APPENDICES

Appendix A

Table A.1 Recent IMF survey of banking problems worldwide, 1980–96

Banking Crises	
Argentina	(1980–82, 1989–90, and Jan–Sep 1995)
Benin	(1988)
Bulgaria	(1991–present)
Cameroon	(1989–93, 1995–present)
Central African Republic	(1976–92)
Chad	(1979–83)
Chile	(1981–87)
Congo	(1994–present)
Equatorial Guinea	(1983–85)
Estonia	(1992–95)
Finland	(1991–94)
Guinea	(1980–85)
Jordan	(1989–90)
Kuwait	(mid-1980s)
Latvia	(1995–present)
Lebanon	(1988–90)
Liberia	(1991–95)
Lithuania	(1995–present)
Macedonia	(1993–94)
Malaysia	(1985–88)
Mexico	(1982, 1994–present)
Niger	(1983–present)
Norway	(1987–93)
Panama	(1988–89)
Philippines	(1981–87)
Sao Tome and Principe	(1980–present)
Senegal	(1983–88)
Somalia	(1990)
South Africa	(1985–present)
Spain	(1977–85)
Sweden	(1990–93)
Tanzania	(1988–present)
Thailand	(1983–87)
Turkey	(1985, 1991)
Uruguay	(1981–85)
Venezuela	(1994–present)
Significant Banking Problems	
Albania	(1992–present)
Algeria	(1990–92)
Angola	(1991–present)
Armenia	(1991–present)
Australia	(1989–92)

Azerbaijan	(1995–present)
Bangladesh	(1980s–present)
Belarus	(1995–present)
Bhutan	(early 1990s–present)
Bolivia	(1986–87, 1994–present)
Botswana	(1994–95)
Brazil	(1994–present)
Brunei	(mid-1980s)
Burkina Faso	1988–94)
Burundi	(1994–present)
Cambodia	(ongoing)
Canada	(1983–85)
Cape Verde	(1993–present)
Central African Republic	(1995–present)
Chad	(1992)
China	(1980s–present)[a]
Columbia	(1982–85)
Costa Rica	(mid-1994–present)
Cote d'Ivoire	(1988–90)
Croatia	(1995)
Czech Republic	(1991–present)
Denmark	(1987–92)
Djibouti	(1991–93)
Dominican Republic	(1992–present)
Ecuador	(1995–present)
Egypt	(1991–95)
El Salvador	(1989)
Equatorial Guinea	(1995)
Eritrea	(1994)
Ethiopia	(1994–95)
Fiji	(1995–present)
France	(1991–95)
Gabon	(1995–present)
Gambia	(1985–92)
Georgia	(1991–present)
Germany	(1990–93)
Ghana	(1983–89)
Greece	(1991–95)
Guinea-Bissan	(ongoing)
Guyana	(1993–95)
Haiti	(1991–present)
Hungary	(1987–present)
Iceland	(1985–86, 1993)
India	(1991–present)
Indonesia	(1992–present)
Ireland	(1985)
Israel	(1983–89)
Italy	(1990–95)
Jamaica	(1994–present)
Japan	(1992–present)
Kazakhstan	(1991–95)
Kenya	(1993)
Korea, South	(mid-1980s)
Kuwait	(1990–91)

(continued next page)

Table A.1 (continued)

Kyrgyzstan	(ongoing)
Laos	(early 1990s)
Lesotho	(1988–present)
Madagascar	(1988, 1991–95)
Mali	(1987–89, 1995)
Mauritania	(1991–93)
Moldova	(1994–present)
Mongolia	(1991–present)
Mozambique	(1988–93, 1994–95)
Myanmar	(ongoing)
Nepal	(late 1980s–present)
New Zealand	(1988–90)
Nicaragua	(late 1980s–present)
Nigeria	(1991–95)
Pakistan	(1980–present)
Papua New Guinea	(1989–present)
Paraguay	(1995–present)
Peru	(1983–90)
Poland	(1991–present)
Romania	(1990–present)
Russia	(1992–present)
Rwanda	(1991–present)
Sierra Leone	(1990–present)
Slovak Republic	(1991–95)
Slovenia	(1992–94)
Sri Lanka	(early 1990s)
St. Vincent and the Grenadines	(1994–present)
Swaziland	(1995)
Tajikistan	(ongoing)
Togo	(1989–91)
Trinidad and Tobago	(1982–93)
Tunisia	(1991–95)
Turkey	(1994)
Uganda	(1990–present)
Ukraine	(1994–present)
United States	(1980–92)
Uzbekistan	(1993–present)
Vietnam	(ongoing)
Yemen Arab Republic	(ongoing)
Zaire	(1991–present)
Zambia	(1994–present)
Zimbabwe	(1995–present)

Note: Banking crises are cases where there were runs or other substantial portfolio shifts, massive government intervention, or collapses of financial firms. Significant banking problems refer to cases where there was extensive banking unsoundness short of a crisis.

a. In 1995, fraud resulted in major losses and depositor runs at two institutions in Taiwan Province of China: One institution was taken over by a state-owned bank, and the other supported by the central bank and a state-owned bank. The large state-owned banks are reported to have an overhang of bad loans to real estate projects.

Source: Lindgren et al. (1996), table 2. Sample ends Spring 1996.

Appendix B
Examples of International Standards in Financial Markets

This appendix describes three earlier international standards in the financial area: the IMF's Special Data Dissemination Standard (SDDS), the G-30's Guidelines for Trading and Settlement of Securities, and the G-30's Guidelines on the Risk Management of Derivatives. Subscription to all three of these initiatives is voluntary.

The IMF's Special Data Dissemination Standard (IMF 1997)

Purpose

The SDDS was established by the IMF to guide members that have, or that might seek, access to international capital markets in the provision of their economic and financial data to the public. The IMF is working towards completion of the General Data Dissemination Standard to guide all its members. Both standards are expected to enhance the availability of timely and comprehensive statistics and therefore contribute to the pursuit of sound macroeconomic policies. The SDDS is also expected to contribute to the improved functioning of financial markets.

