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EXTRAORDINARY

The Government of the Republic of Liberia announces that the Central Bank of Liberia (CBL), pursuant to its mandate under the Central Bank of Liberia Act of 1999 and its authority under the Financial Institutions Act of 1999, and specifically consistent with Section 55 of the said Central Bank of Liberia Act of 1999 and Section 39 of the Financial Institutions Act of 1999, has issued on Monday, July 29, 2013, its Prudential Regulations No. CBL/RSD/003/2013 revising Prudential Regulation No. CBL/SD/01/2000 herein under:

CONCERNING
PRUDENTIAL REGULATIONS ON CAPITAL ADEQUACY
REQUIREMENTS FOR LICENSED BANKS

BY ORDER OF THE PRESIDENT

AUGUSTINE KPEHE NGAFUAN

MINISTER OF FOREIGN AFFAIRS

MINISTRY OF FOREIGN AFFAIRS

MONROVIA, LIBERIA

July 29, 2013

1.0 Introduction

As part of its efforts to upgrade its regulatory framework so as to cope with the latest developments in the global banking industry, the Central Bank of Liberia (CBL), pursuant to its authority under Section 15 of the New FIA, hereby issues these capital adequacy regulations for licensed banks. These regulations replace the previous Regulations, No. CD/SD/01/2000 and reflect significant improvements and changes over the previous regulations taking into account evolving international standards and the country context.

These regulations set out the approach for the assessment and computation of minimum capital required of a banking institution in order to operate as a going concern entity. Attached are the instructions issued in this regard, as well as the set of reports banks will have to submit to the CBL concerning the measurement and calculation of capital adequacy ratio, while taking the following into account:

1. These instructions will replace, effective upon its issuance, the currently applied instructions regarding capital adequacy ratio.
2. The data on capital adequacy ratio shall be prepared on a quarterly basis and should be received by the CBL no later than 21 days from the end of the reporting quarter.
3. The reports submitted on the measurement and calculation of capital adequacy ratio shall be signed by the Chief Executive Officer or in his/her absence, the next senior officer, and reviewed by the external auditors for the quarterly period coinciding with the external audit of the bank.

The amendments herein contained focus on:

1. The inclusion of a minimum Tier 1 capital requirement;
2. Additions to components of capital;
3. Introduction of additional risk weights for on-balance sheet exposures;
4. Introduction of credit risk mitigants;
5. Introduction of risk weights and credit conversion factors for off-balance sheet exposures;
6. Introduction of capital adequacy assessment procedures; and

7. Revised reporting requirements

2.0 Purpose

These regulations set out the new capital adequacy requirements for calculating and maintaining the minimum capital required for credit risks. The CBL requires in particular that all licensed banks maintain adequate capital, in accordance with these Regulations, against their risks as capital provides banks with a cushion to absorb losses without endangering customer deposits.

3.0 Scope of Application

This framework is applicable to all banking institutions licensed under the Financial Institutions Act of 1999 (New FIA).

4.0 Capital Components

Capital represents resources that can be used to meet current and foreseeable future losses while leaving banking institutions with the ability to continue operating as a going concern. The capital base, which is used to compute the CAR is defined as the sum of Eligible Tier 1 and Eligible Tier 2 Capital as defined below.

4.1 Core Capital (Tier 1)

Items and capital instruments that qualify as Tier 1 Capital shall have the following characteristics:

1. Fully paid-up and permanently available;
2. Freely available and not earmarked to particular assets or banking activities;
3. Able to absorb losses occurring in the course of on-going business; and
4. Do not represent any fixed charge on the earnings of a banking institution.

Based on the foregoing, the following items and capital instruments qualify as Tier 1 capital:

1. **Permanent shareholders' equity** (including issued and fully paid ordinary shares/common stock and perpetual

non-cumulative preference shares, but excluding cumulative preference shares);

2. **Disclosed Reserves** which represents appropriations from the profits net of accumulated losses, depreciation, provisions for loans and advances losses, and tax. They are not encumbered and are clearly identifiable in the audited accounts of licensed banks. The reserves include the following:

- i. Statutory Reserves;
- ii. Share Premium (Premium on Capital);
- iii. Retained Earnings; and
- iv. Other distributable and legal reserves.

LESS:

- v. Treasury shares (licensed bank's own shares purchased by it);
- vi. Goodwill arising through consolidation of subsidiaries, merger or combination of businesses, and other intangible assets which include the balances of preliminary (pre-operating) expenses;
- vii. Current year's cumulative net losses.

