Year 2000
The Supervisory Contingency Planning Process

Basle Committee on Banking Supervision

January 1999

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of the Basle Committee on Banking Supervision

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Year 2000: The Supervisory Contingency Planning Process

I. Foreword

This paper presents a series of recommendations to bank supervisory authorities regarding the importance of effectively planning for potential disruptions that may result from failures in computer systems surrounding the millennium date change. The paper does not represent a prediction of the likelihood of occurrence, but rather attempts to provide a range of possible precautions that should be considered in preparing for the Year 2000. It is being distributed as part of a package of papers issued by the Joint Year 2000 Council which represents supervisors across the financial sector.

The paper has been drawn up for the reference of bank supervisors, and it is not directed at contingency planning by banks. This matter is addressed in another document being released by the Joint Council entitled "Year 2000 Business Continuity Planning: Guidance for Financial Institutions".

II. Introduction

The Basle Committee has emphasised the need for bank supervisors around the world to closely monitor Year 2000 readiness preparations of banks. Bank supervisors have issued substantial Year 2000 program management and technical guidance. Such guidance has emphasised the critical need for aggressive oversight by bank boards and senior management in addressing the many challenges to achieving Year 2000 readiness.

There may well be an inclination among the financial industry, particularly those institutions in Europe, to regard the introduction of the Euro as a successful test run for Year 2000, and perhaps unconsciously, to take less pains than they might have done to ensure Year 2000 compliance. Although the industry does seem to have managed the Euro roll-out well, despite some unpublicised localised problems, the Year 2000 issue is far more pervasive in that all aspects of a bank's operations could be affected. It is therefore important that neither banks nor supervisors should become complacent following the Euro conversion.

As many banks and other financial service providers complete Year 2000 systems renovations and testing, the need to develop effective contingency plans is crucial. The banking industry has undertaken a number of initiatives, both internally and as a result of guidance provided by supervisory authorities, to ensure that individual institutions develop internal contingency plans. Several of these initiatives are referenced in the attachment. Various bank supervisors, industry associations and other parties are also disseminating contingency planning guidance for individual institutions.

Since public confidence in banking systems and payments systems is a critical prerequisite for economic stability, bank supervisors also need to develop, refine, and to the extent possible, test their own contingency plans to deal with individual or systemic Year 2000-related problems that could develop within their jurisdictions, both before and after January 1, 2000. Varying legal structures, cultures, and the actual and perceived financial condition of the banking system should all be given adequate consideration in the year 2000 contingency planning process. Given these variables, universally applicable prescriptive advice is not practical. However, the Basle Committee believes that supervisory contingency planning for Year 2000 can be developed within a conceptual framework of common supervisory concerns and potential supervisory strategies. With this paper, the Basle Committee suggests possible strategies for designing Year 2000 supervisory contingency plans. In all cases, contingency plans should be developed well before the millennium.

Both banks and their supervisory authorities operate in unique environments. In both cases, these environments must be evaluated to develop contingency plans to ensure continued operations. Contingency planning is an integrated and dynamic process, subject to modification as circumstances warrant. The most senior levels of management at both banks and supervisory authorities should be directly and actively involved in the contingency planning process and should ensure that sufficient financial and human resources are available to develop and implement strategy.

The activities of external organisations that affect banks, including other supervisory and regulatory entities, should also be included in the process. Communication channels should be established with other appropriate governmental entities[1] and infrastructure providers within the domestic markets. In those countries, where bank supervision is not the sole responsibility of the central bank, there needs to be close cooperation among bank supervisory authorities and the central bank.

[1] These may include central banks, bank chartering/licensing authorities, and securities regulators and exchanges.

III. Risks

1. Potential risk factors

There are three principal interrelated factors that pose significant risk to banks, financial markets, and their supervisory authorities. The timing and duration of the impact of these three factors will likely vary. They may also arise prior to January 1, 2000. It is important to consider both the interrelated nature of these factors and the potential duration of any single risk. The seriousness of the risk and the nature of the response will depend on the temporary or long-term nature of the problem. The three factors are:

- First, a temporary or longer-term *business disruption* may occur due to one or any combination of: technological dysfunction or failure of internal or service provider supplied systems; interconnectivity disruptions between other financial services entities such as correspondent banks, payment and settlement systems and clearinghouses; or service interruptions from key infrastructure providers such as telecommunications, energy, and transportation.
- Second, the *erosion or loss of confidence* on the part of depositors or other funding sources may result in unforeseen demands on available bank funds that could impair the adequacy of a bank's liquidity even to the point of posing viability concerns.
- Third, *increased risk of asset deterioration* may occur due to disruptions in the operations, or even insolvency or bankruptcy, of a bank's borrowers or capital market counterparties as a result of Year 2000 problems.

