THE BROOKINGS INSTITUTION

Farm Credit System Liquidity and Access to a Lender of Last Resort

Report for the Farm Credit System Insurance Corporation

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Introduction

This report was researched and written at the behest of the Farm Credit System Insurance Corporation (FCSIC) in order to evaluate the liquidity of the Farm Credit System (FCS), analyze the FCS's vulnerability in the event of a broad financial market shutdown, and look at the policy aspects of a lender of last resort in such a circumstance. In the following sections the authors detail the structure of the FCS, provide background on how the FCS, other Government Sponsored Enterprises (GSE) and Federal insurance agencies weathered the 2008 crisis, compare these entities' access to a lender of last resort, and finally provide analysis and recommendations on the state of FCS's liquidity and options for securing a backstop in the event of a market shutdown.

Background

The FCS is a GSE designed to expand the availability of credit for agriculture and rural America. There are four FCS Banks (Banks)—AgFirst, AgriBank, Farm Credit Bank of Texas (FCB), and CoBank. The Banks are owned by the member associations, which in turn are owned by their agricultural borrowers. CoBank is also owned by eligible retail cooperative borrowers. At yearend 2011, the FCS had combined assets of $230 billion on a capital base of $35.9 billion. The Banks own the Federal Farm Credit Banks Funding Corporation (Funding Corporation), which raises cash in the wholesale markets to fund the lending of the Banks and their affiliated associations. That is, the borrowers obtain credit from their associations (and CoBank in the case of eligible borrowers) and the associations obtain wholesale funding from their affiliated Banks through the Funding Corporation. The Farm Credit Administration (FCA) oversees the FCS and is responsible for supervising and for setting and enforcing rules that safeguard the safety and soundness of the Banks. FCSIC is a government controlled independent entity that insures the timely payment of interest and principal on bonds and notes issued by the Banks through the Funding Corporation. FCSIC is funded by premiums on the Banks, and at the end of 2011 it had an insurance fund of $3.4 billion against guarantees of $184.2 billion in notes and bonds. [1]

The FCS is the only GSE without explicit legislated access to emergency liquidity from the Treasury Department. For example, Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (FHLBanks) have long had legislation granting them a small line of credit at the Treasury, which added to the perception that the taxpayers of the U.S. stood behind them. And, for those three GSEs that backup was greatly expanded during the financial crisis, making more explicit the government guarantee. Those facilities weren't utilized by the FHLBanks, but they were by Fannie and Freddie, whose solvency was restored with U.S. Government capital injections. About the same time, the supervision of these three GSEs was transferred to a new agency, the Federal Housing Finance Agency (FHFA), which was given much more explicit authority to oversee the activities of the three housing GSEs and to protect their safety and soundness.

[1] The Federal Agricultural Mortgage Corporation (Farmer Mac) provides a secondary market to agricultural lenders. Farmer Mac's debt securities are not insured by FCSIC.

The two other Federal Insurance programs[2] also have access to government funds in an extreme situation and that access was expanded during the crisis. The Federal Deposit Insurance Corporation's (FDIC) $30 billion permanent line of credit to the Treasury was expanded to $100 billion; while the FDIC's total borrowing authority was temporarily increased to $500 billion. In order to avoid using these extra funds the FDIC's Deposit Insurance Fund (DIF) used its premium authority to impose a special assessment on insured institutions in which they prepaid their estimated risk-based assessments. During the crisis, the National Credit Union Share Insurance Fund's (NCUSIF) permanent line of credit with the Treasury was increased from $100 million to $6.0 billion. In addition, the NCUSIF was granted temporary authority to borrow up to $24 billion through the temporary Corporate Stabilization Fund, which expired in December 2010.

Access to back up sources of liquidity was critical in stabilizing the financial system during the financial crisis of 2007-2009 and restoring confidence and more normal flows of credit. In addition to the extraordinary actions just outlined, depository institutions insured by the FDIC and NCUSIF borrowed heavily at the Federal Reserve's discount window and, in the case of retail credit unions, from the NCUA's Central Liquidity Fund (CLF). The authority of the CLF to borrow from the Treasury was increased during the crisis. The Federal Reserve also extended its discount window facilities to nonbank borrowers through a variety of facilities designed to get liquidity to money market mutual funds, issuers of commercial paper, and to purchasers of securitized debt.

The FCS does not have explicit access to a federal government source of back up liquidity. After reporting losses in the wake of the collapse of agricultural land values and commodity prices in the early 1980s, Congress passed a series of amendments to the Farm Credit Act of 1971. The Act reorganized the Banks, made FCA an "arm's-length" regulator with increased supervisory and regulatory powers, including new enforcement authorities, and authorized up to $4.0 billion in federal assistance to the FCS. In total, the FCS received $1.3 billion in federal assistance through government guaranteed Financial Assistance Corporation bonds, which were fully repaid in 2005. As with the housing GSEs in 2008, taxpayer funds were put behind obligations of the Banks and, to forestall a repetition of the problems, more disciplined and tighter supervision was imposed under FCA's new authorities.

However, in the Agricultural Credit Act of 1987, Congress, rather than giving the Banks explicit access to the Treasury, chose to reinforce the creditworthiness of the obligations of the Banks by creating a Federal insurance corporation to stand behind them and giving the FCSIC the ability to raise funds through collecting an insurance premium from the Banks. In contrast to the FDIC and the NCUSIF as Federal insurance funds, however, the FCSIC itself was not given the explicit authority to turn to the Treasury for funds in an emergency. And, unlike the banks, thrifts, and credit unions whose deposits the FDIC and NCUSIF insure, the entities whose obligations FCSIC insures do not themselves have explicit access to the Federal Reserve or any other lender of last resort.

[2] For more information on the FCSIC, the NCUSIF, the FDIC, and the FHLBanks, please refer to the appendix. Fannie and Freddie were not included in the report or appendix, as they are now government owned and their final structure and status are yet to be determined.

This lack of access to a lender of last resort was not a problem for the FCS for many years. But it became a potential issue in the freeze up of financial markets after FHFA placed Fannie Mae and Freddie Mac into conservatorship and Lehman Brothers filed for bankruptcy. As reported in its third quarter 2008 report, the unprecedented instability in the global financial markets reduced FCS' ability to issue debt with preferred maturities and structures. More specifically, FCS operations were funded primarily through short-term discount notes as issuance of longer-term debt had become more restrictive.[3] To provide additional flexibility, the FCA authorized an increase in the ceiling of the Discount Note program from $40 billion outstanding to $60 billion at the Funding Corporation. The shortening of the liability structure of the Banks' funding in turn implied that the existing holdings of liquid assets might not cover the required 90 days of maturing obligations. The FCA adopted the Market Emergency Standby Resolution, which provided for a waiver if the resolution ever went into effect[4]. In early 2009 it also initiated the monthly collection of regular detailed information about the days of liquidity at each Bank in a specified format.

The disruption of the long-term funding market for FCS obligations was temporary and the consequences were not serious. But, in the view of FCSIC management, that relatively benign outcome was partly due to several favorable circumstances that might not be repeated in a similar future event. First, during the most severe period of the market disruption, the FCS did not have a large amount or very concentrated maturities of notes and bonds coming due. Second, over the several years preceding the crisis the farm economy had been quite prosperous; consequently the performance of the loans made by the FCS had been good. FCA, the System's regulator had imposed stronger capital regulations in the early 90s requiring that System institutions build and maintain enough surplus to weather stressed environments.[5] Thus, even the slump of commodity prices and freezing up of trade credit that followed the Lehman-related market disruption did not call into question the capital adequacy of the Banks. The consequences for the FCS might have been more serious in the volatile and risk averse environment that naturally follows a financial crisis if FCS maturities had been larger or more "lumpy," if the farm economy had been more vulnerable to a global slowdown, or if the market had been disrupted for longer. If any of these possibilities had occurred at the same time as the crisis or had other adverse shocks, such as trade restrictions affecting agricultural exports, been experienced, the spill over concerns could have negatively affected the viability of the Banks and caused more lasting constrictions on the funding capacity of the Funding Corporation and the availability of loans to agricultural borrowers.

