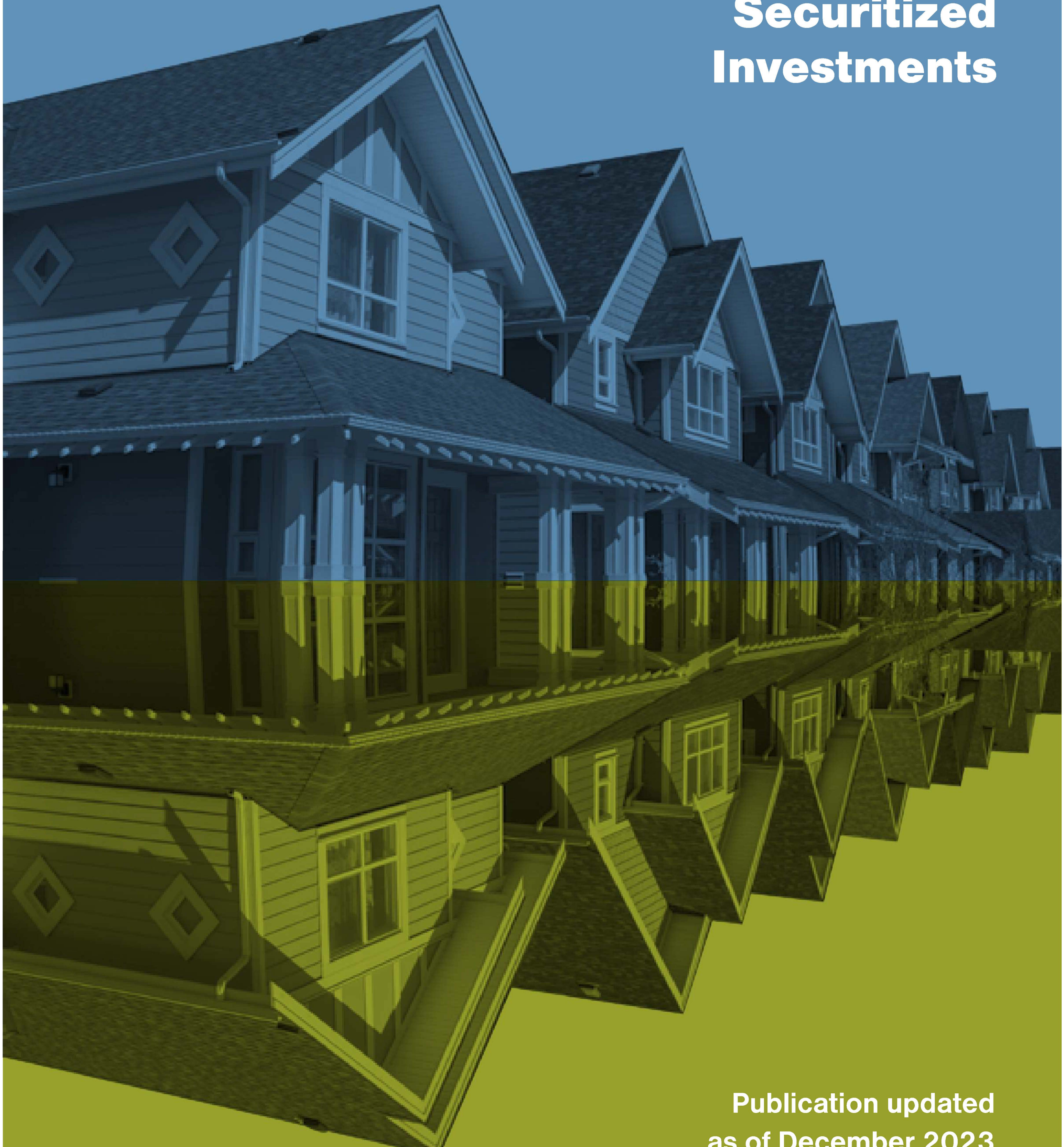
Issue Brief:

Securitized Investments



Publication updated as of December 2023

CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

The California Debt and Investment Advisory Commission (CDIAC) provides information, education, and technical assistance on debt issuance and public funds investments to local public agencies and other public finance professionals. CDIAC was created to serve as the state's clearinghouse for public debt issuance information and to assist state and local agencies with the monitoring, issuance, and management of public debt.