Subscription

Subscription to the SDDS was opened in early April 1996 by a letter from the IMF's managing director to all IMF members and governors. Although

Table B.1 Countries subscribing to the IMF's SDDS, as of 19 February 1997

Argentina	Australia	Austria
Belgium	Canada	Chile
Colombia	Croatia	Denmark
Finland	France	Germany
Hungary	Iceland	India
Indonesia	Ireland	Israel
Italy	Japan	Malaysia
Latvia	Lithuania	Norway
Mexico	Netherlands	Poland
Peru	Philippines	Slovenia
Singapore	Slovak Republic	South Korea
South Africa	Spain	Sweden
Switzerland	Thailand	Turkey
United Kingdom	United Kingdom (Hong Kong)	United States

Source: Internet http://dsbb.imf.org/overview.htm

subscription is voluntary, it carries a commitment by a subscribing member to observe the standard and to provide certain information to the IMF about its practices in disseminating economic and financial data. A member country's subscription, which can be made at any time, is to be communicated in writing to the secretary of the IMF. To date, there have been 42 subscriptions to the SDDS (see table B.1).

The Dimensions and Monitorable Elements of the Standard

The SDDS, in taking a comprehensive view of the dissemination of economic and financial data, identifies four dimensions of data dissemination:

- The data: coverage, periodicity, and timeliness;
- Access by the public;
- Integrity of the disseminated data; and
- Quality of the disseminated data.

For each of these dimensions, the SDDS prescribes two to four monitorable elements—good practices that can be observed, or monitored, by the users of statistics.

The data dimension lists 17 data categories that provide coverage for the four sectors of the economy, and it prescribes the periodicity (or frequency) and timeliness with which data for these categories are to be disseminated (see table B.2). In recognition of differences in economic structures and institutional arrangements across countries, the SDDS provides flexibility. Certain categories are marked for dissemination on an ''as relevant'' basis. Further, some data categories or components of data categories are identified as encouraged rather than prescribed. With respect to periodicity and timeliness, a subscribing member may exercise certain flexibility options while being considered in full observance of the SDDS.

The monitorable elements of the SDDS for access, integrity, and quality emphasize transparency in the compilation and dissemination of statistics.

- To support ready and equal access, the SDDS prescribes (a) advance dissemination of release calendars and (b) simultaneous release to all interested parties.
- To assist users in assessing the integrity of data disseminated under the SDDS, the SDDS prescribes (a) the dissemination of the terms and conditions under which official statistics are produced and disseminated; (b) the identification of internal government access to data before release; (c) the identification of ministerial commentary on the occasion of statistical release; and (d) the provision of information about revision and advance notice of major changes in methodology.
- To assist users in assessing data quality, the SDDS prescribes (a) the dissemination of documentation on statistical methodology and (b) the dissemination of component detail, reconciliations with related data, and statistical frameworks that make possible cross-checks and checks of reasonableness.

Consistent with this comprehensive view of data dissemination, dissemination itself is broadly defined to include electronic dissemination in addition to the more traditional formats.

Transition Period

A transition period for the implementation of the SDDS began with the opening of subscription in early April 1996 and will end on 31 December 1998. During this period a member may subscribe to the SDDS even if its dissemination practices are not fully in line with the SDDS at that time. This period gives subscribers time to adjust their practices, according to a plan that is to be presented and to bring them into line with the standard. During the transition period, the IMF will also elaborate more fully certain operational aspects and review the content and procedures of the SDDS with a view to making any adjustment needed in the light of experience.

Table B.2 IMF special data dissemination standard: coverage, periodicity, and timeliness

Coverage				
Prescribed				
Category	Components	Encouraged categories and/or components	Periodicity	Timeliness
Real sector				
National accounts; nominal, real, and associated prices *	GDP by major expenditure category and/or by productive sector	Saving, gross national income	Q	Q
Production index/ indices[#]	Industrial, primary commodity, or sector, as relevant		M (or as relevant)	6W (M encourage or as relevant)
		Forward-looking indicator(s), e.g., qualitative business surveys, orders, composite leading indicators index	M or Q	M or Q
Labor market	Employment, unemployment, and wages/earnings, as relevant		Q	Q
Price indices	Consumer prices and producer or wholesale prices		M	M

Fiscal sector				
General government or public sector operations, as relevant*	Revenue, expenditure, balance, and domestic (bank and nonbank) and foreign financing	Interest payments	A	2Q
Central government operations#	Budgetary accounts: revenue, expenditure, balance, and domestic (bank and nonbank) and foreign financing	Interest payments	M	M
Central government debt	Domestic and foreign, as relevant, with a breakdown by currency (including indexed), as relevant, and a breakdown by maturity; debt guaranteed by central government, as relevant	Debt service projections: interest and amortization on medium- and long-term debt (Q for next 4 quarters and then A) and amortization on short-term debt (Q)	Q	Q

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Table B.2 (continued)

Coverage				
Prescribed				
Category	**Components**	**Encouraged categories and/or components**	**Periodicity**	**Timeliness**
Financial sector				
Analytical accounts of the banking sector*	Money aggregates, domestic credit by public and private sector, external position		M	M
Analytical accounts of the central bank#	Reserve money, domestic claims on public and private sector, external position		M (W encouraged)	2W (W encouraged)
Interest rates	Short- and long-term government security rates, policy-variable rate	Range of representative deposit and lending rates	D	†
Stock market	Share-price index, as relevant		D	†
External sector				
Balance of payments*	Goods and services, net income flows, net current transfers, selected capital (or capital and financial) account items (including reserves)	Foreign direct investment and portfolio investment	Q	Q

International reserves#	Gross official reserves (gold, foreign exchange, SDRs, and IMF position) denominated in US dollars	Reserve-related liabilities, as relevant	M (W encouraged)	W
Merchandise trade#	Exports and imports	Major commodity breakdowns with longer time lapse	M	8W (4-6W encouraged)
International investment position	See accompanying text		A (Q encouraged)	2Q (Q encouraged)
Exchange rates	Spot rates and three- and six-month forward market rates, as relevant		D	†
Addendum: Population		Key distributions, e.g., by age and sex	A	. . .

