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FUND AVAILABILITY AT AGRICULTURAL BANKS: AN HISTORIC PERSPECTIVE

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Fund Availability at Agricultural Banks: An Historic Perspective

Peter J. Barry[1]

This paper provides an historic perspective on the relationship between agricultural banks in the U.S. and their needs for access to non-local, non-deposit sources of funds. These needs have been attributable to various factors, that have changed in importance over time. Included are 1) seasonal patterns in loans and deposits; 2) pressures on loans and deposits caused by changes in farm and other local income conditions; 3) cyclical patterns of loan growth; 4) deposit disintermediation with re-investment of funds in other financial market instruments; 5) loan requests that exceed banks' legal lending limits; 6) responding to interest rates risks through matching of maturities on loans and funding sources and 7) the periodic need to reduce risks in loan portfolios and to restructure balance sheet ratios.

Because several of the sources of non-deposit funds utilize government sponsored enterprises (GSEs), the chapter begins with a review of the roles of public credit programs. The focus then shifts to a series of programs and initiatives by which commercial banks have gained, or have sought to gain reliable, cost effective access to the financial markets beginning with the formation of Federal Intermediate Credit Banks in the 1920s and continuing through current avenues of market access.

Public Credit Programs and GSEs

Public credit programs are intended to correct an imperfection, fill a gap in the workings of credit markets, or achieve a public purpose through the reallocation of resources or redistribution of income in the economy (Barry; Bosworth, Carron, and Rhyne). Public credit programs may take several forms: 1) direct loans, 2) guaranteed loans, 3) government sponsored enterprises, and 4) tax exempt state and local bonds. Each of these forms may convey different types and magnitudes of subsidy. Government sponsored enterprises (GSEs) are privately owned financial institutions chartered and established by the federal government to serve the credit needs for agriculture, housing, and college students. These borrowing groups were considered unserved or under served by existing credit markets when the institutions were created. Currently included among GSEs are the Farm Credit System, the Federal Agricultural Mortgage Corporation (Farmer Mac), Student Loan Marketing Association (Sallie Mae), the Federal Home Loan Bank System, the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the College Construction Loan Insurance

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Program. The FCS lead the way as the first GSE with the creation of the Federal Land Bank System in 1916.

In general, the GSEs have functioned to fill gaps and improve the workings of credit markets for the borrowing groups in question. These types of programs do not require substantial subsidization, although recent estimates by the General Accounting Office of subsidies conveyed by Fannie Mae in the residential housing market are relatively high. However, to aid with their

targeted lending programs and related concentration of lending risks, the GSEs were given various regulatory preferences and exemptions in their access to the financial markets. Moreover, investors in the debt securities of these enterprises have had the widespread perception that the Federal government will back these securities in stressful times, even though the government has no legal obligation to do so. Thus, funding costs for such enterprises are generally less than those not backed by the government. In addition, the agricultural GSEs and the Federal Home Loan Banks each have specific government regulators to monitor safety and soundness, enforce capital requirements, and oversee the mandated public purposes. The other GSEs are supervised by broader based government agencies and departments.

The FCS is uniquely characterized by its cooperative structure and concentration of direct loans through a network of FCS banks and lending associations to eligible agricultural borrowers. The Federal Home Loan Banks also are direct, cooperatively organized providers of wholesale loans to member thrifts and other depository institutions, although these borrowing institutions tend to provide loans for a broader range of purposes than do the FCS lending associations. Other GSEs focus primarily on maintaining secondary markets for reselling mortgages and student loans, and offering secondary loan guarantees. In general, most of the GSEs provide a linkage between agency market funds and commercial banks and other depository institutions, compared to the direct lending focus of the FCS.

FCS and FICBs

The history of the FCS indicates a lengthy time of tension, competition, and collaboration with the commercial banking system. The FCS developed from 1916 to the mid 1930s as a specialized lender to agriculture to provide appropriate real estate financing terms for farmers and as an alternative source of financing for agricultural production (and agricultural cooperatives) to the then unstable system of commercial banking in rural America. Federal Land Banks were established in 1916 as the first FCS institutions.

