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Risk Management in Agricultural Finance: The Performance of the Republic of China*

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I. Introduction

Beginning in the 1950s, as agricultural finance gave rise to the development of agriculture in Taiwan, the rapidly growing agricultural sector in turn nurtured the development of industry. This led to the creation of the first economic miracle in the country's history. Nevertheless, in view of the peculiar nature of agricultural production, agricultural finance subsequently gave rise to numerous economic problems. For instance, the agricultural sector in Taiwan is characterized by a strong seasonal demand for funds, and there are also numerous borrowers of these funds scattered over a wide area. This means that the average size of loan is small, and this, coupled together with the relatively long repayment period, has resulted in the problems associated with agricultural finance being generally more complicated than in the case of other industries. In the light of the recent changes that have been taking place in the economic environment, the kinds of services that the various agricultural financial institutions have traditionally provided have also changed. The structure of production has changed, the economic conditions prevailing in different parts of Taiwan have changed, and agricultural products have been affected by fluctuations in financial markets. These changing conditions have been brought heavily to bear on not only the three specialized agricultural banks (i.e., the Farmers Bank of China, the Land Bank of Taiwan and the Taiwan Cooperative Bank) but also on the credit departments of farmers' associations located in rural areas all over the island. The proportions of non-agricultural loans in their lending portfolios have increased, with the

result that the system of specialized agricultural finance has been steadily deteriorating.

During the early stages of Taiwan's economic development, as farmers' associations in the different rural areas set up credit departments, the financial activities of these associations permeated the whole of village life. The credit department thus became an efficient grass roots financial institution, and assisted in the promotion of other agricultural sector activities such as marketing, extension and insurance. The farmers' associations not only provided funds to facilitate agricultural production and extension, but they also supplied the funds to support the technology needed for agricultural development. By furthering the agricultural development process, these farmers' associations subsequently helped bring about Taiwan's economic take-off. Furthermore, as the Taiwan economy developed, these conveniently-located credit departments of farmers' associations absorbed surplus funds in the rural areas, thus giving rise to the accumulation of a large pool of deposits. These funds were then redeposited with the three large agricultural banks, and in this way excess savings were efficiently channeled into the industrial sector. Agricultural finance thus played an integral role in the mobilization of the funds required to sustain Taiwan's economic development process.

Right from the outset, the credit departments of farmers' associations, which made up a significant part of the agricultural financial system, were not without their problems. However, as the Taiwan economy, and in particular the rural areas, prospered, it was relatively easy for these shortcomings to be covered up. Then, during the 1970s and 1980s, as agriculture slowly gave way to industry, the share of the agricultural sector in total economic activity gradually declined, and the problems that these credit departments were experiencing began to be exposed. The problems became more acute in the 1990s with the promotion of financial liberalization policies, as competition amongst financial institutions increased sharply following the establishment of a large number of new commercial banks, and the agricultural sector declined in importance. Many of the problems that these credit departments were facing reached

crisis proportions and immediate action was needed to set things right. For these reasons, the remainder of this paper will focus on three major issues, which are as follows:

1. The Structure and Supervision of Agricultural Finance
2. The Current Operating Conditions and Difficulties Faced by Taiwan's Agricultural Financial Institutions
3. The Supervisory Policies of Central Deposit Insurance Corporation(CDIC)

II. The Structure and Supervision of Agricultural Finance

1. The Structure of Agricultural Finance

The system of agricultural finance in Taiwan's highest policy-making body is the Central Bank of China's Agricultural Finance Planning Committee. However, the institutions that handle agricultural finance in practice are the three specialized agricultural banks (namely, the Land Bank of Taiwan, the Taiwan Cooperative Bank and the Farmers Bank of China), 287 credit departments of farmers' associations, as well as the Agricultural Credit Guarantee Fund. In what follows, a brief introduction is given to each of these:

(1) The Agricultural Finance Planning Committee

This committee, which falls under the jurisdiction of the Central Bank of China, was set up in 1970. Its members include the Governor and Deputy Governors of the Central Bank of China, the Chairman of the Council of Agriculture and a Vice Minister of Finance, among others. Its main function is to examine and discuss in detail agricultural loan projects as well as the work of promoting agricultural loans, including the government's agricultural finance policies and plans regarding the system of agricultural finance. It is also concerned with the interest rates charged on agricultural loans as well as the ways in which agricultural funds are raised and disbursed.

