteresources.worldbank.org/INTDEBTDEPT/Resources/468980-1238442914363/5969985-1293636542096/DeMPANote201106.pdf.

[2] Drinking Water Infrastructure Needs Survey and Assessment, U.S. Environmental Protection Agency, April 2013, available at https://www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf.

[3] Going It Alone: Can California's K-12 School Districts Adequately and Equitably Fund School Facilities? Policy Research Working Paper, Center for Cities and Schools, November 2015, available at http://citiesandschools.berkeley.edu/uploads/Vincent__Jain_2015_Going_it_Alone_final.pdf.

[4] 2015 Ten-Year State Highway Operation and Protection Program Plan (SHOPP Plan), California Department of Transportation, April 2015, available at http://www.dot.ca.gov/hq/transprog/SHOPP/prior_shopp_documents/10yr_SHOPP_Plan/2015_Ten_Year_SHOPP_Plan_Final.pdf.

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tions will be needed, particularly at the local level. Among them are "public-private partnerships" or P3s. P3s are not new to public finance. The private sector has been acting as a partner to public agencies since investors underwrote the trans-pacific railroad. But they are still unfamiliar to most public agencies who may not fully understand the risks and rewards of these alliances.

Issuers who choose debt as a source of financing must navigate an increasingly complex market. Depending on the authority, the source of revenues, and the interests of investors or lenders, a public agency may be able to finance projects through cash, bonds, loans, capital leases, or a combination of two or more of these. Each of these imposes a different set of processes, terms and conditions, and on-going responsibilities on the issuer who must be prepared, regardless of the financing approach, to manage the financial, legal, and regulatory obligations they assume.

The challenge of providing needed facilities in today's capital market also offers issuers opportunity. But to capture the advantages of alternative financing strategies, public agencies must adopt new approaches to planning, analysis, reporting, and administration. And this requires more information—information needed to evaluate alternatives, to monitor progress, and make course corrections as needed to generate long-term value for taxpayers and the agency.

WHY IS DEBT MANAGEMENT IMPORTANT?

Public debt has demonstrated a resilience unparalleled in the corporate markets. Default rates are extremely low. Moody's reported four municipal defaults in 2016, all related to the Commonwealth of Puerto Rico.[5] Between 1970 and 2016 the default rate for municipal bonds was 0.15 percent. This compares to a five year global default rate among corporate bonds, through 2007, of 6.92 percent.[6] But defaults do occur. Many Californians know of the challenges faced by the City of Vallejo, City of Stockton, and County of San Bernardino.

Well-designed, proactive debt management programs are important for several reasons. In most cases, debt represents a significant portion of a public agencies financial portfolio in comparison to surplus cash. Whether composed of short- or long-term obligations, debt imposes a financial burden that cannot be ignored. In times of fiscal stress debt payments can crowd out other investments and lead to cut-backs or service reductions. This condition is referred to as a "service insolvency" and is as equally damaging to the agency and its constituents as a financial default.

Government debt portfolios are complex, involving different commitments, securities, and risks. Although state law places limits on the types of debt and, in some cases, the amount of debt a state agency or local government may issue in California, many issuers have other, off-balance sheet obligations that increase the risk of economic, social, or political shocks. In California, public agencies use financing leases and certificates of participation to maneuver around the constitutional restrictions on their authority. These obligations when combined with traditional bonded debt often create a complex set of financial and administrative responsibilities that issuers must manage.

This complexity introduces risk that payments will not be made in the amount or on the dates required. A failure to meet its repayment obligations results in several unwelcome outcomes. These include loss of credit and the consequent rise in future borrowing costs. It may also trigger other penalties, such as repayment acceleration, an increase in interest rates, or mandatory reports or audits. Issuers may also face challenges meeting compliance obligations because, in a large debt portfolio, they may be numerous and disparate. Not meeting these obligations may constitute a technical default or violate securities or state laws. Alternatively, high quality debt management can lower an issuer's cost of debt by reducing the credit premium and the liquidity premium in municipal debt. Although good debt management practices may not, in and of themselves, lead to lower financing costs they can contribute to it. If, on the other hand, an issuer's debt management practices are poorly designed or non-existent, it may generate negative assessments from creditors, analysts, and regulators.

