

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. Insurance Company Asset Liquidity

The term *liquidity* can have different meanings depending on context. Funding liquidity refers to “the availability of credit or ease with which institutions can borrow or take on leverage.” Market liquidity, which is more relevant for insurer investment portfolios, “is the ease with which market participants can transact, or the ability of markets to absorb large purchases or sales without much effect on prices.” The more liquid an investment, the more readily it can be sold in the marketplace; that is, the more easily it can be converted into cash and at a minimal impact to the value of the investment. The most liquid investment is cash; short-term investments are typically liquid investments in that they can be sold quickly, within a market where there is a sufficient number of willing buyers and sellers.

On the contrary, an illiquid asset (such as a residential mortgage-backed security (RMBS) collateralized by subprime mortgage loans) is not easily saleable due to uncertainty about its value or the lack of seasoning in the market in which it is regularly traded. When investors lose confidence in the value of certain securities — particularly those not traded in an active market — a liquidity crisis results, which is what happened in the RMBS market post-2007. Prior to 2008, particularly between 2005 and 2007, RMBS, including those collateralized by subprime mortgage loans (i.e., borrowers with the lowest credit scores) were highly liquid due to a boom in the housing market. With the onset of the financial crisis, many borrowers (beginning with subprime) defaulted on their mortgage loans, causing the RMBS they securitized to default. As a result, the value of these securities dropped significantly, their credit ratings were lowered or withdrawn by the rating agencies, and the market — as well as the liquidity — for RMBS (especially subprime RMBS) disappeared. Only recently has new issuance appeared in the private label RMBS market, but nowhere near pre-crisis levels. In due time, we expect liquidity will eventually return. In general, securities with complex structures — such as RMBS and other types of structured finance investments — are less liquid than other types of more simple, straightforward bond issues.

Investment portfolios should follow guidelines that include asset-liability matching rules to ensure that funds are available when claims need to be paid by matching maturity, or duration. Investing in liquid assets also ensures that funds will be available when needed, although it is not necessary for the entire portfolio to be liquid. After all, with illiquidity comes increased risk, which, in turn, is associated with higher return on investments. And, in the current low-interest-rate environment, perhaps a bit of illiquidity in a portfolio would not be harmful, if appropriately managed. Note that, while illiquidity does change an investor's risk profile, how the risk translates depends on the investor's liquidity needs.

### *Factors That Influence Asset Liquidity*

There are several factors that influence asset liquidity. At times, these factors may overlap or offset one another, which can result in negating the effect of, or adding to the impact on, liquidity. This includes the size, depth and breadth of a particular market. Generally, the larger the market and the more depth it has, the more liquid it is — and, consequently, large transactions can occur within that market without significantly impacting the trading price. The

size of the issue and the investor's holding also plays a role in liquidity. Generally, the larger the size of the issue, the easier it is to sell, and, therefore, the more liquid. If the size of the investor's holding is a large proportion of the total issue size (for example, an investor owns \$200 million of a \$300 million issue), the more difficult it is for the investor to sell his/her position; therefore, the less liquid it becomes. This, then, potentially offsets the benefit of the large issue size.

A broader investor base also improves liquidity, not only because of the size impact (i.e., abundance of available buyers), but also because a more diverse investor base tends to smooth out any market shocks. That is, when many different investors are buying assets, outlier or idiosyncratic trades tend to become blended in with regular trading activity.

Whether a particular asset type is at risk for credit losses will also impact liquidity; i.e., the more likely an asset is expected to default and incur losses, the less liquid it is because the less likely it will be traded at an efficient price or quickly. Bonds with credit issues are usually priced low or at a discount. When the nationally recognized statistical ratings organizations (NRSROs) downgrade the credit quality of a bond, it typically is accompanied by a price decline. But before a downgrade occurs, the NRSROs place a bond rating on (a negative) "credit watch" status, which also tends to cause a bond's price to decline. On the contrary, bonds that are of sound credit quality (i.e., investment grade) and at low risk of delinquency or default are generally liquid. That is, investors would be able to sell the bonds quickly, in larger-sized blocks and at an efficient price. Furthermore, a bond's "credit watch" status also helps to identify liquidity risk, in that a bond that is considered to be on (positive) watch for potential upgrade, or a bond whose credit quality is considered stable, is more liquid and, therefore, more readily tradeable than a bond that is on (negative) watch for downgrade.

Marking an asset to market (obtaining market value pricing information on a bond on a daily, weekly, monthly or quarterly basis) is helpful in identifying liquidity, in that it represents an appraisal of the asset's current market value. So, if the investor were forced to liquidate, the current market value is an indicator as to what he/she would receive. Assets that are actively traded tend to have prices that are readily available and are, therefore, liquid. Conversely, illiquid assets tend to have a lesser availability of mark-to-market sources, as well as a lesser frequency of marks.

The bid-ask spread — or the price difference between what buyers are bidding and sellers are asking — tends to be narrow for larger, more actively traded issues (regardless of asset type), resulting in greater liquidity. Conversely, when the spread widens — such as for less actively traded issues — liquidity decreases because market makers have a more difficult time matching buyers and sellers. Market conditions, industry stability (or lack thereof) and issuer characteristics can influence liquidity risk, as well. The more favorable these features, the more liquid the asset. Note that during the recent financial crisis, the bid-ask spread was wide, even for actively traded issues, as they traded in smaller-sized blocks.

