Capital Adequacy Principles paper

Capital Adequacy Principles

Objective

1. To provide banking, securities and insurance supervisors with principles and measurement techniques (a) to facilitate the assessment of capital adequacy on a group-wide basis for heterogeneous financial conglomerates; and (b) to identify situations such as double or multiple gearing which can result in an overstatement of group capital and which can have a material adverse effect on the regulated financial entities. The principles and measurement techniques put forward in this paper do not replace existing sectoral rules and regulatory responsibilities.

Summary of Principles

2. Supervisors should assess the capital adequacy of financial conglomerates. In so doing, measurement techniques should be designed to:

I. detect and provide for situations of double or multiple gearing, i.e. where the same capital is used simultaneously as a buffer against risk in two or more legal entities;

II. detect and provide for situations where a parent issues debt and downstreams the proceeds in the form of equity, which can result in excessive leverage;

III. include a mechanism to detect and provide for the effects of double, multiple or excessive gearing through unregulated intermediate holding companies which have participations in dependants or affiliates engaged in financial activities;

IV. include a mechanism to address the risks being accepted by unregulated entities within a financial conglomerate that are carrying out activities similar to the activities of entities regulated for solvency purposes (e.g. leasing, factoring, reinsurance).

V. address the issue of participations in regulated dependants (and in unregulated dependants covered by principle IV) and to ensure the treatment of minority and majority interests is prudentially sound.

Measurement Techniques

3. This paper recognises the existence of capital adequacy rules in each sector and does not seek to impose specific techniques for giving effect to the principles. Rather, the paper sets out techniques that usefully complement existing approaches to the assessment of capital adequacy. The Joint Forum has identified three measurement techniques outlined in Annex 1.

Background

4. The emergence of corporate groups which provide a wide range of financial services, known as financial conglomerates and typically incorporating at least two of banking, securities and insurance, has created an additional dimension for the solo supervisors of entities within those groups. Supervisory concerns have been explored from the perspective of each of the three supervisory disciplines and also from a broader perspective by the three groups of supervisors working together.

5. A central issue has been to ensure that the objectives of individual supervisors as they relate to the entities for which they have regulatory responsibility are not impaired as a result of the existence of financial conglomerates. Supervisors collectively recognise the need for individual supervisors of businesses within a conglomerate to satisfy themselves that there is sufficient capital available to the individual regulated entities to ensure their viability. Different supervisors attach different weights to the relative importance of the two objectives identified in the opening paragraph of this paper while recognising that neither is exclusive of the other.

6. The solo capital adequacy requirements of each of the banking, securities and insurance sectors are different with varying definitions of the elements of capital, and varying approaches to asset and liability valuations. Each sector's capital adequacy requirements reflect the nature of the different businesses undertaken by each sector, the differing risks to which they are exposed, and the different ways in which risk is managed by the firms and assessed (and/or constrained) by supervisors.

7. The elaboration and application of capital adequacy measurement techniques on a group-wide basis, and the possibility of the exercise of supervisory powers including those providing for remedial action which may prove necessary, is not intended to create an expectation that the full extent of regulation extends to unregulated entities within a financial conglomerate. The supervisory measures adopted should be construed so as to take this into account.

Assumptions

8. The capital adequacy requirements (and other features of the financial control regimes) that banking, securities and insurance supervisors prescribe for the institutions and groups within their own jurisdictions are taken as given. Supervisors may wish to exercise their judgement on the degree to which they will rely on the application of these requirements in jurisdictions which do not apply similar standards of supervision. The requirements within each sector are not in all cases uniform, but the trend is towards convergence within each sector. Further progress on the elaboration and convergence of capital adequacy requirements in the insurance sector is however desirable, including for insurance groups.

9. The elaboration of acceptable techniques of capital measurement for heterogeneous financial conglomerates does not preclude the use of an accounting-based consolidation approach, or other prudent approaches that meet objectives analogous to those in paragraph 1, for financial conglomerates made up of homogeneous entities.

Definitions

10. For the purposes of this paper, heterogeneous financial conglomerates are conglomerates whose primary business is financial, whose regulated entities engage to a significant extent in at least two of the activities of banking, insurance and securities business, and which are not subject to uniform capital adequacy requirements.

11. Group-wide basis is a term employed to indicate that the entire group, including the parent and all its regulated and unregulated entities, are being considered.

12. Capital and regulatory capital are used interchangeably to mean the aggregate amount of elements eligible for inclusion in the regulatory definition of capital.

13. Regulatory capital requirement is the minimum amount of regulatory capital required by a supervisor, which if not maintained will usually permit or require supervisory intervention.

Guiding Principles

14. The objective in developing measurement techniques for the assessment of capital adequacy on a group-wide basis for heterogeneous financial conglomerates has been to identify approaches that should yield broadly equivalent results, not to promote a single technique for universal application.

15. In principle, the use of the different techniques outlined in the annex to this paper should yield broadly equivalent results if applied to any particular group; in practice, the exercise of reasonable discretionary judgement by supervisors will give results within a range of acceptable outcomes.

