Electronic Cash  
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The author provides an overview of electronic cash, discussing the technology of this new medium of payment, the financial costs and benefits of moving to electronic cash, and the issue of consumer acceptance. An appendix explores the relationship between counterfeiting and electronic cash.

Japanese Banking: A Time of Crisis  
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This article explores the root problems that have led to the crisis in Japanese banking and what is being done to resolve them.

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This regular feature of the FDIC Banking Review contains information on regulatory agency actions, state legislation and regulation, and articles and studies pertinent to banking and deposit insurance issues.
credit-card issuers in the United States have begun to explore the idea of introducing electronic-cash products. Seven financial giants, including Wells Fargo, Chase Manhattan, and MasterCard, have agreed to market the Mondex electronic cash product in the United States.\(^1\) VISA is developing a separate product. These products consist of a plastic payment card and other accessories, and consumers can use them to pay for goods and services the same way they use cash. Also like cash, consumers can use them for making person-to-person payments. These cards are equipped with microchips through which funds can be electronically credited and debited. Users transfer money from their bank accounts to their cards by inserting the card into an automatic teller machine (ATM) or a specially adapted home (or public) telephone.

Mondex maintains that its card offers consumers a number of benefits over traditional cash:

- It has an electronic locking system, which makes it more secure than cash, and it is also more convenient and accessible [it eliminates the need to carry coins and small notes, especially for routine daily transactions where exact change is needed]. Because of the similarity to cash, payment transactions do not involve authorizations or signatures. . . [Thus electronic cash is faster and easier than writing a check or getting a credit card authorization.] [W]ith Mondex it is [also] possible to carry out immediate [cash withdrawals] using specially designed pay phones, or private telephones providing customers with the convenience of a cash dispenser in their homes. (Mondex press release)

But Federal Reserve economist Harvey Rosenblum argues that “the current paper-based system doesn’t have much to recommend it, other than it works great, is cheap, reliable, and we trust it” (quoted in Kutler (1997), 4). Mondex co-inventor Tim Jones disagrees: Physical money has problems. It can be lost, it can be stolen, and there are no records of cash transactions. You have to go to ATMs to get it . . . and you can’t send cash to someone down a telephone line. Mondex overcomes these problems. . . [U]nlike physical money, Mondex can be sent down a telephone line. And unlike money in a bank account there is no need to authorize a bank to make Mondex payments or to check that funds are available; there are no signatures to be validated or PIN numbers to confirm identities. Consequently there is no delay. As with a straight cash transfer, the recipient gets purchasing power instantaneously. (Quoted in Palmer (1994), 7.)

The dramatically declining cost of chip technology, plus the potential benefits to banks, retailers, and consumers, are leading to the widespread introduction of cash cards based on this microprocessor technology. Electronic cash systems are up and running in Denmark, Finland, Portugal, and Spain, while pilot projects are under way in several other countries. In fact, a high-profile New York City pilot is currently test marketing both Mondex and VISA Cash.

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\(^1\)Wells Fargo will own 30 percent of Mondex USA; Chase will own 20 percent; and Dean Witter, AT&T, First Chicago NBD, Michigan National Bank, and MasterCard will each own 10 percent.
The sections below provide an overview of this new medium of payment, discussing the technology of electronic cash, the financial costs and benefits of moving to electronic cash, and the issue of consumer acceptance. An appendix explores the relationship between counterfeiting and electronic cash.

**The Technology of Electronic Cash**

The Bank for International Settlements reports that more than 300 billion consumer cash transactions take place in the United States each year, 270 billion of which are for amounts under $2. Soon banks will be offering a coin card with the capability to displace cash as the payment medium for a large number of these small transactions. These coin, or payment, cards are designed to be used in an open system composed of multiple card issuers, acquirers, and merchants. (Cards issued in an open system may be used to buy goods and services offered by any participating merchants. In contrast, cards issued in closed systems may be used only to buy goods and services offered by the issuing organizations. Washington’s Metro farecard is an example of a card issued in a closed system.)

The transaction flow of an open system is illustrated in figure 1. Issuing banks provide cards to consumers, who load value onto these cards at specially adapted ATMs (Load $A$ and Load $B$ in the figure). Consumers then use their cards at various designated merchants (Pay $A$ and Pay $B$ in the figure). At the point of sale, an electronic data-capture terminal records both the value of the purchase and the routing number of the issuing bank. At the end of the day, the merchant submits the entire batch of electronic cash transactions (Deposit $A + B$) to his or her bank (Acquiring Bank), which forwards the electronic receipts to the system operator (Claim $A + B$ in the figure). The system operator transmits these claims to the issuing banks, which then fulfill the interbank financial obligations resulting from the electronic-value transactions. When these interbank transactions are settled, the merchants are reimbursed by their banks.3

The coin card will be equipped with a microchip through which funds can be electronically credited and debited (see discussion below). Just as people now withdraw cash by inserting a card into an automatic teller machine, cardholders will transfer money from their bank accounts to their coin cards in the same way. This electronic purse will carry a running cash balance in its memory. Each time the card is used, the purchase amount will automatically be deducted from the card and credited to the merchant by an electronic reader. (Merchants will store their electronic cash receipts in specially adapted point-of-sale terminals, transferring accumulated balances to their banks at the end of the day by means of telephone links.) Payments will take just seconds. As with cash, no signatures will have to be validated and no personal identification numbers (PINs) will be needed to confirm identities.

2The figure illustrates a multiple-issuer system; however, a single-issuer system would work in the same way, also using multiple banks: the single issuer would create electronic value and issue it to participating institutions, which would then load this electronic value onto their customers’ payment cards. Cardholders would use this electronic cash to make payments to merchants, who would later deposit these funds with their banks; this value would then be redeemed by the issuer.

3Notice that cardholders may make payments only to merchants, and merchants may clear these payments, or deposit accumulated balances, only through their acquiring banks. In other electronic cash systems, transferability is much less restricted. In systems like Mondex, cardholders are allowed to transfer value freely among themselves; however, merchants still deposit the electronic value received as payment.
Transactions will be conditioned solely upon the storage on the card of enough value to cover the payment. The card is swiped through the electronic cash register and the transaction is completed.

Current forms of electronic payment—credit or debit cards—cannot function as a cost-effective alternative for payments of very small value because of the costly on-line authorization process by which security is maintained. When a credit or debit card is presented at the point of sale, the merchant swipes the card through an electronic cash register that automatically routes a request for authorization to the bank that issued the card. This electronic cash register reads the cardholder’s account information from the magnetic stripe on the back of the card and forwards this information, along with the purchase price, to the card-issuing bank. After checking the account number against a file of lost or stolen cards and verifying that funds (or credit) are available, the bank sends confirmation that payment is authorized. This authorization procedure certainly enhances the security of the retail payment system, but the telecommunication costs of this on-line authorization process range from $0.08 to $0.15 per transaction, depending on volume. These telecommunication costs generally preclude the use of credit or debit cards for payments of very small value.

Recently, however, credit and debit cards have begun to penetrate the $55 billion per year fast-food market, where speed of service has always been at a premium. To address this need for speed, card issuers have streamlined the authorization process. For transactions at fast-food establishments, the credit-card interchange “stands in” for the card-issuing bank and authorizes the transaction after first checking the cardholder’s account number against a central hot-card file. If there is no match, payment is authorized and the amount is billed to the customer’s account. Since there is no change and no sales slip to sign, the transaction actually takes less time than a cash transaction. But unlike cash, these transactions still require an on-line authorization using telecommunication services. Semi-off-line systems like those used in Europe and described below (see “Consumer Acceptance”) economize on these telecommunication costs—without, however, being able to address the need for speed. Because the payor is required to enter a PIN at the point of sale, card payments in semi-off-line systems require more time than a cash payment.

A cash payment does not require a telephone call or PIN. Nor do electronic cash payments. The technology at the heart of an electronic cash system (the one soon to be introduced in the United States, or any other) is a minute silicon chip, a microcomputer that is not only capable of storing information, presenting it, and transferring it to other, similar chips, but that also carries security programming. In other words, the microcomputer chips mounted on the backs of coin cards, and similar chips residing in electronic cash registers and automatic teller machines, can receive or store value or transfer it to one another and, more important, can authenticate the validity of transactions among themselves. As Tim Jones (co-inventor of Mondex) explains, “Every time value is exchanged, the two chips involved check that there has been no tampering with the transaction en route. [Chip] Number One says to [Chip] Number Two: ‘I am a . . . member, are you?’ And only if they both check out will they exchange value” (quoted in Palmer (1994), 7). This security, however, extends only to the value encoded on the card, not to the card’s user.

For each transaction, the chip on the coin card releasing value and the chip in the electronic cash register accepting value confirm the authenticity of the other by examining the chip’s unique “digital signature.” The chip’s processing facilities are used to implement a cryptographic algorithm. This algorithm generates a digital signature that must be authenticated by the receiving chip. This digital signature is the guarantee that the chips involved are genuine—or, more important, they guarantee that the signals have not been tampered with. The availability of funds is confirmed by the value stored on the card, and the authenticity of the electronic cash is confirmed by the digital signature that accompanies each electronic cash.

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4. Given the anonymity of these payments, anyone can spend the electronic cash stored on a card. This anonymity exposes the cardholder to risk of loss—like cash in your wallet, electronic cash is lost if your card is lost or stolen.

5. Most cards store and manipulate a numeric ledger, performing transactions as debits or credits to a balance. An alternative to these “balance-based” products is electronic notes. Electronic notes (often referred to as coins, or tokens) are issued in various denominations and stored on payment cards. In note-based systems, transactions are performed by the transferring of notes from one device to another. If a card does not hold the necessary denominations for a particular transaction, change is made by reconfiguring the notes on the card.

6. Because of high communication costs, banks in Europe use a semi-off-line authorization process. Like cash, these systems economize on telecommunication costs. Credit and debit cards, however, also involve additional accounting costs. Monthly statements provide the cardholder with transaction detail for each payment. (If one were to use a credit card to purchase a cup of coffee each morning, then one’s statement would detail each coffee purchase over the transaction period.) The bookkeeping cost of this record keeping is economized by the use of cash for those small transactions that need little documentation.

payment. No on-line authorization using telecommunication services is required. (For a discussion of defenses against counterfeiting, see the appendix.)

Cost Savings and the Capital Investment

Electronic cash is starting to take off around the world because it eliminates the costs to banks and retailers of handling coin and currency. The U.S. Treasury estimates these costs at $60 billion annually in the United States (approximately $0.20 per cash transaction).8 Electronic cash would limit these costs.

For banks, which provide the public with cash and therefore bear the cost of moving cash around the economy, an area of significant savings would be the cost of loading ATMs with paper currency. For retailers, there would be two areas of significant savings. First, because electronic cash receipts would be reconciled electronically and transferred over telephone lines directly from the store to the bank, sorting, counting, and transporting via an armored car would no longer be necessary. Thus, costs related to handling cash and coins would be reduced. Second, because electronic cash payments would not involve making change, retailers would not have to keep large amounts of coins and small notes on hand—thus, there would be little coin or currency to steal, and the security costs associated with robbery and employee pilfering would be reduced (perhaps the most important areas of savings for retailers). These potential savings alone explain why banks and retailers are willing to invest in such a capital-intensive cash-replacement technology.

Moving to electronic cash requires a large capital investment: payment cards must be provided to the public; existing ATMs must be replaced or retrofitted; and cash-only registers must be replaced by electronic terminals. But the cost savings should easily finance this capital investment.

Assuming only a 10 percent reduction of cash handling costs, cost savings over the next decade would be sufficient to finance a $24 billion capital investment. Approximately $2 billion of this total would cover the cost of providing payment cards to the public (the cost of payment cards runs somewhere between $2 and $10 apiece). From $1 billion to $7 billion would cover the cost of replacing the banking system’s 150,000 ATMs (the cost of automatic teller machines runs somewhere between $7,000 and $50,000 apiece). Another $15 billion could finance the purchase of up to 30 million new cash registers (one new register for approximately every eight people, with the cost of terminals running somewhere between $500 and $2,000 apiece).