At the onset of the crisis, the Banks held minimal amounts of U.S. Treasuries that were so much in demand during the height of the crisis. A high proportion of the supposedly liquid assets were in housing GSE obligations and in non-agency MBS and ABS. The latter categories to be sure had been rated AA or AAA, but the prices of these assets fell sharply as the market deteriorated and they did not form an effective liquidity backstop for the Banks.

[3] See Farm Credit System Quarterly Information Statement—Third Quarter 2008, page 9.
[4] A waiver was never granted and the Banks did not exceed the original Discount Note ceiling.
[5] Total System capital to assets grew from 9 percent in 1991 to 15 percent in 2011. The quality of this capital also improved with retained earnings representing 83 percent of total capital compared with 58 percent 20 years ago.

The FCA and FCS took a number of steps in response to the newly perceived vulnerability. For example, the FCA and FCS explored whether and under what circumstances the Federal Reserve Banks could lend to the Banks under section 13(13) of the Federal Reserve Act during a liquidity crisis in the market. One of the authors of this paper, Kohn, was a party to those discussions when he was at the Federal Reserve. Section 13(13) of the Federal Reserve Act authorizes Federal Reserve lending to individuals, partnerships and corporations collateralized by U.S. Treasury securities or the obligations of U.S. government agencies held by the Banks. The Board's regulation A limits such lending to "unusual and exigent circumstances" and only in cases when the borrower is not able to obtain credit from other sources and when the failure to obtain credit would adversely affect the economy. Based on such considerations, the Federal Reserve Board judged that lending was not warranted at the time, and the Board has followed its longstanding policy of refraining from any commitments about providing such emergency credit in the future.

Somewhat later, FCSIC also approached the Federal Financing Bank (FFB) at the Treasury department about possible borrowing in a future liquidity emergency triggered by a market shutdown. As envisioned by FCSIC, it might issue notes to the FFB or the borrowing might take the form of obligations issued by the Funding Corporation, purchased by the FCSIC and in turn bought by the FFB, with the funds passed back to the holders of maturing FCS obligations. The FFB seemed open to exploring whether and how it may be a potential source of funding for an organization—FCSIC—that was a federal agency and at least implicitly already had full faith and credit backing of the U.S. government.[6] With the guarantee already in place, the FFB would be providing liquidity, not capital, to the FCSIC to make good on guarantees; funding would not increase the exposure of the Federal Government. But the FFB pointed out several ambiguities and uncertainties about the authority of the FCSIC to borrow from the FFB and the modalities of how any such funding would work. And, critically, Office of Management and Budget (OMB) may need to score any agreement between the FFB and FCSIC for budget purposes.

Importantly, the Banks, their regulator the FCA, and the FCSIC as insurer recognized that the Banks themselves needed to hold more high quality liquidity. In late 2008, the FCS formed a liquidity committee to conduct a strategic review of FCS liquidity and to make recommendations to meet future liquidity challenges. Also, earlier in 2008, Congress amended the Farm Credit Act to allow 90% of Federal government guaranteed investments to be deducted from total insured debt on which FCSIC premiums are assessed. In response to these initiatives, the Banks greatly increased their holdings of U.S. Treasury securities and securities with explicit government guarantees. In 2010, the Banks entered into a voluntary agreement in which they agreed to hold the very highest quality and most liquid assets (cash, cash equivalents, or Treasuries maturing in less than three years) to cover the first 15 days of maturing obligations; very high quality securities for the next 30 days and somewhat lesser quality instruments for days 46 through 90. In December 2011, the FCA published a proposed rule closely resembling the 2010

[6] The Resolution Trust Corporation (RTC) was also created without explicit access to the Treasury, but during the thrift crisis the RTC was allowed to borrow from the FFB. See *"Authority of the Federal Financing Bank to Provide Loans to the Resolution Trust Corporation,"* 14 Op. O.L.C. 20, OLC LEXIS 54 (February 14, 1990); "*Debt Obligations of the National Credit Union Administration*," 6 Op. O.L.C. 262 , 1982 OLC LEXIS 62 (May 24, 1982).

agreement.[7] In general, the FCA proposal would improve the Banks' liquidity reserve requirement, promote liquidity risk management best practices, and better prepare the Banks to withstand a liquidity crisis. The proposed rule would continue to require the Banks to maintain a liquidity reserve sufficient to fund a minimum of 90 days of maturing obligations but with higher quality instruments that closely mirrors the 2010 voluntary agreement. The proposed rule also requested comment on a new concept that would require all Banks to establish and maintain a supplemental liquidity buffer that would provide a longer-term stable source of funding beyond 90 days. A key aspect of the proposed regulations is the requirement for Banks to have contingency funding plans to ensure they have sufficient liquidity to fund operations under a variety of stress scenarios, including market disruptions and loss of market access, as well as rapid increases in loan demand or drawdowns of unfunded commitments. As of this writing (early November) the final regulation had not been published.

Finally, in response to the concerns raised by the interruption of market access, the FCSIC engaged the authors to examine various liquidity issues around the FCS—access to lender of last resort as compared to other GSEs and Federal insurance corporations, and the liquidity of the Banks. To these ends, in the process of preparing this report, we have had discussions with individuals at FCSIC, the Funding Corporation, the FFB/Treasury, the Federal Reserve, and some other GSEs and government insurance corporations with access to the Treasury as a lender of last resort—the FHLBanks, and the NCUSIF.

Analysis and Recommendations

It is important to emphasize the limited nature of the examination we were asked to undertake and the reach of our recommendations. They are focused solely on liquidity, not solvency or capital, and a liquidity need occasioned by a shock to markets external to the agricultural sector or the FCS. In our conversations, we encountered some concerns about the potential impact of a decline in land prices should agricultural commodity prices fall considerably. Commodity prices have been elevated on balance over recent years by growing demands from emerging market economies, by unusual weather patterns and drought in some regions of the world, and by environmental regulations mandating the use of ethanol in gasoline. Any of these factors could be reversed or market participants could come to the view that prices had overreacted to them. Extended declines in agricultural commodity prices and in the prices of the land used to produce agricultural commodities could cause loan problems at the Banks and their affiliated associations and call into question the adequacy of their capital, which would then have an effect on their access to markets. We did not evaluate the risk of this particular cause of a loss of access to market funding or of the desirability of providing a backup source of funding under these particular circumstances.

Lender of last resort. As outlined above and shown in more detail in the appendix, the FCS and FCSIC stand out from other GSEs and Federal insurance corporations in their lack of explicit access to a governmental source of back up liquidity. Legislation explicitly gives Fannie, Freddie, the FHLBanks, the FDIC, and the NCUSIF some access to Treasury liquidity in an emergency. Moreover, the institutions

[7] See 76 FR 80817 (December 27, 2011) at http://www.fca.gov/handbook.nsf.

insured by the FDIC and NCUSIF can borrow from the Federal Reserve, which so far has not granted similar access to the Banks.

