NAIC National Association of Insurance Commissioners & The Center for Insurance Policy and Research

Capital Markets Special Report

The **NAIC's Capital Markets Bureau** monitors developments in the capital markets globally and analyzes their potential impact on the investment portfolios of US insurance companies. A list of archived Capital Markets Bureau Special Reports is available via the **index**

U.S. Insurers' Role in the Investment Ecology

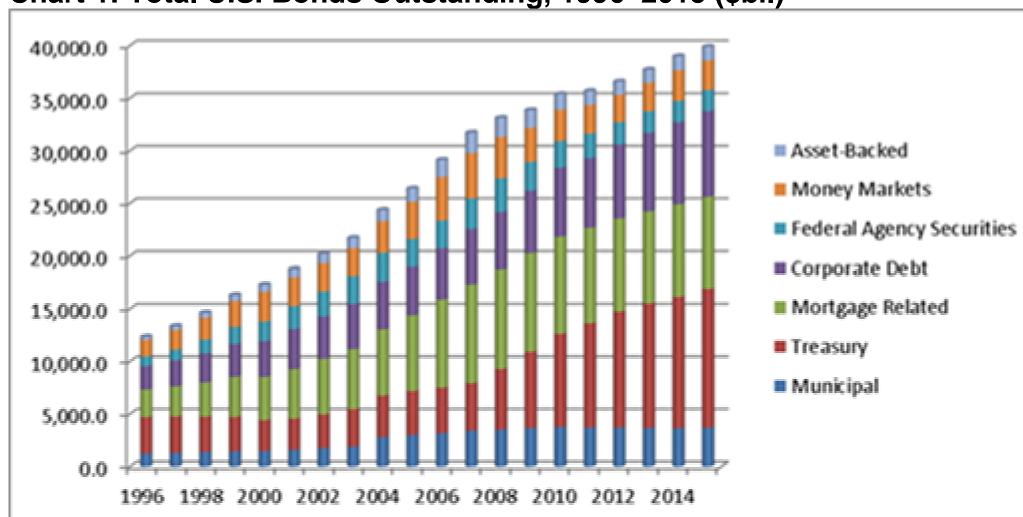
The approximately 5,000 U.S. insurance companies comprise a large proportion of institutional investors in the U.S. financial markets. As the NAIC Capital Markets Bureau has reported in prior special reports, life insurers are responsible for more than 60% of insurance company investment activity, and bonds represent the majority of the industry's investments—in particular, corporate bonds. Analysis of historical asset allocation among U.S. insurers shows that they generally "stick to their knitting"; i.e., any shifts in investments tend to be gradual (as they are typically buy-and-hold investors) and are usually due to changes in the current year's investment objectives. In recent years, these shifts have been representative of an attempt to reach for yield in a low interest rate environment, such as increases in investment in alternative assets. In this special report, we analyze insurer investments relative to the overall respective market issuances and outstanding inventories.

Insurer Role by Asset Type

The U.S. bond market is among the biggest in world financial markets, with $39.9 trillion outstanding as of year-end 2015 per the Securities Industry and Financial Markets Association (SIFMA). This includes municipals, U.S. Treasuries, mortgage-related, corporate, government agency-backed, money markets and asset-backed securities (ABS) (see Chart 1). As of year-end 2015, U.S. Treasuries were the largest bond class at $13.2 trillion, according to SIFMA data, followed by residential and commercial (agency and non-agency) mortgage-related debt ($8.7 trillion) and corporate debt ($8.1 trillion). New issuance in the various bond markets changes year-to-year due to the overall economic environment, as well as due to trends within the particular bond-type industry. Total bond issuance in the U.S. reached $6.4 trillion in 2015, an increase from $5.9 trillion in 2014; this compares favorably to $4.8 trillion in 2008.

The total outstanding U. S. bond market at mid-2015 was cited as being twice the aggregate size of the five largest foreign stock exchanges in Japan, China and Europe, according to the World Federation of Exchanges. Bonds have been associated with safety and predictability, but they are also vulnerable to reversals relative to price trends and trading disruptions. Market participants believe there is a "new" bond market since the financial crisis, with low interest rates having spurred massive debt issuance and investor risk-taking. When interest rates begin to rise, however, borrowing costs will, in turn, also increase. Heightened market volatility—resulting from increasing interest rates, the economic slowdown in China, depressed oil prices, negative interest yields on some government bonds, and a general uncertainty about the global economy—could have unfavorable consequences in the U.S. bond market.

Chart 1: Total U.S. Bonds Outstanding, 1996–2015 ($bil)



Source: SIFMA; bonds includes municipals, Treasuries, mortgage-related, corporate, federal agency securities and ABS.

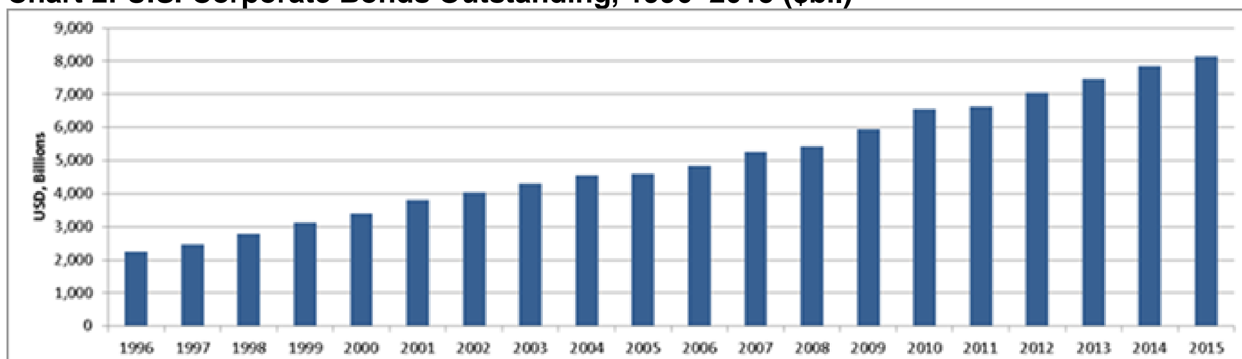
Bonds have been the majority of U.S. insurer investments, totaling almost $4 trillion in book/adjusted carrying value (BACV) at year-end 2015 (or 67% of total cash and invested assets). This represents an increase from $3.3 trillion in 2010, but was a decrease, in percentage terms, from 69.5%. Despite the slight decline, in percentage terms, over this four-year period, bonds have consistently been close to 70% of the U.S. insurance industry's total investments for the same time period. In addition, a vast majority of the industry's bond investments have been investment grade, based on the assigned NAIC designations, consistently exceeding 90% of total bonds. To the extent bonds are downgraded to below investment grade by the nationally recognized statistical rating organizations (NRSROs), notably for P/C companies, they would be carried at the lower of cost or fair value per the respective statutory accounting standards.

Corporate Bonds

Rising interest rates are expected to be "benign" for most corporate issuers, in terms of access to capital markets, according to the Standard & Poor's (S&P) U.S. corporate credit outlook for 2016. Almost 80% of corporate issuers had stable outlooks, with approximately 12% having negative rating outlooks for 2016 (as of Oct. 31. 2015), most of which were in energy and commodity-related sectors. S&P's outlook for U.S. corporate issuers in 2016 is cautious. Some sectors will be more vulnerable to increased borrowing costs, such as auto and homebuilding, which rely on consumer financing. S&P also expects financial volatility and liquidity risks to increase, making it difficult for some segments of the market to access credit, particularly stressed industry sectors and speculative borrowers. In addition, depressed oil prices and the economic slowdown in China continue to be viewed as a source of potential risk for certain U.S. corporate bond issuers. Despite increased market volatility, among other factors, S&P expects its rating outlook on most U.S. industries to remain stable in 2016.