Consumer Acceptance

In late 1997, Chase Manhattan Bank and Citibank introduced electronic cash on the Upper West Side of Manhattan as part of a six-month trial. The pilot involves 50,000 consumers and 500 merchants, with Chase issuing Mondex cards and Citibank issuing Visa Cash cards. The test in New York is just one of many around the globe (Mondex has 16 pilots in 6 countries; Visa has 55 pilots in 17 countries).

These electronic-cash pilots have shown that the technology is effective, but they have also shown that, for the most part, consumer demand is lacking. Mondex, for example, was initially introduced in Swindon, a city of 100,000 located south of London. The first Mondex card there was issued in July 1995, and a nationwide rollout was anticipated for the following summer. Today, nearly three years later, Mondex in England is still issued only in Swindon, and only 13,000 cards are in circulation.9

One approach U.S. banks might use to address consumers’ reluctance to accept the new payment instrument is to take an intermediary step and move to semi-off-line credit and debit operations, such as those currently used in Europe (see description below). Semi-off-line credit and debit operations are much less costly than the on-line system currently used in the United States. For this reason, banks in the United States are expected to move to a semi-off-line system using smart cards during the next few years. (Smart cards are payment cards equipped with a microcomputer capable of storing and processing information.)

A semi-off-line system as used by banks in Europe differentiates between large and small payments to economize on telecommunication costs. Large payments require an on-line authorization using telecommunication services, whereas payments less than the minimum large payment are authorized off-line. The payor simply enters an identification number at the point of sale, a number that must match the PIN stored

9 Although the Swindon experience is representative, a few electronic-cash trials have been successful. In the Ontario city of Barrie, more than 16,000 Visa Cash cards were issued in just three months; in the Ontario city of Guelph, approximately 10,000 Mondex cards were issued in nine months; a Hong Kong pilot that began in October 1996 has grown to 40,000 cards in circulation, with 5,000 participating merchants. For an overview of the e-money developments in more than 65 countries, see Bank for International Settlements (1997).
on the payment card; this PIN validation verifies card ownership. The availability of funds is then confirmed by a maximum charge limit also stored on the card. This limit is debited upon every off-line payment and is occasionally updated when the card is used with a POS having on-line capability.  

These payment systems do not impose a minimum size for off-line payments; thus, payment cards in these systems can be used for micropayments—that is, the purchase of newspapers, coffee, and other small-ticket items. But card payments in semi-off-line systems require more time than cash payments, since the payor must enter a PIN at the point of sale. For this reason, payment cards are generally not used at fast-food restaurants and other quick-service establishments. And for small purchases generally, consumers in Europe typically choose cash. A simple way of extending current credit and debit services into such transactions, however, is for banks to take the next step and load electronic cash on credit and debit cards, turning them into multipurpose payment cards. With these cards, consumers would use on-line payments for large transactions, off-line payments for small transactions, and electronic cash for micropayments.

Making micropayments with multipurpose payment cards would take just seconds. Payments would not involve a PIN or authorization at the point of sale; each time the card was used, cash would simply be transferred from the card to the merchant’s terminal. When micropayments reduced the card’s cash balance to zero, the cardholder would load more cash onto the card at the merchant’s terminal. Electronic cash would be loaded in the same way an off-line payment is made: in each case the cardholder would enter a PIN, and the charge limit on the card would then be reduced by the amount of either the purchase or the cash withdrawal. For the cash withdrawal, the card’s cash balance would increase by the amount of the withdrawal. At the end of the day, when the electronic receipt was returned to the bank, the cardholder’s deposit account (or line of credit) would be reduced by the amount of the cash withdrawal. Cardholders would receive a statement at the end of the transaction period listing individually all card payments as well as the cash withdrawals. Note that off-line payments and cash withdrawals over the transaction period would reduce the card’s charge limit.

Like making credit-card payments, using electronic cash stored on credit cards for small-ticket items would defer payment and carry benefits such as accrual of much-touted frequent-flier points. Alternatively, the technology of these payment cards would provide banks with a vehicle for paying interest on electronic cash stored on debit cards. When the cardholder loads cash onto the card, the bank will load an interest rate on the card.

For consumers, this multipurpose payment card would provide numerous benefits. It would give them “full micropayment capability, while freeing them from balance awareness, reloading hassle, and situations of insufficient cash” (Teicher (1997), 5). Use of paper currency requires trips to the ATM. In contrast, cards in an off-line system would function as remote ATMs by enabling the cardholder to load electronic cash at any merchant terminal, up to the card’s charge limit. These payment cards would offer consumers the services of cash without the inconvenience of a trip to the ATM.

Today no electronic payment system operates like the off-line system described above. In the system proposed by Teicher (1997), payment cards would function as remote ATMs, and electronic coins would be stored on payment cards and merchant terminals. When purchases reduced a card’s cash balance to zero, more coins would be loaded onto the card from the merchant’s terminal. But circulating electronic coins are not necessary in an off-line system—and in fact, they would introduce a problem endemic to paper currency systems: merchants would incur an opportunity cost, since they would have to keep some coins on hand for cash withdrawals.

The electronic cash described here would therefore be much more accessible than paper currency, and electronic-cash transactions would be faster and more convenient. Transactions would be faster because consumers would always have exact change—they would not have to wait for change at the point of sale. And for

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10Banks in France use a semi-off-line system, and today nearly 90 percent of all card payments are authorized off-line. Moreover, since the implementation six years ago of this off-line system, fraud losses in France have declined by 50 percent (see Svigals (1998)). Payment in semi-off-line systems requires knowledge of a PIN that is stored on a tamper-resistant smart card. The tamper-resistant features of smart cards are aimed at protecting the PIN and other critical data from unauthorized observation. Given the secure storage of the PIN, fraudulent payments with stolen cards are virtually impossible.

11With payment cards functioning as remote ATMs, this off-line payment system would in effect make ATMs obsolete. With the proposed semi-off-line system, banks would be able to reap the savings of having fewer ATMs. Today there are approximately 150,000 ATMs deployed throughout the United States, and the monthly operating costs per machine run somewhere between $1,000 and $3,000 (see Belew (1997)).
transactions when exact change is required (for example, to board a bus or purchase something at a vending machine), electronic cash would be much more convenient. Still, consumers would use this electronic cash only if they expected it to be widely accepted.

Conclusion

Electronic cash is meant to be a substitute for a paper currency, and paper currency is universally accepted as payment. To function as an adequate substitute, therefore, electronic cash must have widespread acceptance. Current electronic-cash products have very limited acceptance. Electronic cash can be loaded on payment cards in semi-off-line systems because these systems employ smart cards that also function as coin cards, but such systems are not in use in the United States today. On-line systems, including the one currently used in the United States, use magnetic-strip cards that do not function as coin cards. For this reason, electronic cash cannot be loaded on U.S. credit and debit cards.

Given the current incompatibility between electronic-cash products and consumers’ needs, products issued by organizations like Mondex must operate as stand-alone payment systems. In other words, Mondex (for example) must introduce its product retailer by retailer, and few retailers are currently equipped to accept its cash.

In contrast, if electronic cash were stored on a multipurpose payment card that had widespread acceptance, it would be usable wherever credit and debit cards were accepted. This electronic cash would piggyback on the worldwide network of existing retail card-authorization devices. By leveraging the widespread acceptability of credit and debit cards, electronic cash stored on a multipurpose payment card would offer the public a viable alternative to universally accepted paper currency.
Counterfeiting electronic cash will involve the creation of payment cards that other participants in the system will accept as genuine—in other words, cards capable of replicating a digital signature. To duplicate a genuine payment card, one would need to procure a card with the same type of chip and load the appropriate operating system and application software. One would reconstruct the operating system and application software by examining genuine cards available through legitimate channels. These cards, however, are designed to prevent analysis and reproduction of the contents of the device. More specifically, physical barriers exist that prevent access to the application software stored on the chip:

Tamper-resistant features of these [smart] cards are aimed at protecting data and software from unauthorized observation or alteration. . . . The software code resides in the chip and is designed to be protected from any external observation or modification . . . Such features make it extremely difficult and costly to observe or change critical data stored on the chip . . . or to alter the operating system or software applications. [This] hardware protection . . . includes physical barriers that prevent optical or electrical reading or physical alteration of the chip’s contents. . . . Physical barriers also include external coatings as well as multiple layers of internal wiring that are very difficult to remove without damaging the chip itself. Active tamper-resistant features include sensors within the chip that detect unusual levels of heat, light and electrical current and render the chip inoperable under an attempted attack.

To date there have been no reports of security breaches of smart cards; nevertheless, “it can be assumed that even the most sophisticated tamper-resistant features may eventually be breached. . . . As a result, continued strengthening of the tamper-resistant features of card-based products will probably be necessary” (ibid., 22).

The tamper-resistant features of the payment card represent one of the most important security measures for electronic cash. But since these cards cannot be viewed as impenetrable, issuers must monitor their systems on an ongoing basis. In some cases, the security of electronic cash will be enhanced by the full accounting of individual transactions or the maintenance of cumulative records on individual devices. Alternatively, some systems will employ a value management strategy, which may be more manageable than full accounting. These systems will use a statistical analysis of transaction patterns. Procedures will be implemented to analyze system-level data on payment flows in order to detect unusual volumes of payments that could indicate fraud. Other methods to detect and contain fraud include the issuer’s or system operator’s periodic interaction by devices, and the hot-listing of suspect devices. Maximum balances and expiration dates on devices will also deter fraud as well as contain any resultant losses. Moreover, some systems will have the ability to change rapidly the cryptographic keys or algorithms used if widespread fraud is detected or suspected.
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Never really profitable, Japanese banks are in crisis—a crisis into which they have been sinking for most of the past decade. This article explores the root problems that have led to this crisis in Japanese banking and what is being done to resolve them. It begins by describing the different kinds of banks and the protected niches in which they have operated. It examines the banks’ immediate problems: problem loans resulting from the bursting of the “bubble” economy, a continuing soft economy, and lending problems abroad. It then looks more closely at the competitive problems caused by the very integral role the banks have played, and continue to play, in promoting the government’s industrial policy. The banks’ efforts to deal with their lack of competitiveness, as well as the government’s efforts to strengthen and recapitalize the industry in the short term are then described. Finally, the article touches on the government’s proposals to deal with the financial industry’s long-term structural problems, the so-called Big Bang financial deregulation proposals. A subsequent article will explore the Big Bang reforms in greater detail.

The Banking System

Since the end of the Second World War, the Japanese financial industry has been highly segmented at two levels. (Recent progress in this regard is explained later in the article.) It has also been heavily regulated, primarily by the Japanese Ministry of Finance (MOF).

The Banks

Immediately after the Second World War, in an attempt to eradicate the zaibatsu financial-industrial conglomerates blamed for leading Japan into the Second World War, the Japanese Diet (Parliament) passed a series of laws restricting bank activities. Holding companies were abolished. Banks were restricted from engaging in securities and insurance activities, and bank ownership of other Japanese companies was limited. In addition to this broad segmentation, the banking industry was further segmented into five distinct categories of banks, each with its specialized financial niche and corresponding restrictions: ordinary banks; long-term financial institutions; financial institutions for small business; financial institutions for agriculture, forestry, and fishery; and public financial institutions.

Until very recently, ordinary or commercial banks—which include “city” banks, regional banks and foreign-owned bank branches—were restricted to providing short-term financing. Certain investment

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1The definitions and powers presented here are from U.S. General Accounting Office, Bank Regulatory Structure, Japan, GAO/GGD-97-5, December 1996.
banking services were also permitted. Commercial paper underwriting, foreign exchange, trade financing and some international securities activities were permissible activities. As of February 28, 1997, there were 10 city banks, 129 regional banks, and 92 foreign-owned banks. These commercial banks together provided approximately two-thirds of all industrial loans.