(2) Agricultural Banks

These comprise the Farmers Bank of China, the Land Bank of Taiwan and the Taiwan Cooperative Bank, which together account for about 50 percent of the agricultural loans market. Each of these is described as follows:

1. The Farmers Bank of China:

This national bank resumed its operations in Taiwan in 1967. Its major responsibilities include adjusting agricultural finance, and providing needed credit to facilitate the growth of agriculture, forestry, fishery, animal husbandry and other related businesses. In accordance with the bank's organizational regulations, agricultural loans should exceed 60 percent of total loans. Its relationship with the credit departments of farmers' and fishermen's associations is primarily that of refinancing loans or commissioning loans through these farmers' or fishermen's associations.

2. The Land Bank of Taiwan:

Established in 1946, this is a government-designated specialized bank belonging to the Taiwan Provincial Government that handles real estate credit and agricultural credit.

3. The Taiwan Cooperative Bank:

This bank was also established in 1946 by the Taiwan Provincial Government in order to adjust funding supply and demand conditions in the cases of the credit cooperatives, farmers' and fishermen's associations and agricultural cooperatives, while at the same time handling agricultural finance. At present, it is still responsible for guiding the credit departments of both farmers' and fishermen's associations.

(3) The Credit Departments of Farmers' Associations

There are currently 287 credit departments of farmers' associations in Taiwan. Together, they handle slightly more than 50 percent of agricultural loans. The first farmers' association dates back to September 1900 when

the Sanhsia Farmers' Association in Taipei County was set up. Subsequently, other farmers' associations were established all over the island, so that these associations have a history of more than eight decades. In the early years, farmers' associations in Taiwan were principally concerned with providing technical assistance. However, in September 1941, they started to supplement this assistance with financial services, with the result that, in July 1949 when the government promulgated the *Regulations Governing the Merging of Farmers' Associations and Credit Cooperatives in Taiwan Province*, the farmers' associations in each township set up credit departments to handle agricultural credit. In addition, in January 1972, the government promulgated the *Regulations Governing the Management of the Credit Departments of Farmers' Associations in the Taiwan Area*, whereby these credit departments became a part of the financial system. In June 1974, the government revised *the Statute Governing Farmers' Associations*. The legal status of the credit departments of these farmers' associations from this time on began to be formally established.

The business operations of farmers' associations in Taiwan are designed to fulfill a wide range of objectives and are also comprehensive in terms of their scope. These objectives include agricultural marketing, extension, insurance and credit services.

The credit departments represent only one aspect of the different services offered. Of the staff employed by these farmers' associations, 54 percent work for the credit departments. These credit departments are chiefly concerned with handling the financial business of their members, as part of an overall objective to develop the economies of the rural areas. The competent authority at the national level with regard to these credit departments is the Ministry of Finance. For their funding and redeposits, these departments depend on the three agricultural banks referred to above. The competent authority at the national level in the case of the farmers' associations is the Ministry of the Interior.

A long period of time has thus elapsed since the credit departments

of these farmers' associations were first established. Over that period they have been fairly successful in terms of improving the lot of farmers and promoting needed finance for agriculture, as well as in contributing to the development of the agricultural sector in Taiwan and to the economy as a whole in the rural areas.

(4) The Agriculture Credit Guarantee Fund

The Agriculture Credit Guarantee Fund was established by the government in September 1983 with the assistance of the three major agricultural banks and the farmers' associations. Its principal objective is to provide farmers with credit guarantee services, through contracts drawn up with agricultural banks and farmers' associations. In this way, the Fund is able to facilitate agricultural lending activities. At present the Fund amounts to NT\$2 billion and total guarantees outstanding amount to NT\$23.9 billion, or some 2.5 percent of total agricultural lending. Approximately 80,000 units benefit from these credit guarantee services.

2. The Supervision of Agricultural Financial Institutions

At present, the central competent authority in respect of agricultural financial institutions in Taiwan is the Ministry of Finance. Responsibility for supervising and disciplining these institutions lies, however, with the finance departments of the provincial, county and municipal governments. Furthermore, since April 1945, the Central Bank of China has been authorized by the Ministry of Finance to examine the operations of these institutions. Nevertheless, in view of its shortage of bank examination personnel, pursuant to Article 38 of the Central Bank of China Act, the Central Bank of China has entrusted the examination of the credit departments of farmers' associations to the Taiwan Cooperative Bank. Following the establishment of the CDIC in September 1985, the government in April 1986 drafted the *Program for the Division of Duties in Bank Examination among the Competent Authorities*, according to which