Whether a security has been registered with the U.S. Securities and Exchange Commission (SEC) can also have a material impact on its liquidity. If a security has been registered, it can be sold among the general public, including individuals. If a security has not been registered, there are strict rules on the how frequently it can trade and who it can be marketed to. This can substantially limit its liquidity. There are certain exemptions to the registration requirements that can improve liquidity, although still limiting trading to qualified institutional investors. The most significant of these exemptions is Rule 144A of the SEC Securities Act of 1933. Rule 144A was designed to develop a more liquid and efficient institutional resale market for unregistered securities. Many structured finance securities are 144A transactions.

With respect to bonds, position within the capital structure — whether it's a company's capital structure in the case of corporate bonds or a tranche within a structured finance capital structure — affects a bond's liquidity. Generally, the more senior the bond, the more "protected" it is by credit enhancement, the more in-demand it will be by institutional investors. Therefore, a senior

bond is generally more liquid than a subordinated bond. Additionally, bonds that are secured by some form of collateral are more liquid than bonds that are unsecured.

Market-related risks, such as convexity, as well as the state of the economy (i.e., a “flight to quality” in times of crisis and search for yield in times of low interest rates), will also influence an asset’s liquidity. Assets become more liquid when demand increases, because there are many willing investors that are ready and able to buy. The closer the balance between demand and supply, the more stable the price of the asset will be. Thus, a large supply but small demand translates into decreased liquidity.

#### *U.S. Insurance Industry Portfolio Liquidity*

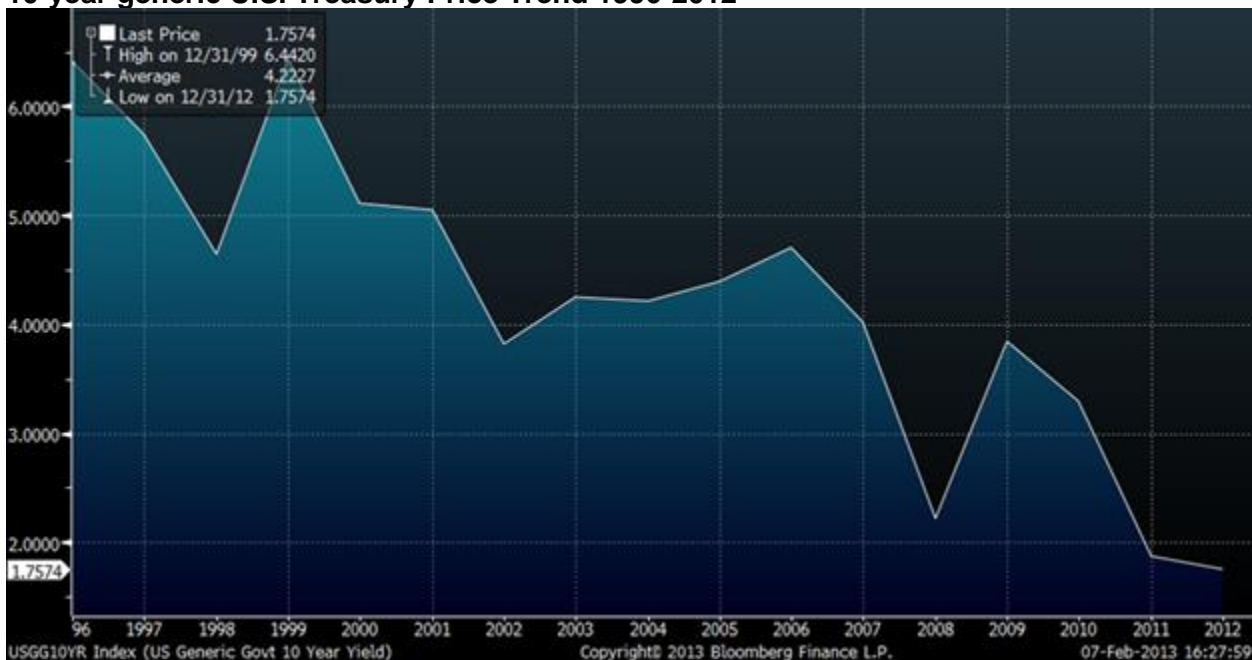
Liquid portfolios are one part of prudent investment management. For the most part, the composition of the U.S. insurance industry’s asset portfolio has not changed significantly over time. The majority of the industry’s portfolio was invested in bonds (69.5% as of year-end 2011), particularly corporate bonds that are investment grade in terms of credit quality. As such, liquidity has not been an issue due in part to the size, depth and breadth of the corporate bond market, among other reasons. Common stocks comprised 10.5% of the industry’s holdings as of year-end 2011, which are, for the most part, highly liquid (particularly the larger companies that trade daily) as they are publicly traded on various stock exchanges. A common stock’s liquidity also depends on the size of the exchange in which it is traded; i.e., the larger the exchange, the more liquid the stock (because of more available trading opportunities).

In addition to the bond and equity exposures, the insurance industry has smaller exposures to less liquid assets that are more difficult to sell at desired prices and on a relatively short notice. These include commercial mortgages and real estate (approximately 7% of total assets as of year-end 2011 on an aggregate basis). These are simply not actively traded markets. This is mostly because there is little standardization with these types of transactions; typically, they are customized. In addition, derivatives (which are included in Schedule DB) and assets included in Schedule BA (such as hedge funds and private equity funds) are generally illiquid due in part to the high associated market risk and potential volatility. Derivatives and Schedule BA assets were less than 5% and less than 1% of the industry’s total assets as of year-end 2011, respectively. Also, to the extent these assets are exchange traded, they are generally more liquid than if they were traded over-the-counter (i.e., outside of an exchange). In exchange for the illiquidity of these assets, however, there is a higher rate of return on the investments — something valuable in the current low-interest-rate environment.

