

RESERVE BANK OF VANUATU

INTERNATIONAL BANK

PRUDENTIAL GUIDELINE No. 4

CAPITAL ADEQUACY OF BANKS

1. This Statement describes the approach used by the Reserve Bank for assessing the capital adequacy of international banks (and their consolidated groups) licensed under the International Banking Act No. 4 of 2002. These guidelines focus on credit risk. Other factors need to be considered, as a separate matter, in assessing the overall capital adequacy of a bank. These include the quality of its assets, profitability, liquidity, market risk, credit risk concentration, adequacy of provisioning and the effectiveness of the bank's management systems for monitoring and controlling risks.
2. It is the responsibility of a bank's board and management to ensure that it has in place adequate systems to identify and measure risks and appropriate capital cover against those risks.
3. The Reserve Bank attaches great importance to ensuring that the capital resources of individual banks are adequate for the size, quality and type of their business. The Bank's approach is consistent in all substantial respects with the approach recommended by the Basle Committee on Banking Supervision.

General Framework

4. The focus of these guidelines is on banks holding adequate capital to meet their credit risk (ie the potential risk of default by a borrower or counterparty) and, as an aspect of that, country transfer risk. Account is taken, in a limited way, of collateral and guarantees.
5. Balance sheet assets and off-balance sheet exposures are weighted according to broad categories of relative risk, based largely on the nature of the counterparty. The higher the risk, the greater is the capital backing required. The sum of risk-weighted assets and risk-weighted off-balance sheet business is related to a bank's capital and the resulting "risk ratio" is used as a measure of capital adequacy.
6. Risk-weightings seek to take account, on a portfolio basis, of the relative likelihood of counterparties being unable to meet their obligations to a bank. The risk weights used reflect broad judgements about potential risk of types of counterparties and are not intended to be a detailed guide to the assessment of credit risk associated with exposures to individual counterparties. It is the responsibility of each bank to individually assess

the credit risk associated in dealing with a counterparty, to allocate the appropriate amount of capital to cover that risk and to suitably price the transactions to reflect the risk.

7. Off-balance sheet transactions are converted to balance sheet equivalents before being allocated a risk weight.

Coverage and Consolidation

8. The guidelines apply to all international banks incorporated in Vanuatu. Foreign banks operating through branches are not subject to these guidelines; they are required to be subject to equivalent capital adequacy standards by their home country supervisors.
9. The primary focus of these guidelines is on the global operations of a bank and its subsidiaries.

Minimum Capital Standards

10. Each international bank is expected to maintain a minimum ratio of total capital to risk-weighted assets, on both a consolidated group and stand-alone basis, of 8 per cent (of which at least 4 per cent should be Tier 1 capital). These levels will be kept under review.
11. The Reserve Bank may require a bank to maintain a higher minimum ratio, eg for a newly established bank, or a bank judged to have an excessive concentration of credit risk exposures or significant other risk exposures.

Definition of Capital

12. Capital is the cornerstone of a bank's strength. The presence of substantial capital re-assures creditors and engenders confidence in a bank.
13. The essential characteristics of capital are that it should:
 - represent a permanent and unrestricted commitment of funds;
 - be freely available to absorb losses and thereby enable a bank to keep operating whilst any problems are resolved;
 - not impose any unavoidable charge on the earnings of the bank; and
 - rank below the claims of depositors and other creditors in the event of the winding-up of a bank.
14. Capital, for supervisory purposes, is considered in two tiers. Tier 1 (or core capital) comprises the highest quality capital elements. Tier 2 (or supplementary capital) represents other elements which do not satisfy all of the characteristics of Tier 1 capital but which contribute to the overall strength of a bank as a going concern. A summary of the main elements

of capital is given in Attachment I.

15. A bank's capital base (or total capital) is the sum of its Tier 1 and Tier 2 capital less any deductions. At least 50 per cent of a bank's capital base must be Tier 1 capital.