The Federal Intermediate Credit Banks (FICBs) were the second major type of lending institution within the FCS. Established by the Agricultural Credit Act of 1923, the twelve FICBs were to provide loan funds to agricultural cooperatives and to discount the short and intermediate term notes from commercial banks or other finance corporations. Thus, the FICBs were, in part, intended to be an additional source of funds for other agricultural lenders. During their early years, the FICBs experienced relatively slow growth because of conservative lending policies, a

narrow spread between the FICB loan rate and the rate client banks were able to charge their customers, and the difficulties farmers had in establishing and operating their own finance corporations. These FICB problems were largely resolved in 1933 when the PCA system was established to discount loans with, or borrow directly from, the FICBs and to make short and intermediate term loans directly to agricultural borrowers.

While commercial banks were still eligible to utilize FICB services, the magnitude of use remained very small in subsequent decades. Market shares of non-real estate farm debt provided by FICBs to other financing institutions (OFIs) were consistently around 1% from 1950 to 1980. For example, OFI debt outstanding was $51 million in 1950, or 0.7% of total non-real estate farm debt. The 1980 figures were $666 million and 0.9% of total non-real estate farm debt. OFI financing remained in the $800 million to $1 billion range through 1984, and then declined sharply as a result of the financial difficulties of FCS institutions in the mid 1980s.

FCS Loan Participations

The Farm Credit Act of 1971 introduced authorization for Production Credit Associations (PCAs) to participate with commercial banks or other lenders in short and intermediate term agricultural loans (authority for participation in real estate loans was established by the Farm Credit Act Amendments of 1980). The PCAs could participate only in loans to borrowers otherwise eligible to borrow from a PCA. Participating commercial banks were to retain at least 50% of the total of each participation loan or retain the maximum amount of the participation loan permitted by banking regulations. If the bank agreed to offer to a PCA all of its eligible agricultural loans, and on the further condition that the bank did not materially reduce its ratio of agricultural loans from the ratio maintained during the three years, then the bank need retain only 10 percent of the total of each participated loan. The borrower (or bank in behalf of the borrower) was required to purchase non-voting participation certificates in the association to the same extent association borrowers were required to purchase borrower stock.

In intervening years, statutory and regulatory constraints on purchases of participations in commercial bank loans have been relaxed considerably. Within limits, associations may now purchase so-called risk management participations in loans to entities that are non-eligible but functionally similar to eligible borrowers. As a general rule, servicing institutions must retain the lesser of 10 percent or such lesser amounts consistent with the servicing institution's lending limit. The former requirement that the borrower invest in equity of the association no longer applies.

While the participation arrangement was not an unqualified success, volume rose steadily from the program's initiation in 1974 to reach $181.6 million in 1980. More recently, participation activity has largely occurred among large commercial banks and the banks for cooperatives (now Cobank and the St. Paul Bank for Cooperatives) in meeting the financing needs of large agricultural cooperatives.

Commercial Bank Developments in the 1970s

During the 1970s many commercial banks experienced strong growth in loan demand by agricultural borrowers that pressed hard against the banks' deposit and capital base. These were high inflation times and the interest rate ceilings imposed by regulation Q were causing significant disintermediation problems. Loan-to-deposit ratios at agricultural banks increased substantially during this period and widespread concerns were expressed about fund availability at rural banks.