As corporate bonds are the largest asset type among U.S. insurer investments, they were about 25% of the total U.S. corporate bond market at year-end 2015. As shown in Chart 2, total U.S. corporate bonds outstanding have steadily increased since at least 1996.

Chart 2: U.S. Corporate Bonds Outstanding, 1996–2015 ($bil)

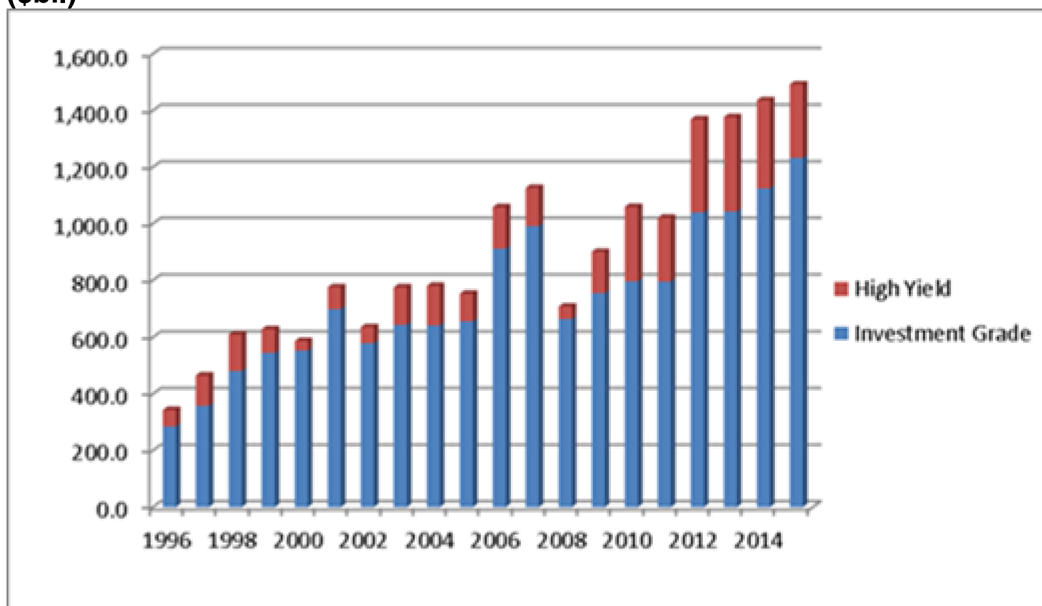


Source: SIFMA.

U.S. High-Yield and Investment Grade Corporate Bond New Issuance

Annual U.S. corporate high-yield bond issuance had not exceeded $147 billion until 2010, according to SIFMA data going back to 1996. It more than doubled that number in each of 2012, 2013 and 2014, but dipped to $260.5 billion in 2015. In 2012, new issuance of investment grade corporate bonds reached $1 trillion and continued growing to $1.2 trillion in 2015. As Chart 3 shows, the proportion of high-yield new issuance relative to overall corporate bond new issuance increased after the financial crisis. This is due to the low interest rate environment that persisted, enabling both investment grade and speculative issuers to refinance at attractive prices. Nevertheless, investment grade new issuance also increased as borrowers with good credit standing were able to easily access the capital markets (more so than speculative borrowers). Approximately 83% of new corporate bond issuance in 2015 was rated investment grade.

Chart 3: New Issuance of High-Yield and Investment Grade Corporate Bonds, 1996–2015 ($bil)



Source: SIFMA.

As measured by the Bank of America Merrill Lynch U.S. Corporate Master Index (which tracks the performance of U.S dollar-denominated investment grade-rated, publicly issued corporate debt) the effective yield (i.e., the annual rate of return associated with a periodic interest rate, taking into account compounding on the interest rate) on corporate bonds was 3.68% as of Dec. 31, 2015, compared to 3.21% as of Dec. 31, 2014, and 2.77% as of Dec. 31, 2012. The

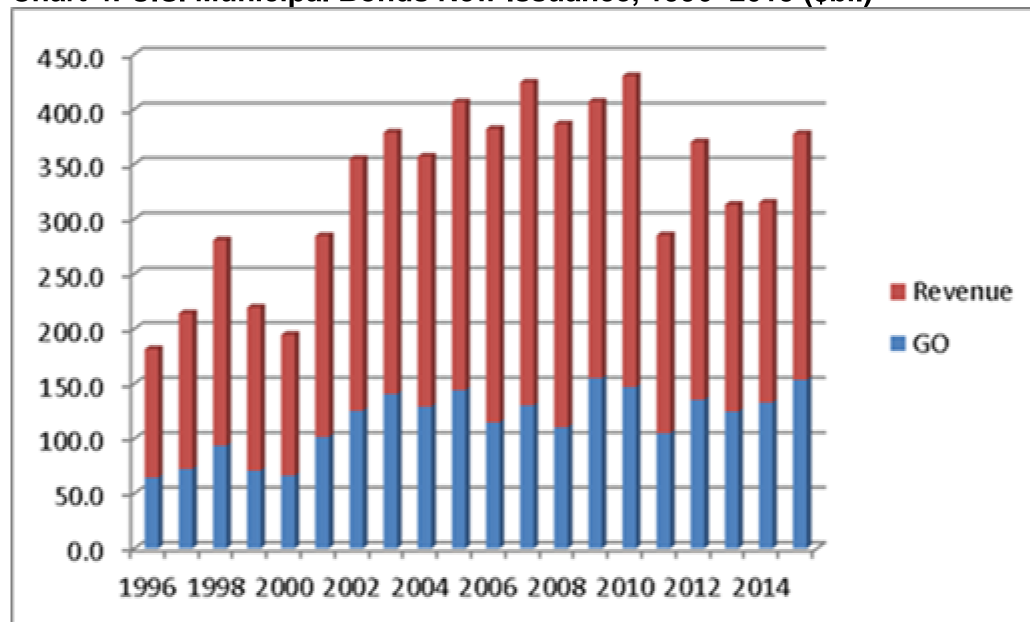
effective yield on high-yield corporate bonds, according to Bank of America Merrill Lynch U.S. High-Yield Master II Index (which tracks the performance of U.S. dollar-denominated below investment grade-rated, publicly issued corporate debt) was 8.76% as of Dec. 31, 2015, compared to 6.71% as of Dec. 31, 2014.

Municipal Bonds

Based on preliminary data, U.S. insurer exposure to municipal bonds was about $550 billion at year-end 2015 (14% of total bonds), a fraction of the overall U.S. municipal bond market. According to SIFMA, municipal bonds outstanding were $3.7 trillion at year-end 2015 ($3.6 trillion at year-end 2014). While municipal bonds are not the largest bond allocation for insurers overall, they are the largest for P/C companies. P/C companies have tended to be more active in the municipal bond market than life companies due to the tax-exempt status of most municipal bonds. Within the industry's total municipal bond exposure, about 53% (or approximately $290 billion) were revenue bonds, and about $201 billion were general obligation (GO) bonds as of year-end 2015.