Additional information concerning this report or CDIAC programs may be obtained by contacting CDIAC directly via phone (916) 653-3269, fax (916) 654-7440, e-mail (cdiac@treasurer.ca.gov) or by visiting CDIAC's website: www.treasurer.ca.gov/cdiac.

INTRODUCTION

California law identifies permissible investments local agencies may choose when investing surplus funds and requires that investment decisions must prioritize principal preservation and liquidity over yield. Among these, Government Code Section 53601 provides that local agencies may invest in securitized investments. Over time, these products have become more complex to address credit, market, and sector risks, making it difficult for investors to analyze how these products affect their portfolios. Local agencies currently investing in or considering purchasing securitized investment products should be familiar with the statutory limitations imposed by law and undertake the necessary research to understand the structure of the investments even if the security carries an implied or explicit guarantee of the United States.

This issue brief provides an overview of securitized investment products and highlights the potential risks these investments pose to local agency investors. It then discusses the authorizing statute applicable to different types of securitized investment products and addresses the current status of federal regulation affecting the market for securitized products.

WHAT IS A SECURITIZED INVESTMENT?

Securitization is the process through which loans and other assets such as home mortgages, car loans, and credit card debt are pooled together and converted into tradeable, liquid credits. Pursuant to Section 53601 local agencies may invest in mortgage-backed securities (MBS), backed by home mortgage loans, and asset-backed securities (ABS) backed by collateral such as credit card debt and auto loans.[1]

The general structure of a securitized asset involves a seller, an issuer and an investor (Appendix A). Sellers are the companies/banks that generate the underlying assets and sell them to issuers.[2] Issuers buy these assets and pool them together to issue MBS or ABS to investors.

Securitized investments such as MBS and ABS help maintain a financing cycle that is important to the US economy. In 2022, issuance of MBS and ABS by both private issuers and federal agencies exceeded $2.4 trillion (Figure 1). As of 2021 there was $14 trillion of outstanding MBS and ABS, including more than $10.6 trillion issued by federal agencies (Appendix B). [3]

MORTGAGE-BACKED SECURITIES MARKET

The MBS market is composed of two sectors: Agency issued and privately issued, each of these sectors is addressed below:

AGENCY ISSUED. Agency MBS are those securities issued or guaranteed by federal entities; the prominent federal agency MBS issuers are Federal National Mortgage Association (Fannie Mae), Federal Home Loan Mortgage Corporation (Freddie Mac), and Government National Mortgage Association (Ginnie Mae)[4] (collectively "Agencies").[5] The first mortgage pass-through security was issued in 1970 and was backed by a federal guarantee provided by Ginnie Mae. Agency debt is typically considered a strong credit qual-

---

1 All references to California Codes is to Government Code unless otherwise noted.

2 Sellers may also take the responsibility of acting as the servicer, collecting principal and interest payments from borrowers.

