Issue Brief:

Securitized Investments

CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION | CDIAC No. 16.05

CALIFORNIA DEBT AND INVESTMENT ADVISORY COMMISSION

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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 securitized markets.

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 2015, issuance of MBS and ABS by both private issuers and federal agencies exceeded $1.9 trillion. As of 2015 there was $10 trillion of outstanding MBS and ABS, including more than $7 trillion issued by federal agencies[3] (Appendix B).

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

[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.

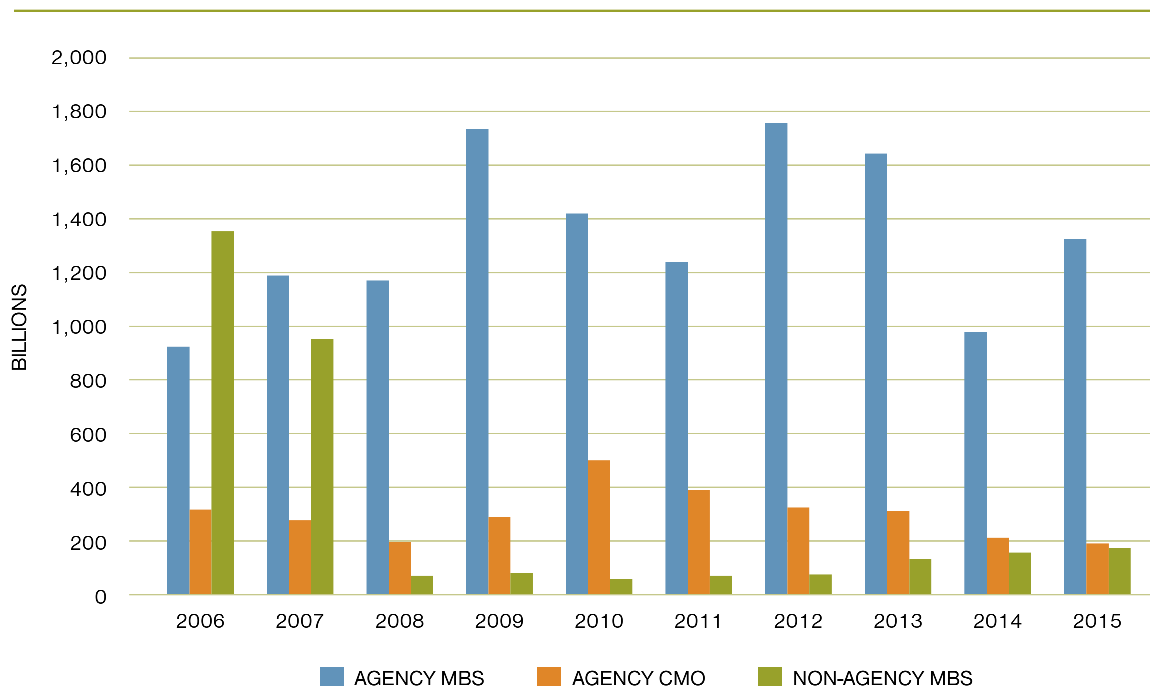
[3] Figures obtained from SIFMA statistics for Structured Finance - www.sifma.org/research/statistics.aspx.

[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)
AGENCY MBS, AGENCY CMOS AND NON-AGENCY MBS, ISSUANCE AMOUNTS, 2006-2015



Source: SIFMA Statistics

quality due to their explicit government backing 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 $40 billion by 2008 (Figure 1). Since the financial crisis, non-agency MBS have consisted mostly of high-grade non-conforming residential mortgage loans, known as "jumbo loans," that exceed the maximum loan value restrictions for Agency debt.

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 "AAA" from Fitch.

ing volume exceeding $11 billion in 2015, over $1 trillion issued annually and more than $8.7 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 2015 by sector.[8] Figure 3 shows the sector distribution of the $795 billion of ABS outstanding in 2015 with a credit rating of “AAA” or “AA”, the minimum rating required for local agency investment.

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; 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

[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 and credit rating is not available, however outstanding amounts for ABCP from 2006-2015 is provided in Appendix B.

