

Corporate System Resolution

Cause of the Corporate System Crisis

Frequently Asked Questions (FAQs)

1. What does this FAQ cover?

This document takes a look at the types of investments that were held by the corporates, how these investments were affected by the downturn in the financial markets, and how the problems with the investments affected the corporate credit unions and threatened the entire credit union system.

Everyone wants to know who or what caused the current problems. When a global financial crisis of this magnitude occurs, it is difficult to assign blame to one specific party or action. Many separate but interlinked actions took place that led to the economic problems that emerged in 2007 and 2008. There were many different actors that were involved. Corporate credit unions made some mistakes. NCUA made some mistakes. A lot of time could be spent trying to place blame, but that would not change the fact that we are facing significant problems that must be addressed. There is plenty of blame to go around - and some very significant lessons to be learned. Going forward, it is essential that we minimize the losses to credit unions and take action to reduce the possibility of such a crisis taking place again in the future.

2. What are the primary problems facing corporates?

Several large corporate credit unions made large investments in private label mortgage-backed securities that are now worth much less than the amount the corporates originally paid for them. This affected corporate credit unions in two significant ways.

First, it impaired their ability to access sources of liquidity as they historically had done.

Second, the corporate credit unions recorded losses on the mortgage-backed securities that threatened their solvency. In some cases, the losses were absorbed by the retained earnings and capital of the corporate credit unions, including the paid-in capital (PIC) and membership capital (MC) held by their member consumer credit unions.

3. What is a mortgage-backed security?

Through the process called "securitization," a purchasing entity aggregates many mortgage loans into a pool, and then issues a security backed by the pool. Said

another way, a mortgage-backed security is created from hundreds, if not thousands, of mortgage loans. When a financial institution makes a mortgage loan, it charges interest to the borrower. When the borrower makes a monthly mortgage payment, part of the payment goes towards paying down the principal balance of the loan and part of the payment is an interest payment. The principal and interest paid from the underlying mortgages is used to pay the principal and interest owed to the mortgage-backed security investor.

To create a mortgage-backed security, mortgage loans are purchased from banks, credit unions, mortgage companies, and other mortgage loan originators. The mortgages are purchased by government-sponsored enterprises (primarily, the Federal National Mortgage Association, commonly known as Fannie Mae, and the Federal Home Loan Mortgage Corporation, commonly known as Freddie Mac) which create what are referred to as “agency” mortgage securities. Additionally many private institutions, such as brokerage firms, may also purchase mortgage loans to create what are commonly referred to as “private-label” mortgage securities. There was a high concentration of corporate credit union investments in private-label mortgage-backed securities.

The agency and private-label mortgage-backed securities are then sold in the financial market to investors. The investor is hoping to earn a profit off the cash flows from the mortgage loans in the pool.

4. What are the risks of investing in a mortgage-backed security?

There are several risks when investing in a mortgage-backed security. The borrower may refinance the mortgage loan or pay off the mortgage loan early, this results in investors being paid back more quickly, which may result in less than expected overall income. The borrower may stop paying on the loan which will reduce or eliminate the principal repayment to the investor. Or, the value of the real estate on which the loan was taken may significantly decline which may impact cash flows as well as the value of the securities. The entities that create the securities take some steps in the creation process to try and reduce the risks to the investor.

5. Can you explain in more detail an “agency” mortgage-backed security?

Fannie Mae or Freddie Mac purchases the loans from a financial institution to create the mortgage pool that backs the security. Fannie Mae and Freddie Mac also provide certain guarantees and, while not backed by the full faith and credit of the U.S. government, have special authority to borrow from the U.S. Treasury to support the guarantees. The guarantees they provide and the ability to borrow from Treasury reduce some of the risk to the investors. The investors purchase the right to receive the timely payment of interest and ultimate payment of principal from the pool of mortgages.

This type of security is a relatively low-risk investment, as it is issued by a government-sponsored enterprise and has guarantees that the investor will receive payments.

6. Are “private-label” mortgage-backed securities of greater risk than “agency” mortgage-backed securities?

Some mortgage-backed securities are issued by private entities, and these securities are referred to as “private-label” mortgage securities. Private-label mortgage-backed securities do not have the guarantee of the government, but they are created with other types of enhancements that offer some level of protection to the investor. The corporate credit unions had invested in a significant amount of private-label mortgage-backed securities.