the CDIC was given responsibility to examine the operations of insured credit departments of farmers' associations as well as a number of other insured financial institutions. In July 1991, after the Bureau of Monetary Affairs of the Ministry of Finance was set up, this Bureau became responsible for examining the Farmers Bank of China, while the Land Bank of Taiwan and Taiwan Cooperative Bank continued to be examined by the Central Bank of China. Those credit departments of farmers' associations that had already participated in deposit insurance were examined by the CDIC, while those that had not participated in deposit insurance continued to be examined by the Taiwan Cooperative Bank which had been entrusted with the examination of these uninsured institutions. However, beginning in July 1996, in accordance with the government's *New Plan Governing the Reform of Financial Supervision and Regulation*, all of the community financial institutions that had formerly been examined by the Taiwan Cooperative Bank began to be examined by the CDIC (as shown in Table 1). (Regarding the examination of agricultural financial institutions by other competent authorities, please refer to Table 2. With regard to the allocation of bank examination personnel among these different authorities, please refer to Table 3.)

III. The Current Operating Conditions and Difficulties Faced by Taiwan's Agricultural Financial Institutions

1. The Peculiar Nature of Agricultural Finance

Generally speaking, agricultural finance differs from other kinds of finance in that there is a large number of small loans involved. This tends to increase the operational costs of lending, the principal reason for this being that the scale of farming operations is generally small. For instance, the cultivated land area of more than two-thirds of tillers is less than one hectare. Furthermore, the drive towards industrialization has led to labor shortages in rural areas as well as insufficient investment in agriculture. Added to this, farmers, when contrasted with industrial borrowers, tend to lack appropriate collateral to secure their borrowing, to the extent that

unsuitable items, including slope land, reservations and woodland are frequently offered as collateral. The demand for agricultural finance is also seasonal, since agricultural activities tend to follow a seasonal pattern, and natural disasters and the spread of contagious diseases among animals also exert a significant impact. Furthermore, farmers do not tend to be highly educated, and they lack coherent strategies when it comes to making plans to borrow money, using the funds appropriately and arranging to pay them back. It is therefore very easy for funds to be misappropriated and for abuses to exist. In this way, the process of repaying agricultural loans becomes much slower and more complicated than in the case of loans for industrial purposes. It is also very easy for the repayment process to be delayed to the extent that the number of overdue loans significantly increases.

2. The Current Operating Conditions of Agricultural Financial Institutions

The three agricultural banks, owing to their being publicly-owned, relatively large in size, and characterized by stable operations, are not prone to operational crises. The problems with agricultural finance tend to be concentrated among the much smaller credit departments of farmers' associations. To illustrate, while the average pastdue loans ratio for these credit departments of farmers' associations has spiraled upwards from 1.5 percent at the end of 1992 to 6.7 percent at the end of 1996, representing an increase of 4.5 times in only four years. The growth rate of loans has also declined from 37.9 percent at the end of 1992 to -2.8 percent at the end of 1996. Net profit before income tax as a proportion of business income has fallen from 11.1 percent at the end of 1992 to 9.3 percent at the end of 1996. Furthermore, net profit before income tax as a proportion of average total assets has declined from 0.9 percent at the end of 1992 to 0.8 percent at the end of 1996. Deposit market share has also dropped from 11.5 percent at the end of 1992 to 10.5 percent at the end of 1996. (For a more detailed explanation, please refer to Table 4.) In addition, at the end of 1997, 48 percent of these credit departments of farmers' associations had been

awarded “D” or “E” ratings on the basis of the National Financial Institutions’ Early-Warning System. This was two-and-a-half times the 19 percent accounted for by these poorer performers in 1993, indicating that the operations of these credit departments have deteriorated. The main factors responsible for this downturn in performance are as follows:

- (1) The 1989 revisions to the Banking Law resulted in a significant relaxation in the scope of business of banks. However, the activities of the credit departments of farmers’ associations continued to remain confined to traditional banking activities, with the result that their operations have gradually worsened.
- (2) Following the deregulation of interest rates in 1989, the size of the spread between deposit and loan interest rates on which the credit departments of farmers’ associations have traditionally relied for their livelihood has been gradually reduced.
- (3) The farmers’ associations were originally set up to serve the interests of their members, who were all farmers. However, following revisions to the law, associate members who are not farmers have been allowed to deposit and borrow money. In 1990, when real estate prices slumped, associate members wantonly borrowed funds from these associations. Owing to the lack of a sound system for assessing the financial situation of prospective borrowers, the number of bad assets increased, thus leading to lower profits.
- (4) After the new private sector commercial banks were established over the 1991-1992 period, competition among banks became increasingly fierce. The credit departments of farmers’ associations, in order to maintain existing levels of business, engaged in increasingly risky lending activities, with the result that the quality of their assets deteriorated.
- (5) Prior to 1995, the work of examining the credit departments of farmers’ associations was handled by the Taiwan Cooperative Bank. Owing to a

shortage of manpower, examinations of individual institutions took place on average only once every one to three years, with the result that operational deficiencies could not be discovered in a timely manner. This resulted in a proliferation of abuses.

