

Public Policy Program
Stanford University

Policy Responses to Increased Bank Loans to Municipal Government

A Report For: The Volcker Alliance

Prepared By:

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Preface

This report was produced for the Stanford Public Policy Program practicum project on the topic of bank loans in California’s municipal financing market. This research should be of interest to policy groups, legislators, debt issuers, investors, and California taxpayers.

The Public Policy Program at Stanford is an interdisciplinary program connecting the theoretical and analytical tools of economics, political science, philosophy, psychology, and law with their real-world policy applications. The Program works with the Stanford Institute for Economic Policy Research (SIEPR), which supports research that informs economic policymaking while engaging future leaders and scholars. SIEPR shares knowledge and builds relationships among academics, government officials, the business community and the public.

The client for this project is the Volcker Alliance. Based in New York, The Volcker Alliance was launched in 2013 to address the challenge of effective execution of public policies and to help rebuild public trust in government. The nonpartisan Alliance works toward that broad objective by partnering with other organizations—academic, business, governmental, and public interest—to strengthen professional education for public service, conduct needed research on government performance, and improve the efficiency and accountability of governmental organization at the federal, state, and local levels.

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Executive Summary

Municipalities rely on the collection of taxes or transfer of state and federal taxes to meet revenue requirements. But they also make use of other instruments for supplemental revenue, such as publicly issued bonds, private placements of municipal securities, and direct loans from banks. The phenomenon of bank loans has raised important questions about transparency, the agreements themselves, and their impacts on municipalities, investors, and the market in general.

California is currently the only state to require the disclosure of bank loans to municipal government. This information is collected by the California Debt and Investment Advisory Commission (CDIAC). California is the largest municipal market in the country at \$78.5 billion in 2016, with \$11.0 billion in private placements and direct loans.¹ This suggests that California's municipal market is 2.1% of the national municipal market and California's municipal bank loan market is 6.4% of the equivalent national market. This study examines CDIAC data to characterize bank loans, identify areas of concern, and discuss roles for public policy.

The research analyzes state and local debt issuances between 2012 and 2016, as well as direct loan documents from 2016. It is also informed by interviews with representatives from municipal borrowers, financial institutions, bond counsels, regulatory agencies, and professional organizations. The findings can be summarized as follows:

- Private placements are increasing in California, rising from 688 to 1761 between 2012 and 2016. They are chiefly being used to fund residential energy improvement programs and build multifamily housing units and K-12 school facilities. The biggest issuers are joint power authorities that act as conduit issuers, such as the Western Riverside Council of Governments, California Statewide Communities Development Authority, and San Bernardino Associated Governments. The biggest lender is the California State Water Resources Control Board, followed by banks: Wells Fargo Bank National Association, First Republic Bank, and Bank of America NA.²
- Items in the Events of Default section of and other covenants in direct loan agreements may be harmful to investors of public debt, municipalities, and taxpayers unaware of their existence.
- Some provisions in direct loan agreements, in conjunction with a lack of timely information for investors of public bonds, could enable banks to make deals with municipalities on claims on assets before other investors know the borrower is struggling and have a chance to come to the table.

¹ California Debt and Investment Advisory Commission. (2017). *CDIAC All Data*. (February, 2017) [data file] <https://data.debtwatch.treasurer.ca.gov/Government/CDA-All-Data/yng6-vaxy>

² Many aspects of the CDIAC database are currently missing. Bond issuance costs, such as underwriter fees, bond counsel fees, and other costs are sporadically available. Similarly, lender information is sparsely available and incomplete.

These findings suggest that the absence of timely and clear disclosure of bank loans and their provisions could negatively impact municipal investors and citizens who are unable to properly assess the riskiness of municipal issuers. The availability of this information allows regulators to identify trends and bubbles at the macro-level, and reduce information asymmetry between issuers and their investors, creditors, and citizens at the micro-level.³

Our recommendations can be summarized as follows:

- Increase enforcement of California’s 2014 law that requires municipalities to report private placements and direct loans to CDIAC.
- Improve public access to CDIAC data by developing an interactive website that uses a reporting format similar to the one shown in Appendix 2, in which a viewer could easily see the obligations of a particular municipality.
- Require Committee on Uniform Security Identification Procedures (CUSIP) identification for private placements of securities to ensure that securities transactions are correctly settled and matched.
- Clarify the definition of “material” in the Security and Exchange Commission's (SEC) Rule 15c-12 to encourage complete disclosure of events that substantially impact a municipality’s financial situation.
- Expand the definition of “financial obligations” of the SEC Rule 15c-12 so that pension obligations must be disclosed by municipalities.

³ Matt Fabian & Lisa Washburn. (20 March, 2017). *Municipal Market Analytics*. MMA Weekly Outlook, p. 3.

I. Introduction

In addition to tax revenues, municipalities use publicly issued bonds, private placements of municipal securities, and direct loans to finance their projects. Private placements, also known as direct purchases, are bonds purchased by banks directly from the municipality,⁴ and direct loans refer to explicit loan agreements between a bank or other financial entity and municipality. For the purposes of this report, “bank loans” is used as a generic term for direct loans and private placements.⁵

The phenomenon of increased bank loans has raised questions about the importance of transparency, the agreements themselves, and their impacts on municipalities, investors, and the market in general. As an example, in September 2015, Standard & Poor downgraded Lawrence, Wisconsin’s credit rating from the third-highest grade, AA, to junk, BB+.⁶ The 4,600-person town had borrowed \$4.6 million in direct loans from local banks and agreed to a clause that allows the banks to demand immediate repayment by deeming themselves “insecure” if they decide that the town’s finances have deteriorated. S&P’s discovery of the terms during a routine review prompted the credit downgrade, likely resulting in fewer willing investors and higher costs to the city.

Such scenarios demonstrate the need for increased transparency in municipal financing; investors, creditors, taxpayers, and citizens should have full disclosure of municipal financial transactions and contingent agreements, without which these stakeholders cannot properly assess their exposure to potential losses. Without this disclosure, municipalities can borrow funds without timely notification to relevant stakeholders, who may be able to access the information months later only in the municipality’s Comprehensive Annual Financial Report (CAFR). As the largest municipal market in the country, with median debt per issuance of \$5.2 million between 2012-2016, California’s municipalities are not invulnerable to Lawrence’s experience, and state legislators have attempted to address the issue. In 2014, California became the first state to require formal disclosure filing of bank loans, which must be done with the California Debt and Investment Advisory Commission (CDIAC) within 21 days. The availability of such data allows regulators to identify trends and bubbles at the macro-level, and reduce information asymmetry between issuers and their investors, creditors, and citizens at the micro-level.⁷

⁴ Municipal Securities Rulemaking Board (MSRB). (2011). “MSRB Notice 2011-52 (September 2011) Potential Applicability of MSRB Rules to Certain ‘Direct Purchases’ and ‘Bank Loans’”, <http://msrb.org/Rules-and-Interpretations/Regulatory-Notices/2011/2011-52.aspx>, retrieved Dec. 1, 2016.

⁵ Following the National Federation of Municipal Analysts 2015 report, we use bank loans to apply to loans and private placements throughout this document.

⁶ Martin Braun. (15 October, 2015). “Swift Descent to Junk Shows Buried Risk as Municipal Loans Surge,” <https://www.bloomberg.com/news/articles/2015-10-05/swift-descent-to-junk-shows-buried-risk-as-municipal-loans-surge>, retrieved April 20, 2017.

⁷ Fabian & Washburn, p. 3.

Using data partly available due to disclosure regulation, this report aims to:

- 1) Characterize the municipal bank loan market in California;
- 2) Examine the extent to which bank loans raise concerns for the issuers, investors, and market in general; and
- 3) Offer policy recommendations to address any concerns.

This report addresses these aims by examining state and local debt issuances in California between 2012 and 2016, as well as direct loan documents from 2016. It is also informed by interviews with representatives from municipal borrowers, financial institutions, bond counsels, regulatory agencies, and professional organizations.

This report aims to provide insight into the place of bank loans in California's economy and bolster the case for timely and clear disclosure nationally. Section II provides background information on the topic, Section III describes the research questions, data, and methodology, and Section IV contains the findings and discussion. Section V concludes the report with recommendations.

II. Background

Municipalities rely on the collection of taxes or transfer of state and federal taxes to meet revenue requirements. But they also make use of other instruments for supplemental revenue, such as publicly issued bonds, private placements of municipal securities, and direct loans from banks. Table 1 describes these financing instruments.

Table 1. Delineating Municipal Financing Instruments

Public Financing:	Private / Bank Loans:
Tax revenue: funds gained by government through taxation; can also be transferred from state/federal government	Private placement / Direct purchase: the agency sells bonds or securities directly to a private investor, rather than as part of a public offering.
Public bond issuances: the government or agency issues bonds to raise funds; bonds are purchased by individuals, mutual and money market funds, insurance companies, and commercial banks	Direct loan: the government or agency enters into a loan agreement or other type of financing agreement with a bank or other financial entity

In a publicly issued bond, a state or local government issuer sells bonds to raise funds for a variety of purposes, such as specific projects, general funding, or funding pension deficits, among others. An underwriter buys the bonds and sells them to investors, such as individuals, mutual funds, banks, or corporations. In California, public offerings are required to be disclosed to CDIAC and to the Municipal Securities Rulemaking Board (MSRB), a regulatory agency focused on municipal financing and subject to the oversight of the Securities and Exchanges Commission.

In private placements, the issuer selects an underwriter that buys the bonds and collects the interest payments and principal directly. Direct loans, in which state or local governments enter a financing agreement with a bank or other financial entity, are also a form of private financing. Bank loans, which encompass private placements and direct loans, do not currently have disclosure requirements at the national level, and it was not until 2014 that California began requiring the disclosure of bank loans to CDIAC.⁸ The phenomenon of bank loans has raised important questions about transparency, the agreements themselves, and their impacts on municipalities, investors, and the market in general. The risks of bank loans are reflected in recent policy developments.

⁸ National Federation of Municipal Analysts (NFMA). (2015). "Recommended Best Practices in Disclosure for Direct Purchase Bonds, Bank Loans, and Other Bank-Borrower Agreements", http://www.nfma.org/assets/documents/RBP/rbp_bankloans_615.pdf, retrieved Nov. 30, 2016, p. 4.

Bank Loan Appeal and Risks

Banks have participated in municipal lending since at least the mid-20th century and were major purchasers of municipal bonds through public offerings.⁹ Since the end of the Great Recession in 2009, some municipalities have eschewed the use of public capital market financing in favor of bank loans.¹⁰ For municipal issuers, fewer disclosure requirements and issuance costs, namely associated with credit ratings, bond insurance, the absence of an Official Statement, and printing costs, make private placements attractive. The execution process also requires less time, interest rates are competitive with public offerings, and private placements can often be structured to better suit specific projects or repayment considerations than public bond issues.¹¹

In spite of these advantages, bank loans can introduce risks that affect credit analysis. Reduced disclosure requirements are of particular concern, because information about a municipality's debt affects its creditworthiness as determined by ratings agencies and potential and current investors. Risks that concern bondholders include:

- Additional debt in general;
- Liquidity risks;
- Refinancing risks; and
- Jeopardized security positions.

Additional debt: Incurring bank loans for new money financing increases the aggregate debt for which the municipality becomes responsible. This can affect the municipality's debt position, whether level of net direct debt, or debt as percent of expenditures, which are important credit quality and pricing indicators for public bonds and the investors who may choose to hold them.

Liquidity risks: The terms of bank loans can differ from the terms of publicly issued debt, especially provisions that trigger changes in payment under certain events, such as "acceleration" features by a ratings downgrade, or ones that favor the bank loan provider in the event of insolvency.¹² Some provisions can inhibit the ability of a municipality to manage financial demands and pay claims that are contingent on certain events, thus affecting its creditworthiness.