However, there are reasons to question whether such access for the FCSIC on behalf of the FCS would be in the public interest. For one, to date this lack of formal legislated access to government liquidity has not seemed to have adversely affected the ability of the FCS to fulfill its public policy role of providing competitive financing for the agricultural economy. The spreads of Bank obligations over Treasury securities closely mirror the spreads of the obligations of other GSEs. FCSIC as a federal insurance corporation is probably already backed by the full faith and credit of the U.S. government, at least implicitly, providing some assurance of repayment of the market notes and bonds of the Banks. Moreover, when FCS' solvency was threatened in the mid-1980s, the Congress structured a work out that involved taxpayer backing and no losses for private investors. More recently in 2008 during an event widely characterized as the "worst financial crisis since the 1930s", the Funding Corporation was able to raise funds in the open market, albeit only with maturities of a year or less, which allowed the FCS to avoid any liquidity issues and meet all its obligations.

Second, there may be incentive and moral hazard costs to firming up the implicit government backing. The lack of explicit access to a governmental lender of last resort has probably contributed to the willingness of the Banks and their regulator to raise liquidity standards in the wake of the financial crisis. Higher standards have costs in terms of interest forgone and capital held against non-loan assets, and naturally, borrower-owners may not be entirely receptive to making the Banks safer and more liquid—that is, reducing the value of the implicit support of the taxpayers. From the broader public policy perspective that takes account of taxpayer as well as agricultural interests, however, any formal access to government liquidity should not be allowed to reduce the momentum toward making the Banks themselves safer.

If access to government liquidity is granted to the FCSIC on behalf of the FCS, in order to limit moral hazard it should be tailored narrowly to deal with a liquidity event external to the agricultural sector and the Banks. In the event that market access is at risk because of concerns about solvency or lax management of liquidity by the Banks, the FCS should be required to approach the Congress and the administration for legislative help. In these circumstances, Congress should evaluate the causes of the difficulties, the conditions for any assistance, and any flaws revealed in the structure or oversight of the FCS before putting additional taxpayer resources behind agricultural credits. And it should require that investors should look first to the resources of the FCS— the FCSIC fund and its ability to collect fees in the future—before public money is put at risk. In the end, it would be important for a federal insurance program to make good on its commitments--failure to do so might call into question other insurance programs, like the FDIC and the NCUSIF—but under conditions arrived at through the legislative process.

But under a very narrow set of circumstances--when the problem is purely a liquidity issue that cannot be handled by FCSIC and the Banks alone, and it originates external to the agricultural sector and the FCS in a prolonged market shutdown situation--we can see some net benefit to giving the Banks, through FCSIC, a process for applying to the Treasury for back up liquidity. The FCS plays an important role in agricultural finance. Self-insuring against any possible liquidity event could be very expensive and

constrain credit availability. Depository institutions have been given access to the Federal Reserve as a liquidity backstop, but in restrictive circumstances and with considerable regulatory and supervisory oversight to limit moral hazard. And other GSEs and Federal deposit insurance corporations can tap the Treasury as a lender of last resort, suggesting that Congress saw the cost of complete self-insurance or the risk of failure as being too high to be in the public interest for these types of institutions. [8]

The potential access would be tail insurance for highly unusual situations that could not be reasonably foreseen. It would not be a substitute for strong liquidity management by the Banks, including holding liquidity against a variety of potential stress situations, as is being required of commercial banks. Access would not act as a substitute for the Funding Corporation utilizing term borrowing as much as is consistent with good risk management and business practices to reduce the FCS vulnerability to market events. And it would be a last resort—to be utilized only after other means of obtaining funding for on- and off-balance sheet obligations had been exhausted. Such means would include utilizing the liquidity reserves of the Banks and temporarily increasing the short-term borrowing of the Funding Corporation, as occurred in the fall of 2008. The utilization of this facility would be reserved for a situation in which there was an extended market shutdown that impaired the ability of the Funding Corporation to raise sufficient funds even in short-term or floating rate markets.

We believe the most direct and logical way to structure any such access is through the FFB, building on the preliminary discussions already held. Any lending by the FFB would be at the discretion of the Secretary of the Treasury, with a clear written understanding that: it would be reserved for a general market closure unrelated to the solvency of the Banks; that it would be a last resort after other sources had been utilized; and that its availability would depend on the Banks following sound liquidity risk management practices.

Within that broad framework, several key issues need to be addressed.

1) Are FCSIC guarantees already full faith and credit (FFC) obligations of the U.S. government so that FFB access would not increase the credit exposure of the government? If they are, is this explicit or implicit and how is it perceived by the public? If it is implicit and the public is uncertain, an agreement would strengthen the implied guarantee, loosening market discipline, and this could be an important policy issue.

2) How should any loan from the FFB be structured? There are alternative mechanisms for the FFB to provide liquidity, from lending to the FCSIC to pass on to the Funding Corporation to lending to the Funding Corporation with FCSIC guarantees. The choice could depend in part on what the FCSIC is empowered to do—specifically whether it can borrow from the FFB, which should be clarified. The need for and

[8] The Federal Reserve also can buy U.S. agency securities in the course of its open market operations, and this could include FCS securities. But it makes these purchases only "in the open market"—i.e. in the secondary market. While helpful in restoring market liquidity in a prolonged crisis, such purchases would not provide immediate funding liquidity in a market shutdown.

composition of any collateral backing a loan also should be determined. For example, collateral may not be needed if FCSIC can repay its borrowings with its premium collections. If collateral is appropriate, FCSIC or the Funding Corporation could back a loan with the assets of the Banks, the assets of the FCSIC fund, and a pledge of future insurance premiums from the Banks.

3) Would there be implications for the budget of the United States? FFB and FCSIC would need to determine, in consultation with OMB, if an agreement would need to be scored by OMB under the Federal Credit Reform Act. Based on the similarity of FCSIC legislative language with that of the FDIC and precedent with the Resolution Trust Corporation, it is possible that an agreement to lend wouldn't require scoring. If, however, an agreement does need to be evaluated by OMB, the score would depend on estimates of any subsidy, which in turn would be judged by comparing the loan amount to the present value of expected future repayments of any loan. Collateralizing the loans would increase the likelihood of repayment and therefore reduce or eliminate any subsidy. If scoring is required, a Congressional appropriation apparently also would be required, even if the potential lending was found not to entail a subsidy. The FFB does not have signed lending agreements with other GSEs and federal insurance corporations. But these agencies have the explicit authorization of Congress to borrow from the FFB.

We recommend that an agreement between FCSIC and the FFB be established well before any precipitating event--as soon as possible after the preceding issues have been dealt with, rather than waiting for a crisis situation to arise. Under the circumstances in which the FCA and FCSIC determine it needs to be activated, the Secretary of the Treasury could then make a judgment based on the already established agreement.

We recommend that the effort to craft such an agreement be discussed with the appropriate Congressional committees. Because the Congress did not explicitly authorize the FCS to borrow from the Treasury, it appears Congress believed that the insurance fund it authorized would be sufficient to deal with any problem. Due to the 2007-2009 financial crisis, the FCSIC and Treasury are considering circumstances when that backstop might not be sufficient. Without Congressional consultation, an adverse reaction by Congress to a surprise activation of the facility in the middle of a market crisis could well be destabilizing for markets generally as well as for the FCS.

Bank Liquidity. Because the facility we envision could only be used in the event of an extreme generalized market shut down, it is imperative that the Banks continue to hold ample liquidity against various contingencies. As noted, considerable progress had been made in this regard since the fall of 2008. The exact requirements of the final FCA regulation on liquidity are not available as of this writing in early November. Assuming it closely mirrors the proposed regulations of December 2011, we would emphasize several issues. First is the critical role of stress tests in assessing liquidity and liquidity management. The Banks need to be prepared to handle combinations of stresses that, while falling

short of complete market shutdown over a prolonged period, would be very serious and challenging. For example, in a market panic the prices of all but the highest quality and most liquid assets, such as Treasury securities, could fall eroding the value of assets available for short-term sale to meet obligations.