The city banks were based in the large cities and were supported by a network of nationwide branches. They traditionally focused on short-term lending to large corporations. They also engaged in some securities activities and international finance. All city banks were also licensed as foreign-exchange banks. For their funding, they relied on Bank of Japan (BOJ) borrowings, the short-term interbank market, and corporate deposits (approximately one-half of their deposits were from large corporate accounts). Regional banks were restricted to providing funding within their prefectures; their customers were primarily small and medium-sized corporations and the interbank market. More than half of their deposits came from individuals. Foreign-owned bank branches in Japan functioned like city and regional banks. They accounted for a negligible amount of industry deposits, loans or assets, but were active participants in the derivatives market.

Long-term financing in Japan has been traditionally provided by long-term financial institutions, a group that includes 33 trust banks (8 of which belong to the Federation of Bankers Associations of Japan) and 3 long-term credit banks. Until recently, these institutions were the only financial institutions in Japan permitted to raise long-term funds.

The trust banks were licensed to conduct both banking and trust activities, and they and the life insurance companies were given a virtual monopoly over most Japanese pension fund investments. As major sources of real-estate and development loans during the “bubble years” (the period of rapid and unsustainable escalation in the stock and real-estate markets in the 1980s), the trust banks currently account for a large percentage of the banking sector’s nonperforming loans. They were funded by individual and corporate deposits held in trusts. The long-term credit banks provided funds to businesses for the purchase of plant and equipment and for long-term working capital. Because these banks were restricted from accepting deposits from their own borrowers and the government, their major source of financing had been the issuance of debentures.

Nineteen large banks from these first two bank categories are considered Japan’s “major” banks. They include the nine remaining city banks, seven of the trust banks, and all three long-term credit banks. The city banks are Dai-Ichi Kangyo, Sakura, Tokyo-Mitsubishi, Fuji, Sumitomo, Daiwa, Sanwa, Tokai, and Asahi. The seven major trust banks are Mitsui, Mitsubishi, Sumitomo, Yasuda, Nippon, Toyo, and Chuo. The long-term credit banks are Industrial Bank of Japan, Long-Term Credit Bank of Japan, and Nippon Credit Bank.

Financial institutions for small business are the third category of Japanese banks, which is composed of approximately 800 mutual (shinkin) banks, credit associations, and credit cooperatives. These institutions have traditionally provided funding to their members, who are primarily small- and medium-sized businesses, consumer cooperatives, and labor unions. Their sources of funds have been deposits and installment savings provided by members (the shinkin banks also accept deposits from nonmembers). Three national federations act as central banks for these cooperative banks. The Ministry of Finance supervises the mutual banks and credit associations, while regional governments supervise the credit cooperatives. The credit associations and cooperatives have not been required to disclose information about asset quality, but both types of institutions, particularly the latter, were large lenders in the Japanese real-estate market during the 1980s.

The fourth category of financial institutions consists of financial institutions for agriculture, forestry, and fishery. As of February 28, 1997, there were 47 credit federations of agricultural cooperatives and 35 federations of fishery cooperatives. These institutions take deposits from and target their lending to local cooperatives. The cooperatives exist at two levels: the level of village, town, or city and the level of prefecture. Serving as the central bank for these institutions is the Norinchukin Bank, which is regulated by the Ministry of Finance and the Ministry of Agriculture, Forestry, and Fishery. During the 1980s, this sector was very active in lending to the housing loan companies, called jusen.

The fifth category of Japanese financial institution is that of public financial institutions: 11 wholly owned government banks and 9 public corporations. These public institutions are used to supplement private-

sector financing. They are funded through the Ministry of Finance, which is funded through the Japanese Postal Savings System. The Japanese Post Office, although not considered a bank, is certainly a formidable banking competitor, for its savings system has taken in approximately $2 trillion in savings—45 percent of all Japanese deposits.

In addition to the five categories of banks, there are a number of unregulated nonbanks—lending institutions that do not take deposits. These consist of insurance companies, housing loan companies (the *jusen* mentioned above), leasing companies, consumer finance companies, securities companies, and money-market dealers.

**Bank Regulation**

The Ministry of Finance (MOF) and the Bank of Japan (BOJ) share responsibility for monitoring the safety and soundness of Japan’s banking industry. Other Japanese bank regulators are the Deposit Insurance Corporation (DIC), which is responsible for insuring bank deposits, and the Resolution and Collection Bank (RCB), which was created in 1995 to receive the assets of failed financial institutions.

The MOF, which also supervises securities institutions, is the primary bank regulator. Its responsibilities approximate those of the U.S. Department of the Treasury, the Internal Revenue Service, the Office of Management and Budget, the Securities and Exchange Commission, and to some extent the Federal Reserve Board. In its banking oversight, the MOF establishes bank standards and has sole responsibility for bank licensing and for development and enforcement of bank regulations. It also has sole legal authority to take enforcement actions against financial institutions, leading to fines, imprisonment, and revocation of licenses. For the most part, the MOF has taken supervisory action by issuing “administrative guidance” on a case-by-case basis. Although the guidance provided through such notifications is not legally enforceable, banks are expected to act upon MOF guidance.

The Bank of Japan—which until recently was under the control of the MOF—is the nation’s central bank and has responsibility for maintaining and fostering a safe-and-sound financial system. Although the BOJ has no legal authority to take enforcement actions against financial institutions, it provides advice to these institutions through its frequent contacts with them. As with the MOF’s guidance, BOJ advice is typically treated as binding by Japanese banks.

Effective April 1, 1998, the BOJ became independent of the MOF and its powers were expanded to accord with those of other countries’ central banks. In light of recent scandals involving bribes to BOJ employees, the Bank is being reorganized to encourage central bank transparency and accountability.

Both the MOF and the BOJ may inspect or examine banks at any time and with any frequency, although each typically examines the average bank once every two to three years. The MOF and the BOJ coordinate their monitoring efforts to ensure that most banks are examined annually. Since 1987, the MOF has used a rating system similar to the CAMELS rating system used by bank regulatory agencies in the United States.

The DIC was established in 1971 to protect depositors and maintain the stability of the financial system. It is supervised by the MOF; the Minister of Finance appoints its governor; and the MOF approves the appointments of its executive directors and committee members. In addition, the MOF must initially approve all applications from financial institutions for financial assistance.

The DIC has authority to collect insurance premiums, pay insurance claims and advance payments, provide financial assistance, purchase assets from failing or failed financial institutions, and manage funds. It insures deposits up to a maximum of 10 million yen per depositor (approximately $73,400). Excluded from coverage are interbank deposits, deposits in foreign currency, deposits in foreign banks and in overseas branches of Japanese banks. Membership in the system is mandatory for city banks, long-term credit banks, trust banks, and certain other banks.

In 1991, for the first time in its history, the DIC arranged an assisted merger of an insolvent institution with a stronger institution. Between 1991 and 1993 there were four more assisted mergers. In 1995, the RCB, modeled after the U.S. Resolution Trust Corporation (RTC), was created to receive the assets of failed financial institutions.

The Diet recently enacted legislation that (1) granted the DIC the authority to issue 3 trillion yen ($22 billion) of bonds to finance financial assistance.

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4The acronym CAMELS refers to capital, asset quality, management, earnings, liquidity, and sensitivity to market risk.

5All dollar-yen exchange rate calculations are based on an exchange rate of 136.27 yen to the U.S. dollar, the late New York spot rate on May 14, 1998.
lion) of government bonds; (2) provided government guarantees for the DIC to borrow 10 trillion yen ($73.4 billion); and (3) amended the Deposit Insurance Law to allow issuance of 7 trillion yen ($51.4 billion) of government bonds to compensate for commercial bank losses. Previously, the DIC had been allowed to borrow up to 2 trillion yen ($14.7 billion) from the BOJ.

**The Problems**

Japanese banks’ distress is caused by both immediate and long-term problems. Speculative lending in Japan during the bubble years of the 1980s created a severe domestic bad-loan problem, and a more recent concentration of lending to Southeast Asia businesses resulted in foreign loans that also are expected to be problematic. The more difficult problems facing Japanese banks, however, are longstanding competitive problems resulting from the government-industry-bank relationship.

**Bursting of the “Bubble” Economy**

The immediate problem facing Japanese banks is their bad loans. The Japanese Ministry of Finance reported in January 1998 that its best estimate of the extent of domestic bad loans was 77 trillion yen (approximately $565 billion)—approximately 14 percent of total domestic loans. Although MOF audit requirements were used to arrive at this estimate, the estimate is based upon bank self-assessment and may therefore underestimate the extent of the problem. Since the January announcement, bad-debt levels have also reportedly increased quite substantially and are expected to continue increasing in the coming months.

Many of these problem loans were made during the bubble years, when the long-term financial institutions and the financial institutions for agriculture, forestry, and fishery, the latter particularly, lent vast sums to commercial real-estate developers and home buyers either directly or through the **jusen** (housing loan companies financed by the banks). But the real-estate and stock markets began to crash in earnest in 1990, bringing an end to the bubble economy. By some estimates, today’s real-estate prices in Japan represent an amazing 80 percent decline from their highs in the 1980s. In the mid-1990s a government effort to bail out the **jusen** with taxpayer funds was met with tremendous resistance by the Japanese people; and until recently, that resistance deterred the government from providing taxpayer funds to deal with the banking crisis. A complicating factor in the resolution of the bad-loan problem in Japan, and a reason for public opposition to a government bailout of the **jusen**, is that many of the borrowers from the **jusen** are rumored to be members of the **yakuza**, the Japanese underworld. A very detailed report on the **jusen** by the MOF and the Ministry of Agriculture, Forestry, and Fisheries, issued in January 1998, reinforced this belief when it inexplicably omitted the names of the largest **jusen** borrowers, all real-estate brokers.

Japanese banks were also substantially affected by the precipitous drop in the Japanese stock market that began in 1990. As with the real-estate market, the stock market has declined dramatically—approximately 60 percent from its highs during the bubble years. Although Japanese banks were not permitted to hold directly more than 5 percent of the shares of another company, an estimated 30 percent of the equity of Japanese industrial companies is held by banks indirectly. Larger banks in particular are thought to have effective control over other companies by their indirect ownership through subsidiaries and affiliates and by cross-shareholding arrangements, interlocking directorships, and credit relationships.

Until recently, bank stock investments in Japan had to be valued at the lower of cost or market, and banks were allowed to use 45 percent of their “hidden reserves”—the unrealized gain on equity holdings—to meet international capital requirements. Any decline in the Japanese stock market therefore decreased the banks’ capital and their lending ability. Because of continuing slippage in the Nikkei, it has been estimated that the largest banks’ hidden reserves at the end of fiscal 1998 (March 31) represent 10 percent of their levels a year earlier, with 8 of the 19 largest banks no longer having any hidden reserves left. It has been calculated that no hidden reserves will be left at any of the largest banks if the Nikkei goes beneath 16,201.

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The economic problems that have so seriously affected Japan, and Japanese banks, show no sign of abating. In fact, they appear to be worsening. Japan’s Economic Planning Agency reported in June that the country had entered its first recession since the oil crisis in the 1970s. Its gross domestic product shrunk an annualized 5.3 percent in the first quarter of 1998, following a 1.5 percent annualized decline in the fourth quarter of 1997. Its gross domestic product for the fiscal year (ending March 31, 1998) also fell—by 0.7 percent—the first fiscal year decline since 1975. The unemployment rate has been steadily rising, reaching 4.1 percent in April. This level, although low compared to international norms, is remarkably high for Japan. Additionally, as of June 12, the yen had sunk to an 8-year low against the dollar. The stock market remains in the doldrums, and recently, at the 15,000 level, the Nikkei has been testing its 1995 lows. Bankruptcies, both corporate and personal, are on the rise, and finally, it is not at all clear that real-estate prices, down an estimated 80 percent from their highs in the 1980s, have bottomed out.

### Problems in Foreign Lending

The foreign lending of Japanese banks has also produced problems. As big lenders to Southeast Asia, Japanese banks are expected to suffer substantial losses from this exposure.