Tier 1 Capital

16. The foundation of a bank's capital is made up of permanent shareholders' equity and disclosed reserves (created or increased by appropriation of retained earnings or other surplus). Such elements fully meet the essential characteristics of capital and represent capital resources which can best contribute resilience and flexibility to a bank experiencing financial difficulties.
17. Tier 1 capital includes paid-up ordinary shares, non-cumulative irredeemable preference and any non-repayable premium arising from the issue of such shares. Partly paid shares (and other capital instruments) qualify only for the value of funds actually received. General reserves and retained earnings (including measured current year earnings net of expected dividends and taxation payments), although distributable in some circumstances, generally meet the attributes of Tier 1 capital. Minority interests in subsidiaries which are consistent with other named capital instruments are eligible to be counted in the calculation of Tier 1 capital of the consolidated group.
18. With regards to servicing Tier 1 capital elements, aggregate dividend payments by a bank in any one year should not exceed the earnings of the bank during that year; as a practical matter, the relationship between dividends and earnings is lagged one year for preference shares (except in the first year of issue when dividends will be allowable notwithstanding any loss in the period preceding the issue date). The Reserve Bank is, however, prepared to modify this requirement, on a case by case basis, if it believes the proposed level of dividends can be justified by reference to other considerations, such as an assessment of the bank's capital position, including commitments to raise capital, and the bank's core profitability.

Tier 2 Capital

19. There are other capital elements that impart strength to a bank's position but to a varying degree fall short of the qualities of Tier 1 capital instruments. These may be included in a bank's capital base as Tier 2 capital up to an amount equal to the bank's Tier 1 capital (net of goodwill, other intangible assets and future income tax benefits).
20. Tier 2 capital is divided into two segments, termed Upper and Lower Tier 2 capital. Upper Tier 2 capital includes elements that are essentially permanent in nature and have characteristics of both equity and debt.
21. Lower Tier 2 capital consists of elements which are not permanent. Lower

Tier 2 capital may be included in Tier 2 capital to a maximum, in aggregate, of 50 per cent of Tier 1 capital (net of goodwill, other intangible assets and future income tax benefits).

Upper Tier 2 Capital

22. Upper Tier 2 capital consists of the following elements:

Asset revaluation reserves

23. Under the Basle framework, reserves created by periodic revaluation of a bank's premises, but which are not passed through profit and loss, can be included as a component of Tier 2 capital only if the revaluation is formally carried through to the balance sheet. Where a bank records revaluations of its premises, whether in the balance sheet or in the notes to the accounts, which are subject to audit review, they qualify as part of Tier 2 capital.
24. To be eligible for inclusion in Upper Tier 2 capital, revaluation reserves of other assets (i.e. direct holdings of quoted, readily marketable securities) must satisfy the following conditions:
- a. The assets must be directly held by the bank or its subsidiary;
 - b. The reserves (i.e. the difference between the market value and the book value) must be shown on the balance sheet or notes to the accounts without passing through the profit and loss accounts;
 - c. The reserves must incorporate the amount of any diminution in the value of the assets (i.e. net of devaluations); and
 - d. Only 45 per cent of the net revaluation surplus (net of devaluations) can be included in Upper Tier 2 capital.

General provisions for doubtful debts

25. It is the responsibility of the management of a bank to review in a prudent and timely manner the quality of the bank's portfolio of assets so that the net value of assets reported adequately reflect any identifiable deterioration in the value of the assets.
26. General provisions for doubtful debts less any associated future income tax benefits (on a gross basis) count as part of Upper Tier 2 capital to a maximum of 1.25 per cent of total risk-weighted assets. To be eligible for inclusion, such provisions must be created against future, presently unidentified losses, and must be freely available to meet any losses which might subsequently materialise.
27. General provisions created against identified losses, or in respect of any identified deterioration in the value of particular assets, whether individual or grouped, foreign or domestic, are excluded from Tier 2 capital. This means general provisions that reflect identified deterioration

in the value of assets subject to country risk, real estate lending, or other problem sectors are not eligible to be included in capital.

Lower Tier 2 Capital

Term subordinated debt

28. Term subordinated debt and similar limited life instruments (including redeemable preference shares) are eligible to be included in Lower Tier 2 capital. Term subordinated debt must be appropriately subordinated and have an original maturity of at least seven years.
29. During the last five years to maturity the amount of such instruments eligible to be counted as Lower Tier 2 capital will be reduced each year by 20 per cent of the original amount issued.

Deductions from Capital

Tier 1

Goodwill

30. Goodwill and similar intangible assets are deducted from Tier 1 capital (and hence from a bank's capital base) in calculating capital ratios.