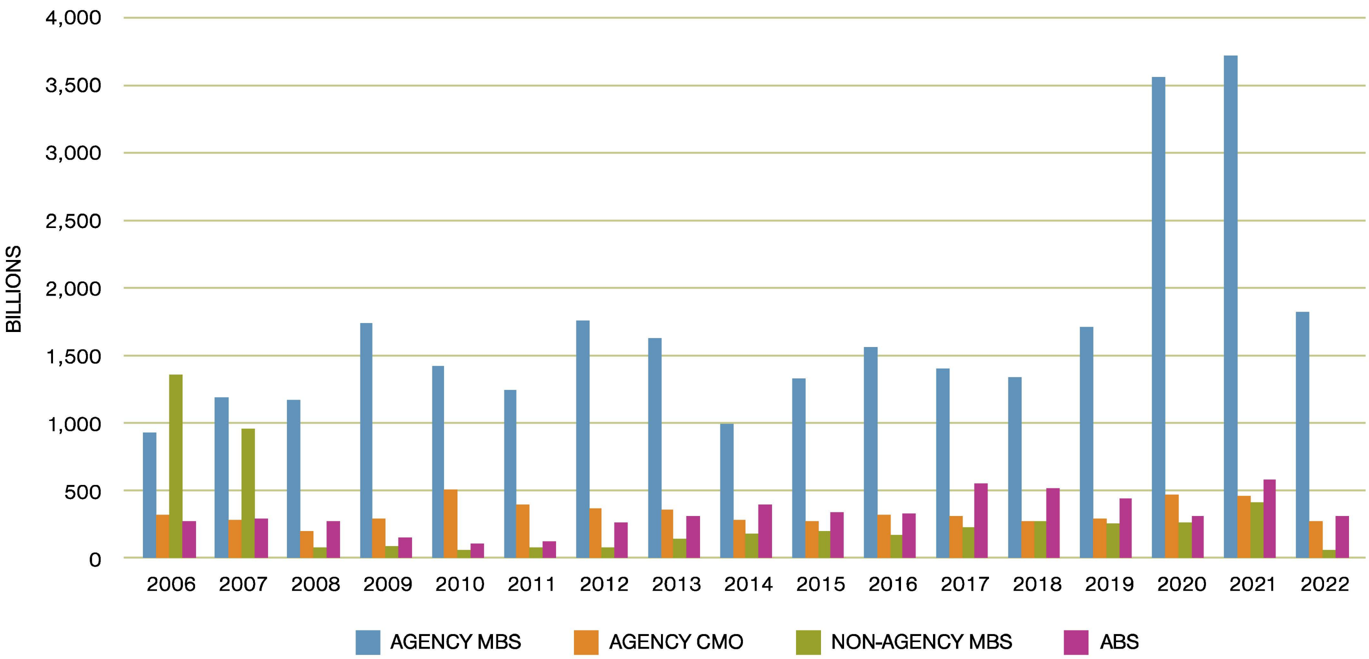
3 Figures obtained from SIFMA statistics for Structured Finance - www.sifma.org/research/statistics.aspx.

4 Ginnie Mae is a wholly-owned corporate instrumentality of the United States within the Department of Housing and Urban Development.

5 "Agencies" refers to all federal agencies that issue MBS not just Fannie Mae, Freddie Mac, and Ginnie Mae.

Figure 1

MORTGAGE-BACKED SECURITIES (MBS) AND ASSET-BACKED SECURITIES (ABS)
AGENCY MBS, AGENCY CMOS, NON-AGENCY MBS, AND ABS ISSUANCE AMOUNTS, 2006-2022



Source: SIFMA Statistics

ity due to their explicit government backing from Ginnie Mae or implied financial support from the US Treasury (Fannie Mae and Freddie Mac).

PRIVATELY ISSUED. Also known as "private-label" issues, privately issued mortgage securities are issued by subsidiaries of banks, financial institutions and home builders (non-agency MBS). This market is smaller than the Agency market. Private issuers were not significant market participants until the late 1980s. Non-agency MBS have no explicit or implied federal guarantees and instead are subject to the credit risk of the underlying mortgage assets. Unlike Agency MBS, non-agency MBS suffered significant losses of principal and market value during the subprime mortgage crisis. Non-agency MBS issuance declined from $953 billion in 2007 to less than $100 billion between 2008-2013 (Figure 1). Since the financial crisis, non-agency MBS issuance slowly increased to $408 billion issued in 2021 before dramatically dropping by 87% to $54.7 billion in 2022 due to rising interest rates.

With federal agency securities comprising the majority of the MBS market, local agency investors may find the credit quality of MBS and liquidity of a large market offer an attractive investment option (Figure 1). MBS issued by Ginnie Mae are guaranteed by the full faith and credit of the United States and MBS issued by other federal agencies are also considered safe from default risk.[6] It is a liquid market with average daily trad-

[6] Unrated federal agency securities are generally treated as if they carry the same implicit rating as the United States. As of the date of this publication, the United States has assigned credit ratings of "AA+" from Standard & Poor's, "Aaa" from Moody's Investors Service and "AA+" from Fitch.

ing volume exceeding $240 billion in 2022, over $2 trillion issued on average annually since 2012 and more than $10.6 trillion outstanding in the secondary market.[7] Yields are typically higher than Treasuries, due to the possibility of prepayment and complexity of the credit structure.