Mitigating concern in the U.S. insurance industry, \$311 billion (or 8.6%) of total cash and invested assets as of Dec. 31, 2011, were invested in U.S. government securities, generally one of the most liquid investments after cash. Highly liquid markets, such as U.S. Treasuries, are considered to be “deep”; that is, investors can and do trade large volumes without substantially affecting the price. Cash and short-term investments were approximately 4% of total assets as of year-end 2011.



10-year generic U.S. Treasury Price Trend 1996-2012



#### How NRSROs Assess Insurer Liquidity

The NRSROs — including Standard & Poor’s (S&P), Moody’s Investors Service (Moody’s) and A.M. Best — include liquidity models in their credit risk assessment of insurers, particularly life insurers. Since the 1990s, S&P has been using a liquidity model as an analytical tool that compares a life insurer’s liquid assets to a risk-adjusted calculation of its liabilities, subject to scheduled and unscheduled withdrawals. The model identifies liquidity that is immediate (one-month time frame), as well as ongoing (one-year time frame). Liquidity is considered as a prime measure of solvency, with liquidity risk most visible when a company’s business position is under stress. S&P views an insurance company’s liquidity strategy as involving a trade-off with investment return, because a high level of liquidity often means investing in larger amounts of short-term, lower-yielding assets. S&P assigns a risk factor to “allowable assets” in both immediate and ongoing scenarios. For example, cash and short-term investments receive 100%

credit and, therefore, no “haircut” (or risk factor), while investment-grade bonds (that is, those that are designated NAIC 1, excluding mortgage-backed securities, asset-backed securities (ABS) and U.S. government bonds) receive a 98% credit (i.e., a 2% haircut/risk factor) in an immediate scenario, but 100% credit in an ongoing scenario. S&P’s liquidity model also applies risk factors to insurer liabilities — in both the immediate and ongoing scenarios — in a similar manner as the assets.

Using data from the annual statutory statements, Moody’s liquidity model measures an insurance company’s asset liquidity profile relative to potential liquidity demands that it may endure in a stressful scenario, based on its liability mix. The primary purpose of the model is to obtain an objective measure of stand-alone liquidity utilizing publicly available data — for the most part to identify companies with potential liquidity constraints. Like S&P, Moody’s views liquidity as an important factor in identifying insurer solvency. For both liabilities and assets, Moody’s assigns a “liquidity factor” that varies across liability and asset types, depending on time frame (i.e., 30 days, six months or one year). Liquidity risk is incorporated into Moody’s Insurance Financial Strength Ratings, which measure the ability of insurance companies to repay senior policyholder claims and obligations on a timely basis.

A.M. Best also has a liquidity model that uses statutory data to quantitatively measure life companies’ short-term (30 days) and long-term (six to 12 months) cash needs under stressed scenarios. The A.M. Best Liquidity Model for U.S. Life Insurers (AMBLM) focuses on three major cash sources for life companies: (1) cash and short-term investments; (2) readily saleable securities that can quickly be converted to cash; and (3) cash flow from operations that are available to meet policyholder obligations, reinvestment or debt repayment at the operating company. A.M. Best believes that an insurer’s liquidity profile is one of the most important factors in determining its financial strength, and it is examined at both the operating and holding company/consolidated levels.

#### *How Regulators Assess Liquidity*

Regulators assess liquidity quarterly and annually as part of the financial analysis process, in addition to assessing liquidity as part of the examination process. More specifically, the financial examination process is focused on the actual liquidity strategy and processes used by the insurer or the insurance group to mitigate this risk. The NAIC *Financial Condition Examiners Handbook* includes a section dedicated to liquidity with respect to financial examinations that requires the examiner to assess the inherent risk of the portfolio and any risk strategies. The purpose is to ascertain liquidity exposure as it relates to expected and unexpected cash demands. The handbook defines illiquid assets “as private placements, real estate, commercial mortgage, investments in affiliates and any other investments that are not readily marketable.” Insurers are responsible for responding to both immediate and material cash demands, and the examination procedures are designed to consider the extent to which the insurer’s strategy fits this risk based on their assets and liabilities.

The quarterly and annual review that is part of the financial analysis process typically revolves around an insurer’s regulatory filings. This review typically focuses on many of the same discussion points that this particular article focuses on, with the exception being that the review is done from the perspective of an individual company and with respect to what may be appropriate for its related insurance liabilities. There are various ratios that are used to help make this assessment that consider, among other things, a typical portfolio for that business type, as well as the various industry data that can be used to help benchmark the company’s portfolio. This article does not go into the details associated with such ratios and related procedures, in part because these measures are typically only the starting point for the analysis and, typically, a more qualitative assessment must also be considered in making such an assessment.

#### *Liquidity by Asset Type*

Depending on the invested asset type and current market and economic events, a given asset's liquidity may vary. However, *cash and U.S. government securities* are considered the most liquid investments, as there will always be a market in which to trade the latter because they are backed by the "full faith and credit of the U.S. government." Note that there can be some differences in liquidity across U.S. government securities related to their different maturities, as it depends on the shape of the yield curve (i.e., whether it flattens or steepens).

*Structured finance securities*, however, such as ABS, collateralized debt obligations (CDOs), commercial mortgage-backed securities (CMBS) and private label RMBS have a relatively small yet volatile exposure within the U.S. insurance industry and, therefore, are subject to liquidity issues. Structured securities in general are not very liquid, not only because of the recent financial crisis, but also because of a lack of seasoning in the structured market compared to other markets. There is no depth of pricing history for these bond types; it does not extend as far back as it does for corporate bonds, for example.