In June 1973, the Agricultural Task Force of the American Bankers Association reviewed the lending environment and noted the increased proportion of agricultural financing that was occurring outside the banking system. This report called for more effective use by bankers of existing financial practices plus the development and implementation of new funding methods, including efforts to restore FICBs as a viable source of funds for agricultural banks. Among other recommendations, the task force specifically urged improved handling of agricultural loan participations between local banks and production credit associations, and strengthening banks' position in discounting loans with FICBs. On the latter point, the bankers recommended an amendment to the Farm Credit Act of 1971, strengthening the language to direct the Farm Credit System to give the same treatment to OFIs as PCAs in borrowing from FICBs. Interestingly, the bankers also recommended the formation of a banker's bank for agricultural lending that would have direct access to the national money markets, similar to that of the FCS.

A comprehensive study published in 1975 by the Board of Governors of the Federal Reserve System also focused on potential improvements in fund availability at rural banks to deal with the inability of small banks to raise funds effectively in the nation's financial markets. Included within the scope of the Federal Reserve study were discount services from FICBs, correspondent credit services, discounting with Federal Reserve Banks, influences of banking organizations on rural credit services, and ways to enhance the marketability of agricultural loans through secondary market development and other means. The Federal Reserve study specifically proposed that the Federal Reserve System act to improve the ability of smaller banks to obtain non-local funds through

1. Vigorous promotion and efficient administration of the then seasonal borrowing privilege, plus implementation of a basic borrowing privilege for smaller banks (see the following section).

2. Initiation of efforts to establish or improve mechanisms for marketing of negotiable instruments issued by small banks.

3. Improvement of the ability of these banks to originate and market finance acceptances.

Some of the findings and recommendations in points 2 and 3 eventually led to the creation of Farmer Mac twelve years later. The study also closely examined the experiences of the FICBs which represented an existing channel of money market access for rural banks. The study found that the practices of the FICBs needed to be revised before a significant expansion of the then small value of such discounts could be expected. Although such revisions would improve credit service to agriculture in the near term, the study committee observed that the FICBs appeared unlikely to adopt a more accommodative stance toward discounting banks or banks' affiliates.

The bankers' task force and the Federal Reserve study both recommended several organizational alternatives for implementing a new intermediary. In 1973, enabling legislation was passed which facilitated investments by nationally-chartered banks in agricultural credit corporations for the sole purpose of making agricultural loans. But no substantial progress occurred through the rest of the 1970s. The long run feasibility of such an organization was unclear, and the logistics of implementation appeared highly complex. Capitalization procedures, choice of financial instruments and funding sources, marketability characteristics, minimum size for efficient operation, geographic scope, uniform credit standards and documentation, and other details were important in the implementation process.

In the late 1970s, two money center banks (Bank of America and Manufacturers Hanover Trust) attempted to develop funding mechanisms based on participations in loan pools to relieve liquidity pressures and over line loan problems at smaller agricultural banks. Neither program had much use, however, due largely to rapidly increasing interest rates that widened the margin at that time between national market rates and those in rural financial markets and to apparent communication difficulties within the banking system.

Seasonal Borrowing from Federal Reserve Banks

The Seasonal Borrowing Privilege was added to the program of the Federal Reserve System's discount window in 1973. The program was targeted to smaller banks with seasonal liquidity problems that lacked access to the national financial markets. To qualify, banks must be small (less than $500 million in total deposits) and they must experience sizable and recurring seasonal swings in net fund availability, defined as total deposits less total loans (Clark; Melichar). Borrowing could occur for up to nine months each year with loans collateralized and mostly having weekly or 30 day maturities. Program users could sell federal funds while they are borrowing seasonal credit as long as net fed funds sold (fed funds sold less fed funds purchased) do not exceed the bank's normal operating pattern.

Program changes since the mid 1970s greatly expanded the number of banks that qualify for seasonal credit as well as the time frame for borrowing and the potential size of seasonal credit lines. For example, the number of banks participating in the program increased from 205 in 1973 to 616 in 1988, while the amount of average weekly credit outstandings rose from $89

million to $235 million (Clark). However, actual program usage has remained low relative to the number of eligible banks. One estimate reported by Clark places the number of seasonal borrowing banks at less than 20% of those eligible for the program.