4.2 Supplementary Capital (Tier 2):

Items or capital instruments which do not meet all of the Tier 1 capital characteristics but which contribute to the underlying financial strength of a banking institution would be included in total capital as Tier 2 or supplementary capital, subject to prescribed conditions and limits.

Total Tier 2 Capital, which shall be limited to 50% of Tier 1 capital, shall consist of the following items:

- a. Hybrid instruments, which include a range of instruments which combine characteristics of equity capital and of debt, and which meet the following requirements:
 - i. They are unsecured, subordinated and fully paid-up;

- ii. They are not redeemable at the initiative of the holder or without the prior consent of the CBL;
 - iii. They are available to participate in losses without the bank being obliged to cease trading (unlike conventional subordinated debt);
 - iv. Although the capital instrument may carry an obligation to pay interest that cannot permanently be reduced or waived (unlike dividends on ordinary shareholders' equity), it should allow service obligations to be deferred (as with cumulative preference shares) where the profitability of the bank would not support payment.
 - v. Cumulative preference shares, having the above characteristics, would be eligible for inclusion in tier (2) capital.
- b. Subordinated term debt, which comprises all conventional unsecured borrowing subordinated (in respect of both interest and principal) to all other liabilities of the bank except the share capital and limited life redeemable preference shares. These instruments are not normally available to participate in the losses of a bank which continues trading. For this reason, these instruments will be limited to a maximum of 50% of tier 1 capital. To be eligible for inclusion in tier 2 capital, such debt must meet the following conditions:
- 1. Maturity: The subordinated debt should have a minimum original fixed term to maturity of over five years;
 - 2. It should be fully paid up;
 - 3. Subordination: The term of the debt agreement should ensure that the claims of the lender are fully subordinated to those of the unsubordinated creditors. More specifically, the subordination provisions should ensure the following:
 - i. The claims of the subordinated creditors should rank behind those of all unsubordinated creditors;
 - ii. To the fullest extent possible creditors should waive their right to set off any amounts they

- owe the bank against subordinated amounts owed to them by the bank;
- iii. The only events of default should be (a) non-payment of any amount due and payable (principal and interest only) under the debt agreement (or guarantee), and (b) the winding-up of the institution (or borrower where this is not the same)
4. **Applicable Law:** The debt agreement should normally be subject to Liberian Law. Other laws are acceptable, but only where it is necessary for the success of the issue. In cases where the debt is issued under overseas law, the CBL should be satisfied that an adequate degree of subordination can be achieved under the overseas law. More specifically, the issuing bank should obtain an opinion confirming that an adequate degree of subordination can be achieved.
 5. **Trigger clauses:** The debt agreement should not contain any clause which might require early repayment of the debt (e.g. cross default clauses, negative pledges and restrictive covenants), or which might make the debt more expensive (e.g. a clause which leads to an increase in the interest paid on the debt under a given circumstance). This should not however prejudice any right to petition for the winding-up of the borrower, for example, in the event of nonpayment of interest on the debt.
 6. **Repayment:** No early repayments should be made without the CBL's prior written agreement. This includes purchases of capital notes by the bank or its subsidiaries for cancellation. The CBL will only agree where it is satisfied that the bank's capital is adequate after repayment, and that it is likely to remain so for at least two years. The CBL considers it essential that note-holders should be made aware of the restriction on early repayment, either through the loan agreement, or in the offer documents, or through other information sources commonly used in the markets. Prior to agreeing to early repayment the bank should provide the CBL with a capital plan showing that its capital will remain adequate (above

the minimum capital adequacy ratio) after repayment, and that it is likely to remain so for at least two years.

4.3 Deductions from Total Capital Base

The following items shall be deducted from the licensed bank's capital base:

- a. Investment in unconsolidated subsidiaries,
- b. Investment in the capital of other banks and financial institutions;
- c. Connected lending of capital nature. Connected lending of capital nature include any form of lending of a long-term nature to an unconsolidated subsidiary or associate or other related person; and
- d. Any other exposure that the CBL deems necessary.

5.0 Credit Risk Weighting of On-Balance Sheet Exposures

5.1 General Requirements

This section sets out the weighting framework to be adopted by licensed banks to quantify their credit risk for calculating the capital adequacy ratio under the Standardized Approach developed by the Basel Committee on Banking Supervision. All licensed banks are required to use the Standardized Approach for credit risks. The qualifying criteria for the use of this approach are detailed below. Under the Standardized Approach, different categories of on- and off-balance sheet exposures of a licensed bank are to be risk-weighted according to the ratings assigned by external credit assessment institutions (ECAIs), where available and applicable, or the risk weights assigned by the CBL based on certain standard characteristics of the exposure (such as nature of exposure, repayment status, etc). Where the risk weights are determined by external credit assessments, licensed banks should only use those assigned on a solicited basis by institutions (i.e. ECAIs) that are recognized by the CBL.