Refinancing risks: Generally, bank loans have shorter terms than publicly issued bonds. Bank loans have maturities of 3-7 years, to avoid the long-term commitments that are found among public bonds. If the municipality requires financing with longer maturities, there is a risk of uncertain access to refinancing when the loan matures.¹³ Bondholders need to be aware of refinancing risk that could compromise an issuer's ability to repay outstanding bonds,

⁹ Securities Industry and Financial Markets Association (SIFMA). (2013). "White Paper: Considerations Regarding Voluntary Secondary Market Disclosure About Bank Loans", <http://www.sifma.org/issues/item.aspx?id=8589943360>, retrieved April 14, 2017, Appendix B.

¹⁰ NFMA, p. 2

¹¹ Government Finance Officers Association (GFOA). (September 2013). "Understanding Bank Loans", <http://gfoa.org/understanding-bank-loans>, retrieved April 20, 2017.

¹² Bergstresser, D., & Orr, P. (2014). "Direct Bank Investment in Municipal Debt". *Municipal Finance Journal.*, 35, 1, p. 3.

¹³ NFMA, p. 8.

particularly if loans are structured with a bank loan may be structured with a large, “balloon” payment of principal or purchase price due at the end of the term of the loan.¹⁴

Jeopardized security positions: In general, additional debt, and additional debt restrictions, can affect municipal security and their credit quality. More debt obligations increase the risk of delayed or defaulted payments for existing bondholders. Bondholders are wary of situations in which assets or revenues that were once available to pay outstanding bonds are pledged to the bank as security for a bank loan.¹⁵ Covenants in loan agreements, such as acceleration clauses and cross default provisions, can jeopardize bondholders’ security positions. Such covenants, and definitions of events of default, can be different from those applicable to outstanding bonds, enabling the bank to assert remedies prior to other bondholders and give seniority to private placements relative to publicly marketed bonds.¹⁶

¹⁴ SIFMA, p. 8.

¹⁵ NFMA, p. 8.

¹⁶ Ibid, p. 7.

Policy Responses

In a move suggesting that disclosure of alternatives to public bond offerings are becoming an area of interest nationally, the SEC has now joined the Government Finance Officers Association and the National Federation of Municipal Analysts in calling for more disclosure regulation, especially in the \$549 billion municipal securities and loans¹⁷ market held by banks as of 2016.¹⁸ Policy responses have arisen at the state and national levels.

Transparency in California: The Municipal Securities Rulemaking Board (MSRB) strictly regulates the disclosure of public bond issues across the country via underwriters, but California became the first state to pass a law regarding the disclosure of municipal bank loans.¹⁹ In view of the risks associated with bank loans, California took steps to improve transparency. In 2014, Assembly Bill no. 2274 amended Sections 8855 and 8856 of the Government Code to require all that the issuer of any debt issue of state or local government submit a report of final sale to CDIAC not later than 21 days after the sale of the debt.²⁰ CDIAC has served as a statistical clearinghouse for all state and local debt issuance in California since 1982, and the data it has collected allows for analysis and description of debt incurred across the state.²¹ The report to CDIAC provides a snapshot in time for that issue, allowing investors and the market greater access to a municipality's financial position.

National Policy Developments: On March 1, 2017, the Securities and Exchange Commission proposed two draft amendments to the SEC's municipal disclosure Rule 15c2-12. Underwriters are responsible for confirming that the issuer has entered into a continuing disclosure agreement in which the issuer agrees to provide timely notice to the MSRB about a list of material events. These amendments add two material events to the existing list of 14 that must be disclosed:

- Amendment 15: "Incurring a financial obligation by the obligated person, if material, or agreement to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the obligated person, any of which affect security holders, if material;" and
- Amendment 16: "Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation of the obligated person, any of which reflect financial difficulties."

¹⁷ This report does not focus on differentiating between private placements and direct loans that may be considered "securities" or "loans", which has been an area of contention in the field. Securities are subject to regulation by the Municipal Securities Rulemaking Board, while loans are not. Please see the MSRB website for further information, particularly: <http://msrb.org/Rules-and-Interpretations/Regulatory-Notices/2011/2011-52.aspx>, retrieved April 20, 2017.

¹⁸ Federal Reserve Flow of Funds, March 2017.

¹⁹ NFMA, p. 4

²⁰ California Debt and Investment Advisory Commission, Assem. Bill 2274, 2013-2014 Reg. Sess. 2014 Cal. Stat. http://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB2274

²¹ California Debt and Investment Advisory Commission. (2016). <http://www.treasurer.ca.gov/cdiac/introduction.asp>, retrieved April 15, 2017.

The proposed amendments require that information be provided about (1) the incurrence and terms of direct loans and direct purchases and (2) the occurrence of accelerations and defaults by the issuer.²² These amendments improve the ability of municipal investors in assessing the fiscal position of issuers. This paper will discuss these amendments in greater depth in the Policy Recommendations section.

²² Stephens, R. B., Wiener, M. L., & Stevens, D. (2017, April 12). Material-Event Disclosures Under New SEC Proposal - Law360. Retrieved April 26, 2017, from <https://www.law360.com/articles/912785/material-event-disclosures-under-new-sec-proposal>

III. Research Questions, Data, and Methodology

The availability of data, as well as California's position as the largest municipal market in the country at \$78.5 billion²³, makes the state a logical candidate for analysis on the phenomenon of bank loans. This research aims to address three questions as related to California's municipal financing:

- 1) What are the characteristics of private placements and direct loans in California?
- 2) Are there private placement and direct loan provisions that are concerning to municipalities and bondholders?
- 3) Is there a role for public policy to improve the market for municipalities?

To address the research questions, we employ qualitative interview data, quantitative data from extant data sources, and direct loan documents from CDIAC. The report is informed by interviews with 15 individuals who represent municipal borrowers, financial institutions, bond counsels, regulatory agencies, and professional organizations (see Appendix 1 for the interview questions). Interviews ranged from 30 minutes to one hour. After contacting financial officers of the top five municipal borrowers of both private placements and public issuances, responsive individuals became the interviewees. Other contacts were referred to the researchers by the Volcker Alliance and municipal borrowers.

The primary data analyses were conducted on a database of all debt issuances as recorded by CDIAC. The CDIAC reporting form has distinguished private placements from other issuances since 2012, two years before the 2014 law made it a requirement, which allowed analysis on issuances from the years 2012 through 2016. The 2012-2016 dataset contains 12,527 total issuances. However, many aspects of the CDIAC database are currently missing. Mainly, it is difficult to fully delineate the various aspects of a bond's issuance cost because key information, such as underwriter fees, bond counsel fees, and other costs are sporadically available in the database. Direct loans were sporadically identified, with 27 made in 2016 and only 15 from 2010 to 2015, which suggests that direct loan reporting is low.

Forty-two individual direct loan documents were reported in the CDIAC database from 2010 to 2016, which were each analyzed to understand the structure of the bank loan agreements. Though a handful of banks, like First Republic Bank, based in San Francisco, California, played a more prominent role in the market, several banks were engaged in direct loans.

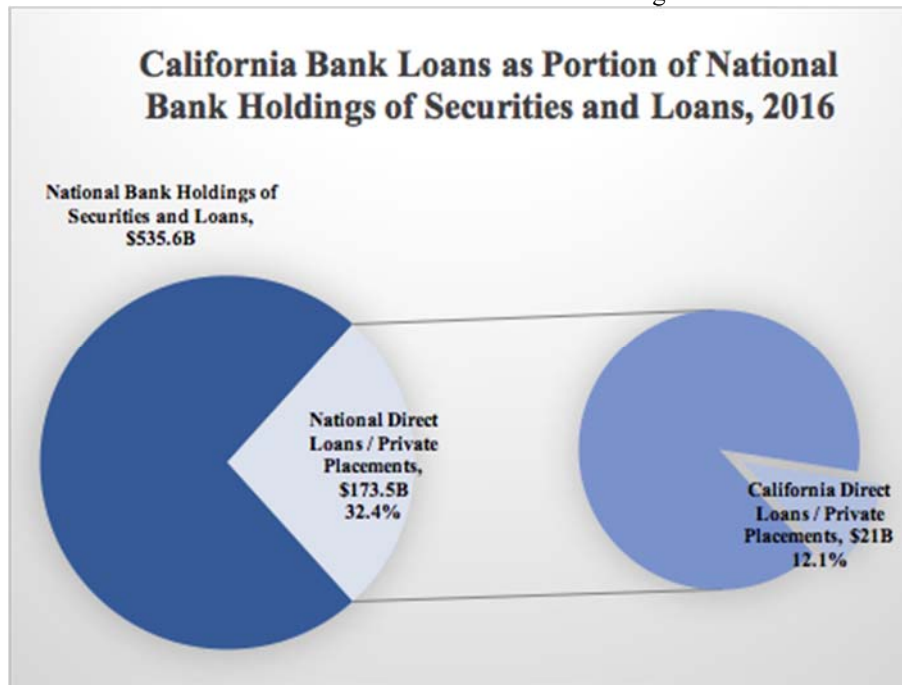
²³ CDIAC, 2017.

IV. Findings and Discussion

Market Size

This report draws from numerous sources to characterize the size of the bank loan market at both federal and state levels. According to the Federal Reserve, the U.S. municipal market was \$3.8 trillion by the end of 2016, of which \$535.6 billion were national bank holdings of securities and loans.²⁴ The Federal Deposit Insurance Corporation (FDIC) offers further granularity; of national bank holdings, \$173.5 billion was categorized as direct loans or private placements. Of the \$536.6 billion in national bank holdings, California's total bank holdings of securities and loans was \$90.6 billion (16.9% of national), with \$21.0 billion classified as direct loans or private placements (12.1% of national).

Figure 1. California Bank Loans as Portion of National Bank Holdings of Securities and Loans, 2016



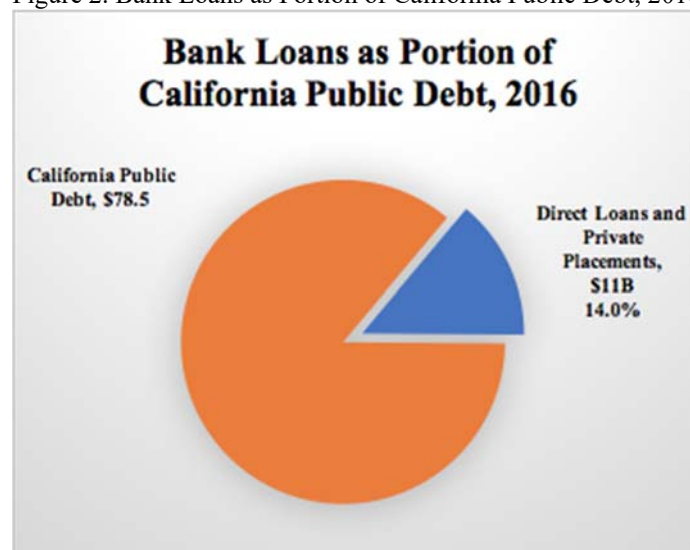
(Source: FDIC BankRegData)

To contrast the bank holdings perspective, the California Debt and Investment Advisory Commission records show \$78.5 billion in cumulative California public debt issuance in 2016 and \$11.0 billion in private placements and direct loans.²⁵ This suggests that California's municipal market is 2.1% of the national municipal market, and California's municipal bank loan market is 6.4% of the equivalent national market.