Empirical studies have largely confirmed that banks using the program have characteristics consistent with the program's policy intent. Borrowing banks tend to have higher ratios of loan-to-deposits and agricultural loans to total loans than do non-borrowers, and greater intra year variability in fund availability. Concerns are expressed, however, about the interest rate subsidy conveyed in the program (i.e. the discount rate is below the market rate on fed funds). Clark's summary observation in 1988 is:

> "Despite financial innovations during the last 20 years that have provided both borrowers and lenders with more funding opportunities, the program continues to operate because of a belief that small rural banks are still unable to tap the amount of credit required to fund peak loan demand".

Clearly, use of the Seasonal Borrowing Program provides eligible banks with a cost-effective source of funds that enhances liquidity management; however, the short term nature of the funds largely precludes their effective use in managing interest rate risk on longer term loans.

Financial Conditions in the 1970s and 1980s

The end of the 1970s and the beginning of the 1980s brought several developments that significantly affected the funding position of rural banks. One development was financial deregulation that phased out regulation Q and allowed banks of all sizes and locations to bid for funds at market interest rates (Barry 1981a, 1981b). Disintermediation problems of commercial banks largely disappeared. The phase out of regulation Q played a major role in integrating local financial markets with regional, national, and international markets, and helped to mobilize the flow of funds between these markets. Accompanying the phase out was a shift in monetary policy in 1979 by the Federal Reserve System from targeting interest rates to targeting the rate of growth of money supply in order to better control inflation. Interest rates were left to reach their market levels. These changes ultimately brought high, volatile inflation rates under control, although at a cost of extremely high and volatile interest rates in the short run that stressed many highly leveraged borrowers in various economic sectors. The combination of removing regulation Q and the shift in monetary policy let market interest rates be the major director of market funds and alleviated the periodic credit crunches that preceded these changes. Problems of swings in fund availability from banks were substantially reduced.

In the agricultural sector, high interest rates along with high debt loads for many farmers and declining farm incomes and land values brought a slow down and then a down turn in loan growth. Severe problem loans and loan losses for many agricultural lenders were also major results. In the process, loan-to-deposit ratios at agricultural banks declined significantly--from national averages in the 65-70% range in part of the 1970s to the 50-60% range, until the mid

1990s when loan to deposit ratios at agricultural banks increased to the 60-65% range. At the same time, banks were developing improved methods of asset-liability management to deal with the new interest rate risk environment. Included were widespread adoption of floating or variable interest rates on all types of loans and more attention to matching maturities and/or durations of rate sensitive assets and rate sensitive liabilities.

1980 Farm Credit Act Amendments and OFIs

The Farm Credit Act Amendments of 1980 extended the FCS loan participation authorities to include Federal Land Banks and brought significant revisions to OFI lending authorities. Much of the debate about the Act focused on the authority by which FICBs loan to or discount loans from commercial banks and other OFIs. The amended statute clearly indicated the FICB services were to be reasonably available to OFIs that: 1) are significantly involved in agricultural or aquatic lending; 2) have limited access to regional or national capital markets; 3) have continuing need for supplementary funds for agricultural and aquatic lending; and 4) do not use FICB services to expand other types of lending. The regulations developed to implement this provision of the statute more precisely delineate these conditions. In particular:

- Eligible OFIs are to have at least 15% of their loan volume at the seasonal peak in agricultural and/or aquatic loans.

- Eligible OFIs must have loan-to-deposit ratios not less than 60% at the seasonal peak for the last three consecutive years (or in the case of an economic decline, the OFIs must have maintained ratios equivalent to depository institutions of comparable size in the particular farm credit district).

- Evidence of money market access shall be determined by the extent to which the OFI can regularly utilize banker's acceptances, commercial paper, negotiable certificates of deposit, or other similar liability instruments as a source of funds.