ASSET-BACKED SECURITIZATION

Asset-backed commercial paper (ABCP) first appeared in 1983 as a new type of short-term debt security to finance the trade receivables of large corporations. Prior to this, commercial paper was issued unsecured, relying on the financial strength of the corporation. Asset-backed securitization expanded in 1985 when computer equipment leases were pooled together to be used as collateral for medium-term investment securities (ABS). Since then short-term ABCP and medium-term ABS have been used to securitize repayment streams from a variety of assets including but not limited to auto loans, credit cards, student loans, trade receivables, home equity loans, rate reduction bonds, tobacco settlements and assessments for clean energy. Both ABS and ABCP often carry some form of liquidity support or credit enhancement, such as bond insurance, to make them attractive to investors.

Structuring techniques are also employed to mitigate the credit risk profile of an ABS. An ABS structure could be overcollateralized or structured into tranches reflecting the credit quality of the underlying assets to help strengthen the ABS credit. For example, ABS using unsecured obligations, such as credit cards, may be structured so that the sponsor can add in new collateral if needed. In addition, the trust structure of ABS issuers provides a buffer from the credit risk posed by the corporate sponsor. In the event the corporate sponsor enters bankruptcy, the securitized assets would not be part of the bankruptcy estate.

Currently the top ABS issuance sectors consist of auto loans, credit cards, housing-related securities and those classified as "other", including loans and leases for boats, aircraft and manufactured housing as well as those with mixed asset categories. Figure 2 displays the composition of all ABS issuance in 2022 by sector.[8] Figure 3 shows the sector distribution of the $1.6 trillion of ABS outstanding in 2021.

RISK

Securitized investments are subject to standard investment risks, including market risk, derived from exposure to overall changes in the general level of interest rates; credit risk, the risk of loss due to the failure of the issuer of a security or failure of repayment by the underlying assets; and industry sector and headline risk, evident with subprime collateralized debt obligations (CDO) during the financial crisis of 2007-09. However, these securities are also subject to additional risk specific to their securitized structure. These structural risks were evident during the financial crisis when complex and opaque financial engineering impaired the ability of investors to thoroughly review these products.

MBS/ABS can be structured as a pass-through or pay-through security. These structures can impact the underlying cash flow of the assets so it is important to understand the potential disruptions in repayment that can affect their value.

Pass-through structures, used for most fixed rate Agency MBS, can be subject to prepayment when interest rates decline and the underlying mortgages are refinanced to a lower interest rate.

7 Figures obtained from SIFMA statistics for Structured Finance - www.sifma.org/research/statistics.aspx

8 Figures obtained from SIFMA statistics for Structured Finance - www.sifma.org/research/statistics.aspx "Other" does not contain CDOs. Data related to ABCP by sector is not available, however outstanding amounts for ABCP from 2006-2021 is provided in Appendix B.

Figure 2

ASSET-BACKED SECURITIES (ABS)
PERCENTAGE OF ISSUANCE BY SECTOR
2022 - $303 BILLION

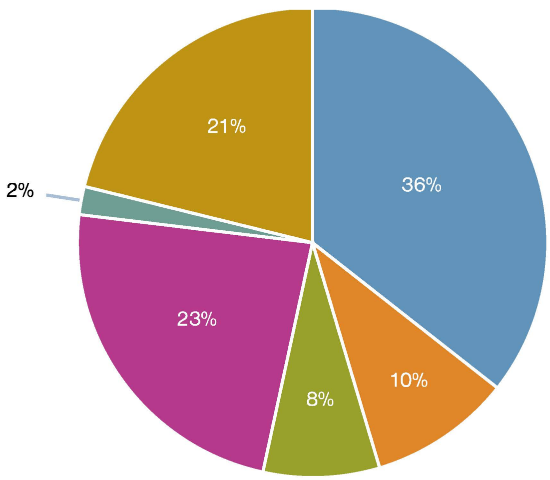
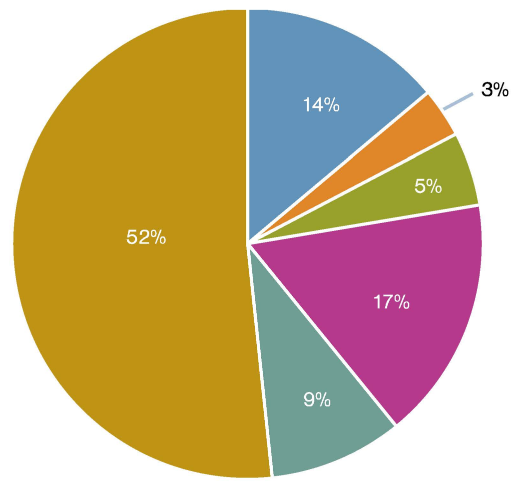