Note: Periodicity and timeliness: Daily (‘‘D’’); weekly or with lapse of no more than one week after the reference date or close of the reference week (‘‘W’’); monthly or with lapse of no more than one month (‘‘M’’); quarterly or with lapse of no more than one quarter (‘‘Q’’); and annual (‘‘A’’).

* Comprehensive statistical frameworks

Tracking categories

† Given that data are widely available from private sources, dissemination of official producers may be less time sensitive. Although dissemination by recorded telephone messages or fax services is encouraged, dissemination of these data can be made part of other (preferably high-frequency) dissemination products.

Source: IMF (1996c).

Metadata

A subscriber is expected to submit information about its data and its dissemination practices—its metadata—to the IMF for presentation on the electronic bulletin board. The metadata are to be submitted to the IMF within three months of subscription, except those relating to summary methodologies (for which more time is provided). Subscribers' metadata are reviewed by the IMF for comprehensiveness and international comparability. The responsibility for the accuracy of the metadata, including timely updates, and for the economic and financial data underlying the metadata, rests with the subscriber.

The Role of the Bulletin Board

The Dissemination Standards Bulletin Board (DSBB) will be maintained by the IMF. Metadata are useful in their own right, and their presentation on the DSBB will facilitate monitoring of observance of the standard by the financial markets and other data users. The DSBB will not provide actual data, although ways are being explored to link the DSBB, with its metadata, to actual country data.

A member's presence on the DSBB will indicate that it subscribes to, and intends to observe, certain tenets of good statistical citizenship. Subscribers will not be removed from the DSBB during the transition period except for egregious nonobservance. After the transition period, serious and persistent nonobservance will be caused for removal. Procedures for removal, which could involve a panel of independent experts and would require a decision by the IMF Executive Board, will be elaborated fully during the transition period.

G-30 Guidelines for Trading and Settlement of Securities (G-30 1989)

Recommendation I

By 1990 all comparisons of trades between direct market participants (i.e., brokers, broker/dealers, and other exchange members) should be accomplished by T + 1.[1]

Recommendation II

By 1992 indirect market participants (such as institutional investors or any trading counterparties that are not broker/dealers) should be members of a trade comparison system that achieves positive affirmation of trade details.

1. T is the date securities are traded; and T + 1 is 1 day after the trade; and T + 2 is 2 days after the trade.

Recommendation III

Each country should have an effective and fully developed central securities depository, organized and managed to encourage the broadest possible industry participation (directly and indirectly), in place by 1992.

Recommendation IV

Each country should study its market volumes and participation to determine whether a trade-netting system would be beneficial in terms of reducing risk and promoting efficiency. If a netting system would be appropriate, it should be implemented by 1992.

Recommendation V

Delivery versus payment (DVP) should be employed as the method of settling all securities transactions. A DVP system should be in place by 1992.

Recommendation VI

Payments associated with the settlement of securities transactions and the servicing of securities portfolios should be made consistent across all instruments and markets by adopting the "same day" funds convention.

Recommendation VII

A "rolling settlement" system should be adopted by all markets. Final settlement should occur on T + 3 by 1992. As an interim target, final settlement should occur on T + 5 by 1990 at the latest, except where it hinders the achievement of T + 3 by 1992.

Recommendation VIII

Securities lending and borrowing should be encouraged as a method of expediting the settlement of securities transactions. Existing regulatory and taxation barriers that inhibit the practice of lending securities should be removed by 1990.

Recommendation IX

Each country should adopt the standard for securities messages developed by the International Organization of Standardization (IOS Standard 7775). In particular, countries should adopt the ISIN numbering system for securities issues as defined in the ISO Standard 6166, at least for cross-border transactions. These standards should be universally applied by 1992.

Table B.3 shows compliance with these G-30 recommendations for a group of developing countries.

G-30 Guidelines on the Risk Management of Derivatives (G-30 1993)

General Policies

Recommendation 1: The Role of Senior Management

Dealers and end users should use derivatives in a manner consistent with the overall risk management and capital policies approved by their boards of directors. These policies should be reviewed as business and market circumstances change. Policies governing derivatives use should be clearly defined, including the purposes for which these transactions are to be undertaken. Senior management should approve procedures and controls to implement these policies, and management at all levels should enforce them.

Valuation and Market Risk Management

Recommendation 2: Marking to Market

Dealers should mark their derivatives positions to market, on at least a daily basis, for risk management purposes.

Recommendation 3: Market Valuation Methods

Derivatives portfolios of dealers should be valued based on mid-market-levels less specific adjustments, or on appropriate bid or offer levels. Mid-market valuation adjustments should allow for expected future costs such as unearned credit spread, close-out costs, investing and funding costs, and administrative costs.

Recommendation 4: Identifying Revenue Sources

Dealers should measure the components of revenue regularly and in sufficient detail to understand the sources of risk.

Recommendation 5: Measuring Market Risk

Dealers should use a consistent measure to calculate daily the market risk of their derivatives positions and compare it to market risk limits.

Table B.3 Conformity with G-30 recommendations on clearance and settlement of securities

Country	Trade Comparison System (T+1): Direct participants	Trade Comparison System (T+1): Indirect participants	Central depositories	Trade netting	Delivery versus payment	Same day funds payment	T+3 rolling settlement	Securities lending
Argentina	Yes		Yes			Yes	Yes	Yes
Brazil	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Chile			Yes		Yes		Yes	
China	Yes	Yes	Yes	Yes		Yes	Yes	Yes
India	Yes			Yes				
Indonesia				Yes	Yes			
Malaysia			Yes	Yes		Yes		Yes
Mexico	Yes		Yes	Yes	Yes	Yes	Yes	
Pakistan		Yes			Yes	Yes		
Philippines								
Poland			Yes	Yes			Yes	
Russia			Yes					
South Korea	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Sri Lanka	Yes		Yes	Yes				
Thailand	Yes		Yes	Yes	Yes		Yes	
Turkey	Yes		Yes	Yes	Yes	Yes		

Source: World Bank (1997).

