

NATIONAL RESERVE BANK OF TONGA

Prudential Statement No.6

CAPITAL ADEQUACY REQUIREMENTS

Introduction

1. This statement is issued in terms of Section 15(3) of the Financial Institutions Act 2004.
2. Section 12 of the Financial Institutions Act requires that every licensed financial institution (LFI) under the Act maintain:
 - a. if incorporated in Tonga, paid up capital and reserves; and
 - b. if incorporated abroad, assigned capital and reserves in Tonga;in such minimum amount and proportion as the Reserve Bank may specify having regard to internationally accepted capital standards. Such proportion shall not be less than 8 percent of the total risk weighted assets for a licensee incorporated in Tonga. The Act also states that the minimum amount specified for the issue of a licence may not be less than \$2,000,000.
3. In addition, Section 12 allows the Reserve Bank to specify minimum capital standards for the consolidated group in the case of a LFI incorporated in Tonga.
4. Section 13 provides that no LFI shall declare or pay any dividend or make any other transfer or remittance from profits:
 - a. If this would contravene section 12 or the restrictions on size of exposures when measured against a LFI's capital as outlined in Section 28; and
 - b. Where the payments would exceed earnings in the year to which they relate without the prior approval of the Reserve Bank.
5. This Statement describes the approach used by the Reserve Bank for assessing the capital adequacy of LFIs in Tonga (and their consolidated groups). 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, the adequacy of provisioning and the effectiveness of the bank's management systems for monitoring and controlling risks.

6. The requirements are based on the credit risk requirements in the 1988 Basel Capital Accord and the 1995 Credit conversion factor recommendations. The Reserve Bank's approach is consistent in all substantial respects with the approach recommended by the Basel Committee on Banking Supervision.

General Framework

7. It is the responsibility of a LFI'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.
8. As mentioned above the focus of these guidelines is on a LFI holding adequate capital to cover its credit risk (ie the potential risk of default by a borrower or counterparty). Account is taken, in a limited way, of collateral and guarantees.
9. 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. Off-balance sheet transactions are converted to balance sheet equivalents before being allocated a risk weight. Risk-weightings seek to take account, on a portfolio basis, of the relative likelihood of counterparties being unable to meet their obligations to a LFI. 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.
10. The sum of risk-weighted assets and risk-weighted off-balance sheet business is related to a LFI's capital/assigned capital and the resulting "risk ratio" is used as a measure of capital adequacy.
11. The methodology in this Prudential Statement applies to all LFIs including foreign banks operating through branches in Tonga which are required to maintain minimum assigned capital/reserves in Tonga.
12. The requirements apply to the global operations of LFI's incorporated in Tonga. Where the NRBT approves the establishment of a subsidiary by a Tongan incorporated LFI the requirements will also apply to the LFI group consolidated in accordance with International Accounting Standards.
13. The level of capital determined in accordance with this Prudential Statement is the basis for calculating the ceilings on credit and other risk exposures, connected lending and holding of shares in terms of Sections 28, 30 and 31 respectively of the Financial Institutions Act 2004.
14. The Reserve Bank will review aspects of the capital adequacy framework in the light of developments in the Tongan financial system.

Minimum Capital

15. The minimum capital which must be paid up before issue of a licence is as follows:
 - a. Banks T\$2 million
 - b. Credit institutions T\$2 million
16. These minimum levels must be maintained at all times by the LFI regardless of whether a lower level of capital would achieve compliance with the capital ratios specified in the next section.

Minimum Capital Ratio

17. LFIs must maintain a minimum ratio of Tier 1 capital or assigned capital to risk-weighted assets at all times as follows:
 - a. Banks 15 percent
 - b. Credit institutions 18 percent
18. These ratios are higher than the minimum set by the Basel Committee on Banking Supervision because of the concentrations implicit in the Tongan market; the inability to adequately secure claims; and the lack of a capital market. Furthermore, the higher ratios are to cover for risks other than credit risks.
19. The Reserve Bank may require a LFI to maintain a higher minimum ratio, e.g. for a newly established LFI, or a LFI judged to have an excessive concentration of credit risk exposures or significant other risk exposures.