16. The use of these techniques does not diminish the need for solo supervisors to establish the solo capital position against solo capital requirements for individual regulated businesses, that are required by sectoral capital adequacy regimes.

17. In order to fulfil the objectives in paragraph 1, acceptable capital adequacy measurement techniques should be designed to:

I. detect and provide for situations of double or multiple gearing, i.e. where the same capital is used simultaneously as a buffer against risk in two or more legal entities;

18. Double gearing occurs whenever one entity holds regulatory capital issued by another entity within the same group and the issuer is allowed to count the capital in its own balance sheet. In that situation, external capital of the group is geared up twice; first by the parent, and then a second time by the dependant. Multiple gearing occurs when the dependant in the previous instance itself downstreams regulatory capital to a third-tier entity, and the parent's externally generated capital is geared up a third time. Although double and multiple gearing are normally associated with a parent downstreaming capital to its dependant, it can also take the form of an entity holding regulatory capital issued by an entity above it in the group's organisation chart (upstreamed capital) or by a sister affiliate . Supervisors need to be alert to the implications of double or multiple gearing in the entities that they supervise, regardless of whether those entities hold capital issued by a parent company, a dependant, or an affiliate.

19. The principal issue raised by double or multiple gearing is not the ownership structure as such (although some structures may also raise broader supervisory concerns), but the consequences of that structure for the assessment of a financial conglomerate's group-wide capital. When double or multiple gearing is present, assessments of group capital that are based on measures of solo capital are likely to overstate the external capital of the group. Supervisors should bear in mind that only capital issued to external (i.e., non-group) investors provides support to the group, although some forms of internally generated capital may provide support for individual companies on a solo basis. Consequently, assessments of group capital should exclude intra-group holdings of regulatory capital. Three capital adequacy measurement techniques for making that adjustment are described in annex 1 to this paper. Annex 2 provides numerical illustrations.

20. The situation is somewhat different when two entities within a group each holds regulatory capital issued by the other. In that case, none of the reciprocal holdings represents externally generated capital. The solution, however, is the same: both intra-group holdings should be excluded from assessments of group capital.

21. The structure of corporate groups means that it is inevitable that at least one entity will own shares and possibly other capital instruments issued by other entities within the group. While from a commercial perspective such structures are not inherently unsound, some may pose a prudential concern. For example, large intra-group holdings of capital can permit difficulties in one entity to be transmitted more quickly to other entities within the group. Thus, in addition to making the necessary adjustment to measurements of group capital, supervisors should be alert to ownership structures that pose such prudential concerns.

22. Paragraphs 17 to 20 deal with double or multiple gearing within a group. Supervisors should also be aware that similar problems of double or multiple gearing can also occur between different conglomerates holding cross participations in each other or in each other's dependants.

II. detect and provide for situations where a parent issues debt and downstreams the proceeds in the form of equity, which can result in excessive leverage;

23. A situation of excessive leverage can occur when a parent issues debt (or other instruments not acceptable as regulatory capital in the downstream entity) and downstreams the proceeds to a dependant in the form of equity or other elements of regulatory capital. In this situation, the effective leverage of the dependant may be greater than its leverage computed on a solo basis. While this type of leverage is not necessarily unsafe or unsound excessive leverage can constitute a prudential risk for the regulated entity if undue stress is placed on the regulated entity resulting from the obligation on the parent to service that debt. A similar problem can arise where a parent issues capital instruments of one quality and downstreams them as instruments of a higher quality.

24. In the particular case of an unregulated holding company, (i.e. one not subject to any sectoral capital adequacy requirement), at the top of a financial conglomerate, an assessment of group-wide capital adequacy by supervisors will need to encompass the effect on the group of the capital structure (and liquidity when appropriate)of such a company. To achieve this supervisors will need to be able to obtain information about the unregulated holding company e.g. via the regulated entities or via public domain information, and so to make an assessment of its ability to service all external debt. This is one aspect of a more general need for

supervisors to consider the impact on regulated entities of unregulated parent holding companies.

III. include a mechanism to detect and provide for the effects of double, multiple or excessive gearing through unregulated intermediate holding companies which have participations in dependants or affiliates engaged in financial activities.

25. Assessment techniques need to be able to address situations where the intermediate holding company provides regulatory capital to another group entity. The group-wide capital adequacy measurement technique used should effectively eliminate the effect of intermediate holding companies and yield the same results as would be produced if there were no such intermediate holding company, or if it were consolidated in the relevant sector for risk assessment purposes. The unregulated intermediate holding company could be a non-trading financial holding company whose only assets are its investments in dependants, and/or a company engaged in activities ancillary to the regulated entity (e.g. a service company to the group).

IV. include a mechanism to address the risks being accepted by unregulated entities within a financial conglomerate that are carrying out activities similar to the activities of entities regulated for solvency purposes (e.g. leasing, factoring, reinsurance).

