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Banks and the Year 2000 Problem

I. INTRODUCTION

As the year 2000 approaches, banks and other financial institutions must face the prospect of major computer system failures and massive liability.¹ Analysts estimate that preparation for the millennium event could cost up to \$600 billion worldwide,² and at least \$10 billion in the U.S. banking industry alone.³ However, those financial institutions that do not properly overhaul their computer systems may experience the most significant costs of the millennium change. One expert who specializes in year 2000 problems estimates potential liability levels as high as \$1 trillion.⁴

When addressing this problem, banks and other financial institutions will face many of the same complicated legal issues as ordinary corporate entities. However, the problems facing the banking industry have several unique characteristics, making compliance more difficult. These special characteristics may render it impossible for some banks to achieve compliance in time, leading a

1. Testimony before Congress in mid-1997 indicated that only 10% of all banks and corporations had completed programs to handle year 2000 computer problems by that time. See Marcy Gordon, *Banks, Most Vulnerable to Computer Glitches, Aren't Ready Yet*, AP, July 10, 1997, available in 1997 WL 4874355. Studies estimate (with a probability of .7) that approximately 50% of the companies with this software problem may not become year 2000 compliant in time and will have all or part of their computer systems shut down (or start producing incorrect data) on or after January 1, 2000. See Jeff Jinnett, *Legal Issues Concerning the Year 2000 "Millennium Bug,"* COMPUTER LAW., Dec. 1996, at 16. (citing Mark Evans, *The Profit Clock is Ticking on 2000 Countdown*, FIN. POST, May 8, 1996, at 22; APT Data Services, *Counting the Cost of the Year 2000*, CONSUMER FIN., Mar. 1, 1996).

2. See Clyde Mitchell, *Implications of the 'Year 2000 Problem'*, N.Y. L.J., Apr. 16, 1997, at 3. The Gartner Group, a large information technology marketing research group, recently completed a study showing that worldwide costs for obtaining year 2000 compliance will be anywhere from \$300 to \$600 billion. See *id.* The American Bankers Association estimate of \$4 billion by the end of 1999, while more conservative, would still represent two percent of pretax earnings in the banking industry over a two-year period. See Dean Anason, *Regulator's Crackdown on a Year-2000 Laggard Sends a Wake-Up Call*, AM. BANKER, Nov. 24, 1997, at 4.

3. See *More Doom, and Some Help for Year 2000*, BANKERS RES./FUNDS TRANSFER REP., June 1997, available in WESTLAW, DIALOG Provider, BANKINFO Database.

4. See Jon Newberry, *Beat the Clock*, A.B.A. J., June 1997, at 51.

few institutions to sell out rather than attempt to achieve year 2000 compliance on their own.⁵ As a result of the complicated legal issues facing financial institutions, they must be prepared to deal with a potentially overwhelming onslaught of year 2000 litigation.

This Comment begins by discussing the general nature of the year 2000 problem and examining both the special predicament facing financial institutions and their progress in achieving year 2000 compliance.⁶ Next, this Comment addresses the added pressure that regulatory agencies place on banks, and the effect they will have on banks, credit unions, and thrifts. This section also examines potential legislation aimed at mandating year 2000 compliance as well as legislation that would alter the scope of liability for banks and other corporations that prepare sufficiently for the new millennium.⁷ This Comment then surveys the various forms of legal actions and tax liability facing the banking industry and how the special characteristics of banks, credit unions, and thrifts affect these issues.⁸ Finally, this Comment concludes that while the dangers of the year 2000 problem are large, many of its effects can be avoided if financial institutions take immediate action.

II. OVERVIEW OF THE YEAR 2000 DILEMMA AND SOLUTIONS: "SO SIMPLE YET SO COMPLEX"

A. *The Year 2000 Problem for Banks*

While reports show the banking and insurance industries are well ahead of other industries in preparing for the coming Millennium,⁹ a sense of confidence is not warranted due to the enormity of the task at hand.¹⁰ The source of the year 2000 problem

5. See *infra* notes 59-60 and accompanying text.

6. See *infra* notes 9-60 and accompanying text.

7. See *infra* notes 61-116 and accompanying text.

8. See *infra* notes 117-66 and accompanying text.

9. See Dean Anason, *Banks Said to Be Best Prepared for Year 2000 Computer Glitch*, AM. BANKER, July 11, 1997, at 2. Larry Martin of Data Dimensions told the Senate Banking Committee that 70% of banking and other financial services companies are taking corrective steps, while only one third of U.S. companies and government agencies can say the same. See *id.*

10. For example, the problem could affect everything from interest calculations in mainframe systems to embedded microprocessors within time controlled vaults.

lies in the fact that most computer systems and software programs developed before the last several years were programmed only to recognize a two digit date field,¹¹ with computers set up to designate the first two digits as "19" by default.¹² Therefore, when the millennium changes, the software will read the last two digits as "00" causing the computer to conclude that it is the year 1900 rather than 2000.¹³

While the year 2000 problem appears simple on the surface, solving it could prove to be an enormous task for software programmers due to the intricate nature of the solution. The solution will be both labor intensive and expensive.¹⁴ For example, engineers must examine every line of "source code" for date fields.¹⁵ After finding the date field, the engineers must reformat them so they can store a four-digit year.¹⁶ Then the companies will need to make a test run of calculations performed by the computer to ensure that they will work properly using the year 2000.¹⁷ In addition, companies will have to test these programming changes for compatibility with outside systems with which the computer interacts.¹⁸ This testing will not be easy because analysts estimate that U.S. commercial banks alone have 9 to 10 billion lines of source code containing date fields.¹⁹ Furthermore, testing the systems may turn out to be the

11. See Penny Lunt, *Millennium Madness: Or Why Your Programs Won't Work After Jan. 1, 2000*, ABA BANKING J., May 1996, at 88.

12. See Walter A. Dods, Jr., *It's Later Than you Think*, ABA BANKING J., June 1997, at 11. Two digit date fields saved computer memory, but it was also assumed that most computers installed before the last several years (i.e. 1988) would be out of use by the year 2000. See Lunt, *supra* note 11, at 88. Additionally, data entry programs tended to be set up so that a clerk inputting data could type in two instead of four digits for each year. See *id.*

13. See Dods, *supra* note 12, at 11.

14. See Lunt, *supra* note 11, at 88.

15. Source code is a software code that is readable by a human programmer. See Jinnett, *supra* note 1, at 16.

16. See *id.* In some situations, this could involve millions of lines of code. See *id.* Reports of \$1.10 to correct a single line of code are apparently not uncommon. See *id.* (citing APT Data Services; *Counting the Cost of Year 2000*, COMPUTER FIN., Mar. 1, 1996; Richard Nunno, *The Year 2000 Computer Challenge*, June 7, 1996 (Science Policy Research Division)).

17. See Lunt, *supra* note 11, at 88.

18. See *id.* at 94.

19. See Mitchell, *supra* note 2, at 7. Chase Manhattan Bank has 200 million lines of code, roughly four percent of which can be assumed to contain date two digit date fields. See Joseph McKendrick, *Sizing Up Year 2000*, BANK TECH. NEWS, May 1996, available in 1996 WL 12075018.

largest part of the process because even after performing all of this work, there is no guarantee that the system will function correctly.²⁰ Therefore, financial institutions should not underestimate the weight of this task.²¹

The costs of making these code conversions will vary according to the size of the institution and the number of lines of source code that must be analyzed for date fields. Banks that rely on old mainframe systems to perform their data analyses and calculations will incur the greatest cost in attempting to correct the problem.²² Studies estimate that a thrift with \$61 million in assets is likely to spend around \$75,000 to rectify its problem, while a thrift with \$5 billion in assets may spend up to \$3 million.²³ Chase Manhattan will reportedly spend at least \$200 million to correct the year 2000 problem.²⁴

B. *Solutions and Potential Difficulties in Implementation*

Given the size of the task, institutions that have yet to begin implementing and testing a comprehensive solution at this point may simply be out of time.²⁵ In order to have a legitimate chance at achieving compliance, bank directors and upper management must rapidly implement an organized and comprehensive top down plan for attacking the year 2000 problem. Because the problem affects so many interconnected phases of a bank's operations, solutions cannot be isolated or implemented sporadically. Therefore, executive leadership and effective channels for feedback between all levels of management, officers, and directors are key to developing both a

20. See McKendrick, *supra* note 19. Testing the newly programmed systems may require 50% of the total time required to reach compliance. See *id.*; see also Tami Luhby, *Testing Solutions to Year-2000 Bug is Biggest Crash Prevention Hurdle*, AM. BANKER, Dec. 26, 1997, at 1 (noting the need to allow sufficient time for testing).

21. Data Dimensions, a technology consulting group currently under contract to do an inventory of BankBoston's proprietary programs, estimates that it will take 100 staff years to get the bank's 110 different in-house programs updated. See Lunt, *supra* note 11, at 94.

22. See *id.* at 88.

23. See *Thrift Industry Making Progress in Meeting Year 2000 Challenge*, Office of Thrift Supervision (News Release), July 30, 1997, available in 1997 WL 438926.

24. See *More Doom, and Some Help for Year 2000*, *supra* note 3.

25. The Gartner Group has already predicted a failure rate in U.S. companies around 50%. See Jinnett, *supra* note 1, at 17.

comprehensive awareness of the problem and a solution to be implemented.

In addition to the monetary costs of solving the year 2000 problem, there is the psychological burden of knowing the amount of effort that a comprehensive compliance effort will require. Moreover, the only reward to be reaped from this effort "is that you get to stay in business; [basically] you get to stay even."²⁶ The cost, effort, and failure to add to the bottom line are major problems to overcome in convincing directors and officers to allocate the resources necessary to lead the effort.²⁷ Banks need to be conscious of the fact that particularly within medium to large size institutions, the task of correcting the year 2000 problem is as much a human relations and management feat for officers and directors, as it is a technical one for the software programmers.²⁸

C. *Options in Addressing the Year 2000 Problem and Their Implications*

Banks and other financial institutions have two immediate options in addressing the year 2000 problem: either replace existing systems or retain the old systems and reprogram both the systems and their respective software.²⁹ Depending on which route is taken, banks must be prepared to address a slightly different set of legal issues. For example, if a bank developed its software in-house and chooses to repair those systems itself, the bank will incur potential liability for post-2000 problems or bugs.³⁰ In addition, dealing with

26. McKendrick, *supra* note 19. As one marketing manager for a software firm stated, "[T]here's no way to win, but [there are] all sorts of ways to lose." *Id.*

27. *See id.*

28. As an example, Chase Manhattan Bank, which began to address the problem in 1995, was faced with conveying the message about the year 2000 problem to more than 40,000 managers and employees worldwide. *See id.*

29. *See* Jinnett, *supra* note 1, at 16. In addition to technical aspects in the institution's decision, relevant accounting standards and tax law may also have some bearing on which choice a bank makes. *See id.* Banks also have the third option of selling out to an institution with a more effective year 2000 compliance approach in place. *See infra* notes 59-60 and accompanying text.