Second, it is important that those stress tests include the contingent need for funding and liquidity that a take down of off-balance sheet obligations could pose. In particular, the FCS has some commitments to extend credit to borrowers on their demand. In periods of high commodity price volatility the draws on those commitments tend to increase (especially in response to spikes in commodity prices that cause grain elevators to need more credit to maintain hedges). Usually, these draw downs have been funded by increases in the issuance of discount notes, but if those notes are already on the rise because of a partial market shutdown, further sharp increases could be problematic. At a minimum the Banks under the direction of the FCA need to engage in a thorough analysis of how large any such draws might be under various circumstances, how those circumstances might coincide with other market disruptions, and the potential liquidity implications of draws on unfunded commitments in the midst of other adverse market events. The results will vary among individual Banks and each should be able to cope with a liquidity stress arising from its particular circumstances—the stress tests should be individually tailored under the direction of the FCA.

Finally, the FCA is considering whether the largest Banks should be held to higher standards for liquidity (and capital) under stress scenarios. The resources of the System--the capital and liquidity of other institutions plus the insurance fund-- would be quite stretched if either one of the two larger institutions had problems meeting its obligations and the other banks or FCSIC were required to step in. From the perspective of the FCS, the two largest Banks are systemically important in that problems at one of those institutions could cause market participants to have legitimate questions about the viability of the whole FCS. Market participants view the FCS as a single entity. A clear lesson of the recent financial crisis is that trouble in very large components of a financial system can threaten the whole system, in part by raising questions about the implications for other components of the system through interconnections, such as the joint and several liability of the Banks. As a consequence, the Dodd-Frank Act and the new banking regulations growing out of the Basel process incorporate higher requirements for systemically important financial institutions (SIFIs). Although CoBank and AgriBank have over $50 billion in assets, they are not subject to the SIFI rules of the Dodd-Frank Act. Nonetheless, we believe stress tests and the resulting liquidity requirement should incorporate interconnections and make allowance for the systemic importance of institutions—the macro-prudential overlay—as well as the particular risk profile of each individual institution.

The liquidity standards for banks coming from the Basel Committee on Bank Supervision are being discussed and modified this year and, consequently, the resulting liquidity regulations for U.S. banks have not yet been proposed. What is appropriate for commercial banks may not be exactly applicable to FCBs, but the general principles are the same and FCA should monitor this progress of the Basel and U.S. processes for ideas about best-practice liquidity regulation that should be applied within the FCS.

Resolution As the number of Banks shrinks, the opportunities to handle a troubled institution unable to meet its obligations by merging it into a stronger institution also diminish. In particular, if one of the two larger Banks were to be in trouble, the orderly wind down of the institution's book of business and repayment of insured obligations would be handled by FCSIC. This could be challenging in a number of dimensions, even if the resources of the FCSIC fund were ultimately adequate to meet the Banks' obligations. Among those challenges could be accessing the liquidity to fund an orderly wind down as obligations came due. FCSIC has options in this regard, including its power to issue guarantees and operate the Bank in conservatorship or receivership using all of the Banks' borrowing authorities. But we recommend that FCSIC consider carefully how it would handle such a situation and what sources of liquidity it could access.

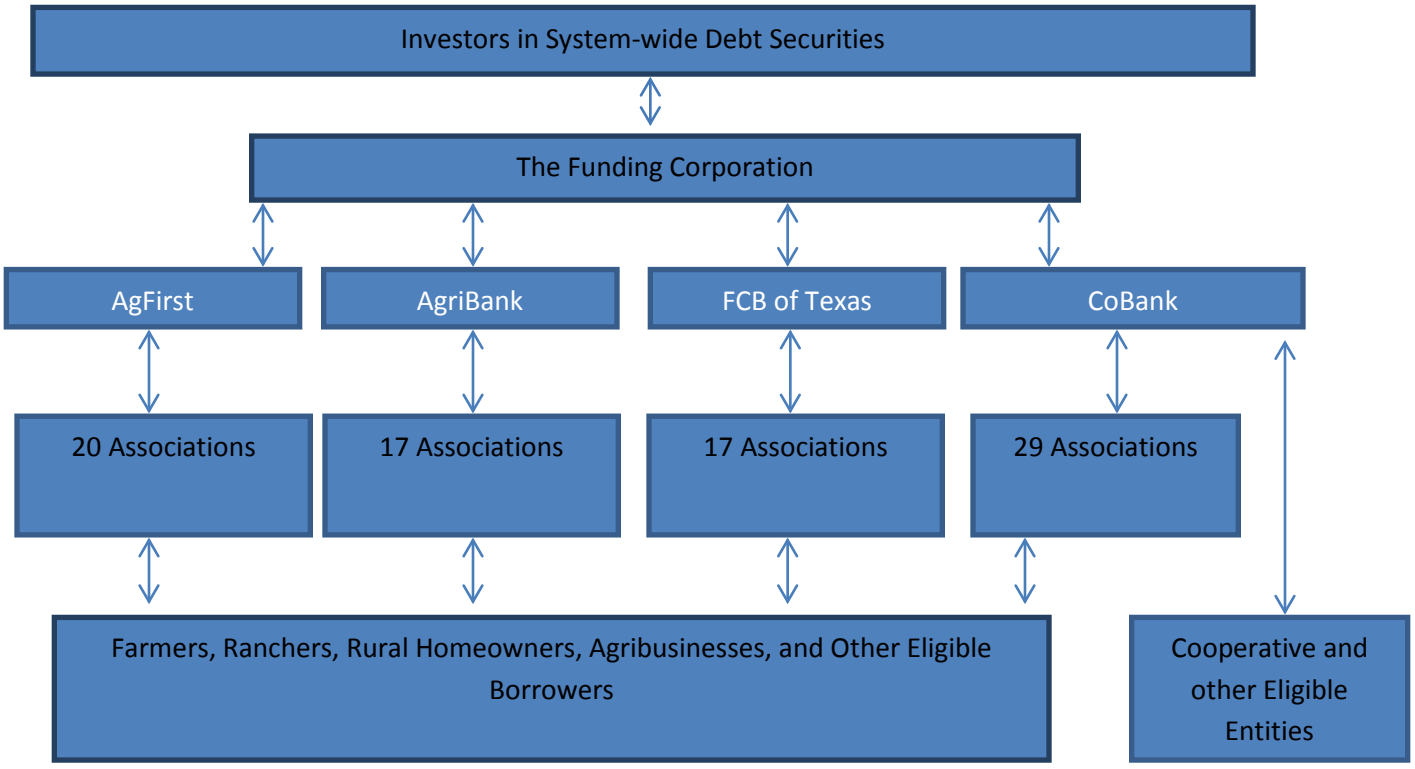
Appendix

This appendix gives greater details for comparisons between the FCS and other GSEs and Federal insurance corporations contained in the report. It looks at the structure of each agency, its experience during the 2008 crisis, its liquidity regulations, and the access for the agency or its insured entities to a lender of last resort. Fannie Mae and Freddie Mac were not included in this analysis since they are entirely government owned and their ultimate structure is still to be decided. Farmer Mac was not included because its debt obligations are not insured by the FCSIC. The agencies, including the FCS, are listed in alphabetical order.