- (6) During the first half of 1995, huge fluctuations in Taiwan's financial markets gave rise to insufficient liquidity. This led to a small number of the weaker credit departments of farmers' associations experiencing panic runs. Depositors thus lost confidence in these associations, and their financial market share consequently declined.

3. The Operational Difficulties Faced by Farmers' Associations

Owing to the above-mentioned changes in the operating environment, beginning in July 1995, a total of 14 credit departments of farmers' associations experienced panic runs, which resulted in a huge reduction in deposits. Of these 14 credit departments, two had not previously participated in deposit insurance, and their operations were subsequently merged with those of other financial institutions. In each of the other 12 cases, the CDIC dispatched personnel to assist the insured institution by calming down depositors' fears. The main operational difficulties that these troubled institutions faced included the following:

- (1) *Credit risk*: If a loan was extended to a customer who was not creditworthy, once the due date for the repayment of the loan had passed, the unpaid loan became a bad debt.
- (2) *Loan business risk*: Such risk arose where the farmers' association did not have a sound lending policy, there was no established procedure for approving requests for loans, there was an inadequate system of internal controls, the internal auditing function was lacking, and the boards of directors and supervisors were not performing satisfactorily.
- (3) *Liquidity risk*: The extremely limited capital requirements for setting up a credit department (a maximum of NT\$20 million was required), made

it difficult for the farmers' associations to rapidly accumulate net worth. Furthermore, raising funds was also not at all easy since the farmers' associations could not make public offerings of shares to non-members.

- (4) *Concentration of credit, leading to a deterioration in asset quality:* The main reasons for a deterioration in asset quality included a coherent lending policy, or else a system for extending credit that was seriously defective. The amount of collateral actually located outside the region greatly increased, and the large number of loans meant that the number of cases also significantly increased. Items used as collateral tended to be concentrated in areas where it was difficult to distinguish farmland from woodland. In addition, loans were often concentrated in the hands of single individuals and their related parties. Collateral was often overvalued and no analysis was performed as to whether the borrower could repay the loan or what its purpose was.
- (5) *The changing operating environment did not favor business operations:* The impact of increased competition brought about by liberalization, as well as the limitations imposed upon the development of these farmers' associations, such as their being denied access to funds from non-members, did not help them to operate successfully.

IV. THE SUPERVISORY POLICIES OF CDIC

1. The Structure and Current Status of Deposit Insurance

- (1) The deposit insurance system in Taiwan was established in 1985 by the Ministry of Finance in consultation with the Central Bank of China, in accordance with the *Deposit Insurance Act* and Article 46 of the *Banking Law*. Its objectives are to safeguard the benefits of depositors in financial institutions, promote savings, maintain an orderly credit system and enhance the sound development of financial operations.
- (2) The total capital of the Central Deposit Insurance Corporation at the

time of its establishment was subscribed for on the basis of an offering by the Ministry of Finance, the Central Bank of China and insured institutions. The original level was set at NT\$800,050,000, but by February 1998, actual paid-in capital had already increased to NT\$8 billion. Currently, the maximum insurance coverage extended by CDIC to each depositor is NT\$1 million, and insured banks are assessed at a rate of 0.015% of the insured deposit liability, the lowest such rate in the world. Participation in the deposit insurance system is administered on a voluntary basis, but the Executive Yuan in August 1997 approved a proposal to make deposit insurance compulsory. In December 1997, a revised draft of the *Deposit Insurance Act* was submitted to the Legislative Yuan for deliberation. In this way, those financial institutions that are still uninsured will be swiftly admitted into the deposit insurance system.

- (3) The *Deposit Insurance Act* entrusts the CDIC with four important responsibilities, namely, to handle deposit insurance, to examine insured institutions, to assist problem insured institutions and to deal with the termination of the status of insured institutions. In the slightly more than twelve years since its establishment, the CDIC has exhibited a stable, service-oriented, professional and efficient approach to its work, with the result that deposit insurance has, within the overall financial system, been able to effectively safeguard the rights and interests of depositors as well as achieve the goal of maintaining financial order.
- (4) At the end of January 1998, 401 (or 85.3 percent) of the 470 financial institutions in Taiwan were covered by deposit insurance. Only one of the three agricultural banks was insured as of that date. The other two, which are owned by the Taiwan Provincial Government, have not yet participated in the deposit insurance system, since participation is still administered on a voluntary basis and no consensus has emerged at the Taiwan Provincial Assembly that they be admitted. Of the 287 credit departments of farmers' associations currently in existence, 246 (or 87.7 percent) are insured. The remainder, owing to the voluntary nature

of participation, have not yet to meet the requirements for becoming insured institutions.