Capital Management Planning

20. The board and management of a LFI is responsible for developing an internal capital assessment process and setting capital targets that are commensurate with the LFI's risk profile and control environment to ensure that the LFI has adequate capital to support its risks beyond the core minimum requirements. Holding increased levels of capital is only one component for addressing increased risks confronting the LFI. Other means for addressing risk, such as strengthening risk management, applying internal limits, strengthening the level of provisions and reserves, and improving internal controls, must also be considered. Furthermore, capital should not be regarded as a substitute for addressing fundamentally inadequate control or risk management processes.

21. A LFI should develop a capital management plan which should be updated annually and a copy of the plan should be provided to the Reserve Bank. A capital management plan should address issues such as:
- a. Establishing a minimum buffer above the Reserve Bank's required minimum requirement;
 - b. Establishing a trigger or trigger points which require management action to ensure that the LFI does not breach either its internal board approved capital requirement or the Reserve Bank's minimum requirement;
 - c. The ability to access additional capital in both normal times to support growth and when the bank is under pressure;
 - d. The rate of growth of the LFI's assets;
 - e. The concentration of assets;
 - f. The quality of the LFI's assets and adequacy of provisioning;
 - g. Dividend policies;
 - h. The adequacy of its risk management processes to identify and control other risks such as operational risk.
22. Where a LFI becomes aware that it is likely to breach the minimum capital requirement, it should immediately initiate discussions with the Reserve Bank.

Definition of Capital

23. Capital is the cornerstone of a bank's strength. The presence of substantial capital re-assures creditors and engenders confidence in a bank. The essential characteristics of capital are that it should:
- a. represent a permanent and unrestricted commitment of funds;
 - b. be freely available to absorb losses and thereby enable a LFI to keep operating whilst any problems are resolved;
 - c. not impose any unavoidable charge on the earnings of the LFI; and
 - d. rank below the claims of depositors and other creditors in the event of the winding-up of a LFI.
24. The Basel Committee on Banking Supervision recognises three tiers of capital for supervisory purposes but at this stage the Reserve Bank is only prepared to recognise Tier 1 capital as eligible for compliance with the minimum capital

requirements. Tier 1 capital fully satisfies the essential elements listed above. Tiers 2 and 3 capital do not satisfy all of the essential characteristics of capital but may contribute to the overall strength of a LFI as a going concern.

25. Tier 1 capital comprises:
 - a. Paid-up ordinary shares/Assigned Capital (if foreign incorporated).
 - b. Non-repayable share premium account.
 - c. General reserves.
 - d. Retained earnings.
 - e. Non-cumulative irredeemable preference shares.
 - f. Minority interests in subsidiaries consistent with the foregoing components.
26. Asset revaluation reserves (e.g. premises, securities and foreign exchange revaluation reserves) **do not qualify** for inclusion in Tier 1 capital.
27. Retained earnings may include current year earnings net of expected dividends and taxation payments and other appropriations including provisions for loan loss reserves. Current year losses must be deducted from retained earnings for capital adequacy purposes.
28. Non-cumulative irredeemable preference shares will not be eligible for inclusion in Tier 1 capital to the extent that they exceed 25 per cent of net Tier 1 capital (ie Tier 1 capital net of non-ordinary shares and other capital instruments).
29. Assigned capital represents the component of Balances due to Head Office which are regarded as a permanent commitment of funds for Tongan operations.

Deductions

30. In calculating capital ratios the following must be deducted from capital:
 - a. Goodwill and similar intangible assets are deducted from Tier 1 capital and assets (and hence from a bank's capital base) in calculating capital ratios. Goodwill and other intangibles may not have any value in the event of losses and are therefore not included in capital.