26. For unregulated entities, supervisors have a number of analytical alternatives, including the substitution of a capital proxy for the relevant sector, the application of other ad hoc treatments that represent a prudent treatment of the risks being accepted, or as a fallback, use of total deduction treatment described in paragraph 39 and annex 1. For unregulated entities whose activities are similar to regulated entities (for example, leasing, factoring, reinsurance), a comparable or "notional" capital proxy (including any valuation requirements for assets and liabilities) may be estimated by applying to the unregulated industry the capital requirements of the most analogous regulated industry. Normally, the capital proxy treatment is applied to a reinsurance company in a group. If the capital proxy treatment is not applied to reinsurance within the group, the supervisor of any insurance company in the group should consider whether it is prudent to give credit for reinsurance placed with the reinsurer in assessing the solo capital adequacy of the regulated group insurers.

27. Unregulated non-financial entities should normally be excluded from the assessment of the group. However, where it is clear that one or more regulated entities in the group have effectively provided explicit support, such unregulated entities should be brought into the group wide assessment, via capital proxy or through total deduction.

28. More generally, where risk has been transferred from regulated companies in a group to unregulated companies in the group, supervisors of the regulated companies may need to look through to the overall quantum and quality of assets in the unregulated companies, especially where a notional capital proxy has not been used.

V. address the issue of participations in regulated dependants (and in unregulated dependants covered by principle IV.) and to ensure the treatment of minority and majority interests is prudentially sound.

29. The framework and mechanism for identifying and mapping group relationships is embodied in company law and accounting conventions. For the purposes of prudential supervision, the accounting treatment should be used as the point of departure although the precise way in which capital is measured and aggregated will need to be determined by the supervisor in the light of his assessment of group relationships.

30. Where the group has neither control of nor significant influence by virtue of its participation(s) in a regulated company, the regulated entities' investments should be treated in accordance with the solo supervisors' rules for capital adequacy assessment for investments in similar companies. This approach will normally be applicable to group participations of less than 20%, and it will normally result in the participation(s) being treated on the same basis as participations of less than 20% in unregulated companies.

31. Where group participations in a regulated dependant are such as to give the group shared control, only the pro-rata share of regulatory capital in excess of the dependant's own regulatory capital requirements should normally be regarded as available to support risks in the parent company or in other entities in the group and to be recognised in a group-wide capital adequacy assessment, subject to the conditions in paragraphs 32-35. Where in the view of supervisors, group participations in a regulated dependent are such as to give significant influence and exposure to risk, but falling short of control, supervisors should normally use the same approach. The test of significant influence and exposure to risk can usually be expected to apply to participations of 20% or more (and on occasion between 10 and 20%), but under 50%.

32. Such participations below 50% may occasionally be treated as not conferring significant influence or exposure to risk, in particular if voting participation is under 20%, there is no right to board membership, large exposure or asset spread rules are met, and there is no co-ordination of business plans and development. Conversely, the test may exceptionally be met by participations in the range 10-20%.

33. Under accounting conventions, participations which confer effective control and/or meet company law definitions of subsidiaries are usually consolidated in full and minority interests shown separately from the group shareholders' funds. This is on the basis that if the subsidiary were disposed of, or funds corresponding to its assets transferred to the shareholders (usually through a dividend), the minority shareholders would receive their proportion of the proceeds. For prudential purposes, regulatory capital in excess of such a subsidiary's own regulatory capital requirements, and which can be regarded as in principle available to support risks in the parent company or in other entities in the group should a shortfall arise, can be recognised in a group-wide capital adequacy assessment, subject to the conditions set out in paragraphs 32-35. This treatment can be expected to apply to group participations in excess of 50%, including 100% participation.

34. A group-wide assessment of any participations covered by paragraphs 29-31 needs to determine whether an adequate distribution of capital exists within the group. This may lead supervisors to judge that although group-wide capital covers the risks of the group, its improper distribution may endanger regulated entities within the conglomerate; in other cases it may point to a shortfall in group-wide capital overall. Such an assessment should take into account restrictions (e.g. legal, tax, rights of other shareholders' and policyholders' interests, restrictions which may be imposed by solo regulation of dependants, foreign exchange, specific local requirements for branch operations) on the transferability of excess regulatory capital (whether by the transfer of assets or by other means) in such dependants.

35. The requirement is not that such transfers should actually take place, but it should be ascertained that funds equivalent to any capital in excess of the capital requirement of a dependant and included in the group-wide capital assessment could legitimately be moved should the need arise. This test may lead supervisors in their group wide assessment of capital, to limit the inclusion of excess capital in such dependants to the funds which they judge to be available to the parent or other parts of the group, taking account of any restrictions of the kind identified in paragraph 33.

36. Supervisors should be aware that fully integrating non-wholly-owned subsidiaries may overstate the extent to which excess regulatory capital is available to the group as a whole, unless the assessment described in paragraphs 32-33 has been carried out, while this treatment of deficits may overstate the group's responsibility to inject capital.

37. Conversely, a pro rata attribution of any deficit may understate a parent's de facto responsibility to provide additional capital. Any solo deficits in dependants should therefore be attributed in full in the group capital assessment if it appears to the supervisor that the parent is likely to have to support the dependant without assistance from other external

participants in the dependant. The larger the group participation in a dependant, the more likely such support will be required.