2. CDIC's Examination of the Credit Departments of Farmers' Associations

In order to strengthen risk management with regard to the credit departments of farmers' associations, the CDIC has established an on-site system of examination, as follows:

- (1) The CDIC examines the credit departments of farmers' associations mostly by conducting on-site examinations (including general-scope and specific-scope examinations), and to a lesser extent by engaging in off-site monitoring. Its work of examination is based on the concepts of "providing assistance rather than just conducting examinations" and "prevention is better than cure." In this way, the CDIC is concerned with providing assistance to these farmers' associations by means of its examinations, in the hope that they will operate more soundly. In July 1996, the CDIC hired an additional 74 staff to conduct specific-scope examinations and ensure that the business operations of each of the 287 credit departments of farmers' associations could be examined at least once each year.
- (2) When examining the credit department of a farmers' association, the CDIC will base its decision regarding what action to take according to the extent of the deficiencies found. If the deficiencies are minor, the chief examiner will probably ask the insured institution's officers to correct the operational deficiencies during the period of examination. If major deficiencies are found, the outcome of the specific-scope examination will be reported to the competent authority for appropriate action. By following such a procedure, the insured institution's operational deficiencies can be quickly rectified.
- (3) Where specific problems exist in relation to the examination of the credit departments of farmers' associations, the CDIC coordinates

important bank examination activities through its Bank Examination Committee. The members of this committee include a Vice Minister of Finance, a Central Bank of China deputy governor, the Director General of the Ministry of Finance's Bureau of Monetary Affairs, the Director General of the Central Bank of China's Bank Examination Department, the Commissioner of the Taiwan Provincial Government's Department of Finance, the directors of the respective departments of finance of the Taipei City Government and the Kaohsiung City Government, the President of Taiwan Cooperative Bank and the President of the CDIC. The committee meets once every month.

- (4) When examining the credit departments of farmers' associations, the CDIC pay particular attention to risk management, particularly in relation to credit risk management, market risk management, interest rate risk management, liquidity risk management, operational risk management, regulatory risk management and goodwill risk management. It concentrates specifically upon the ability of the various layers of management within the organization to control risk.

3. The CDIC's Off-site Examination of the Credit Departments of Farmers' Associations

In addition to the use of the above-mentioned methods to conduct examinations on-site, the CDIC has also set up the following system for examining and supervising the credit departments of farmers' associations off-site. These off-site examinations complement those that take place on-site.

- (1) *Establishing a National Financial Institutions' Early-Warning System (NFIEWS)*: In July 1993, the CDIC formally established a National Financial Institutions' Early-Warning System (NFIEWS) in order to take note of insured institutions with problems early on and help them make improvements in a timely manner. The NFIEWS consists of an Examination Data Rating System and a Call Report Percentile Ranking System. The data obtained from the reports prepared on the basis of

these two different systems are inputted into the NFIEWS for evaluation, and then the results are forwarded to the competent authority for reference.

- (2) *Establishing a system to analyze the data of community financial institutions included within the financial early-warning system:* Since the 4th quarter of 1996, the CDIC has taken over responsibility for compiling the Taiwan Cooperative Bank's former Bank Examination Department's publications, including a "Quarterly Analysis of the Business of Community Financial Institutions" and a "Quarterly Statistical Report on the Financial Data and Related Indicators in Respect of Community Financial Institutions in Taiwan." This is in line with the government's gradual adoption of public disclosure policies in respect of financial institutional data.
- (3) *Completing a report during the 1997 fiscal year on a non-linear regression model that it has been using to study to probability that financial institutions, notably community financial institutions, will set off the early-warning system:* By means of this model, the likely operating conditions of the credit departments of farmers' associations may be predicted at an earlier stage and hence disasters can more readily be avoided.
- (4) *Establishing an off-site monitoring system as well as a follow-up evaluation system involving account officers:* The CDIC has set up an off-site monitoring system for insured institutions with significant operational shortcomings. Not only are in-depth weekly and monthly reports prepared, but account officers are also engaged in follow-up evaluations where there are operational deficiencies.
- (5) *Implementing a "compliance officer" system:* In order to implement the Executive Yuan's "Financial Supervisory and Management Improvement Plan" (FSMIP) and realize the objective of strengthening self-discipline among financial institutions, the CDIC has, at the request of the Ministry of Finance, promoted the setting up of a "compliance officer" system for financial institutions. The system purports to ensure

that operators comply with the laws and regulations promulgated by the competent authority, as well as with the system of internal controls installed by the financial institution itself. In order to avoid serious violations of laws and regulations, each institution should designate a member of staff to serve as the compliance officer. The compliance officer should in turn prepare a written statement that states clearly whether or not each business activity complies with applicable laws and regulations and the system of internal controls. In addition, the CDIC is responsible for off-site monitoring and follow-up evaluation.