- b. Net future income tax benefit (future tax benefit arising from income tax losses (i.e. income tax loss carry forward) net of any deferred tax liabilities). If the provision for deferred income tax liability exceeds the amount of future income tax benefits, the excess may not be added to capital. The value of the “claim” represented by net future income tax benefits depends on factors such as the future profitability of a bank and the continuation of tax rules that allow the benefits to be utilised. As such, future income tax benefits **do not** fully satisfy the tests required for inclusion in capital.
- c. Where consolidation is not judged appropriate for accounting reasons an LFI must deduct from its Tier 1 capital (and risk assets) its investments in, and any other forms of credit support provided to, a subsidiary or associate effectively controlled by the LFI. Life, general insurance and funds management subsidiaries would in the normal course not be consolidated for capital adequacy purposes.
- d. To avoid double gearing of capital in the Tongan financial sector, a LFI’s holdings of other LFIs’ capital instruments (as shown in its books) should be deducted from the investing LFI’s capital (and risk assets). This includes equity in local and overseas incorporated LFIs operating in Tonga (and their subsidiaries) held by the LFI and its subsidiaries where relevant.

Reductions in Capital and Capital Restructurings

- 31. Where a LFI proposes any reduction in its capital or restructure of its capital it should obtain the prior written agreement of the Reserve Bank. The Reserve Bank would need to be satisfied on the basis of a capital plan (which extends out for at least three years) that the LFI’s capital would remain adequate after the proposed reduction.
- 32. Where a LFI proposes to increase its capital through an issue of shares the LFI should advise the Reserve Bank and provide details of the amount of the capital increase.

Risk Weights

- 33. There are three categories of risk weight – 0, 20, and 100 per cent. Weights for particular items are given in Attachment 2.

Collateral and guarantees

34. Claims secured against cash may be weighted as for a claim on cash provided they satisfy the criteria set down in Attachment 3.

Treatment of Off-balance Sheet Items

35. Inclusion of off-balance sheet business in calculating risk based capital ratios involves a two-step process:
 - a. The principal (or face value) amounts of transactions are converted into on-balance sheet equivalents (“credit equivalent amounts”) by application of a credit conversion factor; and
 - b. The resulting credit equivalent amount is assigned the risk weight appropriate to the counterparty, or, if relevant, the weight assigned to the guarantor or the collateral security. This amount then forms part of the LFI’s total risk weighted assets.
36. Credit conversion factors for off-balance sheet transactions are given in Attachment 4.

Interest rate and foreign exchange rate contracts

37. The credit risk on interest rate, foreign exchange rate (Foreign exchange contracts with an original maturity of 14 days or less are excluded) and other market-related contracts is the cost to a LFI of replacing the cash flow specified by the contract in the event of counterparty default (At the time a contract is initiated, it can be replaced at little or no cost because interest rates or exchange rates embodied in the contract reflect those then prevailing in the market. But as time passes and market rates change, the value of the cash flow that the LFI is entitled to receive from the counterparty under the terms of the contract often will exceed the value of the cash flow it is obligated to pay. If the counterparty were to default in such a circumstance, the LFI would have to pay a “premium” to replace, or re-establish the cash flow attaching to the original contract).
38. The cost of replacement will depend, among other things, on the maturity of the contract and on the volatility of rates underlying that type of instrument.
39. Credit equivalent amounts for market-related transactions may be calculated in one of two ways and details of the two methods of calculation are summarised in Attachment 5:

- a. A current exposure or “mark-to-market” method where financial instruments are revalued regularly (in a prudent and consistent manner) to measure current replacement value plus an allowance for potential future exposure¹⁷; or
 - b. An original exposure or “rule-of-thumb” method where there is a simple conversion factor for the notional principal amount of each instrument.
40. In calculating credit equivalent amounts on market-related off-balance sheet contracts LFI’s must use the more accurate “Current Exposure Method” of calculation unless otherwise agreed with the Reserve Bank.

Netting arrangements

41. Netting is a process by which all outstanding transactions between two counterparties are combined and reduced to a single (net) sum for a party to either pay or receive. The process is formalised in a netting agreement. From a prudential viewpoint, the key issue is whether a bank’s effective exposure against a counterparty (or counterparties) is limited to the net sum determined by a netting agreement so ensuring that the amount of credit risk is genuinely reduced. At this stage no netting is permitted for capital adequacy calculation purposes. The Reserve Bank will, however, consider including netting arrangements in the capital framework if this practice becomes common.