30. *See generally* Mitchell, *supra* note 2, at 3 (noting that unlike a vendor situation where a third party may be responsible for defects in an institution's year 2000 solution, a bank that undertakes to fix its own systems will likely be responsible for any potential problems associated with that solution).

the year 2000 problem may strain existing operations, as banks may have to use existing staff to fix their software and systems.

Many institutions may have both in-house and vendor developed software and will be forced to address two very different sets of legal issues. In addition, the problems associated with bank computer systems developed by third party vendors are even more complex and burdensome than problems associated with systems developed in-house. After taking an inventory of their software systems,³¹ banks will need to analyze each licensing agreement to determine if third party vendors are responsible for reprogramming the system to make it year 2000 compliant.³² Some vendors may not be willing or contractually obligated to upgrade the systems for free, and where the vendor is not contractually obligated the conversion could be costly.³³ If a vendor is not obligated to reprogram the software, and the bank decides to do it itself, it will need to verify its rights to do so under its current licensing agreements³⁴ because copyright law may deny some banks the right to modify the source code in the software.³⁵ Furthermore, a self-help approach may void any warranty claims the institution may have had against the software provider.³⁶

The problem is further exacerbated by the fact that many banks are still using the same mainframe systems purchased as many as thirty years ago. These machines are often programmed in COBOL, a language in which few skilled technicians are still proficient.³⁷ As the millennium approaches, more and more institutions will be working to address the year 2000 problem. As this happens, the price of the services for those who are trained in

31. See Jinnett, *supra* note 1, at 17.

32. See Mitchell, *supra* note 2, at 3.

33. See generally Lunt, *supra* note 11, at 90 (noting that IBM is fixing hardware/software for its customers with current maintenance agreements at no cost, when otherwise the upgrades would cost 15% of the original purchase price). An institution with a large system in place may find themselves paying large amounts of money to make their systems compliant if they are under no warranty or service contract that covers this situation.

34. See Mitchell, *supra* note 2, at 3.

35. See *id.*

36. See *id.*

37. See Beth Duncan, *Year 2000: Companies That Fail to Correct Glitch, Disclose Costs May Be Targeted*, 29 Sec. Reg. & L. Rep. (BNA) 1682 (Dec. 5, 1997), available in WESTLAW, 29 SRLR 1682.

COBOL is sure to rise and some banks may simply find it impossible to find qualified technicians to work on their systems as other institutions race to address the problem.³⁸

D. Banks as Data Intensive Institutions/Dangers of Third Party Reliance

Because of the unique characteristics of banks, the year 2000 problem poses greater financial consequences for them than for other industries. Bank computer systems are more likely to suffer from the year 2000 problem than those of any other industry because their business is so concentrated around computer based calculations.³⁹ For example, banks are "data intensive" entities because much of what they do, most notably interest accrual calculations, depends heavily upon the integrity of the date information associated with deposit and credit records.⁴⁰ Consequently, while around forty percent of the program applications of most normal corporations are deemed "mission critical," typically ninety percent of a financial institution's programs fall within that classification.⁴¹ Thus the task for banks is more formidable because they will have to spend a tremendous number of hours to complete the conversion effort.

Further exacerbating the problem for banks and other financial institutions is their continued reliance on third party

38. See generally Ann Marsh, *Business Services and Supplies*, FORBES, Jan. 12, 1998, at 110 (noting that Cobol programmers are currently being sought out in a bidding war by companies trying to address the year 2000 problem).

39. See *Banks Must Beware of Date-Bug Liability*, BANK SYS. & TECH., Aug. 1997, at 27, available in 1997 WL 11805427.

40. See generally Mitchell, *supra* note 2, at 7. As an example of one of the thousands of routine banking operations affected by the year 2000 problem, banks sometimes must make retroactive interest rate adjustments on a commercial loan because someone entered the wrong rate or the loan was renegotiated. See Lunt, *supra* note 11, at 88. If the year is 1996, and you want to recalculate interest for the last two years, the typical program simply subtracts two from 96 and gets 94, its starting point. See *id.* If the year is 2001, the program may not know how to subtract two from one and may fail. See *id.* A non-compliant bank computer calculating interest for a financial instrument for the six-year period of 1995 through the year 2000 might calculate the interest for the period of 1900 through 1995, for a 96 year period instead of a six year period. See Jinnett, *supra* note 1, at 16.

41. See *Senators Consider Weighing in to Spur Year 2000 Problem Solutions*, 69 Banking Rep. (BNA) 58, 60 (July 14, 1997). In achieving year 2000 compliance and allocating resources, institutions have commonly gone through the task of designating which programs and systems are "mission critical" and thus have first priority.

vendors to meet data processing and software development needs. Currently, about eighty percent of all thrift institutions rely on service bureaus to perform their data processing, while the remaining twenty percent perform the operations internally.⁴² Such reliance will make the job of determining year 2000 compliance all the more complex, as thrifts discover that they must rely on the efforts of third parties to ensure the integrity of their data. Some banks, particularly smaller institutions which have relied solely on multiple outsources to develop their software programs, may find themselves in an even more complex legal situation.⁴³ This degree of reliance on third party vendors adds to the difficulty of solving year 2000 problems both from a technical standpoint and a legal standpoint as institutions strive to flesh out obligations of multiple vendor parties under current licensing contracts.

Finally, due to both the interconnectedness of financial institutions as well as the fact that many banks' software applications are vendor produced, there are, as a general rule, no standard year 2000 solutions for the banking industry.⁴⁴ This multi-layered facet to solution development has created a perplexing dilemma for some institutions. For example, in revamping its more than 190 different software programs, BankBoston is faced with the task, like so many other large and small institutions, of ensuring that every other party or financial intermediary's system with which it exchanges information will be able to accept and support BankBoston's new software formats.⁴⁵ In addition, BankBoston will have to flesh out any legal obligations between those organizations and BankBoston. From an overall industry standpoint, addressing the ability of

42. See *Thrift Industry Making Progress in Meeting Year 2000 Challenge*, *supra* note 23.

43. The predicament of Sanwa Bank, a wholly-owned US subsidiary of Sanwa Bank Limited of Japan which has \$8 billion in assets, highlights the multiple vendor problem that faces many small and large institutions. See *Sanwa Bank Tackles The Year 2000 Problem*, *FUTURE BANKER*, Aug. 1997, at 33. Sanwa currently has more than 350 vendors providing more than 90% of their programming applications. See *id.* Sanwa expects to spend about \$20 million and to hire 55 new employees to deal with the problem. See *id.*

44. See Jinnett, *supra* note 1, at 16. For example, there are currently over 40 different vendors marketing in excess of 100 software tools to correct the year 2000 problem. See *id.*

45. See Lunt, *supra* note 11, at 94. Credit card issuers are dealing with very similar dilemmas of interconnectedness in ensuring that year 2000 credit cards are accepted around the world. See Jeremy Quittner, *As Year 2000 Looms, Issuers Play Beat the Clock*, *AM. BANKER*, Aug. 5, 1997, at 11.

financial institutions to interact may be the most critical facet of year 2000 compliance.⁴⁶ Regulatory agencies, particularly the Federal Reserve (Fed), have expressed concern that the financial industry is neglecting this aspect of the compliance effort.⁴⁷ Therefore, banks should develop a data processing flow chart of their computer systems that identifies where third party software programs and/or data are input and processed.⁴⁸ They should then contact suppliers to determine their compliance plans and to monitor their progress in achieving compliance.⁴⁹

E. Small Banks and Thrifts: A Plight of a Different Nature

While large institutions such as Chase Manhattan and BankBoston have allocated millions of dollars to implement solutions for the year 2000 problem, it appears that the level of preparedness and ability of small banks and thrifts to address the problem is considerably lower than that of the larger banks.⁵⁰ In

46. See generally *Year 2000 Issues and Examination Approach*, OCC Advisory Letter, 97-6 (May 16, 1997) ("Since the 1996 Interagency Statement, it has become clear that testing mission critical system interdependencies, particularly those with external systems, will be time consuming and could take at least one year in more complex data processing environments.... Therefore, year 2000 planning should allow sufficient time to assess the effect that Year 2000 solutions will have on data transfers."). The consequences of the year 2000 problem, in light of this interconnectedness could be especially drastic in the currency exchange markets. Computer Sciences Corp. in El Segundo, California, estimates that the financial services industry would lose up to \$3.3 billion over five days if a big bank with three percent of the foreign exchange market were to have trouble settling its transactions. See *Technology: Report Projects Year 2000 Foreign Exchange Impact*, AM. BANKER, Jan. 21, 1998, at 12, 13.

47. See *Year 2000 Alert*, Circular No. 10937, Fed. Res. Bank of NY, Apr. 4, 1997, (visited Feb. 7, 1998) <<http://www.ny.frb.org/docs/bankinfo/circular/10937.html>>. A company's computer system, even if year 2000 compliant, may fail to process, produce error messages, or generate incorrect data if the company receives contaminated programs and/or data from third party suppliers which are not year 2000 compliant. See Jinnett, *supra* note 1, at 18. The Federal Reserve Bank of New York commented that "most institutions have focused their efforts on identifying change made internally to address the Year 2000 issue . . . [however] fewer institutions are as advanced in their thinking about how the Year 2000 may affect their dealings with customers, vendors or service providers." *Year 2000 Alert*, *supra*.

48. See Jinnett, *supra* note 1, at 17-18.

49. See *id.* Counsel for banks should also pursue possible indemnification provisions within contracts with third party providers that protect the institution from liability in the event the third party software provider or data processor fails to achieve compliance. See *id.* at 19.

