COMMITTEE ON BANKING REGULATIONS AND SUPERVISORY PRACTICES

Consolidation of banks' balance sheets: aggregation of risk-bearing assets as a method of supervising bank solvency

Introduction

Supervisory authorities all over the world have become increasingly aware in recent years of the need, in assessing the soundness of banks and the adequacy of their capital, to take into account the totality of their business at home and abroad. The aim of this paper is two-fold: first, to set out the reasons why the Committee considers that the aggregation of banks' risk-bearing assets is an important instrument of banking supervision, and the conclusions which it has drawn from this analysis; and second, to describe present practices in this area.

The structure of the paper is as follows:

Part I:	analysis of the problem and conclusions
Part II:	consideration of certain operational issues
Part III:	description of present practices (also presented in tabular form in an Annex) in the nine EEC countries and the five non-EEC countries represented on the Committee with regard to the aggregation of banks' risk-bearing assets.
Appendix 1:	theoretical illustrations of the gearing potential or multiplier effect on banks' lending capacities of operating freely through subsidiaries and joint ventures, as well as the limited usefulness of solvency requirements in controlling this phenomenon.
Appendix 2:	recent changes in the attitudes of supervisory authorities to surveillance of overseas operations.
Annex:	table summarising present practices with regard to the aggregation of banks' risk-bearing assets.

I. Methods of controlling banks' total risk exposure - analysis and conclusions

In the great majority of the countries considered in this report the accounts of banks' branches, foreign as well as domestic, are consolidated with those of their head offices for assessment of solvency. The growing awareness, referred to in the introduction, on the part of supervisory authorities of the need to assess the adequacy of a bank's capital on a consolidated basis therefore concerns principally the operations of subsidiaries and joint ventures. The establishment of such holdings can substantially gear up a parent bank's overall lending capacity if each entity is considered separately on the basis of a commonly applied ratio of risk assets to capital. (An example of this gearing potential or multiplier effect is given in Appendix 1 of this report.)

In principle, the supervisory authorities of the parent bank can counter this multiplier effect in two ways:

a) by imposing a 100 per cent. solvency requirement on such holdings (i.e. offsetting the full amount of the investment in a subsidiary against the capital of the parent before calculating the parent's own risk assets ratio)

b) by the consolidation of balance sheets and, in particular, by aggregating all of a banking group's risk-bearing assets.

The effects of both these methods are also illustrated in Appendix 1.

A 100 per cent. solvency requirement suffers from the disadvantage that it cannot guarantee that the prudential controls on an overseas operation are as strict as the parent supervisory authorities might wish. There is thus a strong incentive for banks to establish non-branch affiliates in countries where solvency requirements are less onerous than at home, which is the case especially in offshore centres. In addition a 100 per cent. solvency requirement has the following other limitations:

- it cannot fully reflect the potential responsibility of the parent bank, since the foreign affiliate may need financial support over and above the original equity investment
- it does not prevent the multiplier effects that could result from the establishment of banking offices that are themselves subsidiaries of subsidiaries

- banks will tend to be hostile to such a requirement because their affiliates, particularly those with relatively low balance-sheet totals, are often heavily capitalised.

On the other hand, the approach to supervising the adequacy of a bank's capital through aggregating all its risk-bearing assets and relating them to the total of its ultimate risk-bearing resources has a number of advantages:

- the same solvency ratio is applied to all risks of the same type that are being run by a particular bank, regardless of where its different offices may be located
- it removes the incentive for banks to establish non-branch affiliates in countries simply in order to take advantage of lower solvency requirements
- it should reduce the risk of ceilings on the size of loans to individual customers being circumvented, through the head office of a bank and a subsidiary extending credit to the same institution or person.

In addition, consolidation should be useful for banking supervision purposes in enabling the authorities to monitor banks' aggregate exposure to exchange rate risks and country risks. At the same time, it should be recognised that consolidation is a supplement to and not a substitute for other supervisory techniques; for example, where subsidiary companies are subject to more onerous capital requirements than their parents, consolidation would tend to give a misleading impression of the capital adequacy of the parent institution. For certain purposes, therefore, the supervisory authorities would also need to continue to monitor the parent on its own.

Despite this qualification, consolidation should enable the supervisory authority of a parent bank to make a more considered judgement about the capital adequacy of that bank in the light of its overall commitments than would otherwise be possible. Moreover, should such consolidated figures be available to host supervisory authorities it would assist them in judging the soundness of legally independent subsidiaries of foreign banks operating in their territory. The Committee therefore concludes that the capital adequacy and risk exposure of banks and their affiliates can most satisfactorily be monitored by supervisory authorities on the basis of consolidation of risk assets. It believes that parent supervisory authorities

should seek to move in that direction by obtaining the fullest possible information on their banks' risk exposure, including that of their branches, subsidiaries and joint ventures, both at home and abroad.