²⁴ Federal Reserve System. (2016). *Financial Accounts of the United States - Z.1 (L.212, 2016:Q3)* [Levels Tables]. Retrieved from <https://www.federalreserve.gov/releases/z1/20161208/html/1212.htm>

²⁵ CDIAC, 2017.

Figure 2. Bank Loans as Portion of California Public Debt, 2016



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Though these numbers may seem incongruent, note that the FDIC and CDIAC are reporting from different reference points. The FDIC's \$21.0 billion number for 2016 refers to the direct loans or private placement holdings of banks located with the State of California. CDIAC's \$11.0 billion number refers to direct loans and private placements California municipalities have borrowed. The discrepancy could be caused by factors such as the ability of banks located with the state to have out-of-state municipal holdings.

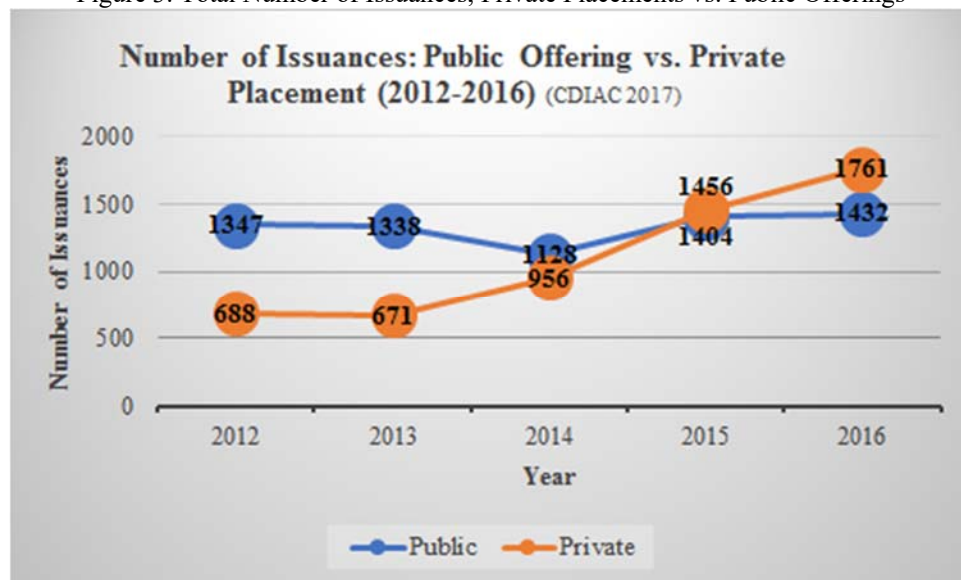
CDIAC's estimate that California is only 2.1% of the national market is harder to explain. It is possible that CDIAC is not capturing all of California's public issuances. CDIAC might also have a narrower definition of public issuance, which would underestimate the proportion of California's municipal market as part of the national market. Unfortunately, a state-by-state breakdown of the national \$3.8 trillion was not available, which would have provided more information on the discrepancy between the FDIC and CDIAC's estimates for California's public and private debt.

Private Placements: Descriptive Statistics

This section will highlight some key descriptive findings from statistical analyses performed on CDIAC's database of California issuances from the years 2012-2016. The findings capture the trend in the growth of private placements versus public offerings, both in terms of the total number of private placements issued year-by-year and the total amount of debt issued. These findings also include comparisons between private placements and public offerings in terms of their average issuance costs, interest rates, and purpose of funding. This section concludes with a look into which funding purposes or sectors issue the most private placements and some trends within those sectors.

Figure 3 gives the total number of public offering issuances and private placement issuances each year from 2012-2016. These include all issuances, including long-term fixed-rate issuances and short-term variable-rate issuances. There is a steady increase in private placements from 2012-2016, with 2016 having almost triple the amount triple the number of private placements as in 2012. The number of public offerings remains roughly the same.

Figure 3. Total Number of Issuances, Private Placements vs. Public Offerings



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Figure 4 shows the amount of par value outstanding among all public offerings or private placements for a given year. The amount of par value owed remains roughly in the same range from 2012-2015. In 2016, both public offerings and private placements increase substantially.

Figure 4. Principal Amount Owed, Private Placements vs. Public Offerings in Billions



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 2 compares par value average and new money average across public offerings and private placements from 2012-2016. Table 3 compares issuance costs and issuance cost interest rate across 2012-2016 between public offerings and private placements. These issuance costs represent total issuance costs (containing both fixed and variable costs). The interest rates are annual averages on all issues of the associated financing instrument tracked. It should be noted that the analysis used only simple averages, and that the interest rate differential could be substantially different among random subsets.

Table 2. Principal and New Money Averages, Public Offerings vs. Private Placements

Year	Private Placements, Principal Amount Avg	Public Offerings, Principal Amount Avg	Private Placements, New Money Avg	Public Offerings, New Money Avg
2012	\$10,462,367	\$44,710,570	\$6,102,955	\$25,744,992
2013	\$9,066,650	\$44,022,612	\$4,471,640	\$26,443,549
2014	\$7,008,233	\$48,585,016	\$4,602,620	\$24,575,389
2015	\$4,724,037	\$43,430,437	\$3,252,533	\$18,088,534
2016	\$6,260,185	\$48,246,303	\$4,799,256	\$17,977,211

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 3. Interest Rate and Issuance Cost Comparisons, Public Offerings vs. Private Placements

Year	Private Placements, Total Issuance Costs	Public Offerings, Total Issuance Costs	Private Placements, TIC Interest Rate	Public Offerings, TIC Interest Rate
2012	\$116,020	\$369,598	5.63%	2.52%
2013	\$122,250	\$334,973	4.62%	2.97%
2014	\$94,062	\$430,740	6.12%	2.85%
2015	\$85,347	\$392,495	6.03%	3.09%
2016	\$100,178	\$412,871	5.81%	2.74%

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 4 shows the top funding purposes for both private placements and public offerings. Over 60% of private placements issued were used for residential energy conservation, with multifamily housing and K-12 school facilities being the next highest.

Table 4. Purpose of Issuances

Private Placement			Public Offering		
Purpose	Count	%	Purpose	Count	%
Residential Energy Conservation	3419	60.3%	K-12 School Facility	2155	31.4%
Multifamily Housing	628	11.1%	Cash Flow, Interim Financing	969	14.1%
K-12 School Facility	455	8.0%	Multiple Capital, Public Works	918	13.4%
Multiple Capital, Public Works	178	3.1%	College, University Facility	455	6.6%
Water Supply, Storage, Distribution	92	1.6%	Water Supply, Storage, Distribution	389	5.7%
Equipment	82	1.5%	Redevelopment, Multiple Purposes	359	5.2%
Health Care Facilities	72	1.3%	Wastewater Collection, Treatment	164	2.4%
Wastewater Collection, Treatment	66	1.2%	Project, Interim Financing	130	1.9%
Commercial Energy Conservation	63	1.1%	Public Building	121	1.8%
Public Building	57	1.0%	Residential Energy Conservation	111	1.6%

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 5 lists the issuers that have issued the most private placements and public offerings. The highest-volume issuers are joint power authorities like the Western Riverside Council of Governments. Most of these issuers are conduit issuers, which are typically governmental entities that issue bonds for projects where the funds are used by third parties. California Municipal Finance Authority, for example, often issues bonds on behalf of private borrowers like healthcare systems that qualify for tax exempt bonds. WRCOG issues bonds for use by other city governments to improve energy conservation in their own neighborhoods.

Table 5. Top Issuers of Private Placements and Public Offerings

Private Placement			Public Offering		
Issuer	Count	%	Issuer	Count	%
Western Riverside Council of Governments	1249	22.0%	State of California	850	12.4%
California Statewide Communities Development Authority	868	15.3%	California Statewide Communities Development Authority	133	1.9%
San Bernardino Associated Governments	746	13.2%	Sonoma County	115	1.7%
Los Angeles County	698	12.3%	California Municipal Finance Authority	92	1.3%
California Municipal Finance Authority	270	4.8%	California School Finance Authority	58	0.9%
Sonoma County Public Financing Authority	117	2.1%	California Health Facilities Financing Authority	47	0.7%
California Enterprise Development Authority	79	1.4%	California State Public Works Board	40	0.6%
Los Angeles	66	1.2%	San Francisco City & County	37	0.5%
San Francisco City & County	62	1.1%	California Infrastructure & Economic Development Bank	34	0.5%

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 6 contains the top lenders of private placements by total amount of principal outstanding issued. Of all private placements analyzed, only 59 issuances in the CDIAC database have a

lender or underwriter listed. Of the private placements disclosed, the California State Water Resources Control Board lent the most money. Most of the top lenders are banks, but several government agencies such as the California State Water Resources Control Board and Poway Unified District Public Financing Authority issue loans to municipalities.

Table 6. Top Lenders of Private Placements

Top Lenders by Principal, 2012-2016	Sum Principal Amount
California State Water Resources Control Board	\$317,965,718
Wells Fargo Bank National Association	\$150,000,000
First Republic Bank	\$130,570,000
Bank of America NA	\$104,838,000
Farmers and Merchants Bank of Long Beach	\$78,231,000
Piper Jaffray & Co.	\$62,370,000
Stifel Nicolaus & Company Inc.	\$54,015,000
Bank of America Merrill Lynch	\$51,895,000
Bank of the West	\$51,000,000
Barclays Capital Inc.	\$50,000,000
RBC Capital Markets LLC	\$50,000,000
Boston Private Bank & Trust Company	\$32,000,000
Stone & Youngberg/Stifel Nicolaus & Co.	\$31,264,707
Bank of Marin	\$29,475,000
Umpqua Bank	\$27,267,000
Poway Unified District Public Financing Authority	\$26,180,000
US Bank National Association	\$24,370,000
Citibank	\$16,570,000
California United Bank	\$15,000,000
Compass Mortgage Corporation	\$14,665,000

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Table 7 lists the top 10 funding purposes for private placements in the year 2016 based on the total par value across all issuances used for a given funding purpose (e.g. all multifamily housing in 2016 summed up to a total par value of \$3.9 billion). Multifamily housing accounts for the largest share of total par value across all private placements in 2016, followed by residential energy conservation and K-12 school facilities.

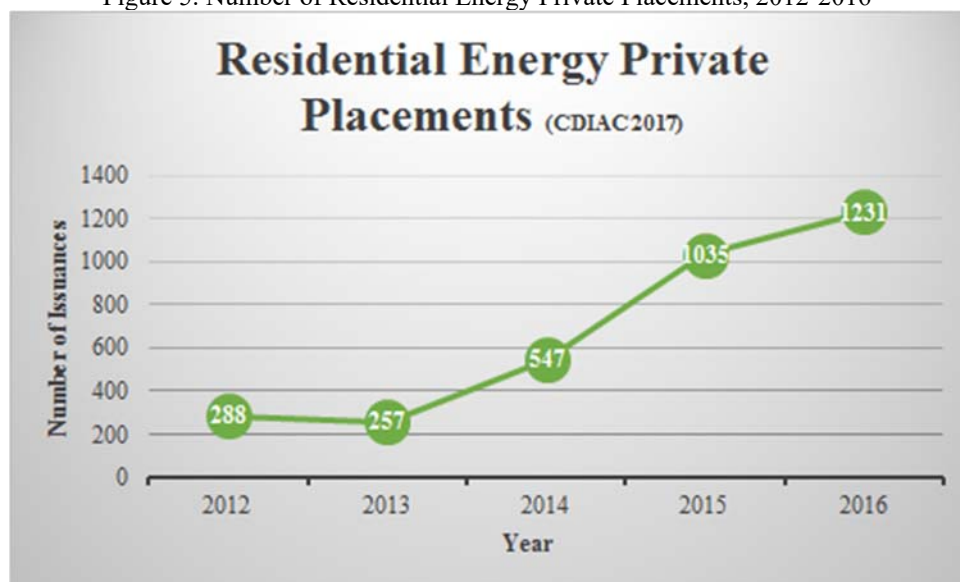
Table 7. Private Placements' Purpose of Funding by Total Principal, 2016

Purpose of Funding	Total Par Value (\$)
Multifamily Housing	\$3,907,421,177
Residential Energy Conservation, Improvement	\$1,379,362,038
K-12 School Facility	\$841,561,684
Health Care Facilities	\$750,712,245
Public Transit	\$457,000,000
Power Generation/Transmission	\$428,119,192
Multiple Capital Improvements, Public Works	\$338,941,586
Hospital	\$280,662,000
Pollution Control	\$242,900,000
College, University Facility	\$228,241,977

(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Figure 5 illustrates the trend in the number of residential energy private placements from 2012-2016, which has increased steadily since 2013.