Many Japanese banks responded to the poor conditions in the domestic market by stepping up their foreign lending. Foreign loans and other assets account for approximately 22 percent of the assets of Japan’s 20 largest banks. However, foreign lending has produced problems of its own. Because much of it is done in dollars and accounted for in yen, recent appreciation in the dollar has resulted in an increase in the yen-amount of loans outstanding, forcing banks to set aside more capital to meet Bank for International Settlements minimum reserve requirements. But a more pressing problem is that much of Japanese banks’ foreign lending was made to Southeast Asian companies. The Bank for International Settlements reports that Japanese banks hold at least $276 billion in loans to businesses in Asia. This Asian exposure by Japanese banks is approximately six times that of U.S. banks and twice that of German banks. While some of these loans are reportedly to Japanese companies operating in Asia, much of this foreign lending may be unrecoverable. Even more ominously, these Asian economies have been major markets for Japanese goods, accounting for more than 40 percent of Japanese exports. The crisis in Southeast Asia is therefore expected to reverberate throughout the Japanese economy.

### Structural Problems

The greater problem for Japanese banks is that they are not competitive, because of structural reasons. According to Moody’s Investors Services, Japanese banks—with historical return-on-assets ratios of 0.43 percent—are the world’s least profitable, even disregarding problem loans. Thus, if and when the problem loans are disposed of, Japanese banking will still remain unprofitable and unable to compete internationally unless structural changes are made. To understand the reasons for this lack of competitiveness, one must understand two relationships: the one between Japanese industry and the Japanese government, the other between the banks and other Japanese businesses (called the keiretsu relationship).

The power of the Japanese government over the financial affairs of Japanese banks is tremendous. For example, until the summer of 1991, the BOJ, under the direction of the MOF, assigned each bank each quarter the net amount of new lending it was authorized to make. This power is exerted to achieve one objective. As set forth by the Japanese government, the overriding purpose of Japanese banks has been to act as intermediaries in recycling Japanese savings to Japanese industry. Following the Second World War, the government—particularly the very powerful Ministry of Finance—successfully built and directed a banking system whose single goal was to support Japanese industry with the cheapest possible cost of capital. As one analyst has said, Japan has the only banking sector in the world dedicated to the cause of full employment. Bank loans in Japan remain the major source of corporate finance, far overshadowing the stock and bond markets as sources of capital. Savers (who receive 0.1 percent annual interest on their time-deposit accounts) and the banks (whose large customers typically pay loan interest rates of between 12.5 and 25 basis points above the bank’s cost of funds) have been sacrificed by the government to the cause of industrial production.

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12“Japan’s Sick Banking System,” *The Economist* (March 9, 1996): 71
13Ibid.
But in return for carrying out national industrial policy and lending at rock-bottom rates, banks were protected from global and domestic competition and received tacit government assurance of a bailout should problems arise. Historically, when a Japanese financial institution was in difficulty, other healthy institutions, at government urging, would act as a “convoy” and rescue the failing institution by providing liquidity to it, or agreeing to merge with it. This tacit government-directed guarantee allowed Japanese banks to ignore credit quality in pricing loans. Thus, they severely underpriced their products; and low margins, in turn, pushed them to pursue a strategy of volume lending. The average spread between loans and deposits has also narrowed over time, declining to 171 basis points in September 1995 from 230 basis points in March 1991.15

Inherent conflicts of interest have allowed this lack of bank profitability to go unchallenged. Large corporate customers reportedly own more than 50 percent of the shares of Japanese banks, so it is easy to understand the lack of stockholder attention to loan mispricing.16 Here it is important to grasp the concept of the keiretsu. Keiretsu are closely knit groups of Japanese businesses that, sanctioned by the government, work together cooperatively to achieve group goals. They are affiliated through cross-shareholding agreements. Six keiretsu in Japan have a large commercial bank at their center, with the rest of the group composed of trust banks, life and nonlife insurance companies, and trading, construction, finance, and real-estate companies. The banks in the keiretsu are both lenders to and stockholders of the other businesses; the other businesses are both stockholders of the banks and the prime beneficiaries of the banks’ low-cost loans. Keiretsu members are also frequently on the bank’s board of directors, and bank officials are frequently on the boards of the other firms.

Government industrial policy and the inherent conflicts of interest in the keiretsu relationship have produced an unprofitable banking sector. However, because banks operate in protected niches, with a guaranteed level of “appropriate” profits, they have not pursued more-profitable financial services. For instance, two lucrative services provided by global banks today—loan securitization and interest-rate swaps—are foreign innovations that Japanese banks have ignored. Until very recently, Japanese banks rarely engaged in securitization, and their use of derivatives was severely restricted. Some Japanese banks have begun securitizing their problem-loan portfolios, but have used foreign financial institutions, mostly located in London, to do so—even for Japanese securities issued in yen and sold back to Japanese investors. Japanese banks are also markedly low-tech, and they have not been able to take advantage of arbitrage opportunities created by disequilibriums in foreign or domestic markets.

Unlike the situation in most countries, the two most powerful departments in Japanese banks are corporate planning (whose members interact with the MOF) and personnel (whose members oversee the careers of bank employees). The careers of Japanese bankers are still virtually governed by seniority. An employee’s bonus is guaranteed; his rank and pay are basically identical to all other employees of his age (Japanese bankers continue to be predominantly male); and the route to promotion is inflexible.17 Heads of departments or major branch managers are often elevated to board membership as recognition of their service. Boards tend to be very large (Tokyo-Mitsubishi, for instance, has 60 board members), and it is not considered respectful for board members to question corporate decisions.18

**What Is Being Done**

In response to their problems, some banks, most particularly the major banks, have begun to dispose of their problem loans and to undertake modest downsizing, cost-cutting, and business-shifting activities. The Japanese government has also initiated some short-term fixes to help the banks; and has proposed some reforms, some of which have been enacted, to deal with the underlying lack of competitiveness of the Japanese financial sector, the so-called Big Bang reforms.

**Banks’ Actions**

The major Japanese banks have begun to deal with their problem loans. Many other Japanese banks, however, have been slow to dispose of their problem loans because lending opportunities have been limited, bond

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17*Euromoney* reports that bank presidents must serve a stint as director of corporate planning, with approximately 23 years necessary for advancing from an entry-level bank employee to a division head in corporate planning.

yields low, and a government bailout (now announced) was long expected. For the 1996 fiscal year ending March 31, 1997, the 19 major Japanese banks disposed of 6.17 trillion yen ($45.3 billion) in nonperforming loans,\(^{19}\) double the volume disposed of the previous year. The Bank of Tokyo–Mitsubishi reported that it wrote off $8.4 billion in problem loans, and Fuji Bank reported plans to sell $25 billion in loans to build its capital base.\(^{20}\) Fiscal 1997 bank records are not scheduled for release until later in 1998, but it has been reported that the large banks will be writing off 10.219 trillion yen ($75 billion) in nonperforming loans for this period.\(^{21}\)

Virtually all buyers have been foreigners, for Japanese life insurance companies have shown little interest in entering this market. E&Y Kenneth Leventhal estimates that by the beginning of 1998, $20 billion in foreign money had been invested in problem loans and distressed properties. Most of the deals were bulk sales; buyers were expected to securitize and sell them when restrictions on securitization end this year.

In addition, some banks have initiated modest downsizing, salary decreases and branch closings. Downsizing and cost cutting was required initially for all banks planning to take advantage of the DIC’s 13 trillion yen assistance program (described below). Among the larger banks, the Bank of Tokyo-Mitsubishi announced planned staff reductions, branch closings, and pay cuts. Sanwa Bank is planning staff reductions of 1,300 employees over the next three years. It also plans to reduce the number of directors from 43 to 30; to cut compensation; and to consolidate or to close 60 branches in Japan and 5 branches overseas during the next three years. Sakura Bank will close as many as 23 overseas branches.\(^{22}\) Sumitomo Bank’s California-based operations are being purchased by Zions Bancorporation (Utah).\(^{23}\) However, despite some cost cutting, Japanese bank salaries continue to be higher than salaries in other Japanese industries. They are also higher than bank salaries in other countries, a fact that is particularly interesting inasmuch as Japanese banks, unlike many of their international peers, do not provide investment banking services, typically a more lucrative banking specialty.

The keiretsu relationships are also changing. According to recent reports, cross-shareholdings (the glue of the keiretsu arrangements) have declined, dropping from 55 percent of total shareholdings 10 years ago to 47 percent today.\(^{24}\) And the “convoy” system has begun to unravel. Nissan Mutual Insurance Company, Sanyo Securities, Hokkaido Takushoku Bank, and Yamaichi Securities are all companies that were recently allowed to fail. It was reported that nine life insurance companies rejected Sanyo’s request for a postponement of its loan payments. However, the convoy system is not completely finished. Many analysts see the recent requests by the major banks for government financial assistance as their capitulation to MOF demands that they provide protective camouflage for weaker banks in need of assistance. In particular, Sanwa Bank, one of the healthiest Japanese banks, recently applied for a loan of 100 billion yen that was generally seen as unneeded.\(^{25}\)

In response to changing conditions, some banks have changed their business mix. Lending activity has been curtailed; construction companies, in particular, report that their lines of credit have been shut down. Larger numbers of commercial banks have been entering the bond business, gaining a market share of 60 percent in the year ending March 1997, up from 36 percent a year earlier.\(^{26}\) Long-term credit banks, having lost their monopoly on providing long-term credit, have shown an interest in entering asset management. Two of the three long-term credit banks, Nippon Credit Bank and Long-Term Credit Bank of Japan, allied themselves last year with Bankers Trust and Swiss Bank Corp., respectively, to strengthen their global asset management capabilities. The third long-term credit bank, Industrial Bank of Japan, is actively seeking a comparable alliance.

**Short-Term Government Fixes**

The Japanese government has tried to help the banks both indirectly, by stimulating the economy, and directly, by providing cash to the industry. It has pur-

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\(^{26}\)“Japanese Securities Firms: Once There Were Four,” *The Economist* (September 27, 1997): 80.
sued a very easy monetary policy, dropping the official discount rate to 0.5 percent in 1995, where it remains. However, many analysts feel that this loose monetary policy, rather than restarting the economy, has caused excessive borrowing and overcapacity. With rates this low, the government is also no longer in a position to use monetary policy as a tool to spur the economy.

The government has also tried to export its way out of its problems. But because of resistance from the United States and Europe and the financial problems in Southeast Asia, an export-led expansion no longer appears a viable strategy for overcoming domestic Japanese stagnation.

The Japanese government has also tried to stimulate the economy by direct infusions of money. It injected 75 trillion yen ($550.4 billion) into the economy between 1992 and 1995, with approximately half dedicated to public works investments. The economy began to show some signs of growth in the spring of 1997, at which point, to gain control of its budget deficit, the government raised the consumption tax, slashed public spending, raised welfare contributions, and withdrew temporary tax concessions, throwing the country into recession.

Another stimulus package has recently been announced. On March 26, 1998, the Liberal Democratic Party announced a plan, subsequently enacted, to spend 16.6 trillion yen ($121.8 billion) in public works investments and temporary tax cuts to stimulate the economy. This is the largest stimulus package ever enacted in Japan. Approximately two-thirds of the money will go to public works, including less traditional targets of public investments such as information technology, telecommunications, education, urban redevelopment, and disaster prevention. Supporters of the plan also claim it includes “decisive” measures to address the bad-loan problem, including tax incentives to encourage the disposition of bad loans more quickly and a promised overhaul of the tax system. Many analysts are not optimistic about this new stimulus package, because much is concentrated on public works spending which, in the past, appeared to help only the construction industry, and only in the short run at that. Without permanent tax cuts—which are politically difficult to enact because they would require the issuance of deficit-financed bonds, currently prohibited by a fiscal reform law—it is feared that the Japanese people will use any temporary windfall for savings rather than consumption.

The government has directed special assistance to the banks. Some of this assistance has manifested itself in government actions to disguise the true extent of the banks’ financial problems. For instance, for years the Japanese government used “price-keeping operations”—government manipulation of the stock market—to improve the balance sheets of financial and other companies. Just before the end of the fiscal year, the government would purchase huge amounts of stock on the Nikkei, thereby artificially inflating the financial statements of the banks, which are large holders of publicly traded stock. As discussed above, the banks were permitted to use some of the unrealized gains on these stock investments as hidden reserves to meet capital requirements.