38. Regulatory capital in a dependant and the matching capital requirements should be calculated according to the rules applicable to the financial sector and jurisdiction in question. The supervisor of the parent should establish that any excess capital in the dependant and to be recognised in the parent or group balance sheet comprises capital elements acceptable under his own rules.

Total deduction

39. If it is not possible or practicable to make a prudent valuation of the capital in a regulated dependant, the value of the participation to the rest of the group should be set at zero, i.e. the book value of the investment should be fully deducted, unless circumstances (e.g. the existence of a guarantee from the parent to the dependant) suggests that an even more prudent treatment should be applied. This approach is likely to be appropriate if the regulatory competence of the dependant's jurisdiction is uncertain, and may also be appropriate where the local regulatory requirements and/or type of business undertaken is markedly different from those prevailing in the same sector in the parent/group jurisdiction.

Market risk

40. An emerging issue for supervisors is the treatment of market risk. In many cases, the existence of market risks in different parts of a group may lead supervisors to judge that full offset of positions is not appropriate, and that an aggregation or deductive approach may give the best group wide assessment of risks; in others a consolidation approach that fully offsets market risk may give a more accurate picture. This is an area where the appropriate guidance to supervisors is likely to evolve over the next few years.

Techniques

41. The Joint Forum has identified three techniques of capital measurement which are capable of yielding comparable and consistent assessments of the capital adequacy of financial conglomerates: the **building-block prudential approach**, the **risk-based aggregation method** and **risk-based deduction method**. In addition the "total deduction" technique can also be of value, especially in addressing problems of double/multiple gearing. The particulars of these techniques are set out in annexes 1 and 2 to this paper.

42. This paper endeavours to build on existing methods developed by sectoral supervisors in their respective jurisdictions to evaluate group-wide capital adequacy. Although these

existing methods frequently capture risks present across the range of conglomerates' activities, they may not always do so, or only do so in a limited manner. Where agreed by the supervisors involved with an individual conglomerate, coordination of the application of a capital adequacy measurement technique can help minimise duplicated reporting and other regulatory burdens for financial institutions.

43. In applying the techniques outlined in this paper, or other prudent techniques that may be developed in the future, supervisors have discretion to exclude entities which are immaterial to the risk profile of the group or its capital adequacy. Furthermore, supervisors may have to exercise judgement in other areas, such as the definition of regulatory capital, the determination of participation levels of subsidiaries, the application of accounting and actuarial principles, the treatment of unregulated entities and the treatment of minority and majority interests. Supervisors need to be aware that differences in the treatment of these elements may result in material differences in the overall assessment of the capital adequacy of the conglomerate.

44. The techniques consolidate or aggregate existing capital requirements and recognise risk reducing techniques (e.g hedging) to the extent that they are incorporated in sectoral capital adequacy regimes. As sectoral capital rules are developed to take more account of risks and as efforts continue to bring closer the rules in different sectors, so future measurement techniques for conglomerates may be developed to provide a better overall assessment of their capital adequacy.

45. The techniques presented have been tested by Joint Forum members on a limited number of financial conglomerates to ensure the equivalency of results between techniques and the feasibility of their application. In conducting the testing, some supervisors found it necessary to combine or tailor the techniques depending on the specific circumstances of the financial conglomerate. For example, in some cases the techniques were tailored depending on whether consolidated or unconsolidated information was available. Supervisors should have this flexibility in implementing the techniques.

46. The Joint Forum recognises that financial conglomerates operate under various types of corporate and management structures. It is not intended that the implementation of the techniques will be more favourable to one organisational structure over another.

47. If a financial conglomerate is considered not to have adequate capital, relevant supervisors should discuss and determine what appropriate measures need to be taken.

Annex 1

Supervisory Measurement Techniques Relating to Heterogeneous Financial Conglomerates

Use and Description of Techniques

The three techniques, described below, are recognised as useful alternative methodologies for assessing capital adequacy, and each technique, while analysing capital from different perspectives, should provide a similar conclusion regarding capital adequacy. Supervisors may wish to use those techniques that are best suited to the way readily accessible financial data on the conglomerate are structured. Supervisors should have the flexibility to utilise the individual techniques on their own or in combination and may need to modify these for the specific circumstances of the particular financial conglomerates with which they deal. Moreover, supervisors may use those techniques best suited to identify or highlight the nature of the risks assumed by the financial conglomerate or that identify potential weaknesses relevant to the structure of a particular financial conglomerate. Another analytical technique, which is similar to those used to evaluate group-wide capital adequacy, is provided as a fall back treatment to address the problem of double gearing and is directed at the parent company only.

1. Building Block Prudential Approach

The "building block" approach essentially compares the fully consolidated capital of the financial conglomerate to the sum of the regulatory capital requirements for each group member. The regulatory capital requirements are based on those required by each group member's supervisor or, in the case of unregulated entities, a comparable or notional capital proxy.