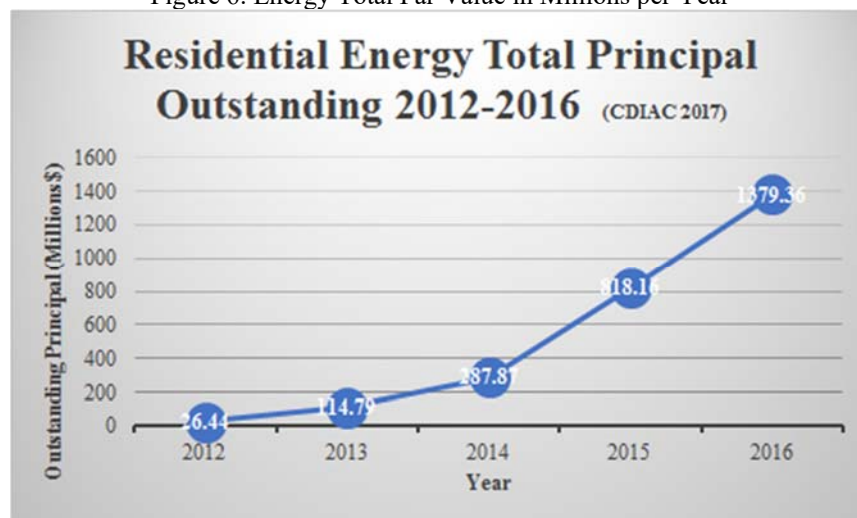
Figure 5. Number of Residential Energy Private Placements, 2012-2016



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Figure 6 illustrates the trend in total par value for residential energy private placements from 2012-2016, which has increased substantially since 2014. This corresponds with the increasing number of residential energy private placements. This amount still only makes up about 10% of the total outstanding principal across all private placements.

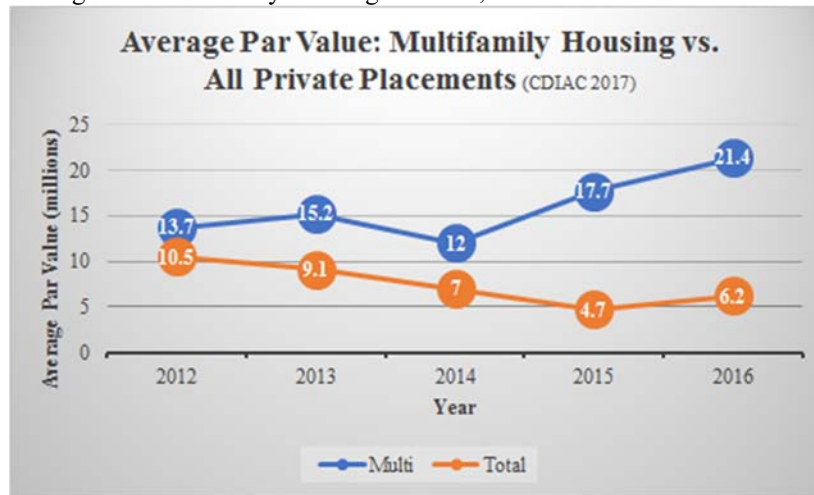
Figure 6. Energy Total Par Value in Millions per Year



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Figure 7 shows the trend in mean par value issued for multifamily housing private placements from 2012-2016, which has increased since 2014. The mean par value for housing issuances has been significantly higher than the mean for all private placements.

Figure 7. Multifamily Housing vs. Total, Mean Par Value 2012-2016



(Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/debt.asp>)

Private Placements: Discussion

The trend of increasing private placements. The results indicate that the total number of private placement issuances have been increasing from 2012 through 2016, with 2016 notably containing almost triple the number of issuances from 2012. However, the total par value did not change at the same rate as the number of issuances from 2012 to 2015. In 2016, the par value did almost double, from around \$6.88 billion to \$11.02 billion. The change in the number of private placements is explained by the change in the way residential energy conservation projects are financed. The fact that par value outstanding did not increase in accordance with the increase in the number of issuances indicate that the average amount of debt issued per issuance was lower from years 2012-2015.

Are the issuance costs and interest rates expected for private placements? Private placements have much lower issuance costs but higher interest rates than public offerings. Table 3 shows that private placement issuance costs are consistently approximately one-third of the issuance costs for public offerings. In contrast, the interest rate for private placements is approximately double that of public offerings. This is consistent with the idea that private placements are attractive to municipalities because they cost much less to issue in spite of their higher interest rates. The process of issuing a public offering has more obstacles and is much more resource-intensive.

Private placements used for the purpose of energy and residential improvements account for over 60% of the total number of private placements and warrant further analysis, especially to see the extent to which they are responsible for the increase in private placements witnessed.

WRCOG and the Energy Private Placement Market: Most of the energy private placements were issued by the Western Riverside Council of Governments, the top issuer of private placements in the CDIAC database. This organization almost exclusively issued energy private placements. An interview with a financial officer from WRCOG illuminated the purpose of their issuances and the reasoning that made private placements their preferred financing instrument.

In 2011, WRCOG partnered with a commercial and residential lending organization called PACE to begin an initiative for energy conservation among houses in California. The original jurisdiction of this program was only the 17 city governments in Riverside County that comprise the council, but in 2013-2014, the program expanded statewide. As the organization primarily conducts funding through the issuance of private placements, this corresponds with the surge in energy private placements seen in the data.

Sectors of Interest: Though energy private placements take up a substantial portion of the total number of issuances (over 60%), their share of the total private placement par value is not nearly as large. The energy private placements are the second-highest share of the total principal owed across private placements, but multifamily housing takes up the largest share by a significant margin. In 2016, the total par value for multifamily housing private placements was triple that of residential energy private placements.

Private placements for the purpose of multifamily housing have consistently been issued for increasing par values over the past five years. The total par value of issuances for multifamily housing has tripled between 2012 and 2016. The average par value per private placement has also increased over the last five years. Multifamily housing is the purpose with the most notable increase in amount of debt issued and is a sector to monitor in the future. Residential energy and building of new K-12 facilities are other areas to monitor.

This is consistent with data collected from interviews with various municipalities. With an increased emphasis on building more affordable housing in the state in the past few years, many municipalities have increased funding for multifamily housing units.

Are private placements a systemic risk? Currently, the data does not necessarily indicate major systemic risks with private placements. The principals of private placements are generally relatively small (median deal size of \$5.2 million on par value outstanding) and the amount of debt issued via private placements is dispersed among a wide variety of lenders. However, some of the sectors identified above have shifted their primary financing instrument. And given the increase in deal size in certain sectors, it is possible that the increase in private placements will become more worrisome in the future.

Direct Loans: Standard Covenants

The structure of most bank loan documents was similar. If the municipality meets one of the criteria for an Event of Default, the lender is entitled to the actions under Remedies on Default. Many of the documents included various covenants, which either bind the municipality to certain actions, or entitle the lender to Remedies if not met or cured. This report discusses the definitions and implications of conventional Events of Default and covenants in the Standard Covenants section and more unconventional provisions in the Unconventional Covenants section.

There were three items in the Events of Default section that almost every document included. The first event usually described default in the event the municipality failed to make payments to the lender when they were due. Oftentimes, the default was curable if the municipality remedied the situation within 10 to 30 days of a written notice. The second event of default that was present in every document was that the filing of bankruptcy constituted defaulting on the loan. The third commonly found event of default occurs if the municipality makes any statement proven to be false or misleading in any material respect.

Table 8: Direct Loan Covenant Analysis²⁶

Agreement Term:	Occurrences out of 41	Percent
Events of Default		
<i>Failure to pay any loan payment and continuation</i>	41	100%
<i>Declaration of bankruptcy or insolvency</i>	41	100%
<i>Misleading or misrepresentative statement made regarding Municipality's financial situation</i>	Majority	
<i>Failure to meet a Covenant</i>	Majority	
<i>Sale or merger of the Municipality</i>	Majority	
<i>Cross Default</i>	25	61%
<i>Ratings Downgrade</i>	3	11%
<i>Material Adverse Change</i>	10	24%
Financial Covenants		
<i>Debt Service Coverage Ratio</i>	24	59%
<i>Liquidity Requirement</i>	16	39%
Miscellaneous Covenants		
<i>Most Favored Nation</i>	2	5%
<i>Increased Cost</i>	2	5%
<i>Gross Up</i>	10	24%
Remedies on Default		
<i>Cease to extend credit to the Municipality</i>	Majority	
<i>Proceed by court action to enforce performance by the Municipality of applicable covenants and recover the payments of all amounts due</i>	41	100%
<i>Accelerate the immediate repayment of the loan and all unpaid principal and accrued interest</i>	41	100%

Source: CDIAC, <http://www.treasurer.ca.gov/cdiac/>

²⁶ Appendix 2 includes a reporting table of select provisions in each document the team analyzed for 2016.

However, less frequent and potentially more harmful provisions were found in the Events of Default, evaluated in Table 8, which shows an inventory of important agreement terms from the 41 loan documents.

One section that was often present in the loan documents was a Financial Covenants Section. When present, this section contained either a Debt Service Coverage Ratio provision, a Liquidity Requirement provision, or both. The Municipal Securities Rulemaking Board defines debt service coverage ratio as the ratio between annual revenues available to pay debt service to the annual debt service requirement. More simply, the formula is:

$$\text{Coverage} = \frac{\text{Available Revenues}}{\text{Debt Service Requirement}}^{27}$$

From our analysis, 24 of the 41, or 59% of the agreements require the borrower to maintain an average debt service coverage ratio of 1.21:1, relatively ordinary and comparable to the historical benchmark of 1.25:1 found with most real estate and commercial loans.²⁸

The liquidity requirement provisions require the borrower to maintain a specific amount of liquid assets that consisted of a borrower's immediately available cash, bank deposits, savings accounts, certificates of deposit, and money market accounts maintained with the municipality. The amount is often be subject to proportional reduction in the event of optional prepayment. Sixteen of the 41, or 39% of the agreements require the borrower to maintain an average of \$3,341,250 of liquid assets. Generally, neither the debt service coverage ratios nor liquidity requirements appeared remarkable given the borrower's agreement to make payments.

Lastly, the Remedies on Default sections were extremely uniform in structure and content. All 41 agreements stated that the lender was entitled to acceleration, which declares the principal balance of loans immediately due and payable. All Remedies on Default sections also included Enforcement provisions, which give the lender the right to proceed by court action to enforce performance and recovery all payments due from the municipality. The vast majority of documents also gave the lender the right to cease to extend credit to the municipality. This report finds no issues with these three provisions, not only due to their ubiquity, but because it's reasonable to expect that a lender would have enforceable actions like the right to some sort of legal recourse in the event of a default and the ability to cease extending credit.