50. See McKendrick, *supra* note 19. First Union National Bank began to look at the

addition, studies indicate that the problem with smaller institutions extends well beyond the mere confines of awareness of the year 2000 problem. First, the institutions that are most likely to lag behind are those small institutions that are least able to afford the compliance costs.⁵¹ Smaller banks simply may not have the resources to address the problem on their own and may have to rely more heavily on the efforts of regulators and third party providers.⁵² This lack of resources will, in all likelihood, force small banks to focus their compliance efforts externally, adding even more complexity to an already difficult legal situation. Furthermore, as the year 2000 approaches and programming resources become more scarce, it may become more expensive for small institutions to outbid larger ones in hopes of acquiring the necessary programming services. This potential scarcity of programming resources may leave some smaller institutions without the necessary expertise to address the year 2000 problem.

Second, the degree to which smaller institutions, particularly thrift institutions, rely upon third parties for their data processing services may make the year 2000 problem even more complex for these smaller institutions.⁵³ These institutions will need to inquire frequently into the state of year 2000 preparedness of their respective

year 2000 problem as far back as 1988, yet the task is still unfinished as the bank faces the job of testing and reprogramming more than 10 million lines of code. *See id.* A survey by Sheshunoff Management Systems indicated that 33% of community banks were not prepared to address the year 2000 problem. *See* Louis Whiteman, *Community Banking: Many Small Banks Seen to Lag in Retooling for 2000*, AM. BANKER, September 9, 1997, at 6.

51. *See Federal Banking Agencies Gear Up to Ensure Smooth Transition to Year 2000*, 68 Banking Rep. (BNA) 591 (Mar. 31, 1997). The OCC has observed a "higher degree of awareness and preparation in larger banks and large non-bank processing centers . . . [w]hile many smaller banks are aware of the issue, they generally have not been preparing as aggressively as larger institutions." *Id.*

52. Smaller community banks and thrifts may need to take advantage of solutions that other banks have used in addressing year 2000 concerns. Kingsfield Bank of Maine, in particular, "has joined a committee, organized by the Maine Association of Community Banks, that is trying to find simpler ways to assess potential computer problems." Whiteman, *supra* note 50, at 6. Nevertheless, Kawika Daguio, the ABA's Federal Representative for payments systems and technology, suggests that "small banks are going to have to trust their vendors and regulators to ensure things go as well as they should . . . given a lack of resources to address the problem." *Id.*

53. *See* Bruce Caldwell & Andy Patrizio, *Millennium Approaches: Testing for 2000: Testing Code Will be the Biggest-and the Most Expensive Part of the Year 2000 Compliance Job. Here's How to be Prepared When the Testing Crunch Hits*, INFOR. WK., Sept. 15, 1997, available in 1997 WL 14147924.

vendors.⁵⁴ In light of this, the Office of Thrift Supervision (OTS) is taking steps to ensure that these vendors and processors are sufficiently prepared to face the year 2000.⁵⁵ However, institutions should not rely solely upon regulators in this regard, as the Fed has already indicated it will not ensure vendor compliance.⁵⁶ While the Federal Deposit Insurance Corporation (FDIC) is making its examinations available to all institutions, ultimately thrifts themselves must determine the degree to which their vendors have achieved year 2000 compliance.⁵⁷

Finally, the problems facing smaller institutions and thrifts in achieving year 2000 compliance do not exist in a vacuum. Because of the interconnectedness of the banking industry, failures at these smaller institutions can present significant problems for the larger institutions with which they are connected.⁵⁸ In addition, smaller institutions that are starting to register significant year 2000 liabilities on their books may become attractive, inexpensive takeover targets for larger institutions. In fact, bank consolidation should increase due to the year 2000 problem, as investment bankers are reportedly encouraging institutions burdened by the costs of technology upgrades to sell out to other institutions.⁵⁹ Some small institutions may be easily absorbed by larger institutions that have comprehensive and sophisticated year 2000 compliance efforts already in place. In addition, the requirement of full disclosure of material facts mandates that smaller institutions disclose large contingent losses related to the year 2000 problem, thereby lowering the value of their institution on the public securities markets, making them more vulnerable to acquisition. However, observers expect this consolidation to end by 1999 due to the time required to integrate systems technology between institutions.⁶⁰

54. See *Thrift Industry Making Progress in Meeting Year 200 Challenge*, *supra* note 23.

55. See *id.* In the course of its safety and soundness examinations, the OTS will have "information systems" examiners perform exams of service providers to the thrifts. See *id.*

56. See *infra* note 68 and accompanying text.

57. See *infra* note 78 and accompanying text.

58. See *Banks Said to be Prepared for Year 2000 Computer Glitch*, AM. BANKER, July 11, 1997, at 2.

59. See Aaron Elstein, *Weakness in Big-Bank Stocks Chills Merger Fever*, AM. BANKER, Jan. 27, 1998, at 1, 26.

60. See Gordon Matthews, *M & A Roundup: Merger Pace Accelerated in 1997*, AM.

III. THE UNIQUE PLIGHT OF BANKS AS HEAVILY REGULATED INSTITUTIONS

The demanding role that agency directives play both in guiding and testing bank compliance efforts, as well as the threat of sanctions from bank regulatory agencies, will increase both the pressure to achieve year 2000 compliance and the potential liability of banks for failing to do so. Bank and other regulatory agencies will play a major role in every banking institution's compliance effort due to their present power to examine financial institutions for "safety and soundness" and to take enforcement actions based upon what they find.⁶¹ Under pressure from the Senate Banking Committee, which has continuously expressed concern about the industry's level of preparedness,⁶² all of the relevant regulatory agencies have now implemented plans to monitor institutional progress in achieving year 2000 compliance.⁶³ For example, in December 1997 the Federal Financial Institutions Examination Council (FFIEC) issued new "safety and soundness" guidelines focusing specifically on the responsibilities of senior management and boards of directors to address internal and external business risks and to monitor their

BANKER, Jan. 29, 1998, at 3A. This consolidation process can take as long as 9 to 15 months. *See id.*

61. *See Federal Banking Agencies Gear Up to Ensure Smooth Transition to Year 2000*, *supra* note 51, at 590. The Federal Reserve Board, the Federal Deposit Insurance Corp., the OTS, and the OCC have begun developing specific guidelines regarding the year 2000 problem for their regular on-site safety and soundness examinations. *See id.* at 591. Regulated industries may face extraordinary problems with the year 2000 because depository institutions are highly regulated and require that directors exercise a high degree of diligence so that internal procedures adequately protect depositors. As a general rule, the "law has tended to hold directors of depository institutions to a higher level of care than directors of ordinary corporations." Vito Peraino, *Corporate Directors' Liability and the Year 2000 Problem*, Andrews Sec. & Comm. Litig. Rep., Mar. 12, 1997, available in WESTLAW, 3/12/97 ANSECCLR 3.

62. *See, e.g., Senate Banking Committee Asks if Regulators Are Ready for Millennium*, 68 Banking Rep. (BNA) 453 (Mar. 10, 1997). In a February 27, 1997 letter, Senator Robert Bennett (R-Utah) first addressed the financial regulators as to banks' awareness and progress in addressing the year 2000 problem and requested a report from the Federal Reserve Board, the Federal Deposit Insurance Corporation, the Office of Thrift Supervision, the National Credit Union Administration, and the Office of the Comptroller of the Currency. *See id.* at 453. Bennett also advised the regulatory agencies to push for completion of reprogramming by December 31, 1998. *See id.*

63. *See Alex D. McElroy, Senate Banking Panel Expresses Concern on Pace of Year 2000 Compliance Efforts*, 69 Banking Rep. (BNA) 202-03 (Aug. 4, 1997).

organization's year 2000 preparation programs.⁶⁴ These expanded guidelines also require senior management to keep their boards of directors informed on a quarterly basis of their institution's progress in addressing the year 2000 problem.⁶⁵ In light of these guidelines, senior management will also be required to rate an institution's performance against predetermined "performance benchmarks," as well as assessing the ability of outside vendors to provide year 2000 compliant products for their institution.⁶⁶ However, these guidelines should not be seen as a substitute for an institution's own due diligence in ensuring that its vendors are year 2000 compliant, according to Comptroller Eugene Ludwig.⁶⁷ The New York Federal Reserve Bank, for example, has clearly indicated that it does not intend to ensure the compliance of outside vendors.⁶⁸

A. *Approaches of the Different Regulatory Agencies*

1. The Office of the Comptroller of the Currency

In 1997, the Office of the Comptroller of the Currency (OCC) issued Advisory Letter 97-6 entitled "Year 2000 Issues and Examination Approach."⁶⁹ This letter mandated that all national banks regulated by the OCC must have reprogramming completed and testing of the new systems under way by December 31, 1998.⁷⁰

64. See *Federal Regulators Issue Guidance On Business Risks of Year 2000 Problem*, 70 Banking Rep. (BNA) 10 (Jan. 5, 1998). The FFIEC is a council comprised of the Federal Reserve Board, the FDIC, the Comptroller of the currency, the OTS, and the NCUA. See *id.* The council was created to promote uniform supervisory and examination policies for the nation's depository institutions. See *id.*

65. See *id.*

66. See *id.*

67. See Dean Anason, *Ludwig Says Banks Lagging On the Year-2000 Problem*, AM. BANKER, Nov. 5, 1997, at 2.

68. See Jeffrey Goldfarb, *Year 2000: Banks Advised To Partner With Vendors Because Fed Oversight Not Forthcoming*, 70 Banking Rep. (BNA) 50 (Jan. 12, 1998). Fed Vice President George Juncker stated that the industry will "have to test for [themselves]," emphasizing that "regulators won't uncover a problem until it's probably too late." *Id.*

69. OCC Advisory Letter, 97-6 (May 16, 1997).

70. See *id.* In its advisory letter, the OCC requires banks to have all year 2000 compliance work completed by December 31, 1998, in order to allow a year for testing their systems and working out any potential bugs. See *id.* The OCC is to complete this "Supervisory Review" by mid 1998, which will include on-site examinations of all institutions and follow-ups at institutions not in compliance by that date. In reviewing a

The OCC is also currently developing and implementing a “supervisory plan” to address heightened awareness of the year 2000 problem within the industry, performing an initial assessment of the planning efforts of financial institutions for the year 2000 and guiding a supervisory review of all institutions for year 2000 preparedness.⁷¹

Banking institutions should remain cognizant of the OCC’s resolve to seek whatever regulatory sanctions are necessary to ensure compliance on the part of the institutions it regulates. In a letter to the executives of all national banks and their respective vendors, Director Ludwig indicated in no uncertain terms that “[the OCC] will not hesitate to use any and all supervisory tools and enforcement powers to ensure that banks meet the safety and soundness challenge posed by the Year 2000 problem.”⁷²

2. Federal Deposit Insurance Corporation

The FDIC is currently trying to conduct on-site reviews of its more than 6200 state chartered non-member banks by June 30, 1998.⁷³ In addition, the FDIC has created a “centralized tracking system to monitor the progress and manage the oversight of all FDIC-supervised institutions year 2000 compliance efforts.”⁷⁴ As part of this plan, FDIC chairman Andrew Hove has indicated that like the OCC, the FDIC will take “supervisory action . . . including formal enforcement [actions] when warranted, if an institution is not addressing this issue on a timely basis.”⁷⁵ Recently, Michael Zamorski, the deputy director in the FDIC’s Division of Supervision, indicated that the FDIC will be prepared at the appropriate time to close banks or thrifts that are behind in their year 2000 preparation.⁷⁶

bank’s progress, the OCC will also pay particular attention to an institution’s “due diligence reviews” of third party software providers as well as the role of directors and senior management in implementing and monitoring year 2000 compliance efforts. *See id.*

71. *See id.*

72. *Year 2000: Ludwig Urges Banks to Step Up Year 2000 Compliance Programs*, 69 *Banking Rep.* (BNA) 489, 490 (Sept. 29, 1997).