Capital Base

Inter-bank holdings of capital

31. To avoid double gearing of capital, a bank's holdings of other banks' capital instruments (as shown in its books) should be deducted from the investing bank's capital base (and risk assets). This includes both equity and debt capital investments in local and overseas banks (and their subsidiaries) held by the bank and its subsidiaries.
32. A deduction is not required where one bank wholly owns or effectively controls another bank. In such cases, the parent bank is already required to observe capital adequacy on a consolidated as well as on an individual bank basis. Deduction is also not required where:
 - the capital instruments are held by a bank for trading purposes and are clearly identified as part of the holding bank's usual and regular trading activities; and
 - the instruments are marked to market in the holding bank's books.

Bank capital instruments held as part of normal trading operations should be included in risk assets with a 100 per cent weight.

Investments in non-consolidated subsidiaries

33. In the normal course, the Reserve Bank prefers to supervise the capital adequacy of banks and their subsidiaries on a fully consolidated basis.

Exceptions to this approach will be considered where consolidation is not judged appropriate for accounting reasons and/or where the non-consolidated subsidiary is subject to effective supervision by another authority. In these cases, there would need to be co-operation between the Reserve Bank and the other supervisor concerned so that the Bank could be assured the subsidiary/associate involved would not compromise the stability of its parent bank. Life and general insurance subsidiaries would in the normal course not be consolidated for capital adequacy purposes.

34. A bank is required to deduct from its capital base (and risk assets) its equity and/or other capital investments in *non-consolidated* subsidiaries or associates which are effectively controlled by the bank.
35. Where a bank invests capital in, or provides a guarantee or similar support to, an entity which undertakes the role of manager, responsible entity, trustee or custodian in relation to funds management or the securitisation of assets, then the capital or guarantee should be deducted from the bank's capital base.

Reductions in Capital

36. Where a bank proposes any reduction in its capital it should obtain the prior written agreement of the Reserve Bank. The Bank would need to be satisfied on the basis of a capital plan (which extended for at least two years) provided by the bank that the bank's capital would remain adequate after the proposed reduction.

Collateral and guarantees

37. Claims secured against cash may be weighted as for a claim on cash provided they satisfy the following criteria:
 - There is a written agreement that is legally binding in all relevant jurisdictions between the lender (or party holding the claim) and the party lodging the cash collateral establishing the lender's *direct* and *unconditional* recourse to the cash collateral. A common law (or bankers') right of set-off is *insufficient* on its own to satisfy this condition.
 - In the event of default, any requirement on the lender to serve notice on the party lodging the collateral should not impede the lender's recourse to the collateral.
 - Cash collateral may be lodged by a third party provided that party also indemnifies or guarantees the borrower's obligations (or those of the party (or those of the party on which a claim is held) to the lender.
 - Cash collateral may be lodged with the *bank or any subsidiary*

provided that the lender and the entity belong to the same consolidated group headed by a licensed bank and the entity holding the collateral is bound to act in accordance with the agreement between the lender and the party lodging the collateral.

- The collateral may be accessed by the party lodging the cash provided the lender retains the right to *block access* to the collateral at any time.
 - The *currency* in which the collateral is lodged may differ from that of the exposure against which it held, provided that it is valued at current market exchange rates.
 - When taking cash collateral, lenders must ensure that legal agreements entered into are binding in the jurisdiction in which the cash is held.
38. Claims formally guaranteed by banks or governments, where there is direct, explicit, irrevocable and unequivocal recourse to the guarantor, attract the same risk weight as a direct claim on the guarantor. Indirect guarantees (such as guarantees of guarantees) and letters of comfort are not recognised for the purposes of allocating risk weights.

Risk Weights

39. There are five categories of risk weight – 0, 10, 20, 50 and 100 per cent. Weights for particular items are given in an Attachment 2.

Attachment I

Definition of Capital

Tier 1 (Core) Capital¹

- Paid-up ordinary shares.
- Non-repayable share premium account.
- General reserves.
- Retained earnings.
- Non-cumulative irredeemable preference shares.
- Minority interests in subsidiaries consistent with the foregoing components.

Tier 2 (Supplementary) Capital²

Upper

- General provisions for doubtful debts.³
- Asset revaluation reserves.⁴
- Mandatory convertible notes and similar capital instruments.
- Perpetual subordinated debt.

Lower⁵

- Term subordinated debt.

¹ Goodwill and similar intangible assets are deducted from Tier 1 capital and capital base.

² Cannot exceed Tier 1 capital.

³ Amount included is limited to a maximum of 1.25 per cent of total risk assets.

⁴ Assets should be valued regularly and prudently.