7. Why would investors choose to take the additional risks of investing in private-label mortgage-backed securities?

Mortgage-backed securities benefit investors in that they provide opportunities for investments with different levels of risk. Mortgage-backed securities have traditionally been relatively safe investments. There is a desire in the financial markets for this type of investment which pays a fairly stable return over an extended period of time. However, mortgage-backed securities can also be structured during the securitization process to offer a higher level of risk for individual investors seeking such investment opportunities.

We already discussed the guarantee that goes with securities issued by government-sponsored agencies. Issuers of private-label securities take different steps to reduce the risk associated with the securities they issue. For an investor looking for lower risk, the securitization can be structured to provide credit enhancements to make the investment less risky. Credit enhancements include, for example, insurance wraps, reserve accounts, and overcollateralization.

An insurance wrap is a pretty straightforward concept. The security includes an obligation from an insurance company that the investor will receive the expected principal payments. The companies that provide this type of insurance are called “monoline” insurers. The financial health of a number of monoline insurers has declined, threatening their ability to make good on their insurance obligations. Some corporate credit unions have experienced losses due to the failure of two monoline insurers, Financial Guarantee Insurance Company and AMBAC Financial Group, to make payments on securities they guaranteed. The insurers were forced to suspend claim payments due to deficits incurred from extraordinary payouts.

An example of a reserve account is a specific amount of funds set aside to absorb a level of losses before the losses would be passed on to the investor.

And, finally, overcollateralization means creating a security backed by a pool of mortgage loans greater than the value of the investment. For example, if the mortgage-backed security sold in the market for \$100,000, there might be a pool of mortgage loans in the amount of \$110,000 backing that security. The value of the mortgage loans in the pool could fall by 10 percent before it would impact the value of the security.

8. Do all private-label mortgage-backed securities have credit enhancements?

No. Some investors want a greater return on their investment, and as such they are willing to take more risk. Credit enhancements reduce risk, but they come at a price. Those investors who desire less risk are willing to pay the price for the credit enhancements. Usually, that price is a reduced rate of return than the rate of return for the investors who did not take the credit enhancements. During the securitization process higher risk pieces of a security can be created through a process called “subordination.”

9. What is “subordination” when discussing a mortgage-backed security?

The creator of a mortgage-backed security can create different levels of risk for investors through the use of “subordination.” Subordination is the process by which certain slices of the investment, called tranches, absorb losses before other higher priority tranches. Thus, when mortgage loans default, first losses are absorbed by the lowest priority tranche. As losses increase, they are absorbed by the higher priority tranches after the lower tranches are fully used.

10. Can you provide an example of “subordination”?

The subordinate tranche of a security is the tranche that absorbs first losses. For our example, 15% of the security is in a subordinate tranche that will absorb losses before the remaining 85% of the security investors. The credit rating agency may have reviewed the securitization, and, in part due to the subordinated 15 percent piece of the securitization, assigned a triple-A rating to the 85 percent of the security in the top-priority tranche, or also referred to as the senior position. The investors in the senior position will receive their cash flows before the investors in the subordinate position. In effect, the investors in the subordinate position shield the investors in the senior position from any losses until such time the losses exceed 15 percent. Historically mortgage-backed securities experienced no significant losses, thus the 15 percent subordinate piece would be considered enough enhancement to allow the credit rating agencies to assign the 85 percent piece a triple-A rating.

In theory, on a very basic look at the security created in the example, as long as the projected principal losses do not exceed 15 percent, the holders of the triple-A rated piece of the security would be safe from losses. Unfortunately, in the current,

unprecedented financial crisis, losses far exceeded subordinated tranches, placing the senior tranches at risk of loss. In many areas of the country, especially in areas like California, Arizona, and Florida, home values fell 40 percent, or even more. When defaults occurred, the underlying collateral values were insufficient to protect investors from losses. The holders of the triple-A portion of these securities found themselves absorbing huge and unexpected losses.

11. Can you explain investment credit ratings?

Most investors do not have the time or resources to perform a thorough financial analysis of the securities in which they would like to invest. Traditionally investors have relied on credit ratings provided by Nationally Recognized Statistical Rating Organizations (NRSROs), often referred to as rating agencies, as part of their decision process when considering an investment. A credit rating provides an assessment of the creditworthiness or, more simply, the financial condition and prospects, for a security available in the financial market. Corporate credit unions are required to perform their own independent review of a security prior to purchase. The NRSRO's credit rating is one part of their analysis.