In general, these revisions were intended to put OFIs in essentially the same position as PCAs in their ability to use FICB services. However, the OFI revisions still left commercial banks with access to a funding source that was owned, controlled, and patronized by PCAs--a major competitor for banks in financing the short and intermediate term credit needs of commercial agriculture. The OFI revisions resulted in no significant changes in the extent of OFI financing. By the time the regulations were finalized near year end 1981, the phase out of regulation Q was well underway and the ground work had been laid for the emerging financial stress times in agriculture. Loan volumes began to decline, the liquidity positions of rural banks substantially increased, and the FCS institutions and many agricultural banks began to experience financial difficulties. The volume of OFI discounting trended downward, reaching a low of $126.6 million in 1982 and then increasing to $210.2 million at year end 1984.

A New Market for Funding Agricultural Banks

In December of 1980, the Federal Reserve Bank of Kansas City sponsored a conference on "Future Sources of Loanable Funds for Agricultural Banks". The conference brought together a cross section of lenders, government officials, and academicians to consider the fund availability issue at rural banks and other broader issues as well. Included among the topics were the effectiveness of the correspondent banking system; the appropriate role of public credit programs administered by the Farmers Home Administration; the Federal Reserve Seasonal Borrowing Privilege; the FCS as a source of loanable funds; and the potential for a new market to provide loanable funds to rural banks.

In commenting on the potential for a new funding mechanism for rural banks, Raymond J. Doll observed:

> "To make their instruments competitive in national money markets, small rural banks need to have equal access to financial markets, which means being able to package securities so they are just as attractive as those of other market participants. This suggests a market in which the numerous financial instruments of all of the participants can be bought and sold on a comparable basis (page 171)".

Doll went on to say:

> "Such difficulty suggests the need for a highly developed, well organized, and well capitalized umbrella organization which would be able to package a wide variety of asset and liability instruments based on rural banks' paper and to make these instruments marketable on a competitive basis (page 172)".

Still further, Doll states:

> "One alternative with substantial appeal is an institution organized as a private venture by the banks themselves. Membership would be available to all insured commercial banks that agree to help capitalize the market and abide by laws covering such items as fees, instruments to be traded, investments to be made, and trading rules (page 173)".

And finally,

> "Because of the unique problems facing rural banks, strong arguments prevail for government sponsorship of an agency that would encourage increased mobility in the flow of funds through the competitive marketing of bank asset and liability items (page 175)".

Thus, Doll was echoing the calls made earlier for a new funding mechanism to better link agricultural banks with the national financial markets. In the process, he was largely describing the eventual form of Farmer Mac several years later.

MASI and MABSCO

A notable example of an attempt to develop expanded agricultural funding opportunities within the banking system was the experience of the Mid American Bankers Service Company (MABSCO) and one of its subsidiaries, Mid America Services Inc. (MASI). MABSCO was a bankers service company owned by the bankers associations of thirteen mid-western states with the Iowa Bankers Association as the flagship institution. MASI was an agricultural credit corporation that acted as a servicing agent by which participating banks in the several states could sell portions of their agricultural production and intermediate term loans to Rabobank (Netherlands) as the funding source.

The MASI program was established in 1981-82 as a subsidiary of MABSCO. It began a pilot phase in 1983 involving the 13 mid-western states and then became fully operational. MASI itself was funded through the earnings from a capital note invested by each of the participating banks and by a 25 basis point mark-up on Rabobank's cost of funding the farm loans it purchased. Expeditious loan handling and credit scoring were an important feature of MASIs operations.

Despite the effective organization of MASI and extensive information provided to agricultural bankers about its potential value, the financial innovation represented by MASI received relatively little use. It began operating at a time when fund availability at agricultural banks was relatively strong and the significant financial problems of many farmers and lenders in the mid 1980s were just becoming evident. Thus, MASI had no direct, significant effect on the agricultural credit markets.