4. The CDIC's policies with respect to credit departments of farmers' associations with unsound operations

- (1) *Providing assistance to insured institutions:* Pursuant to Article 17 of the *Deposit Insurance Act*, the CDIC, in order to strengthen the business operations of the insured institution may, if it deems it necessary, request that the competent authority dispatch personnel to assist the business operations of such an institution. The methods used to accomplish this include discussing the insured institution's operations with its responsible officials, getting those responsible officials to agree to remedy the deficiencies, attending all of the institution's internal and other important meetings, and assisting in calming depositors' fears in the event of a run on the institution. In addition, the recently-revised *Deposit Insurance Act* empowers the CDIC to provide financial assistance to the insured institution to assist it to merge or else to take over its assets and liabilities.
- (2) *Dispatching a supervisory task force to take charge of the institution's day-to-day operations:* In order to safeguard the rights and interests of depositors, the competent authority may assign the CDIC to set up an *ad hoc* supervisory task force to take charge of the problem credit departments' day-to-day operations.
- (3) *Implementing a risk-based premium system:* As participation in deposit insurance becomes compulsory, those insured institutions with

relatively high operating risk should, pursuant to Article 13 of the *Deposit Insurance Act*, be assessed on the basis of a risk-based premium system. In this way, those credit departments of farmers' associations with relatively high degrees of operating risk will be compelled to improve their operations.

- (4) *Giving problem institutions a written warning*: Pursuant to Article 19 of the *Deposit Insurance Act*, if an insured institution violates laws or regulations or the Insurance Agreement or engages in unsafe and unsound business practices, the CDIC shall warn that institution of the need to rectify such violations within a prescribed time limit.
- (5) *Termination of Insured Status*: If an insured institution that has been warned by the CDIC fails to rectify violations of laws and regulations or the Insurance Agreement within the prescribed time limit, the CDIC shall terminate its status as an insured institution.

V. CONCLUSION

In order to effectively control financial risk, participation in deposit insurance should be quickly made compulsory, a safe and sound operational framework should be created, bank examination and financial supervision should be strengthened, and problem financial institutions should be dealt with expediently, so that the rights and interests of depositors can be safeguarded and financial conditions stabilized.

Deposit insurance in Taiwan is presently administered on a voluntary basis, and at the end of January 1998 only 65.8 percent of all eligible deposits were insured. It is only through the examination of the operations of the credit departments of farmers' associations that the interests of the depositors in these institutions can be weakly safeguarded. However, as participation in deposit insurance becomes compulsory later this year, and all deposit-taking institutions become part of the deposit insurance system, all those engaged in the work of bank examination and supervision should pay particular attention to the following:

1. Agricultural finance is a special case in point in that it is inherently risky, and it affects agricultural financial institutions in ways that other financial institutions are not affected. Furthermore, the credit departments of farmers' institutions are especially likely to be adversely affected by this risk. For these reasons, the CDIC needs to strengthen its examination of these credit departments, particularly in relation to credit risk management, market risk management, interest rate risk management, liquidity risk management, operational risk management, regulatory risk management and goodwill risk management. It also needs to increase the depth and frequency of its on-site examinations. Only then can it reasonably hope to prevent financial crises from occurring.
2. In order to strengthen the risk management of these credit departments, the CDIC will broaden the implementation of its financial early-warning system, and should base its actions on assisting problem insured institutions as early as possible. It should also increase its provision of special assistance to those credit departments of farmers' associations with relatively high levels of operational risk, in order to remedy operational deficiencies early on and thereby lower their operational risk.
3. The CDIC should adopt a risk-based premium system in a gradual and ordered manner, and also determine the size of the deposit insurance fund as well as the time period in which the insurance premiums should be collected. This information can then serve as a basis for determining the assessment rate, in accordance with the principle of maintaining an adequate deposit insurance fund.
4. In order to significantly improve the operations of the credit departments of farmers' associations, it is recommended that the competent authority quickly draft regulations for merging them with or converting them into an incorporated financial institutions. Increased emphasis needs to be placed on the responsibility vested in the CDIC to

terminate a problem insured institution's insured status by commencing winding up procedures, in order that the operational crises being faced by problem credit departments of farmers' associations can be swiftly resolved.