Farm Credit System

I. Basic Structure

The FCS is structured like an inverse bank holding company; the agricultural and rural borrowers own the associations; the associations the four Banks: AgFirst, AgriBank, and FCB of Texas, and CoBank which is jointly owned by eligible cooperatives. The four Banks own the Funding Corporation. The borrowers of FCS obtain credit from their local associations (and eligible cooperatives directly from CoBank), the associations obtain wholesale funding from their affiliated Banks, and the Banks utilize the Funding Corporation to issue bonds and notes to investors in the capital markets. The associations and Banks are organized as cooperatives; they are owned by the member-borrowers.



The four bank districts vary in size with the CoBank and AgriBank districts being the largest with $95.9 billion and $83.1 billion in assets, respectively, as of January, 1, 2012, followed by the AgFirst district with $32.5 billion and FCB of Texas district with $19.6 billion.[9] The FCS has a total of $230 billion in total assets and $71 billion in unfunded commitments.

The FCA supervises, regulates, and oversees the FCS including the associations, Banks, and related entities. The FCA creates and enforces rules to ensure that the FCS is in compliance with the Farm Credit Act of 1971, as amended (Farm Credit Act).

FCSIC is a government controlled independent entity that ensures the timely payment of principal and interest on FCS insured obligations. FCSIC guarantees the Banks' bonds and notes and manages its insurance fund, which has approximately $3.4 billion in assets against guarantees of $184.2 billion in notes and bonds. FCSIC is funded by premiums that maintain the Secure Base Amount (SBA), defined in the Farm Credit Act as 2% of aggregate insured obligations reduced by 90% of federally guaranteed loans and investments and 80% of State guaranteed loans and investments.[10]

II. Addressing the Crisis

During the worst of the crisis, after the FHFA placed Fannie Mae and Freddie Mac into conservatorship and Lehman Brothers filed for bankruptcy, the Funding Corporation was able to successfully meet customer needs, but it had to do so primarily through the issuance of discount notes with maturities out to one year. To ensure sufficient flexibility, the FCA increased its Discount Note Program limit from $40 billion to $60 billion. The Funding Corporation also needed to talk to its dealers about how much liquidity they could get day to day, and the cost of those funds. It encouraged the Banks to look elsewhere for backup sources of funding. FCA and FCS held exploratory discussions with the Federal Reserve in an attempt to establish a line of credit for the Banks, but ultimately no agreement was reached or assurances given.

Although the FCS weathered the crisis and all obligations were met, the FCSIC believes that the FCS may have been fortunate in several respects: First, it had relatively small maturities and no "lumpy" days of large needs for funds during the time that market access was limited; second, the FCS was in especially strong condition as its borrowers were positively impacted by an extended period of prosperity in the agricultural sector, their primary lending market. In FCSIC's view, the FCS may have

[9] The CoBank figure reflects the January 1, 2012, merger of CoBank and U.S. AgBank. As of January 1, 2012, on a Bank-only basis, CoBank, AgriBank, AgFirst and FCB of Texas had assets of $88.4 billion, $73.1 billion, $29.6 billion, and $14.1 billion, respectively.

[10] Under section 5.55 of the Farm Credit Act, the secure base amount means 2 percent of the aggregate outstanding insured obligations of all insured Banks or such other percentage of the aggregate amount as the Corporation in its sole discretion determines is actuarially sound to maintain in the Insurance Fund taking into account the risk of insuring outstanding insured obligations.

been more vulnerable had the crisis coincided with severe stress in the agricultural sector such as a drop in commodity prices or an international trade incident that constrained exports.

III. Institution Backstops

Each Bank within the FCS takes precaution against liquidity risk and has contingencies for emergency situations.

Liquidity Requirements

Prior to the crisis, the FCA required the Banks to hold a minimum of 90 days of liquidity and establish contingency plans for liquidity shortfalls. FCA regulations also constrained the types and quality of the liquidity instruments the Banks could hold. However, as permitted by regulation, many Banks held substantial amounts of non-agency MBS in their investment portfolios, which dropped precipitately in value during the crisis. Moreover, FCA's regulatory days of liquidity calculation does not include off-balance sheet obligations, and the regulations do not explicitly require liquidity stress testing in relation to Bank contingency funding plans.[11]

In August 2011, the FCA published a proposed rule on investments to, among other things, strengthen its regulations governing investment management and to revise its list of eligible investments.[12] In December 2011, the FCA published a proposed rule on liquidity and funding that would require each Bank to hold a minimum of 90 days of higher quality liquidity to cover 90 days of maturing obligations. The proposed investment rule would further constrain the Banks' ability to hold lower quality liquidity. The proposed liquidity and funding rule would establish a multi-tiered liquidity structure that would improve the quality of the liquidity reserves that are required. The latter proposed rule would establish three tiers of quality: to cover 15 days of maturing debt, each Bank must hold the highest quality Level 1 instruments (i.e., cash, U.S. Treasuries or other full faith and credit instruments that mature in 3 years or less, or GSE senior debt securities that mature within 60 days); days 16-30 must be high quality Level 1 instruments (i.e., other U.S. Treasuries and full faith and credit instruments with more than 3 years to maturity); days 31-90 banks must qualify as Level 2 liquidity (i.e., other GSE debt instruments and money market instruments). Although the final rule has not been published, under a voluntary agreement by the Banks the makeup of the banks' liquidity has improved significantly. The below table compares the FCS' liquidity position as of December 31, 2006 and December 31, 2011:

[11] The FCA first emphasized stress-testing through its National Oversight and Examination Program for 2009 and 2010. In March 2010, the FCA issued an informational memorandum describing its stress testing expectations for all FCS institutions, which included stress scenarios over a three year time horizon in relation to liquidity and liquidity measures.

[12] See 76 FR 51289 (August 18, 2011).

System Aggregate Liquidity (in $000s)	December 31, 2006		December 31, 2011	
U.S. Treasuries	$ -	0.0%	$ 4,797,714	12.4%
Other Full Faith and Credit	$ 65,617	0.2%	$ 1,446,659	3.7%
Money Market Instruments	$ 4,616,852	14.9%	$ 2,527,868	6.5%
Ginnie Mae MBS	$ 4,229,936	13.7%	$ 14,432,703	37.4%
GSE Obligations	$14,310,063	46.3%	$ 13,840,141	35.9%
Non-Agency MBS	$ 4,132,114	13.4%	$ 908,385	2.4%
ABS	$ 3,358,419	10.9%	$ 386,593	1.0%
Other	$ 215,624	0.7%	$ 259,985	0.7%
Total Liquid Investments	$30,928,625		$ 38,600,048	
Source: FCA Call Reporting System				

In addition to the above changes in liquidity quality, the FCA's proposed rule would require the Banks to specifically address unexpected draws on unfunded commitments in their contingency funding plans (CFP). Under the proposed rule, the board of directors of each Bank is required to adopt a liquidity policy, which includes a CFP for their respective institutions. Among other things, the CFP must direct management to conduct periodic stress testing of the Bank's cash inflows and outflows, liquidity position, profitability, and solvency under a variety of stress scenarios, and assign appropriate personnel and implement executable actions plans that carry out the CFP. Each Bank board must review its liquidity policy, including the CFP, at least once a year, validate the sufficiency of the policy, and make revisions as necessary.

The FCA's existing and proposed liquidity reserve requirement covers a minimum of 90 days of on balance sheet obligations; this is easy to calculate, but limited in coverage because it does not include cash flow projections from assets, liabilities and off-balance-sheet items. Each Bank simply matches the principal portion of liquid assets to the principal portion of on-balance sheet maturing obligations to compute its days of liquidity. Under normal operations, when stress or volatility is low, the days of liquidity measure provides market participants with a full assessment of the liquidity position of each Bank. However, it may not provide an accurate assessment of the Banks' liquidity position in an extremely volatile or stressed situation, because the regulatory measure does not consider off-balance sheet obligations. As the Basel Committee on Bank Supervision notes in its comments on bank liquidity, "Many potential off-balance sheet liquidity exposures require little direct or immediate funding but can lead to significant liquidity drains in times of market or idiosyncratic stress."[13] Sudden or unexpected cash outflows from the Banks' off-balance sheet obligations are not captured by the regulatory days of liquidity calculation.