Farmer Mac

The financial problems of agricultural borrowers and their lenders during the mid 1980s obscured, but did not eliminate, the concerns of agricultural banks about new methods of gaining direct access to financial markets for obtaining loanable funds. The issue resurfaced during the ongoing debate about financial assistance for the Farm Credit System, which lead to the series of amendments in 1985, 1986, and 1987 to the Farm Credit Act of 1971. (Thanks to greater diversity of their loan portfolios and shorter maturities of their assets and liabilities, most surviving agricultural banks were able to recover more quickly than the FCS institutions from the stress problems in agriculture during the 1980s). Life insurance companies also were interested in having a mechanism for mobilizing their agricultural loans and in helping to profitably operate a market to achieve this goal.

The result of these deliberations was the creation of the Federal Agricultural Mortgage Corporation (Farmer Mac) in the Agricultural Credit Act of 1987. Farmer Mac was created to oversee the development of a secondary market for farm real estate loans. Supervised and regulated by the Office of Secondary Market Oversight in the Farm Credit Administration, Farmer Mac operates as an independent entity within the Farm Credit System. Farm Credit System institutions along with commercial banks, life insurance companies, and other financial institutions hold the capital stock in Farmer Mac. The purposes of Farmer Mac, indicated in the 1987 act, are to 1) increase the availability of long term credit to farmers and ranchers at stable interest rates; 2) provide greater liquidity and lending capacity in extending credit to farmers; 3) facilitate capital market investments in providing long term agricultural lending, including funds at fixed rates of interest; and 4) improve availability of funding for rural housing.

At last rural banks (and other lenders) had a new market mechanism to serve as a secondary market for adding liquidity to the farm mortgage portions of their loan portfolios. However, Farmer Mac has met with little success. Originally, Farmer Mac was to supervise the purchases by poolers of mortgages originated and perhaps serviced by a primary lender. The poolers were to aggregate the loans into portfolios and then sell pooled participation securities to investors. In turn, Farmer Mac would guarantee the securities to insure their safety for financial market investors.

By 1995, however, only eight poolers had been certified, and little pooling activity had occurred. The total volume of credit outstanding under the Farmer Mac program was in the $350 million to $500 million range. The slow development was attributed to several factors: weak loan demand by agricultural borrowers, strong liquidity positions of agricultural banks, stringent capitalization requirements for bank originators, uncertain loan volume, questionable interest rate competitiveness, and slow acceptance by investors of the unique and complex features of real estate mortgages in agriculture.

Beginning in 1990, Farmer Mac received two new authorities intended to stimulate and expand the development of the secondary market. The first new authority allowed Farmer Mac to serve as the pooler for secondary sales of loans guaranteed by the Farmers Home Administration. An informal market for FmHA and SBA guaranteed loans has been active for a long time. The volume of FmHA guaranteed loans sold through Farmer Mac totaled $47.6 million in 1994, up from $39.5 million in 1993. Despite the growth, the 1994 figure was less than 5% of FmHA fiscal 1994 guaranteed loan volume eligible for Farmer Mac sale.

The second change, in late 1991, authorized Farmer Mac to fund loan pools by issuing its own unsecured debt securities. The proceeds of the security sales are used to buy and hold other securities backed by qualifying pools of farm mortgage loans issued by certified Farmer Mac poolers and guaranteed by Farmer Mac. This new portfolio strategy has attracted some interest, although little securitization occurred.

Farmer Mac has taken several other actions, including an alliance (terminated in mid 1996) with the Western Farm Credit Bank of Sacramento and the formation of a network of mini poolers. In addition, in 1996 Farmer Mac received statutory changes to allow it to purchase loans directly from originators and to remove the 10% subordination interest or reserve required on all originated loans. The future of Farmer Mac is highly uncertain, given the limited use to date. Whether the recent changes will produce significant effects, or whether the ultimate demand for the program, in an environment of stronger growth in loan demand, will increase remains unclear.