Price-keeping operations were discontinued in the mid-1990s but were resurrected this year to improve the banks’ reported financial condition for the 1997 fiscal year, which ended March 31, 1998. On March 30, 1998, the Postal Ministry announced that $7 billion from postal savings and insurance accounts was being transferred to trust banks for their purchase of stock in Japanese companies. Unlike in previous years, however, this time the strategy did not work. It is unclear whether the trust banks participated to the degree expected, but in any case, sellers quickly jumped into the market, causing the Nikkei to fall to 16,527 on March 31, far short of the government goal of 18,000.27

The government, in an act reminiscent of the behavior of U.S. regulators during the savings-and-loan crisis, has recently initiated accounting rule changes to allow the banks to meet their capital requirements. Financial reporting requirements have been changed to allow banks to value their equity holdings at historical cost, a change that effectively places a floor on expected capital losses caused by the prolonged stock market decline. Another change allows banks the option of carrying their real-estate holdings at market.

The government has postponed implementing reforms that would cause some banks to be declared insolvent. In 1996, the Diet passed several bills to strengthen the deposit protection system. In particular, a “prompt corrective action” system, changing the method for calculating capital adequacy ratios to follow international standards more closely, was to have been adopted on April 1, 1998. These capital adequacy ratios would have required specific corrective actions: institutions with less than 8 percent capital would have been required to prepare a management improvement

plan; those below 4 percent capital would have needed to implement specific corrective measures; and those below 0 percent would have been required to suspend operations. Implementation of this system for institutions involved in domestic business has been postponed until April 1999 to give the affected banks time to clear up their bad-loan problems. Internationally active banks are still subject to the rules.

The government is now also supplying cash directly to the banks. The Liberal Democratic Party recently announced a 30 trillion yen ($220.1 billion) program to stabilize the financial system. Thirteen trillion yen—in the form of purchases of preferred stock, subordinated bonds, or loans—was to be made available by the Deposit Insurance Corporation for selected investments in weak but viable banks that were implementing prompt corrective action measures. As announced, the terms of the assistance required the banks to cut costs, write off problem loans, prepare ethics guidelines, and provide more information on their activities. However, the standard-setting committee established by the legislation backed away from these requirements and recently held that the criteria were not binding and that all banks, regardless of financial or ethical weakness, could apply. In fact, as mentioned above, all banks have been encouraged to apply in order to provide camouflage for the truly needy banks applying for assistance. The remaining 17 trillion yen of the 30 trillion yen financial stabilization package is being provided to the DIC to shore up its deposit fund.

**Long-Term Government Fixes**

Stock market manipulation, accounting rule changes to improve reported financial results, financial infusions—these are the short-term government fixes to the banks' problems. The government has also initiated dozens of reforms designed to make the Japanese financial industry more competitive over the long run. Announced by Japanese Prime Minister Ryutaro Hashimoto on November 11, 1996, these reform proposals are called Japan's Big Bang, in reference to the decade-earlier British experience in deregulating its securities markets.

The Big Bang proposals are designed to make the Japanese financial industry as a whole more competitive, and are directed to securities firms and insurance companies as well as to banks. They create a different competitive structure, authorizing financial holding companies, heretofore banned in Japan, and eliminating most of the restricted powers enjoyed by the different kinds of financial firms. They allow for broad-based competition and even permit foreign entities to enter the Japanese market. The reforms eliminate the distinctions between the different kinds of banks, allowing them to compete in one another's territory. They also eliminate a bank monopoly—foreign exchange—but permit banks to enter other, potentially lucrative financial areas, such as mutual fund distribution, underwriting and trading of securities, asset management, and eventually, perhaps, insurance sales (not yet decided). The Big Bang proposals also promote increased transparency and Western standards of governance. A new agency, the Financial Supervisory Agency (FSA), reporting directly to the prime minister and independent of the MOF, has been created to assume supervisory control over the financial entities currently supervised by the MOF.

Increased competition and greater transparency, goals of the Big Bang financial industry reforms, have much more potential to change the economic outlook for Japanese banking than cash infusions or other short-term government fixes. However, many of the Big Bang reforms have been put on hold while the government deals with the immediacy of the banking crisis. And unfortunately it is not at all clear that either the financial industry or the still powerful MOF is fully committed to the idea of unfettered competition. The verdict on the Big Bang financial reform proposals is therefore still out. The Big Bang reforms, and the opportunities and problems they present, will be the subject of a subsequent article in the *FDIC Banking Review*.

Recent Developments Affecting Depository Institutions

by Lynne Montgomery*

REGULATORY AGENCY ACTIONS

Inter-Agency Actions

Bank Examiners Adopt New Risk-Based Procedures

On October 1, 1997, the Federal Reserve Board, the FDIC, and state banking departments began implementing a common risk-focused examination procedure for state-chartered community banks. The new process channels examiners’ attention toward those activities posing the highest level of risk at each bank and aims to improve bank examiners’ ability to diagnose emerging problems. The Federal Reserve Board (FRB) and the FDIC developed exam procedure modules to help examiners analyze community banks’ most important activities, including loan portfolio management, securities, management and internal controls, earnings, and capital.

In order to simplify examinations further, federal and state examiners are using a new software program called “ELVIS” (Examiner Laptop Visual Information System). Examiners may use the program to organize notes and store agency rules, which reduces the burden of documentation and paperwork and gives examiners more time to analyze a bank’s operations. AB, 10/2/97; BBR, 10/6/97, pp. 527–528.

Simplified Market Risk Rules

On December 9, 1997, the FDIC approved an interim final rule allowing banks under its supervision to calculate specific market risks with internal valuation models, eliminating the requirement to compare the model-generated results with those of the standardized measure developed by the international Basle Committee on Banking Supervision. The rule reduces regulatory burden by no longer requiring institutions to develop and maintain two separate methods for measuring market risk exposure to specific stock and bond positions in their trading portfolios. The rule applies only to those institutions whose trading portfolio represents 10 percent or more of their assets, or whose trading activities amount to $1 billion or more.

The rule was approved on an inter-agency basis, with the FRB issuing an interim rule on December 19, and the OCC on December 23, 1997. The three agencies together supervise fewer than 20 institutions that would be affected by the market risk rule. PR–92–97, FDIC, 12/9/97; BBR, 12/15/97, p. 868.; NR 97–115, OCC, 12/23/97.

Less-Frequent Exams for Healthy Banks and Thrifts

The four federal banking and thrift regulatory agencies issued a final interim rule on April 2, 1998, that permits less-frequent examinations for small, well-run thrifts and banks. The rule shifts the exam cycle for eligible institutions from every 12 months to

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Reference sources: American Banker (AB); The Wall Street Journal (WSJ); BNA’s Banking Report (BBR); and Federal Register (FR).
every 18 months. Eligible institutions must have no
more than $250 million in assets, be rated CAMELS
1 or 2, be well-capitalized and well-managed. A
longer exam cycle permits the agencies to focus their
resources on institutions that present the most imme-
diate supervisory concerns and reduces regulatory
burden on smaller, well-run institutions. OTS 98–25,
4/2/98.

Common Merger Application
The four federal regulatory agencies for banks and
thrifts proposed a uniform application for institutions
to use for mergers, consolidations, and combinations.
Financial institutions would no longer be required to
submit different forms to each agency. The action is
part of the agencies’ continuing review of corporate
forms to simplify procedures, eliminate duplicative
or outdated policies, and otherwise reduce burdens
for financial institutions. NR 98–7, OCC, 1/21/98.

HMDA Data Collection Rules
Beginning January 1, 1998, depository institutions
with assets totaling $29 million or less will be
exempted from collecting data on mortgage loan
originations. The Home Mortgage Disclosure Act
(HMDA) requires lenders above a certain size to col-
clect data on the loans they originate and file reports
of that data with federal regulators. The Economic
Growth and Regulatory Paperwork Reduction Act of
1996 provided that the asset exemption level be tied
to increases in the Consumer Price Index. In January
1997, the FRB issued an interim rule raising the asset
exemption level from $10 million to $28 million in
order to bring the requirement up to date with the
1996 index. During the twelve-month period ending
in November 1997, the price index rose 2.4 percent,
resulting in a new exemption threshold of $29 mil-
lion in assets. The new level will be in effect

No Banking Holiday for Year 2000
The FRB announced that banks would remain
open for normal operations on December 31, 1999.
Various financial and trade groups have suggested
that a banking holiday on December 31, 1999 would
give the banks more time to deal with potential com-
puter-related disruptions caused by the century date
change. However, the FRB believes that bank
resources will be better spent “preparing for the year
2000 change-over rather than addressing the operat-
ing, financial, legal and other consequences that
would flow from a date-change holiday.” BBR, 2/2/98, p.
165.

Expanded Year 2000 Authority
On March 20, 1998, President Clinton signed leg-
islation giving the Office of Thrift Supervision and
the National Credit Union Administration additional
authority to address Year 2000 computer-related
problems. The “Examination Parity and Year 2000
Readiness for Financial Institutions Act” would give
the thrift and credit union regulatory agencies the
same supervisory authority over third-party software
vendors that banking regulators already have. The
new law further requires that financial regulatory
agencies offer seminars to the institutions they regu-
late on the safety-and-soundness implications of the
Year 2000 problem and offer model approaches for
solving common Year 2000 problems. The law puts
the regulatory authority of credit unions and thrifts
on par with that of other financial regulators. BBR, 3/30/98.

Federal Deposit Insurance Corporation
Tanoue Nominated to Head FDIC
On November 7, 1997, President Clinton nomi-
nated Honolulu banking attorney Donna Tanoue to
head the FDIC. Ms. Tanoue will replace Acting
FDIC Chairman Andrew C. Hove Jr., who took the
post in June 1997, after the resignation of former
Chairman, Ricki Helfer. Ms. Tanoue is currently a
partner with the law firm of Goodsill, Anderson,
Quinn & Stifel. Her practice has focused on banking
and real-estate finance, with emphasis on bank reg-
ulatory matters. Formerly, she served as Com-
mmissioner of Financial Institutions for the state of
Hawaii, and she is credited with restoring financial
stability to Hawaii’s thrift and industrial loan compa-
ny industry. BBR, 11/17/97, p. 738.

Semiannual Agenda of Regulations
The FDIC published its semiannual regulatory
agenda in the Federal Register on October 29, 1997.
The agenda provides information about the FDIC’s
projected new rule makings, as well as existing regu-
lations under review and completed rule makings.
Many of the actions are the result of the FDIC’s
ongoing efforts to reduce the regulatory bur-
den on banks, simplify rules, improve efficiency and
comply with the Riegle Community Development
and Regulatory Improvement Act of 1994. The
agenda contains 31 regulatory actions. Seven actions
have been completed and the remaining actions are in various stages of the rule-making process. PR–79–97, FDIC, 10/30/97.

**Assessment Rates**

On November 12, 1997, the FDIC Board of Directors voted to leave deposit insurance premium rates unchanged through the first half of 1998. The current risk-related assessment rates range from zero basis points to 27 basis points for both BIF-insured and SAIF-insured institutions. The FDIC reported that more than 95 percent of BIF-insured institutions and more than 90 percent of SAIF-insured institutions are rated well-capitalized and will continue to pay nothing for their deposit insurance coverage. The rate schedule is expected to maintain both the BIF and SAIF reserve ratios above the Congressionally mandated 1.25 percent (reserves as a percent of insured deposits). As of June 30, 1997, the BIF ratio was 1.35 percent and the SAIF ratio was 1.32 percent. PR–82–97, FDIC, 11/12/97.

**Bank Failure**

The FDIC announced the first bank failure in more than a year. On November 21, 1997, the Louisiana Commissioner of Financial Institutions closed Southwest Bank, Jennings, La., and named the FDIC as receiver. The FDIC approved the assumption of Southwest Bank’s deposits by newly chartered First Southwest Bank, also of Jennings. First Southwest Bank opened its doors on November 24, 1997. The FDIC estimated the cost to the Bank Insurance Fund to be approximately $3.5 million. The Southwest Bank failure is the first BIF-insured institution to fail since August 1996 and the first bank in Louisiana to fail since November 1992. PR–84–97, FDIC, 11/21/97.