Regardless of the cause, predicting the extent and potential impact of these risks can be very imprecise, which makes effective contingency planning problematic. However, bank supervisors should be aware of how banks have quantified risk factors to assess potential aggregate risks and to what extent they have developed mitigation strategies. The Year 2000 has the potential for creating very broad forms of operational risk and, consequently, supervisors should determine that bank management is aware that standard disaster recovery plans may not be appropriate.

2. Identifying potential risk

By this time, supervisory authorities should have established procedures to assess the state of Year 2000 readiness for supervised banks and, in some jurisdictions, certain third party providers. The results of these reviews, as well as the results of internal, external and industry-wide testing, may provide both a risk profile for the industry and a means of assessing the viability of individual institutions. However, despite efforts to attain Year 2000 readiness, a bank may experience disruptions resulting from a number of factors. These risk factors include the loss of key infrastructure services, the breakdown of third party relationships such as payment and settlement systems and correspondent banking relationships, and the failure of its own systems or that of a service provider due to technological failure.

Bank supervisors should proactively identify potential disruption scenarios and related options for dealing with isolated or system-wide problems, regardless of the reason. In particular, they should make sure that banks using service providers or other external interfaces have contingency plans for possible failures in these systems. Supervisors should also consider the need to put pressure on service providers to adopt their own contingency plans, or to suggest that industry groups take on this role.

The ability to anticipate the range of potential failures and to identify system weaknesses is fundamental to determining the appropriate scope of a supervisory contingency plan. Supervisory authorities should develop a method of identifying individual institutions with potential problems and describing and prioritising systemic problems. The former can be completed through the analysis of self-assessment surveys or conducting on-site Year 2000 readiness reviews of individual banks. Systemic uncertainties may be identified through a study of the relationship between banks and third parties and the effect of any third party failures on the banks. The latter review should include both domestic and international entities. Supervisors should identify key participants and maintain surveillance over those institutions and third parties with identified risk factors deemed to be material.

3. Back-up procedures

As with existing disaster recovery plans, data integrity procedures are critical to ensuring that adequate and consistent data are available in the event of a technological failure. The procedures may address both mission-critical and other systems. They should address the issue of recovery difficulties associated with institutions of all types and should preserve sufficient historical mission-critical data to enable records to be accurately reconstructed after the century date change in the event that data is corrupted.

While all banks will already have back-up procedures that they consider adequate in normal circumstances, there are special features of the Year 2000 challenge that merit extra attention. Supervisors should issue a mandate that banks within their jurisdiction maintain specified back-up records in electronically retrievable media for certain periods or key dates. These records may be a specification of the minimum data elements and format to capture certain assets, liabilities, and income accounts. It is essential that all processes for creating back-up data files be completed before the millennium date change or other potentially sensitive dates and be thoroughly tested. Whatever happens, it is essential to have back-up which has the certainty to provide a clear audit trail and enable the bank, an acquirer, or a receiver to reconstruct corrupt records. Some supervisors may wish to assure depositors and other bank customers that they will verify the safety of banks' back-up arrangements.

4. Systems disruptions at financially sound banks

Supervisory authorities must consider their options for dealing with banks that experience technological or systemic disruptions but are otherwise financially sound. Materiality will be an important factor in deciding what action may be needed. The significance of the bank and its connections with other institutions and markets, the nature of the disruptions, the estimated length of the inability to execute operations are important factors in deciding what action may be needed. Under certain circumstances, bank supervisors, and other regulators with appropriate authority, may consider providing temporary regulatory relief, though supervisors will not wish to specify in advance what action they would plan to take. Supervisory authorities in collaboration with the central bank would also be wise to consider in advance how they propose to respond to requests for assistance from corrupted banks, in the form, for example, of public statements as to financial standing or for more material support. .

In deciding whether and how to provide relief for financially sound banks that are experiencing IT disruptions, particular attention will need to be paid to the maintenance of public confidence, which will be adversely affected if adequate information is not made available. It is important that supervisors make arrangements in advance to keep fully abreast of events so that they will be in a position to make appropriate public statements.