II. Some operational issues

The Committee recognises that there are a number of operational difficulties in stipulating which interests should be consolidated and in what proportion. It may for instance not be practical, because of the differing balance sheet structures, to envisage the consolidation of non-financial interests, for which a 100 per cent. solvency requirement would normally be adequate. Even where financial interests are concerned, it is necessary to determine how far consolidation should embrace bank holding companies, leasing activities, personal loan companies or other quasi-banking operations. In describing present practices, this paper has only included those subsidiaries which act as banks in the deployment of their assets, i.e. which make loans, whether or not they take deposits. A further point on which the Committee is agreed is that temporary interests should not be consolidated, but this then raises the issue of how permanent participations should be distinguished from temporary ones. In addition, it may be noted that for some countries difficulties may arise related to considerations of banking secrecy.

A further decision has to be made about the treatment of interests which are less than wholly-owned. There can be little doubt that where the interest is a majority one, the accounts should be consolidated, but whether on a pro-rata basis or fully is open to discussion, since a bank's moral obligation might be considered to extend beyond its equity share. As for minority interests, there is a clear case for excluding very small interests (for which a 100 per cent. solvency requirement could be applied), but no conclusion has yet been reached on what this cut-off point should be and whether it should be expressed as a proportion of the parent's capital, the subsidiary's, or both. The justification for consolidation on a pro-rata basis is again not clear-cut where minority interests are concerned; banks may be involved in joint ventures in which their responsibility might be held to extend beyond their proportionate shareholding, either because (though not in a majority) they are the largest shareholder, or because their fellow-shareholders are non-banks. The treatment of joint ventures and minority holdings is on the agenda for future meetings of the Committee.

III. Present practices with regard to the aggregation of banks' risk-bearing assets

The synoptic table which appears as the Annex presents the results of a survey of present practices in the fourteen countries covered by the report with respect to the use of consolidation for the purpose of assessing banks' capital adequacy. It will be seen from the number of qualifications made to the answers given that structural, regulatory and other differences make inter-country comparisons difficult. The main results of the survey may be summarised as follows:

i) Capital adequacy ratios (Question 1)

In all fourteen countries capital adequacy ratios are applied in respect of either liabilities or risk assets or both, in some countries on an informal basis.

ii) Consolidation of risk assets (Question 2)

In all fourteen countries figures for both domestic and foreign* branches are consolidated with those for the parent institution.

There is no agreed procedure with regard to subsidiaries, joint ventures or participations. The risk assets of wholly-owned subsidiaries, both domestic and foreign, are at present consolidated in Denmark, Ireland, the Netherlands, Canada and the United States. The Swiss and Japanese authorities have introduced the same requirement for banks' annual statements from 1977 and 1978 respectively. In Belgium, where a 100 per cent. solvency requirement applies to bank subsidiaries, a bank has an option to base its capital adequacy ratio on consolidated figures. In the United Kingdom prudential supervision of banks is undertaken with a general regard for consolidated figures: the banks are prepared to accept the use of broad numerical yardsticks, including for example a risk assets ratio, in the assessment of their overall capital adequacy.

As far as partly-owned subsidiaries (both domestic and foreign) are concerned, banks in the Netherlands have to consolidate on a pro-rata basis any holdings in excess of 10 per cent.; in Ireland, Switzerland, the United

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* With the exception of Sweden, whose banks are prohibited from establishing branches abroad.

Kingdom, the United States and, starting from 1978, Japan, consolidation applies to majority holdings, whilst the same provision is contained in the Canadian banking legislation which is currently before Parliament.

iii) Separate testing and solvency requirements (Question 3)

The supervisory authorities of those countries where subsidiaries or joint ventures are not consolidated still carry out separate tests of whether prudential requirements are being observed, although in most cases these apply to domestic interests only. In addition, in Sweden and the United Kingdom quantitative solvency requirements are imposed on, or tests applied to, the parent banks in respect of their subsidiaries and joint ventures.

October 1978

The multiplier process in banking affiliations

A bank is able, by establishing subsidiaries, to create an equity capital pyramid which enables it to circumvent restrictions imposed by the supervisory authorities in the form of capital adequacy ratios. It is, for example, theoretically possible for a bank subject to a capital adequacy/risk assets ratio of 10 per cent. on all levels of its operations to have a risk exposure equivalent to one thousand times its capital and reserves:

Example 1

Parent bank A

Holding in B	10	Own resources	1
		Deposits	9

Subsidiary B

Holding in C	100	Own resources	10
		Deposits	90

Subsidiary C

Loans	1,000	Own resources	100
		Deposits	900

The supervisory authorities can in principle counter this multiplier effect:

a) by imposing a 100 per cent. solvency requirement on subsidiaries
b) by the aggregation of all the banks' risk-bearing assets in a consolidated balance sheet.

