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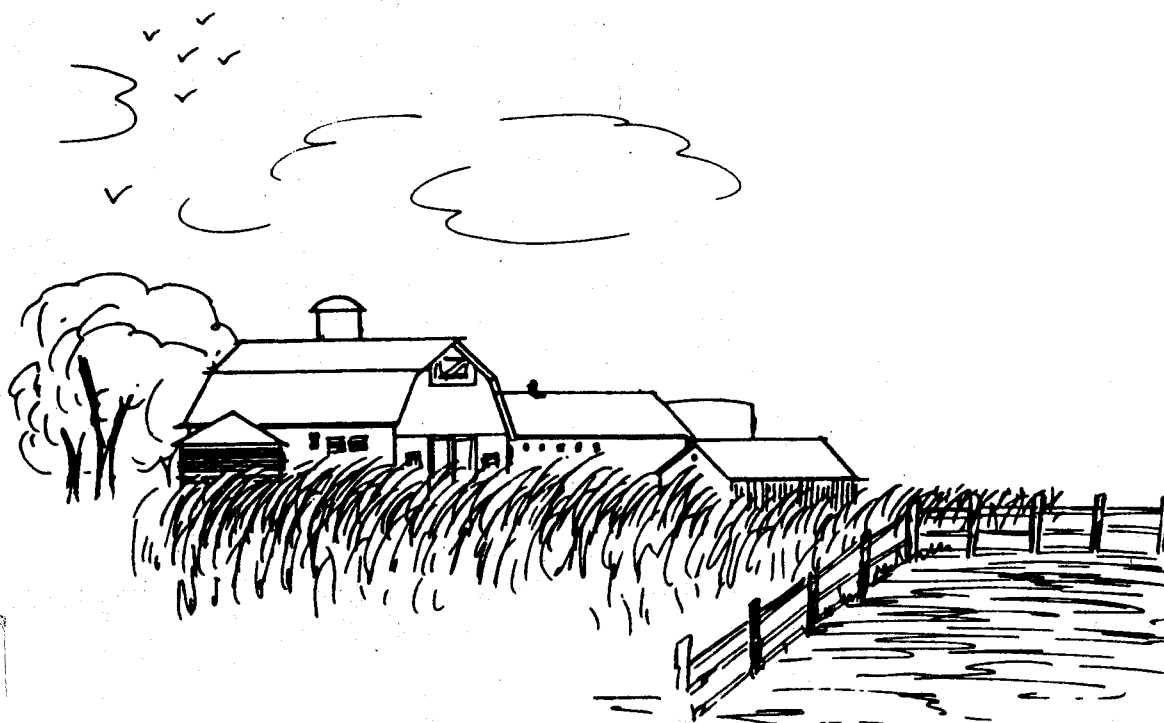
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# **Financing Agriculture in a Changing Environment: Macro, Market, Policy, and Management Issues**

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# Emerging Issues for the Farm Credit System



Farm Credit Administration  
McLean, Virginia

*Following are the remarks of Marvin R. Duncan, Member of the Farm Credit Administration Board at the meeting of the NC-161 Research Committee on Financing Agriculture in a Changing Environment: Macro, Market, Policy and Management Issues held at the McLean Hilton Hotel, McLean, VA on October 4, 1988.*

There are a number of emerging issues facing the institutions that comprise the Farm Credit System. They range from the role of directors, managers, and even stockholders of the borrower-owned institutions to credit standards, credit administration, internal controls, implementation of borrower rights, and the policy direction and management oversight provided by the directorate.

For our purposes here today, I have identified four emerging issues that I think merit our attention. Although they must all be faced in the near future, each has far longer term implications for the Farm Credit

institutions and their borrowers. The four issues are:

- the structure of the Farm Credit System and its credit delivery mechanism;
- funding and loan pricing;
- capitalization and profitability; and
- renewing the spirit of entrepreneurship.

Even though these issues are somewhat interrelated, I would like to address each separately.

## **Structure & Credit Delivery**

### **A History of Change**

The Farm Credit System is currently undergoing marked structural change. However, change is nothing new to these institutions. The changes began soon after the old National Farm Loan Associations, later to become Federal Land Bank Associations (FLBAs), were chartered and continued after charters were

issued to Production Credit Associations (PCAs).