The principal off-balance sheet liquidity exposure in the FCS is "unfunded commitments." These are typically revolving credit lines or credit facilities to FCS borrowers. The FCS also has exposure, to a

[13] See Basel Committee, "Basel III: International framework for liquidity risk measurement, standards and monitoring, (December 2010), 30.

lesser extent, to letters of credit. As of December 31, 2011, the FCS had $71 billion in off-balance sheet unfunded credit commitments, consisting of $68.3 billion in commitments to extend credit and $2.8 billion in letters of credit (some of the commitments to extend credit are unconditionally cancelable and will not expose the Banks to liquidity risk).

The following table represents the liquidity positions of the four Banks and their days of liquidity relative to on balance sheet commitments as of March 2012:

$ In Billions	AgFirst	AgriBank	CoBank	Texas	System
$ in Liquidity*	$7.0	$11.3	$16.5	$3.2	$37.9
Days of Liquidity	234	156	180	229	183
* Liquidity includes, cash, cash equivalents, and eligible investments at a discounted value, which reflect haircuts as defined by FCA Regulation 615.5134.					

Emergency Liquidity

If the markets are closed for refinancing, and the Bank(s) is unable to meet its obligations on insured debt, there are two options for accessing emergency liquidity:

- FCSIC would step in and use the $3.4 billion fund.
- After the FCSIC fund has been exhausted, the Banks with "available collateral" would be required to cover the obligations of defaulting Banks under joint and several liability. (Banks are required to hold assets in excess (103%) of the proceeds of the Systemwide bonds they are using; "available collateral" is the amount of assets in excess of this requirement.)

Because there is no lender of last resort and excess collateral is generally small relative to obligations, if the liquidity event is severe and one or more Banks default, it could essentially begin an emergency sell off of Bank assets.

IV. System Backstops

If the entire FCS is in crisis, as in the case of a severe market disruption, there are systemic protections to protect from a complete collapse.

Market Funding

In the case of a market disruption, or another event that threatened the liquidity of the entire FCS, the Funding Corporation might be able to sell discount notes and other short-term instruments, as it did in the fall of 2008. The FCS Discount Note Program now has a cap of $60 billion, which provides ample flexibility to meet a liquidity event with short-term instruments.

FCSIC

If the Funding Corporation is unable to meet the Banks' liquidity needs, the FCSIC would step in with its $3.4 billion in assets. This fund could be used in creative ways to leverage its liquidity power—for example by guaranteeing obligations or taking the tail risk for the obligations of the Banks. But if the size of the liquidity need were such that the insurance fund were potentially inadequate, the FCA would have to make a call on all non-defaulting Banks to satisfy any liability of defaulting Banks. If the available collateral were too small, since there is no other lender of last resort, the FCS would need to go to Congress to avoid a liquidation of the FCS.

V. Resolution Authority

In the case of a Bank experiencing severe stress, a merger has historically been used to absorb a weak Bank into a stronger Bank. If a voluntary merger is not an option, the FCSIC has the following authorities under the Farm Credit Act:

1. Under section 5.61, the FCSIC can provide assistance to a stand-alone troubled Bank or to facilitate a merger or consolidation of a troubled Bank with a healthier Bank subject to a least cost test.
2. Under section 5.58 (after being appointed by the FCA), the FCSIC must act as a conservator or receiver and may prescribe regulations it considers necessary to carry out this function.

Federal Deposit Insurance Corporation and Depository Institutions

I. Basic Structure

The Federal Deposit Insurance Corporation (FDIC) insures deposits held in banks and savings and loan associations (depository institutions) for up to $250,000 (and also provides unlimited insurance on noninterest bearing demand deposits until yearend 2012). The FDIC supervises depository institutions and is the primary federal regulator of state-chartered banks that do not belong to the Federal Reserve System. The FDIC manages the Deposit Insurance Fund (DIF) and the resolution of troubled institutions. The FDIC also examines the state-chartered banks (and, after Dodd-Frank, other banks as well alongside other supervisors) for safety and soundness and to ensure they comply with consumer protection laws and meet the credit needs of the communities they serve. The FDIC is not funded by taxpayer money, but rather is financed by depository institutions' quarterly premiums to the DIF. Still, the taxpayer stands behind the insurance fund, as evidenced in part by a line of credit with the Treasury (see below). While the FDIC is the banks' insurance corporation, the Federal Reserve is the lender of last resort to depository institutions through the discount window.

II. Addressing the Crisis

Liquidity for depositories

In 2007, due to stress in short term funding markets, the Federal Reserve reduced the discount rate to encourage borrowing, and ultimately established the Temporary Auction Facility (TAF) to auction term funds to depository institutions. The auctions were established to provide a method of infusing liquidity into depository institutions outside of open market operations and the discount window, in part because stigma attached to borrowing at the window was inhibiting its use. Depository institutions bid on advances from local Federal Reserve banks and received loans at interest rates determined by the auctions themselves, with a minimum bid rate set equal to the interest rate that banks earn on excess reserve balances. The final auction was held March 8, 2010.

TLGP

In October 2008, after consulting with the President, the Secretary of the Treasury made a systemic risk determination that was supported by the FDIC and the Federal Reserve. As a result, the FDIC created the Temporary Loan Guarantee Program (TLGP) under section 13(c)(4)(G) of the Federal Deposit Insurance Act. The TLGP included a debt guarantee program and a transaction account program. A total of 56% of eligible institutions chose to opt into the debt program that guaranteed senior unsecured debt issued between October 14, 2008 and June 30, 2009, for a fee based on the amount and maturity of the debt issued. The guarantees could be applied to the debt of bank holding companies as well as depository institutions. Approximately 86% of depository institutions participated in the

transaction account program, which guaranteed in full non-interest bearing transaction accounts through December 31, 2009.

FDIC Reserve Ratio

During the crisis, due to actual and expected bank failures, the DIF's reserve ratio dropped significantly. In May 2009, the FDIC Board adopted a rule imposing a 5 basis point special assessment to prevent the DIF balance from falling close to or below zero. In December 2009, all depository institutions were required to prepay their estimated risk-based assessments for the fourth quarter of 2009, and for all of 2010, 2011, and 2012.

During the crisis, the FDIC's permanent line of credit with the Treasury was increased from $30 billion to $100 billion. The FDIC was also granted temporary borrowing authority of $500 billion if the Secretary of the Treasury, upon recommendations from the FDIC and Federal Reserve, determined that additional funds were required. This expansion expired December 31, 2010.

III. Individual Institution Backstops

Each depository institution is required to take precautions against liquidity risk and to have contingency plans for emergency situations.

Liquidity Requirements

While specific requirements have not been mandated in terms of days of liquidity or quality of credit, on March 17, 2010 the FDIC, the Office of the Comptroller of the Currency (OCC), the Federal Reserve, the Office of Thrift Supervision, and the NCUA issued an interagency policy outlining expectations for sound practices for managing funding and liquidity risk. The policy statement makes clear that the board of directors is ultimately responsible for the liquidity risk of an institution and that senior management is responsible for determining the structure and controls of managing risk. Strategies for funding daily operational needs, including during periods of adverse conditions, should be clearly identified and articulated. The guidelines also suggest having cash flow projections, targets for liquid asset reserves, identification of unstable liabilities and asset coverage ratios, asset and funding concentrations, and outlining unfunded loan commitments and lines of credit.