5. Non-viable banks

Despite the efforts of banks and bank supervisors, a potential exists that some banks will experience mission-critical systems failures. It is incumbent upon supervisors to develop methods to identify those banks with the highest degree of risk and to set up procedures that will enable the supervisors to address any disruptions that result in an orderly manner. Time and resource constraints require that supervisors act as soon as weaknesses are identified to develop and implement procedures. Establishing appropriate pre-emptive actions require a case-by-case approach. These could include ordering the bank to outsource its IT operations, forbidding it to undertake new business, exploring the feasibility of a merger with another institution with strong IT systems (though this may not be a practical option as the date change draws clear), forcing it to wind down its operations or some combination of these options.. A positive perception of the supervisors' commitment to address Year 2000 problems and take appropriate action both before and after the millennium change will help promote the public's confidence in the banks that are not affected

6. Asset deterioration risk

A bank will face increased risk to asset quality to the extent that its customers encounter Year 2000-related problems. These problems may result from the failure of a customer to properly remediate its own systems and from Year 2000 problems that are not addressed by the customer's suppliers and clients. Bank supervisors have issued guidance recommending that banks identify, assess, and establish controls for the risk posed by various counterparties.

If asset deterioration occurs, bank supervisors would normally be expected to address the problems through traditional supervisory methods. Asset portfolios may need to be analysed to identify both potential problem institutions and industry concentrations. The overall Year 2000 readiness of industries to which banks typically extend credit or from whom they purchase equities should be taken into account. Supervisors should be sensitive to the implications of an unjustified request for banks to change their credit policies, so as not to create an over-cautious attitude. Rather, the focus should be directed towards encouraging banks to practice adequate due diligence and prudent underwriting standards. Where appropriate, supervisors should consider encouraging banks to establish loss reserves for potential risks based on the magnitude of the risk and the likelihood of its occurrence.

7. Liquidity risk

Liquidity risk is a principal concern of both bank management and supervisors. While there is no precedent for estimating liquidity demands for the period surrounding the millennium change, supervisors ought to alert banks to be prepared for a possible liquidity squeeze. To that end, supervisors need to consider a number of measures to facilitate liquidity. For example, banks should be encouraged to ensure they have adequate credit lines with private sector counterparties. The necessary arrangements need to be completed well in advance of the century date change. Supervisors may also consider encouraging or requiring banks to keep additional cash or liquid assets for the period of the highest predicted demand. Both the negative impact on earnings and security considerations for increased cash retention related to this strategy should be taken into account.

An important aspect of managing liquidity risk is to maintain the confidence of customers and counterparties. It is therefore imperative for supervisors to stress the importance of banks demonstrating as convincingly as possible that they are prepared for the Year 2000. Moreover the public needs to be reassured that sufficient cash will be made available to meet depositors' needs. Supervisory authorities in countries with deposit insurance schemes can additionally remind depositors that their balances will be protected by the insurance arrangements.

IV. Other Considerations

1. Public communications strategies

Promoting and preserving public confidence requires strategic coordination on the part of both the industry and supervisory authorities in order to succeed. Supervisory authorities should develop communication and action plans designed to reinforce, as appropriate (and giving due consideration to moral hazard implications), the public's confidence in the banking system. Supervisory authorities in several countries are planning to hold contingency planning conferences in the coming months and such events will be useful in signalling supervisors' readiness.

Documentation explaining the contingency plans that the supervisory authorities are setting in train would also be advisable. Bank supervisors should be prepared to deal with the television, radio, and print media on Year 2000 issues as the need arises. In some countries, it may be desirable to take a proactive approach and actively seek such opportunities. Consumer outreach programs that include speaking engagements before major groups and regular public service announcements can allay the public's concern about actual or perceived Year 2000 problems.

Supervisors can also encourage or require banks to establish action plans or customer awareness programs designed to inform depositors and other customers of the bank's efforts to become Year 2000 ready. Banks should be encouraged to provide customer information brochures describing the actions being taken to prepare for the century date change.

2. Cross-border considerations

In June 1998, the Basle Committee on Banking Supervision issued to the supervisory community a paper, "Supervisory Cooperation on Year 2000 Cross-Border Issues." The paper established a protocol that recognised that the home country supervisor is responsible for the enterprise-wide Year 2000 readiness, sharing responsibility with host country supervisors to determine that adequate measures are being taken by offices in the host country. The paper includes a list of key Year 2000 contacts at supervisory authorities around the world. The Basle Committee will periodically update this list and therefore it is critical for supervisory authorities to update their contact information with the Basle Committee as the millennium change approaches.

As part of their contingency planning processes, supervisory authorities should utilise the contact list to follow-up with their counterparts in other countries on a bilateral basis. When host country supervisors identify Year 2000 concerns related to operations in their country, they should immediately contact the appropriate home country supervisor in order to resolve potential issues.

3. Implementation and resource considerations

Bank supervisors must ensure that adequate resources (e.g., personnel and facilities) are available to deal with potential problems arising from the millennium change. This may require that sufficient staff be allocated to manage emergency situations as they arise and to provide a full range of appropriate supervisory responses. The plan should address such issues as staff schedules, staff training, and the potential need to contract with external parties.