Figure 2

ASSET-BACKED SECURITIES (ABS)
PERCENTAGE OF ISSUANCE BY SECTOR
2015 - $194 BILLION

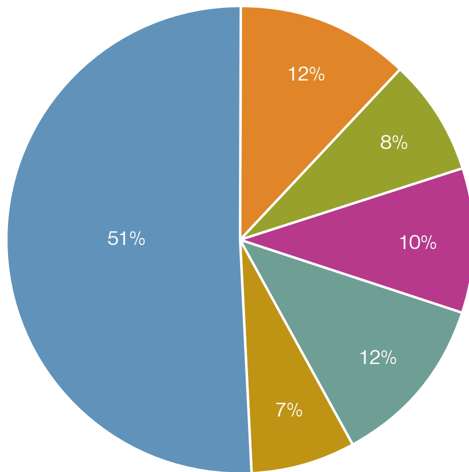
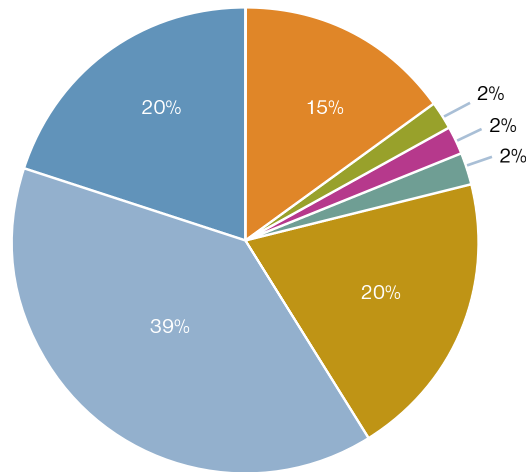


Figure 3

ASSET-BACKED SECURITIES (ABS)
PERCENTAGE OF AAA/AA OUTSTANDING
BY SECTOR
AS OF QUARTER 4, 2015 - $795 BILLION



AUTOMOBILE | CREDIT CARD | EQUIPMENT | HOUSING | OTHER | STUDENT LOANS | CDOs

Source: SIFMA Statistics

mortgages are refinanced to a lower interest rate. 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

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.

they mature later. If the security is a non-Agency CMO, it is also subject to greater risk of default 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. 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 percent of their portfolio in in 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 instru-

ments, including those issued as MBS and ABS.[9] Local agencies should also consider implementing concentration limits for Agency issued MBS/ABS similar to the 20 percent 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 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 may invest no more than 25 percent of their surplus funds in eligible commercial paper and may not purchase more than 10 percent of the outstanding commercial paper 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(a).

PRIVATE ISSUE MBS/ABS. Non-agency mortgage-backed securities and medium-term asset-backed securities (also known as term securitizations) 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 with a maximum of five years' maturity.
- issued by an issuer having an "A" or higher rating for the issuer's debt as provided by an NRSRO.
- rated in a rating category of "AA" or its equivalent or better by an NRSRO.

In addition to the types of medium-term securitized debt, minimum rating requirement for the issuer of the security and of the securities, this section requires a limit of no more than 20 percent on the amount of securitized debt that a local agency's portfolio can contain.

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.

ISSUER RATING REQUIREMENT. Securities purchased pursuant to Section 53601(o) must be rated in the "AA" category or higher by an issuer rated "A" (or equivalent) or better by an NRSRO. However, these securities in the current market carry a credit rating based on the quality of the underlying financial assets. The Special Purpose Vehicle or issuer that issues the securitized debt may not be assigned a credit rating. Without an issuer rating (not the sponsor's rating) of A or higher a securitized asset would not be a permissible investment for a local agency.[10] A local agency should be aware that the statute specifies issuer not sponsor with regard to the rating requirement.

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[9] California Debt and Investment Advisory Commission, *Local Agency Investment Guidelines: Update for 2016*, 16.04, 2016.

[10] The trust structure of securitization is intended to insulate investors from the corporate credit risk of the seller (sponsor or originator) and also provide a way for the corporate entities to move assets off their balance sheets. When the SPV (issuer) purchased the collateral (loans) from the sponsors, the sponsor no longer retains liability for those assets and therefore shifts the risk of the repayment from those assets to investors so the rating of the sponsor would have no bearing on the credit quality of the securitized asset.