Specifically, the "building block" prudential approach takes as its starting point and basis the fully consolidated accounts of the financial conglomerate as a single economic unit. By definition, all intra-group on- and off-balance sheet accounts or exposures have been eliminated. For prudential purposes, the consolidated balance sheet and off-balance sheet commitments are split into four different blocks (or sectors) according to the supervisory regime of the individual firms involved: banks, insurance companies, securities firms, and unregulated firms. Then, the regulatory capital requirements for each regulated entity or sector are calculated (these requirements could be different from those applicable on a solo basis because of the elimination of intra-group exposures). Each member's capital level is compared to its individual capital requirement to identify any capital deficits. Those deficits should be evaluated in terms of the availability of freely transferable capital of other sectors as defined in the statement of principles. Finally, the regulatory capital requirements of each regulated entity and the proxy for the unregulated entity are added together and the total is compared with the aggregate amount of capital across the group.[1] Such an approach can be complemented by a review of the distribution of risks and capital within the economic unit,

[1] The use of proxy capital requirements is one alternative for dealing with unregulated entities. Another method is to remove the unregulated entity's assets, liabilities and capital from the consolidated entity.

that is, whether the apparent risks within the unit are covered by an adequate type and quantity of capital.

For financial conglomerates with a regulated parent company whose activities dominate the group (i.e. banking, securities or insurance), a variation of the building block approach, which provides the same result, may be more suitable. The modified building block approach deducts from the regulatory capital of the parent company the capital requirement for its regulated dependants in other financial sectors and the notional proxy of any unregulated dependants carrying out similar business. The resulting adjusted capital amount is then compared with the capital requirement for the parent's own activities, including any capital required for the activities of any of its dependants in the same financial sector.

2. Risk-Based Aggregation

The risk-based aggregation approach is very similar to the building block approach but differs by tailoring its methodology to situations in which either fully consolidated financial statements are unavailable or intra-group exposures may not readily be netted out. This methodology is also helpful for situations in which the calculation of regulatory capital is more easily derived from unconsolidated statements and where the elimination of intra-group exposures may not be appropriate. Risk-based aggregation involves summing the solo capital requirements of the regulated group and capital norms or notional capital amounts of unregulated companies and comparing the result with group capital. As a simple example, in a group comprising a parent bank with insurance and securities dependants, the capital requirements of the parent bank are summed with the capital requirements of the insurance and securities dependants (as determined by their respective regulators). Capital adequacy is assessed by comparing the result with the group's regulatory capital.

In calculating group capital (or own funds), adjustments should be made to avoid double counting capital by deducting the amount of funds downstreamed or upstreamed from one entity to another. Therefore, where dependants are held at cost in the accounts of the parent company, the group's capital should be calculated by summing the capital of the parent and its dependants and then deducting from that aggregate capital amount the book value of the parent's participation in the dependants.

An alternative technique for calculating the group's regulatory capital is to identify the externally generated capital of the group. This technique is particularly useful in the following situations: when dependants are not held at cost; when it is difficult to determine the amount of capital downstreamed from the parent; or when other intercompany transactions add complexity. The externally generated capital of the group is found by adding the externally generated regulatory capital of the parent to that of its dependants. Externally generated capital refers to regulatory capital not obtained elsewhere in the group including equity supplied by minorities, qualifying third party debt finance, retained profits arising from transactions with third parties, or other qualifying capital that is not reflected in the parent's own capital.

For externally generated capital to "belong" to the group it should be, in principle, payable to the group on the winding up or sale of the dependant. However, it may be judged that funds equivalent to such capital could readily be transferred to other parts of the group not withstanding any restrictions that might apply on the winding up or sale of the dependant.

A more prudent form of risk-based aggregation involves aggregating the greater of either the regulatory capital requirement/notional capital proxy or the investment of the group in each dependant. The aggregate figure of the dependants is then added to the regulatory capital requirement of the parent company itself to produce the overall group capital requirement. This requirement is then compared with the externally generated capital of the group (as described above).

3. Risk-Based Deduction Method

The risk-based deduction method is very similar to the risk-based aggregation method but focuses on the amount and transferability of capital available to the parent or elsewhere in the group. Essentially, this approach takes the balance sheet of each company within the group and looks through to the net assets of each related company, making use of unconsolidated regulatory data.

Under this method, the book value of each participation in a dependant company is replaced in the participating company's balance sheet by the difference between the relevant share of the dependant's capital surplus or deficit. Any holdings of the dependant company in other group companies are also treated in a similar manner. However, any reciprocal interest, whether direct or indirect, of a dependant company in a participating company is assumed to have zero value and is therefore to be eliminated from the calculation.

Since the method focuses on the amount of surplus that is available for transfer to cover risks situated in other parts of the group, this approach is predicated on the use of pro-rata consolidation of non-wholly-owned dependants. At the discretion of supervisors, further scrutiny of surplus transferability may be achieved by adjusting these surpluses to exclude any capital not attributable to the parent due to withholding or other tax payable on the transfer of resources and reserves or other items that would not be transferable as capital among group members.