In the 1930s, there were nearly 5,000 National Farm Loan Associations. If 10 farmers could qualify for a total of \$20,000 in loans, they could apply for a National Farm Loan Association charter. The number of FLBAs was reduced to 1,216 by 1950 and to 553 by 1975. The number of Production Credit Associations peaked in 1945 at 511.

Now there are 225 Federal Land Bank Associations and 137 Production Credit Associations, with a wide mixture of common or separate boards, as well as common or separate managements at various levels. There are also 711 branch offices.

To add further diversity, the Columbia and Omaha districts each have one district-wide PCA. The Jackson and Spokane districts each have two PCAs, which amounts to a district-wide association with one hold-out association. The St. Louis district is down to four PCAs; Louisville is

down to six, and Spokane has a district-wide Federal Land Bank Association.

### **Mergers of Banks**

As you know, the Agricultural Credit Act of 1987, mandated the merger of the Federal Land Bank and Federal Intermediate Credit Bank in each district. This was achieved on July 6, 1988. The exception was Jackson where the land bank is being liquidated. In addition, eight district Banks for Cooperatives have voted to merge into a National Bank for Cooperatives effective January 1, 1989.

The stockholders of two of the remaining district banks -- Jackson and Spokane -- will reconsider their previous decisions not to merge and vote again. If they join the national bank, only Springfield and St. Paul will remain independent. Interestingly enough, like the national bank, they will be authorized to make loans in all territories served by the Farm Credit System.

### **Mergers of Associations**

The next step in these structural changes is a vote by the stockholders of Federal Land Bank Associations and Production Credit Associations serving substantially the same

territories to merge their associations. If they do, the resulting association would become a direct lender. Currently, the PCAs are primary lenders, but the FLBAs are agents of the land banks.

This could also become interesting. In Omaha, for example, there are 31 FLBAs and one PCA. If only one FLBA merged with the PCA, the resulting association could make direct long-term loans across the entire territory of the former PCA -- thus competing head on with the other FLBAs.

However, it doesn't stop there. Associations also have an opportunity to reorganize earlier mergers, disband, and/or seek reassignment to an adjoining district. Finally, discussions are currently underway that could result in shifts of associations affecting the territories of six Farm Credit Banks.

Local control now has real meaning to associations and their stockholders.

### **Fewer Districts**

Let us continue with the final step. A systemwide committee is to come up with a plan to reduce the number of Farm Credit Districts, and hence Farm Credit Banks, down to no fewer than six. None of this precludes other kinds

of mergers. Since the Banks for Cooperatives in Springfield and St. Paul apparently will not become part of the National Bank for Cooperatives, there is, for example, nothing to prevent them from merging with their respective Farm Credit Banks.

### **The Position of the Farm Credit Administration**

I want to go clearly on record as saying that the Farm Credit Administration takes no position on any of the mergers that have taken place or that will be proposed. What will happen is strictly up to the stockholders.

Among the Farm Credit Administration's chief concerns are that the letter and intent of the law is carried out and that stockholders receive full financial disclosure and any other information necessary to help them make informed decisions on the merger proposals.

The statute states that the Farm Credit System:

"be designed to accomplish the objective of improving the income and well-being of American farmers and ranchers by furnishing sound, adequate and constructive credit and closely related services to them, their

cooperatives, and to selected farm-related businesses necessary for efficient farm operations."

So, another concern of the Farm Credit Administration is that the structural design that the stockholders of the various institutions decide upon will accomplish that objective.

### **Bigger ≠ Better**

From a professional standpoint, I think that whether there are the 11 Farm Credit Banks as currently configured or only six, the configuration will have limited bearing on cost effectiveness. In fact, Frederic Scherer, a noted structural economist, after years of meticulous study, observed: "On average, mergers decrease efficiency." Indeed, if after achieving whatever economies of scale are the norm for a given business, one could ask if bigger has ever been more efficient or if bigger has ever been more innovative.

In the case of the non-merged, jointly managed institutions, experience has shown that distress and hardship can result for the joint employees of these commonly managed, but corporately separate, institutions if one should fail.

In the commercial banking industry in 1987, banks with assets of

\$100 million to \$500 million did better in both return on assets and return on equity than banks with assets of \$500 million to \$1 billion and substantially better than those with assets in excess of \$1 billion.

By the same token, with the exception of whatever plusses may be perceived from having local control of a smaller institution, I doubt that it will make much difference if a district has one Farm Credit Association making direct loans of all kinds through branch offices or if a district has several independent associations making those loans.