⁵ In total these items cannot exceed 50 per cent of Tier 1 capital and are subject to eligibility criteria.

Attachment II

Risk Weights

Zero weight

- Notes and coin.
- Balances with central banks .
- Loans and other claims fully secured against cash.
- Government money market securities not exceeding 12 months to maturity, and claims fully secured against these securities.

10 per cent weight

- Other Government securities.
- Claims fully secured against Securities (greater than one year to maturity) and Government securities or securities issued by central borrowing authorities; or guaranteed by the Governments.
- Claims on central governments and central banks of the OECD, and claims guaranteed by or secured against securities issued by these bodies.
- Claims on other foreign central governments and foreign central banks, and claims guaranteed by such entities, where the claims are denominated in the local currency and funded by local currency liabilities.

20 per cent weight

- Claims on governments and public sector entities (except those which have corporate status or operate on a commercial basis), and claims guaranteed by these entities.
- Claims on non-commercial public sector entities in OECD countries and claims guaranteed by these entities.
- Claims on OECD banks, and claims guaranteed by these banks.
- Claims on other banks incorporated in countries outside the OECD with a residual maturity of up to one year, and claims of similar maturity guaranteed by these banks.
- Claims on international banking agencies and regional development banks and claims guaranteed, or secured by securities issued, by these agencies and banks.
- Cash items in the process of collection.

50 per cent weight

- Credit equivalent of off-balance sheet exposures arising from market related transactions with counterparties that would otherwise attract a 100 per cent risk weight.
- Loans for housing, or other purposes, fully secured by a mortgage over residential property.

100 per cent weight

- Claims on Government public trading enterprises which have corporate status or operate on a commercial basis in significant competition with private sector enterprises.
- Claims on commercial companies owned by the public sector in OECD countries.
- Claims on, or guaranteed by non-OECD central governments and central banks other than those denominated in the local currency and funded in that currency.
- Claims on non-OECD foreign banks with residual maturity exceeding one year.
- Claims on, or guaranteed by non-bank parents (including bank holding companies which are not themselves banks) of OECD banks, unless specifically guaranteed by an OECD bank.
- Claims on non-bank private sector, including non-bank financial institutions.
- Holdings of subordinated bonds issued by international agencies and multilateral development banks.
- Premises, sites, equipment and other fixed assets.
- Operating leases covering plant, equipment etc.
- Equity investments and capital instruments issued by other banks held for trading purposes.
- All other assets and claims not included elsewhere.

Off-Balance Sheet Business

Direct Credit Substitutes	Credit Conversion Factor
Guarantees.	100%
Standby letters of credit serving as financial guarantees.	100%
Bills endorsed under bill endorsement lines.	100%
Trade and Performance Related Contingent Items	
Warranties, bid bonds, indemnities, performance bonds and standby letters of credit related to particular non-monetary obligations.	50%
Documentary letters of credit secured against underlying shipment of goods.	20%
Commitments	
Commitments with certain drawdown.	100%
Forward asset purchases and amounts owing on partly paid shares and securities which represent commitments with certain drawdown.	100%
Other commitments (eg formal standby facilities and credit lines) with a residual maturity of:	
(i) one year or less, or which can be unconditionally cancelled at any time without notice.	0%
(ii) over one year.	50%

Other Items

For items not included above, credit conversion factors to be used should be discussed with the Bank.

Foreign Exchange, Interest Rate and Other Market Related Off-Balance Sheet Transactions

Current Exposure Method (*Mark-to-market approach*)

Credit equivalent amounts are represented by the sum of current credit exposure and potential credit exposure:

(i) Current Credit Exposure

This is the mark-to-market valuation of all contracts with a *positive* replacement cost (ie contracts with an unrealised profit where a bank would lose the profit in the event of a default by a counterparty). (Negative replacement costs are disregarded.)

(ii) Potential Credit Exposure

This is calculated as a percentage of the nominal principal amount of a bank's portfolio of interest rate and exchange rate related contracts split by residual maturity as follows:

Remaining Term to Maturity of Contracts	Interest Rate Contracts	Exchange Rate Contracts
Less than one year	nil	1.0%
One year or longer	0.5%	5.0%

Original Exposure Method (*Rule-of-thumb approach*)

Credit equivalent amounts would be calculated by applying credit conversion factors to the principal amounts of contracts according to the nature of the instrument and its original maturity.