²⁷ Glossary of Municipal Securities Terms. (n.d.). Retrieved May 21, 2017, from <http://www.msrb.org/glossary/COVERAGE.aspx>

²⁸ Lesonsky, R. (2017, January 03). What is Debt-Service Coverage Ratio? We Explain DSCR Here. Retrieved May 21, 2017, from <https://www.fundera.com/blog/debt-service-coverage-ratio>

Direct Loans: Unconventional Covenants

Many of the provisions in the Events of Default section could be considered boilerplate. However, numerous items in the Events of Default section and covenants in other sections are potentially harmful to investors of public debt, municipalities, and taxpayers are likely unaware of their existence.

One such clause was cross default, which puts a borrower in default with the lender if it defaults on another liability or obligation unrelated to the bank loan agreement. Oftentimes, the agreement only puts the borrower in a state of default if the liability exceeded a certain amount. Cross default provisions were relatively common, with 61%, 25 of the 41 agreements, containing cross-default provisions; the most common liability minimum was \$100,000 and the average default liability minimum was \$153,750.

The ratings downgrade provision was another clause that could put a municipality at risk. The provision stipulates that an event of default occurs if S&P, Fitch, or Moody's assigns to any debt secured by the borrower's pledged revenues that is rated below A- (by S&P or Fitch) or A3 (Moody's Investors Service). Only 7%, or three of the 41 loan documents, included such provisions, but these provisions can be more complicated than their face value suggests. The fact that an Event of Default condition can be met through a ratings downgrade is problematic for borrowers, because they are not directly in control of the factors that lead to their ratings.

For example, a credit rating agency could change its criteria and increase scrutiny on certain types of issuers or specific types of debt in its review. In 2014, S&P changed the credit ratings and potentially increased the cost of borrowing of 13 nationwide after evaluating 404 direct loans totaling \$16 billion.²⁹ Hypothetically, a cycle could form in which a rating downgrade by a credit agency due to the discovery of direct loans could lead the municipality to default on those same loans.

Another frequent provision was the material adverse effect or material adverse change, found either as an event of default or as part of the borrower's reporting requirements in 10 of the 41 documents. A material adverse effect refers to a change in the operations, business, properties, liabilities, or financial prospects of the municipality that would result in its material impairment to perform its obligations under any loan document. The problem with such a clause, especially as an event of default, is that it is broad, unclear, and heavily subject to interpretation as to what constitutes material change.

In general, the requirements in the Financial Covenants sections, including debt service coverage ratio and liquidity, as unusual given the municipality's obligation to make frequent payments. However, the financial covenants sections were either redacted or explicitly omitted in four of the agreements, which is concerning if the borrower, bond counsel, or lender did not want the covenants to be made public.

²⁹ Braun, Martin. (15 October, 2015). "Swift Descent to Junk Shows Buried Risk as Municipal Loans Surge." Bloomberg. Retrieved April 20, 2017 from <https://www.bloomberg.com/news/articles/2015-10-05/swift-descent-to-junk-shows-buried-risk-as-municipal-loans-surge>

Out of the three main Remedies on Default, including the exercise of legal means to enforce performance of contract and ceasing to extend credit, acceleration seemed to be the most important provision. Given that a relatively minor event like a ratings downgrade could trigger a default and that cross-default provisions are relatively common, the occurrence of a chain reaction for a municipality is possible. In a worst-case scenario, a ratings downgrade in just one loan agreement could lead the municipality to default on that agreement, and cross default provisions in other contracts could cause multiple accelerations, causing severe liquidity strains on a municipality. In a case like this, the banks could make deals with the municipality with regards to claims on assets before public bond investors know the borrower is struggling and have a chance to come to the table.

The language of one miscellaneous covenant, the most favored nation clause (MFN), states that whenever a municipality signs a new loan agreement with stronger covenants, it must agree to amend the current bank document and give the current lender the same rights. Only 2 of the 41 loan agreements, or 5%, had this clause and it was associated with larger borrowing amounts. However, the MFN can pose the same connectivity problem to municipalities the cross default clause does. If a municipality signed four prior loan agreements that are relatively standard, and a new lender demands stronger covenants such as a material adverse change counting as an Event of Default, all the previous agreements get amended with that same language if they contained MFN clauses.

Another provision that was not included in the three major sections was increased cost. Increased cost is a type of gross up provision, in which the interest rate the municipality pays is “grossed up” if a regulatory change lowers the total payment the lender receives. Such a clause protects the lender from any future regulatory changes that increase funding costs. These risks can consist of stricter Basel Capital Requirements for banks, higher insurance premiums, or new taxes.³⁰ For example, the language in one document states that if the federal corporate income tax increases, the interest rate the municipality pays is subject to adjustment by a margin rate factor. The margin rate factor is the greater of 1.0 and $(1 - \text{Maximum Federal Corporate Income Tax Rate}) * 1.58346$.

Only two of the 41 loan agreements contained increased cost provisions. However, five times as many contained some form of language connected to the idea of “grossing up” interest rates in the event of a tax code change unfavorable to the lender. However, the language was often unclear, often with no explicit gross up rates and gross up being referenced only in the Definitions sections.

³⁰ Second Amended and Restated Indenture between San Francisco County Transportation Authority and US Bank National Association as Trustee. (2015). Retrieved May 25, 2017, from <http://cdiacdocs.sto.ca.gov/2015-1308.pdf> P. 7, 37

V. Policy Recommendations

The recommendations of this paper are broadly designed to improve the transparency of California's municipal market, and by extension, make a case for greater transparency across the entire nation. Any market can suffer when participants on one side have less information than those on another. In this case, the market suffers when either municipal bond holders do not have the information they need to make knowledgeable investments, or bank loans hurt issuers enough that the market unravels. More transparency and better disclosure practices can greatly improve both sides of the market.

State Based Reforms

Though requiring direct loan disclosure through the MSRB's Electronic Municipal Market Access (EMMA) database, would be ideal, the Tower Amendment prohibits "direct or indirect federal regulation of municipal issuers."³¹ Hence, the federal government is barred from requiring issuers to file offering documents for bank loans. Due to the low likelihood of a repeal of the Tower Amendment, it is more realistic to pursue state-based reform.

Increasing Enforcement and Access: The first recommendation for improving disclosure is increasing enforcement of California's 2014 law that requires municipalities to report private placements and direct loans to CDIAC. Though CDIAC estimates that reporting for public offerings and direct purchases to be over 98% of such transactions; the estimate for direct loans is unknown but likely much less because there were more direct loans reported for 2016 than the prior five years combined. Increasing the number of direct loans in the database would offer more information to issuers and help evaluate their other agreements. More information can also help issuers argue for more favorable terms on future loans. For example, an ideal scenario would enable a less sophisticated issuer to view loan documents for their purpose of debt or type of financing and obtain an understanding of the type of covenants that are normal for a new issuance.

CDIAC's data that is accessible to the public is currently housed in an exportable Excel spreadsheet. However, the spreadsheet is meant for research purposes and difficult to navigate for public use. This paper recommends two possible alternatives for simple access to relevant direct loan covenants. The first is an interactive website that uses a reporting format similar to the one shown in Appendix 2, in which a viewer could easily see the obligations of a particular municipality. Even if a municipality had a perfectly good reason to agree to a ratings downgrade provision, a taxpayer could see and inquire about it. The second method is standardizing the bank loan documents in such a way that they would be machine readable. Even though the documents are uploaded as electronic pdfs, the differing structures and terms for the same sections make machine reading and analysis difficult.

³¹ NAST Supports Preservation of the Tower Amendment. (2016, October). Retrieved May 29, 2017, from <http://nast.org/wp-content/uploads/2016/10/Tower-Amendment-6915-ONE-PAGER.pdf>
National Association of State Treasurers Memorandum

Complying with both proposed initiatives might be time-intensive, but could worth the cost provided enough interest. Municipalities could benefit from being able to evaluate current and future loan agreements, investors would gain a better sense of municipal credit quality, and taxpayers could use the site as a tool to keep their municipalities accountable.

The practical enforcement of the 2014 law may be accomplished through increased activity from the State of California. The only penalty for not filing debt issuance information with CDIAC is contained in California Water Code section 20560.2. Under this section, a sale of debt can be rendered invalid if the issuer does not comply with California Government Code Section 8855(i). However, the report's authors know of no instances where the penalty has ever been enforced for failing to report either public offerings or bank loans. Hence, fines could be one potential way to raise compliance. However, market-based reforms might prove to be more effective and less intrusive in increasing reporting. For example, the State of California could build a dynamic online platform that asks issuers for a one-page summary of all alternative financings.³² If that became a regular practice, issuers who did not disclose might be penalized through higher pricing. Interviews with issuers revealed that many respondents had incomplete or unclear understandings of the 2014 law. CDIAC actively reaches out to its constituents to inform of their filing requirements, but it could increase its marketing efforts and outreach to raise awareness of both the 2014 law's reporting requirements and the potential harms of bank loans.

³² Lauren Herrera. (July 2015). "Alternative Financing in the Municipal Market: Financial and Policy Considerations for Municipal Borrowers." Retrieved April 17, 2017 from <http://www.treasurer.ca.gov/cdiac/issuebriefs/201507.pdf>, p. 4.

Federal Reforms

Requiring Identification Numbers (CUSIP): The second recommendation for improving municipal market transparency is requiring CUSIPs for private placements. The Committee on Uniform Security Identification Procedure (CUSIP) is a nine-digit number assigned to all security issues approved for trading in the US. The bond rating and analyst community like CUSIPs because they improve the standardization of tagging the securities. All private placements would have a unique identifier and be in the CUSIP Services Bureau's centralized database. They help avoid confusion and ensure that securities transactions are correctly matched and settled.

Requiring CUSIP increases the difficulty for lenders to identify instruments that are truly securities as "loans." If a loan turns out to be a security, the dealer needs to be a broker dealer to sell it to investors. If it is a security, MSRB rules are applicable. Disclosure obligations arise under EMMA if the loan is a security. The delineating factors are that loan documents should not have typical securities language. In addition, loan documents generally have covenants, information disclosure requirements, and transferability restrictions. A CUSIP requirement for private placements might force lenders to take a harder look when determining debt as a loan or security and act as a piece in the puzzle in raising the accountability of lenders.

The MSRB has proposed draft amendments to Rule G-34, on "CUSIP Numbers, New Issue and Market Information Requirements," that clarify the need that dealers must obtain CUSIP numbers. The amendments respond to the claim that industry participants like banks do not appear to believe that CUSIP numbers are required with respect to municipal securities.³³ This push at the federal level moves exactly in the right direction with respect to bank loan identification.

That being said, the MSRB needs to be aware that additional CUSIP assignment could create reporting and system complexities that result in unintentional disclosure gaps. The National Federation of Municipal Analysts sent a letter to the MSRB arguing that new CUSIP assignment for each private debt transaction could realistically cause fewer notices being posted or linked to the CUSIPs for public debt, increasing the difficulty investors face in obtaining a full risk assessment.³⁴ With this issue, even though CUSIPs improve transparency, regulators need to be cautious and make sure bank loans are linked to an issuer's public debt.

SEC Amendments, Materiality and Financial Obligations: The SEC proposed two draft amendments to municipal disclosure Rule 15c-12, covered in this report's background section that this report supports. These amendments are vital in improving the ability of municipal investors to assess the fiscal position of issuers. In the current state, lenders obtain the best view of the full financial situation of issuers, through strict reporting covenants within the agreements.