- Market risk is best measured as ''value at risk'' using probability analysis based upon a common confidence interval (e.g., two standard deviations) and time horizon (e.g., a one-day exposure).
- Components of market risk that should be considered across the term structure include: absolute price or rate change (delta), convexity (gamma), volatility (vega), time decay (theta), basis or correlation, and discount rate (rho).

Recommendation 6: Stress Simulations

Dealers should regularly perform simulations to determine how their portfolios would perform under stress conditions.

Recommendation 7: Investing and Funding Forecasts

Dealers should periodically forecast the cash investing and funding requirements arising from their derivatives portfolios.

Recommendation 8: Independent Market Risk Management

Dealers should have a market risk management function, with clear independence and authority, to ensure that the following responsibilities are carried out:

- The development of risk limit policies and the monitoring of transactions and positions for adherence to these policies. (See Recommendation 5.)
- The design of stress scenarios to measure the impact of market conditions, however improbable, that might cause market gaps, volatility swings, or disruptions of major relationships, or might reduce liquidity in the face of unfavorable market linkages, concentrated market making, or credit exhaustion. (See Recommendation 6.)
- The design of revenue reports quantifying the contribution of various risk components and of market risk measures such as value at risk. (See Recommendations 4 and 5.)
- The monitoring of variance between the actual volatility of portfolio value and that predicted by the measure of market risk.
- The review and approval of pricing models and valuation systems used by front- and back-office personnel and the development of reconciliation procedures if different systems are used.

Recommendation 9: Practices by End Users

As appropriate to the nature, size, and complexity of their derivatives activities, end users should adopt the same valuation and market risk management practices that are recommended for dealers. Specifically, they should consider: regularly marking to market their derivatives transactions for risk management purposes; periodically forecasting the cash investing and funding requirements arising from their derivatives transactions; and establishing a clearly independent and authoritative function to design and assure adherence to prudent risk limits.

Credit Risk Measurement and Management

Recommendation 10: Measuring Credit Exposure

Dealers and end users should measure credit exposure on derivatives in two ways:

- Current exposure, which is the replacement cost of derivatives transactions—that is, their market value.
- Potential exposure, which is an estimate of the future replacement cost of derivatives transactions. It should be calculated using probability analysis based upon broad confidence intervals (e.g., two-standard deviations) over the remaining terms of the transactions.

Recommendation 11: Aggregating Credit Exposures

Credit exposures on derivatives, and all other credit exposures to a counterparty, should be aggregated taking into consideration enforceable netting arrangements. Credit exposures should be calculated regularly and compared to credit limits.

Recommendation 12: Independent Credit Risk Management

Dealers and end users should have a credit risk management function with clear independence and authority, and with analytical capabilities in derivatives, responsible for:

- Approving credit exposure measurement standards.
- Setting credit limits and monitoring their use.
- Reviewing credits and concentrations of credit risk.
- Reviewing and monitoring risk reduction arrangements.

Recommendation 13: Master Agreements

Dealers and end users are encouraged to use one master agreement as widely as possible with each counterparty to document existing and future derivatives transactions, including foreign exchange forwards and options. Master agreements should provide for payments netting and close-out netting, using a full two-way payments approach.

Recommendation 14: Credit Enhancement

Dealers and end users should assess both the benefits and costs of credit enhancement and related risk-reduction arrangements. Where it is proposed that credit down-grades would trigger early termination or collateral requirements, participants should carefully consider their own capacity and that of their counterparties to meet the potentially substantial funding needs that might result.

Enforceability

Recommendation 15: Promoting Enforceability

Dealers and end users should work together on a continuing basis to identify and recommend solutions for issues of legal enforceability, both within and across jurisdictions, as activities evolve and new types of transactions are developed.

Systems, Operations, and Controls

Recommendation 16: Professional Expertise

Dealers and end users must ensure that their derivatives activities are undertaken by professionals in sufficient number and with the appropriate experience, skill levels, and degrees of specialization. These professionals include specialists who transact and manage the risks involved, their supervisors, and those responsible for processing, reporting, controlling, and auditing the activities.

Recommendation 17: Systems

Dealers and end users must ensure that adequate systems for data capture, processing, settlement, and management reporting are in place so that derivatives transactions are conducted in an orderly and efficient manner in compliance with management policies. Dealers should have risk management systems that measure the risks incurred in their derivatives activities including market and credit risks. End users should have risk management systems that measure the risks incurred in their derivatives activities based upon their nature, size, and complexity.

Recommendation 18: Authority

Management of dealers and end users should designate who is authorized to commit their institutions to derivatives transactions.

Recommendation 19: Accounting Practices

International harmonization of accounting standards for derivatives is desirable. Pending the adoption of harmonized standards, the following accounting practices are recommended:

- Dealers should account for derivatives transactions by marking them to market and taking changes in value to income each period.
- End users should account for derivatives used to manage risks so as to achieve a consistency of income recognition treatment between those instruments and the risks being managed. Thus, if the risk being managed is accounted for at cost (or, in the case of an anticipatory hedge, not yet recognized), changes in the value of a qualifying risk management instrument should be deferred until a gain or loss is recognized on the risk being managed. Or, if the risk being managed is market to market with changes in value being taken to income, a qualifying risk management instrument should be treated in a comparable fashion.
- End users should account for derivatives not qualifying for risk management treatment on a mark-to-market basis.
- Amounts due to and from counterparties should only be offset when there is a legal right to set off or when enforceable netting arrangements are in place.