5. It is recommended that the competent authority turn the credit departments of farmers' associations into limited liability joint-stock companies and use capital standards, as well as risk-based capital requirements, to assess the condition of them in order to improve their financial structure. At the same time, those farmers' associations located in cities should be converted into credit cooperatives, and the extent to which associate members may participate in business activities should be limited. In this way, deposit insurance risk can be reduced.

References :

(1) In Chinese :

1. The Central Bank of China, Financial Statistics Monthly, Taiwan District, The Republic of China, February 1998.
2. Executive Yuan, the Republic of China, Plan Governing the Reform of financial Supervision and Regulation, April 1996.
3. Department of Agricultural Economics, National Taiwan University, Professor H.C. Chen, et al., A Study on the Soundness of the Credit Departments of Farmers' Associations, Final Report of the Research, Development and Evaluation Commission, Executive yuan, October 1996.
4. Lin Wei-Yi, The Future Development of Taiwan's Financial Sector, International Commercial Bank of China Monthly, 1997, No.16 : 3.
5. Lin Wei-Yi, The System of Financial Supervision in the U.S. and the Federal Deposit Insurance System, CDIC Deposit Insurance Journal, June 1997, No.10 : 4.
6. Huang Yung-jen, Taiwan's Community Financial Institutions—Past, Present and Future, Community Financial Institutions Research and

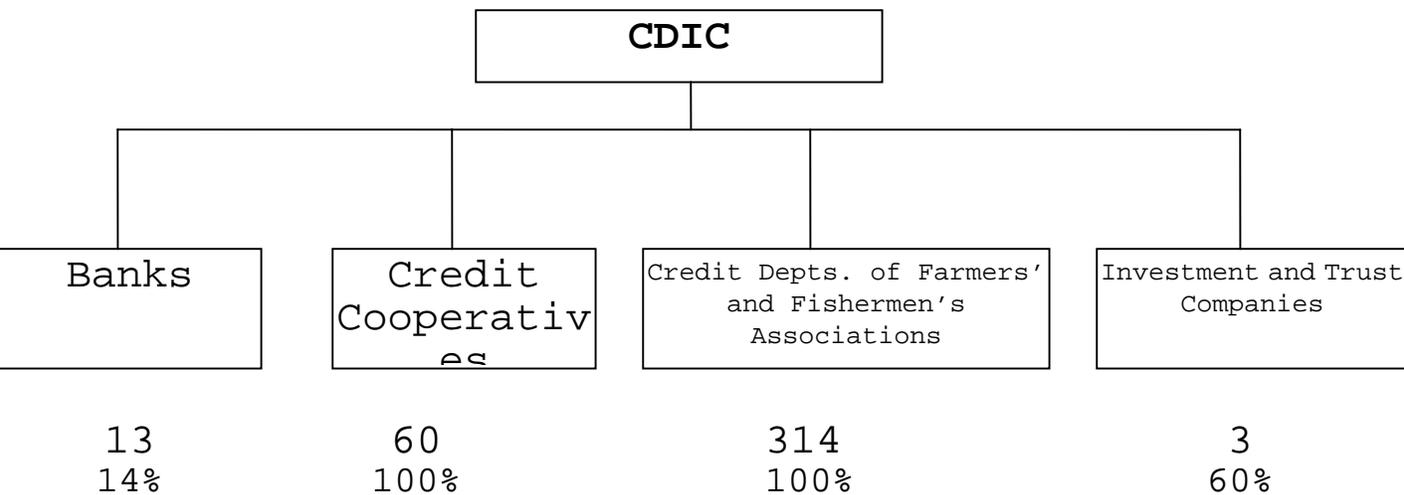
Training Center, 1985.

7. Yen Chuen-pao, The Development of Taiwan's Banks over Four Decades, China Credit Information Service, 1991.

(2) In English :

1. Federal Deposit Insurance Corporation, "History of the Eighties, Lessons for the Future", 1997, pp.38-41, pp.422-462.
2. Kliesen, Kevin L., & R. Alton Cilbert, "Are some Agricultural Banks Too Agricultural?" Federal Reserve Bank of St. Louis Review 78, No.1 Jan/Feb 1996, pp.23-35.