³³ Hume, L. (2017, March 01). MSRB Draft Rules Would Clarify CUSIPs Needed for Private Placements. Retrieved April 26, 2017, from <http://www.bondbuyer.com/news/washington-securities-law/msrb-draft-rules-would-clarify-cusips-needed-for-private-placements-1126571-1.html>

³⁴ Washburn, L., & Egan, J. (31 March, 2017). MSRB Regulatory Notice 2017-05 [Letter to Ronald W. Smith]. National Federation of Municipal Analysts, Pittsburgh, Pennsylvania.

Credit analysts have the second-best view, often learning about direct loans and other private placements from year-end audits, but not at the time of the loan.³⁵

However, investors of public securities are at a massive disadvantage, because they cannot readily access information relating to private placements, especially events like defaults and accelerations. As a result, in a few cases, the contracts have raised credit concerns and ratings have been downgraded, effectively subjecting only bondholders to the consequences of private events.³⁶ These amendments would reduce this information asymmetry, but the SEC needs to clarify these rules in order to aid market stability in places like California.

The MSRB needs to create a better definition of events that are “material.” The MSRB may understandably find it useful to keep the definition of “material” intentionally broad; depending on the circumstances, a small bank loan may represent a development that is technically “material” but is much less significant than many other developments relating to the issuer. However, many market participants complain of the ambiguity of “material” events. If the MSRB does not want to define the term, state governments can play a larger role in encouraging issuers to post their disclosure policies, on which investors and other market participants could comment.

There is a growing need for disclosure due to the growing risks that unfunded pension liability poses to all local governments, both within California and across the country. Municipal Market Analytics, an independent municipal research firm, states that municipal investors accept that state and local pension contracts are likely to be considered senior to general obligation and other unsecured bondholders, and that a government signing a new pension contract should be a disclosable event to investors because they could cause risk-averse investors to sell their bonds to more speculative investors. In addition to bank loans, pension obligations need to be explicitly included in the definition of “financial obligations.” Due to the influx of retirees, lower retirement age requirements, and low funding rates, pension obligations have been taking up an increasing amount of space in municipal budgets. The bankruptcies of Stockton and San Bernardino are prime examples of what can happen when pension obligations become unmanageable. The signing of new pension contracts as a disclosable event will improve the robustness of municipal markets in California and nationally.

³⁵ Jacobs, T. (2015, June 07). Moody's: Growth in bank loans and private financing creating information gaps in US municipal market. Retrieved April 26, 2017, from https://www.moody's.com/research/Moodys-Growth-in-bank-loans-and-private-financing-creating-information--PR_310660

³⁶ Matt Fabian & Lisa Washburn. (24 April, 2017). *Municipal Market Analytics*. MMA Weekly Outlook.

Bibliography

- Bergstresser, D., & Orr, P. (2014). "Direct Bank Investment in Municipal Debt." *Municipal Finance Journal.*, 35, 1.
- Braun, Martin. (15 October, 2015). "Swift Descent to Junk Shows Buried Risk as Municipal Loans Surge." *Bloomberg*. Retrieved April 20, 2017 from <https://www.bloomberg.com/news/articles/2015-10-05/swift-descent-to-junk-shows-buried-risk-as-municipal-loans-surge>
- California Debt and Investment Advisory Commission. (2017). CDIAC All Data. (February, 2017) [data file] <https://data.debtwatch.treasurer.ca.gov/Government/CDA-All-Data/yng6-vaxy>
- Casey, J. (13 March, 2017). "Lawyers Ask About Carve-Out from CUSIPs for some Private Placements." *The Bond Buyer*. Retrieved April 26, 2017, from <https://www.bondbuyer.com/news/lawyers-ask-about-carve-out-from-cusips-for-some-private-placements>
- Columbo, E. M., Deaton, D. M., & Seymour, J. K. (2017, March 13). "Evaluating SEC Plan For New Municipal Issuer Disclosures." *Law360*. Retrieved April 26, 2017, from <https://www.law360.com/articles/899219?scroll=1>
- Fabian, M. & Washburn, L. (20 March, 2017). "MMA Weekly Outlook." *Municipal Market Analytics*.
- Fabian, M. & Washburn, L. (24 April, 2017). "MMA Weekly Outlook." *Municipal Market Analytics*.
- Federal Reserve System. (8 December, 2016). *Financial Accounts of the United States - Z.1 (L.212, 2016:Q3) [Levels Tables]*. Retrieved from <https://www.federalreserve.gov/releases/z1/20161208/html/l212.htm>
- Government Finance Officers Association (GFOA). (September 2013). "Understanding Bank Loans." Retrieved April 20, 2017 from <http://gfoa.org/understanding-bank-loans>
- Hume, L. (01 March, 2017). "SEC to Propose Issuer Disclosures on Bank Loans, Private Placements." *The Bond Buyer*. Retrieved April 26, 2017, from <http://www.bondbuyer.com/news/washington-securities-law/sec-to-propose-issuer-disclosures-on-bank-loans-private-placements-1126531-1.html>
- Hume, L. (01 March, 2017). "MSRB Draft Rules Would Clarify CUSIPs Needed for Private Placements." *The Bond Buyer*. Retrieved April 26, 2017, from <http://www.bondbuyer.com/news/washington-securities-law/msrb-draft-rules-would-clarify-cusips-needed-for-private-placements-1126571-1.html>

- Hume, L. (03 March, 2017). "SEC Proposal on Bank Loans May Be Far Reaching." The Bond Buyer. Retrieved April 26, 2017, from <https://www.bondbuyer.com/news/sec-proposal-on-bank-loans-may-be-far-reaching>
- Jacobs, T. (07 June, 2015). "Moody's: Growth in bank loans and private financing creating information gaps in US municipal market." Retrieved April 26, 2017, from https://www.moodys.com/research/Moodys-Growth-in-bank-loans-and-private-financing-creating-information--PR_310660
- Lauren Herrera. (July 2015). "Alternative Financing in the Municipal Market: Financial and Policy Considerations for Municipal Borrowers." Retrieved April 17, 2017 from <http://www.treasurer.ca.gov/cdiac/issuebriefs/201507.pdf>, p. 4.
- LeBuhn, James. (25 October, 2011). "Direct Bank Placements." FitchRatings. Retrieved April 17, 2017 from [https://www.cdfa.net/cdfa/cdfaweb.nsf/0/5329A991CE6FBB1B8825796C00627257/\\$file/Fitch.DirectBankPlacements.pdf](https://www.cdfa.net/cdfa/cdfaweb.nsf/0/5329A991CE6FBB1B8825796C00627257/$file/Fitch.DirectBankPlacements.pdf)
- Municipal Securities Rulemaking Board (MSRB). (2011). "MSRB Notice 2011-52 (September 2011) Potential Applicability of MSRB Rules to Certain 'Direct Purchases' and 'Bank Loans'." Retrieved December 1, 2016 from <http://msrb.org/Rules-and-Interpretations/Regulatory-Notices/2011/2011-52.aspx>
- Mike Quinn and Todd Smart. (10 March, 2016). "Assessing the Less Contemplated Risks of Bank Placement Agreements", The Bond Buyer.
- NAST Supports Preservation of the Tower Amendment. (2016, October). Retrieved May 29, 2017, from <http://nast.org/wp-content/uploads/2016/10/Tower-Amendment-6915-ONE-PAGER.pdf>
National Association of State Treasurers Memorandum
- National Federation of Municipal Analysts (NFMA). (2015). "Recommended Best Practices in Disclosure for Direct Purchase Bonds, Bank Loans, and Other Bank-Borrower Agreements." Retrieved November 30, 2016 from http://www.nfma.org/assets/documents/RBP/rbp_bankloans_615.pdf
- Securities Industry and Financial Markets Association (SIFMA). (2013). "White Paper: Considerations Regarding Voluntary Secondary Market Disclosure About Bank Loans." Retrieved April 14, 2017 from <http://www.sifma.org/issues/item.aspx?id=8589943360>
- Second Amended and Restated Indenture between San Francisco County Transportation Authority and US Bank National Association as Trustee. (2015). Retrieved May 25, 2017, from <http://cdiacdocs.sto.ca.gov/2015-1308.pdf>, P. 7, 37
- Stephens, R. B., Wiener, M. L., & Stevens, D. (12 April, 2017). "Material-Event Disclosures Under New SEC Proposal." Law360. Retrieved April 26, 2017, from

<https://www.law360.com/articles/912785/material-event-disclosures-under-new-sec-proposal>

Tim Schaefer, Deputy Treasurer for Public Finance, California State Treasurer's Office, personal communication, Nov. 21, 2016

Thomas Jacobs. (16 October, 2014). "Growth of Bank Loans and Private Placements Increases Risk and Reduces Transparency in the Municipal Market." Retrieved April 20, 2017 from <http://www.vehbfa.org/wp-content/uploads/3d.-Tab-2-Guadagno-Moodys-Growth-of-Bank-Loans-and-Private-Placements-10-16-14.pdf>

Thomas Jacobs, Rachel Cortez, and Deepa Patel. (15 September, 2011). "Direct Bank Loans Carry Credit Risks Similar to Variable Rate Demand Bonds for Public Finance Issuers." Retrieved April 20, 2017 from <http://www.treasurer.ca.gov/cdiac/seminars/2014/20141008/loans.pdf>

Washburn, L., & Egan, J. (31 March, 2017). MSRB Regulatory Notice 2017-05 [Letter to Ronald W. Smith]. National Federation of Municipal Analysts, Pittsburgh, Pennsylvania.

Weber, F., Artin, K., & Deaton, D. (11 April, 2017). Proposed Amendments to Exchange Act Rule 15c2-12, Comments on the Collection of Information Requirements [Letter to Shagufta Ahmed & Brent J. Fields]. National Association of Bond Lawyers, Washington, D.C.

Appendix 1: Interview Questions

Version 1: Municipalities

- 1) Can you tell us about your job / role?
- 2) What is the background of the organization?
- 3) What types of projects has your organization funded with private placement?
- 4) What is appealing to your organization about private placements?
- 5) What is the process your organization uses for reporting loans to CDIAC?
- 6) What types of projects has your organization funded [/considered funding] with commercial lending?
- 7) What are obstacles that municipalities encounter in using private placements?
- 8) What are trends you've noticed about private placements?
- 9) As you know, we are three graduate students and this is the topic area of our practicum project - what meaningful contribution do you think we could make?
- 10) Are there other people we should talk to about this?

Version 2: Bond Counsels

- 1) What are the main priorities/goals of a bond counsel?
- 2) Do you do the reporting to CDIAC? Do you have any issues with the reporting process?
- 3) How do you get involved in a transaction? Who are your main clients?
- 4) How do you go about negotiating terms in a contract?
- 5) What do you think about acceleration, cross default, and gross up covenants? Do you see them often? Do bond counsels point out such covenants to issuers?
- 6) How do municipalities generally view their bank loan agreements? What do they think of potentially harmful covenants, such as acceleration clauses? Are there municipalities that are more susceptible to such clauses?
- 7) What's the process for the bond counsel for private vs. public placements?
- 8) What are the legal issues with treating a transaction as a loan vs. security?
- 9) What trends, if any, do you see among private placements and public offerings regarding purpose or type of debt?
- 10) What are your thoughts on issuing CUSIPS for private placements?

Version 3: CDIAC

- 1) When it comes to non-reporting penalties in California, who enforces the penalty?
- 2) Can you tell us a little about the background/history for CDIAC's data collection changes around 2012?
- 3) Has reporting to CDIAC increased over time, especially after 2012, or has it remained relatively constant?
- 4) Even if all California municipal debt is not reported, is it close to a random sample? What, if any factors, influence the bias?

Version 4: Bank

- 1) How do the processes for private placements and public offerings work?
- 2) What are considerations for selecting between private placements and public bonds?
- 3) What are your thoughts on the criticism of covenants in private placements?