73. *See* Scott Barancik, *GAO Report Finds FDIC Doesn’t Know Enough About Banks’ Readiness for 2000*, *AM. BANKER*, Feb. 11, 1998, at 2.

74. *See* McElroy, *supra* note 63, at 202.

75. *Id.* at 203.

76. *See Year 2000: FDIC Seen Lagging in Y2K Readiness, But Still Pressuring Banks*

The FDIC has also mentioned a drop-dead date after which they will take over institutions that have failed to update computer systems and thereby placed deposit insurance funds or customer deposits at risk.⁷⁷ Finally, the FDIC, on behalf of financial institutions, is performing quarterly assessments of some of the larger software companies' efforts at year 2000 compliance and is making their reports available upon request.⁷⁸

3. The Federal Reserve Board

The Fed is the primary federal regulator of state-chartered banks that are members of the Federal Reserve System as well as the primary regulator of bank holding companies. The main role of the Fed is to act as the central lender for banking institutions while serving to effectuate monetary policy through a number of regulatory powers over these institutions. Inherent in this role is the Fed's obligation to ensure the integrity of transaction liquidity between its reserve branches and member institutions. Fed officials have publicly expressed their concerns about the integrity of transaction liquidity between its reserve branches and member institutions in light of the year 2000 problem.⁷⁹ To address these concerns, the Fed is currently preparing to launch a comprehensive program allowing banks to test computers used for Fed Wire and automated clearing house transactions.⁸⁰ The test will allow banks to send dummy payments with a variety of post-2000 dates to help determine if they

to Be Prepared, BNA Banking Daily, Feb. 11, 1998, available in WESTLAW, 2/11/98 BBD d2. Other enforcement actions may include termination of deposit insurance, appointment of a receiver, or even forced mergers. *See id.*

77. *See id.* The FDIC has indicated that such a date would depend on the size of the institution. *See id.* The FDIC, as well as other regulators, is considering a number of triggering events that would require takeover of an institution, including if computer failure within an institution interrupts its ability to participate in the Federal Reserve's Payment system. *See id.*

78. *See* Whiteman, *supra* note 50, at 6.

79. *See* McElroy, *supra* note 63, at 203. Fed Governor Edward W. Kelley, Jr., in addressing the Senate Banking Committee, "[assured] . . . that the [Fed] is giving the Year 2000 problem its highest priority, commensurate with our goal of maintaining the stability of the nation's financial markets and payments systems, preserving public confidence, and supporting reliable government operations." *Id.* at 203.

80. *See* Janet Seiberg, *Fed to Test Payment System Immunity to Year 2000 Glitch*, AM. BANKER, Jan. 27, 1998, at 1.

have eliminated the year 2000 problem in their systems.⁸¹ During the first half of 1998, the Fed will monitor both domestic and international bank operations in the United States to ensure that all institutions have year 2000 plans intact.⁸² For the most part, such monitoring will take place through the course of their routine examinations.⁸³

4. Office of Thrift Supervision

The OTS regulates all federally chartered savings and loan institutions.⁸⁴ To ensure year 2000 compliance, the OTS is planning to utilize a full range of examination procedures.⁸⁵ The OTS has conducted off-site supplemental evaluations of the more than 1,300 thrifts the agency regulates and has preliminary off-site reports on year 2000 preparedness for all thrifts.⁸⁶ The OTS will use the results from these supplemental examinations to prioritize the list of institutions for which it plans to conduct on-site examinations.⁸⁷ In addition, the OTS has started publishing a year 2000 newsletter called "MMillennium" to facilitate further awareness of year 2000 issues.⁸⁸ Furthermore, the OTS will address year 2000 issues in reviewing all corporate merger applications received by the agency.⁸⁹

81. *See id.* The Fed will publish a schedule in the Federal Register of specific services banks may test on the system each day. *See id.* at 2.

82. *See* Goldfarb, *supra* note 68, at 50.

83. *See id.*

84. *See* JONATHON R. MACEY & GEOFFREY P. MILLER, *BANKING LAW AND REGULATION* 68 (2d ed. 1997).

85. *See Thrift Industry Making Progress In Meeting Year 2000 Challenge*, NEWS RELEASE 97-50, (OTS, Washington, D.C.), July 30, 1997, available in 1997 WL 438926. Officials at the OTS have "encouraged its five regulatory regions to use the full range of examination approaches available . . . to ensure completion of the 1998 examinations by deploying on-site, off-site, special and limited exams and field visitations as necessary, depending on the circumstances found at each thrift institution." *Id.*

86. *See id.*

87. *See id.*

88. *See Year 2000: Thrift Regulator Offers Y2K Newsletter Helping Thrifts Prepare for the Millennium*, BNA Banking Daily, Feb. 12, 1998, available in WESTLAW, 2/12/98 BBD d2.

89. *See id.*

5. Securities Exchange Commission

All banks and bank holding companies that are publicly traded entities will be subject to filing and disclosure requirements enforced by the Securities Exchange Commission (SEC). Therefore, these institutions will need to inform their shareholders in reasonable detail if they expect to spend material amounts of money to make their computer systems compliant.⁹⁰ Larger institutions that have begun to perform both public and private placement securities underwriting through the use of the section 20 Subsidiary (section 20 sub) will have further issues to address. Such institutions may be subject to heavier scrutiny than banks without section 20 subs who are merely required to adhere to the same filing requirements as normal publicly traded companies.⁹¹ Furthermore, all publicly held banking institutions should expect strict regulatory scrutiny into disclosures concerning year 2000 expenses and liability, as the year 2000 problem has recently become a top priority at the SEC.⁹²

B. Other Effects of Regulatory Supervision on Banking Institutions

In late summer 1997, studies revealed that more than eighty-five percent of all large commercial banks were fully aware of and were addressing the year 2000 problem.⁹³ However, a later survey by the OCC revealed that fifteen percent of commercial banks were not prepared to deal with the year 2000 problem, and another twenty percent were just starting to address the problem.⁹⁴ Such statistics

90. *See Securities and Exchange Commission: Companies Need to Be Specific About Year 2000 Disclosures, Staff Says*, 30 Sec. Reg. & L. Rep. (BNA) 77 (Jan. 16, 1998) available in WESTLAW, 30 SRLR 77. If such amounts are deemed to be material, the institution's disclosures should include specific dollar amounts. *See id.*

91. *See Year 2000: SEC to Require Detailed Reporting From Broker-Dealers, Official Says*, 30 Sec. Reg. & L. Rep. (BNA) 117 (Jan. 23, 1998) available in WESTLAW, 30 SRLR 117. The SEC is planning to issue a proposal requiring broker-dealers to report their state of readiness for complying with the year 2000 problem. *See id.* The proposal would require two separate reports, one 45 days following the adoption of the proposal, and a second in 1999 outlining the institution's overall readiness preparation and further specifying compliance and testing schedules. *See id.*

92. *See id.*

93. *See McElroy, supra* note 63, at 202-03.

94. *See Whiteman, supra* note 50, at 6. It should be further noted that there are various

lead one to question the banking industry's true level of preparedness and realistic probability of achieving compliance. The true state of compliance for a majority of the banking industry will not be known until the summer of 1998 by which time the OCC plans to have examined all national banks on year 2000 compliance efforts.⁹⁵ The results of the regulatory agency examinations should shed significant light as to which banks realistically will be ready for the year 2000 and which banks will not.⁹⁶

Of all commercial banks, BankBoston may be leading the pack because it began addressing the problem as early as 1995. Consequently, BankBoston has been extremely successful thus far in striving to achieve compliance.⁹⁷ As previously discussed, time will

surveys citing different levels of preparedness within the industry. For instance a study commissioned by Fannie Mae indicated that as of November 6, 1997, a mere 71% of financial related companies had taken steps to address the year 2000 problem, with 49% admitting that their firm still faces problems. *See Survey Shows Some Firms Behind on Y2K Problem*, 69 Banking Rep. (BNA) 787 (Nov. 24, 1997). The multitude of reports may indicate that the real status of the industry will be best assessed following the various regulatory examinations.

95. *See Federal Banking Agencies Gear Up to Ensure Smooth Transition to Year 2000*, 68 Banking Rep. (BNA) 590, 590-91 (Mar. 31, 1997). A cause for concern: Federal Reserve Board Governor Edward Kelley, Jr. has indicated that while data collected during exams would be kept confidential, all enforcement actions taken against banks that fail to fix their computers would be made public. *See Dean Anason, Senate Banking Panel Eyes Bill to Limit Liability of Banks Ready for Year 2000*, AM. BANKER, July 31, 1997, at 4. Julie Williams, Chief Counsel of the OCC, said that the agency had completed about 500 of 2000 year 2000 examination checks due by mid-1998 as of mid-November 1997. *See Dean Anason, Government Gets Tough With Bank on Year-2000*, AM. BANKER, Nov. 18, 1997, at 1-2. The FDIC, as of early November 1997 had already completed an initial inspection of 81% of the more than 6,200 institutions that it supervises. *See Anason, supra* note 67, at 2.