SIFMA statistics show that issuance in the municipal debt market was $403.1 billion in 2015, an increase from $337.5 billion in 2014 and $334.9 billion in 2013. Total issuance in 2015 included $224.2 billion in revenue bonds (an increase from $182.3 billion in 2014) and $153.4 in GO bonds (an increase from $132.7 billion in 2013) (see Chart 4). In addition, almost 62% of 2015 municipal bond issuance was from refunding, or refinancing of existing bonds, up from 57% in 2014, with the balance coming from new capital.

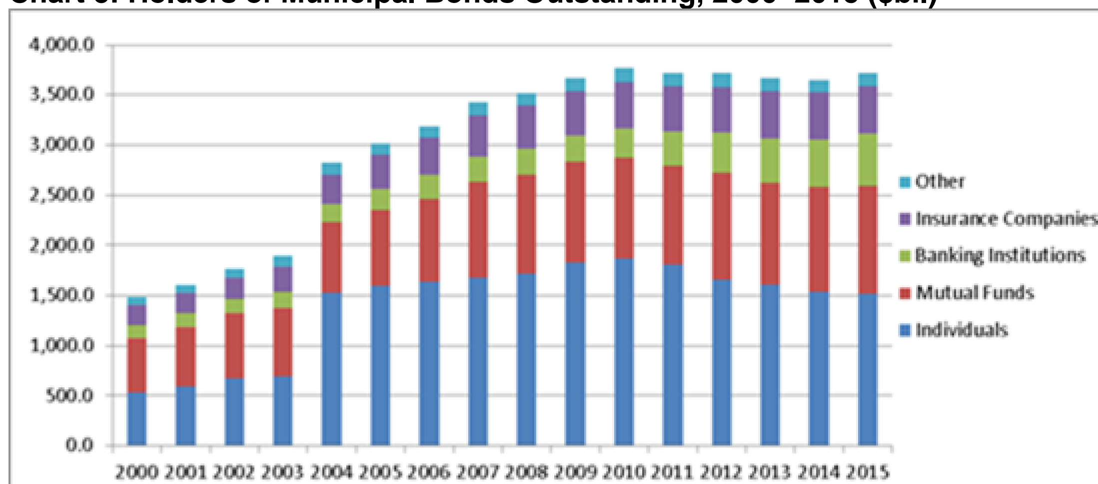
Chart 4: U.S. Municipal Bonds New Issuance, 1996–2015 ($bil)



Source: SIFMA.

Chart 5 shows the historical holders of municipal debt, with individual investors consistently being the largest, followed by mutual funds (which include mutual funds, money market funds, closed-end funds and exchange-traded funds). Within the insurance industry, P/C and life companies held approximately 14% of total municipal bonds outstanding in 2015. For the 2000 to 2015 time period, insurers (P/C and life companies) generally accounted for 11% to 14% of total municipal bond debt holdings.

Chart 5: Holders of Municipal Bonds Outstanding, 2000–2015 ($bil)



Source: SIFMA and Federal Reserve; insurance companies include P/C and life insurers.

Per data compiled by Bloomberg and Bank of America Merrill Lynch, risk-adjusted returns for municipal bonds in 2015 exceeded returns on Treasuries, stocks, commodities and corporates. Total one-year return, as of Dec. 31, 2015, and as measured by the S&P Municipal Bond Index, was 3.32% versus 1.38% for the S&P 500, 0.10% for the S&P 500 Investment Grade Corporate Bond Index, -2.48% for the S&P High-Yield Corporate Bond Index, and 0.09% for the S&P/BGCantor U.S. Treasury Bill Index. The municipal bond market, which is comprised of many highly rated issuers, offers a unique tax advantage and historically high tax-adjusted returns, and is expected to continue to stay the course in 2016, despite a few troubled issuers.

Structured Securities: ABS, CDOs, CLOs, RMBS and CMBS

According to S&P research, U.S. structured securities new issuance was $436 billion in 2015 (see Table 1), representing a 6% decrease from $462 billion in 2014. For the purpose of this report, structured securities include ABS, collateralized debt obligations (CDOs), collateralized loan obligations (CLOs), agency and non-agency residential mortgage-backed securities (RMBS) and commercial mortgage-backed securities (CMBS). S&P forecasted a new issuance year-over-year decline of about 15% to $370 billion in 2016 in structured securities (not including agency-backed RMBS); through the first quarter of 2016, it was $72 billion [according to S&P: $40 billion in ABS; $18 billion in CMBS; $7 billion in CLOs (note that since the financial crisis, predominantly all CDO/CLO new issuance has been in CLOs); and $7 billion in RMBS-related (not including agency-backed RMBS)]. Market volatility and potential for increasing interest rates are factors that could dampen structured securities new issuance in 2016, along with uncertainty regarding the impact of risk-retention rules stemming from the federal Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act).

Table 1: U.S. Structured Securities Issuance By Sector ($bil)

U.S. Structured Finance Issuance As of March 31, 2016

(Bil. $)

	2014	2015	YTD 2015	YTD 2016	2016F
ABS	$206	$183	$58	$40	$190
CMBS	$94	$101	$27	$17	$80
CLO	$124	$98	$31	$7	$50-$60
RMBS-Related	$38	$54	$15	$7	$50
Total	$462	$436	$131	$72	$370

RMBS-Related includes prime, reperforming/nonperforming, rental bond, servicer advances, and risk sharing deals.
Sources: Standard & Poor's Ratings Services, S&P Capital IQ LCD, Bloomberg, Commercial Mortgage Alert.

Source: Standard & Poor's

At year-end 2015, the U.S. insurance industry invested in $274.5 billion BACV in ABS and other structured securities (where other structured securities include CDOs/CLOs) based on preliminary calculations, which was 7% of total bond exposure. In comparison, ABS and CDOs/CLOs outstanding in the total U.S. market at year-end 2015 were $1.3 trillion, according to SIFMA data.

The majority of the U.S. insurance industry's exposure to ABS has traditionally been with consumer ABS collateralized by auto loans, followed by credit card receivables; however, there is also a portion of ABS collateralized by small business loans and other types of receivables such as time share, structured settlements and royalty payments in insurer investment portfolios. Some ABS are also securitized by commercial receivables such as equipment leases.

U.S. insurers have invested in some CDOs, but mostly exposure to this bond type has been with CLOs. Insurer exposure to CLOs has increased in recent years due to their attractive yields and relatively strong performance of the underlying bank loan collateral.

ABS

Total ABS exposure held by U.S. insurers was about $212 billion BACV in 2015, based on preliminary numbers, which was 28% of the $747.3 billion in total U.S. ABS outstanding, according to SIFMA. Note that the asset types SIFMA includes as part of its definition of ABS may differ slightly from what is reported as ABS by U.S. insurers, so it may not be an *exact* comparison, but it is still statistically meaningful and relevant. Despite an increase in U.S. ABS outstanding over the years, inventory is nowhere near the peak of $903.5 billion in 2007. Generally speaking, ABS have been deemed "survivors" of the financial crisis, having experienced minimal losses compared to other structured securities, such as RMBS and CDOs. U.S. insurers reported a combined BACV of $42.2 billion in auto-related, credit card and student loan ABS for 2015 (on a preliminary basis), or a 10% decrease over 2014. Life companies, similar to 2014, held the largest portion of that total, with BACV of $22.7 billion (54% of total

insurer ABS exposure), followed by P/C companies, which reported BACV of $16.6 billion (39%). The remainder was held by health, fraternal and title companies. Insurers comprise a large proportion of the overall ABS investor base.