Debt issuers face a number of risks, including:

- INTEREST RATE OR MARKET RISK. Risk generally associated with changes in market prices and interest rates. Changes in interest rates on new debt affect the cost of funds and the composition of the debt portfolio. Long-term debt is generally more susceptible to interest rate changes than short-term bonds.
- ROLLOVER RISK. Risk that debt will have to be refunded or taken out with another issue. This risk may be driven by a decline in the issuer's credit or a rise in interest rates and the debt is replaced with a more costly substitute.
- LIQUIDITY RISK. Issuers that have leveraged debt, including swaps, may incur penalties if they attempt to terminate their agreements in an illiquid market, one that posts few transactions supporting an exchange. Liquidity risk also refers to circumstances in which the amount of liquid assets available to meet debt service obligations unexpectedly declines.
- CREDIT OR DEFAULT RISK. The risk of nonpayment or nonperformance by borrowers or obligated parties to a financing, including counterparties that provide security to the debt.

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[5] U.S. Municipal Bond Defaults and Recoveries, 1970-2016, Data Report, June 27, 2017, available at https://www.researchpool.com/download/?report_id=1412208&show_pdf_data=true.

[6] Ibid.

- OPERATIONAL RISK. This includes risks posed by mismanagement, fraud, or abuse that affects the issuer's or counterparty's performance under the terms of its financial and legal obligations.
- EVENT OR POLITICAL RISK. An issuer is subject to catastrophic events, accidents, political crisis, lawsuits, or legislative or regulatory developments that alter operations, authorities, and finances. Included in this are actions the legislative body may take to redirect or appropriate funds needed to meet financial obligations.
- COMPLIANCE RISK. If an issuer fails to meet its legal or regulatory responsibilities it may incur fines, penalties, and legal costs as well as reputational damage that may limit the issuer's ability to issue debt in the future. For tax-exempt debt, a failure to meet the requirements of the tax code may cause the interest on the bonds to be taxable.

THE LIMITS OF EXISTING DEBT MANAGEMENT PRACTICES

The Government Finance Officers Association (GFOA), a membership organization composed of public finance officials from American and Canadian, provides training and best practice recommendations on a variety of topics, including debt management. While GFOA does not offer a definition of "debt management", the scope of best practice recommendations it has published suggests that it encompasses the issuance and sale of debt and the ongoing administrative tasks including post-issuance compliance, investing bond proceeds, and refunding outstanding debt.[7]

GFOA recommends that state and local issuers adopt policies to guide its decisions and actions in the issuance of debt. GFOA's Best Practice recommendations for creating debt policies covers 5 key areas: 1) Debt Limits; 2) Debt Structuring Practices; 3) Debt Issuance Practices; 4) Debt Management Practices; 5) Use of Derivatives.[8] Under the 'debt management practices', the issuer is encouraged to consider how bond proceeds should be invested, its disclosure practices as well as, arbitrage rebate requirements, compliance, and on-going investor communications.

One might conclude from these materials that GFOA understands debt management to include the post-issuance responsibilities of issuers. This view is constrained and fails to address several fundamental problems that issuers who do not maintain adequate debt management practices encounter. Many of these arise from poor planning, accounting, disclosure, and reporting practices and inadequate oversight and control processes.