Where local regulations prevent adoption of these practices, disclosure along these lines is nevertheless recommended.

Recommendation 20: Disclosures

Financial statements of dealers and end users should contain sufficient information about their use of derivatives to provide an understanding of the purposes for which transactions are undertaken, the extent of the transactions, the degree of risk involved, and how the transactions have been accounted for. Pending the adoption of harmonized accounting standards, the following disclosures are recommended:

- Information about management's attitude to financial risks, how instruments are used, and how risks are monitored and controlled.
- Accounting policies.
- Analysis of positions at the balance-sheet date.
- Analysis of the credit risk inherent in those positions.
- For dealers only, additional information about the extent of their activities in financial instruments.

Recommendations for Legislators, Regulators, and Supervisors

Recommendation 21: Recognizing Netting

Regulators and supervisors should recognize the benefits of netting arrangements where and to the full extent that they are enforceable and encourage their use by reflecting these arrangements in capital adequacy standards. Specifically, they should promptly implement the recognition of the effectiveness of bilateral close-out netting in bank capital regulations.

Recommendation 22: Legal and Regulatory Uncertainties

Legislators, regulators, and supervisors, including central banks, should work in concert with dealers and end users to identify and remove any remaining legal and regulatory uncertainties with respect to:

- The form of documentation required to create legally enforceable agreements (statute of frauds).
- The capacity of parties, such as governmental entities, insurance companies, pension funds, and building societies, to enter into transactions (ultra vires).
- The enforceability of bilateral close-out netting and collateral arrangements in bankruptcy.
- The enforceability of multibranch netting arrangements in bankruptcy.
- The legality/enforceability of derivatives transactions.

Recommendation 23: Tax Treatment

Legislators and tax authorities are encouraged to review and, where appropriate, amend tax laws and regulations that disadvantage the use of derivatives in risk management strategies. Tax impediments include the inconsistent or uncertain tax treatment of gains and losses on the derivatives, in comparison with the gains and losses that arise from the risks being managed.

Recommendation 24: Accounting Standards

Accounting standards-setting bodies in each country should, as a matter of priority, provide comprehensive guidance on accounting and reporting of transactions in financial instruments, including derivatives, and should work towards international harmonization of standards on this subject. Also, the International Accounting Standards Committee should finalize its accounting standard on financial instruments.

Appendix C
Banking Activities, Bank Ownership, and Commercial Bank Supervisory Practices in EU and G-10 Countries, 1995

Table C.1 Permissible banking activities and bank ownership in EU and G-10 countries, 1995

Country	Securities[a]	Insurance[b]	Real estate[c]	Commercial bank investment in nonfinancial firms	Nonfinancial firm investment in commercial banks	Geographic branching restrictions
Austria	Unrestricted	Permitted	Unrestricted	Unrestricted	Unrestricted	None
Belgium	Permitted	Permitted	Restricted	Restricted	Unrestricted	None
Canada	Permitted	Permitted	Permitted	Restricted	Restricted	None
Denmark	Unrestricted	Permitted	Permitted	Permitted	Unrestricted	None
Finland	Unrestricted	Restricted	Permitted	Unrestricted	Unrestricted	None
France	Unrestricted	Permitted	Permitted	Unrestricted	Unrestricted	None
Germany	Unrestricted	Restricted	Permitted	Unrestricted	Unrestricted	None
Greece	Permitted	Restricted	Restricted	Unrestricted	Unrestricted	None
Ireland	Unrestricted	Prohibited	Unrestricted	Unrestricted	Unrestricted	None
Italy	Unrestricted	Permitted	Restricted	Restricted	Restricted	None
Japan	Restricted	Prohibited	Restricted	Restricted	Restricted	None
Luxembourg	Unrestricted	Permitted	Unrestricted	Unrestricted	Restricted	None
Netherlands	Unrestricted	Permitted	Permitted	Unrestricted	Unrestricted	None
Portugal	Unrestricted	Permitted	Restricted	Permitted	Unrestricted	None
Spain	Unrestricted	Permitted	Restricted	Unrestricted	Permitted	None
Sweden	Unrestricted	Permitted	Restricted	Restricted	Restricted	None
Switzerland	Unrestricted	Permitted	Unrestricted	Unrestricted	Unrestricted	None
United Kingdom	Unrestricted	Permitted	Unrestricted	Unrestricted	Unrestricted	None
United States	Restricted	Restricted	Restricted	Restricted	Restricted	Yes[d]

Note: Unrestricted: a full range of activities in the given category can be conducted directly in the bank.
Permitted: a full range of activities can be conducted, but all or some must be conducted in subsidiaries.
Restricted: less than a full range of activities can be conducted in the bank or subsidiaries.
Prohibited: the activity cannot be conducted in either the bank or subsidiaries.

a. Securities activities include underwriting, dealing and brokering all kinds of securities, and all aspects of the mutual fund business.

b. Insurance activities include underwriting and selling insurance products/services as principal or agent.

c. Real estate activities include investment, development, and management.

d. Will be largely eliminated in late 1997 as the Riegle-Neal Interstate Banking Act takes effect.

Source: Barth et al. (1996).