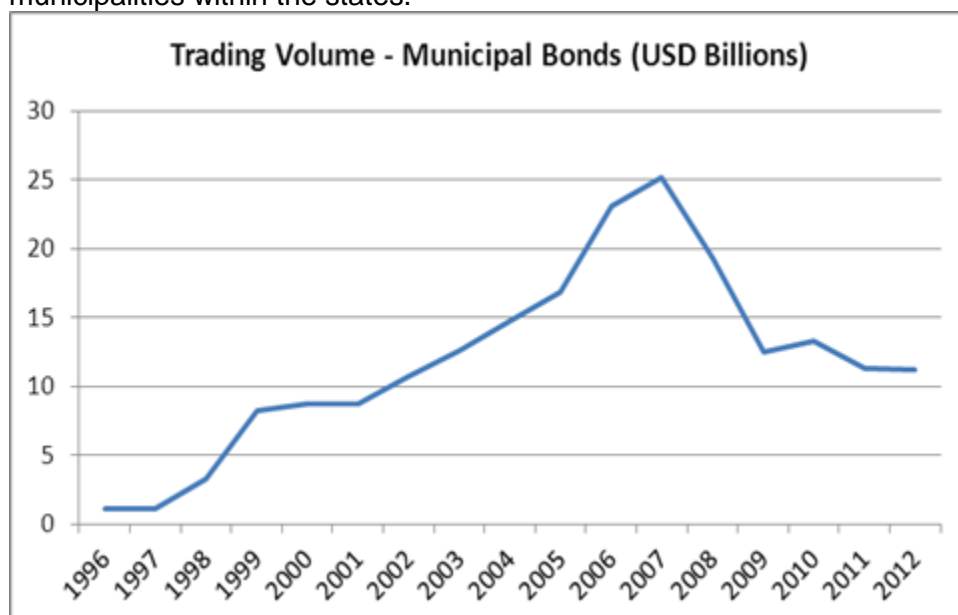
In terms of the recent financial crisis, some complex and misunderstood structured credits — such as private label (non-agency) RMBS collateralized by subprime mortgage loans and CDOs collateralized by these RMBS suffered from credit-related losses and were subsequently downgraded by the NRSROs. Some of the worst performing of these securities were ultimately liquidated (or written off). As a result, the market for these securities disappeared. Only in the past couple of years has new issuance emerged, but nowhere near pre-crisis levels. For the most part, there has been no new significant issuance for private label RMBS. As a result, inventory (and, thus, liquidity) for these securities has been negatively impacted. As it was, the investor base for structured securities, particularly RMBS and CDOs, has generally been smaller than investor bases for other more common types of investments, such as corporate bonds. This is due, in part, to these securities' structural complexities compared to that of corporate debt, as well as their lack of history (and, therefore, lack of historical performance measures). Investor preference for a "back to basics" investment strategy has further exacerbated the structured finance liquidity issue. In addition, some financial firms have been unable or unwilling to underwrite new structured credits, either due to more strict capital rules or simple de-risking.

Nevertheless, investors have slowly derived comfort with some of the more basic structured finance securities such as collateralized loan obligations (CLOs) and ABS, which are collateralized by syndicated bank loans and consumer finance receivables, respectively, as these two types of structured investments have surfaced to the top as "survivors" of the financial crisis (at least with respect to structured finance investments). In addition, since the financial crisis, market participants in these securities, either internally or through third-party vendors, have made significant efforts to price these securities in order to obtain current and accurate market values indicating what these investments would be worth if they were sold.

Unlike private label RMBS, *agency-backed RMBS* are either guaranteed by the full faith and credit of the U.S. government (in the case of Government National Mortgage Association) or are supported by government-sponsored entities (Federal National Mortgage Association or Federal Home Loan Mortgage Company); therefore, they are generally considered liquid investments.

*Municipal bonds* comprise a relatively large portion of the insurance industry's bond exposure at \$487 billion (or 13.4%) of total cash and invested assets as of Dec. 31, 2011. Given the tax-exempt nature of municipal bonds, as of year-end 2011, property/casualty companies held the majority (70% of the \$487 billion) of the industry's municipal bond investments. In comparison, life companies held 27% of the industry's municipal bonds investments as of year-end 2011. Similar to structured finance, municipal securities bond trading also declined with the onset of the recent financial crisis. Low interest rates and, therefore, low yields have also deterred investors in this asset class. And, about 60% of new issuance in 2012 was attributed to the refunding of older, higher interest-rate bonds. In addition, liquidity of these bonds is affected by

the economic and financial health of the states in which they were issued and/or the municipalities within the states.



Source: Securities

Industry and Financial Markets Association (SIFMA).

The industry's exposure to *foreign sovereign debt* was approximately \$81.6 billion as of June 30, 2012. The NRSROs have lowered ratings on the long-term sovereign debt of several countries, particularly those in the troubled Eurozone area. Liquidity for these bonds has been negatively impacted as investors (mostly financial institutions in the U.S. and abroad) understandably no longer view them as attractive investments. Lower credit quality ratings also force investors of these securities, particularly financial institutions, to hold more capital against these holdings to compensate for the increased risk.

Both *common and preferred stock* together were almost 11% of total cash and invested assets as of year-end 2011. Bid-ask spreads for equities have been narrow, signifying no major liquidity issues. As of September 2012, the average spread on S&P 500 stocks was extremely small.

*Corporate bonds* are the largest proportion of insurer bond investments, at \$1.8 trillion as of Dec. 31, 2011. Corporate bond liquidity varies over time, depending on macroeconomic trends, and is inter-related to the health of the industry in which the bonds were issued. For example, the U.S. housing sector crisis resulted in bonds issued by related industries (i.e., homebuilders, home building materials, etc.) to not be considered attractive investments and, therefore, not easily traded and, in turn, not very liquid.