a) Where foreign subsidiaries are made subject to a 100 per cent. solvency requirement, the effective capital adequacy/risk assets ratio depends on the ratio imposed directly on the subsidiary concerned by its host supervisory authority:

Parent bank A
(required ratio 100%)

Holding in B	10	Own resources	10

Example 2

Subsidiary B
(required ratio 10%)

Loans	100	Own resources	10
		Deposits	90

Example 3

Subsidiary B
(required ratio 20%)

Loans	50	Own resources	10
		Deposits	40

Example 4

Subsidiary B
(required ratio 1%)

Loans	1000	Own resources	10
		Deposits	990

b) Where banks are required to aggregate all their risk-bearing assets in a consolidated balance sheet, the group accounts for these last three examples, on the assumption of a 10 per cent. ratio requirement, might be:

Consolidated balance sheet

Example 2	Loans	100	Own resources	10
			Deposits	90
Example 3	Loans	50	Own resources	5
			Deposits	45
Example 4	Loans	1000	Own resources	100
			Deposits	900

Recent changes in attitudes of supervisory authorities to surveillance of overseas operations

The banking supervisory authorities' increasing awareness of the responsibility banks ought to have not only for their foreign branches but also for their subsidiaries and joint ventures abroad has led in recent years to the introduction of a number of new requirements concerning banks' relationships with their foreign affiliations. The most important of the recent changes introduced by the countries covered in this report are:

- In the United States investments in foreign banking institutions by US banks, and significant investments by bank holding companies, are by Statute subject to advance approval. "The Statement of Stock Interests in Foreign Joint Ventures" of 12th February 1976 identifies certain considerations that the Federal Reserve will regularly take into account in approving applications by banks to invest in foreign joint ventures. In particular, the Federal Reserve, when assessing the strength of a bank, takes into account the possibility that a joint venture might need financial support beyond the initial investment by the US bank, as well as any arrangements that the investing US bank may have made with other investors to share responsibility for providing such support.

- In the spring of 1976 Japan issued regulations requiring domestic banks to provide the Ministry of Finance with regular reports and, also, in the spring of 1978 regulations requiring consolidated statements in respect of foreign holdings exceeding 50 per cent.

- In Canada the whole question of consolidation has been under consideration in the course of the recent review of banking legislation. At present Canadian banks are only permitted to have subsidiaries outside the country; in such cases consolidation is required only where the subsidiary is wholly-owned. The new banking legislation will provide for full consolidation, to include all banking subsidiaries. The Canadian authorities are also concerned with the treatment both of non-banking subsidiaries and of minority holdings which give a considerable degree of control. To this end, proposals have been made that the equity accounting principle should

be applied to all holdings of banks carrying a voting participation in excess of 20 per cent. or giving clear operational control. So far as non-banking subsidiaries are concerned, it is proposed that in cases where such a subsidiary clearly has no function in any consolidation, a form of consolidation should be affected by again applying the equity accounting principle.

- Since March 1977 banks in the Netherlands have been required once a year to present accounts in which the figures for wholly-owned subsidiaries or participations abroad (with the exception of minority interests of 10 per cent. and less) are consolidated on a pro-rata basis (domestic wholly-owned subsidiaries and majority participations are consolidated monthly).

- In Switzerland consolidation is being introduced for the first time in respect of banks' annual statements for the year 1977.

- In the United Kingdom the involvement of supervised institutions through operations in subsidiaries and associated companies, whether UK or foreign, is included in assessments of solvency and is, in general, subjected to a 100 per cent. solvency requirement. In some cases supervision of banking subsidiaries and of non-banking finance company subsidiaries may be undertaken by means of consolidation with the parent, though the parent will also be looked at on an unconsolidated basis. At least once a year there is a review of each supervised institution's consolidated accounts to ensure that no material operations carried out through subsidiaries, affiliates or overseas branches are escaping attention at the more frequent reviews.

- In Belgium subsidiaries of banks are subject to a 100 per cent. solvency requirement; since 1972 the parent bank has had the option of presenting a consolidated balance sheet in respect of which certain prudential ratios have to be observed. Since the middle of 1975 the law has allowed that such consolidation may be made compulsory, but no implementing decree has so far been adopted.

- Finally, so far as "branching-in" is concerned, in 1974 the United Kingdom authorities requested foreign shareholders of consortium banks established in the United Kingdom to certify that they were "aware of their moral responsibility" for the banks concerned. In Switzerland the authorities require minimum endowment capital of Sw.fr. 2 million for the branches of foreign banks and the introduction of a similar requirement has been under consideration in Ireland.