Table C.2 Commercial bank supervisory practices in EU and G-10 countries: 1995

	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg
Components of capital for meeting the capital standard or requirements										
Noncumulative perpetual preferred stock	Yes	Yes	No, does not exist	Yes	No, issues not permitted in domestic market	Yes	Yes	Yes, no limits	Yes, but limits	Yes
Current year profit-added (or loss deducted)	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Intangible assets other than goodwill	No	No	No	No	No, except for lease renewal rights	No	Yes	No	Yes	No
Goodwill[a]	No	No	No	No	No	No	Yes	No	Yes	No
Undisclosed reserves[b]	Yes, but limits	Yes, but limits	No information	No	No	Yes, but limits	No	No	No	Yes
Hybrid capital instruments (including cumulative perpetual preferred stock)[c]	Yes, but limits	Yes, but limits	No, does not exist	Yes	Yes	Yes, but limits	Yes, but limits	Yes, but limits	Yes, but limits	Yes
Subordinated term debt[d]	Yes, but limits	Yes, but limits	Yes	Yes	Yes	Yes, but limits	Yes, but limits	Yes, but limits	Yes, but limits	Yes
Limited life redeemable preference shares[e]	No	Yes, but limits	No, does not exist	Not applicable	Yes, but not issued	No	Yes, but not utilized at present	Yes, but limits	No, does not exist	Yes

Fixed asset revaluation reserves[f]	No	No	No, does not exist	Yes	Yes	No	Yes, but limits	Yes, but limits	Yes, but limits	No
Latent or hidden revaluation reserves[g]	No	No	No, does not exist	No	No	Yes, but limits	No	No	No	Yes
General loan-loss reserves[h]	Yes	Yes	No, does not exist	Yes	Yes	Yes, but limits	Yes	Yes, but limits	Yes, but limits	Yes
Investment in the capital of other banks and financial institutions	No	No	No	No	Yes, but limits	No	No	No	No	No
Examinations and/or inspections										
On-site	Yes	Yes	Yes, usually every 3 years	Yes, not regularly	Yes	Yes	Yes, generally every 2-3 years	Yes, usually every 18-24 months	Yes, usually every 4-8 years	Yes, ad hoc basis
Banks pay exam	Yes	No	Yes	Yes	No information	Yes	No	No	No	Yes
External audits										
Required external audits	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes, for banks quoted on the stock exchange	Yes

(continued next page, see page 96 for notes)

Table C.2 Commercial bank supervisory practices in EU and G-10 countries: 1995 (continued)

	Austria	Belgium	Denmark	Finland	France	Germany	Greece	Ireland	Italy	Luxembourg
Information publicly disclosed										
Bank examinations or inspections	No	No	No	No	No information	No	No	No	No	No
Enforcement actions	No	Yes	No	No	No information	No	No	No	Yes	No
Consumer protection laws										
Consumer protection laws exist	Yes	Yes	No, not specifically for banks	Yes	No information	Yes	Yes	Yes	Yes	Yes
Domestic bank activities abroad										
Specific authorization required	No	No, only notification	No	No	No	No	Yes	Yes	Yes	No
Limits or restrictions placed on domestic banks' foreign activities	No	No, only notification	No	No	No	No	No	No	No	No
Rates paid on deposits or charged on loans										
Restrictions or controls	No	Yes, only on consumer loans and special savings accounts	No	Yes	No information	No	No	No	No	No

Lending limits on										
Single borrower	Yes	Yes	Yes	Yes	No information	Yes	Yes	Yes	Yes	Yes
Persons connected with the bank	Yes	Yes	No	Yes	No information	No	Yes	Yes	Yes	Yes
Particular sectors	No	No	No	Yes	No information	No	No	No	Yes	No
Country risk exposure	No	No	No	Yes	No information	No	No	No	No	No
Large exposures	Yes	Yes	Yes	Yes	No information	Yes	Yes	Yes	Yes	Yes

(continued next page, see page 96 for notes)

Table C.2 Commercial bank supervisory practices in EU and G-10 countries: 1995 (continued)

	Netherlands	Portugal	Spain	Sweden	United Kingdom	Canada	Japan	Switzerland	United States
Noncumulative perpetual preferred stock	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes, no limits	Yes
Current year profit-added (or loss deducted)	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Intangible assets other than goodwill	Yes	Yes	No	No	No	Yes	Yes	No	No, with limited exceptions
Goodwill[a]	Yes	Yes	No	No	No	No	No	No	No
Undisclosed reserves[b]	Yes	No information	No	No	Not applicable	No	No	Yes, but limits	No
Hybrid capital instruments (including cumulative perpetual preferred stock)[c]	Yes	Yes	Yes, but limits	Yes, with approval	Yes, but limits	Yes	Yes, but not prevalent	No, not including cumulative perpetual preferred stock	Yes, but limits
Subordinated term debt[d]	Yes	Yes, but limits	Yes, but limits	Yes	Yes, but limits	Yes	Yes	Yes, but limits	Yes, but limits
Limited life redeemable preference shares[e]	Yes	No information	Yes, but limits	No	Yes	Yes	Yes, but not issues	No	Yes, but limits
Fixed asset revaluation reserves[f]	Yes	Yes	Yes, but limits	Yes, with approval	Yes, with caution	No	No	Yes, but limits	No

Latent or hidden revaluation reserves[g]	Yes	No information	No	No	Not applicable	No	Yes	Yes, but limits	No
General loan-loss reserves[h]	Yes	Yes	No	No	Yes, but limits	No	Yes	Yes, no limits	Yes, but limits
Investment in the capital of other banks and financial institutions	Yes	No	No	No	No	Yes, but back to back issues are deducted	No, if sole purpose is to raise capital ration	No	No
Examinations and/or inspections									
On-Site	Yes, depends of size/risk profile	Yes, usually annually	Yes	Yes	Yes, but limited and usually biennially	Yes, annually	Yes	Yes, every year	Yes
Banks pay exam	No	No	No	No	No, not directly	Yes	No information	Yes	Yes
External audits									
Required external audits	Yes	Yes	Yes	Yes	Yes	Yes	No information	Yes, official part of supervisory system	Yes, for banks with assets exceeding $500 million

(continued next page, see page 96 for notes)

Table C.2 Commercial bank supervisory practices in EU and G-10 countries: 1995 (continued)

	Netherlands	Portugal	Spain	Sweden	United Kingdom	Canada	Japan	Switzerland	United States
Information publicly disclosed									
Bank examinations or inspections	No	No	No	No	No	No	No information	No	No
Enforcement actions	No	Yes	No	No	Yes, but not explicitly naming institutions	No	No information	No	Yes
Consumer protection laws									
Consumer protection laws exist	Yes	Yes	Yes	Yes	No	Yes	No information	No	Yes
Domestic bank activities abroad									
Specific authorization required	No	Yes	Yes, but only branches outside EU	No	No	No[i]	No information	No, only notification	No
Limits or restrictions places on domestic banks' foreign activities	Yes	No	No	No	No	No[i]	No information	No	Yes