Again, assuming the achievement of economies of scale, I believe it would be easy to over emphasize the advantages of mergers.

One might, however, ask whether in the longer term, the Farm Credit System needs both banks and associations. Perhaps, in time, one or the other will prove more efficient than a system composed of both.

### **Positioning for the Future**

What will make a big difference for the Farm Credit institutions is how credit and related services are developed, packaged, priced, and delivered. In considering this area of structure, I concur wholeheartedly with the conclusions of Tom Peters in his

recent book, Thriving on Chaos: Handbook for a Management Revolution.

After reviewing the evidence and experience of a number of companies, Peters gave this picture of the successful firm in the 1990s and beyond.

"It will be flatter - have fewer layers of organizational structure.

"It will be populated by more autonomous units - have fewer central-staff second guessers, more local authority to introduce and price products.

"It will be oriented toward differentiation, producing higher value-added goods and services, creating market niches.

"It will be quality conscious, service conscious, more responsive, and much faster at innovation.

"And it will be a user of highly trained, flexible people as the principal means of adding value."

Peters' first two points speak to organization. In the Farm Credit System, there are both banks and associations. Is it really critical how many banks or what kind of

associations there are as long as there exists a reasonably flat structure with ample local autonomy and authority? Wouldn't eliminating management layers and streamlining the decision process improve the performance of banks and associations?

Remember, that non-interest costs for Farm Credit institutions are frequently marked by higher per dollar of loan volume than for other lenders with whom they compete. Fortunately, recent advances in information technology offer these institutions some innovative opportunities to improve the cost effectiveness of their credit delivery systems.

One might also question what value these layers add to the process? It could be argued that instead of adding value, they may often simply add unnecessary bureaucracy. But let's also recognize that management layering is a two-edged sword. Wouldn't eliminating those layers and having a high degree of local autonomy also help prevent the institutions from using one another as an excuse for taking an action, for not taking an action, or for simply dragging their feet? Putting responsibility and accountability where credit decisions are made and loans serviced will improve the performance of Farm Credit institutions.

Peters' second two points speak to products and services -- how they are developed, and how they are packaged, priced, and delivered to market segments. Farm Credit institutions can no longer afford to be stodgy, bureaucratic, political and traditional. Instead, they must become innovative, decisive, customer-driven, and profitable. These are the key elements to success.

The degree to which success is often achieved is found in Peters' last point. Success depends on people who are trained to do their jobs and given the ways and means of doing them well. It goes without saying that such people must be held accountable for the results. And if you have the right people with the right training, they will welcome that accountability. People want to excel and will do so for a firm that rewards excellence and achievement.

The legislation opens the doors for Farm Credit institutions to possibilities that have been talked about for years. But the efficiency and effectiveness of Farm Credit institutions will not be primarily dictated by their structure. It will, however, also be dictated by how well that structure is made to work. It will depend on the credit products and services to be offered to varying

segments of the market and the mechanism to deliver those products.

Former Assistant Secretary of the Treasury, Charles O. Sethness, who was the Administration's point man on Farm Credit through all three legislative initiatives, commented recently on the future of the Farm Credit System. He said, "System institutions are going to have to figure out how to deliver customer-responsive services at competitive costs, and I think it is going to require some very sharp attention to the costs of the credit delivery system." An issue of primary importance then is how can credit best be delivered?

He added that another problem facing the system is "chewing through that backlog of high-cost debt." And that leads directly to my second issue -- funding and pricing.

## Funding and Pricing

### Funding

This issue involves how the Farm Credit institutions obtain their loan funds and how they price their loan products. The Farm Credit banks obtain their loan funds primarily through the sale of securities -- bonds and discount notes -- to investors in the Nation's money markets. Because their securities are sold in the "agency

market," the Farm Credit banks have had a cost of funds advantage over their competitors.

Let me digress here and say that I don't think the agency market will be as big an advantage in the future as it has been in the past. This is true because financial markets have become much more efficient at intermediating credit. Recently, high quality commercial paper has commanded lower interest rates than have the discount notes of the Farm Credit banks. Innovations in agricultural credit, such as the securitization of debt, should further improve the efficiency of these credit markets and further erode the historic pricing advantage of Farm Credit institutions.