4. Fallback treatment for double gearing

Each of the three techniques for evaluating group-wide capital adequacy of the financial conglomerate explicitly take into account adverse effects of double gearing by examining capital adequacy of the parent and each of its dependants on a solo and group-wide basis. For supervisors that wish to quickly evaluate the extent to which double gearing may have compromised the capital adequacy of the parent company, there is a simple methodology that may be employed, referred to as the total deduction method.

The total deduction method is based on the full deduction of the book value of all investments made by the parent in dependants. Some supervisors may also wish to deduct any capital shortfalls in those dependants (as indicated by the capital standards of their solo supervisors) from the parent's own capital. In other words, under this technique the supervisor attributes a zero value, or in some cases a negative value, to the parent's investments. The parent's adjusted capital level is then compared with the parent's solo regulatory capital requirement, assuming that the parent is a regulated entity.

The total deduction method implicitly assumes that no regulatory capital surpluses within dependants of the group would be available to support the parent's capital or debt

service and that there is no regulatory capital deficit. Again, this procedure is designed to evaluate the extent that double gearing might impair the capital adequacy of the parent organisation and is not designed to evaluate the group-wide capital adequacy of the financial conglomerate.

Annex 2

Summary and Examples of Measurement Techniques

Each technique results in similar capital assessments of the financial conglomerate, although different conclusions may result if in using one technique an analyst decides to use pro rata consolidation while in employing another technique, full consolidation is used.

1. *Building Block Approach*
    - Uses consolidated financial statement
    - Divides statement into individual sectors or blocks
    - Adds together solo capital requirements/proxy of each member
    - Compares aggregate capital requirement/proxy to consolidated capital

2. *Risk-Based Aggregation*
    - Uses *un*consolidated statements
    - Adds together the capital of each entity in the group
    - Subtracts intra-group holdings of regulatory capital to adjust for double gearing
    - Adds together the solo capital requirements/proxies of each entity in the group to arrive at an aggregate capital requirement
    - Subtracts aggregate capital requirement/proxy from adjusted group-wide capital to calculate surplus or deficit

3. *Risk-Based Deduction*
    - Uses *un*consolidated statements
    - Analysis performed from parent company perspective
    - Predicated on pro rata consolidation of dependants
    - Parent capital reduced by amount of investments in dependants
    - Parent capital increased/(decreased) by solo capital surplus/(deficits) of dependants
    - Parent's solo capital requirement subtracted from adjusted parent capital to determine group-side surplus or deficit.

Building Block Prudential Approach

- Identifies solo and group-wide capital surplus or deficit using consolidated financial statements

Summary of Method

1. Consolidated balance sheet broken down into its major firms
2. Solo capital requirement/proxy is calculated for each firm or sector
3. Requirement/proxy is deducted from each dependant's actual capital to calculate surplus/deficit
4. Items deemed non-transferable are deducted (none shown)
5. Solo capital requirements/proxies are aggregated and compared to actual group-wide capital to identify group-wide surplus or deficit

Consolidated Statement Divided By
(No Intra-Group Accounts)

	Banking (Parent Co.)	Insurance	Securities (60% owned)	Unreg.	
			(Full Consolidation)		**Aggregate Group-Wide Total**
Capital Required/Proxy	32	10	17	10	**69**
Actual Capital (solo)	40	12	22	7	**81**
Surplus (Deficit)	8	2	5	-3	**12**

Aggregation ▶

			(Pro Rata Consolidation)		**Aggregate Group-Wide Total**
Capital Required/Proxy	32	10	10.2	10	**62.2**
Actual Capital (solo)	40	12	13.2	7	**72.2**
Surplus (Deficit)	8	2	3.0	-3	**10.0**

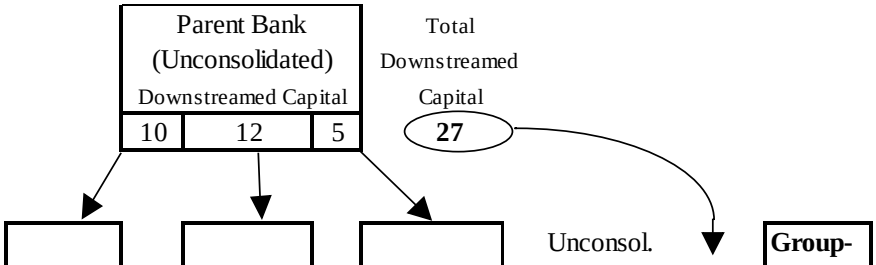
Aggregation ▶

Variant: Modified Building Block Approach: Deduct from the capital of the parent company, the capital requirement for its regulated dependants and notional capital proxy amounts for unregulated dependants in other financial sectors. Recommended when a dominant financial activity is undertaken by the parent company.