Credit ratings are assigned by the rating agencies, such as Moody's, Standard & Poor's, and Fitch, based on their review of the structure of a security. For a fee paid by the entity that creates the security, the credit rating agencies perform a thorough review of all aspects of the securitization. The review includes analysis of the mortgage loans in the underlying pool of assets, and also any credit enhancements that we discussed in the previous slides. The credit rating agencies are expected to provide the potential investor with an unbiased and objective summary of the quality of the security based on the credit rating it assigns. Credit rating agencies have come under criticism over the past two years as a result of the many highly-rated securities that were later downgraded significantly.

Credit ratings are generally a letter designation. Each of the credit rating agencies uses a slightly different letter rating system. The rating system used by Standard & Poor's ranks from excellent to poor starting from triple-A (AAA) and going down to single-D (D). Securities rated below triple-B minus (BBB-) are deemed to be non-investment grade, sometimes referred to as "junk bonds."

The process of subordination provides for the breaking up of the cash flows of a security into different pieces. The different pieces can be assigned different credit ratings, or no credit ratings, to appeal to investors with different appetites for risk.

12. How did the investment requirements of Part 704 regulate these investment purchases?

Corporate credit unions are required to comply with Part 704 of NCUA's Rules and Regulations. The investment section of the rule sets forth the minimum requirements that a security must meet at the time of purchase. There are a number

of requirements set forth in the rule. One of the requirements is the permissible credit ratings. In general, corporate credit unions were restricted to purchasing securities with credit ratings of AAA and AA.

When the investment requirements for Part 704 were implemented, a thorough review was performed on the history of credit ratings and their success in evaluating the financial strength of marketable securities. The loss history of securities with an initial rating of AAA or AA was less than one half of one percent. The loss history of securities issued by government-sponsored entities and the loss history of private-label securities was virtually the same. While corporate credit unions were not allowed to rely only on credit ratings, the track record of credit ratings in evaluating the future performance of securities was historically strong. Credit ratings have been an investment decision-making tool in financial markets for decades. However, as we noted earlier, credit rating agencies have come under criticism as of late.

The securities seemed to be highly marketable. At the time corporate credit unions bought them, they could easily be sold in the financial markets, or used as collateral for borrowings.

All of the mortgage-backed securities that were purchased by corporate credit unions were permissible at the time they were acquired, and accordingly met the rating requirements.

13. How did this type of investment fit with the corporates role as a liquidity provider?

A key function of a corporate credit union -- and one of the primary reasons that the corporate credit union system was created -- is to serve as a liquidity provider to consumer credit unions. Historically, mortgage-backed securities fit well into the corporate credit unions' business function as a liquidity provider because there was an active market for mortgage-backed securities and they could be used as collateral for borrowing.

Up until the current economic crisis, there was an active market for mortgage-backed securities. Corporate credit unions could readily buy or sell securities in the financial markets, depending on their liquidity needs. When corporate credit unions had excess funds on deposit from consumer credit unions who were their members, some purchased private-label mortgage-backed securities with those funds. The securities offered a better return and were historically just as safe as many other investment products. The earnings from the securities were passed on to member credit unions in the form of dividends on share deposits, or helped subsidize the fees charged to consumer credit unions for the services, such as settlement, provided by the corporate credit union. Or, in times of low liquidity, corporates could turn to the financial markets to sell the securities. Since sales of mortgage-backed securities

were common and since they historically performed well, corporates could relatively easily sell the securities without incurring a loss.

Another way that corporate credit unions could also use mortgage-backed securities as a means of obtaining liquidity was to offer them as collateral on loans. As we noted in the previous installment of this presentation, the Federal Home Loan Banks and the Federal Reserve Discount Window are alternative sources of liquidity. Financial institutions can borrow from those entities to meet liquidity demand, although the Federal Reserve Discount Window has historically been a lender of last resort. Only due to the current global liquidity crisis has the Discount Window been more flexible in this regard. Both the Federal Home Loan Banks and the Federal Reserve Discount Window require collateral in the form of highly-rated securities. Rather than selling mortgage-backed securities to meet short-term liquidity demands, corporates could borrow funds using the securities they had purchased as collateral. The securities would be returned to the corporate once the loan balance was paid off.