It is interesting that the creation of Farmer Mac in 1987 occurred in legislation directed primarily toward the financial recovery of the Farm Credit System. To some extent, the major competitors (that is commercial banks and life insurance companies) of the FCS used the circumstances of those times and the political process to gain a new financial innovation (Farmer Mac) as a concession from the FCS for receiving federal financial assistance to aid in its own recovery. Thus, Farmer Mac was created in part, as a quid pro quo, although the issue of market access to loanable funds by rural banks had been receiving lengthy attention.

It is also interesting that agricultural banks were able to substantially increase their farm real estate lending during the same period of time in which Farmer Mac was developed. This topic is considered in the next section.

Farm Real Estate Lending by Commercial Banks

Despite the financial stress times in agriculture, another significant development in the early 1980s was the substantial increase in farm real estate lending by commercial banks--a trend that has continued to the present. U.S. farm real estate debt held by commercial banks increased from $8.3 billion in 1983 to $22.42 billion at year end 1995, an annual growth rate of 8.6% while total farm real estate debt during this period declined significantly. In addition, commercial banks' market shares of farm real estate debt during the period increased from 9.0 % to 28.4 %. At the same time, the farm real estate loan volume and market shares held by the FCS declined from $44.3 billion to $24.4 billion and from 43.0% to 30.8%.

The growth in commercial banks farm real estate lending (actually loans secured by farm real estate) is attributed to several factors. Included are a preference by banks to offer full service lending; the full service lending of competing FCS institutions resulting from consolidation of management and lending territories of many PCAs and FLBAs; financial stress of FCS institutions in the 1980s and temporary loss of interest rate competitiveness on FCS loans; refinancing of non-real estate loans using real estate as security; stronger liquidity positions; and the declining importance of sellers of farm land as a source of real estate debt.

A series of surveys of commercial banks by the University of Illinois indicated that the primary purpose of banks' farm mortgage loans was to finance the purchase and improvements of farm real estate, although refinancing played a major role earlier in this time period. For

example, a 1981 survey of 305 Illinois banks indicated that 72% of bank loans secured by farm real estate were for purposes of purchasing or improving farm land and buildings. A 1989 survey indicated 61% of farm real estate loans were used for this purpose, and a 1995 survey indicates that 66% of farm real estate loans are for the purchase and improvement of farm real estate.

Survey responses also indicated that much of the growth in farm real estate loans involves adjustable rates on relatively short maturities (eg. 3-5 year) with longer amortization periods, balloon payments, and intended refinancing. The use of long term, fixed rate loans was very low.

Federal Home Loan Bank System

The 1988 Financial Institution Reform, Recovery, and Enforcement Act (FIRREA) provided another channel by which commercial banks could gain access to agency market funds. The Act authorized Federal Home Loan Banks to make advances (i.e., loans) to commercial banks, similar to the FHLB system's long standing financing of savings and loan associations. The FHLBs are GSEs and sell consolidated agency securities in the financial markets, with essentially the same pricing arrangements as securities sold by the farm credit banks. To receive advances, commercial banks must become members of the FHLB by purchasing stock in their district bank. Eligibility requirements include making long term home mortgage loans either by purchasing or originating long term mortgages, with at least 10% of the institution's total assets held in residential mortgage loans.

Membership by commercial banks in the FHLB system has grown rapidly since 1988. At June 30, 1995 the FHLB system membership totaled 5,563 institutions, comprised of 2,016 thrift institutions, 3,420 commercial banks, 105 credit unions, and 22 insurance companies. About half (1,737) of the 3,420 commercial bank members were borrowers at mid-year 1995 with outstanding advances totaling $28.8 billion, or $16.6 million per bank. In contrast, about 60% of member thrift institutions were borrowers, with outstanding balances totaling $89.3 billion, or $75.4 million per institution. The advances to member institutions tend to be highly concentrated and must be substantially collateralized. The funds may then be used for any purpose.