- SUBJECTING THE AGENCY TO INCREASED STRUCTURAL RISK. Issuers should avoid even minor levels of risk in their debt portfolio. Unfortunately some do not. In an effort to lower costs, for example, some issuers may rely too heavily on short-term debt, leaving them vulnerable to interest rate changes. Others may take on forms of debt that include terms, such as acceleration provisions, that may affect their ability to meet other outstanding obligations.
- INCOMPLETE UNDERSTANDING OF DEBT BURDEN. Debt limits are either set by statute or policy. Neither reflects the capacity of the issuer to generate the required revenues to repay the debt and they seldom, if ever, take the perspective of the taxpayer in understanding the impact of all, overlapping debt on them.
- PLANNING PROCESSES DO NOT TIE TOGETHER. Few agencies undertake the effort to develop and administer plans that can be used to guide financing decisions or achieve policies and goals set by the agency. As a result, they are not using the outcomes of their strategic plan, capital plan, or long-term financial plan to guide decisions to use debt financing.
- INADEQUATE DATA TO MANAGE LONG-TERM FINANCIAL RISKS. Issuers focus their attention on the debt schedule and repayment, but may not collect or have the technological capacity to manage other data points, refundings, swap and arbitrage calculations, or term bonds on their financial position.
- INADEQUATE DATA TO UNDERSTAND THE BENEFITS OF DEBT FINANCING. Post-issuance data collection, particularly with regard to the use of proceeds, is seldom a consideration of issuers. As a result, neither the issuer nor the taxpayer understand the full cost or benefit of issuing debt. Issuers are also susceptible to the misuse of bond funds and the long-term legal and financial impacts of resolving such problems.

THE OBJECTIVES OF A ROBUST DEBT MANAGEMENT SYSTEM

It is generally assumed that a debt management system will provide the necessary resources to allow a public agency to finance its borrowing needs efficiently and to ensure that its financial and legal obligations are met. This is much more significant than building a debt service payment schedule or to issuing the reports and notices required by federal securities laws. Other benefits of a robust debt management system include:

- Ensuring that the agency's debt portfolio is managed according to its cost and risk goals.
- Maintaining liquidity and minimum levels of cash reserves to attend to program and debt service obligations.
- Managing financing strategies to use available financing authority efficiently.
- Meeting compliance and reporting obligations.

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[7] GFOA's 2018 Annual Meeting includes a session on "debt management" described as a "focus on effective strategies for issuing debt, hiring outside professionals, meeting disclosure requirements, and utilizing checklists and policies and procedures to best manage these responsibilities through the lens of a small government."

[8] GFOA Best Practices/Advisories, *Debt Management Policy*, October 2012, available at http://www.gfoa.org/debt-management-policy.

- Establishing best practices that achieve the agency's policy and program objectives.
- Building a common interface that establishes a single book of record for financial and program information and provides easy access to this information to taxpayers and investors.
- Eliminating redundant data management systems or needless rework by integrating accounting, disbursement, budgeting, and financial reporting in one system.
- Reducing reliance on external data providers or consultants by allowing the agency to own its own data.

A more complete definition of a government debt management system is a process of establishing and implementing a strategy for prudently managing the agency's debt in order to meet its financing needs, its cost and risk objectives, and any other debt management goals it may have set, such as disclosure, compliance reporting, and performance and financial management. The aim of debt management is to ensure that the agency's borrowing needs are met efficiently and that its debt, and the short- and long-term obligations arising from budget and off-budget debt, are managed in a manner consistent with the government's cost and risk preferences. It should cover all the agency's liabilities, including direct or privately placed debt, conduit debt, and debt guaranteed or backed by the agency.

Using the work of Prasad and Pollock it is possible to identify the elements of a comprehensive debt management system. It should address these following elements of an agency's debt program.