96. *See generally FFIEC Reminds Financial Institutions Of Critical Year 2000 Conversion Issues*, 68 Banking Rep. (BNA) 886 (May 12, 1997) (noting that bank regulatory agencies plan to have a supervisory review of all regulated institutions' year 2000 compliance efforts completed by mid-1998. These results will be used to prioritize on-site examinations for institutions that have not started their compliance efforts. Furthermore, FFIEC is recommending a completion date of December 31, 1998, to allow sufficient testing time.); *see also Alex D. McElroy, Risk-Based Capital, Technology Issues Dominate Interagency Plans, Officials Say*, 70 Banking Rep. (BNA) 110-11 (Jan. 19, 1998). Bank regulators, with the backing of the Senate Committee on Banking have repeatedly stated that efforts at compliance should be completed by December 31, 1998, so that a full year could be allotted for testing the revamped systems. *See, e.g., Federal Banking Agencies Gear Up to Ensure Smooth Transition to Year 2000, supra* note 95, at 590; *Senate Banking Committee Asks if Regulators Are Ready for Millennium, supra* note 62, at 453; *Year 2000 Issues and Examination Approach, supra* note 46.

97. *See Carol Power, BankBoston Gets a Thumbs-Up for Year-2000 Program*, AM. BANKER, Sept. 25, 1997, at 7. In October, BankBoston became the first financial institution to be certified by the Information Technology Association of America (ITAA) for its corporate efforts to upgrade its computer systems for the millennium change. *See id.* The

be one of the critical factors determining the success of other banks seeking to solve the year 2000 problem. Other large institutions such as First Union which began to address the problem as early as 1988; Chase Manhattan which began in January 1995; and Bank of America which began in 1990,⁹⁸ may be the most likely of all the other candidates to achieve timely and full compliance.⁹⁹

Several of the relevant bank regulatory agencies hope to have complete assessments of year 2000 compliance finished in 1998. That year may prove to be a watershed for several reasons. First, enforcement actions, or at least the threat thereof, may be deemed necessary to push laggard institutions along. Such enforcement actions could have a devastating effect on the confidence of an institution's customers, causing them to move their deposits and other business to institutions that are year 2000 compliant or at least perceived as being such. Second, disclosure of these enforcement actions, coupled with the need to disclose all material liabilities stemming from the year 2000 problem, could likely lead to lower valuation of an institution's publicly traded shares, and consequently make an institution a much cheaper target for takeover by a larger, more compliant institution.

To date, both the Fed and FDIC have taken enforcement actions against a bank holding company in Georgia and its subsidiaries. The Fed issued a cease and desist order against Putnam-Greene Financial Corporation, a bank holding company in Eatonton, Georgia. The cease and desist order required "the holding company to repair its systems and report its progress frequently under a strict series of deadlines."¹⁰⁰ Among other mandates, this action saddled the institution with a number of heavy burdens, targeting in particular a lack of sufficient leadership by the holding

ITAA year 2000 certification essentially amounts to a third party audit, and it concluded that BankBoston employs the "best practices in the industry," said Steve McManus, Communications Manager of BankBoston's Millenium Project Team. *See id.*

98. *See* McKendrick, *supra* note 19.

99. *See generally* FFIEC *Increases Pressure on Banks To Speed Cure For Year 2000 Problem*, BANKING POL'Y REP., May 19, 1997, at 7, available in WESTLAW, 16 No. 10 BNKPR 7 (noting that FFIEC expects all banks to have testing of mission critical systems under way by December 31, 1998). Meeting this deadline is probably most feasible for those institutions that began addressing this problem several years ago.

100. Anason, *supra* note 2, at 4.

company's directors and upper management.¹⁰¹ The order required Putnam-Greene to submit within thirty days of the effective date of the order, "an acceptable plan describing the specific actions that will be taken by the board of directors and management to ensure that each of Putnam-Greene's Electronic Information Systems are year 2000 compliant."¹⁰² Most significant, however, is the clear message that this action sends: bank directors and upper management will be some of the first parties targeted by regulators, and the deadlines will be tight as the institution must now complete all of its year 2000 testing by December 31, 1998.¹⁰³

The order also placed Putnam-Greene under tight deadlines to send in detailed disaster and recovery plans in case the new systems fail to function properly.¹⁰⁴ In addition, the order requires the holding company to implement year 2000 compliant Electronic Information Systems by July 1, 1999.¹⁰⁵ The FDIC issued a similar cease and desist order against all of Putnam-Greene's subsidiaries which contained many of the same requirements as the Fed order.¹⁰⁶

Although regulators have emphasized that they prefer to work with the banks rather than imposing enforcement actions, the Putnam-Greene action proves that regulatory agencies are serious in

101. In re Putnam-Greene, No. 97-027-B-BHC, 1997 WL 714851, at *1 (FRB, Nov. 12, 1997). The First Coastal Bank of Georgia, one of three subsidiaries of Putnam-Greene, was ordered by the FDIC to cease a number of unsafe and unsound banking practices including the failure to provide adequate supervision and direction over the affairs of the Bank by the board of directors, as well as "operating the bank with Management whose policies and practices with respect to electronic information systems are detrimental to the Bank and jeopardize the safety of its deposits." In re First Coastal Bank, FDIC-97-085b (Nov. 12, 1997) (WESTLAW, FFIN-FDICED Database).

102. In re Putnam-Greene, No. 97-027-B-BHC, 1997 WL 714851, at *1 (FRB, Nov. 12, 1997).

103. See *Year 2000: Regulators Take First Enforcement Action Ordering Year 2000 Compliance By Banks*, 69 Banking Rep. (BNA) 777 (Nov. 24, 1997).

104. See *id.*

105. See *id.* The order also requires Putnam Greene to submit to the Federal Reserve Bank a plan to increase the number of its outside directors and to report on a quarterly basis its progress in this regard. See *id.*

106. See In re Farmers and Merchants Bank, FDIC-97-084b (Nov. 12, 1997) (WESTLAW, FFIN-FDICED Database); In re First Coastal Bank, FDIC-97-085b (Nov. 12, 1997) (WESTLAW, FFIN-FDICED Database); In re Farmers Bank, FDIC-97-086b (Nov. 12, 1997) (WESTLAW, FFIN-FDICED Database). Farmers and Merchant Bank of Eatonville, Ga., First Coastal Bank of Georgia of Pembroke, Ga., and The Farmers Bank in Union Point, Ga., which are subsidiaries of Putnam-Greene, were all recipients of cease and desist orders from the FDIC.

their approach towards the year 2000 problem. The action has also shown that supervision will only become more intense if an institution chooses to lag in resolving its problems internally. Most notably, a bank will be put on an even stricter timetable for addressing its compliance problems.

Banks must also consider the prospect of a customer relations crisis if regulatory agencies take such an enforcement action against their institution. While results of the periodic "safety and soundness examinations," and the special year 2000 examinations and assessments will be kept out of the public eye, enforcement actions can and will likely be made public.¹⁰⁷ Because of this probable scenario, banks must manage the year 2000 problem as both a customer relations problem as well as a legal and engineering one.

C. *Potential Effect of New Legislation and Rulemaking*

Banks must remain aware of pending year 2000 legislation and rulemaking in Washington, D.C. Senator Robert Bennett (R-Utah), Chairman of the Senate Banking Financial Services and Technology Subcommittee, has proposed a bill that would allow sanctions against "companies that fail to satisfy fiduciary duties to customers as a result of negligence in Year 2000 remediation efforts."¹⁰⁸ Legislators have also suggested a bill that would "[alter] the burdens of discovering fraud and transaction errors in banking and other financial records for U.S. consumers."¹⁰⁹ Such a bill would undoubtedly facilitate an already long list of potential tort actions that may be brought by consumers against banking institutions.

The Senate Subcommittee on Financial Services and Technology has also proposed new legislation that would require "four set types of disclosure by publicly traded companies."¹¹⁰ The Computer Remediation and Shareholder Protection Act of 1997¹¹¹

107. See Dean Anason, *Regulators' Crackdown On a Year-2000 Laggard Sends a Wake-Up Call*, AM. BANKER, Nov. 24, 1997, at 4.

108. *Year 2000: Senators Consider Weighing in To Spur Year 2000 Problem Solutions*, supra note 41, at 58-59.

109. *Id.* at 59.

110. Niles S. Campbell, *Year 2000: Separate Bills Addressing Y2K Problem Planned by House and Senate Lawmakers*, 69 Banking Rep. (BNA) 705 (Nov. 10, 1997).

111. S. 1518, 105th Cong. (1997).

would require disclosure of "likely costs associated with the defense of lawsuits associated with the year 2000 problem;" the corporation's "progress in addressing the problem within its specific divisions and departments;" existing "insurance coverage for defense of lawsuits or the specific occurrence of any year 2000 failure;" and a corporation's "contingency plans for computer system failure, by division or department."¹¹²

Senator Bennett has stated that he has also considered proposing "legislation to protect year 2000 compliant institutions from potential liability for failures in computer systems over which they [had] no control."¹¹³ Such legislation, if passed, could serve to temper liability between banking institutions and data processors, other banks, ATM networks, or even Federal Reserve branches.¹¹⁴ Furthermore, the proposed legislation could prevent customers from collecting from their banks if a mistake resulted from a year 2000 glitch at a vendor, third party data processor, or another bank.¹¹⁵

Finally, House Banking Committee Chairman, James Leach (R-Iowa), has also proposed legislation to help ease the burden on banking institutions dealing with the year 2000 problem. Chairman

112. *Id.*

113. McElroy, *supra* note 63, at 202. The Senate Banking Committee, and Chairman Alfonse D'Amato in particular, have played an active role in guiding the regulatory agencies to properly address the year 2000 problem. Both his inquiries and scrutiny of responses received from the heads of the regulatory agencies indicate that he is playing anything but a passive role in promoting awareness of the problem within the industry. See, e.g., *Senate Banking Committee asked if Regulators are Ready for the Millennium*, 68 Banking Rep. (BNA) 453 (Mar. 10, 1997) (noting Senator Bennett expressed concern over difficulty increasing as the millennium approaches); *D'Amato Presses for more Information on Fed's Response to Year 2000 Problem*, 68 Banking Rep. (BNA) 743 (Apr. 21, 1997) (noting D'Amato, not satisfied with the Fed or NCUA's response to his inquiry for information regarding their year 2000 plans, continues to push for efforts to promote more than mere awareness of the year 2000 problem); *Senate Banking Panel Expresses Concern On Pace of Year 2000 Problem Compliance*, 69 Banking Rep. (BNA) 202 (Aug. 4, 1997). All things considered, banks need to carefully monitor year 2000 legislative developments that could have substantial bearing on their liability to third parties, as well as their susceptibility to regulatory action.