The policy also emphasizes the importance of robust methods of measuring liquidity risk including stress testing, calculating collateral positions, and regular and frequent reporting. Other recommendations include a formal contingency funding plan to address liquidity shortfalls in emergency situations, a cushion of highly liquid assets, diversified funding, and intraday liquidity position management.

Currently, bank supervisors are working on quantitative liquidity requirements for at least the largest organizations. The Basel Committee on Bank Supervision has proposed both a Liquidity Coverage Ratio (LCR) with a 30 day time horizon and a Net Stable Funding Ratio (NSFR) with a one-year horizon.

The exact specifications of both are still under consideration, with the LCR slated to be introduced in 2015 and the NSFR in 2018. Under the LCR, banks will be required to hold cash or high-quality assets equal to 30 days of potential liquidity needs.

Emergency Liquidity

Individual institutions have access to the Federal Reserve's discount window to meet liquidity needs. However, loans to troubled depository institutions may be limited; they borrow at a higher rate and can be subject to greater restrictions on amounts and collateral coverage than are clearly solvent institutions. Moreover, if a depository institution's capital ratio falls below certain levels, the number of days the Federal Reserve will lend is limited. Many depository institutions are members of the FHLBanks, and can borrow from them as well.

IV. System Backstops

In the event that general access of depository institutions to the federal funds and other wholesale funding markets are impaired, or they begin to experience a retail deposit run, these institutions can use the Federal Reserve discount window to meet their immediate liquidity needs. Many of these institutions would also be able to rely on the FHLBanks for emergency liquidity, provided the FHLBanks maintained market access.

In addition, the FDIC safeguards against depository institution runs by insuring deposits and aiding in the orderly resolution of those institutions that are too weak or insolvent to function. The DIF is required to maintain a contingent reserve for probable failures over a 12-month period. In the case of widespread failures, this fund can be drawn upon to aid in depository institution resolutions. The Dodd-Frank Act established a minimum designated reserve ratio of 1.35% of estimated insured deposits, and mandated that the FDIC adopt a restoration plan should the fund balance fall below 1.35%. Previously, the reserve ratio was capped at 1.5%, that has since been lifted and the FDIC's current reserve ratio target is 2.0%. The $100 billion line of credit that the FDIC has with the Treasury is also a source of cash if the fund were ever in danger.

V. Resolution Authority

The FDIC is authorized to resolve troubled depository institutions at the least cost possible. While the primary regulator—the state regulator or the OCC—makes a decision to shut a bank, the resolution is handled by the FDIC, in most cases by selling the deposits and loans to another institution. Now, the FDIC also has the authority to resolve nonbank SIFIs, including the nonbank portions of systemically important bank holding companies. The decision to activate the special resolution authority for nonbank SIFIs is made by the Secretary of the Treasury after receiving recommendations from the Board of Governors of the Federal Reserve and the Board of Directors of the FDIC (in both cases by at least a 2/3 vote.)

The FDIC has a $100 billion line of credit to the Treasury that can be accessed to provide liquidity for resolutions.

Federal Home Loan Banks

I. Basic Structure

The Federal Home Loan Banks (FHLBanks) are 12 cooperatives owned by over 7,700 community financial institutions. The FHLBanks essentially function as a conduit between global markets and local mortgage financing needs. Local member institutions put up collateral and the FHLBs lend them money through secured loans, known as advances, to support home mortgage lending and lending to small businesses or agricultural interests.

The FHLBanks' Office of Finance raises money to support the FHLBanks through the sale of debt securities in global capital markets; the FHLBanks are joint and severally liable for all debt issued for the system. The Office of Finance issues both discount notes and bonds with issue sizes ranging from millions to billions. Discount note maturities range from one day to one year and bond maturities vary in length from six months to 30 years, although the majority are between one and five years.

The FHLBanks are regulated by the Federal Housing Finance Agency (FHFA).

II. Addressing the Crisis

Market Experience

During the market shutdown following the bankruptcy of Lehman Bros., the FHLBanks had access to the debt markets with primary issuance relegated to very short-term instruments. The Office of Finance mostly issued discount notes and floaters for short-term maturities. The Office of Finance spoke to the FHLBanks everyday to maintain a dialogue about the availability and costs of funding.

Temporary Government Assistance Measures

The FHLBanks were included in the creation of the GSE Credit Facility meant to provide liquidity to Fannie Mae and Freddie Mac by allowing them to borrow secured funds from the Treasury. Each FHLBank entered into an individual agreement with the Treasury, which expired in December 2009. The FHLBanks never used this line of credit.

The cost and availability of funding for the FHLBanks was also helped by the Federal Reserve's program to buy MBS and agency debt as part of its Large Scale Asset Purchase program (popularly known as QE1). The Federal Reserve Bank of New York bought $34.4 billion in FHLB bonds in 2009.

III. Individual Institution Backstops

Each FHLBank within the system takes precautions against liquidity risk and has contingencies for emergency situations in which market access is impaired.

Liquidity Requirements

The FHLBanks are required to maintain sufficient liquidity to meet obligations, including renewal of maturing advances, for 5 days if markets are closed to new issuance and for 15 days if maturing advances are not rolled over. The FHLBanks have relatively low off balance sheet commitments consisting primarily of standby letters of credit that are fully collateralized at time of issuance. For advances, members pledge collateral at or above what is required and can increase borrowing against excess collateral, but there is no commitment to lend beyond existing levels. As a result, the FHLBanks can control the amount of new loans they make when funding markets are under stress and don't have to hold liquidity against unfunded lending commitments.

Debt Repayment

If an FHLBank cannot make a payment on a consolidated obligation, other FHLBanks are required to meet the obligation under the joint and several liability of the banks. This has never been tested since no FHLBank has failed to make its payments.

IV. System Backstops

If the entire system is in crisis, as in the case of a market shutdown, there are certain programs and plans in place to support the FHLBanks ability to meet obligations.

If market access is restricted enough that even short term markets can't fund the system, the FHLBanks have a $4 billion line of credit with the Treasury as set out in existing legislation. At the Secretary's discretion, the Treasury can purchase this amount of consolidated debt obligations from the FHLBanks. The line of credit is largely symbolic since $4 billion isn't enough to provide liquidity to the entire system, and there is no explicit Treasury guarantee of FHLBank debt. The line is probably seen in the market as an implicit guarantee, especially since the government enacted special legislation to keep other GSEs—Fannie and Freddie-- alive in the last crisis. There is currently no written agreement between the FHLBanks and the Treasury on the process or the conditions to be met for accessing this line, although it is understood that the Office of Finance would have to demonstrate that it had exhausted all other options before requesting that the Treasury supply liquidity.

In preparation for a future market shutdown, the FHLBank system has developed an internal strategy to deal with the possibility of sharply rising costs or curtailed availability in such a circumstance. The strategy includes a hierarchy of funding priorities and protocols for communication among the FHLBanks and the Office of Finance to discuss and execute on a continuum of priorities.

The FHLBank system does not have an insurance corporation.

V. Resolution Authority

As noted, the FHLBanks are joint and severally liable for consolidated obligations, so if any one FHLBank can't make its payments the others are required to do so. This process would be determined by the FHFA. In addition, the FHFA has resolution authority over the FHLBanks including conservatorship and receivership authority and the ability to merge FHLBanks, although it does not have a source of funds to use during such an operation.