14. Did the advent of national fields of membership for corporates play into their investment strategies?

National fields of membership for corporate credit unions were approved in the late 1990s. This introduced a new level of competition among the corporate credit unions to pay even higher dividend rates.

Over the past few years, the Federal Reserve held interest rates at record low levels. As such, investors earned very low returns on government issued debt. Corporate credit unions were looking for a higher return in order to continue to pay dividends at the rate consumer credit unions expected, and to fund the various services they provided to consumer credit unions.

Many corporate credit unions chose to purchase senior positions in the private-label mortgage-backed securities. The senior positions were highly rated at the time of purchase and had a significant level of subordinate positions to absorb the first losses. Based on historic performance, there appeared to be very little risk with the private-label mortgage-backed securities purchased by the corporates.

Finally, many of the securities paid interest based on a floating rate rather than a fixed rate. This helped corporate credit unions in the overall management of their investment and share portfolios, and mitigated the risk of changing interest rates. As interest rates rise or fall, a corporate credit union should change its dividend rates on shares accordingly so that it continues to pay a current market rate. As interest rates rise or fall, a floating rate investment's rate of return will also adjust. If the investments were fixed rate, when interest rates rise and the dividend on shares is increased, there will be less income after dividend expenses earned from the investment. In a worst case scenario, the rate earned on the investment would be

less than the rate paid on the shares. In such a case, the corporate credit union would lose money.

15. How do consumer credit unions benefit from the corporate investment strategies?

In general, consumer credit unions maintain their funds in corporate credit unions on a very short-term basis. At the end of the business day, a consumer credit union may deposit any funds it does not need for lending or operational purposes into the corporate. The corporate invests the funds in the financial markets. The consumer credit union earns a small return on funds that would otherwise have earned nothing, and has access to those funds from the corporate the next day.

Consumer credit unions also maintain short-term funds in the corporate to meet the settlement demands for the various payment system transactions of their members. When the time arises for a check to clear, or an ACH payment to be made, the consumer credit union must have the funds in its account at the corporate to cover those funding demands.

Corporate credit unions function as aggregators of credit union funds. A corporate credit union with the consolidated funds from a large number of consumer credit unions has a greater number of options for making investments than does an individual consumer credit union investing on its own. While a corporate credit union maintains a significant portion of its funds in overnight investments, investing in longer-term mortgage-backed securities could fit into its overall role of liquidity provider.

Mortgage-backed securities generated more income than overnight or short-term investment opportunities, and were thought to also provide a source of liquidity by being readily saleable or capable of being pledged as collateral. The added income allowed corporate credit unions to provide a higher dividend on consumer credit union share deposits. Income was also used to offset some of the service fees corporates charged their member credit unions, as corporate credit unions traditionally offer a higher level of “hands-on” service and assistance. The income from the securities enabled corporate credit unions the ability to purchase the equipment and hire staff to handle the processing of various activities that allowed many consumer credit unions to offer more financial services than they could on their own.

16. What caused the losses on the private-label mortgage-backed securities?

To understand what happened to cause the losses associated with the private-label mortgage-backed securities that were held by corporate credit unions, we need to look at the overall global economic crisis that emerged in 2007 and 2008.

In the early part of the decade making homeownership a possibility for as many Americans as possible was an explicit public-policy priority. Government programs and financial institutions increased their efforts to assist consumers in making home purchases. The strong economy fueled consumers' ability to purchase homes. As a result, home prices rose rapidly, resulting in what is known as a "housing bubble." Basically that means that the extraordinary increase in real estate prices was not sustainable.

The impact of the real estate price growth on the national and global economies was significant. The demand for housing led to a huge increase in construction. The construction industry created a significant number of new jobs. Financial institutions found it difficult to keep up with the demand for funds to meet home borrowing needs. To raise additional funds, they sold their mortgage loans. As we described earlier, the mortgage loans were aggregated into pools to be securitized and sold to investors in the financial markets. There was a strong demand for mortgage-backed securities, both government sponsored and private-label, by investors as the expected return was far greater than what could be earned on government-issued debt, given the historically low interest rates set by the Federal Reserve.

Many homeowners found that the value of their residences had increased significantly. More and more consumers wanted to be part of the real estate boom. More and more investors wanted to purchase mortgage-backed securities. However, most consumers with good credit had already purchased real estate. There were fewer and fewer consumers seeking mortgage loans that could demonstrate a good credit history and the ability to repay.