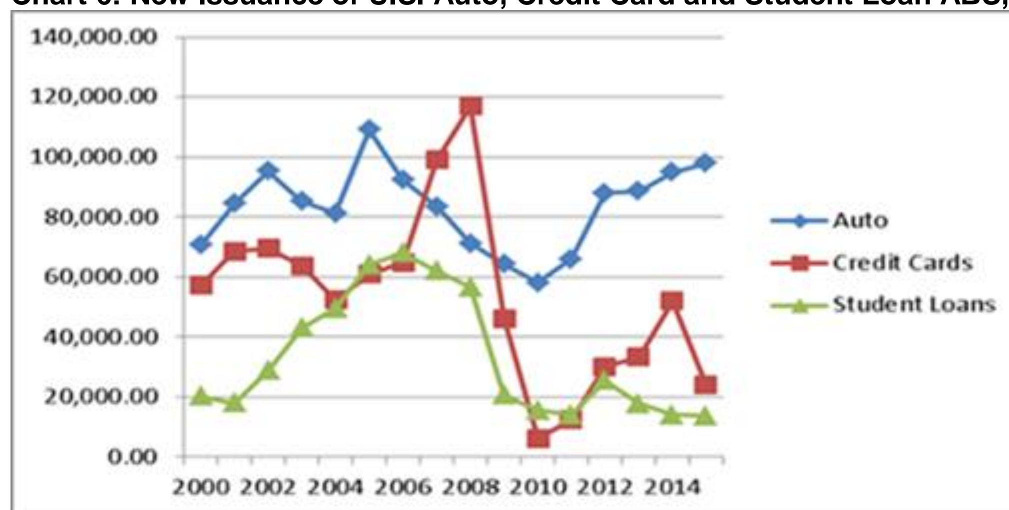
In 2015, among the three aforementioned consumer collateral types, the largest exposure for insurers was with auto-related ABS, at $20.1 billion, compared to $23.0 billion in 2014 (see Table 2). Credit card ABS holdings were the second-largest at $13.6 billion, followed by student loan ABS at $8.4 billion. As Table 2 shows, insurer investments in these three ABS categories (on an aggregate basis) decreased by about 10% from 2014 to 2015.

Table 2: U.S. Insurer ABS Collateral Types ($bil BACV)

	2015	2014
Auto Loans	$20.1	$23.0
Credit Card Receivables	$13.6	$15.8
Student Loans	$8.4	$7.7
Total	**$42.2**	**$46.5**

New issuance of ABS was $193.5 billion in 2015, a decrease from $225.3 billion in 2014, due in part to investor concerns over global economic growth and market volatility (especially pertaining to oil). Through February 2016, S&P research cited new issuance of U.S. ABS at $17 billion, approximately $11 billion of which was collateralized by auto loans. In 2015, auto ABS was approximately 50% of total U.S. ABS new issuance at $97.9 billion; ABS collateralized by credit cards and student loans accounted for 12% ($23.9 billion) and 7% ($13.5 billion), respectively. As demonstrated in Chart 6, new issuance with respect to these three consumer receivables/loan-backed securities trended downward post-financial crisis but then regained momentum (except for student loans, which has leveled off).

Chart 6: New Issuance of U.S. Auto, Credit Card and Student Loan ABS, 2000–2015 ($bil)

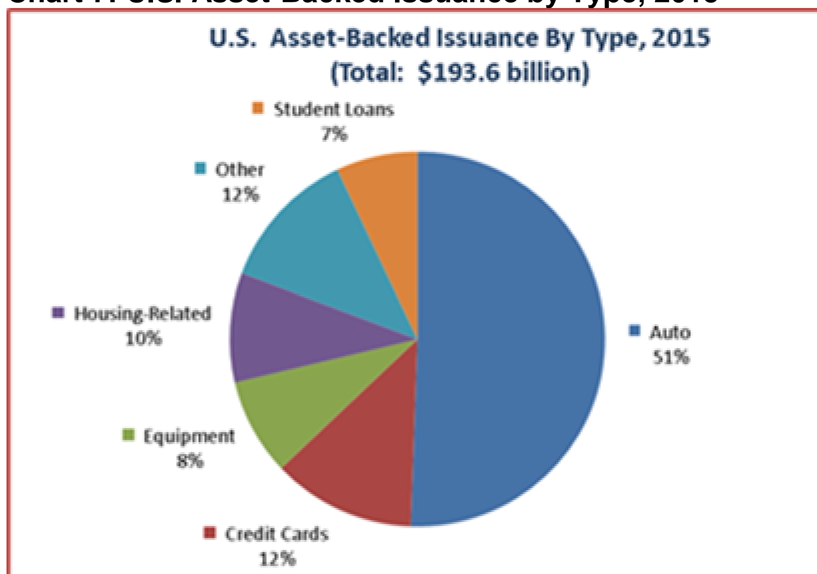


Source: SIFMA.

The allocation of new ABS issuance for 2015, by collateral type, is shown in Chart 7. Declines in new issuance were due in part to wider spreads on ABS in the fourth quarter of 2015 (due, perhaps, in part to the small bump in interest rates by the Federal Reserve), reducing the attractiveness of securitization for issuers. For credit card ABS, research by DBRS, a Canadian-based NRSRO, expect growth in new issuance at 10% over 2015 levels; S&P research expects new credit card issuance to be about $30 billion in 2016. For auto ABS, DBRS cites a continuing trend in strong new vehicle sales to support growth in this sector in 2016; per S&P research, ABS new issuance is expected to reach $75 billion in 2016, due in part to carry over from 2015 (i.e., transactions that were structured but did not yet close in 2015) and an increase in auto lending. Both S&P and DBRS expect student loan ABS to remain relatively flat for 2016, but private student loans (versus government loans, or Federal Family Education Loan Program

(FFELP)) are expected to increase substantially due to an increase in refinancing, and they are expected to comprise a more even proportion of student loan ABS collateral pools than in previous years.

Chart 7: U.S. Asset-Backed Issuance by Type, 2015



Source: SIFMA.

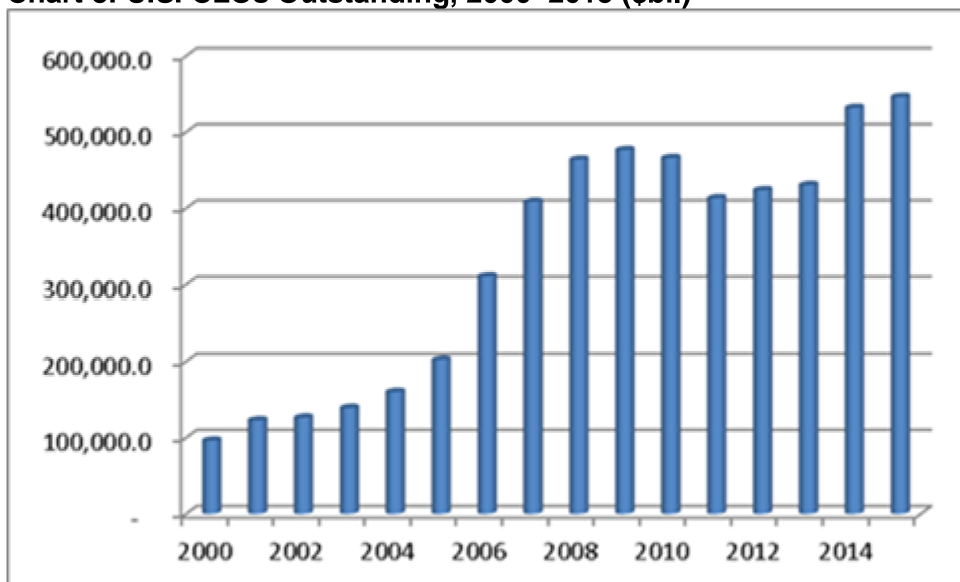
At the close of 2015, about $520 billion of the outstanding $1.4 trillion in U.S. ABS, per SIFMA data, was in ABS related to student loans, auto loans and leases, and credit cards. At year-end 2015, outstanding student loan ABS amounted to $202 billion (down from $218.1 billion in 2014); auto ABS was $190 billion (up from $179 billion); and credit card ABS was $129 billion (down from $137 billion in 2014).