114. Comments from within both the ranks of regulatory agencies as well as the Senate Banking Committee indicate a high degree of concern with year 2000 compliance and the far reaching effects of institutions that fail within an industry that is so "interconnected." See Gordon, *supra* note 1. These same groups expressed concern over the "loss of consumer faith in the security of banks" as well as the ultimate role of bailout that the American taxpayer will play if an S&L type failure occurs within the banking industry as a result. *Id.*

115. See Dean Anason, *Senate Banking Panel Eyes Bill to Limit Liability of Banks Ready For Year 2000*, AM. BANKER (Daily News Digest), July 31, 1997, at 4.

Leach's bill would "provide a safe harbor from litigation based on [year 2000] caused violations of the law," and "authorize federal regulators to waive civil monetary penalties and work toward reducing damages assessed by courts due to inadvertent technical violations of the law directly caused by Y2K glitches."¹¹⁶

As the year 2000 draws nearer and the press coverage becomes more intense, mainstream America is likely to put more political pressure on Congress and bank regulators to take action to maintain consumer confidence in our nations financial infrastructure. Consequently, banks should be prepared for intense scrutiny because, while new laws may help ease the burden for those that achieve compliance, those banks that fail to make the requisite progress are unlikely to benefit from such future legislation.

IV. SURVEY OF POTENTIAL LEGAL ISSUES FOR BANKS AND OTHER FINANCIAL INSTITUTIONS

In addition to the possibility of regulatory enforcement actions discussed above, banks may become involved in private litigation as a result of year 2000 problems. Banks may find themselves either as defendants in shareholder derivative actions for failure to adequately address year 2000 glitches that subsequently result in loss to the institution, or as plaintiffs in litigation to pass year 2000 costs and losses on to third party software and hardware vendors. The legal issues likely to be raised in these suits are discussed more fully below.

The most overwhelming aspect of the year 2000 problem remains the sheer number of potential legal issues it may instigate. Banks must ensure that the solutions for one legal problem do not cause an institution to unknowingly create other legal pitfalls. Banks and thrifts must prepare for litigation and regulatory scrutiny by carefully and comprehensively keeping records and documenting all steps taken to reach year 2000 compliance. Only with proof of preventive action will banks successfully defend the multitude of inevitable lawsuits and regulatory actions.¹¹⁷

116. Campbell, *supra* note 110, at 705-06.

117. A commentator from a leading Washington, D.C. law firm representing the financial industry commented that "the way to reduce the likelihood of being a defendant in

A. *Litigation Issues*

Banking is an interconnected industry, and numerous systems reprogrammed for the year 2000 from various institutions will have to interact efficiently to maintain the integrity of our financial information systems.¹¹⁸ In light of this reality as well as the large number of parties that the average institution will have to deal with in attempting to solve the problem, it seems inevitable that litigation will arise.¹¹⁹ While banks must continue in their efforts to achieve compliance before the year 2000, at some point, bank directors and officers must acknowledge and disclose when a substantial chance of failure exists within their mainframe systems and give shareholders fair warning of the litigation onslaught that is likely to follow.¹²⁰

Lawsuits may potentially be brought against an institution by a variety of parties including customers, business partners, and shareholders. Institutions will therefore need to take precautions enabling them to raise effective defenses to customer and shareholder claims. In addition to defenses, banks should also work ahead to properly allocate liability risk among third parties, both past and present, with whom they have contracted to design their software systems. Banks will probably find it necessary to file lawsuits of their own against vendors, third party data processors, as well as other third parties whose negligence has led to the introduction of corrupt or noncompliant data into their system.

such litigation or administrative proceeding is to start preparing today the record of your institution's compliance with legal, regulatory, and operational elements of the problem and management's attempt to exercise prudence in resolving the issues. . . ." *Year 2000: Prepare the Record Now For Year 2000 Suits, Firm Says*, 69 *Banking Rep.* (BNA) 777 (Nov. 24, 1997).

118. See *supra* notes 44-49 and accompanying text.

119. Sanwa Bank, as previously discussed in the context of vendor reliance, has already run into a problem with system interconnection. See *supra* note 43 and accompanying text. See *id.*

120. See Jeff Jinnett, *Year 2000 "Millennium Bug" Litigation*, L.A. LAW., June, 1997, at 34 (citing Alison Rea, *Does your Computer Need Millennium Coverage?*, BUS. WK., Mar. 10, 1997). The Giga Information Group, an information technology firm, has estimated that costs of year 2000 litigation could run in the range of \$1 trillion. See *id.* If that figure is not imposing enough by itself, consider that the annual total of expenses associated with litigation in this country is \$300 billion, or *less than one third of the above total*. See *id.* (emphasis added) (citing Jack Kemp, *Common Good Above Profits*, NAT'L L.J., Nov. 4, 1996, at A20).

1. Tort and Contract Claims Against Banking Institutions

If the failure of a bank's system disrupts the production of accurate financial information, banks must be prepared for the numerous actions their customers and business partners will inevitably bring against them. Everything from breach of contract to consumer fraud cases could potentially arise,¹²¹ with bank customers charging that Chief Executive Officers, Chief Financial Officers, and directors had the power to minimize the risk associated with the year 2000 problem.¹²²

It is unlikely banks will be able to successfully defend against such actions by claiming lack of knowledge or unforeseeability of the risks associated with the year 2000. The banking industry is perhaps one of the most informed industries of all, as regulatory agencies have made repeated efforts to ensure that institutions are fully informed and monitored with respect to their year 2000 compliance.¹²³ Furthermore, as the year 2000 problem continues to be discussed in the media, officers of financial institutions will be hard pressed to argue that the problems were beyond their knowledge or control.¹²⁴

121. See Vito Peraino, *The Millennium Looms: 2000 Liabilities await the Banking Industry*, BANK NEWS, Feb., 1997, at 15-16, available in WESTLAW, DIALOG Provider, BANKINFO database. VISA announced in early 1997 that it would begin charging its 20,000 member banks a fine ranging from \$1,000 to \$170,000 per month if their ATM's rejected credit cards because of a card expiration date beyond 1999. See Mitchell, *supra* note 2, at 7 (citing T. Hoffman and R. Scheier, *VISA leads Charge For Compliance*, COMPUTER WORLD, Jan., 13, 1997, at 2). This is a perfect example of where an institution will need to be prepared to allocate risk to other parties. For example, in this situation, it could very well be that the ATM network and not the bank is responsible for the glitch. In late 1996, First USA Bank issued credit cards that had year 2000 expiration dates that were turned down by point of sale terminals that read the date as 1900, rather than 2000. See Jeremy Quittner, *Credit/Debit/ATMs, As Year 2000 Looms, Issuers Play Beat the Clock*, AM. BANKER, Aug. 5, 1997, at 11.

122. See Warren Reid, *See supra* note 39, at 37.

123. See *supra* notes 61-92 and accompanying text.

124. See Warren Reid, *Challenges and Legal Pitfalls of the Year 2000 Problem*, INSIDE LITIG., Nov. 1996, at 6, available in WESTLAW, 10 No. 11 INLIT 6. Mr. Reid also suggests that even "excusable delay" clauses common in contracts will provide no protection from liability. See *id.*

2. Shareholder Derivative Suits and Other Claims

Directors and officers may bear the brunt of the majority of lawsuits that are filed based upon principles of “due diligence” and “material disclosure” in addressing year 2000 concerns. Furthermore, directors and officers must be aware of potential liability for gross negligence under applicable banking regulations as they carry out their duties.¹²⁵

Directors and officers have a major responsibility as fiduciaries to their respective institution and their shareholders. In guarding against director liability, institutions should be prepared to show that their officers and directors acted reasonably in attempting to solve the problem.¹²⁶ However, insuring against potential liability will require more than just good effort. A “written record of [such due] diligence” will be just as imperative as litigation arises.¹²⁷

Bank directors and officers will also need to address disclosure concerns within a number of contexts, most notably, the high costs of addressing the year 2000 problem. Because these costs could amount to several hundred million dollars for some institutions, not including the potential liability from systems failures, directors will likely be under a duty to exercise “due diligence” by inquiring into the true scope of year 2000 liability and costs to their institution.¹²⁸ If the high costs of addressing the year

125. See 12 U.S.C. § 1821 (1994). The Federal Institutions Reform, Recovery and Enforcement Act of 1989 (FIRREA) provides that:

a director or officer of an insured depository institution may be held personally liable for monetary damages in any civil action, by, on behalf of, or at the request or direction of the [FDIC] . . . for gross negligence, including any similar conduct or conduct that demonstrates a greater disregard of a duty of care . . . including intentional tortious conduct, as such terms are defined and determined under applicable state law. Nothing in this paragraph shall impair or affect any right of the [FDIC] under other applicable law.

Id.

126. See Debra Stamper, *Year 2000: Issues and Answers*, KY. BANKER, Mar. 1997, at 17-20, available in WESTLAW, DIALOG Provider, BANKINFO database.

127. See Rauer L. Meyer & Steven L. Hock, *Legal Issues and Risks of the Year 2000 Problem*, (visited Feb. 8, 1998) <<http://www.comlinks.com/legal/tmjb7.htm>>.

128. See Peraino, *supra* note 61, at 3. The “Statement of Financial Accounting Standards (SFAS) No.5 (Accounting for Contingencies). . . provides that contingencies which are reasonably possible, whether or not the amount can be calculated or estimated, must be disclosed in a note to the financial statements.” Jinnett, *supra* note 1, at 20. SFAS No. 5 defines a contingency “as an existing condition, situation, or set of circumstances

2000 problem are in fact deemed to be “material,” officers and directors would be wise to disclose that information.¹²⁹ Furthermore, as such costs are incurred, directors and officers will need to consider the implications of such significant costs on their duty to disclose material information within their audited financial statements.¹³⁰ A recent ruling by the Financial Accounting Standards Board stated that year 2000 compliance work will not be amortizable as a capital expenditure; thus, expenses associated with year 2000 compliance could significantly affect the earnings of many financial institutions in the near term.¹³¹

Banks also need to review their loan portfolios to detect potential year 2000 compliance problems. Banks will need to factor debtors’ noncompliance into its earnings in the form of higher “bad debt allowances” considering the higher amount of risk that will be associated with that particular client.¹³² Bank counsel will also need to encourage banking directors and officers to be accurate in disclosing the effect that loan recipients’ noncompliance will have on their institution’s earnings.