#### *Corporate Bond Trading Volume and Inventories*

The U.S. corporate bond market size was estimated at \$8 trillion as of June 2012. From the beginning of 2012 through June, average daily trading volume was \$18 billion, which is considered low. In comparison, the U.S. Treasury market experienced an average daily trading volume of \$532 billion for the same time period. Most corporate debt is traded in the primary market (at new issuance). Primary dealers are banks designated as trading counterparties of the Federal Reserve Bank of New York. The number of financial institutions that meet New York Fed requirements and standards to be designated as a primary dealer has decreased over the past 14 years: in 1999, there were 30 primary dealers; in 2009 there were 16; and, as of Nov. 1, 2011, there were 21. Note, however, that banks do not have to be primary dealers to trade in the secondary market; although, as previously stated, most trading, particularly in fixed income, occurs in the primary market.



The industry's exposure to banks/financial institutions was approximately \$350 billion as of year-end 2011. As many banks have experienced downgrades to their long-term ratings by the NRSROs, it has hurt their ability to serve as counterparties to over-the-counter and other transactions. And, according to Barclays' U.S. Corporate Investment Grade Index, as trading counterparties have become less willing or able to provide market-making liquidity, (option-adjusted) spread volatility has increased.

The market has lost some key players that had previously been liquidity creators; e.g., Lehman Brothers, Bear Stearns, etc. The elimination of in-house proprietary trading desks at these banks has hurt liquidity, particularly with respect to large blocks of bonds or those that tend to trade infrequently. As such, sell-side investors have struggled to find financial institutions willing to take on the risk of warehousing large amounts of bonds to facilitate orders that accumulate over time in order to avoid upsetting the market.

Unlike equities, because there is no centralized exchange for trading corporate bonds, investment managers often rely on relationships or prior business dealings with individual traders and firms, in the bid-offer process. Investors typically view declining inventories as an omen that suggests there will be a future increase in business activity. However, from a trading perspective, this sentiment is not necessarily shared. To traders, a decline in inventory usually means a decline in liquidity; that is, if there are lesser amounts available to trade, it is less likely that those bonds will sell unless they are sold at a discount.

Changes in the financial markets have reshaped trading, such as increases in capital requirements, limits on proprietary trading and a move toward a centralized clearinghouse for swaps. According to BlackRock Investment Institute research dated September 2012, "the financial industry's self-inflicted wounds of trading losses and excesses increase the risk for reduced market liquidity." As a result, there is "a more transparent but less vibrant marketplace for many securities and higher costs for investors."

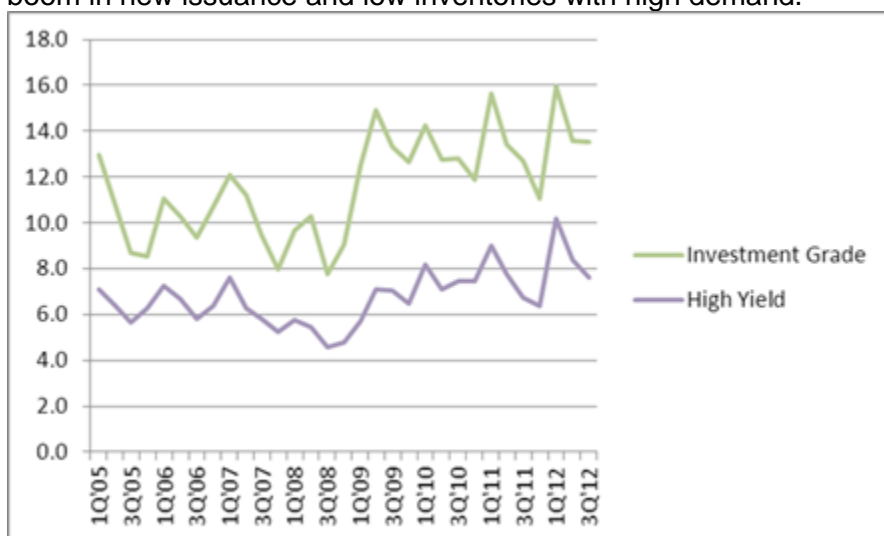
Based on information derived from Bloomberg, corporate bond inventories with primary dealers peaked at \$235 billion in October 2007, but have since shrunk by almost 80% to \$51 billion as of November 2011.



This was due, in part, to risk aversion and anticipation of stricter capital requirements. Inventories of U.S. corporate bonds have since increased to a total of \$59 billion as of July 2012 (according to BlackRock research). As of mid-2012, the U.S. investment-grade corporate bond market was more than \$3 trillion, and the U.S. high-yield corporate bond market was well over \$1 trillion as companies took advantage of issuing new debt in the low-interest-rate environment. As of year-end 2012, data from the Securities Industry and Financial Markets Association (SIFMA) shows that U.S. investment grade corporate bond new issuance for the year was \$1,030.7 billion, and U.S. high-yield corporate bond new issuance for the year was



\$329.2 billion. Constraining liquidity in the corporate bond market is the mismatch between the boom in new issuance and low inventories with high demand.



Source: Securities Industry

and Financial Markets Association (SIFMA).