Each FHLB offers an extensive range of loan products and financial services to its member institutions that are intended to be cost competitive, liquidity generating, and helpful to the institution's asset-liability management. The usefulness in asset-liability management is attributed to an array of maturity and repayment alternatives on advances that may range up to 15 years. Approximately 47% of the advances outstanding at June 30, 1995 had a maturity greater than one year. The maturity structure of advances differs considerably among the system banks, depending on individual bank's policies and customer needs. The maturity structure of advances for ten of the Federal Home Loan Banks is shown in Table 1 for year-end 1994.

Legislation proposed in 1996 by Congressman Richard Baker would substantially change the FHLB system and open its services to nearly all depository institutions in the U.S. The Enterprise Resource Bank Act of 1996 would rename the FHLBs as Enterprise Resource Banks,

make membership in the ERB system voluntary, liberalize membership eligibility, substantially broaden the range of assets that could be pledged as loan security, and make the Federal Housing Finance Board an arms length regulator of the ERB system. These changes would make the re-engineered FHLBs a wholesale source of agency market funds for virtually all community banks, and would especially aid these banks in the management of interest rate risk on longer term farm and non farm real estate loans.

Concluding Comments

The substantial growth of, and favorable experiences by, commercial banks with FHLB advances have prompted commercial banks to seek comparable access to agency market funds from the farm credit banks. The bankers believe that advances from the farm credit banks would provide rural banks with a cost competitive source of funds, greater flexibility in liquidity management, and more effective asset-liability management, all in support of agricultural and rural development lending. As discussed earlier in this paper, the bankers' current proposal represents another attempt, in a long series of similar initiatives, to gain improved access to non-local, non-deposit sources of funds.

Fund availability at small agricultural banks remains a significant, yet perplexing issue. On the one hand, the fund availability issue has a long history which clearly suggests a preference by bankers for improved access to funds in the national financial markets. However, few of the policy or managerial initiatives and instruments cited in this review have met with substantial, sustained use. One exception is the Seasonal Borrowing Program from Federal Reserve Banks, which is geared to short term liquidity needs. Another is the recent growth in borrowing by banks from the Federal Home Loan Bank System.

Part of the problem may involve cyclical patterns in small banks' needs for funds rather than a sustained pattern of use over time. Another part of the problem may involve the policy preference of the past to channel agency market funds through the Farm Credit System to commercial banks, even though the FCS lending associations own the Farm Credit Banks and are direct competitors with agricultural lending by commercial banks. Attempts to combine both lending associations and commercial banks as users of services of other FCS institutions have not worked well in the past, and there is little reason to expect greater success in the future.

It is possible that the continued evolution in the geographic structure of banking will, in part, resolve the funding problem by substantially reducing the number of small rural banks. New funding mechanisms within the banking system may also be developed, although neither of these possibilities seems imminent at this time. Thus, fund availability at agricultural/rural banks remains an interesting issue.

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Table 1. Maturity Structure of 1994 FHLB Advances.

Bank	Total	One Year	Two Years	Three Years	Four Years	Five Years	Longer than Five Years
	$ Million	Percent of Total					
New York	14,515	75.6	10.4	6.2	3.9	1.6	2.3
Topeka	6,215	58.1	20.8	9.7	7.6	1.2	2.6
Chicago	6,677	60.1	16.6	6.4	8.8	5.9	2.3
Boston	8,504	54.0	22.6	10.8	5.7	2.5	2.2
Cincinnati	7,141	33.5	14.5	10.6	3.0	6.7	31.7
Atlanta	15,956	13.3	22.3	13.2	15.4	13.5	14.9
Seattle	8,900	49.5	28.0	11.5	3.6	2.1	5.3
Indianapolis	7,758	37.5	21.3	21.1	11.4	5.0	3.7
San Francisco	25,290	40.0	20.4	6.9	9.2	1.7	21.9
Des Moines	9,817	35.4	19.4	13.5	9.3	2.4	18.3