Risk-Based Aggregation

- Similar to building block, but tailored for situations in which:
  - only unconsolidated statements are available
  - intra-group exposures cannot be readily netted out

  Summary of Method:
  1. Sum solo capital requirements/proxy of parent and dependants
  2. Sum actual capital held by parents and dependants
  3. Deduct any upstreamed or downstreamed capital
  4. Eliminate any non-transferable items (none shown)
  5. Compare aggregate requirement/proxy to aggregate group-wide capital to identify surplus or deficit



	Insurance	Securities 60% Owned	Unregulated	Unconsol. Bank Parent	Elim-ination	**Group-Wide Capital**
		(Full Consolidation)				
Solo Capital Req./Proxy	10	17	10	32		**69**
Actual Capital	12	22	7	67	**-27**	**81**
Surplus (Deficit)	2	5	-3	35	**-27**	**12**
		Aggregation →				
		(Pro Rata Consolidation)				
Solo Capital Req./Proxy	10	10.2	10	32		**62.2**
Actual Capital	12	13.2	7	67	**-27**	**72.2**
Surplus (Deficit)	2	3.0	-3	35	**-27**	**10.0**
		Aggregation →				

Alternative Method to Deal With Double Leverage:

- If the amounts of capital downstreamed or upstreamed within the group are unclear, an alternative technique involves identifying ***externally generated capital*** of the group

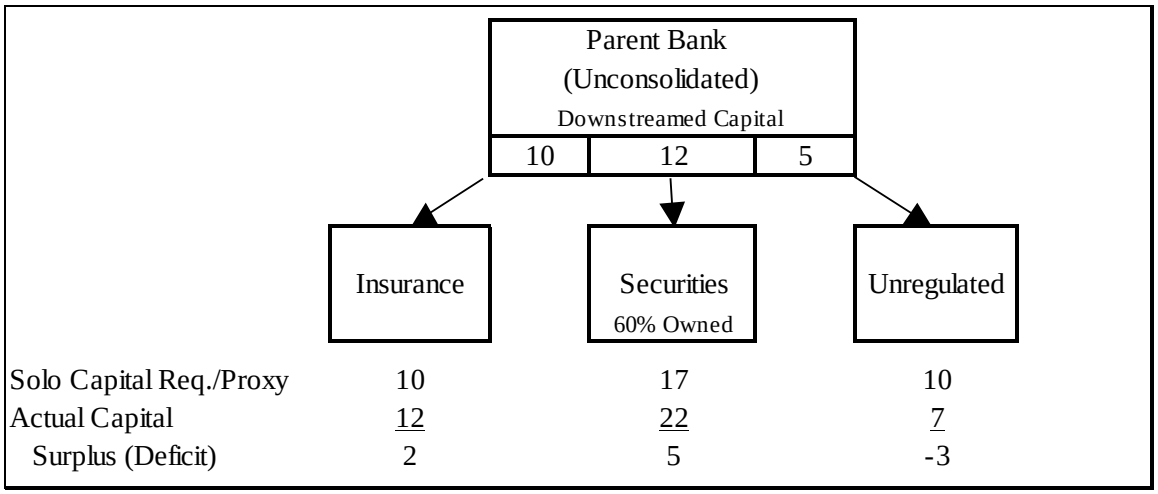
- Externally generated capital:

  - is not obtained elsewhere from the financial conglomerate
  - includes retained earnings from business conducted outside conglomerate
  - may include any equity supplied by minorities or third party debt finance

Risk-Based Deduction

- Very similar to Risk-Based Aggregation, differences include:
    - Analysis performed from perspective of parent company
    - Focuses on capital surplus or deficit of each dependant
    - Predicated on pro-rata integration

- Summary of Method:
    1. Start with parent's capital accounts
    2. Deduct investments in dependants from parent's capital
    3. Add to adjusted capital, surplus or deficit values from each dependant
        - Take into account any limits on transferability of capital
        - Use pro rata consolidation method for non-wholly-owned dependants
        - Treat any holding of the dependant in other downstream group companies in a similar manner to this calculation
        - Eliminate any reciprocal holdings of a dependant in other upstream group companies
    4. Subtract parent's solo capital requirement from adjusted capital
    5. Resulting figure is surplus or deficit from a group-wide perspective



	Insurance	Securities	Unregulated
Solo Capital Req./Proxy	10	17	10
Actual Capital	12	22	7
Surplus (Deficit)	2	5	-3

Parent Capital	**67**
Deduct Capital Investments in Dependants	
Insurance Firm	-10
Securities Firm	-12
Unregulated Firm	-5
Substitute Dependants Surplus or Deficit	
Insurance Firm	2
Securities Firm (@60% Pro Rata)	3
Unregulated Firm	-3
Adjusted Parent Capital	**42**
Subtract Parent Solo Cap Req.	32
Resulting Group-Wide Surplus	**10**

Memo:

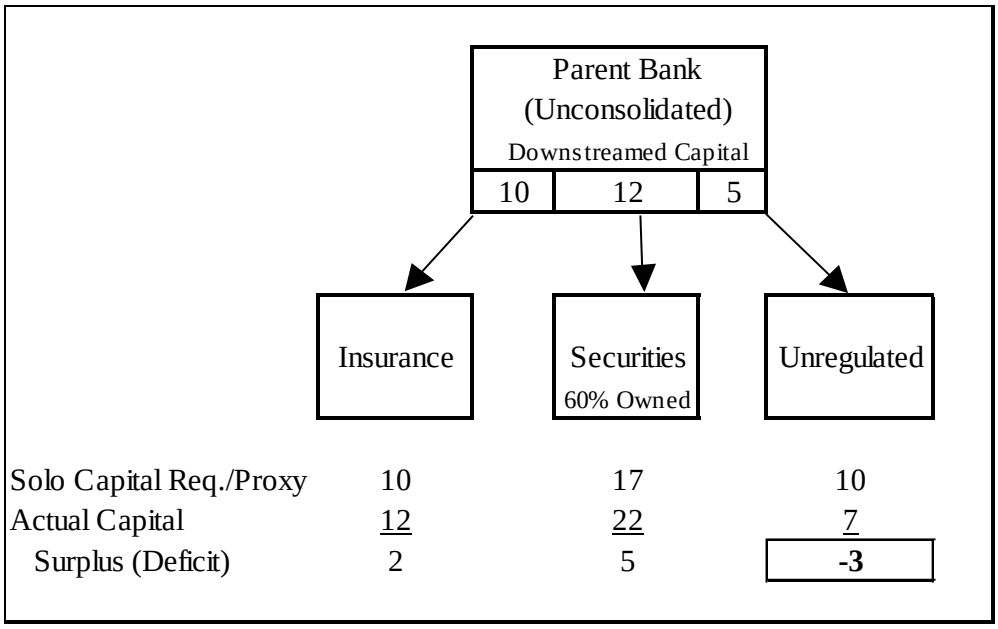
Reconciliation With Full Consolidation of Other 2 Methods:	
Add Back 40% of Securities Firm	2
Surplus with Full Consolidation	**12**

Total Deduction Method
(For Double Gearing at Parent Only)

- Quick test for potential double gearing at parent level
- Not a substitute for the other three techniques
- Almost identical to Risk-Based Deduction, but no credit given for any capital surpluses of dependants and no changes made for capital deficits

Summary of Method

1. Dependant's investments are fully deducted from parent capital
2. Any solo capital deficits may also be taken into account
3. Adjusted capital is compared to the parent's solo capital requirement



Solo Capital Req./Proxy	10	17	10
Actual Capital	12	22	7
Surplus (Deficit)	2	5	**-3**

Parent Capital	**67**
Deduct Capital Investments in Dependants	
Insurance Firm	-10
Securities Firm	-12
Unregulated Firm	-5
Add Dependant's Deficit	
Unregulated Firm	**-3**
Adjusted Parent Capital	**37**
Subtract Parent Solo Cap Req.	32
Resulting Parent Surplus	**5**

Appendix To Annex 2
Summary Balance Sheets of Financial Firms

The example financial conglomerate is assumed to be comprised of a parent banking company with regulated insurance and securities dependants and an unregulated commercial finance firm. It is assumed that apart from the parent's investment in its dependants, there are no intra-group exposures (or that these have been netted out). For this simple example, capital is assumed to be comprised of shareholders equity and reserves.

Parent Banking Firm Excluding Dependants			
Assets		Liabilities	
Loans	200	Deposits	250
Other assets	115	Borrowings	25
		General reserves	4
		Total Liabilities	279
Total Assets	315	Total Equity	36
	Capital = equity & reserves		40

Insurance Firm (Dependant)			
Assets		Liabilities	
Investments	125	Policy obligations	138
Other assets	25	General reserves	2
		Total Liabilities	140
Total Assets	150	Total Equity	10
	Capital = equity & reserves		12

Securities Firm (60% Owned Dependant) **(100% Presentation)**			
Assets		Liabilities	
Investments	200	Borrowings	203
Other assets	25	General reserves	2
		Total Liabilities	205
Total Assets	225	Total Equity	20
	Capital = equity & reserves		22

Unregulated Commercial Finance Firm (Dependant)			
Assets		Liabilities	
Loans	100	Borrowings	113
Other assets	20	General reserves	2
		Total Liabilities	115
Total Assets	120	Total Equity	5
	Capital = equity & reserves		7

Appendix to Annex 2 (cont'd)
Consolidated and Unconsolidated Example Balance Sheets

Fully Consolidated Group

Assets		Liabilities	
Loans	300	Deposits	250
Securities	325	Policy Obligations	138
Other assets	185	Borrowings	341
		General reserves	10
		Total Liabilities	739
		Minority Interests	7
Total Assets	810	Total Equity	63
		Capital = minority interests, equity & reserves	81

Parent Firm With Unconsolidated Dependants

Assets		Liabilities	
Loans	200	Deposits	250
Other assets	115	Borrowings	25
Investments in subsidiaries		General reserves	4
Insurance Firm	10		
Securities Firm	12	Total Liabilities	279
Commercial Finance	5		
Total investments in subs	27		
Total Assets	342	Total Equity	63
		Capital = equity & reserves	67

Pro Rata Consolidated Group
(Securities Firm Consolidated @ 60%)

Assets		Liabilities	
Loans	300.0	Deposits	250.0
Securities	245.0	Policy Obligations	138.0
Other assets	175.0	Borrowings	259.8
		General reserves	9.2
		Total Liabilities	657.0
Total Assets	720.0	Total Equity	63.0
		Capital = equity & reserves	72.2