**External Auditing Procedures**

Effective December 31, 1997, the FDIC rescinded an obsolete policy statement that provides guidance on external auditing programs for state-chartered banks that are not members of the Federal Reserve System. The policy statement recommended that all FDIC-supervised banks have their financial statements reviewed by a certified public accountant as part of their external auditing programs. The policy also provided two alternatives for an institution whose board of directors or audit committee determined that a financial statement audit was inappropriate for their external auditing program. However, the FDIC has determined that the two alternatives are no longer acceptable substitutes for an audit and has offered two new alternatives. The new alternatives consist of a report on the institution’s balance sheet, or documentation of adequate internal controls on certain parts of its regulatory reports, both of which should be performed by an independent accountant. BBR, 1/12/98, pp. 46–47.

**1997 Financial Results**

The Bank Insurance Fund (BIF) earned $1.4 billion in 1997, ending the year with a record fund balance of $28.3 billion. The Savings Association Insurance Fund (SAIF) earned net income of $0.5 billion for the year and ended the year with a record balance of $9.4 billion. The continuing low numbers of bank and thrift failures contributed to the strong results. Only one BIF-insured institution failed during the year. No SAIF-insured institution failed in 1997. Revenue for the BIF totaled $1.6 billion for the year. The fund earned $1.5 billion in interest on investments in U.S. Treasury securities and received another $25 million in deposit insurance assessments. The SAIF received $550 million in revenue, consisting of $535 million in interest on investments in U.S. Treasury securities and $14 million in deposit insurance assessments.

The FSLIC Resolution Fund (FRF) assets in liquidation were reduced by 51 percent over the year to a balance of $2.4 billion at year-end. Federal Financing Bank borrowings for the FRF were reduced by $3.7 billion to $0.8 billion. PR–20–98, FDIC, 3/24/98.

**Real-Estate Survey – October 1997**

The October 1997 issue of the *Survey of Real Estate Trends* reported continuing positive views of local commercial and residential real-estate markets. The survey polled 311 senior examiners and asset managers at the federal bank and thrift regulatory agencies. More than half of those responding to the survey (54 percent) reported improved commercial market conditions for the three months ending in October, compared to only 46 percent of those participating in October 1996. Forty-two percent of the participants reported that residential real-estate market conditions were better than three months earlier, compared to 35 percent in October 1996.

The national composite index used by the FDIC to summarize results for both residential and commercial real-estate markets was 71 in October, which is down from 74 in July but up from 67 in October.
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1996. The national index for commercial markets of 77 in October was essentially unchanged from July. The commercial index increased for all regions except the South. In contrast, the residential composite index fell in all four regions. The national residential index was 67 in October, down from 73 in July. Index values above 50 reflect improving conditions, while values below 50 indicate declining conditions. Survey of Real Estate Trends, FDIC, October 1997.


The January 1998 issue of the Survey of Real Estate Trends reported that conditions in residential and commercial real-estate markets continued to be favorable. Forty-nine percent of those surveyed described local housing market conditions as improving, compared with 42 percent in October. Strong home sales and a tight housing supply contributed to the favorable observations of housing market conditions. The percentage of participants noting better conditions in local commercial markets dropped to 49 from a record high of 54 in October.

The national composite index increased from 71 in October to 72 in January. Regionally, the respondents reported an increasingly tight housing market in the West, rising sale prices for existing homes in the Northeast, above-average volume of apartment construction in the Midwest, and increasing sales of commercial properties in the South. The survey polled 298 examiners and assets managers from the federal bank and thrift regulatory agencies. Survey of Real Estate Trends, FDIC, January 1998.

Report on Underwriting Practices

The October 1997 issue of the Report on Underwriting Practices reported that banks’ underwriting standards showed no widespread problems, but indicated that lending for both commercial real estate and construction should be monitored more carefully in the future. Compared to the previous report issued in May 1997, more institutions active in commercial real-estate and construction lending made higher-risk loans. Implemented in early 1995, the survey of underwriting practices is aimed at providing early warnings of potential problems in underwriting practices at FDIC-supervised, state-chartered nonmember banks. The focus of the survey is threefold: material changes in underwriting standards for new loans, degree of risk in current practices, and specific aspects of the underwriting standards for new loans. Slightly more than 90 percent of the banks examined in the six-month period ending September 30, 1997 showed no material change in overall underwriting practices since their last examination. Report on Underwriting Practices, FDIC, October 1997.

Foreign Banking Activities

On March 24, 1998, the FDIC Board of Directors announced a new regulation that dramatically reduces filing requirements for most banks when they want to open a foreign branch or make a foreign investment. In addition, the regulation permits well-run, well-capitalized institutions with no pending enforcement actions to initiate new activities abroad without prior Board approval. The institutions are required to notify the FDIC after new operations begin. The new regulation also streamlines the FDIC’s internal application processing procedures, which will expedite decisions on application requests. PR–19–98, FDIC, 3/24/98.

Deposit Interest Payments

The FDIC Board of Directors approved a final rule on February 10, 1998, making its exceptions to the statutory ban on demand deposit interest payments track those issued by the FRB. Under the final rule, the FRB’s exceptions to the statutory ban on paying interest on certain demand deposits would automatically apply to all FDIC-supervised institutions. Before the rule, federal law required the FDIC to issue similar exceptions to the general prohibition on demand deposit interest payments that the FRB authorized for the institutions it supervises. However, occasionally the FRB issued a specific exception to the ban before the FDIC could implement a similar action, which put the FDIC-supervised institutions at a temporary competitive disadvantage relative to FRB-supervised institutions. BBR, 2/16/98.

Federal Reserve Board

Risk-Based Approach to Consumer Compliance Reviews

On September 25, 1997, the Federal Reserve Board announced a new risk-based consumer compliance supervision program and extended the consumer compliance exam cycle for state member banks and foreign banking companies. The program, which will be phased-in throughout 1998, focuses on the relationship between “regulation risk” and “product risk” to determine the likelihood of an institution complying with consumer protection...
rules. The relationship between the two risk elements will be correlated to determine the appropriate level of oversight for an institution.

The program also extends the frequency of consumer exams for well-managed state member banks with excellent compliance histories. State member banks with less than $250 million in assets and two “satisfactory” or better ratings for compliance with consumer protection rules and the Community Reinvestment Act would be examined every 36 months, instead of every 18–24 months. Banks with more than $250 million in assets and excellent compliance records will be evaluated every 24 months, and banks with consumer compliance problems will be examined annually. \( \text{BBR, 10/6/97, p. 528.} \)

\textbf{Regulation Z}

The Federal Reserve Board announced final revisions to its Regulation Z, the Truth in Lending Act Regulation. The revisions would allow lenders to provide borrowers with simplified disclosures for variable-rate loan payments. The final rule applies to any adjustable-rate loan with maturity greater than one year that is secured by the borrower’s principal residence. The rule became effective on November 21, 1997, with compliance optional until December 22, 1997. \( \text{BBR, 12/1/97, p. 806.} \)

\textbf{Regulation U}

Beginning April 1, 1998, the FRB will permit banks to lend up to 100 percent of the purchase price of “small cap” stocks listed by NASDAQ. Under Regulation U, the banks were not permitted to lend more than 50 percent of the purchase price of these securities. The FRB also gave banks permission to lend up to half the purchase price of exchange-traded options. Before this decision, banks were not permitted to lend any portion of the purchase price of these securities. A federal law continues to prevent banks from financing more than half the purchase prices of issues traded on major exchanges, such as the New York Stock Exchange or the other securities listed by NASDAQ. \( \text{AB, 12/19/97.} \)

\textbf{New Policy on Cash Processing}

Under a revised Federal Reserve Board policy statement published in the \textit{Federal Register} on March 10, 1998, depository institutions will have more flexibility to obtain cash services from district Federal Reserve Bank offices. The statement allows banks to designate ten “end-points” to receive cash from a Federal Reserve Bank office. An “end-point” is defined as a branch, head office, money room, or armored car used by the depository institution to handle cash orders and deposits. Previously, the FRB required banks to access the cash processing system from sites within their home Federal Reserve Bank district. The revised policy provides flexibility to depository institutions to make the most cost-effective arrangements for obtaining cash services from Reserve Bank offices. \( \text{AB, 3/10/98; BBR, 3/16/98, p. 429.} \)

\textbf{Office of the Comptroller of the Currency}

\textbf{Ludwig Resigns}

After five years as Comptroller of the Currency, Eugene A. Ludwig resigned at the end of his term on April 4, 1998. He plans to return to the private sector and to spend more time with his family. \( \text{BBR, 1/26/98, p. 121.} \)

\textbf{Acting Comptroller}

Effective April 5, 1998, Julie L. Williams became acting Comptroller of the Currency. Ms. Williams had been Chief Counsel since 1994 and was also designated First Deputy Comptroller. Under the National Bank Act, she automatically became acting Comptroller following Mr. Ludwig’s departure. \( \text{NR 98–37, OCC, 4/6/98.} \)

\textbf{Asset Securitization Handbook Issued}

The OCC released its first handbook on asset securitization on November 12, 1997, entitled \textit{Comptroller’s Handbook: Asset Securitization}. The OCC acknowledged that the loans most often consolidated for securitization are consumer loans but anticipates that non-consumer assets will be next. The handbook is aimed at giving bank officials a better understanding of the benefits and risks associated with securitization and outlines procedures for effective risk management. The booklet also focuses on a bank’s use of asset securitization to manage its balance sheet and generate fee income. \( \text{NR 97–101, OCC, 11/12/97; BBR, 11/17/97, p. 758.} \)

\textbf{New Assessment Schedule}

On December 3, 1997, the OCC released a new schedule of fees and assessments that means extra costs for national banks and other OCC-regulated institutions that receive lower supervisory ratings. For each national bank or OCC-regulated foreign firm, the OCC imposes a semiannual assessment
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Based on a formula set out in 12 CFR 8.2; however, the formula did not reflect the extra costs involved in supervising banks that need special attention. The new rule imposes a surcharge equal to 25 percent of their assessment on banks scoring 3, 4, or 5 under the CAMELS rating system. Foreign branches or agencies of foreign banks that receive ROCA ratings of 3, 4, or 5 will also pay a 25 percent surcharge. The ROCA rating ranks risk management, operational controls, compliance, and asset quality. In addition, the assessments for nonlead national banks in multi-bank holding companies were lowered by 12 percent. The OCC also dropped the annual franchise fee that had been imposed on national banks that are registered as municipal or government securities dealers. The final rule took effect on December 31, 1997.

Survey of Credit Underwriting Practices

The 1997 Survey of Credit Underwriting Practices found that strong competition among financial institutions is driving national banks to continue easing credit standards for most types of commercial loans. The survey evaluated the lending practices at 80 of the largest national banks and compared the results to the 1996 survey. Almost 60 percent of the banks participating in the survey eased lending standards for one or more types of commercial loans. The survey reported weaker underwriting standards for home-equity and residential real-estate loans; however, loan requirements were tighter for small-business and agricultural loans. The survey also noted that credit requirements were stricter for credit cards, consumer loans, and affordable housing lending. The aggregate loan portfolio of the banks surveyed was approximately $1.5 trillion, which represents approximately 84 percent of all outstanding loans in national banks as of June 30, 1997. NR 97–112, OCC, 12/16/97; BBR, 12/22/97, p. 901.

National Banks to Sell Crop Insurance

The OCC’s General Counsel stated that the National Bank Act permits national banks to offer crop insurance in connection with loans they make to farm customers. Crop insurance is intended to protect farmers’ loss of income because of crop failure or low yields, and to reduce lenders’ exposure to agricultural credit risk. The 1996 farm bill repealed federal farm price guarantees on many crops, which has increased banks’ risk of farmers defaulting on agricultural loans. As a result, many farmers have become interested in national banks providing crop insurance coverage. State-chartered banks in Iowa have been selling crop insurance to farm customers for years through licensed agents employed by the banks. The General Counsel wrote that crop insurance enhances or facilitates a bank’s lending activity by protecting the bank’s loans, and is therefore part of a bank’s lending operations. BBR, 1/5/98, p. 14.