Some financial institutions began to extend credit for real estate purchases beyond the creditworthiness of the borrower. In other words, the borrower could not document the financial ability to make the loan payments. Mortgage loans to individuals with demonstrated creditworthiness granted using conventional loan underwriting standards are referred to as "prime" mortgage loans. Mortgage loans to individuals that cannot demonstrate creditworthiness and are not granted using conventional loan underwriting standards are referred to as "sub-prime" mortgage loans. The commonly held belief was that real estate values would keep rising. If a borrower could not make the payments, they could sell the property and pay off the lender. Or, if the lender had to foreclose, they could sell the property at an amount equal to or greater than the outstanding loan balance. There were other non-traditional mortgage loan products introduced at this time to help fill the demand for non-creditworthy borrowers. The loan products include Alternative-A mortgages, known as Alt-A, which allowed for less stringent loan documentation loans, non-verification of income, lower credit scores, or higher loan-to-value ratios.

Investor demand for mortgage-backed securities also remained high. More and more mortgage-backed securities contained pools that included sub-prime mortgage loans.

The growth in real estate prices could not be maintained. When high risk borrowers could not make loan payments, they found they could not sell their homes at a price high enough to pay off the mortgage loan balance. Many mortgage loans were granted with adjustable rates that had a low interest rate to start. After time, when the interest rates reset and the monthly payments increased, many borrowers could no longer afford the payments. A large number of sub-prime mortgage loans were forced into foreclosure. The greater number of foreclosures created a large volume of properties available for sale. The greater supply of properties caused further decreases in real estate prices, leading to more foreclosures. Real estate construction, which had become a very large sector of the economy, declined significantly. This led to higher unemployment and even more borrowers unable to pay their mortgages. The sub-prime mortgage loan problem spread into the prime mortgage loan sector as once creditworthy borrowers lost their jobs.

The decline in value of real estate and increased foreclosures had a devastating impact on mortgage-backed securities. The value of the real estate loans backing the mortgage-backed securities declined to the point they were lower than the value of the security. As more and more borrowers stopped making payments on their mortgage loans, the cash flows of principal and interest that created the payment streams to pay investors did not keep up with original projections. While the issuers of the private-label mortgage-backed securities utilized credit enhancements and subordination in an attempt to mitigate the risks, the decline in cash flows and in the value of the properties overwhelmed subordinated pieces. The holders of AAA securities found themselves facing unprecedented declines in the value of their investments.

As the value of the mortgage-backed securities declined, the historically strong markets to buy and sell mortgage-backed securities became inactive as investors became uncomfortable with the safety of the securities. Lenders became less willing to accept mortgage-backed securities as collateral for borrowing.

These events had a significant impact on most financial institutions, including the credit union industry. Corporate credit unions' ability to use their mortgage-backed securities as collateral to borrow funds as a means to provide liquidity came to an end. They were stuck with huge amounts of mortgage-backed securities and could not sell them for a price anywhere near to what they paid for them. The problems were compounded by the accounting treatment required on these securities.

17. Did the credit ratings on the securities show the impact from the real estate market changes?

Credit ratings deteriorated rapidly in late 2008. There was very little time for the corporate credit unions to try to sell their mortgage-backed securities before the ratings and values began to deteriorate.

In June 2007, 99 percent of all the securities held by corporate credit unions were rate AAA or AA. Only 1 percent were rated A or BBB, which is still considered investment grade in the financial markets. There was a slight decline by December 2007, and a bigger decline by June 2008. However, by December 2008, the severity of the financial crisis was much more evident. Only 76 percent of the securities were rated AAA or AA, and 14 percent had fallen below investment grade.

18. How did the declining real estate market impact the corporates ability to be a liquidity provider?

Corporate credit unions were able to use mortgage-backed securities in their overall business model as a liquidity provider by being able to readily sell the securities in the financial markets or by using them as collateral for borrowing. However, as the real estate crisis began to grow, and as more and more investors became concerned with the safety of mortgage-backed securities, the mortgage-backed security market was immobilized: there were no buyers for those securities, at any price. When the market became inactive, corporate credit unions were unable to find buyers at other than highly depressed prices, and the low market values for the securities almost completely eliminated their use as collateral.