### Pricing Their Products

Pricing their loans on the average cost of funds rather than on their marginal cost contributed to the Farm Credit institutions recent stress. This method of pricing their loan products put them at a distinct competitive advantage during periods of rising rates, but it also assured that the Farm Credit institutions were at a competitive disadvantage when rates were dropping because they had to live with high cost outstanding bonds that had no call provisions. For example,

the banks still have some outstanding bonds that were issued in 1982 on which they are paying 15.2%. These bonds don't mature until 1992.

Farm Credit institutions introduced variable interest rates that helped them cope with mild swings in the market. However, when those interest rate swings became severe, this shifting of these interest rate risks to their borrowers created more problems than it solved. Interest rate risks transferred to borrowers came back to the banks and associations as credit risks when borrowers could no longer comfortably pay the higher debt service costs. Moreover, credit-worthy borrowers went elsewhere for lower cost loans, as competitors' interest rates began to fall.

Farm Credit institutions tried to counter this run-off of offering differential interest rates, giving cash-flowing, high-equity borrowers preferred rates. This method of loan pricing based the price of the loan on the risk a borrower brought to the other stockholders of the cooperative. While this principal has been accepted for many years in other farm cooperatives, many Farm Credit borrowers were angered by differential interest rates, probably because they did not understand the need to maintain the financial stability of their

credit cooperatives. Distressed borrowers, on the other hand, argued that they should get lower rates to help their cash flow.

Other things being equal, the PCAs and Banks for Cooperatives should not have been caught in this interest rate bind, and for the most part, they weren't. PCA problems stemmed from inadequate credit standards, poor credit administration, and a lack of internal controls. The BCs haven't had many problems to speak of. For years, the PCAs obtained their loan funds chiefly through 9-month bonds, and the BCs obtained theirs through 6-month issues. In effect, the loan term matched the bond term -- the asset matched the liability. The BCs generally managed their credit business well, and as a result did not experience the depth of problems PCAs and Federal Land Banks faced.

The Federal Land Banks, in addition to the same management shortfalls of the PCAs, had not undertaken appropriate asset/liability management programs, and they experienced the most trouble. Farm Credit institutions -- particularly those making long-term loans -- simply must do a better job managing the liability side of their balance sheets. They

must attain a better match between assets and liabilities.

For the future, this will mean more matched funding -- tying an interest rate to a bond rate for three to five years. It will mean adopting the kind of adjustable rate mortgages (ARMs) used by home lenders with caps on interest rate movements. And it may mean having callable debt instruments and prepayment penalties as a means of providing some measure of protection against being saddled with outstanding debt after the loans supported by that debt have been repaid.

### **Capitalization & Profitability**

#### **Profit a Necessity, Not a Luxury**

Profit is essential for a credit cooperative, just as for any other business. The co-op traditionalists may prefer to call it earnings or even savings. But by any name, profit is necessary if a financial institution is to cover its operating expenses and cost of loan funds, maintain necessary reserves and allowance for loan losses, and capitalize itself to support loan growth. If the profits are beyond what is needed for these purposes, they can be distributed to borrower/stockholder through stock dividends and patronage refunds.

From a regulatory perspective, the Farm Credit Administration is interested in the safety and soundness of the institutions under our jurisdiction. In the examination process, the Farm Credit Administration looks at profitability indicators -- return on average assets, net interest margin, return on equity capital, and net operating income to average earning assets. These are important indicators for evaluating the operational soundness of the institutions. They are the same indicators investors look at when analyzing the institutions' financial statements and making decisions about their securities.

#### **Capitalizing Farm Credit Institutions**

The issue of capitalization is more complex. Before the Agricultural Credit Act of 1987, Farm Credit institutions were capitalized, in large part, through investments made by borrowers as a condition to obtaining loans. Borrowers from the Federal Land Banks and Production Credit Associations invested in the capital stock of the associations in amounts ranging from 5 to 10% of their loans. This was often a paper transaction because the borrowers usually financed their stock purchase with the

same Farm Credit institution they were borrowing from.

The associations made similar investments in the banks. The stock was retired at par value when the loans were repaid. In essence, borrowers' capitalized their own loans. Borrowers from the Banks for Cooperatives also purchased stock on an equitable basis to help capitalize those institutions.

As a minimum requirement, farmers will now purchase stock of \$1,000 or 2% of the loan, whichever is less. An institution, however, may choose to require higher levels of capital stock to be purchased. And its retirement will be at the discretion of the board of directors.