The issuer rating requirement was added in 1992 by AB 3576 (1991, Umberg) to address concerns that MBS/ABS transactions involve highly complex financial relationships that some jurisdictions may not have the expertise to manage.[11] In light of the recent market crisis, the Securities Exchange Commission (SEC) in 2010 began a broad effort to remove references to credit ratings provided by a nationally recognized statistical rating organization from SEC rules in order to reduce the risk of investor reliance on credit rating references (see Federal Landscape for MBS/ABS below). CDIAC cautions local agencies that the current language contained in 53601(o) requiring the MBS/ABS issuer to have a minimum credit rating may preclude certain MBS/ABS as an eligible investment.

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 exposures to those mortgages and had borrowed heavily against them."[12]

In response to the financial crisis a number of federal actions and reforms have been 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. Ultimately Congress will determine how long the conservatorship will continue.

In May 2014, FHFA released its 2014 Strategic Plan updating the implementation of its obligations as conservator of Freddie Mac and Fannie Mae. The plan's three goals are to maintain foreclosure prevention activities and credit availability for national housing finance markets; reduce taxpayer risk through increasing the role of private capital in the mortgage market; and build a new securitization infrastructure adaptable for use by other participants in the secondary market in the future. Due to some of the goals of conservatorship, the traditional Agency market could experience some change.

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

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[11] The original language of AB 3576, as introduced, would have allowed local agencies to invest in MBS/ABS that were eligible for investment by member banks of the Federal Reserve. Member banks of the Federal Reserve include National Banks and state-chartered banks. Currently, National Banks may invest up to 25 percent of capital and surplus in marketable investment grade securities that are fully secured by interests in a pool of loans to numerous obligors and in which a national bank may invest directly. Activities Permissible for a National Bank, Cumulative – Comptroller of the Currency, April 2012. AB 3576 added "equipment lease-backed certificate, consumer receivable passthrough certificate, or consumer receivable-backed bond" and "other pay-through bond" to 53601 (o).

[12] Financial Crisis Inquiry Report, Financial Crisis Inquiry Commission, pg xvi, January 2011. http://cybercemetery.unt.edu/archive/fcic/20110310173545/http://c0182732.cdn1.cloudfiles.rackspacecloud.com/fcic_final_report_full.pdf

inconsistent with existing state law and as a result local agencies may find it more difficult to evaluate ABS eligibility under the existing investment language in 53601(o).[13]

Highlighted below are some of the newest rules that apply to SEC-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 five percent 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.[14]

The SEC has also proposed revisions to existing rules that are currently pending, such as:

FLOW OF FUNDS TRANSPARENCY. Proposal to require ABS issuers to provide a computer program showing the effect to the flow of funds, or "waterfall," provisions of the transaction. The proposal was designed to make it easier for an investor to analyze the ABS offering at the time of its initial investment decision and to monitor ongoing performance of the ABS.

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).

ACKNOWLEDGEMENTS

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[13] Dodd-Frank and the SEC each have different definitions of an asset-backed security. For example, the Dodd Frank Act defines an asset-backed security (Exchange Act-ABS) much broader than the definition of an asset-backed security in SEC's Regulation AB. The definition of an Exchange Act-ABS includes securities that are typically sold in transactions that are exempt from registration under Rule 144A of the Securities Act, such as collateralized debt obligations, as well as securities issued or guaranteed by a government sponsored entity, such as Fannie Mae and Freddie Mac and municipal securities that otherwise come within the definition. www.sec.gov/rules/final/2011/33-9175.pdf

[14] Credit Risk Retention, Release No. 34-73407, Securities and Exchange Commission www.sec.gov/rules/final/2014/34-73407.pdf

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:

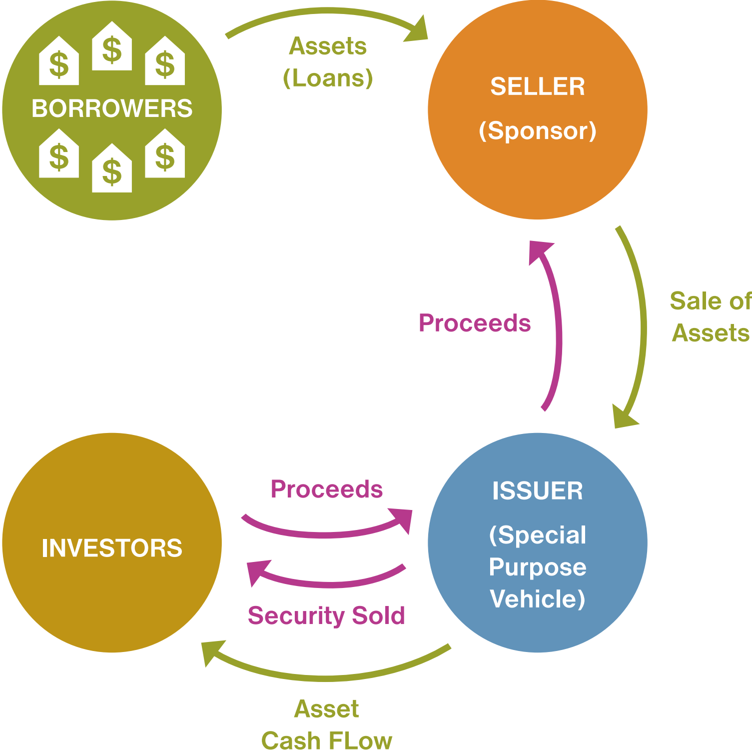
Webinar 2: Agencies (June 17, 2015)

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)

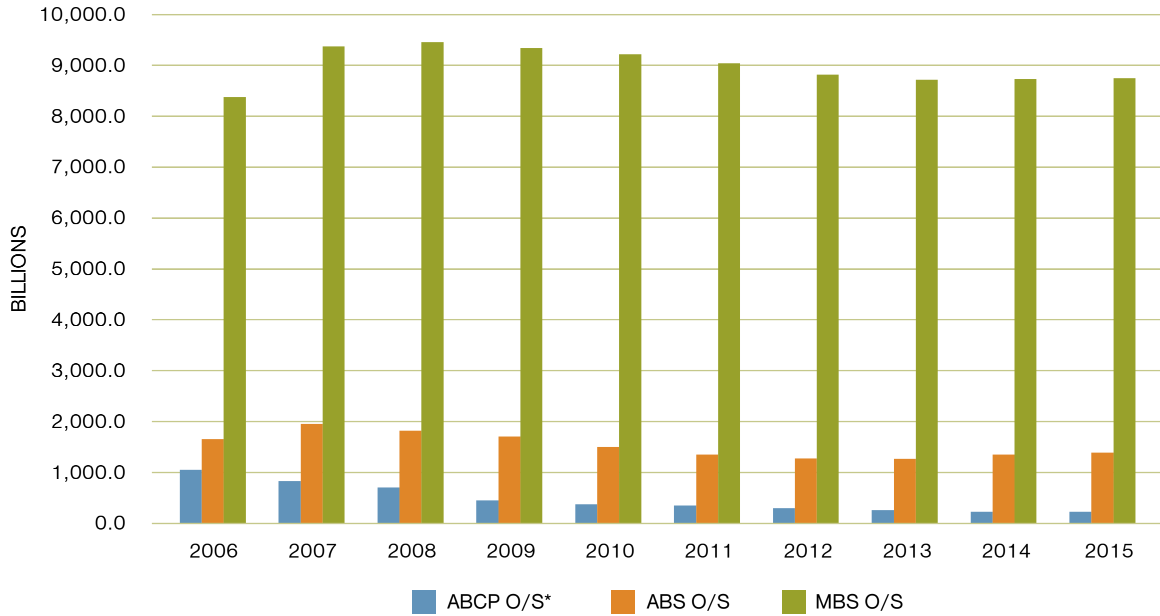
APPENDIX A

BASIC SECURITIZATION STRUCTURE



APPENDIX B

ASSET-BACKED COMMERCIAL PAPER, ASSET-BACKED SECURITIES AND MORTGAGE-BACKED SECURITIES OUTSTANDING, 2006 - 2015



Source: SIFMA Statistics and the Federal Reserve

*Figures for outstanding ABCP in 2006 were obtained from the Federal Reserve - https://research.stlouisfed.org/fred2/series/ABCOMP

CALIFORNIA
DEBT AND
INVESTMENT
ADVISORY
COMMISSION

915 Capitol Mall, Room 400, Sacramento, CA 95814
p 916.653.3269 • f 916.654.7440
cdiac@treasurer.ca.gov
www.treasurer.ca.gov/cdiac