According to DBRS, credit card ABS have experienced low charge-offs and delinquencies (i.e., almost at historical lows), down to around 2% for charge-offs and below 2% for delinquencies in 2015 compared to about 10% and 6% for charge-offs and delinquencies, respectively, in 2009. A trend in strong performance is expected to continue in 2016. Auto loan pools, on the other hand, are expected to have slightly higher losses in 2016 versus 2015, according to S&P, due to "continued market and interest rate volatility…potentially dampening both issuance and investor…" Both S&P and DBRS agree that student loan collateral is expected to remain steady in 2016, as delinquencies on private loans were at their lowest levels since pre-crisis and are expected to continue to decrease.

CLOs

U.S. insurer CLO exposure has been on an increasing trend post-crisis. CLOs held by insurers totaled approximately $45.7 billion in 2015 based on preliminary data, representing a significant increase from $13.7 billion in 2009. Year-end 2015 insurer exposure was about 8% of total CLOs outstanding in the U.S. market in 2015 ($546.2 billion), according to SIFMA data (see Chart 8). Citibank research cited that insurance companies worldwide were responsible for 20% of AAA-rated (highest credit quality) CLO investments in the U.S new-issuance market in 2014, up from 13% in 2013. Any concern regarding insurers' exposure to CLOs tripling over the past six years is mitigated by the fact that they have invested predominantly in senior classes of debt that are at the top of the capital structure.

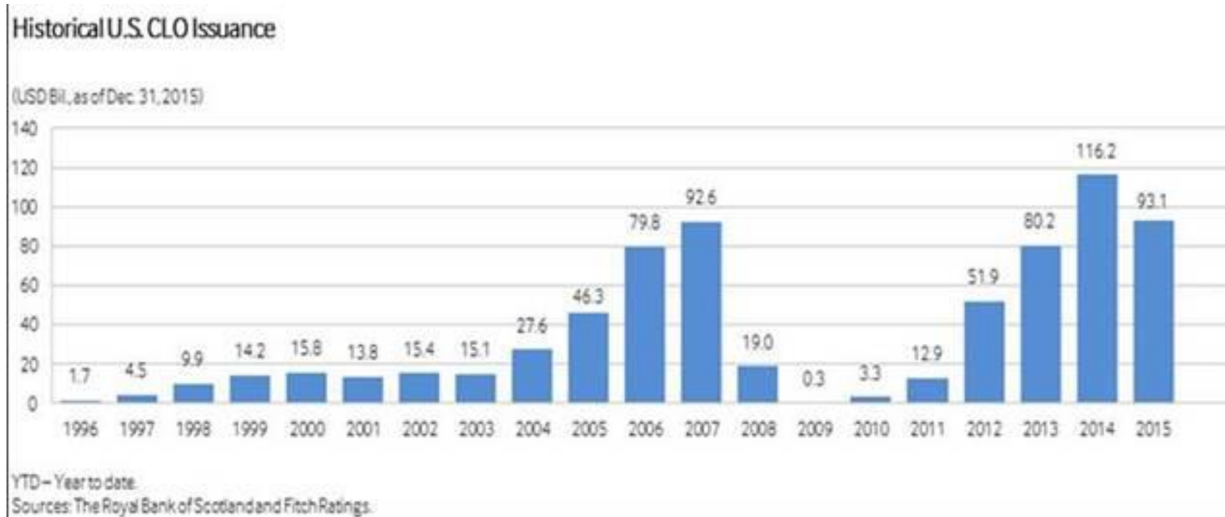
Chart 8: U.S. CLOs Outstanding, 2000–2015 ($bil)



Source: SIFMA.

Since the financial crisis, particularly since 2011, new CLO issuance steadily increased, reaching $116.2 billion in 2014—higher than the previous peak in 2007 of $92.6 billion—and then dropped in 2015 to $93.1 billion (see Chart 9). For 2016, CLO new issuance is not expected to be robust due to uncertainty regarding risk-retention rules recently implemented by the Dodd-Frank Act, as well as a small increase in LIBOR, making CLOs less attractive. In addition, along with a decline in new issuance, a consolidation among collateral managers is also expected in 2016. In January 2016, S&P forecasted total new issuance of U.S. CLOs to be about $70 billion in 2016; through early March, it was $3.8 billion. Spreads on AAA-rated CLO tranches (the highest credit quality) were about 150 bps to 155 bps over the three-month LIBOR between January and February 2016, according to data from Thomson Reuters LPC.

Chart 9: Historical U.S. CLO Issuance



Source: Fitch Ratings research: "Global CLO Market Trends Quarterly," published Jan. 19, 2016.

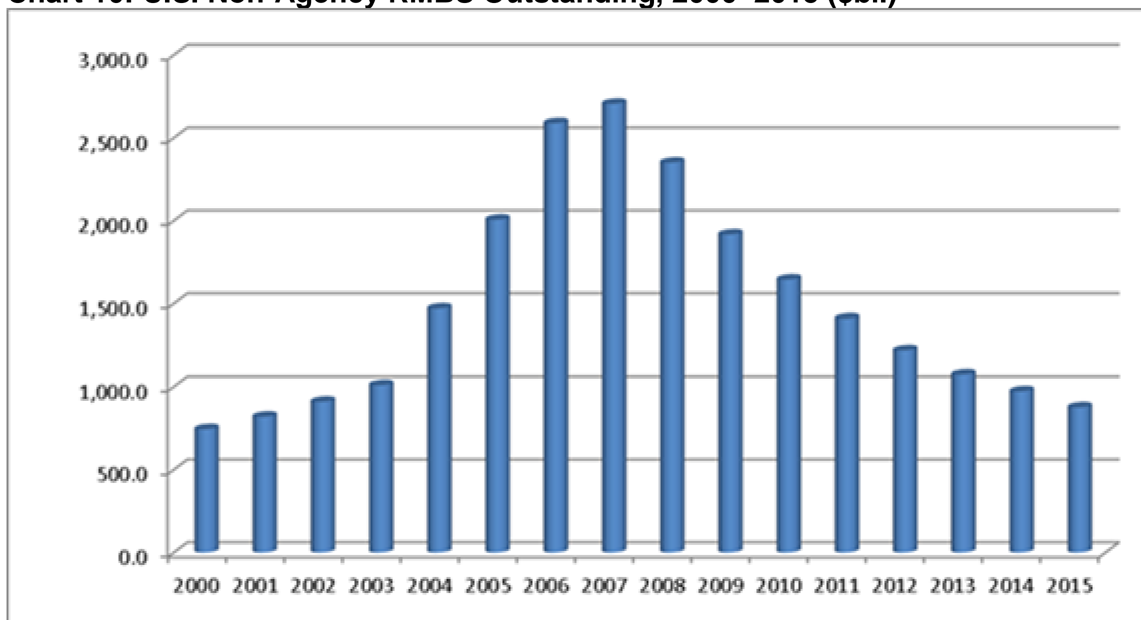
MBS

Agency and Non-Agency RMBS

U.S. insurer exposure to agency RMBS and non-agency (private label) RMBS was about $280 billion and $108 billion, respectively, at year-end 2015 (totaling approximately $388 billion),