Original Maturity of Contracts	Interest Rate Contracts	Exchange Rate Contracts
Less than one year	0.5%	2.0%
One year and less than two years	1.0%	5.0% (ie 2% + 3%)
For each additional year	1.0%	3.0%

Illustration of Risk Ratio Calculation**Assume a bank with the following details:**

CAPITAL	USD M
Ordinary Shares (OS)	10
Retained Earnings (RE)	15
Asset Revaluation Reserve (ARR)	5
Term Subordinated Debt (TSD) (7 years to run)	5
BALANCE SHEET ASSETS	
Balance with central banks	15
Government Securities (maturity greater than one year)	50
Inter-Bank Deposits	40
Government Claims	5
Housing Loans	100
Commercial Loans	180
Fixed Assets	10
Total	<u>400</u>
OFF-BALANCE SHEET ITEMS	
Guarantees to Corporates	30
Commitments to Provide Financial Facilities to Corporates (maturing in 4 years) guaranteed by a bank	100
6-month Forward Foreign Exchange Contract with a corporate	40
Total	<u>170</u>

Step 1. Calculate Tier 1 Capital, Tier 2 Capital and Capital Base

$$\text{Tier 1 Capital} = \text{OS} + \text{RE}$$

$$= 10 + 15$$

$$= \text{USD 25 million}$$

$$\text{Tier 2 Capital} = \text{ARR} + \text{TSD}$$

$$= 5 + 5 \text{ (check eligible amount of TSD)}$$

$$= \text{USD 10 million}$$

$$\text{Capital Base} = \text{Tier 1 Capital} + \text{Tier 2 Capital (check eligible amount of Tier 2 Capital)}$$

$$= 25 + 10$$

$$= \text{USD 35 million}$$

Step 2. Calculate risk-weighted balance sheet assets

Asset Category	Asset	Amount USD M	Risk Weighted Amount USD M
0%	Balance with central banks	15	0.0
10%	Government Securities (greater than 1 year)	50	5.0
20%	Inter-Bank Deposits	40	8.0
20%	Government Claims	5	1.0
50%	Housing Loans	100	50.0
100%	Commercial Loans	180	180.0
100%	Fixed Assets	10	10.0
		<u>400</u>	<u>254.0</u>

Step 3. Calculate risk weighted assets for off-balance sheet items other than market rate related contracts

Off-Balance Sheet Items	Nominal Amount USD M	Credit Conversion Factor	Credit Equivalent USD M	Risk Weighting	Risk Weighted Amount USD M
Guarantees to corporates	30	100%	30	100%	30
Commitments to provide financial facilities to corporates (maturing in 4 years) guaranteed by a bank	100	50%	50	20%	10
					<u>40</u>

**Step 4. Calculate risk weighted assets for off-balance sheet market rate related contracts
(using Current Exposure Method)**

Off-Balance Sheet Items	Nominal Amount x Conversion Factor USD M	Credit Conversion = Factor	Potential Exposure+ USD M	Current Exposure = USD M (a)	Credit Equivalent x USD M	Risk Weighting x	Risk Weighted Amount USD M
Forward Foreign Exchange Contract with a corporate: 6 months to maturity	40	0.01	0.4	1.1 (b)	1.5	50% (c)	0.75
							0.75

- (a) May only be positive or nil value. Negative current exposures are ignored.
- (b) Marked to market values used are purely illustrative.
- (c) Defined maximum weight.

Step 5. Calculate Total Risk Weighted Assets

$$\begin{aligned}
 \text{Total Risk Weighted Assets} &= \text{Risk Weighted Assets on-balance sheet} \\
 &+ \text{Risk Weighted Assets off-balance sheet (other than market related)} + \text{Risk Weighted Assets off-balance sheet (market related)} \\
 &= \text{USD 254.0 million} + \text{USD 40.0 million} + \text{USD 0.75 million} \\
 &= \text{USD 294.75 million}
 \end{aligned}$$

Step 6. Calculate Capital Ratios

$$\begin{aligned}
 \text{Tier 1 Capital Ratio} &= \text{Tier 1 Capital} \div \text{Total Risk Weighted Assets} \\
 &= \text{USD 25.0 million} \div \text{USD 294.75 million} \\
 &= 8.5\% \\
 \text{Total Capital Ratio} &= \text{Capital Base} \div \text{Total Risk Weighted Assets} \\
 &= \text{USD 35.0 million} \div \text{USD 294.75 million} \\
 &= 11.9\%
 \end{aligned}$$