National Credit Union Share Insurance Fund and Credit Unions

I. Basic Structure

There are two types of credit unions (CU) -- corporate CUs and retail CUs, which are subject to different regulations and have different access to liquidity. Retail credit unions hold deposits for and make loans to the public; the corporate credit unions act as bankers' banks for the retail credit unions, investing excess balances and facilitating payments.

The Central Liquidity Fund (CLF) is a potential source of liquidity owned by member unions; it was created to help retail credit unions experiencing "unusual or unexpected liquidity shortfalls." The National Credit Union Share Insurance Fund (NCUSIF) insures deposits in federally insured credit unions for up to $250,000 per account holder.

II. Addressing the Crisis

The CLF resembles the Federal Reserve discount window for retail credit unions. Under law, the CLF gets its funds from the Treasury and can borrow up to 12 times its capital. Before the crisis, borrowing was also subject to a $1.5 billion congressional appropriation limit—far below the limit based on capital. During the crisis Congress lifted this appropriation limit to allow the CLF to borrow at its higher overall limit, which at the time was around $50 billion. During the worst of the crisis, the CLF was borrowing up to $22 billion at a time and advancing those funds to CUs. Although technically the CLF is intended only as a backstop for retail CUs, the corporate credit unions were able to access this pool of funding by borrowing from the retail CUs, which in turn were borrowing from the CLF.

Before the crisis, the NCUSIF had a $100 million line of credit with the Treasury; during the crisis this line of credit was increased to $6 billion on a permanent basis. The NCUSIF also established the Corporate Stabilization Fund that could borrow up to $30 billion from the Treasury, $24 billion in temporary funding (which expired in December 2010) plus the new permanent $6 billion line. During the crisis, the NCUSIF extended a blanket guarantee to the obligations of all corporate credit unions in order to buy time to address the challenges of the crisis.

The NCUA had several programs to deal with the problems of the corporate credit unions. They included facilities to guarantee the unsecured debt obligations and deposits of the corporate CUs. The Temporary Corporate Credit Union Stabilization Fund (TCCUSF) was created as a separate insurance fund from the NCUSIF to isolate and handle the costs associated with the corporate resolution efforts. By 2011, five corporate credit unions had been placed into conservatorship and four bridge corporate credit unions had been established. These CUs issued a total of $36 billion worth of promissory notes through their bridge bank successors to ensure funding until their assets could be sold. The NCUA funded these promissory notes through the sale of guaranteed notes backed by the cash flows of legacy assets in the five conserved corporate credit unions. These notes are known as NCUA Guaranteed Notes (NGN) and raised $28.3 billion in cash for the resolution estates. After final asset sales $3.1-$3.5 billion is

still needed to fully retire the promissory notes. In order to improve the TCCUSF's liquidity, the NCUA approved a $6 billion borrowing authority for the TCCUSF from the Treasury and authorized a voluntary pre-payment program that would reduce the 2011 regular assessment. The TCCUSF is intended to expire on June 30, 2021.

III. Individual Institution Backstops

Each CU within the system is required to take precautions against liquidity risk and have contingency plans for emergency situations under the same policy guidance of March 17, 2010 that applies to other depository institutions (described in detail in the FDIC section of this appendix).

Liquidity Requirements

The NCUA oversees the performance of the retail CUs under the policy guidance; there are no quantitative limits or requirements for liquidity. The regulator attempts to ensure that there is adequate diversification in funding sources and an acceptable amount of Treasuries on their balance sheets. Historically, a large percentage of retail credit unions have relied upon their corporate credit union for meeting liquidity demands and most maintained lines of credit for this purpose. However, the capacity of the corporate CUs to perform this role has been diminished by the impact of the financial crisis and the reforms to the corporate credit union system that resulted

Corporate CUs are different from banks and retail CUs, in that their "customers" are retail credit unions and therefore the corporate CUs have different liquidity and capital risks. Corporate CUs must maintain a 4% leverage ratio to support exposures to liquidity and interest rate risks. The Corporate CUs are required to monitor their liquidity sources regularly and demonstrate that these sources remain available. There are no specific days of liquidity requirements.

Emergency Liquidity

Retail credit unions can borrow from the CLF and have access to the Federal Reserve discount window. The CLF in turn is a full faith and credit institution that borrows from the Treasury through its Federal Financing Bank to advance funds to retail CUs. The terms of its lending resemble the Federal Reserve's discount window, as it only grants fixed term loans at fixed rates to solvent institutions. To become a member, natural person credit unions must subscribe to CLF capital stock for at least .5% of the CUs paid-in and unimpaired capital surplus.

The CLF can borrow up to 12 times its capital from any source but generally limits such borrowing to the Treasury in accordance with the FFB Act. Based on its total subscribed capital and surplus, it had a theoretical limit of about $50 billion going into the crisis; but it was limited to $1.5 billion by Congressional appropriation. That appropriation ceiling was removed during the crisis. However, its capital is declining and its borrowing capacity will shrink to roughly $2 billion, due in large part to the wind down of US Central Bridge and the impending sale of their $1.9 billion in CLF stock. The CLF can lend to retail CUs to support liquidity needs, provided they meet the CLF's standards for

creditworthiness; generally, if a CU's net worth drops to 2% or below it is critically undercapitalized, then the CLF would stop lending and the NCUSIF would have to decide whether and how to resolve the troubled CU. Some retail CUs believe they are eligible to borrow from the FHLBanks since they have a significant amount of mortgage loans on their balance sheet.

Responding to the decline in the lending capacity of the CLF, the NCUA currently has a rule out for comment that would require federally insured credit unions to have a backup source of federal liquidity. This backup source of liquidity can come in one of four forms: (1) become a direct member of the CLF; (2) become a member of the CLF through a corporate credit union; (3) obtain and maintain access to the Fed's Discount Window; or (4) maintain a certain percentage of assets in highly liquid Treasury securities.

Corporate CUs would need to give up their bankers' bank exemption from reserve requirements in order to access the Federal Reserve discount window, which many hesitate to do. Unlike the retail CUs, the corporate CUs cannot borrow directly from the CLF, but as noted above they accessed these funds via the retail CUs during the crisis through 2-step programs that involved retail credit unions borrowing from CLF and investing the proceeds in guaranteed corporate credit union obligations.

Under Section 208 of the Federal Credit Union Act, the NCUSIF is authorized under limited circumstances to put money into CUs to prevent failure or to reduce the cost of resolution, although it has less discretion on deciding to keep institutions alive. The NCUSIF can use its authority to extend guarantees to help CUs.

IV. System Backstops

If the entire system is in crisis, with access to retail deposits or, for the corporate CUs, market funding impaired, there are systemic protections to safeguard against a complete collapse.

<u>NCUSIF</u>

The NCUSIF is available to support the system. It is an insurance fund of $10.8 billion backed by the full faith and credit of the US government, which should reduce the risk of deposit runs. The NCUSIF itself can obtain funds to assist in resolving troubled institutions by both borrowing from the CLF and drawing on a $6 billion line of credit with the Treasury. The NCUSIF can extend guarantees, put money into an institution to prevent failure or manage the least cost resolution of a failing or insolvent CU. Member credit unions are required to maintain 1% of their deposits in the NCUSIF, although the NCUA Board can levy premiums above this amount; the NCUSIF is maintained at 1.3 percent of the deposits insured. If many institutions were failing all at once, it is likely the NCUSIF would use its guarantee authority to conserve cash. There is no limit on the amount that can be guaranteed, although after a certain point the credibility of the guarantee could be jeopardized and concerns of moral hazard would increase.

V. Resolution Authority

The NCUSIF winds down failing CUs using its fund backstopped by its line of credit at the Treasury.

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