representing about 7% of total U.S. insurer cash and invested assets, based on preliminary data. In comparison, SIFMA data identifies approximately $6.9 trillion in total agency RMBS outstanding (which includes Ginnie Mae, Fannie Mae and Freddie Mac MBS and CMOs) and $885 billion non-agency RMBS outstanding as of the same date. On its own, non-agency RMBS outstanding totaled $973 billion and $885 billion in 2014 and 2015, respectively (see Chart 10). Both insurer exposure and overall market outstandings of non-agency RMBS have been low compared to years prior to the financial crisis, due in part to low new issuance; non-agency RMBS new issuance has not returned in any meaningful amount since 2007.This means that insurer exposure to non-agency RMBS at year-end 2015 was a meaningful 15% of total U.S. market non-agency outstanding RMBS. As show in Table 3, U.S. insurer holdings of non-agency RMBS has significantly decreased. Note that the BACV amount of non-agency RMBS held by insurers has not changed much over the last few years—and inventory in the market has shrunk (due mostly to no new issuance)—so insurers seemingly hold a large proportion of this asset type.

Chart 10: U.S. Non-Agency RMBS Outstanding, 2000–2015 ($bil)



Source: SIFMA.

Table 3: U.S. Insurer Historical Non-Agency RMBS Exposure, 2009–2015 ($bil BACV)

2009	$ 150.5
2010	$ 128.9
2011	$ 123.1
2012	$ 117.2
2013	$ 113.6
2014	$ 113.9
2015*	$ 107.7

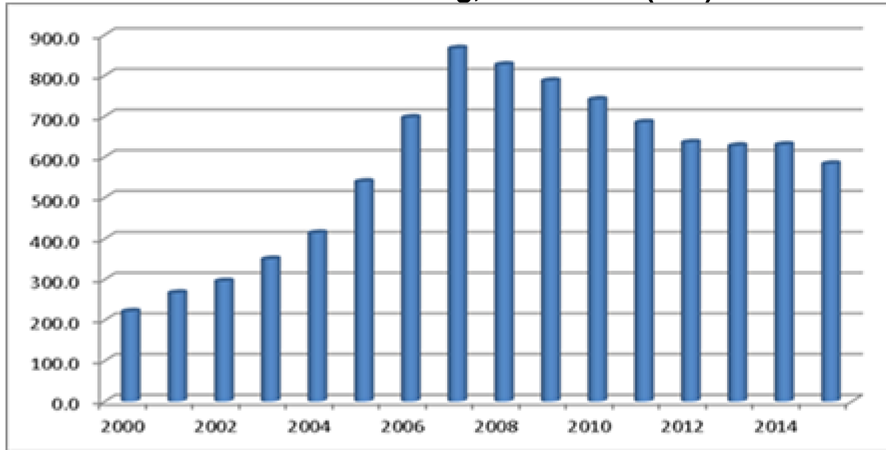
*Based on preliminary reported data.

CMBS

The overall U.S. CMBS market had $582.8 billion in outstanding debt at year-end 2015, an 8% decrease from $630 billion in 2014. In comparison, at year-end 2015, U.S. insurers had $166.1 billion in CMBS exposure (based on preliminary data), representing a significant 28.5% of the overall market for that time period. CMBS outstanding had been on a relatively steady decline

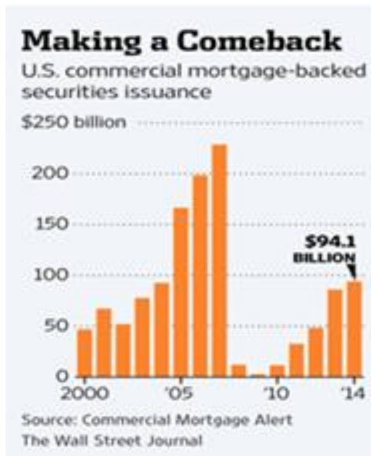
since reaching a peak of $866.8 billion in 2007, but has leveled off somewhat since 2012 (see Chart 11).

Chart 11: U.S. CMBS Outstanding, 2000–2015 ($bil)



The trend in outstanding CMBS is due in part to a significant decline in new issuance (see Chart 12) post- 2008 financial crisis. Since 2010, however (and unlike non-agency RMBS), CMBS new issuance has been increasing steadily, and was $100.1 billion in 2015. S&P research cites $9.5 billion in new issuance through mid-February 2016, with an expectation of more than $100 billion by year-end 2016 (nowhere near its record of $229 billion in 2007, however). Attractive yields (relatively) account for the recent increase in new issuance. Contributing to growth in the CMBS market has been an increase in active commercial mortgage lenders: in 2014 there were 35 lenders that contributed to CMBS transactions versus 18 in 2011. Some of these active lenders include insurance companies; in particular, life companies.

Chart 12: U.S. CMBS New Issuance, 2000–2014 ($bil)



S&P research shows that CMBS delinquencies remained flat, around 7% from 2014 to 2015. Prior to reaching this level, delinquencies had risen sharply post-crisis, from less than 1% in 2008 to about 10% in 2012. S&P expects CMBS delinquencies to improve in 2016, due in part to positive credit performance on commercial mortgage loans and a lower-than-expected default rate on matured loans.

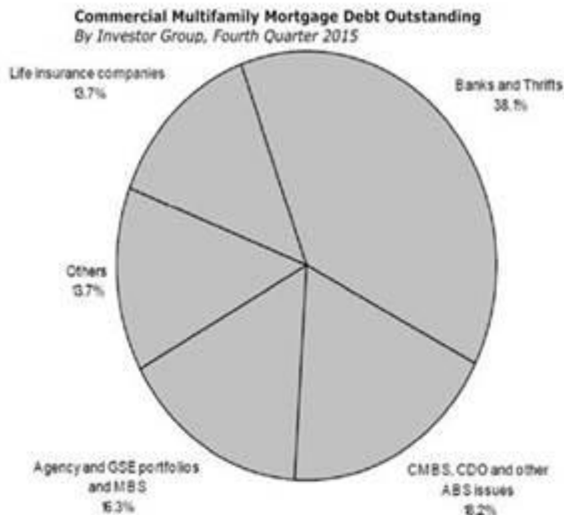
Commercial Mortgage Loans

The Mortgage Bankers Association (MBA) cited the level of outstanding commercial mortgage debt at $2.83 trillion at the end of the fourth quarter of 2015, which was about a 7% increase from $2.64 trillion in the fourth quarter of 2014. Over the past four years, outstanding commercial mortgage debt has increased year-over-year, growing from $2.37 trillion at the end

of 2011, with commercial mortgage loans accounting for a large component of this debt in each of these years.

The largest holders of commercial mortgage debt have been commercial banks and thrifts, which have historically held between 33% and 38% of the outstanding yearly totals since at least 2011 (see Chart 13). Life insurance companies have been significant investors in commercial mortgage loans for decades, and held approximately 14% of total commercial mortgage debt outstanding over the past several years.

Chart 13: Commercial Multifamily Mortgage Debt Outstanding, Fourth Quarter 2015



Source: MBA.