Without the ability to easily convert their mortgage-backed securities to liquidity, corporate credit unions found it increasingly difficult to function as liquidity providers to consumer credit unions. The situation deteriorated to the point where a few of the largest corporate credit unions could not conduct settlement activities on behalf of the credit union system without assistance. Had settlement activities not taken place, consumer credit union members' checks would not clear. The reputation of the individual credit union, as well as the credit union system, would have been seriously compromised.

19. Were there any early indicators of the developing problems with the securities?

An early indicator of the developing problems with the mortgage-backed securities was the increase in "unrealized losses" on the balance sheets of the corporates. This is an accounting term and a requirement under generally accepted accounting principles (GAAP). GAAP requires an entity, on an ongoing basis, to obtain a price for what an investment would sell in the financial market. Unrealized losses on securities are reported on the balance sheet but are not recorded through earnings, nor do they count against capital. However, they represent losses that would be recognized through earnings and capital if the securities were sold. This accounting treatment is intended to provide full and fair disclosure to anyone reviewing an entity's financial statements.

In December 2008, unrealized losses were approximately \$30 billion for the corporate credit union system. Corporate credit unions could not sell the securities without being forced to realize the "unrealized" losses. It became of paramount

importance for corporates to tap any and all liquidity sources to prevent the sale of securities and avoid realizing the unrealized losses. Putting additional pressure on liquidity was the outflow of funds from corporates due to a lack of confidence among their consumer credit union members of their financial health. Corporate credit unions became reliant on borrowings, and also became less able to meet their members' liquidity needs.

A corporate credit union's solvency is measured in terms of capital. From a regulatory perspective, many corporates did not reflect concerns initially because losses were unrealized, as discussed above. Many experts thought the unrealized losses were a short-term response to market disruptions. Even the credit ratings for most of the mortgage-backed securities held by corporates remained AA or higher through June 2008, indicative of the highest credit quality. In the latter part of 2008 the perception had changed, as investors understood actual principal losses were going to occur. These principal losses were considered other-than-temporary impairments (OTTI) and had to be recognized, according to GAAP. OTTI losses resulted in significant erosion of capital in corporate credit unions. At this time, all capital at U.S. Central, WesCorp, and Constitution has been fully depleted due to projected credit losses.

20. What is the Agency's position on depleted capital?

The Agency's position is based on legal, regulatory, and accounting requirements. By law, all corporate credit unions must report their financial statements in accordance with GAAP. So if GAAP requires a loss to be recognized, then a corporate will record the loss. Per NCUA regulations, when losses occur, they are first absorbed by retained earnings. If all retained earnings are depleted, then the corporate must deplete paid-in capital and membership capital invested by credit unions until retained earnings are restored to zero. It is this convention that has resulted in consumer credit unions writing off their capital investments in corporate credit unions.

21. What is "other-than-temporary-impairment" or OTTI?

The concept of OTTI forms the basis for the losses at the corporate credit unions and is a very complicated accounting issue.

OTTI is an accounting requirement under GAAP. The premise for OTTI is that certain price declines are not temporary, but reflect fundamental losses in a security that are considered to impair the security's long-term value. Credit risk is the potential for the investor to receive less principal through maturity than had been expected at the time of purchase. Commonly, it is credit risk that results in OTTI. The credit losses associated with credit risk are recognized through earnings. If insufficient earnings exist to cover the total amount of the losses, then capital is used to absorb the amount of the losses remaining.

Significant price declines that endure for a period of time are the first indicator that OTTI may exist. The next step is to perform projections on the bond performance to determine if there are any fundamental causes for the price declines. In the case of corporate credit unions, they used internal credit models and contracted with third party vendors to project the credit performance of their mortgage-backed securities. In making these projections, the credit analysis looks to the underlying mortgage loans. Assumptions are made as to how many loans will default and, when defaults occur, the amount of the loss that will be recognized. Losses on mortgage loans occur when there is insufficient equity in the property to cover the cost of foreclosure and satisfy the existing mortgage loan balance. The projections then must look at the security and project losses through the various tranches. Credit enhancement factors must be considered such as subordination, or insurance wraps, as discussed earlier. When a credit loss is expected to impair a tranche, the investor most likely will record OTTI as a loss.

These credit loss projections in corporate credit unions have indicated that substantial credit losses are likely. Accordingly, many corporates have had to record OTTI. Total OTTI charges through June 2010 amount to almost \$12 billion dollars. These losses resulted in capital being depleted at several corporates, and the respective members of these corporates have had to impair their investments in contributed capital accounts.