Year 2000 Preparations Factor in Applications

In an advisory letter released on January 23, 1998, the OCC said that national banks’ preparations for the Year 2000 computer problem would be a factor when reviewing certain applications. The applications addressed in the letter include new charters, mergers, conversions, and new federal branches of foreign banks. Applications for certain operating subsidiaries are also affected, and applicants will have to make sure that their vendors are Year 2000-compliant. NR 98–8, OCC, 1/23/98; BBR, 2/2/98, p. 165.

Bank Underwrites Municipal Bonds

A barrier between commercial and investment banking was broken on December 11, 1997, when the OCC gave permission to a national bank to underwrite municipal revenue bonds. Zions First National Bank of Salt Lake City, Utah, is permitted to form an operating subsidiary to issue the bonds. The Glass-Steagall Act prohibits banks from underwriting securities or owning stock in corporations that are “principally engaged” in securities underwriting; however, the Act makes no mention of firms that earn only a portion of their revenue by underwriting securities. The OCC claims that this omission enables banks to own firms involved in underwriting.

Bank Offers Digital Signature Products

The OCC has conditionally approved an application for Zions First National Bank to be the first financial institution to offer digital signature products to its customers. Digital signatures are used for electronic authentication of the sender of an electronic message and can provide an important way for consumers and businesses to decide which electronic communications they can trust. The approval permits Zions to establish an operating subsidiary to act as a certification authority to enable subscribers to
generate digital signatures that verify the identity of a sender of an electronic message. The certification process will also enable subscribers to be certain that communications received have not been altered during transmission. The bank plans to focus on certification services primarily involving corporate and government contracts. NR 98–4, OCC, 1/13/98.

**Office of Thrift Supervision**

**Seidman Named Director**

On October 29, 1997, Ellen S. Seidman was sworn into office to a five-year term as Director of the OTS. She takes over the agency from Nicolas Retsinas, who became Director in October 1996 while remaining Assistant Secretary and Federal Housing Commissioner at the Department of Housing and Urban Development.

Ms. Seidman spent the past four and one-half years as special assistant to President Clinton for economic policy at the White House National Economic Council. During her time at the Economic Council, she was chairwoman of the interagency working group on pensions and has been responsible for issues such as financial institutions, natural disaster insurance, bankruptcy, and home ownership. Before joining the Administration, she was Senior Vice President for Regulation, Research, and Economics at Fannie Mae. OTS 97–78, 10/28/97; BBR, 11/3/97, p. 688.

**Court Rules for Thrift Acquirers**

On December 22, 1997, the U.S. Court of Federal Claims ruled in favor of the acquirers of several troubled thrifts on contract claims against the federal government. The acquirers claimed that the government breached existing contracts when it changed the accounting and regulatory treatment of supervisory goodwill through the enactment of the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) in 1989. The acquirers claimed that the favorable accounting and regulatory treatment promised by the government was key to their acquisitions when they acquired the thrifts earlier in the 1980s. There are more than 120 pending cases brought by acquirers of troubled thrifts. BBR, 1/1/98, p. 29.

**Electronic Guidelines Urge Internal Controls**

On October 15, 1997, the OTS issued examination guidelines that focus heavily on an institution’s internal policies and controls for Internet banking and other electronic services. The guidelines emphasize that thrifts should adopt risk-management programs to monitor threats posed by electronic banking. OTS examiners are instructed to conduct a brief initial test that primarily determines whether a thrift has proper auditing procedures to monitor its technologies. If the initial review raises concerns, examiners will use more-detailed checks in up to seven areas, including strategic planning, operating controls, business insurance coverage, and information security. AR, 10/17/97.

**Intermediate Holding Companies**

Effective April 1, 1998, the OTS will allow mutual holding companies to set up a stock holding company as an intermediate subsidiary. The stock holding company will be sandwiched between the mutual holding company and its savings association in a three-level corporate structure. The controlling interest in the subsidiary holding company resides with the parent mutual holding company. The OTS said the rule provides mutual holding companies with increased flexibility to establish corporate structures that can take advantage of market opportunities while protecting the rights of mutual depositors. TR–192, OTS, 3/19/98; BBR, 3/16/98, p. 446.

**Lower Liquidity Requirement**

On November 24, 1997, the OTS lowered the liquidity requirement for savings associations from 5 to 4 percent of the institution’s liquidity base. The new final rule also requires that each savings association maintain sufficient liquidity to ensure its safe-and-sound operation. The final liquidity rule increases regulatory flexibility and is part of the OTS’s ongoing effort to simplify its regulations and reduce regulatory burden. OTS 97–82, 11/24/97.

**Capital Distributions**

The OTS proposed a rule on January 7, 1998, that would allow well-run, healthy savings associations to pay cash dividends without notifying their federal regulator. The institutions would have to satisfy specified criteria in order to qualify. The proposed rule change would bring the OTS’s capital distribution regulations into greater conformity with those of the other federal banking regulators and reflects the improved capital position of the thrift industry. OTS 98–1, 1/7/98.
National Credit Union Administration

Supreme Court Rejects NCUA Policy but House Brings Relief

On February 25, 1998, the U.S. Supreme Court ruled against the National Credit Union Administration, stating that it misread the Federal Credit Union Act when it eased membership standards for a class of federal credit unions. The case centered on Section 109 of the Federal Credit Union Act, which requires members of each credit union to share a “common bond.” Since 1982 the NCUA has argued that federal occupation-based credit unions meet the “common bond” requirements even if multiple occupations are represented, and the NCUA allowed credit unions to expand their membership dramatically. The American Bankers Association and several banks sued the NCUA, charging that the statute limits each credit union to one employee group, all of whose members share a single common occupational bond. The Court agreed with the bankers in an opinion by Justice Clarence Thomas. However, on March 26, 1998, the House Banking Committee approved a bill that gives credit unions relief from the Supreme Court ruling. The bill, called the Credit Union Membership Access Act, was also approved by the House of Representatives on April 1, 1998. BBR, 3/2/98, p. 333; BBR 3/30/98; AB, 4/2/98.

NCUA Approves Chartering Change

The National Credit Union Administration’s Board of Directors voted on January 22, 1998, to adopt an amendment to its rules to make it easier for a credit union to convert to a community-based charter. The Board agreed to remove the current requirement that credit unions wishing to convert to community charters must provide evidence of community support. BBR, 1/26/98, p. 141.

New Risk Rating System for Corporates

The National Credit Union Administration is testing a new risk rating system for corporate credit unions. The new system, the Corporate Credit Union Risk Rating System (CCURRS), is expected to replace the current system, CAMELS, by May 1, 1998. Corporate credit unions provide investment, payment, liquidity, and support services to natural-person credit unions. The NCUA said the new system was designed to recognize that corporate credit unions are unique and “the combination of financial and operational risks managed by corporates differ significantly from the risks incurred by commercial banks, thrifts, and natural-person credit unions.” BBR, 2/2/98, p. 188.

Securities and Exchange Commission

Year 2000 Costs Disclosed

The Securities and Exchange Commission issued guidelines on January 12, 1998, requiring that publicly traded banks disclose what they expect to spend rectifying possible Year-2000 computer problems. The institutions are also required to outline their general plans for addressing the computer problems in their financial statements and provide a timetable for carrying them out. AB, 1/13/98.

Federal Housing Finance Board

FHLBanks to Meet SEC Disclosure Standards

The Federal Housing Finance Board proposed a rule that would require Federal Home Loan Banks to comply with SEC quarterly and annual reporting rules. Certain securities issued by the Finance Board and the FHLBanks are exempt from registration and reporting requirements of the Securities Exchange Act of 1934 and are treated as government securities. Under the Finance Board’s proposed rule, FHLBanks would be required to submit unaudited quarterly financial statements, as well as audited annual financial reports, to the Board and FHLBank members. The reports would be prepared in accordance with the SEC’s financial disclosure and accounting requirements. Currently, all of the FHLBanks submit annual financial statements, but not all of them issue quarterly financial reports. BBR, 1/26/98, p. 141.

FHLBanks Continue to Borrow

The Federal Housing Finance Board voted unanimously to allow the Federal Home Loan Bank System’s Office of Finance to continue to borrow without limit through the rest of 1998. In late 1997,
the Finance Board decreed that the Office of Finance’s debt-issuance authority would expire at the end of March. The Board lifted the constraint as it prepares to address underlying policy issues relating to the System’s finances. The FHLB System has come under criticism for pursuing aggressive borrow-and-invest practices at the expense of its traditional mission of making low-cost loans, called advances, to mortgage-lending institutions. *The Wall Street Journal*, 3/16/98.

**OTHER ENTITIES**

**Financial Accounting Standards Board**

**Derivatives Rule Delayed**

The Financial Accounting Standards Board voted to delay by six months the effective date of its new derivatives rule. The new derivatives rule, which will become effective June 15, 1999, will require companies to report derivatives at fair market value on quarterly income statements. Bankers and regulators have argued that the cost of compliance, coupled with the Year 2000 expenses, would be extremely burdensome. *AB, 12/18/97.*

**Federal Financial Institutions Examination Council**

**Year 2000 Guidance**

The FFIEC issued additional guidance for financial institutions on risks they face because of the Year 2000 date change. The inter-agency statements, “Guidance Concerning Institution Due Diligence in Connection with Service Provider and Software Vendor Year 2000 Readiness” and “Guidance Concerning the Year 2000 Impact on Customers” supplement the statement issued on May 5, 1997. The guidance clarifies the importance of developing and executing a due-diligence process for each mission-critical service and product supplied by service providers or software vendors. This process should enable an institution’s management to identify the obligations of the institution and its service providers and software vendors. The institution should also establish an effective monitoring program of the renovation phase, establish a process for testing the renovated products and services, and adopt contingency plans in the event of information systems disruptions. The statements also provide guidance that should enable a financial institution’s management to effectively assess the Year 2000 readiness of the institution’s borrowers, fund providers, and asset management. *FIL–29–98, FDIC, 3/18/98.*

**STATE LEGISLATION AND REGULATION**

**Texas**

On January 1, 1998, a constitutional amendment was passed that permits home-equity lending in Texas. This amendment ends a 123-year-old prohibition on home-equity lending in Texas. The amendment permits homeowners to borrow up to 80 percent of the market value of a home. *BBR, 11/10/97, p. 712.*

**Florida**

On February 27, 1998, Florida regulators imposed a 90-day moratorium on conversions of credit unions from federal to state charters in order to prevent a flood of applications resulting from the February 25, 1998, U.S. Supreme Court ruling that credit unions must be composed of only one employer group. *BBR, 3/9/98, p. 400.*

**Iowa**

With Congress threatening to abolish the thrift charter, savings and loans in Iowa are urging lawmakers to create a new state savings bank charter. If the plan were enacted, Iowa’s 30 thrifts could convert to the new charter and retain liberal branching rights. Iowa forbids commercial banks from branching into communities where another bank already operates. Commercial banks could also use the new charter to better compete with brokerage firms, credit unions, and other financial-services companies. *AB, 2/10/98.*

**BANK AND THRIFT PERFORMANCE**

**Third-Quarter 1997 Results for Commercial Banks and Savings Institutions**

Commercial banks continued to produce record earnings, reporting net income of $14.8 billion for the third quarter of 1997. Third-quarter earnings were $131 million more than the previous earnings record set in the second quarter. This also marks the third consecutive quarter that earnings reached an all-time high. The increase in earnings this quarter was sup-
Recent Developments

Fourth-Quarter 1997 Results for Commercial Banks and Savings Institutions

Insured commercial banks had record earnings in the fourth quarter of 1997, as well as for the full year. Fourth-quarter net income totaled $15.3 billion, an increase of $511 million from the third quarter. For all of 1997, banks posted record net income of $59.2 billion, up $6.9 billion from 1996 annual results. The FDIC attributes the higher bank earnings in 1997 to increased net interest income and higher noninterest income. The fourth-quarter annualized return on assets was 1.24 percent, the highest annual rate recorded by the industry since the FDIC was established. One insured commercial bank failed during the fourth quarter, which was the first bank failure in 15 months.