- 4) What is the underwriter's role?
- 5) What prices are the bonds sold at?
- 6) Is there a concern/risk for diversification of risk from holding leftover bonds?
- 7) Have you noticed underlying trends with private placements or public offerings in the last ten years?

Appendix 2: Direct Loan Covenant Reporting Example

* All municipalities for 2016: select covenants

Issuer	Lender	Cross Default	Debt Service Coverage Ratio	Liquidity Requirement?	Swaps Allowed?
California Enterprise Development Authority	First Republic Bank	500000		Yes	
Tri-City Healthcare District	Bank of the West				
California Infrastructure & Economic Development Bank	Five Star Bank	100000			
San Francisco City & County	First Republic Bank	100000	1.25		
Weaverville Community Services District	Umpqua Bank	0			
California Enterprise Development Authority	First Republic Bank	250000	1.25	3750000	No
California Enterprise Development Authority	California United Bank	250000	1.1		
ABAG Finance Authority for Nonprofit Corporations	Compass Mortgage Corporation	0	1.25		
California Statewide Communities Development Authority	First Republic Bank	100000		Yes	

Paradise Irrigation District	Capital One Public Funding LLC				
California Enterprise Development Authority	First Republic Bank	100000	1.3	350000	No
California Statewide Communities Development Authority	Stifel Nicolaus & Company Inc	1000000	1.25	5280000	
Peninsula Clean Energy Authority	Barclays Bank	100000	Yes	Yes	
California Enterprise Development Authority	Farmers and Merchants Bank of Long Beach	100000	1.25		No
California Enterprise Development Authority	Farmers and Merchants Bank of Long Beach	0	1.1	2000000	No
California Municipal Finance Authority	Boston Private Bank & Trust Company	500000	1.15	2500000	
California Infrastructure & Economic Development Bank	Five Star Bank	100000			No
Stockton Port District	Western Alliance Bancorporation	None			
California Enterprise Development Authority	Farmers and Merchants Bank of Long Beach	100000	1.25		

California Municipal Finance Authority	California Bank & Trust	25000	1.3	Yes	
California Municipal Finance Authority	First Republic Bank	50000	1.1	10000000	
California Enterprise Development Authority	First Republic Bank	100000	1.35	1850000	
California Enterprise Development Authority	Umpqua Bank	100000			
ABAG Finance Authority for Nonprofit Corporations	Compass Mortgage Corporation	100000			
Anaheim	Wells Fargo Bank National Association	0			No
California Infrastructure & Economic Development Bank	Farmers and Merchants Bank of Long Beach	100000	1.2	1000000	

Appendix 3: CDIAC Data Dictionary

Title	Column	Description
CDIAC Number	A	The CDIAC Number is a unique sequential number that, along with the issue year (the year in which the issue was entered into the CDIAC database) identifies the issue. This number is assigned by the system at the time the issue is added to the CDIAC database. The number is reset to 1 at the beginning of each new calendar year.
Issuance Documents	B	The documentation of the debt issuance that was submitted to CDIAC by the issuer with the issuer's Report of Final Sale. Documents vary depending upon the type of debt issued. Types of documents include official statements, bond specimens, indentures, resolutions of the governing body, promissory notes, leases, loan agreements, instalment sales agreements, and other issuance-related disclosures. If the field does not return a link to view the documents, it will return either "Pending", meaning documents have been submitted by the issuer but have not yet been posted to DebtWatch, or "None Submitted", indicating that the issuer submitted no documentation with the Report of Final Sale.
Sold Status	C	Indicates whether the debt is "proposed" for sale on the "sale date" or has been "sold" on the "sale date".
Sale Date	D	The date the proceeds of the debt issue were made available to the issuer or other party obligated to repay the debt, and the evidence of indebtedness was provided to the underwriter, purchaser or lender. An issue with "sold status" of "proposed" will return the most current proposed sale date submitted to CDIAC by the issuer. When the debt is issued, the sale date will reflect the date the debt was actually issued. (Note: Most frequently the sale date that will return for bonds and other similarly issued securities is the date of bid acceptance or execution of a bond purchase contract. This is based on the interpretation of the statute prior to 2015.)
Issuer County	E	The county in which the issuer is located. The field will return either the name of one of California's 58 counties, "State of California" for the State or an entity of the State, "SLC" for the Student Loan Corporation, a statewide entity, or "Multiple" for a joint powers authority that is issuing on behalf of agencies in multiple counties.
MKR Authority	F	If a joint powers authority used bond proceeds to purchase local debt obligations of local agencies or make loans to local agencies under the Mark-Roos Bond Pooling Act of 1985, the field will return a "Yes." (See JPA & Marks-Roos.) The local debt obligations purchased by a Marks-Roos authority are tracked separately in this website under the debt of cities, counties, Mello-Roos community facilities districts, and special districts.
Local Obligation	G	If the debt issuance was purchased by a joint powers authority under the Marks-Roos Bond Pooling Act of 1985, the field will return "Yes." (See JPA & Marks-Roos.)
MKR CDIAC Number	H	If the debt issuance was purchased by a joint powers authority under the Marks-Roos Bond Pooling Act of 1985, the field will return the CDIAC Number of the joint powers authority issuance that purchased the debt. (See JPA & Marks-Roos.)

Issuer Group	I	Debt Watch has categorized all issuers into one of eight issuer groups including: Cities: Cities, city redevelopment entities and successors Counties: Counties, county service districts and authorities, county redevelopment entities and successors, City and County of San Francisco State of California: State of California, State programs and departments, State entities, State joint powers authorities, Student Loan Corporation K-14 Schools: K-12 school districts, community college districts UC & CSU: University of California, California State University JPA & Marks-Roos: Joint powers authorities, entities authorized under the Marks-Roos Bond Pooling Act Mello-Roos: Community facilities districts Special Districts: Local municipal service districts (water, sewer, electric, flood control, vector control, hospital, fire, library, etc.) that are not a county entity
Issuer Type	J	Specifically identifies the type of issuing entity in greater detail than the Issuer Group field. The field will frequently inform users of the type of entity and purpose or service for which the debt was issued. CDIAC tracks 59 different issuer types.
Issuer	K	The entity of State or local government that is legally authorized to enter into the debt obligation. An issuer may serve as a legal conduit through which third-party borrowers or obligors can utilize federally or state tax-exempt financing. (See Conduit Revenue Financing.)
Project Name	L	The name given to the issue or the project for which the debt is being issued. This field is often used by the issuer to provide additional information about the purpose of the debt, its relationship to other debt issues, or the area benefiting from the debt proceeds.
Principal Amount	M	In a bond or note transaction, the amount that is the face value, also known as the par amount, of the bonds or notes. It does not include net issue premium/discount or any of the costs of issuance. In a direct-lending structure, it is typically the amount borrowed. In a capital lease structure, it is approximately the fair market value of the asset rights conferred to the municipal entity through the lease. The principal amount is the amount that is typically charged against an entity's legal issuance authority.
New Money	N	The portion of the principal amount that is not used for refunding (or refinancing) other outstanding debt. New money is the amount by which the issuer's debt liability increases. This field is calculated by subtracting the refunding principal amount from the total principal amount. The refunding principal amount reported by the issuer may include premium or costs and fees associated with the financing and thus may underrepresent new money, or return a negative value. The field data should be considered approximate.
Refunding Amount	O	The amount of the proceeds from the debt issuance that the issuer or other party obligated to repay the debt intended to use for the purpose of refunding, redeeming, or refinancing other outstanding debt. Unlike the principal amount, the refunding amount reported to CDIAC may include issue premium that was raised specifically for refunding.
Net Issue Discount/Premium	P	Issue discount is created when the lender or underwriter pays less for a bond than the amount of the principal - known as par value. Issue premium is generated when the lender or underwriter pays more for a bond than the par value (or principal amount). Issue premium is created when the issuer structures the bond to periodically pay (or accrete) interest payments higher than the market interest rates for bonds of similar maturity and credit. Periodic interest payments (or accretion) that are lower than the market rate create a discounted issuance price. Issuers may generate premium and discount within the same issue of bonds (some of the maturities of the issue of bonds can be sold at par, some at

		premium, and some at discount). The field shows the net amount that was generated at original issuance. Generally, the net issue discount/premium can be added to the principal amount to know the total proceeds, before issuance costs, of the issue.
Debt Type	Q	The type of instrument used to create debt. This website tracks more than two dozen types of debt that include varieties of bonds, notes, loans, warrants, certificates of participation, commercial paper, lines of credit, installment purchases, and capital leases.
Purpose	R	The principal purpose for which the debt has been incurred by the issuer. Issuers may select one of 44 purposes.
Source of Repayment	S	The principal source of funds that the issuer will use to repay the debt obligation. Issuers select one of 14 different repayment sources, among which are property taxes, general fund, enterprise revenues, special assessments, and special taxes.
TIC Interest Rate	T	One method of calculating the interest cost to be paid by the issuer over the life of all the bonds. The TIC (true interest cost) rate accounts for the time value of money. When the TIC Interest Rate is used to discount all of the issue's future principal and interest payments, the summation of the discounted values will equal the original proceeds of the debt issue inclusive of net issue premium/discount. A blank field indicates that the issuer provided an alternative interest cost calculation (for example, a NIC interest rate), the rate could not be calculated as with a variable interest rate, or the issuer did not provide the rate to CDIAC.
NIC Interest Rate	U	One method of calculating the overall rate of interest to be paid by the issuer over the life of all the bonds in an issuance. The NIC (net interest cost) interest rate takes into account net issue premium/discount and the interest to be paid over the life of the issue, but does not account for the time value of money. (See TIC Interest Rate.) A blank field indicates that the issuer provided an alternative interest cost calculation (such as a TIC interest rate), the rate could not be calculated as with a variable interest rate, or the issuer did not provide the rate to CDIAC.
Interest Type	V	The type of interest cost reported for the bond issuance. The field will return true interest cost ("TIC"), net interest cost ("NIC"), variable ("VAR"), other ("O"), or blank. If the field is blank and there are no interest costs reported in the TIC Interest Rate or the NIC Interest Rate fields, the interest costs were not reported to CDIAC. A return of "VAR" means that the interest costs are based on an interest rate structure that may vary over the term of the debt. A return of "O" means that interest costs were reported by the issuer in another form, perhaps because the issuer did not calculate the TIC or NIC.
Other Interest Type	W	The field shows a description of the interest type when the interest type is submitted by the issuer as "O," or other. This is common in direct-lending structures when the issuer has not calculated TIC (true interest cost) or NIC (net interest cost), or in some federally subsidized structures which effect a zero interest cost to the issuer.
Federally Taxable	X	Most of the municipal debt reported to CDIAC is federally tax-exempt. The interest paid to the investor or debt holder is excluded from the investor's or debt holder's gross income in the calculation of their federal income tax. Some municipal debt pays interest that is not federally tax-exempt and some pays interest that is subject to the federal alternative minimum tax. A blank field indicates that the debt is federally tax-exempt. Otherwise, the field will indicate