- LEGAL FRAMEWORK. This sets forth the legal authority for the agency to borrow funds and the types of instruments it may use including municipal securities, loans, guarantees, and positions it may take in securing obligations of other borrowers.
- MANAGERIAL STRUCTURE. This guarantees the separation of power between those who set policies and strategies regarding the use of debt and those who implement them. The planning processes undertaken by the agency provide a clear understanding of the link between the two sides of this equation.
- DEBT MANAGEMENT STRATEGY. A debt management strategy that is based on the agency's longer-term financial plan and policies related to the use of debt, helps to minimize the cost and fiscal impact of debt on the agency. A debt management strategy is based on (a) the composition of the debt portfolio; (b) benchmarking; and (c) assessment of new financing instruments.
- EVALUATION OF DEBT MANAGEMENT OPERATIONS. The agency must be able to gather data on its debt management operations and its performance against short- and long-term objectives contained in the debt-management strategy.
- AUDIT. Regular internal and annual external audits help to establish accountability and to identify opportunities to improve practices with regard to (a) reliability and integrity of financial and operational information; (b) effectiveness and efficiency of debt management operations; (c) safeguarding of public funds; (d) compliance with laws, regulations, and contracts; and (e) the agency's adherence to its debt management strategy.
- OFF-BALANCE SHEET BORROWING. Direct loans, leases, and guarantees free agencies from the legal and regulatory obligations imposed on municipal securities and in California have been a recognized source of capital. But these transactions may impose conditions or risk that the agency has not fully considered or considered in relation to its publicly traded debt securities. A debt management system must be able to incorporate the financial, regulatory, and administrative responsibilities of these structures into the agency's financial and operational systems.
- CONDUIT ISSUES AND DERIVATIVES. Relationships with conduit borrowers and counterparties present both financial and reputational risk to issuers if they fail to meet the terms of agreements. As result agencies should continue to surveille them both to make adjustments to potential risks and to make the requisite disclosures that may be necessary.
- CASH FLOW FORECASTING. To ensure that the agency is always in a position to meet it financial commitments and to maintain its programs and services it must be able to forecast cash flows. The ability to analyze its cash position will also allow the agency to manage its financial resources in a way that provides for the lowest cost of financing.
- DEBT ADMINISTRATION, SEPARATION OF DUTIES AND STAFF DEVELOPMENT. Administering a debt portfolio involves processing and recording debt transactions as well as developing and maintaining the systems and procedures required to carry this out in an effective and secure way. There should be strong controls and well-documented procedures for settling transactions, maintaining financial records, and accessing debt management system.
- BUSINESS CONTINUITY AND DATA SECURITY. The agency should undertake a comprehensive assessment of these operational risk and develop mitigations and protocols to ensure business continuity and data security.
- DEBT RECORDS. The agency should maintain and make available all public documents associated with debt transactions, including the offering documents, indentures, lease agreements, security arrangements, financial analyses, and ratings reports.
- DEBT REPORTING. Providing full disclosure of the balance of the outstanding obligation and the uses of proceeds provides accountability and builds trust among those served by the agency.

TAKING STEPS TO IMPROVE DEBT MANAGEMENT PRACTICES AMONG CALIFORNIA PUBLIC AGENCIES

In essence, a comprehensive debt management program involves:

- Establishing clear debt management objectives and supporting them with the appropriate governance structure.
- Building a prudent cost and risk management strategy.
- Coordinating this strategy with other policies, including the agency's strategic vision, its capital improvement plan, and its long-term financial plan.
- Issuing debt that is appropriate given the strategic objectives of the agency.
- Monitoring and administering cash flows and balances.
- Undertaking financial and administrative risk assessment and implementing risk-reducing mitigation.
- Creating a document library and providing timely and complete reporting.
- Implementing best practices that ensure that debt managers are accountable for carrying out their duties in a transparent and responsible manner.

Public agencies may perform all of these functions to one degree or another. What is lacking in the common understanding of debt management is an integrated approach. Integration achieves strategic goals and operational efficiencies that may produce lower costs, less risk, and improved compliance.

How do we as public agencies get there?

First, issuers must acknowledge that the common understanding of debt management fails to include several essential functions. It fails to encourage integration, coordination, and administration. In doing so, it leaves issuers at risk of mis-managing their debt programs or failing to achieve their program goals.

Second, issuers must avail themselves of technologies that offer an integrated approach to data management, recordkeeping, reporting, and to the sale and administration of debt obligations. This means moving from spreadsheets and paper files to an electronic platform. Using a single technological solution will provide transparency and enable the issuer to adopt a set of best practices that ensures standardization and data reliability. In addition, it provides for business continuity and data security that paper files do not offer.

Third, issuers must adopt new practices and train staff to manage additional duties and operate in an integrated, strategic environment. In addition, issuers should increase their efforts to provide taxpayers information on their debt programs and provide reliable data on the cost and benefits of debt financings. In the long run issuers will benefit from an educated taxpayer base that understands the objectives and strategic advantages of debt financing. A robust debt management program supported by technologies that provide access, standardization, and analysis is essential to providing this education.

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