Reporting Arrangements

42. The LFI’s capital is to be reported in the Quarterly FID 12 Consolidated Group Capital by no later than 15 business days from the end of the quarter reported (Attachment 1). A LFI must also provide the Reserve Bank with a report of its Off-Balance Sheet Business under the Quarterly FID 13 (Attachment 1).

Compliance with Prudential Statement No. 6

43. This statement is effective from 1 June 2009.

RISK WEIGHTS

Zero weight

- Notes and coin.
- Gold bullion held in own vaults or on an allocated basis to the extent backed by gold bullion liabilities.
- Balances with the Reserve Bank
- Loans and other claims fully secured against cash.
- Tongan Government money market securities not exceeding 12 months to maturity, and claims fully secured against these securities.
- All claims on the Tongan Government and claims guaranteed by the Government
- On-balance sheet unrealised gains on market related off-balance sheet transactions where they have been included in off-balance sheet risk weighted asset calculations.

20 per cent weight

- Other Tongan Government securities and claims fully secured against these securities.
- Claims on central governments and central banks of the OECD, and claims guaranteed by or secured against securities issued by these bodies.
- Claims on 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.
- Claims on Tongan and OECD banks, and claims on non-OECD banks agreed specifically by the Reserve Bank, and claims 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.
- Claims on Tongan public sector entities (except those which have corporate status and 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 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.

100 per cent weight

- Claims on Tongan public trading enterprises which have corporate status and operate on a commercial basis (notably 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 (unless otherwise specifically agreed by the Reserve Bank).
- 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.
- Credit equivalent of off-balance sheet exposures arising from market related transactions with counterparties that would otherwise attract a 100 per cent risk weight.
- All other assets and claims not included elsewhere.

ELIGIBLE CASH COLLATERAL

An exposure (on- or off-balance sheet) will qualify as collateralised by cash subject to the following conditions:

1. There is a written contractual agreement between the lender (or party holding a 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.
2. 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.
3. 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 on which a claim is held) to the lender.
4. Cash collateral may be lodged with the LFI or any subsidiary provided:
 - a. The lender and the entity holding the collateral belong to the same consolidated group headed by a LFI in Tonga; and
 - b. The entity holding the collateral is bound to act in accordance with the agreement between the lender and the party lodging the collateral.
5. 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. Where an exposure is collateralised by a CD or like instrument (issued by the LFI or its subsidiary), the lender would need to retain physical possession of the instrument until the collateral obligations are extinguished.
6. The currency in which the collateral is lodged may differ from that of the exposure against which it is held, provided that it is valued at current market exchange rates. Funds lodged with an overseas branch or subsidiary of the LFI are eligible to be treated as cash collateral, subject to (4). above.
7. When taking cash collateral, lenders must ensure that legal agreements entered into are binding in the jurisdiction in which the cash is held. In particular, where cash collateral is lodged by a third party, the lender must satisfy itself that the arrangement will not fail for lack of consideration. Set-off arrangements must satisfy all the above conditions to be recognised as cash collateral.

OFF-BALANCE SHEET BUSINESS

Direct Credit Substitutes Credit Conversion Factor

- Guarantees: 100%
- Assets sold with recourse where credit risk remains with the LFI (Reverse repos (ie purchase and resale agreements) are to be treated as collateralised loans. The risk is to be measured as an exposure to the counterparty or according to the asset if it is a recognised collateral security within the risk ratio framework): 100%
- Standby letters of credit serving as financial guarantees: 100%
- Written put options over specified assets with the character of a credit enhancement: 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%
- Sale and repurchase agreements where credit risk remains with the bank: 100%
- Forward asset purchases and amounts owing on partly paid shares and securities which represent commitments with certain drawdown and placements of forward forward deposits: 100%
- Note issuance facilities and revolving underwriting facilities. 50%
- Other commitments (eg formal standby facilities and credit lines) with an original maturity of:
 - (i) one year or less, or which can be unconditionally cancelled at any time without notice: 0%
 - (ii) over one year: 50%