Publicly held institutions will also need to ensure that they properly disclose required financial information on all forms filed with the SEC.¹³³ If non-compliance is “reasonably likely” the SEC will probably require a bank to disclose that fact in the Management’s Discussion and Analysis section of its respective

involving uncertainty as to possible gain or loss to an enterprise that will ultimately be resolved when one or more future events occur or fail to occur.” *Id.*

129. *See id.*

130. *See Jinnett, supra* note 1, at 20.

131. *See Mitchell, supra* note 2, at 3.

132. *See id.*

133. *See id.* The SEC has made it clear that it is prepared to take enforcement action upon a showing of evidence that material information regarding year 2000 expenses and impact is not being disclosed. *See Duncan, supra* note 37, at 1682-83. Furthermore:

Public companies are required to file an annual report on Form 10-K and quarterly reports on Form 10-Q with the U.S. Securities and Exchange Commission. Pursuant to Reg. S-K, Item 303, each such annual report and quarterly report must include a section entitled “Management’s Discussion and Analysis of Financial Condition and Results of Operations.” Instruction 3 to Item 303(a) provides that: “the discussion and analysis shall focus specifically on *material events* and uncertainties known to management that would cause reported financial information not to be necessarily *indicative of future operating results or future financial condition.*”

Jinnett, *supra* note 1, at 21 (emphasis added).

reports.¹³⁴ In addition, institutions aware of future liabilities associated with the year 2000 problem must fully disclose them in their SEC filings, both in terms of compliance expenditures as well as damages resulting from potential breaches of contract and liability in tort discussed above.

There is great potential for shareholder derivative suits brought on by losses suffered as a result of a bank's failure to address these concerns in a timely manner or failure to properly disclose an institution's real state of preparedness in addressing the issue. Therefore, the timeliness of directors and officers action in addressing year 2000 compliance becomes crucial. The potential for shareholder derivative suits is compounded by the fact that banks have been given an overabundance of fair warning. Because such shareholder actions are inevitable, bank directors and officers must implement comprehensive top down solutions that evidence concerted efforts to assess potential pitfalls within their respective institutions, and bank directors and officers must fully document such efforts.

With the heightened level of consolidation within the banking industry, as well as the likely willingness of non-compliant banks to sell out, year 2000 compliance becomes all the more important within the context of mergers and acquisitions. As banks acquire new companies, bank directors and officers will have to inquire into whether the computer systems of the institutions they are acquiring are year 2000 compliant. Mergers will substantially add to an institution's compliance burden if the entity acquired is not year 2000 compliant.¹³⁵ The Federal Reserve Board has already indicated that it intends to hold up consolidation with institutions that have

134. See Jinnett, *supra* note 1, at 21. Furthermore, the SEC's Securities Act Release No. 6385 implemented in Financial Reporting Release No. 36 (May 18, 1989) provides that a disclosure duty exists when an "uncertainty is both presently known to management and *reasonably likely* to have material effects on the registrant's financial condition or results of operations." *Id.* (emphasis added). Management's Discussion and Analysis reports must be included in all annual reports and quarterly reports on Form 10-K and 10-Q respectively that public companies are required to file with the SEC. *See id.*

135. See McKendrick, *supra* note 19. In the Chase Manhattan merger with Chemical Bank, Chemical Bank brought to the transaction the burden of testing and potentially reprogramming 80 to 90 million lines of its computer code. Chase already has an estimated 200 million lines to test. *See id.*

significant year 2000 compliance problems.¹³⁶ Other regulatory agencies will also consider year 2000 compliance in the merger approval process.¹³⁷ This added level of inquiry may slow the review process as well as delay approval.

During all mergers and acquisitions, directors and officers should sort out who, among the combined organizations, is responsible for both pre-year 2000 and post-year 2000 expenses. Failure to exercise "due diligence" in evaluating potential consolidation proposals will leave the door open for corporate liability for banks and could also result in liability for directors and officers to shareholders in derivative suits.¹³⁸ Given that some companies may be inclined to sell divisions or subsidiaries before the year 2000 because they cannot afford the cost of achieving year 2000 compliance,¹³⁹ banks attempting to enter into mergers will be under heavier regulatory scrutiny than other corporations in this arena, making the exercise of "due diligence" even more critical.¹⁴⁰

136. See Olaf de Senerpont Domis and Dean Anason, *Capital Briefs: Fed Vows Crackdown on Year-2000 Snafus*, AM. BANKER, Nov. 17, 1997, at 2. The Fed stated in a November 12, 1997, supervisory letter to all banks and holding companies it regulates that "in considering expansion proposals, an important element of the Federal Reserve's assessment of the financial and managerial factors will be an applicant's ability to ensure year 2000 readiness for the combined organization." *Id.*

137. See Bill McConnell, *OCC to Weigh Year 2000 Readiness Before Granting Applicants' Requests*, AM. BANKER, Jan. 26, 1998, at 2. In advisory letter 98-1, the OCC indicated that it will consider year 2000 compliance before approving new charters, mergers, and conversions as well as new federal branches of foreign banks. See *Year 2000: National Banks' Year 2000 Preparations Will Be A Factor in Applications*, OCC Says, BNA Banking Daily, Jan. 26, 1998, available in WESTLAW, 1/26/98 BBD d9.

138. See Mitchell, *supra* note 2, at 3.

139. See Jinnett, *supra* note 1, at 20.

140. See Jonathon Polonsky, *Thinking Points for a Full Company Response to the Year 2000 Software Crisis*, YEAR 2000 J., Thelan, Marrin, Johnson & Bridges L.L.P., Vol. 1, No. 5, 1997, (visited Feb. 6, 1998) <http://www.tmj.com/article/art_22.htm>. John Wexted, Senior Vice President of the Chicago Federal Reserve noted that his Fed Branch "pays close attention to [year 2000] issues as it relates to merger and acquisition activity. . . [noting] that there are a number of companies that have been readying themselves for sale or may have made decisions that they don't want to remain independent . . . who haven't paid a lot of attention to the Year 2000 issue." *Id.* Mr. Wexted indicated that the "Fed will require banks to evaluate potential Year 2000 compliance problems as part of doing due diligence on acquisition targets." *Id.* Another issue that could arise concerns the possibility of larger institutions taking over smaller institutions that have not obtained a satisfactory examination rating from their Regulatory Agency and have had publicly disclosed enforcement actions taken against them for failing to progress sufficiently towards year 2000 compliance. Assuming full disclosure by banks that truly are in trouble from a compliance standpoint, an institution with a rather sophisticated compliance effort in place could potentially acquire institutions that have rather large compliance liabilities reflected

In light of these potential liabilities, bank attorneys should examine director and officer liability insurance policies to determine whether year 2000 liability is covered. A number of insurance companies have publicly stated their intention not to cover year 2000 expenses, a move that would indeed tend to stymie litigation efforts.¹⁴¹ If these intentions play out, bank attorneys will need to encourage institutions to seek supplementary policies that are being offered by several new insurance groups.¹⁴²

3. Suits Against Vendors, Banks, and Other Third Parties

A key defense to a bank's potential liability will be its ability to allocate that liability to third party data processors or software vendors. Assuming an institution does not have in-house developed software, directors and officers should thoroughly assess their contractual relationships with software vendors. Directors and top management must ensure that software licenses and computer system development agreements clearly state what obligations the vendor has to them.¹⁴³ Solutions to compliance problems as well as possible liability claims lie within these documents.

Banks can bring suits against hardware and software vendors and service providers under a variety of warranty claims, both express and implied.¹⁴⁴ They will need to determine if in fact year

in their financial statements. It will be interesting to see if regulatory agencies actually use the ability to sanction in light of consumer confidence concerns. Also of interest is the degree to which institutions further along may use such information to their competitive advantage, perhaps in improper ways, to manipulate a takeover. One would be prudent to examine potential "unfair and deceptive trade practices" issues that would potentially be implicated by larger institutions using such enforcement information to their advantage.

141. See Robert L. Scheier and Patrick Thibodeau, *Insurers Plan Limitations on 2K Coverage*, COMPUTER WORLD, News, Sept. 1, 1997, (visited Feb. 6, 1998) <<http://www.computerworld.com/res/index.html>>.

142. See Mitchell, *supra* note 2, at 7 (noting that at "least two insurance companies (AIG of New York and Minet Group of London) have offered to selected financial institutions Year 2000 insurance in an amount of up to \$100 million").

143. See *Banking Executives Turn of the Century Challenges: A Framework for Risk Reduction*, BANK SYS. & TECH., Aug., 1997, at 27 n.8. These individuals in doing so have to plan for the inevitable litigant assertion that "the board of directors, CEOs, CFOs had the power to minimize risk." *Id.*

144. See Jinnett, *supra* note 120, at 36. Possible express warranty suits include: warranties for year 2000 compliance; warranties that software contained no viruses, arguing that the Millennium bug constitutes a "logic bomb" which is a cousin to viruses; and arguments that a "vendor's disclaimer of implied warranty or merchantability was

2000 fixes were contemplated by warranties in their software agreements. However, bank directors and officers must keep in mind that self-help, in some cases, will void warranty claims if banks choose to fix their systems in-house.¹⁴⁵ Thus, banks must carefully study their contracts and the warranty provisions within them and attempt to modify licensing agreements to provide for year 2000 compliance.

Banks may also be able to bring suits against vendors based on fraud or misrepresentation. They can argue that third parties knew that such software programs would need to be utilized into the next century and that the third party “fraudulently failed to alert the plaintiff to the fact that the product would not operate past its ‘event horizon’ which might even precede January 1, 2000.”¹⁴⁶ However, there are a number of potential defenses that third parties can raise against institutions making such claims. In tort claims, potential defendants could argue “assumption of risk,” claiming that banking institutions had full knowledge of the year 2000 problem at the time of purchase and therefore should be estopped from belatedly raising a claim against them.¹⁴⁷ This argument is bolstered by the fact that the year 2000 problem has been “common knowledge” in the technology community for decades and that malfunctions have been occurring for years due to date field problems.¹⁴⁸ Furthermore, if the FDIC has

ineffective to exclude liability for latent defects such as the logic bomb, since to permit such a disclaimer would be unconscionable.” *Id.* at 36. (citing *Sierra Diesel Injection Serv. v. Burroughs Corp.*, 874 F.2d 653 (9th Cir. 1989) (finding that warranty disclaimer in a computer sales contract was ineffective and holding computer vendor liable for breach of warranty); RESTATEMENT (SECOND) OF CONTRACTS § 208 (1981) (stating that court may refuse to enforce unconscionable term of contract)). Even in the absence of express warranties, banks may be able to bring suit based on “implied warranties of fitness for a particular purpose.” Jinnett, *supra* note 120, at 36. Institutions may be able to argue such warranties guarantee the life span of their systems into the next millennium, thus helping the institution relieve itself of some of its compliance expense. *See id.*

145. *See Mitchell, supra* note 2, at 3.