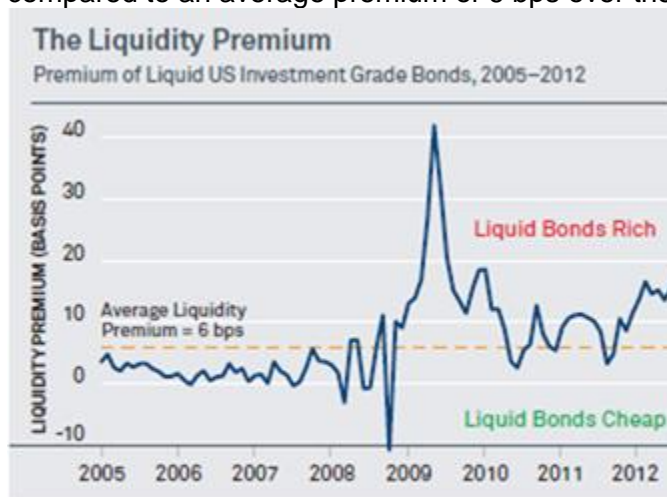
According to SIFMA, between 2005 and third quarter of 2012, a quarterly high of \$10.2 billion in high-yield corporate debt was traded (first quarter 2012) compared to a low of \$4.6 billion in the third quarter of 2008. A quarterly high of \$15.9 billion and low of \$7.8 billion were traded in investment grade bonds for the same time period.

The fixed-income market has been taking advantage of the low-interest-rate environment, and new issuance has been booming, with yield-hungry investors bidding up prices of corporate bonds. This has resulted in many bonds trading at a premium to par. This affects bond liquidity because of convexity; that is, the relationship between bond prices and bond yields that demonstrates how the duration of a bond changes as interest rates change. As a result, liquidity has been concentrated in large, new issues, with older and smaller bonds exhibiting less liquidity.

Barclays Capital estimates that liquidity in the U.S. investment-grade credit market fell by 7% in 2012. Barclays assessed liquidity by comparing the outstanding size of the corporate bond market with the volume of corporate bond trading, based on the Financial Industry Regulatory Authority's (FINRA) Trade Reporting and Compliance Engine (TRACE) reporting system. Bid-offer spreads suggest that, on its face, liquidity in the high-grade market has improved, but this is believed to mainly be a reflection of the sharp tightening in overall credit spreads during 2012. A "best-to-cover" level is the gap between a trade price and the next best dealer's offer. For U.S. high-yield corporate bonds, the "best-to-cover" levels have decreased since late 2008 (as shown in the graph below) and are only slightly elevated compared to pre-financial crisis levels.

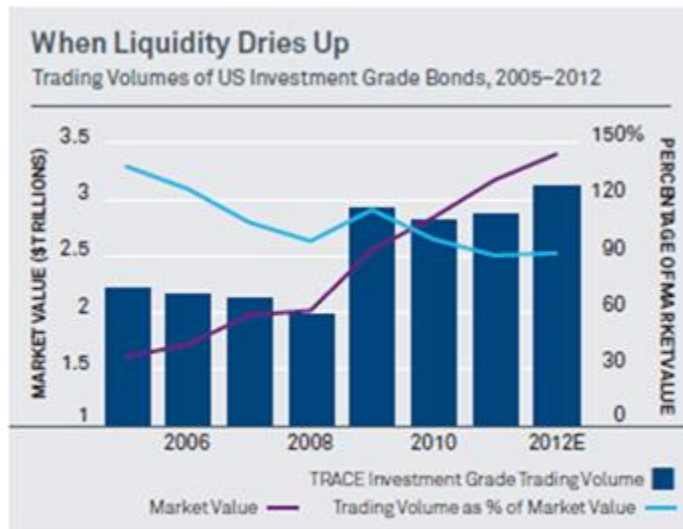


For U.S. investment-grade corporate bonds, spreads are nowhere near their 2008–2009 highs, but they are a bit higher than pre-crisis levels. To promote liquidity in the U.S. investment-grade market, traders split up large orders so that the average trade size in June 2012 was \$318,000, representing a 17% decrease from a year prior. According to J.P. Morgan research, highly liquid bonds trade at a premium of approximately 16 basis points (bps) over less liquid ones, compared to an average premium of 6 bps over the past seven years.



In a keynote address at the 8th Annual Risk Management Convention and Exhibition in February 2007, Timothy Geithner (who was, at the time, president and chief executive officer of the Federal Reserve Bank of New York) stated that “movements in bid-ask spreads, the level of interest rates, changes in asset prices and risk premia, along with the level of volatility and expectations of future volatility, and turnover volume or other measures of market depth, help us

evaluate market liquidity." Illiquidity occurs when investors "...lock it away, hold on to it and are reluctant to trade." This is what happened to the corporate bond secondary market in the fall of 2012.



Sources: BlackRock, Barclays and TRACE.  
Notes: 2012 estimates are annualized first-half data. 2012 market value as of June 29, 2012.

In the early 2000s, BlackRock's aforementioned report indicated that "markets were awash in liquidity and leverage then, with greater market depth (the ability to carry out large trades quickly with minimal market impact) and the tightest bid-ask spreads on record." This means that there was an abundance of cash-seeking investments. Typically, an investor should evaluate whether there is sufficient market depth to initiate a trade. Investors with long strategies can take advantage of illiquid markets by investing in hard-to-trade, discounted bonds, because they are investing for the long term anyway.

#### *Regulatory Impact*

The so-called "*Volcker Rule*" is one item within the federal Dodd-Frank Wall Street Reform and Consumer Protection Act that is intended to avoid another "meltdown" in the banking system by limiting proprietary trading. Specifically, it bans proprietary trading and restricts investments in hedge funds and private equity by commercial banks and their affiliates. So, if banks want to hold riskier assets, they must hold more capital to offset those investments. In turn, this would decrease liquidity in the corporate debt market.