Rates paid on deposits or charged on loans									
Restrictions of controls	No	No	No	No	No	No	No, with few relatively minor exceptions	Yes, only on loans	Yes, but not particularly confining
Lending limits on									
Single borrower	Yes	Yes	Yes	Yes	Yes[j]	Yes	Yes	Yes	Yes
Persons connected with the bank	Yes	Yes	Yes	No	Yes[j]	Yes	No information	Yes	Yes
Particular sectors	Yes	No	No	Yes	Yes[j]	No	No information	Yes	No
Country risk exposure	Yes	No	No	No	Yes[j]	No	No information	No, but provision requirements per country	No
Large exposures	Yes	Yes	No	Yes	Yes[j]	Yes	No information	Yes	No

(continued next page, see page 96 for notes)

a. Goodwill is an intangible asset.

b. Undisclosed reserves are portions of accumulated after-tax retained earnings not identified in the published balance sheet or otherwise disclosed, except to banking supervisors.

c. Hybrid-capital instruments including cumulative preferred stock are instruments that combine the characteristics of equity capital and debt and should meet the following requirements: unsecured, subordinated, and fully paid-up; not redeemable at the initiative of the holder or without prior consent of supervisory authority; available to participate in losses without the bank being obliged to cease trading (unlike conventional subordinated debt); and all service obligations to be deferred where the profitability of the bank would not support payment.

d. Subordinated term debt is normally not available to participate in losses of a bank that continues operating (included in capital only if minimum maturity of five years).

e. Limited life redeemable preference shares are the same as immediately before.

f. Fixed asset revaluation reserves represent a formal revaluation—carried through to the balance sheet—of a bank's own premises.

g. Latent or hidden revaluation reserves are the difference between the market value and historic cost book value of long-term holdings of equity securities.

h. General loan-loss reserves are reserves that are held against future and presently unidentified losses and are freely available to meet losses that may subsequently materialize.

i. Explicitly or implicitly, in relation to the size of the bank's capital base.

j. Depends on nature and circumstances of the bank and country involved.

Note: The Basle Committee on Banking Supervision (composed of representatives of the central banks and supervisory authorities from the G-10 countries and Luxembourg) adopted the Basle Accord in July 1988. The Basle Accord is noncompulsory and applies only to internationally active banks. It is composed of four basic elements: (1) an agreed upon definition of tier 1 (or core) capital, consisting primarily of common stockholders' equity and noncumulative perpetual preferred stock; (2) additional components of capital, constituting tier 2 capital; (3) a general framework for assigning assets and off-balance-sheet items to broad risk categories and procedures for calculating risk-based categories and procedures for calculating a risk-based capital ratio; and (4) a schedule for achieving, by no later than the end of 1992, a minimum ratio of total capital (tier 1 plus tier 2) to risk-weighted assets of 8 percent (of which at least 4 percent should be in the form of core capital).

The European Union issued two directives primarily addressing capital standards: the Own Funds and Solvency Ratio Directives, which were adopted in April 1989 and December 1989, respectively. These directives have the force of law and apply to all banks incorporated in the member state. Banks were required to meet a minimum 8 percent risk-weighted capital ratio by 1 January 1993. The EU directives refer to ''original own funds'' and ''additional own funds'' rather than to tier 1 (core) capital and tier 2 (supplemental) capital. However, these differences in terminology have no substantive effect.

The Basle Accord and the EU directives do not provide for identical minimum capital standards for banks.

Sources: Supervisory authorities in the listed countries provided information used to prepare this table. However, they are not responsible for any errors or misinterpretations. For exact information, one must consult the pertinent laws and regulations in the individual countries. *The Capital Equivalency Report*, US Board of Governors of the Federal Reserve System and US Secretary of the Department of the Treasury, 19 June 1992, was a source for France and Japan. Also, in the case of France, a source was *Bank Regulatory Structure: France,* US General Accounting Office, August 1995.

Appendix D
Two Examples of Disclosure of the Financial Condition of Banks

Aggregate Positions: Data for National Banks in the United States (Goldstein and Turner 1996)

Table D.1

Income	Balance sheet	Performance ratios
Net income	Assets	Return on equity
Net interest income	Loans	Return on assets
Noninterest income	Real estate	Net interest margin
Noninterest expense	Commercial and industrial	
Loan-loss provision	Noncurrent loans[a]	Loss provisions to loans
Gains on securities sales, net	Other real estate owned	Net loan loss to loans
Extraordinary income	Securities not trading	Noncurrent loans to loans
Net loan loss		Loss reserves to loans
	Total liabilities	Loss reserves to noncurrent loans
	Total deposits	
	Domestic deposits	Loans to assets
	Loan-loss reserve	Loans to deposits
		Equity to assets
	Equity capital	Estimated leverage ratio[b]
	Total capital	Estimated risk-based capital ratio

Note: These aggregate data cover around 3,000 banks and are published quarterly.

a. Sum of loans and leases 90 days or more past due, plus loans not earning the contractual rate of interest in the loan agreement.

b. Ratio of estimated tier 1 capital to estimated tangible total assets.

Source: Office of the Comptroller of the Currency, *Quarterly Journal*

Individual Positions: New Zealand's New Disclosure Regime For Banks (Mortlock 1996; Nicholl 1996)

The aim of bank supervision in New Zealand is to maintain a sound and efficient financial system. The protection of depositors is not an aim in itself; there is no deposit insurance.