Figure 3

ASSET-BACKED SECURITIES (ABS)
PERCENTAGE OUTSTANDING BY SECTOR
AS OF QUARTER 4, 2021 - $1.6 TRILLION



Source: SIFMA Statistics

Due to the structure of a pass-through security, investors receive all of the payments collected, but in the event of a prepayment the security can be paid off faster than anticipated, impacting the duration of a local agency's portfolio. While also subject to prepayment risk, credit card and auto loan ABS are not as exposed to prepayment risk as much as MBS. This is due to shorter terms and lower loan amounts of the underlying assets.

Pay-through structures are also affected by prepayment risk especially collateralized mortgage obligations (CMO), which use MBS as the underlying assets. For example, if a CMO is issued with a sequential structure the incoming cash flows are separated into different payment streams to pay principal and interest on the senior tranche first while the subordinate tranches receive interest only until the senior tranche is fully repaid. The subordinate tranches are subject to a greater risk of prepayment than the first tranche since they mature later. If the security is a non-Agency CMO, it is also subject to greater risk of default

Pass-through structured securities represent a pro-rata ownership interest in the underlying asset pool. Investors are entitled to a proportional share of all principal and interest payments collected from the asset pool as the payments are received.

A collateralized mortgage obligation is secured by a pool of mortgage pass-through securities. The equivalent asset-backed pay-through structure is commonly referred to as a collateralized debt obligation, the security for which is derived from a pool of non-mortgage related underlying assets.

by homeowners since there is no federal support of the underlying mortgages.

Many pay-through structures also contain embedded options that can affect the value of the security. Before and after purchasing MBS/ABS investors should analyze embedded options using methods such as option-adjusted spread (OAS) to determine how these options increase or decrease the yield of a pay-through security when compared to a risk-free benchmark such as US Treasuries.[9] For example, if interest rates rise, a put option may be more valuable to an investor because it provides the flexibility to sell the security to obtain a higher yielding investment. Conversely, analysis of the value of any call options to the benefit of the MBS/ABS issuer should also be reviewed.

The credit quality of the underlying assets of a security can pose additional risk to an investor. While the majority of Agency issued MBS carry either a full or implied guarantee of the US Government, other securitized investments do not have a guarantee on the underlying assets. ABS presents a higher degree of risk to an investor because the underlying assets often use unsecured obligations of borrowers like consumer receivables (e.g., credit cards and student loans) with no collateral such as the title of an automobile or mortgage lien as a secondary source of repayment.

Non-Agency MBS which are secured by mortgage liens also carry some level of risk since these mortgages primarily consist of "jumbo loans" or sub-prime mortgages that do not qualify for a federal agency guarantee program.

During the financial crisis, some pay-through structures experienced full loss of value due to the default of third party insurers. During this time, investors may have focused on repayment streams instead of the credit quality of the underlying assets of the security. As a result rating agencies now review not only the underlying assets but the third parties involved in the transaction (servicers, insurers). Investors should employ this same level of review in their analysis of these investments. Prior to including MBS/ABS in its portfolio, a local agency should understand the structure of the security including the underlying cash flow of the assets, identify any potential disruptions in repayment, and assess the credit quality of the underlying assets. Investments in securitized products should only be entered into with a clear understanding of the potential risks involved and only if the local agency has the expertise to manage such investments.