The Volcker Rule could reduce liquidity across several asset classes, and it is viewed as having the potential to reduce market efficiency. Notwithstanding, corporate credit is an important source of funding for U.S. businesses, with approximately \$1 trillion raised annually. A study conducted by Oliver Wyman indicated that the Volcker Rule would artificially limit banks' ability to facilitate trading, maintain inventories sufficient to meet demand and actively participate in the market to price assets efficiently, thereby decreasing liquidity. A lower inventory of bonds and, therefore, a lower supply, means investors have to pay more for the bonds (in the form of a premium), and they will also demand higher interest payments from the issuers because the securities they hold are less liquid.

*Basel III* is "a comprehensive set of reform measures, developed by the Basel Committee on Banking Supervision, to strengthen the regulation, supervision and risk management of the banking sector," as defined by the Bank for International Settlements (BIS) and endorsed by the G20 leaders. These measures are intended to improve the banking sector's ability to absorb "shocks" arising from financial and economic stress, regardless of the source; improve risk management and governance; and strengthen banks' transparency and disclosures.

In terms of liquidity, under Basel III, banks will calculate a liquidity coverage ratio (LCR) that requires them to hold sufficient high-quality liquid assets that could readily be converted to cash in order to withstand a 30-day stressed funding scenario as specified by supervisors. The LCR was first implemented in December 2010 and is intended to promote short-term resilience of a bank's liquidity profile. Over the past couple of years, it has been revised to expand the range of assets considered as eligible high-quality liquid assets. The net stable funding ratio is a long-term structural ratio designed to address liquidity mismatches — providing incentives for banks to use stable sources of funding. The Basel Committee on Banking Supervision provided guidance in 2008, titled "Principles for Sound Liquidity Risk Management and Supervision," that is based on fundamental review of sound practices within banking and takes account of lessons learned during the recent financial crisis. Lastly, there is a supervisory monitoring framework that includes metrics to identify and analyze liquidity risk and trends within a particular bank and system-wide.

#### *Conclusion*

Maintaining liquid portfolios is considered part of prudent investment management, to help ensure cash is readily available when needed. It is understandable, however, to have a certain amount of risky and, therefore, less liquid, investments in a portfolio to achieve higher returns — particularly in this low-interest-rate environment. Insurers have specific measures in place to determine portfolio liquidity, as do NRSROs when assessing the financial strength of insurance companies. In addition, post-financial crisis regulatory rules will impact liquidity in the financial industry as a whole. Mitigating concern over liquidity risk in U.S. insurer portfolios is the large amount of investments in liquid U.S. government securities. With respect to corporate bond investments (the largest bond investment within the U.S. insurance industry), while liquidity may rise and fall in the primary and secondary markets based on macroeconomic trends, given the depth of the industry, it is not likely that the corporate bond market will ever be truly illiquid. The NAIC Capital Markets Bureau will continue to follow trends in liquidity risk and report as deemed appropriate. We are also working on developing additional tools and analysis to assist regulators with better understanding the impact of liquidity risk on insurer portfolios.

March 1, 2013		Change %			Prior			
Major Insurer Share Prices		Close	Week	QTD	YTD	Week	Quarter	Year
Life	Aflac	\$50.19	1.2	(5.1)	(5.1)	\$49.58	\$52.89	\$52.89
	Ameriprise	68.08	1.2	9.0	9.0	67.25	62.45	62.45
	Genworth	8.52	(0.4)	13.7	13.7	8.55	7.49	7.49
	Lincoln	29.80	2.0	15.6	15.6	29.22	25.77	25.77
	MetLife	35.32	0.1	7.8	7.8	35.29	32.76	32.76
	Principal	31.55	2.1	11.2	11.2	30.91	28.38	28.38
	Protective	31.64	(0.8)	11.1	11.1	31.90	28.47	28.47
	Prudential	54.98	(0.2)	3.6	3.6	55.11	53.09	53.09
	UNUM	24.61	2.7	18.7	18.7	23.97	20.73	20.73
PC	ACE	\$85.67	(0.6)	7.8	7.8	\$86.15	\$79.50	\$79.50
	Axis Capital	40.76	0.7	18.3	18.3	40.49	34.46	34.46
	Allstate	46.35	(0.3)	15.7	15.7	46.47	40.05	40.05
	Arch Capital	49.52	3.5	13.0	13.0	47.86	43.82	43.82
	Cincinnati	45.16	1.3	15.9	15.9	44.56	38.95	38.95
	Chubb	84.68	0.6	12.9	12.9	84.15	75.01	75.01
	Everest Re	124.09	(0.3)	13.1	13.1	124.51	109.67	109.67
	Progressive	24.42	(0.2)	16.2	16.2	24.48	21.01	21.01
	Travelers	80.69	0.4	12.8	12.8	80.38	71.53	71.53
	WR Berkley	41.59	(0.4)	10.6	10.6	41.77	37.59	37.59
	XL	28.82	1.3	15.6	15.6	28.46	24.94	24.94
Other	AON	\$60.89	2.5	9.9	9.9	\$59.42	\$55.41	\$55.41
	AIG	37.85	1.5	7.3	7.3	37.28	35.28	35.28
	Assurant	41.82	2.0	21.3	21.3	41.01	34.48	34.48
	Fidelity National	24.81	(3.7)	5.2	5.2	25.75	23.58	23.58
	Hartford	23.68	(0.1)	5.8	5.8	23.70	22.39	22.39
	Marsh	37.24	2.6	8.6	8.6	36.28	34.30	34.30
Health	Aetna	\$47.50	(0.5)	2.9	2.9	\$47.76	\$46.17	\$46.17
	Cigna	58.26	(1.5)	9.3	9.3	59.17	53.29	53.29
	Humana	67.88	(6.6)	(0.8)	(0.8)	72.65	68.43	68.43
	United	53.52	(3.1)	(1.1)	(1.1)	55.24	54.12	54.12
	WellPoint	61.88	(1.3)	1.9	1.9	62.71	60.73	60.73
Monoline	Assured	\$18.86	1.5	33.6	33.6	\$18.59	\$14.12	\$14.12
	MBIA	10.31	0.8	30.2	30.2	10.23	7.92	7.92
	MGIC	3.79	44.1	40.4	40.4	2.63	2.70	2.70
	Radian	9.17	18.9	49.1	49.1	7.71	6.15	6.15
	XL Capital	28.82	1.3	15.6	15.6	28.46	24.94	24.94