The following internationally recognized credit ratings agencies are also accepted as ECAIs: Moody's, Standard and Poor's and

Fitch Ratings. Banks are required to obtain the prior approval of CBL for the use of other ECAs.

5.2 Standard Portfolios

For the purpose of risk-weighting under the Standardized Approach, credit exposures should first be categorized into the following standard portfolios:

1. Cash items
2. Claims on banks
3. Claims on corporates
4. Claims on International Organizations
5. Claims on Multilateral Development Banks (MDBs).
6. Claims on public sector entities
7. Claims on sovereigns
8. Past due exposures
9. Retail exposures
10. Other exposures

These standard portfolios are mutually exclusive and, therefore, any given exposure should be categorized under only one of them. Each of the portfolios has its own risk-weighting scale. The risk weights are discussed in detail below.

5.21 Cash Items

The following types of asset are regarded as cash items which should attract a **0%** risk weight:

- a. Notes and coins;
- b. All gold bullion held in the licensed bank's own vaults or in the vaults of other institutions; and
- c. Checks, drafts and other items drawn on other banks that are payable immediately upon presentation and that are in the process of collection.
- d. Balances with the CBL, including CBL Bills.

5.22 Claims on Banks

Claims on CBL-licensed banks should be assigned a risk weight one grade less favorable than that assigned to claims on the Liberian Government. Claims on foreign

banks outside Liberia, including Liberian banks’ overseas banking subsidiaries, should be risk weighted based on the banks’ credit quality grades below, i.e., assigning risk weight based on the external credit assessment of the bank itself.

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	unrated
Risk Weight	20%	50%	100%	100%	150%	100%

5.23 Claims on Corporates

Claims on corporates should be risk-weighted as follows:

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	unrated
Risk Weight	20%	50%	100%	150%	100%

The CBL may increase the above standard risk weight for unrated claims where it judges that a higher risk weight is warranted by the overall default experience in Liberia. As part of the supervisory review process, the CBL may also consider whether the credit quality of corporate claims held by individual licensed banks should warrant a standard risk weight higher than 100%.

5.24 Claims on International Organizations

Claims on international organizations such as the International Monetary Fund, Bank for International Settlements, European Central Bank, European Commission will receive a **0%** risk weight.

5.25 Claims on Multilateral Development Banks (MDBs)

Claims on MDBs that fulfill the eligibility criteria provided below should be risk-weighted at **0%**. All other MDBs should be risk weighted based on ECAIs’ ratings using the credit quality grades applicable to claims on banks. The

eligibility criteria for 0% risk weight treatment of MDBs are:

1. Very high quality long-term issuer ratings, i.e. a majority of an MDB's external assessments must be AAA;
2. Shareholder structure is comprised of a significant proportion of sovereigns with long-term issuer credit assessments of AA- or better, or the majority of the MDB's fund-raising are in the form of paid-in equity/capital and there is little or no leverage;
3. Strong shareholder support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continued capital contributions and new pledges from sovereign shareholders;
4. Adequate level of capital and liquidity (a case-by-case approach is necessary in order to assess whether each MDB's capital and liquidity are adequate); and,
5. Strict statutory lending requirements and conservative financial policies, which would include among other conditions a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, and individual exposure and credit category), large exposures approval by the board or a committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process, and rigorous assessment of risk and provisioning to loan loss reserve.

5.26 Claims on Public Sector Entities

Claims on Liberian public sector entities should be risk weighted one grade less favorable than Liberian Government. Claims on other foreign public sector entities should be risk weighted one grade less favorable than its sovereigns. Claims on commercial companies owned by public sector entities shall be treated as claims on corporates and assigned risk weight based on the corporate credit quality grade.

5.27 Claims on Sovereigns

Claims on sovereigns should be risk-weighted based on the following sovereign credit quality grades:

Credit Assessment	AA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	unrated
Risk Weight	0%	20%	50%	100%	150%	100%

5.28 Past Due Exposures

This portfolio should include any exposure that is more than 90 days past due or those against which specific provision has been allocated. The unsecured portion of any loan (assuming said loan qualifies for CRM treatments as noted in Section 8) that is classified as past due, net of specific provisions (including partial write offs), will be risk-weighted as follows:

1. 100% risk weight when specific provisions are 50% or less of the outstanding amount of the loan;
2. 50% risk weight when specific provisions are greater than 50% of the outstanding amount of the loan.
3. If past due loan is fully secured by unrecognized collaterals then 100% risk weight shall be applied.