Market-Related Instruments

1. Interest-rate contracts

- single currency interest rate swaps;
- basis swaps;
- forward rate agreements;
- interest rate futures contracts;
- interest rate options purchased;

- other contracts of a similar nature.
2. *Foreign-exchange contracts (including contracts concerning gold)*
- cross-currency swaps (including cross-currency interest rate swaps);
 - forward foreign-exchange contracts;
 - foreign currency futures;
 - foreign currency options purchased;
 - hedge contracts;
 - other contracts of a similar nature.
3. *Other Contracts similar to the above relating to -*
- equities (whether to individual equities or indices);
 - precious metals except gold (eg silver, platinum, and palladium);
 - other commodities other than precious metals (eg energy contracts, agricultural contracts, base metals [eg aluminium, copper and zinc] etc);
 - any contracts covering other items giving rise to credit risk.

The following types of instruments are *excluded* in the calculation of credit equivalent amounts:

- Foreign exchange contracts (except contracts concerning gold) with original maturity of fourteen calendar days or less; and
- Instruments traded on futures and options exchanges that are subject to daily mark-to-market and margin payments.

Other Items

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

MARKET-RELATED OFF-BALANCE SHEET TRANSACTIONS**1. Current Exposure Method (*Mark-to-market approach*)**

The credit equivalent amount for a transaction (contract) equals the sum of current credit exposure and an “add-on” for potential future credit exposure for the contract:

(i) Current Credit Exposure

The current credit exposure for a contract is determined by the total replacement cost (obtained by “marking to market”) of the contract. If the total replacement cost of the contract has a *positive* value (ie the contract has an unrealised profit where a bank would lose the profit in the event of a default by a counterparty) then the current credit exposure equals the positive value. If the replacement cost is zero or negative, then the current credit exposure of the contract is zero.

(ii) Potential Future Credit Exposure

The potential future credit exposure of a contract is calculated by multiplying the notional principal amount of the contract by a “credit conversion factor” (percentage) according to the residual maturity of the contract as set out in the matrix below:

Current Exposure Method – Credit Conversion Factors

	One year or less	Over one year to 5 years	Over 5 years
Interest rate	0.0 %	0.5 %	1.5 %
Foreign exchange (incl. Gold)	1.0%	5.0%	7.5%
Equities	6.0 %	8.0 %	10.0 %
Precious Metals (except Gold)	7.0 %	7.0 %	8.0 %
Other Commodities	10.0 %	12.0 %	15.0 %

Replacement costs (including future credit exposure) which are fully collateralised by cash and eligible government securities, or backed by eligible guarantees, may be given the weight of the underlying security or guarantor.

The notional or nominal principal amount, or value, of a contract is the reference amount used to calculate payment streams between counterparties to a contract.

Potential future credit exposure is calculated for all contracts regardless of whether the current exposure amount is zero, positive or negative. It will always be a positive amount.

For contracts with multiple exchanges of principal, the “credit conversion factors” are to be multiplied by the number of remaining payments (ie exchanges of principal) still to be made under the contract.

LFIs should not generally enter into contracts at off-market prices. If any contracts are undertaken at off-market prices, LFIs should contact the Reserve Bank to discuss the reasons for such actions and to agree the capital (and other prudential) treatment of these transactions. This includes historical rate rollovers on foreign exchange contracts. The Reserve Bank will need to be persuaded as to the need for dealing at off-market rates.

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

This method is only available to LFIs with the prior approval of the Reserve Bank for interest rate and foreign exchange (including gold) related contracts. In the normal course, LFIs are expected to use the Current Exposure Method. Credit equivalent amounts under the Original Exposure Method are to be calculated by applying the “credit conversion factors” set out below to the notional principal amounts of contracts according to the nature of the instrument and its original maturity

Original Maturity of Contracts	Interest Rate Contracts	Foreign Exchange (and gold) Contracts
One year or less	0.5%	2.0%
Over one year and less than two years	1.0%	5.0%
For each additional year	1.0%	3.0%

The Notes set out above under Current Exposure Method are also applicable where relevant.