Present practices with regard to the aggregation of banks' risk-bearing assets in fourteen countries

Items	EEC member countries									non-EEC countries				
	Belgium	Denmark	France	Germany	Ireland	Italy	Luxembourg	Netherlands	United Kingdom[1]	Canada	Japan	Sweden	Switzerland	United States
1. In assessing solvency, are the following ratios applied in your country:														
(a) a capital adequacy ratio in respect of liabilities?	no	yes	no	no	yes	yes[1]	yes	no	yes	yes	yes	no	yes	yes[1]
(b) a capital adequacy ratio in respect of risk assets?	yes	no	yes[1]	yes	yes	no	no	yes	yes	yes	no	yes	no	yes[1]
2. Are the domestic parent company's risk assets aggregated for supervisory purposes with those of														
(a) domestic branches?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
(b) branches abroad?	yes	yes	yes	yes	yes	yes	yes	yes	yes[2]	yes	yes	no[3]	yes	yes
(c) domestic wholly-owned subsidiaries?	no[4]	yes	no	no	yes	no	no	yes	yes[2]	no[5]	yes[6]	no	yes	yes
(d) wholly-owned subsidiaries abroad?	no[4]	yes	no	no	yes	no	no[7]	yes	yes[2]	yes[8]	yes[6]	no	yes	yes
(e) domestic majority or minority holdings, with participation of														
(i) 50 per cent. or more?	no[4]	no	no	no	yes	no	no	yes	yes[2]	no	yes[6]	no	yes	yes
(ii) between 10 per cent. and 50 per cent.?	no[4]	no	no	no	no	no	no	yes	no	no	no	no	no	no
(iii) less than 10 per cent.?	no[4]	no	no	no	no	no	no	no	no	no	no	no	no	no
(f) majority or minority holdings abroad, with participation of														
(i) 50 per cent. or more?	no[4]	no	no	no	yes	no	no[7]	yes	yes[2]	no	yes[6]	no	yes	yes
(ii) between 10 per cent. and 50 per cent.?	no[4]	no	no	no	no	no	no[7]	yes	no	no	no	no	no	no
(iii) less than 10 per cent.?	no[4]	no	no	no	no	no	no[7]	no	no	no	no	no	no	no
3. In so far as the risk assets are not aggregated,														
(a) are the (i) branches	-[1]	-	-	-	-	-	-	-	-	-	-	-	-	-
(ii) wholly-owned subsidiaries	-[1]	-	yes[9]	yes[10]	-	yes[9]	yes[10]	-	-	no	-	yes[10]	-	-
(iii) majority or minority holdings	-	no	yes[9]	yes[10]	yes[11]	yes[9]	yes[10]	no[12]	-[13]	no	no	yes[10]	-	no
referred to in question (2) above tested separately and, if so, how?														
(b) are there any specific solvency requirements for														
(i) wholly-owned subsidiaries?	yes	-	no	no	-	no	no	-	yes[14]	no	-	yes[14]	no	-
(ii) majority or minority holdings?	yes	no	no	no	no[15]	no	no	yes[12]	yes[14]	no	no	yes[14]	no	no
or capital endowment requirements for branches?	-	-	no	no	no[16]	no	no	-	no	no	-	no	yes[17]	-
If so, what are they?	100%	-	-	-	-	-	-	10%	-	-	-	-	17)	-

N.B. SUBSIDIARIES ARE DEFINED IN THIS TABLE AS NON-BRANCH AFFILIATES WHICH ARE ENGAGED IN THE BUSINESS OF LENDING, WHETHER THEY TAKE DEPOSITS OR NOT.

Notes:

(1) Supervision is carried out on an informal basis.
(2) Assessment on an aggregated basis is usually less frequent than on a non-aggregated basis.
(3) Swedish banks are prohibited from establishing branches abroad.
(4) The Belgian parent company has the option of basing the capital adequacy ratio on consolidated figures.
(5) In general Canadian banks are not permitted to have wholly-owned domestic subsidiaries.
(6) To be applied for the first time to banks' annual statements for 1978.
(7) Luxembourg-based parent banks have practically no subsidiaries or holdings abroad.
(8) Refers only to banking subsidiaries, as banks are generally not permitted to own non-banking institutions.
(9) On an informal basis for domestic subsidiaries and holdings only.
(10) Domestic subsidiaries only.
(11) Applies only to minority holdings. However, subsidiaries and majority holdings are also tested separately.
(12) Refers only to holdings of 10 per cent. and less.
(13) The book value of the investment is deducted from the parent bank's share capital. If the parent is also providing loans, a separate test is made to determine whether those loans also should be deducted.
(14) The book value of the subsidiary is deducted from the parent bank's share capital.
(15) Refers only to minority holdings.
(16) Not at present.
(17) Only for branches of foreign banks. Requirement: Sw.fr. 2 million per branch.