Under pay-through structures, the issuer or special purpose vehicle retains ownership of the assets and divides the incoming cash flows into separate payment streams. The separated payment streams from the underlying assets are used to back different subcategories of securities called tranches.

INVESTMENT AUTHORITY

California's investment related statutes are prescriptive when it comes to authorizing local agency investments. If an investment is not specified in statute then it is not permissible. Section 53601 provides local agencies with the authority to purchase the following securitized investment products.

AGENCY MBS. Agency mortgage-backed securities are obligations issued by federal agencies and instrumentalities. Section 53601(f) allows local agencies to invest up to 100% of their portfolio in

[9] Refer to CDIAC publication *Issue Brief: Benefits and Limitations of Option-Adjusted Spread Analysis* for general guidance about what option-adjusted spread (OAS) is and how to interpret OAS values.

Agency MBS without restriction. CDIAC's Local Agency Investment Guidelines, however, recommend local agencies institute restrictions that recognize the different characteristics and risk profile of Agency debt instruments, including those issued as MBS and ABS.[10] Local agencies should also consider implementing concentration limits for Agency issued MBS/ABS similar to the 20% limit contained in 53601(o) described herein:

ABCP. Asset-backed commercial paper is authorized under Section 53601(h), which limits investments in commercial paper to those of "prime" quality requiring the highest letter and number rating provided by a nationally recognized statistical rating organization (NRSRO). Section 53601(h) requires that the "issuing" entity must be:

- organized within the United States as a special purpose corporation, trust, or limited liability company.
- have program wide credit enhancements including, but not limited to, overcollateralization, letters of credit, or a surety bond.
- have commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

Furthermore, eligible commercial paper is limited to a maximum maturity of 270 days or less. Local agencies that have less than $100 million of investment assets under management, may invest no more than 25% of their surplus funds in eligible commercial paper and those that have $100 million or more of investment assets under management may invest no more than 40% of their moneys in eligible commercial paper. A local agency may invest no more than 10% of its total investment assets in the commercial paper and the medium-term notes of any single issuer. An exception to this section exists for counties, the City and County of San Francisco and the City of Los Angeles – all of which may invest in commercial paper pursuant to the concentration limits in Section 53635.

PRIVATE ISSUE MBS/ABS. Mortgage-backed securities and medium-term asset-backed securities (also known as term securitizations) not issued or guaranteed by an agency or issuer identified in 53601 (b) or (f) that are authorized under Section 53601(o) include:

- mortgage passthrough security, collateralized mortgage obligation, mortgage- backed or other pay-through bond, equipment lease-backed certificate, consumer receivable passthrough certificate, or consumer receivable-backed bond.
- rated in a rating category of "AA" or its equivalent or better by an NRSRO and have a maximum remaining maturity of five years or less.

In addition, this section limits local agencies to investing no more than 20% of a local agency's portfolio in private issue securitized debt.

While permissible in government code, it should be noted that a local agency can have a more stringent investment policy that does not allow for the purchase of these securitized investment products.

FEDERAL LANDSCAPE FOR MBS/ABS

It is important to note that securitized investment products were implicated in the financial crisis. According to the Financial Crisis Inquiry Commission, although the vulnerabilities that created the potential for crisis were years in the making, it was the collapse of the housing bubble which led to a full-blown crisis in the Fall of 2008.

"Trillions of dollars in risky mortgages had become embedded throughout the financial system, as mortgage-related securities were packaged, repackaged, and sold to investors around the world. When the bubble burst, hundreds of billions of dollars in losses in mortgages and mortgage-related securities shook markets as well as financial institutions that had significant expo-

[10] California Debt and Investment Advisory Commission, *Local Agency Investment Guidelines: Update for 2024*, 23.07, 2023.

sures to those mortgages and had borrowed heavily against them."[11]

In response to the financial crisis a number of federal actions and reforms were enacted affecting the MBS and ABS markets.