		that the debt is "federally-taxable" or "subject to alternative minimum tax."
First Optional Call Date	Y	The first date on which an issue may be redeemed at the issuer's option. For preferred securities, it is returned for optional calls exclusively into cash.
Final Maturity Date	Z	The date that the issuer is obligated to make the final payment -- including principal, interest or other sums due -- to repay the entire outstanding debt without exercise of options of the issuer or the investor to prepay (or redeem) the debt earlier. Prior to 1995, the only maturity date captured in the database was that for term bonds or debt with only a single maturity date. Serial bonds or debts with multiple maturity dates issued prior to 1995 will return a blank field.
CAB Flag	AA	A bond structured so the investment return on the principal amount is not paid to the investor periodically as is the common practice with a current interest bond, but reinvested at a stated compounded rate until maturity. At maturity, the issuer makes a single payment to the investor including both the initial principal amount and the total compounded investment return. If this data field indicates "Yes", all or a portion of the issue was comprised of capital appreciation bonds. If "No", capital appreciation bonds were not issued. A blank field is indicative of an issuance that predates CDIAC's collection of this data.
S and P Rating	AB	Standard & Poor's (S&P) Ratings Services is a nationally recognized statistical rating organization that provides an opinion of the credit-worthiness of a bond. S&P assigns long-term bond credit ratings of AAA, AA, A, BBB, BB, B, CCC, CC, C, D and uses a system of + and - to further delineate credit quality within grades. The highest quality are rated AAA. S&P assigns short-term bond credit ratings of A-1+, A-1, A-2, A-3, B, C. A blank field indicates that the issuer did not have the bond rated by S&P or failed to submit the rating to CDIAC.
Moody's Rating	AC	Moody's Investors Service is a nationally recognized rating organization that provides an opinion of the credit-worthiness of a bond. Moody's assigns long-term bond credit ratings of Aaa, Aa, A, Baa, Ba, B, Caa, Ca, C, and uses a scale of 1-3 (1 highest) to further delineate credit quality within grades. The highest quality are rated Aaa. Moody's assigns short-term bond credit ratings of P-1, P-2, P-3, and Not Prime. A blank field indicates that the issuer did not have the bond rated by Moody's or did not submit the rating to CDIAC.
Fitch Rating	AD	Fitch Ratings is a nationally recognized bond rating organization that provides an opinion of the credit-worthiness of a bond. Fitch Ratings assigns long-term bond credit ratings of AAA, AA, A, BBB, BB, B, CCC, CC, C, D and uses a system of + and - to further delineate credit quality within grades. The highest quality are rated AAA. Fitch Ratings assigns short-term bond credit ratings of F1+, F1, F2, F3, B, C. A blank field indicates that the issuer did not have their bond rated by Fitch or did not submit the rating to CDIAC.
Other Rating	AE	An opinion of the credit-worthiness of the bond from a rating organization that is not Moody's Investors Service, Standard & Poor's Ratings Services or Fitch Ratings. A blank field indicates that the issuer did not have the bond rated, had it rated by one of the other three agencies, or did not submit the rating to CDIAC.
Guarantor Flag	AF	The type of guaranty or credit enhancement provided by the guarantor. The field will return bond insurance ("Ins"), letter of credit ("LOC"), state intercept program ("Int"), other ("Oth"), or a blank. A blank field indicates that the debt was not issued with a third-party guaranty, insurance, or other credit enhancement, or the issuer did not submit the information to CDIAC.
Guarantor	AG	The entity or financial services firm (sometimes also called a "credit enhancer"), usually a bank or a bond insurer, that is providing a form of debt repayment security, such as bond insurance, in addition to that provided by the issuer or obligor. Prior to 1994, CDIAC did not capture the name of the guarantor in the database. From 1994 onward, a blank field indicates that the debt was not issued with a third-party guaranty, insurance, or other credit enhancement, or the issuer did not submit the name of the firm providing the

		guaranty or credit enhancement to CDIAC.
Sale Type (Comp/Neg)	AH	Indicates whether the debt issuance was sold competitively (comp) or through a negotiated (neg) sale. In a competitive sale, the issuer sells the securities to the winning underwriter or syndicate presenting a bid that provides the lowest interest rate cost and conforms to the issuer's stipulated debt criteria. In a negotiated transaction, the issuer sells the debt directly to an underwriter or underwriting syndicate selected by the issuer after negotiating the required terms. Private placement transactions always return a sale type "neg."
Private Placement Flag	AI	An issue of municipal debt securities sold directly to institutional investors through a negotiated sale rather than through a public offering to a broad group of investors. Purchasers of these securities are often required to agree to restrictions on the resale. Direct lending from banks or other financial institutions is categorized as private placement in the CDIAC database. Prior to January 2012, CDIAC did not capture whether an issue was a private placement. A return of "No" in this field for an issuance prior to 2012 is not necessarily accurate.
Underwriter	AJ	A municipal securities dealer that purchases debt from the issuer with an intention to resell it to other buyers. Prior to 2010, underwriter included purchasers of debt in a private placement transaction. A blank field indicates that the transaction was a private placement with a purchaser or the issuer did not submit the name of the underwriter to CDIAC.
Lender	AK	The bank or financial services company that is purchasing the debt of the issuer or making a direct loan.
Purchaser	AL	The bank or financial services company in a private placement transaction that is purchasing the debt of the issuer or making a direct loan. In a capital lease structure, the purchaser may be a leasing company. The purchaser may also be a municipal financing authority (joint powers authority) that has purchased the debt of the issuer with the proceeds of its own simultaneous debt issuance. Prior to 2010, the purchaser was not separately identified as such, but was included as underwriter.
Placement Agent	AM	The individual or firm acting as agent on behalf of the issuer or obligor to arrange for the sale of a new issue of municipal debt directly to investors rather than by purchasing the debt from the issuer and reselling it to investors. The services of a placement agent are often used in private placements. A blank field indicates that the issuer did not use the services of a placement agent or did not submit the name of the placement agent to CDIAC.
Financial Advisor	AN	The person or firm that advises the debt issuer or obligor on matters pertinent to the issuance, such as structure, timing, marketing, fairness of pricing, terms, and ratings. A blank field indicates that the issuer did not use the services of a financial advisor or did not submit the name of the financial advisor to CDIAC.
Bond Counsel	AO	The attorney or law firm retained by the issuer to give a legal opinion that the proposed debt is a valid obligation of the issuer, and, to the extent applicable, the interest on the proposed debt is exempt from federal or state income tax. A blank field indicates that the issuer did not use the services of a bond counsel to issue the debt or did not submit the name of the bond counsel to the California Debt and Investment Advisory Commission (CDIAC).
Co-Bond Counsel	AP	The name of the attorney or law firm working on behalf of the issuer as a bond counsel (see Bond Counsel) in cooperation with another bond counsel. Issuers employ the services of co-bond counsel in complex debt issuances where the required expertise is found in multiple firms. A blank field indicates that the issuer did not use the services of a co-bond counsel to issue the debt or failed to submit the name of the co-bond counsel to CDIAC.
Disclosure Counsel	AQ	The attorney or law firm retained by the issuer to provide advice on the issuer and/or obligor's securities law disclosure obligations and to assist in the preparation of the official statement or other offering document. Disclosure

		counsel may also assist in preparation of the bond purchase contract, official notice of sale (in a competitive sale) and/or continuing disclosure agreement. The disclosure counsel may be the same firm as the bond counsel. A blank field indicates that the issuer did not use the services of a separate disclosure counsel or did not submit the name of the disclosure counsel to CDIAC.
Borrower Counsel	AR	The attorney representing the issuer who gives a legal opinion that the proposed debt is a valid obligation of the issuer, and, to the extent applicable, the interest on the proposed debt is exempt from federal or state income tax. A borrower's counsel is used when the debt is a direct loan from a bank or other financial institution. A blank field indicates that the services of a borrower's counsel were not used to issue the debt or that the issuer did not submit the name of the borrower's counsel to CDIAC.
Trustee	AS	A financial institution or government entity with trust powers, designated by the issuer or borrower, that acts, pursuant to a debt contract, in a fiduciary capacity for the benefit of the debt holders in enforcing the terms of the debt contract. For instance, counties often serve as trustees for K-14 schools. A blank field indicates that the services of a trustee were not used or the issuer did not report the name of the trustee.
Issue Costs Pct of Principal Amt	AT	The total of all reported costs of issuance expressed as a percentage of the total principal or par amount. Only the costs reported by the issuer are included in the calculation. The principal is not increased or reduced for any net premium or discount. A zero return or an unreasonably low percent indicates that some or all of the costs were not reported to CDIAC and could not be obtained or verified through submitted documentation.
Total Issuance Costs	AU	The total of all issuance costs as reported to CDIAC, including underwriter total spread/discount, placement agent fee, financial advisor fee, bond counsel fee, co-bond counsel fee, disclosure counsel fee, borrower's counsel fee, trustee fee, credit enhancement fee, rating agency fee, and other issuance expenses.
UW Takedown	AV	The largest component of the UW total spread/discount that is paid to an underwriter or members of the syndicate as a commission for the resale of the securities according to the syndicate agreement. A blank field indicates that the transaction did not use an underwriter syndicate or the issuer did not submit the UW takedown.
UW Mngmt Fee	AW	A component of the UW total spread/discount that is paid to a syndicate's managing underwriter for the costs of managing the affairs of the syndicate. A blank field indicates that the transaction did not use an underwriter syndicate or the issuer did not submit the "UW mngmt fee".
UW Expenses	AX	A component of the UW total spread/discount that is paid to a syndicate's managing underwriter to cover the costs of operating the syndicate. A blank field indicates that the transaction did not use an underwriter syndicate or the issuer did not submit UW expenses.
UW Total Discount/Spread	AY	The differential between the price paid to the issuer by the underwriter for a new issue of municipal debt and the price that the securities are sold to the public by the underwriter. The UW total discount/spread field returns a total of "UW expenses, mngmt fee, and takedown" if reported. The "UW total discount/spread" field may have a value even if the three component values are blank. A blank field indicates that the transaction did not use an underwriter or the issuer did not submit the UW total discount/spread.
Placement Agent Fee	AZ	The fee paid to the placement agent at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the issuer did not use the services of a placement agent or did not submit the specific payment made to the placement agent.
Financial Advisor Fee	BA	The fee paid to the financial advisor at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that

		the issuer did not use the services of a financial advisor or did not submit the specific payment made to the financial advisor.
Bond Counsel Fee	BB	The fee paid to the bond counsel firm at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the issuer did not use the services of a bond counsel or did not submit the specific payment made to the bond counsel.
Co-Bond Counsel Fee	BC	The fee paid by the issuer to the bond counsel firm at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the issuer did not use the services of a co-bond counsel or failed to submit the specific payment made to the co-bond counsel.
Disclosure Counsel Fee	BD	The fee paid to the disclosure counsel firm at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the issuer did not use the services of a disclosure counsel or did not submit the specific payment made to the disclosure counsel.
Borrower Counsel Fee	BE	The fee paid by the issuer to its counsel at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the services of a borrower's counsel were not used to issue the debt or that the issuer did not submit the specific payment made to the borrower's counsel.
Trustee Fee	BF	The fee paid to the trustee at the time of issuance. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the issuer did not use the services of a trustee or failed to submit the specific payment made to the trustee.
Credit Enhancement Fee	BG	The fee paid by the issuer (or conduit borrower or obligor) to a financial services firm, usually a bank or a bond insurer, to provide debt repayment security in addition to that provided by the issuer or obligor. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates that the debt was not issued with a third-party guaranty, insurance, or other credit enhancement or the issuer failed to submit the specific amount paid for the credit enhancement.
Rating Agency Fee	BH	The fees paid by the issuer at the time of issuance to the rating agencies that have rendered their opinion of the credit-worthiness of the bond. The fee may or may not be paid from the proceeds of the debt issuance. A blank field indicates an unrated bond issuance or that the issuer did not submit the specific payment made to the rating agencies.
Other Issuance Expenses	BI	Expenses paid at the time of issuance for services directly associated with the issuance of the debt that are not paid to the underwriter, bond counsel, borrower's counsel, disclosure counsel, rating agency, guarantor, financial advisor, placement agent, or trustee. The expenses may or may not be paid from the proceeds of the debt issuance.