FDIC-insured savings institutions reported net income of $2.4 billion in the fourth quarter, an increase of $197 million from the fourth quarter of 1996. Total earnings for the year were a record $8.8 billion, which is $1.8 billion higher than in 1996. The main reasons for the record earnings were lower non-interest expenses, a decline in provisions for future loan losses, and increased profits from sales of securities. Savings institutions had an annualized ROA of .95 percent in the fourth quarter and posted an ROA of .93 percent for the year. There were no federally insured savings institution failures in 1997, which is the first year of no failures since 1959. PR–14–98, 3/12/98.

RECENT ARTICLES AND STUDIES

The Treasury Department released a study on November 17, 1997, entitled American Finance for the 21st Century. The study finds that financial marketplace failures, even very large ones, are inevitable; and therefore, federal regulators should adopt a policy of containment that isolates individual upsets while protecting the financial system as a whole. Congress directed the Treasury to perform the study in the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994. The report was written by Robert E. Litan, director of the Economic Studies Program at the Brookings Institution, and Jonathan Rauch, a contributing editor of the National Journal. BBR, 11/24/97, pp. 778–79.

On December 11, 1997, the House Banking Committee released a report entitled U.S. Financial Services Sector Vulnerable to Computer Attack, which claims that the U.S. financial-services sector is not addressing security problems fast enough to keep up with the rapid growth of the Internet. The report addresses the vulnerability of the financial-services sector to foreign and domestic computer crime and estimates that financial firms may be losing $2.4 billion a year because of theft by computer. The reasons stated for the vulnerability are that computer software is outdated, telecommunications systems are easy to access globally, and computer hackers can decipher encryption codes. BBR, 12/15/97, p. 881.

A similar study released on December 18, 1997, by the FDIC reported that financial institutions must

ported by stronger financial performance of credit-card specialty banks, and by higher trading profits at a few large banks. In the second quarter, restructuring charges and the expense of boosting reserves at some large credit-card banks caused profits for that group of institutions to dip sharply. Profits of this group more than doubled in the third quarter to $1.3 billion. The third-quarter annualized return on assets was 1.22 percent, down slightly from the second quarter ROA of 1.24 percent, but above the 1.19 percent of a year ago. For the fourth consecutive quarter, no insured commercial banks failed. The number of problem banks decreased from 74 in the second quarter to 71 at the end of the third quarter. The problem banks have total assets of approximately $5 billion.

FDIC-insured savings institutions reported earnings of $2 billion in the third quarter of 1997, for an annualized ROA of 0.79 percent. Earnings declined from the second quarter by $398 million, primarily because of charges related to acquisitions. The savings industry earned $6.6 billion in the first three quarters of 1997, up by $1.7 billion over the same period in 1996, and within $1 billion of the annual record set in 1995. Ninety percent of all savings institutions showed improved quarterly earnings from a year ago. The number of problem institutions declined to 27, compared to 29 in the second quarter. Assets of problem institutions declined to $2 billion at the end of the third quarter from $2.8 billion in the second quarter. FDIC Quarterly Banking Profile, Third Quarter 1997.
recognize the security risks associated with the Internet and implement appropriate measures to protect their systems and data from unauthorized access. The paper, entitled *Security Risks Associated with the Internet*, identifies risks posed by using the Internet as an information resource or service delivery tool. The paper is intended to supplement the FDIC Division of Supervision’s existing supervisory procedures for electronic banking activities, and to provide bank managers with information to help identify potential risk factors and security solutions. 

The Treasury Department released a study on December 11, 1997, entitled *Credit Unions*, which was mandated by the Economic Growth and Regulatory Paperwork Reduction Act of 1996. The report concludes that credit unions are safe-and-sound institutions. The study also concludes that the credit union insurance fund is well-capitalized, has had few losses over recent years, and appears to be able to handle financial crises in the credit union industry. The study did recommend that credit union regulators adopt supervisory policies for market risk similar to those employed by bank regulators, including capital requirements, market-risk measurements, and prompt corrective action provisions for troubled credit unions. 

The FDIC has published a study entitled *History of the Eighties—Lessons for the Future*, which presents a comprehensive analysis of the banking crises of the 1980s and early 1990s. The two-volume study also evaluates the lessons learned from the crises. In the first volume, the FDIC presents its assessment of the economic, structural, supervisory and legislative conditions present as the era of failures began. The FDIC also reviews how these factors changed over time, as well as the policy implications for future banking problems. The second volume contains the proceedings of the History of the Eighties symposium held by the FDIC in 1997. 

The Consumer Bankers Association’s annual *Consumer Credit Collections Study* reported that bankruptcies account for 40 percent of all credit-card losses at large banks. The study, released on January 16, 1998, also reported that the credit-card bankruptcy charge-off rate at smaller institutions was 27 percent. 

A Georgetown University study entitled *Credit Union Insurance and Regulation* concludes that the government should maintain a separate insurance fund for credit union deposits. The study finds that credit unions are better capitalized than banks, and the credit union fund performed much better than the other funds during the economic crises of the late 1980s and early 1990s. The study also examines corporate credit unions and recommends increased oversight and new rules to prevent these institutions from investing in risky financial instruments.

**INTERNATIONAL DEVELOPMENTS**

**Japan**

On November 17, 1997, Hokkaido Takushoku Bank Ltd. collapsed. It is Japan’s tenth-largest bank and the first of Japan’s ten major commercial banks to require a bailout. Japan extended emergency central bank loans and arranged for North Pacific Bank to take over the failed bank’s deposits and outstanding loans. 


One week later, on November 24, 1997, Japan’s fourth-largest securities company collapsed. Yamaichi Securities Co. was unable to borrow sufficient operating funds after two U.S. ratings companies rated its credit as “junk.” The company also disclosed that it had nearly $1.6 billion in previously undisclosed losses that were hidden off its balance sheet. The Wall Street Journal, 11/24/97.

On January 12, 1998, The Ministry of Finance reported that Japanese commercial banks’ bad loans, nonperforming loans, and loans with potential risks totaled 76.7 trillion yen (approximately $590 billion), which is 14 percent of their total loans of 624.9 trillion yen. Prime Minister Ryutaro Hashimoto announced that his government was drafting amendments to the Deposit Insurance Law and Financial System Stabilization legislation in order to help stabilize the Japanese financial system. The amendments would allow the governmental Deposit Insurance Corporation (DIC) to conduct on-site and other types of investigations of failed banks and allow public prosecutors to indict parties who block the investigations. BBR, 1/19/98, p. 101.

Japan’s Ministry of Finance has agreed to allow banks to have banking subsidiaries without establishing a bank holding company. A ban on holding companies was lifted last year, which enabled a bank
to establish a bank holding company under which it can own securities and other financial subsidiaries. However, not a single bank has expressed intentions to establish a holding company because of complexity related to the transfer of assets between the holding company and subsidiaries, and other details. The Ministry thus came up with the amendment in an apparent move to encourage bank mergers and improve their efficiency and productivity. *BBR, 1/26/98, p. 153.*

On February 16, 1998, the Japanese Diet passed two bills that will provide 30 trillion yen ($260 billion) in taxpayer money to assist in the disposal of commercial bank nonperforming loans and to reinforce the protection of depositors. The Law for Emergency Measures for Financial Function Stabilization gives the Deposit Insurance Corporation the authority to issue government bonds and borrow 10 trillion yen. The government would use the borrowings to purchase commercial banks’ preferred shares and subordinated debt securities in the event of bank failures. The other measure approved by Japanese legislators includes amendments to the Deposit Insurance Law that allow the Deposit Insurance Corporation to issue seven trillion yen worth of government bonds to compensate for commercial bank losses. It also sets up the government-backed Liquidation and Collection Bank as the recipient bank of bad loans held by healthy banks. *BBR, 2/23/98.*

**Indonesia**

Indonesia plans to merge four big state-owned banks into one institution in an effort to clean up the poorly managed and inefficient government financial institutions. The plan will also allow foreign banks to buy into any state-owned bank. *The Wall Street Journal, 1/2/98.*

On January 27, 1998, the Finance Ministry announced a package of measures that is intended to restart the flow of money into the economy. The package included guarantees on bank deposits, an end to all curbs on the foreign ownership of banks, and the creation of a special agency that would rehabilitate ailing banks. *The New York Times, 1/27/98.*

**South Korea**

In December 1997, the South Korean government received a $55 billion bailout package from the International Monetary Fund in exchange for an agreement to dismantle the country’s interlocked financial and industrial system, known as Korea Inc. In accordance with the IMF agreement, the government closed ten of the country’s 30 merchant banks in February 1998. A government-backed bridge bank was created to assume the failed institutions’ assets and liabilities. *The Wall Street Journal, 12/4/97, 2/2/98.*

**United Kingdom**

On October 28, 1997, the U.K. Securities and Investments Board changed its name to the Financial Services Authority (FSA). The name change is part of a broad revision of the regulation of U.K. financial markets aimed at consolidating banking supervision and investment services regulation into one regulatory body.

One of the first actions taken by the FSA was the signing of an information-sharing memorandum of understanding with the Bank of England and two U.S. regulators, the SEC and the Commodity Futures Trading Commission. The MOU is expected to enhance the ability of the regulators to obtain information about the activities of U.S. and U.K. internationally active firms. It also sets forth procedures for co-operation when addressing potentially significant market events experienced by U.S. or U.K. securities or banking firms. *BBR, 11/3/97, pp. 696–97.*

**China**

On February 28, 1998, China’s top legislative body, the Standing Committee of the National People’s Congress, gave approval to the Ministry of Finance to issue $33 billion of domestic bonds to bail out the country’s state bank monopoly. Ninety percent of the country’s bank assets are controlled by four state-owned institutions. Authorities have also proposed that China introduce a deposit insurance plan and appoint a federal agency to audit all bank assets for the first time since 1949. *BBR, 3/9/98, p. 410.*

**Russia**

Russia’s central bank withdrew 316 banking licenses in 1997, which is more than 15 percent of the country’s banks. The central bank is continuing to weed out the country’s weakest financial institutions and will be quicker to withdraw licenses in the future. Analysts predict the number of banks will continue to decline sharply this year, as smaller banks struggle to survive in the low inflation environment and bigger banks seek to expand by merger or acquisition. *Financial Times, 1/7/98.*
102 Nations Sign Financial-Services Pact

On December 13, 1997, a deal was reached between 102 nations, which will open up foreign markets to banks, insurance companies, and other financial institutions. The deal, which was coordinated by the World Trade Organization (WTO) and is the result of seven years of work, is expected to boost world growth and restore confidence in the Asian financial markets. The range of services covered under the agreement is broad and includes: traditional banking services, such as depositing and lending; securities services, including trading in equities and derivatives; and insurance services, including the sale of insurance, brokerage, and reinsurance.

The agreement’s main achievement is that it locks market access offers into a legally binding framework. Any signatory country that does not adhere to the agreement must answer to the WTO’s Dispute Settlement Body and face the possibility of trade sanctions. The agreement will be open to participating governments for signature in January 1999 and will take effect in March 1999. Developing countries will have phase-in schedules that will allow some governments to wait until 2020 to completely implement their financial-services offers. BBR, 12/22/97, pp. 922–23.

Guidelines on Internal Bank Controls

On January 19, 1998, the Basle Committee on Banking Supervision issued a series of guidelines designed to improve the evaluation of internal bank controls. The guidelines call on national banking supervisors to ensure the establishment of improved management oversight and control structures in banks under their authority. The guidelines also require banking supervisors to ensure that banks are carrying out adequate risk assessments and to address other issues such as improving internal communication, and monitoring and evaluation of internal control systems in banks. The guidelines reflect a growing concern about the adequacy of existing internal controls. BBR, 1/26/98, p. 149.