THE IMPACT OF CONSERVATORSHIP ON THE MBS MARKET. In 2008, the Federal Housing Finance Agency (FHFA) placed Fannie Mae and Freddie Mac in conservatorship after deterioration in the housing markets left them unable to operate without the intervention and financial support of the US Department of the Treasury. As conservator, FHFA initially focused on reducing losses, operational and credit risk, and stabilizing the mortgage and housing markets. Once the Fannie Mae and Freddie Mac returned to profitability, FHFA turned its focus to more long-term issues. FHFA's director holds the authority to terminate the conservatorship, however, currently there is no time frame as to when the conservatorship may end.

RULES OF INTEREST FOR SECURITIZED ASSETS. Since 2010, the SEC has proposed and adopted a number of rules regarding asset-backed securities often as directed by the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).

Below are some of the requirements enacted by the SEC that apply to registered corporate ABS, including non-agency MBS:

CREDIT RATINGS. The Dodd Frank Act requires the SEC to modify regulations to remove any references to or requirement of reliance on credit ratings and to substitute in such regulations a standard of credit-worthiness the SEC determines as appropriate.

DISCLOSURE. ABS issuers are required to provide asset-level information in a standard electronic format to enable easier investor analysis, disclose and review the underlying assets, and provide ongoing reporting.

RISK RETENTION. Corporate sponsors are required to satisfy a risk retention obligation by retaining 5% of the fair value of all ABS interests in the issuing entity that are issued as part of the securitization transaction. Agency MBS meet risk retention requirements for as long as the Agencies are guaranteed by or operate under the conservatorship or receivership of FHFA with capital support from the United States.[12]

CONCLUSION

Local agencies should exercise caution when considering investing in mortgage-backed securities and asset-backed securities. At a minimum, they should analyze the different characteristics and risk profile of the MBS/ABS transactions, collateralized mortgage obligations or other pay-through securities prior to purchasing. They should fully review and understand the complexity of the structured investments products and the underlying assets used to securitize those products even if the security carries an implied or explicit guarantee of the United States.

In light of evolving complexities in the securitization markets and related federal regulatory actions, local agencies should consider incorporating policies and procedures that address risk analysis, credit rating reliance, asset class restrictions and portfolio concentrations related to securitization investment products allowed under Government Code Sections 53601(f), (h), and (o).

---

[11] Financial Crisis Inquiry Report, Financial Crisis Inquiry Commission, pg xvi, January 2011. www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf.

[12] Asset-Backed Securities, U.S. Securities and Exchange Commission, www.sec.gov/spotlight/dodd-frank/assetbacked-securities.shtml.

ACKNOWLEDGEMENTS

This issue brief was written and updated by Tara Dunn and edited by Angelica Hernandez. Special thanks to Thomas Williams, CFA, Investment Officer, City of San Diego; Martin Cassell, CFA, Chief Executive Officer and Chief Investment Officer, Chandler Asset Management; and Jeff Probst, CFA, Vice President and Portfolio Manager, Chandler Asset Management for their important contributions to this report.

ADDITIONAL CDIAC RESOURCES ON SECURITIZED INVESTMENTS

Local Agency Investment Guidelines

A Step-by-Step Examination of Public Investment Securities Webinar Series:

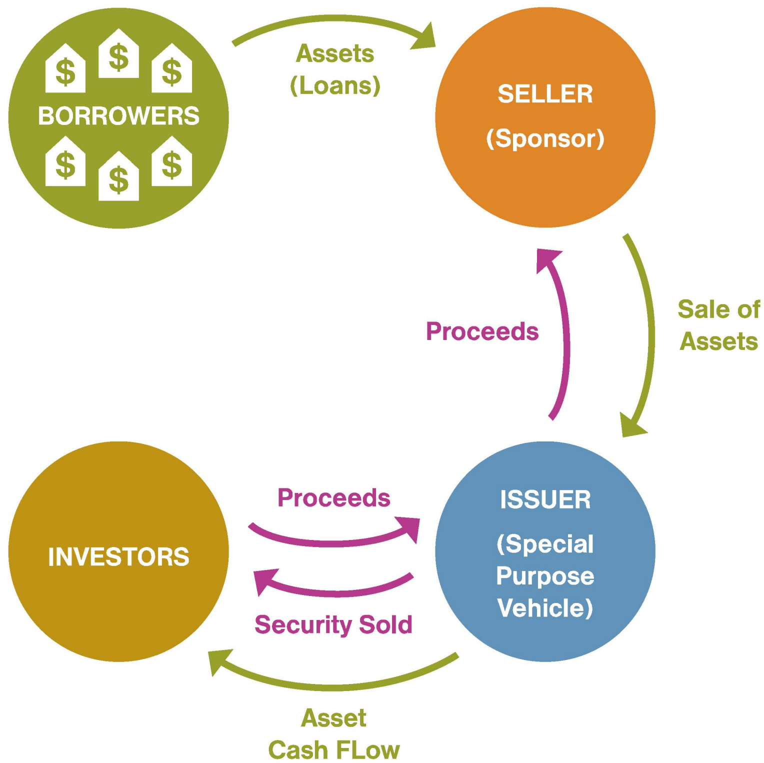
Webinar 2: Agencies (June 17, 2015)