Registration of Banks

Bank registration entitles the institution to use the word ''bank'' in its name; but registration is not required to conduct banking business.[1] The Reserve Bank of New Zealand is responsible for deciding on applications for bank registration subject to certain conditions:

- Total capital of at least 8 percent of the banking group's risk-weighted credit exposures, of which at least one-half must be tier 1 capital.[2]
- Group's credit exposure to major shareholders and related entities not permitted to exceed: (a) 15 percent of tier 1 capital in the case of lending to a nonbank and (b) 75 percent of tier 1 capital in the case of lending to a bank.
- Locally incorporated banks to have at least two independent directors and a nonexecutive chairman.

Reserve Bank Action When a Bank's Capital Falls Below Requirements

Recent reforms introduced a more structured approach with the aim of reducing the scope for regulatory forbearance by the banking supervisor.

- If a bank's tier 1 or total capital falls below the limits noted above, the bank would have to submit to the Reserve Bank a plan for restoring capital, including the following elements: (a) no dividends paid until the minimum capital requirements have been compiled with; (b) no increase in exposure to related parties from the level prevailing when

1. However, compliance with disclosure and other requirements contained in the Securities Act is required.

2. At the time of announcement, the Reserve Bank noted, ''Although the Bank considers that disclosure alone, without minimum requirements, should provide sufficient incentives for banks to at least adhere to the international norm of 8 percent, it believes the retention of the capital requirement offers benefits in terms of international credibility, at little, if any, marginal costs to banks.''

capital requirements first breached; and (c) if reduction in capital results in a bank being in breach of the limit on related party exposures, the bank would be required to reduce its exposure to a level that complies with the limit.

- If a bank's tier 1 capital fall below 3 percent of risk-weighted exposures, gross credit exposures must not be increased from the level which occurred when capital first fell below this limit.
- The plan would be published in the bank's public disclosure statement at the first practicable opportunity.

Form of Disclosure

- Quarterly, with two main—forms, one brief (''Key Information Summary'') and the other longer (''General Disclosure Statement''). A Supplemental Disclosure Statement discloses details of any guarantee arrangements and conditions of registration imposed by the Reserve Bank.
- At the half-year and end-of-year, disclosure statements must be published not later than three months after the relevant balance date. In the first and third quarters of a bank's financial year, banks have only two months to publish the disclosure statements, given that in these quarters the disclosure statements are of an abbreviated nature.

Key Information Summary

This one- or two-page note must be displayed prominently in every bank branch and include:

- *Credit rating.* If the bank has one, it must disclose the credit rating given to its long-term senior unsecured liabilities payable in New Zealand. It must also disclose the name of the rating agency, any qualifications (e.g., ''credit watch'' status), and any changes made in the two years preceding the balance date. A bank with no credit rating must disclose prominently that fact.[3]
- *Capital adequacy.* Risk-weighted capital ratios, as measured using Basle capital requirements.
- *Impaired assets.* Amount and specific provisions held against them.

3. The initial intention of imposing a mandatory rating on all banks was abandoned in the face of opposition from smaller banks that argued that this would impose unnecessary costs on them.

- *Exposure concentration.* Disclosed when it exceeds 10 percent of group's equity; disclosure is based on group's peak lending to individual customers over the accounting period. Disclosed as the number of exposures between 10 percent and 20 percent of the group's equity, the number between 20 percent and 30 percent and so on.
- *Connected lending.* Amount of credit exposure to connected persons, based on peak exposure over the accounting period.
- *Profitability* and statement as to *whether liabilities are guaranteed* by another party.

General Disclosure Statement

Contains all the information in the Key Information Summary but in greater detail and additional information such as:

- *Capital and exposure information.* Detailed information on tier 1 and tier 2 capital and credit exposure (both on- and off-balance-sheet) for the bank and the banking group.
- *Funds management.* Information on securitization, unit trusts, superannuation funds, and other fiduciary activities. Explanation of measures in place to minimize risks that might affect the banking group's balance sheet.
- *Sectoral information.* Credit exposure by industry sectors and geographical areas. Main sources of funds by geographical area, by product, and by counterparty type.
- *Risk management systems.* Description of internal audit function and extent to which systems are subject to review.
- *Market risk exposures.* Banking group's exposure to changes in interest rates, foreign exchange rates, and equity prices. Market risk disclosure is for the bank's whole book (both the banking book and the trading book). These disclosure requirements give banks the option of calculating interest rate risk using the Reserve Bank model (based on the Basle market risk model) or using their own model, provided that it produces a result that is at least as conservative as the Reserve Bank model. Both peak and end-of-period exposures must be disclosed.
- Detailed information on *asset quality* and *credit exposure concentration*.

Directors' Attestations and Legal Responsibilities

Every disclosure statement must contain attestations signed by every director of the bank. The attestations relate to:

- Whether the bank has adequate systems in place to monitor and manage the banking group's business risks (including credit risk, concentration risk, equity risk, foreign exchange risk, interest rate risk, and liquidity risk) and whether those systems are being properly applied;
- Whether the banking group's exposures to related parties are contrary to the interest of the banking group;
- Whether the bank is complying with its conditions of registration; and
- That the disclosure statement is not false or misleading.

Directors face serious criminal and civil penalties (including imprisonment, fines, and unlimited personal liability for depositors' losses) for false or misleading statements. Directors may also incur common law liability if they allow the bank to continue to accept funds on the basis of a disclosure statement that, although not false or misleading when signed, has become false or misleading as a result of subsequent material adverse developments.

Reserve Bank's Responsibilities

Under the disclosure framework, the Reserve Bank:

- Will monitor banks' disclosure statements to maintain a sound understanding of the financial condition of the banking system.
- Will monitor banks' compliance with disclosure requirements and conditions of registration. The Reserve Bank also has the power to require a bank to correct and republish a disclosure statement found to be false or misleading.
- Can initiate legal proceedings against a bank and its directors if a statement is thought to be false or misleading.

The Reserve Bank retains extensive crisis management powers under its act, including the powers to appoint an investigator, give directives to a bank and recommend that a bank be placed under statutory management.