#### **Capital Standards**

But more important is what is going on right now. Capital standards for Farm Credit institutions now require that the institutions achieve a specified minimum capital base to support their risk adjusted asset base. Now, institutions are being capitalized rather than individual loans. Moreover, capital will now have a cost to banks and associations just as is true for commercial banks and thrift institutions.

On September 28, the Farm Credit Administration Board approved final regulations governing capital



standards for the Farm Credit institutions. Farm Credit institutions will be required to maintain a 7% risk adjusted capital ratio net of loan loss reserves. The capital will be in the form of at risk stock investment and retained earnings. The level of capitalization required by the regulations is, in fact, somewhat lower than many Farm Credit institutions maintained prior to the recent period of financial adversity.

The risk based capital standards conform very closely to standards adopted by other federal financial regulators for commercial banks and thrift institutions. These standards are all closely patterned after the Basle agreement, a pattern for financial institution capitalization agreed to by 12 industrialized countries in late 1987.

A majority of Farm Credit institutions are expected to achieve the risk-based capital requirements within the required 5-year phase-in period. The ongoing process of restructuring should permit many of the weaker units to achieve the standard over a somewhat longer period.

A stronger capital base will make the Farm Credit institutions more resilient and better able to weather the stressful periods and will provide a

basis for sustaining their growth. It will also provide incentives for management policies that promote safety and soundness. Finally, a better capitalized system will provide assurances to stockholders and investors about the institution's viability.

Capital adequacy is measured by two major indicators:

- permanent capital to average assets,
- adversely classified assets as a percentage of risk funds.

The first, permanent capital to average assets indicates the amount of capital available to support growth. The second, adversely classified assets as a percentage of risk funds, compares the risk in the loan portfolio to the institution's capital base plus its allowance for loan losses. It also measures the threat to the institution's capital base presented by the problems in its assets. Again, the Farm Credit Administration, as a Federal regulator, and the investors in Farm Credit securities both look at these measurements.

Of course, down the road, the Farm Credit institutions will have the Farm Credit System Insurance Corporation and the Farm Credit Insurance Fund to insure the timely payment of principal and interest on

notes, bonds, debentures, and other obligations of eligible and participating institutions. An interesting question is the level of reserves the insurance fund will require to protect Farm Credit institutions, investors, and taxpayers from the impact of financial adversity in Farm Credit institutions.

The Farm Credit Act of 1971, as amended provides the Farm Credit institutions with the tools and the mechanisms they need to deal with structure, credit delivery, funding, pricing, and capitalization and to realize the profitability necessary to be a viable competitor in the agricultural credit marketplace.

Let me paraphrase Peters once again in that perhaps I should not have said "to be" a viable competitor, because "to be" implies stasis and there is no place to stand anymore. The only excellent firms are those that are effectively evolving to meet the demands of a rapidly changing environment. For Farm Credit institutions that means continually striving to improve their products, their pricing, and their delivery.

A final issue relates to entrepreneurship and ownership.

### **Renewing the Spirit of Entrepreneurship & Pride of Ownership**

If the Farm Credit institutions are to return to financial viability and prosper in the years ahead, their leadership and their borrower/stockholders must avoid succumbing to a Government program mentality and pursue with renewed vigor the spirit of entrepreneurship and pride of ownership that characterized their earlier years.

Though supporting the Farm Credit Act Amendments of 1985, the Farm Credit institutions were successful at negating the self-help provisions in those amendments, eliminating the chance for Federal financial assistance under that statute. The Farm Credit institutions were successful again when the Farm Credit Amendments Act of 1986 permitted Farm Credit institutions to use regulatory accounting practices that allowed some of them to operate at capital levels that otherwise would have resulted in their liquidation. And the Farm Credit institutions were successful when they came back a third time in 1987 with legislation that has made it possible for financial assistance to be provided. Some Farm Credit institutions are now fighting the provision calling for a one-time

assessment that would require them to provide a modicum of that assistance themselves and reducing the level of taxpayer assistance required. Despite these actions, the Farm Credit institutions should not be lulled into believing that Congress will continue to step-in to solve their business problems. If it happens again, the cost in operating freedom and independence may well escalate.