A major feature of contingency planning is to ensure the speedy provision of accurate information between regulated entities, supervisors, central banks and other relevant parties. It is important that supervisors play a key role in this information collection and distribution process, through setting up communication channels that can be used both before and after 1st January 2000. These will reduce the information demands on institutions, allowing them to concentrate their resources on fixing the problem.

The establishment of communication centres by national authorities should be encouraged as a means of centralising information and coordinating the implementation of contingency plans to handle disruptions and failures. Such centres would promote the efficient gathering and use of critical information and the effective use of resources. The centres can be utilised to coordinate personnel and resources as well as to serve as contact points between supervisory authorities, the media, and the public. Communication centres would promote co-ordinated planning and help handle media issues in advance of the event as well as providing a means for effective damage control at the time of any problems. Timelines for activation of such centres should be established before critical dates are reached.

4. Legal authority

A key question for bank supervisors is whether their legal structure allows sufficient flexibility and discretion to deal effectively with possible scenarios that could arise. Given the wide range of potential problems that supervisors face in connection with the Year 2000 date change, it is imperative that supervisors are positioned, both legally and practically, to deal with disruption or failure. Consequently, it is important that supervisors review, in concert with other domestic supervisors and the central bank, their authority in order to determine whether it is adequate to initiate appropriate supervisory measures. This would include early intervention prior to Year 2000 as well as intervention after the century date change.

A list of options supervisors may consider, depending upon their legal authority, includes providing temporary liquidity support, mandating data integrity procedures, issuing different types of enforcement actions, initiating temporary market suspensions, instituting charter/licence revocation, appointing receivers or conservators, exploring the possibility of mergers and strategic alliances, or requiring the adoption of special measures. In considering the appropriateness of these options, supervisors should determine, for example, whether a liquidity crisis would provide sufficient grounds to support a receivership for a bank that is financially able to meet its obligations but cannot do so because of operational problems.

The results of such a review may disclose the need for additional temporary legal authority. If so, action should be taken quickly. Given the relatively short time period remaining before the potential need to take supervisory action, it is imperative that these considerations receive prompt attention.

V. Conclusion

It is imperative that supervisory authorities act quickly to develop contingency plans for dealing with Year 2000 disruptions in the banking industry. The financial services industry operates on a global scale and, therefore, attention to potential disruptions within a country's borders will not be sufficient to avert or contend with the possible effects of Year 2000-related failures. The Basle Committee believes that the interests of governments and the worldwide financial services industry are best served by a concerted effort on the part of supervisory authorities to establish open lines of communication across borders, in addition to establishing sound policies to deal with domestic problems. This approach affords the best possible means of ensuring that disruptions have a minimal impact.

Attachment

Reference Material on Contingency Planning

The following reference material on contingency planning is available from other sources:

- British Bankers' Association: "Year 2000 Contingency Planning Guide", 1998
- Federal Financial Institutions Examination Council: "Guidance Concerning Contingency Planning in Connection with Year 2000 Readiness", 13th May, 1998 (available at http://www.ffiec.gov)
- Federal Financial Institutions Examination Council: "Year 2000 Phase II Work Program", 10th July, 1998 (as above) (Note: this document contains examination procedures designed to assist examiners in determining if an institution has addressed satisfactorily the Year 2000, including assessing the adequacy of the institution's Year 2000 contingency plans.)
- Federal Financial Institutions Examination Council: "Questions and Answers concerning Year 2000 Contingency Planning", 15th December, 1999 (as above)
- Bank of England: "Euro Conversion: Contingency planning; the authorities' role over the conversion weekend"
- Joint Year 2000 Council: package of documents on contingency planning prepared by its four constituent Committees, February 1999 (available at http://www.bis.org)
- Joint Year 2000 Council: "Year 2000 Business Continuity Planning: Guidance for Financial Institutions", February 1999
- French Financial Sector: "Addendum to the White Pages on Year 2K Changeover", February 1999
- Bank of Japan: "Guidance on Cooperation with Service Providers and Vendors in Addressing the Year 2000 Problem and Guidance on Year 2000 Contingency Planning, released on 24th November, 1998, available on the Bank's web site (http://www.boj.or.jp)

- Office of the Superintendent of Financial Institutions (Canada): "Year 2000 – 1998 Survey and 1999 Milestone Dates", 15th January, 1999, available on OSFI's website (http://www.osfi-bsif.gc.ca)

- Global 2000 Co-ordinating Group: "Year 2000 Business Risk Management", 13th January, 1999, available on web site (http://www.global2k.com)

In addition, a variety of detailed guidance on Year 2000 readiness is available from the web site of the Bank for International Settlements (http://www.bis.org).