Commercial mortgage origination growth has fluctuated over the past several years. For example, from 2010 to 2011, originations increased 55% on what the MBA attributed to interest rates that were still low, and stabilizing real estate fundamentals; in 2012, origination volume increased 49%, buoyed by strength in the multifamily segment and improving property markets. In 2013, however, commercial mortgage loan originations contracted, and origination was down again in 2014, even as life insurance companies and government-sponsored entities reached record commercial mortgage loan origination volumes. Preliminary estimates by MBA for 2015 put the year's originations at 24% higher than 2014, and it expects commercial mortgage debt outstanding to continue to increase in 2016, rising to an estimated $2.9 trillion due to growth in the U.S. economy.

U.S. insurance industry exposure to commercial mortgage loans was estimated to be $386.9 billion BACV at year-end 2015 (about 6.6% of total cash and invested assets), which was about 14% of the $2.64 trillion in outstanding commercial mortgage loans. The overwhelming majority of commercial mortgage loans held by insurers (more than 90%) have consistently been with life companies. The increase in exposure from 2008 to 2009 (see Table 4) was due to lessened bank and CMBS involvement in commercial mortgages post-financial crisis, which, in turn, benefitted life companies. Since 2010, insurer exposure to commercial mortgage loans has been steadily increasing, after declining from 2008 to 2010.

Table 4: U.S. Insurance Industry Commercial Mortgage Loan Exposure, 2007–2015 ($bil BACV)

2007	$	292.9
2008	$	304.9
2009	$	295.3
2010	$	287.3
2011	$	302.2
2012	$	324.4
2013	$	342.1
2014	$	339.6
2015*	$	386.9

*Based on preliminary calculations.

According to MBA, delinquency rates for commercial loans have been low, due in part to "strong property fundamentals and values, coupled with still low interest rates." Five investor groups—including life companies—hold about 80% of all commercial mortgage loans. Historically, delinquencies for life company commercial mortgage loans (60 days or more past due) have been less than 1% going as far back as 1998, according to data from MBA. For the fourth quarter of 2015, delinquencies for life companies were 0.04%. Across the five investor types, delinquency rates were highest with CMBS, which were as high as 8.71% during the fourth quarter of 2012, but have since decreased to 4.73% as of the fourth quarter of 2015.

Other Asset Types

Common Equity

Common equity was approximately 12% of U.S. insurer total investments at year-end 2015 ($672.5 billion, based on preliminary data). While a large portion of U.S. insurers' common equity exposure is in affiliates, approximately $270 billion (40%) of total common equity exposure was unaffiliated at year-end 2015. P/C and life companies typically comprise the vast majority of unaffiliated common equity exposure (95% as of year-end 2015), with P/C accounting for about $234 billion of the total unaffiliated exposure (87%), and within just a few large companies. U.S. insurer equity exposure includes both domestic and foreign stocks. Given the depth and breadth of worldwide stock markets and varying valuations over time, insurer exposure is just a small fraction of global markets, but is impacted by positive or negative valuations. For year-end 2015, total return on the S&P 500 Index was 1.38% and, as of early March 2016, it was -2.2%.

Private Equity and Hedge Funds

U.S. insurance industry exposure to "other" invested assets (i.e., those that are not traditional long-term bond investments and are reported in Schedule BA), which include private equity and hedge funds, was $308.5 billion at year-end 2015, based on preliminary data, $133 billion of which was unaffiliated. The largest component of this unaffiliated exposure was in common stock joint ventures. In comparison, there was about $4.2 trillion in private equity and venture capital assets under management as of June 2015, according to Prequin, a data and research source for the alternative assets industry. Private equity raised approximately $288 billion in 689 funds in 2015. Also according to Prequin, as of November 2015, hedge funds had $3.2 trillion in assets under management and received $71.5 billion in new net capital inflows in 2015.

Derivatives

U.S. insurance industry exposure to derivatives was $54.5 billion in BACV in 2015 (approximately 1% of total cash and invested assets) based on preliminary calculations, a small decrease from $57.1 billion in 2015, but significantly larger than $20.5 billion in 2010. In comparison to the global derivatives market, the Bank for International Settlements cited the global over-the-counter derivatives notional amount of all derivatives contacts to be $552.9 trillion as of the first half of 2015. U.S. insurer derivatives exposure in notional amount was

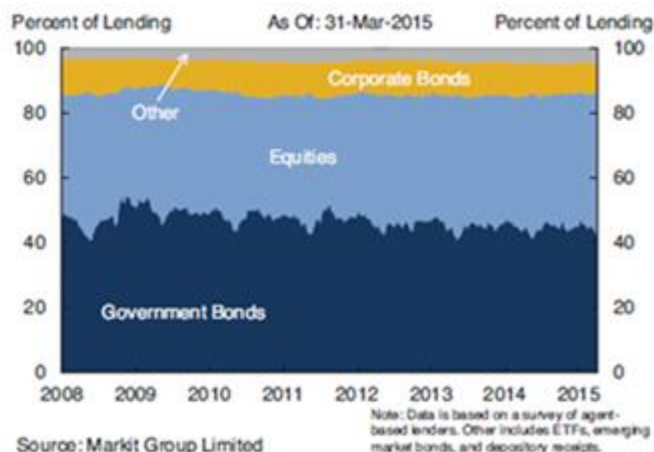
$2.02 trillion in 2014. While the 2015 notional amount is not yet available for U.S. insurers, we do not expect it to change significantly from year-end 2014. Pursuant to an NAIC Capital Markets Bureau special report published in August 2015, 94% of total industry derivatives' notional value was used for hedging strategies, with two-thirds of that amount for hedging interest rate risk.

Securities Lending Reinvested Collateral

U.S. insurance industry exposure to securities lending reinvested collateral was very small compared to other asset types at $16.6 billion in 2015, down from almost $19 billion in 2013. Securities lending reinvested collateral has been less than 1% of the industry's total cash and invested assets since at least 2010 and concentrated within a few large life companies. On the other side of the equation (that is, for securities lent), according to the 2015 Financial Stability Oversight Council (FSOC) 2015 Annual Report, the average value of securities lending transactions was $1.9 trillion globally ($1 trillion in the U.S.) in 2015; the majority of these securities consisted of government bonds and equities (see Chart 14 and Chart 15).

Chart 14: Value of Securities on Loan, 2008–2015 ($tril)

Chart 15: Composition of Securities Lending by Security Type, 2008–2015



Summary

As reported in prior NAIC Capital Markets Bureau special reports, insurers tend to "stick to their knitting" with regard to invested assets, even in volatile markets. Given they are largely buy-and-hold investors, insurer portfolios tend not to experience much turnover, especially life

companies. Global financial markets continue to evolve and the dynamics within particular asset types change, based in part on worldwide economic sentiment. Consequently, issuance and outstanding amounts for the various asset types fluctuate over the years. The percentage of U.S. insurer investments of the different asset types tends not to change significantly from year to year. For some of these asset types, U.S. insurers represent a relatively large investor base, as is the case with corporate bonds, RMBS and CMBS, where U.S. insurers invested in about 25%, 15% and 28% of their markets, respectively. On the contrary, even though corporate bonds are U.S. insurers' largest investment by far, it is such a small proportion of the overall U.S. corporate bond market.

The NAIC Capital Markets Bureau will continue to monitor events in the global financial markets relative to U.S. insurer investments and report as deemed appropriate.