By the same token, the Farm Credit borrowers should not think they have a right to have their loans restructured regardless of how that restructuring might affect the financial condition of the institution or the burden it may place on the other borrower-owners of the institution who have worked hard to keep their loans current. The Farm Credit institutions are required to restructure loans only if restructuring is less costly than foreclosure. They are borrower-owned, private sector, credit cooperatives, not Government programs.

The borrower ownership and cooperative features of the Farm Credit institutions have been among their greatest strengths resulting in what once was one of the largest and most successful agricultural credit organizations in the world.

Because these institutions were directed by boards whose members were also borrowers, Farm Credit institutions were attuned to the needs of those borrowers and were innovative in meeting those needs. However, while Farm Credit institutions were concerned about filling the credit requirements of borrowers, directors also recognized the need of having financially stable, earnings oriented institutions that would serve future generations. These directors established policies that would fulfill both requirements and held hired management accountable for carrying out those policies.

Borrowers, also, played an active role in the conduct of their institutions and watched with a critical eye what those institutions achieved. They chose their directors with care, often in highly contested elections. News releases proudly and justifiably boasted of stockholder attendance at annual meetings. Directors took pride in what they were able to report at those meetings. In short, Farm Credit institutions were cooperatives in every sense of the word. But somewhere, somehow, something went very wrong.

### **The Future is Now**

It serves no useful purpose to point fingers and place blame. There is plenty to go around. We know what happened and we pretty much know why. What must be ensured is that the same mistakes are not made again.

The Agricultural Credit Act of 1987 provides both the tools and the opportunity for borrower/stockholder of Farm Credit institutions to once again take control over the future of their credit cooperatives. The challenge for these borrower/stockholders is to responsibly balance their legitimate interests as borrowers with the financial stability requirements imposed by ownership of their credit cooperatives.

There are substantive business considerations emerging for the Farm Credit institutions. The issues are clear. The prospects are present. They require immediate attention. The degree of effectiveness with which they are addressed will determine the future of the Farm Credit institutions. If that degree of effectiveness is high, the Farm Credit institutions can be assured their brightest successes are on the horizon.

In the final analysis, it's up to the borrower/stockholders who own the Farm Credit institutions. They must

decide what is best for their institutions. Once decided, they must elect directors who will carry those views forward and who will exercise sound judgement giving direction to the credit cooperatives.

The directors must establish policies that reflect the views of the borrowers and hold management accountable for carrying out those policies. However, the directors must also realize that it is they and not management who borrowers hold responsible for the results.

It would be very constructive if the analytical and management expertise in this room could play a role in helping the directors, managers, and borrower/stockholders of the Farm Credit institutions to recognize the full range of these issues and their respective roles in successfully dealing with them.



## METHODOLOGY IN ALLOWANCE FOR LOAN LOSS DETERMINATION

Martin Fischer and Glenn Pederson\*

Generally accepted accounting principles (GAAP) require that an allowance for losses be established when (a) it is probable that an asset has been impaired, and (b) the amount of loss can be reasonably estimated. Concerning loan loss allowances for banks and other lenders, the 1983 Industry Audit Guide **Audits of Banks** states:

A bank should maintain a reasonable allowance for loan losses applicable to all categories of loans through periodic charges to operating expenses. The amount of the provision can be considered reasonable when the allowance for loan losses, including the current provision, is considered by management to be adequate to cover estimated losses inherent in the loan portfolio [1, p.2].

Methods for estimating "losses inherent in the loan portfolio" are of great practical importance to lenders. A major challenge for the Farm Credit System (FCS) during the mid 1980s was to establish allowances in an environment where history and experience offered little useful evidence concerning the future level of loan losses. Elsewhere in the financial community, similar problems arose in connection with loans to developing countries and to energy-related sectors [2].

This paper addresses methodology in allowance for loan loss determination. Background issues relating to provision and allowance for losses in the FCS are reviewed, and impacts of FASB-15 accounting for restructured loans are discussed. A model of future loan losses of a Federal Land Bank (FLB) is developed. The model views future loan losses as a random variable, and yields estimates of the mean and variance of the distribution of future loan losses. The estimated mean of the probability distribution is presumably a reasonable estimate of "losses inherent in the loan portfolio." However, recognizing the uncertainty surrounding future losses, and in deference to the accounting principle of conservatism, management may prefer to establish an allowance in excess of the expected value of future losses. We propose that the allowance should be considered adequate if the probability that losses will exceed the allowance is acceptable (i.e., "small enough" for the comfort of management and auditors).

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