Risk weights should be applied to the net amount after deducting specific provisions and after applying the eligible CRMs.

5.29 Retail Exposures

Retail exposures will include consumer loans, installment loans, credit cards receivables, housing loans, small loans given to individuals such as advances against salary, temporary loans against floats/deposits, and exposures to qualifying small and medium sized enterprise (SMEs). Except those that are past due as defined under 'past due

exposures' above, claims that meet the following two criteria may be categorized as retail exposures and subject to a **75%** risk weight:

1. **Orientation criterion:** The exposure must be either to an individual person or persons or to an SME; and
2. **Product criterion:** The exposure must take the form of any of the following: revolving credits and lines of credit (including credit cards and overdrafts); personal term loans and leases (including installment loans, auto loans and leases, student and educational loans, personal finance), residential housing loans; and small business facilities and commitments.

The CBL may from time to time evaluate whether the 75% risk weight is considered too low for exposures in the regulatory retail portfolio based on the default experience in Liberia. Claims on enterprises that do not satisfy the criteria for inclusion as SMEs within the retail exposures should be treated as claims on corporate. Claims on individuals that do not satisfy the criteria for inclusion as retail exposures should be treated as corporates or other exposures, whichever is applicable.

5.210 Other Exposures

These include all exposures not specified elsewhere, other than those which are deducted in determining the capital base of the licensed bank. They also include fixed assets. Such exposures are subject to a 100% risk weight, or a higher risk weight as may be specified by the CBL, if the asset concerned, other than those that are past due, is considered to be of higher risk.

5.3 Calculation of Credit Risk-Weighted Amount for On-Balance Sheet Assets

The weighted amount is calculated by multiplying the principal amount, net of specific provisions, if any, with the applicable risk weight. For an exposure covered by eligible CRM techniques, the weighted amount of the exposure can be reduced based on the treatment described in the Credit Risk Mitigation section 8 below.

6.0 Computation of Credit Equivalent Amount of Off-Balance Sheet Items

6.1 General Instructions

The risk-weighted amount of an off-balance sheet item that gives rise to credit exposure is generally calculated by means of a two-step process:

1. The principal amount of the transaction is converted into a credit equivalent amount by multiplying the amount by the specified credit conversion factor; and
2. The resulting credit equivalent amount is multiplied by the risk weight applicable to the counterparty or type of asset. Where the off-balance sheet item is secured by eligible collateral or guarantee, the CRM guidelines detailed in Section 8 may be applied.

6.2 Credit Conversion Factors

The credit conversion factors to be used will be as follows:

6.21 Direct Credit Substitutes

Total direct credit substitutes of the following items shall have a Credit Conversion Factor of 100%:

1. **General Guarantees of Indebtedness:** General guarantees of indebtedness where the risk of loss in the transaction may crystallize into a direct liability and become a direct claim on the counterparty. These include Guarantees in respect of counterparties like insurance agents, sales agents, etc. to cover any non-payment by them of premium, sales proceeds, etc. to their beneficiaries. Bank Guarantees in favor of customs would cover any nonpayment of customs duties by their counterparties;
2. **Stand-by LCs serving as Financial Guarantees:** Stand-by Letters of Credit, which are direct, credit

substitutes where the risk of loss in the transaction is equivalent to that of a direct claim on the counterparty. This includes stand-by Letters of Credit serving as financial guarantees for loans, securities and other financial liabilities;

3. **Bank Acceptances:** Liabilities arising from acceptances on accommodation of bills but excludes bills that have been discounted by the bank itself. Risk participation and other similar commitments undertaken to repay the financial obligation of a customer, on his failure to do so, should be included; and
4. **Others:** Any other obligation which carries the same risk of loss in the transaction and is equivalent to that of a direct claim on the counterparty.

6.22 Transaction-Related Contingencies

Total transaction-related contingencies of the following items shall have a Credit Conversion Factor of 50%:

1. **Performance Bonds, Bid Bonds & Warranties:** Transaction-related contingent items such as Performance Bonds, Bid Bonds and Warranties, where the risk of loss arises from an irrevocable obligation to pay a third party, the non-financial obligation of the customer upon his failure to fulfill obligations under a contract or a transaction. Such contingencies would crystallize into actual liabilities dependent upon the occurrence or non-occurrence of an event other than that of a default in payment by the counterparty;
2. **Stand-by LCs related to particular transactions:** Contingent liabilities relating to particular transactions. Here too, there is a likelihood of the contingencies crystallizing into actual liabilities depending upon the occurrence or non-occurrence of an event other than that of a default in payment by a counterparty; and

- 3. Others:** Other contingent liabilities arising from an irrevocable obligation to pay a third party, the non-financial obligation of a customer upon his failure to fulfill such obligation or terms under contract or transaction.