March 1, 2013		Change %			Prior			
Major Market Variables		Close	Week	QTD	YTD	Week	Quarter	Year
Dow Jones Ind	14,089.66	1.5	7.6	7.6	13,880.62	13,099.80	13,099.80	
S&P 500	1,518.20	1.1	6.8	6.8	1,502.42	1,422.10	1,422.10	
S&P Financial	237.40	0.7	7.3	7.3	235.77	221.17	221.17	
S&P Insurance	220.00	1.1	10.2	10.2	217.55	199.67	199.67	
US Dollar \$		Change %			Prior			
	/ Euro	\$1.30	(1.3)	(1.4)	(1.4)	\$1.32	\$1.32	\$1.32
	/ Crude Oil bbl	90.97	(2.0)	(0.7)	(0.7)	92.84	91.62	91.62
/ Gold oz	1,575.00	(0.2)	(5.9)	(5.9)	1,578.20	1,673.70	1,673.70	
Treasury Ylds %	%	Change bp			%	%	%	
1 Year	0.15	0.00	0.01	0.01	0.15	0.14	0.14	
10 Year	1.85	(0.13)	0.09	0.09	1.98	1.76	1.76	
30 Year	3.06	(0.11)	0.10	0.10	3.17	2.95	2.95	
Corp Credit Spreads -bp		Change %			Prior			
CDX.IG	47.50	(3.3)	(16.7)	(16.7)	49.12	57.04	57.04	

March 1, 2013									
Major Insurer Bond Yields				Weekly Change					YTD
Company	Coupon	Maturity	Price			Spread		Spread	
			Current	Change	Yield	B.P.	Change	Change	
Life	Aflac	8.500%	5/15/2019	\$136.22	\$0.48	2.21%	112	(1)	(15)
	Ameriprise	5.300%	3/15/2020	\$118.95	\$0.54	2.36%	110	4	(9)
	Genworth	6.515%	5/15/2018	\$112.17	\$0.37	3.91%	308	8	(82)
	Lincoln National	8.750%	7/15/2019	\$135.30	\$0.55	2.65%	155	5	(29)
	MassMutual	8.875%	6/15/2039	\$155.92	\$1.69	5.02%	212	1	(36)
	MetLife	4.750%	2/15/2021	\$114.99	\$0.63	2.64%	119	4	10
	New York Life	6.750%	11/15/2039	\$136.63	\$1.52	4.40%	149	2	(14)
	Northwestern Mutual	6.063%	3/15/2040	\$126.44	\$1.10	4.38%	145	3	0
	Pacific Life	9.250%	6/15/2039	\$146.31	\$1.59	5.80%	289	(1)	(42)
	Principal	6.050%	10/15/2036	\$125.12	\$1.10	4.34%	159	(0)	(23)
	Prudential	4.500%	11/15/2020	\$112.24	\$0.47	2.72%	130	5	(11)
	TIAA	6.850%	12/15/2039	\$134.51	\$0.93	4.60%	169	4	(1)
P&C	ACE INA	5.900%	6/15/2019	\$124.25	\$0.36	1.80%	67	(1)	(10)
	Allstate	7.450%	5/15/2019	\$131.42	\$0.52	2.03%	95	2	(15)
	American Financial	9.875%	6/15/2019	\$133.46	(\$0.10)	3.83%	275	22	(38)
	Berkshire Hathaway	5.400%	5/15/2018	\$119.91	\$0.50	1.41%	57	(0)	(6)
	Travelers	3.900%	11/15/2020	\$112.63	\$0.61	2.10%	70	3	5
	XL Group	6.250%	5/15/2027	\$120.61	\$1.64	4.29%	212	(5)	(30)
Other	AON	5.000%	9/15/2020	\$114.83	\$0.91	2.81%	144	4	12
	AIG	5.850%	1/15/2018	\$117.70	\$0.29	2.01%	127	2	6
	Fidelity National	7.875%	7/15/2020	\$133.22	(\$1.78)	-1.57%	(242)	35	(111)
	Hartford	5.500%	3/15/2020	\$117.43	\$0.97	2.77%	151	(1)	(22)
	Marsh	9.250%	4/15/2019	\$135.67	\$0.52	2.85%	166	2	(30)
	Nationwide	9.375%	8/15/2039	\$148.02	\$1.95	5.80%	289	0	(33)
Health	Aetna	3.950%	9/15/2020	\$109.30	\$0.63	2.58%	118	1	(2)
	CIGNA	5.125%	6/15/2020	\$115.57	\$0.64	2.75%	140	(0)	(4)
	United Healthcare	3.875%	10/15/2020	\$109.95	\$0.49	2.43%	102	3	5
	Wellpoint	4.350%	8/15/2020	\$110.88	\$0.35	2.73%	136	3	(2)

Questions and comments are always welcome. Please contact the Capital Markets Bureau at [CapitalMarkets@naic.org](mailto:CapitalMarkets@naic.org).

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