Webinar 4: Money Markets; Part 1: Banker's Acceptances, Commercial Paper (July 8, 2015)

Webinar 6: Asset-Backed Securities, Mortgage-Backed Securities, Collateralized Mortgage Obligations (Sept 2, 2015)

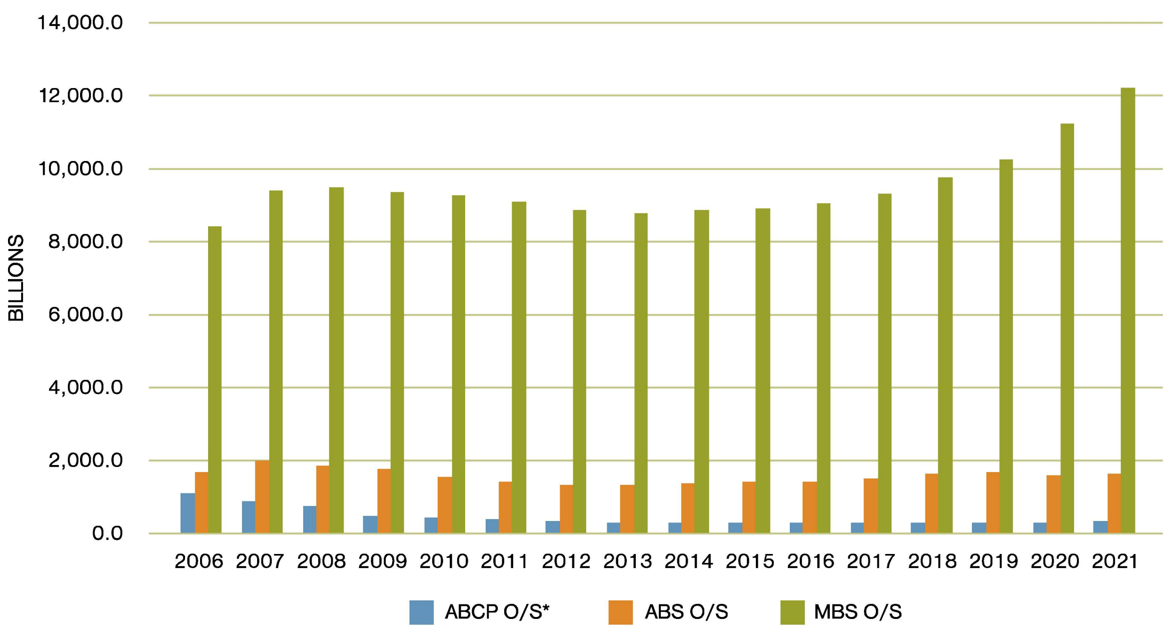
APPENDIX A

BASIC SECURITIZATION STRUCTURE



APPENDIX B

ASSET-BACKED COMMERCIAL PAPER, ASSET-BACKED SECURITIES AND MORTGAGE-BACKED SECURITIES OUTSTANDING, 2006 - 2021



Source: SIFMA Statistics

CDIAC

CALIFORNIA DEBT AND INVESTMENT
ADVISORY COMMISSION

901 P Street, Room 142-A, Sacramento, CA 95814
p 916.653.3269 • f 916.654.7440
cdiac@treasurer.ca.gov
www.treasurer.ca.gov/cdiac