146. Jinnett, *supra* note 120, at 36.

147. *See Stamper, supra* note 126, at 18. In the alternative, defendants may also argue that by programming software with only two digit date fields, they were merely “following industry standard practice in designing computer systems, writing software and/or manufacturing microchips using two digit year date fields, and [that] this practice has been shown to be reasonable on a cost-benefit historical analysis.” Jinnett, *supra* note 120, at 37.

148. *See Jinnett, supra* note 120, at 37 (citing IVARS PETERSON, FATAL DEFECT: CHASING KILLER COMPUTER BUGS 113-41 (1996)). *See, e.g., Florida Power & Light Co. v. Westinghouse Elec. Co.*, 826 F.2d 239, 256 (4th Cir. 1987) (finding that Westinghouse implicitly assumed the risk that technical reprocessing solution with respect to spent uranium fuel would not be available).

in fact examined a particular software company and found them to be noncompliant, and an insured bank has failed to inquire into the FDIC's report on such a software company, the software company's defense is strengthened further.¹⁴⁹

Third parties have several other defenses. First, a vendor may have abandoned a particular software product by either going out of business or simply discontinuing the line.¹⁵⁰ Second, as mentioned earlier, if a bank decides to modify the software in-house or has hired outside parties to modify the source code, the vendor's responsibility may be voided.¹⁵¹ Furthermore, the presence of a limited liability clause in the agreement could serve to cut off any liability on the part of the vendor.¹⁵² Finally, while the foreseeability defense is not likely to be successful in defending vendors of recently manufactured software, vendors responsible for some of the older legacy mainframe software and hardware systems that were installed in banks over thirty years ago may have a strong argument that the year 2000 dilemma was not foreseeable at that point in time.¹⁵³

Other more practical issues may also affect a bank's ability to collect from a vendor or data processor. First, there will be a limited number of "deep pockets" to pursue. For example, in some cases, a third party vendor may simply be too small to pay the potentially massive judgments levied against it.¹⁵⁴ Furthermore, a vendor's insurance company may not cover such expenses under existing policies, thus lowering a bank's incentives to take the vendor to court. Consequently, smaller software outfits and service providers may have more leverage in dealing with the threat of massive damages and be able to force more settlements based upon contract principles.¹⁵⁵

149. See *supra* note 78 and accompanying text.

150. See Stamper, *supra* note 126, at 18. Depending on what clauses are contained within an institution's licensing agreements, courts might also construe an "act of God" clause as protecting the vendor from liability. See *id.*

151. See *id.*

152. See *id.*

153. See Newberry, *supra* note 4, at 52.

154. Some small vendors may have gone out of business or simply be unable to pay such high damages. See *id.* Certainly tort litigants will run into numerous companies filing for bankruptcy rather than face the burden of heavy judgments.

155. See Mitchell, *supra* note 2, at 7. While existing insurance contracts may not cover year 2000 liability, new insurance offerings are emerging to address institutional needs for a

B. Tax Issues

Almost as imposing for banks as the litigation issues they face will be the manner in which banks allocate the expenses for compliance on corporate tax returns. The IRS recently held that costs paid or incurred to purchase year 2000 compliant software could be deducted as an expense under Revenue Procedure 69-21, rather than requiring such expenditures to be capitalized.¹⁵⁶ However, the IRS has not taken a position regarding whether this same approach will be allowed for in-house software efforts. Institutions that choose to expense year 2000 costs may see earnings decrease in the short term.

In order to ensure tax deductibility of an in-house software effort as an expense, banks must structure agreements with third party vendors such that they qualify as “repairs.”¹⁵⁷ However, even if a bank chooses to reprogram its systems in-house, deductibility may depend largely upon “the manner in which the work is reflected in the contracts and how carefully the company documents the expenditures on its books and records.”¹⁵⁸

Banks may attempt to deduct the costs as “research and development.”¹⁵⁹ However, Revenue Procedure 97-50 states that deductions for such efforts “generally will not qualify for the Internal Revenue Code section 41 research activity credit, particularly in light

variety of coverage, from direct and contingent business interruption coverage, as well as third party liability coverage for institutional liability for damages sustained by others as a result of a bank’s failure to achieve year 2000 compliance. See Newberry, *supra* note 4, at 52.

156. See Rev. Proc. 97-50, 1997-45 I.R.B. 8, available in 1998 WL 653255 (IRS).

157. See Joan Paul, *Year 2000 Tax Issues: Preventing an Even Bigger Hit to the Bottom Line*, ASPEN L. & BUS., Chapter 6 of Drafting Licensing Agreements, (3d ed. 1997) (visited Jan 26, 1998) <<http://www.comlinks.com/legal/tmjb9.htm>>. Treasury Regulation section 1.162-4 provides that “[r]epairs in the nature of replacements, to the extent that they arrest deterioration and appreciably prolong the life of the property, shall . . . be capitalized [in accordance with applicable rules] . . .” Treas. Reg. § 1.162-4 (1997).

158. *Id.* Apparently, for “big ticket” repair expenses, such as year 2000 expenses, there does not exist a clear position statement from the IRS. “Rulings on these issues for the initial five to ten years after exposure of the issue have tended to be unfavorable.” *Id.*

159. *Id.* While it is apparently questionable as to whether section 174(a) of the Internal Revenue Code allows for the deductibility of computer software development, “a 1969 I.R.S. Revenue Procedure permits the taxpayer to treat software R & D costs as deductible under Section 174(a).” *Id.* However, the expenditures must satisfy qualitative criteria as to what constitutes research and experimental expenditures. See *id.*

of strict proposed rules the Service unveiled early this year.”¹⁶⁰ This sentiment has apparently been somewhat reinforced by previous IRS positions on the research credit.¹⁶¹ Instead, banks may choose to deduct the costs of year 2000 compliance as expenses or qualify such costs for the research activity credit, again opting for a short term earnings drop.¹⁶²

C. *Intellectual Property Considerations*

In addressing the year 2000 problem, a number of institutions will choose to modify existing software and mainframe systems in-house, or “provide an off-line copy of all of their computer applications, tools, and utilities to a year 2000 service provider” in order to make them year 2000 compliant.¹⁶³ However, such a course of action could potentially implicate several intellectual property issues. First, many software licenses contain “confidentiality restrictions barring licensees from disclosing, or providing a copy of, the software to any third party without the consent of the licensor,” potentially leading to a copyright infringement action, even if the copy is kept on the bank’s premises.¹⁶⁴ Banks must therefore assess the status of their licensing agreements with third party providers of software products to ensure that they may bring in outside parties to reconfigure their software code.¹⁶⁵

If an institution’s software provider is not willing to allow third parties to fix their software problems, or the provider’s upgrade will not be available until too close to the year 2000, banks may find themselves having to fix the problems in-house. When fixing problems in-house, banks risk claims of copyright infringement.¹⁶⁶

160. Rev. Proc. 97-50, 1997-45 I.R.B 8, available in 1998 WL 653255 (IRS).

161. See Joan Paul, *Update on Year 2000 Tax Issues-IRS Confirms Applicability of Rev. Proc. 69-21 to Year 2000 Fix Costs*, (visited Jan 25, 1998) <http://www.tnjb.com/article/art_25.htm>. “The IRS confirmed in Revenue Proc. 97-50 that year 2000 costs fall within the purview of Rev. Proc. 69-71,” and that year 2000 costs will only qualify for the research tax credit in “extraordinary circumstances.” *Id.*

162. See Paul, *supra* note 157.

163. Jinnett, *supra* note 120, at 7.

164. *Id.*

165. See Stamper, *supra* note 126.

166. See *id.* However, House Banking Chairman, James Leach, has proposed legislation that would, among other things, “amend federal copyright laws to allow regulated financial

However, this may be a better alternative than taking the even greater risk of waiting until the last minute for a solution that may not work. Banks caught in such a complex situation will need to ensure that they take a route that minimizes their potential liability. Banks also need to keep in mind that they may be in a weaker bargaining position vis-à-vis software providers, who are well aware of the aforementioned complexities. For example, banks may be forced to accept limitations on liability imposed by the software vendors in their repair contracts.

V. CONCLUSION

The year 2000 problem is a major threat to banking institutions in the United States and around the world; however, it can and should be dealt with promptly. While the threat of increased scrutiny and enforcement actions by regulatory agencies, as well as massive liability await ill-prepared institutions, banks can significantly minimize the magnitude of these problems by promoting awareness and strategic solution development within their institutions. For both small and large banks, this will entail shoring up contractual relationships with a variety of service providers, software vendors, and customers, as well as ensuring that the ramifications of the year 2000 problem for their institutions are properly disclosed.

Unfortunately, due to the interconnected nature of the banking industry, year 2000 problems could arise in a variety of contexts, regardless of an institution's pre-2000 efforts. To successfully weather the wave of customer and third party lawsuits following the millenium, it is essential that every institution compile a comprehensive record of due diligence throughout their compliance effort. In particular, directors and upper management must be prepared to prove that they knew about the year 2000 problem, promoted awareness of it within their organizations, and took every economically practical effort to address the issue.

institutions or software makers temporarily to copy bank computer software for Y2K compliance, in instances where copyright consent is difficult to obtain." Campbell, *supra* note 110, at 705.

On a positive note, some external factors may help curtail the rush of year 2000 litigation. Insufficient capital within small software developers and other entities may deny some plaintiffs the deep pockets for which they had hoped. Additionally, a lack of year 2000 insurance coverage could further limit potential litigants incentive to pursue expensive litigation and force more settlements based upon contractual principles. This should not, however, serve to alleviate fears. If an institution fails to address the year 2000 problem, its banking days may be over.

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