March 25, 2016								
Major Insurer Share Prices			**Change %**			**Prior**		
		Close	**Week**	**QTD**	**YTD**	**Week**	**Quarter**	**Year**
Life	Aflac	$63.52	2.0	6.0	6.0	$62.27	$59.90	$59.90
	Ameriprise	94.36	1.9	(11.3)	(11.3)	92.60	106.42	106.42
	Genworth	3.03	8.2	(18.8)	(18.8)	2.80	3.73	3.73
	Lincoln	41.67	4.0	(17.1)	(17.1)	40.06	50.26	50.26
	MetLife	44.73	1.1	(7.2)	(7.2)	44.25	48.21	48.21
	Principal	41.43	2.7	(7.9)	(7.9)	40.36	44.98	44.98
	Prudential	74.94	1.9	(7.9)	(7.9)	73.55	81.41	81.41
	UNUM	32.38	2.2	(2.7)	(2.7)	31.68	33.29	33.29
PC	Axis Capital	55.02	0.4	(2.1)	(2.1)	54.82	56.22	56.22
	Allstate	67.23	2.6	8.3	8.3	65.52	62.09	62.09
	Arch Capital	70.17	0.1	0.6	0.6	70.13	69.75	69.75
	Cincinnati	65.78	(0.2)	11.2	11.2	65.90	59.17	59.17
	Chubb	122.47	2.1	(7.7)	(7.7)	119.95	132.64	132.64
	Everest Re	191.29	(2.4)	4.5	4.5	196.08	183.09	183.09
	Progressive	34.61	4.2	8.8	8.8	33.21	31.80	31.80
	Travelers	115.76	1.9	2.6	2.6	113.64	112.86	112.86
	WR Berkley	54.75	2.6	0.0	0.0	53.38	54.75	54.75
	XL	36.77	2.7	(6.2)	(6.2)	35.80	39.18	39.18
Other	AON	$101.47	1.0	10.0	10.0	$100.48	$92.21	$92.21
	AIG	53.71	1.6	(13.3)	(13.3)	52.89	61.97	61.97
	Assurant	78.02	0.5	(3.1)	(3.1)	77.60	80.54	80.54
	Fidelity National	32.23	0.1	(7.0)	(7.0)	32.20	34.67	34.67
	Hartford	45.91	2.7	5.6	5.6	44.71	43.46	43.46
	Marsh	59.80	1.8	7.8	7.8	58.74	55.45	55.45
Health	Aetna	$112.61	(0.8)	4.2	4.2	$113.47	$108.12	$108.12
	Cigna	139.53	(3.5)	(4.6)	(4.6)	144.62	146.33	146.33
	Humana	184.60	(1.2)	3.4	3.4	186.91	178.51	178.51
	United	126.72	1.3	7.7	7.7	125.10	117.64	117.64
Monoline	Assured	$26.07	0.8	(1.4)	(1.4)	$25.87	$26.43	$26.43
	MBIA	9.35	2.3	44.3	44.3	9.14	6.48	6.48
	MGIC	7.96	5.7	(9.9)	(9.9)	7.53	8.83	8.83
	Radian	12.66	4.8	(5.5)	(5.5)	12.08	13.39	13.39
	XL Capital	36.77	2.7	(6.2)	(6.2)	35.80	39.18	39.18

March 25, 2016							
Major Market Variables		**Change %**			**Prior**		
	Close	**Week**	**QTD**	**YTD**	**Week**	**Quarter**	**Year**
Dow Jones Ind	17,602.30	2.3	1.0	1.0	17,213.31	17,425.03	17,425.03
S&P 500	2,049.56	1.4	0.3	0.3	2,022.19	2,043.94	2,043.94
S&P Financial	306.90	1.5	(4.6)	(4.6)	302.39	321.73	321.73
S&P Insurance	304.58	1.9	(1.0)	(1.0)	298.81	307.71	307.71
US Dollar $		**Change %**			**Prior**		
/ Euro	$1.13	1.1	3.8	3.8	$1.11	$1.09	$1.09
/ Crude Oil bbl	39.35	2.1	6.1	6.1	38.54	37.09	37.09
/ Gold oz	1,256.20	0.4	18.6	18.6	1,251.00	1,059.60	1,059.60
Treasury Ylds %	**%**	**Change bp**			**%**	**%**	**%**
1 Year	0.61	(0.08)	0.01	0.01	0.69	0.60	0.60
10 Year	1.88	(0.11)	(0.39)	(0.39)	1.98	2.27	2.27
30 Year	2.68	(0.07)	(0.34)	(0.34)	2.75	3.02	3.02
Corp Credit Spreads -bp		**Change %**			**Prior**		
CDX IG	85.15	2.8	(3.5)	(3.5)	82.85	88.24	88.24

April 15, 2016									
Major Insurer Bond Yields				**Weekly Change**					**YTD**
				Price			**Spread over UST**		**Spread**
	Company	**Coupon**	**Maturity**	**Current**	**Change**	**Yield**	**B.P.**	**Change**	**Change**
Life	Ameriprise	5.300%	3/15/2020	$111.05	$0.26	2.37%	116	(6)	22
	Genworth	6.515%	5/15/2018	$92.44	($2.38)	10.50%	932	156	321
	Lincoln National	8.750%	7/15/2019	$118.68	($0.05)	2.74%	167	0	49
	MassMutual	8.875%	6/15/2039	$145.50	($1.38)	5.41%	298	9	42
	MetLife	4.750%	2/15/2021	$109.90	$0.61	2.58%	122	(9)	33
	New York Life	6.750%	11/15/2039	$128.80	($0.41)	4.72%	222	(1)	30
	Northwestern Mutual	6.063%	3/15/2040	$121.29	$0.06	4.59%	214	4	33
	Pacific Life	9.250%	6/15/2039	$140.42	$0.47	6.00%	357	(1)	69
	Principal	6.050%	10/15/2036	$114.42	$1.27	4.93%	247	(13)	38
	Prudential	4.500%	11/15/2020	$108.55	$1.12	2.54%	122	(14)	13
	TIAA	6.850%	12/15/2039	$125.94	$0.19	4.98%	250	(3)	23
P&C	ACE INA	5.900%	6/15/2019	$111.62	$0.00	2.15%	97	(1)	15
	Allstate	7.450%	5/15/2019	$115.60	($0.13)	2.28%	107	3	9
	American Financial	9.875%	6/15/2019	$120.92	($0.47)	3.02%	174	(8)	(4)
	Berkshire Hathaway	5.400%	5/15/2018	$108.61	($0.22)	1.32%	39	10	(3)
	Travelers	3.900%	11/15/2020	$107.87	$0.32	2.10%	73	3	1
	XL Group	6.250%	5/15/2027	$116.63	$0.04	4.35%	227	(1)	31
Other	AON	5.000%	9/15/2020	$110.39	$0.17	2.55%	125	3	21
	AIG	5.850%	1/15/2018	$106.85	$0.36	1.99%	105	(33)	18
	Hartford	5.500%	3/15/2020	$110.22	($0.32)	2.80%	158	8	42
	Nationwide	9.375%	8/15/2039	$147.06	$0.56	5.71%	325	(5)	44
Health	Aetna	3.950%	9/15/2020	$106.43	$0.88	2.41%	112	(13)	17
	CIGNA	5.125%	6/15/2020	$110.71	$0.50	2.44%	115	(11)	(5)
	United Healthcare	3.875%	10/15/2020	$107.78	$0.99	2.08%	71	(20)	1
	Wellpoint	4.350%	8/15/2020	$107.81	$1.06	2.46%	113	(26)	(9)

Questions and comments are always welcome. Please contact the Capital Markets Bureau at **CapitalMarkets@naic.org**.

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