Table 1 Breakdown of the 390 Financial Institutions Examined by CDIC



Notes :

1. No. of Insurable Deposit-taking Institutions: 470 , including:

91 Banks (including 45 Taiwan branches of Foreign banks)

Agricultural Finance Credit Cooperatives 20

314 Credit Departments of Farmers' and Fishermen's Associations

Table 2 Structure of Financial Examination towards Agricultural Banking

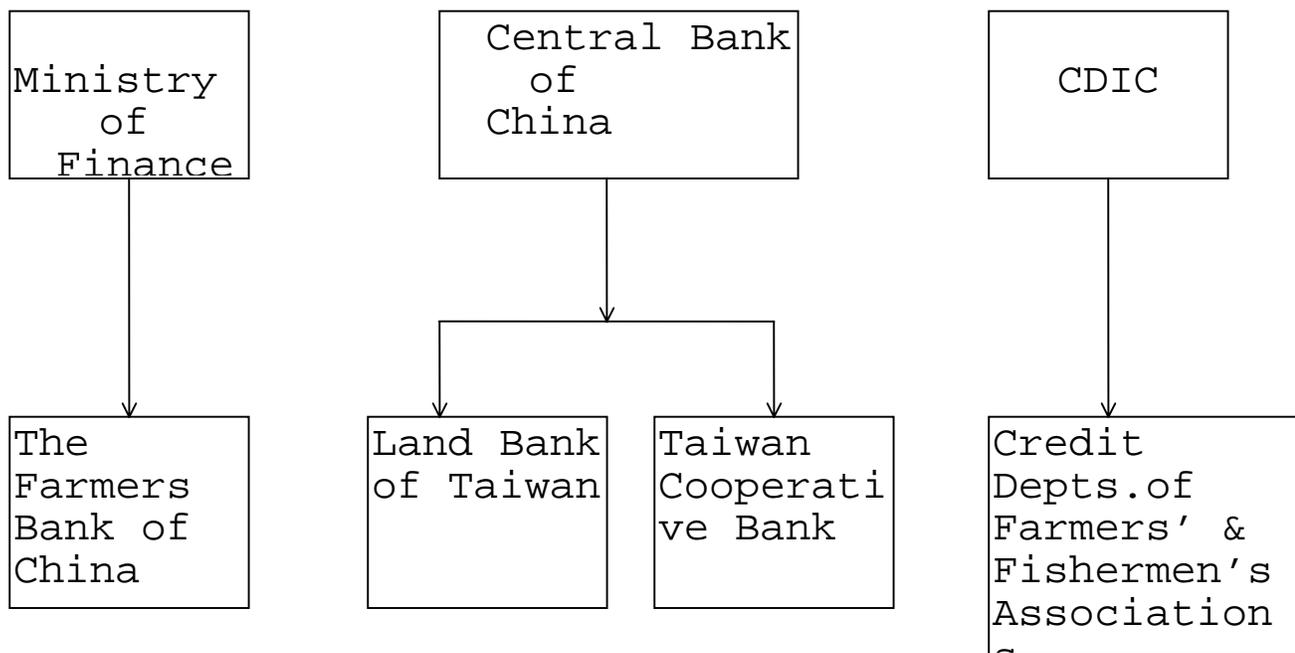


Table 3 The Allocation of Bank Examination Personnel

Unit: persons

Institution \ Date	1998.2	1996.6
CDIC	194	73
Central Bank of China	110	114
Ministry of Finance	48	48
Taiwan Cooperative Bank	--	57
Total	352	292

Note: Includes support staff.

Table 4 Important Indicators for the Credit Departments of Farmers' Associations

Units: %, multiples, NT\$billion

Item/Year	1992.1 2	1993.1 2	1994.1 2	1995.1 2	1996.1 2
Liability/Total Net Worth (multiple)	27.8	26.9	26.0	23.3	21.0
Pastdue Loans Ratio	1.5	1.7	2.3	4.0	6.7
Growth Rate of Loans	37.9	31.2	19.8	12.9	-2.8
Net Profit Before Tax /Operating Income	11.1	10.9	10.8	10.5	9.3
Net Profit Before Tax /Average Total Assets	0.9	0.9	0.9	0.9	0.8
Total Deposits (NT\$billion)	871.2	1,038.2	1,197.7	1,226.3	1,244.5
Market Share(%)	11.5	11.7	11.8	11.1	10.5
Total Loans (NT\$billion)	537.6	687.0	800.3	880.8	842.1
Market Share(%)	7.4	8.1	8.1	8.2	7.5

Note : The deposit and loan market share of the credit departments

of farmers' associations are based on their share of the deposits and the loans of all monetary institutions (excluding the postal savings system).