6.23 Short-Term Self Liquidating Trade-Related Contingencies

Total short-term self liquidating trade-related contingencies of the following items shall have a Credit Conversion Factor of 20%:

- 1. Shipping Guarantees:** Guarantees issued by the reporting institution to customers where the reporting institution agrees to indemnify fully, to a named shipping agent, against all liabilities arising from the release of goods without production of Bills of Lading and/or other shipping documents by the receiving party;
- 2. Documentary Letters of Credit:** Documentary credits collateralized by the underlying shipments which are short-term self-liquidating and trade-related transactions;
- 3. Trade-related Acceptances:** Liabilities arising from acceptances that are based on a specific trade transaction either domestic or foreign e.g. Letters of Credit; **and**
- 4. Others:** Contingent liabilities arising from short-term self-liquidating trade related obligations.

6.24 Commitments with an Original maturity of up to one year or which can be unconditionally cancelled at any time

Total of the following items shall have a Credit Conversion Factor 0%:

1. **Formal Stand-by Facilities and Credit Lines:** Commitments include the undrawn portion of any binding arrangements which obligate the reporting institution to provide funds at some future date. Such commitments would have an original maturity of less than one year or which can be unconditionally cancelled at any time by the reporting bank at its discretion. Formal stand-by facilities and credit lines for Letters of Credit, Trust Receipts, etc; should be included under this item;
2. **Undrawn Term Loans:** Undrawn portion of a term loans with an original maturity of less than one year or which can be unconditionally cancelled at any time by the reporting bank;
3. **Undrawn Overdraft Facilities/Unused Credit Card Lines:** The undrawn portion of overdraft facilities and credit card lines with an original maturity of less than one year or which can be unconditionally cancelled at any time by the reporting bank; and
4. **Others:** Any other commitment with an original maturity up to one year or which can be unconditionally cancelled at any time.

6.25 Other Commitments with an Original maturity of over one year

Total of the following items shall have a Credit Conversion Factor 50%

1. **Formal Stand-by Facilities and Credit Lines:** The commitments under formal standby facilities and credit lines with an original maturity that is over one year;
2. **Undrawn Term Loans:** The undrawn portion of term loans where the original maturity is over one year.

3. **Others:** Any other commitment with an original maturity over one year.

7.0 Minimum Capital Adequacy Ratio

Compliance with the minimum capital adequacy requirement is determined by two minimum ratios by which regulatory capital is linked to asset risk weightings:

1. Total qualifying regulatory capital divided by risk-weighted assets must be equal to or greater than 10%;
2. Qualifying Tier 1 capital divided by risk-weighted assets must equal at least 5%.

However, the CBL may require certain target and trigger ratios for individual licensed bank depending on the bank's risk profile and risk management system as assessed by the CBL.

The CBL shall impose a specific capital charge and/or limits on all material risk exposures, where necessary, if in the judgment of the CBL such material risks have not been adequately transferred or mitigated through transactions (**eg securitisation transactions**) entered into by the bank.

Licensed banks must give the CBL, immediate written notification of any actual breach of the 10% and 5% minimum requirements. Where such notification is made, the licensed bank must also provide written action plan setting out how it proposes to restore its CAR to the required limit. The action plan should also describe how the licensed bank will ensure that a breach of the minimum CAR will not occur again in the future. The licensed bank should report its CAR calculation on a monthly basis thereafter until its CAR has reached the minimum level. The CBL shall also use leverage in assessing the capital adequacy of banks. The minimum acceptable leverage ratio shall be 5%.

8.0 Credit Risk Mitigation (CRM)

Banks use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralized by first priority claims, in whole or in part with cash or securities or a loan exposure may be guaranteed by a third party. Additionally, banks may

agree to net loans owed to them against deposits from the same counterpart.

While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks). Residual risks include legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy, consideration of the underlying credit, valuation, policies and procedures, systems, control of roll-off risks and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile.

This section, therefore, sets out the detailed requirements for the recognition and use of credit risk mitigation techniques (CRM) under the comprehensive approach developed by the Basel Committee on Banking Supervision. In particular, this section sets out the recognition requirements, the types of CRM techniques recognized by the CBL (eligible collaterals, netting and guarantees), and the calculation of adjusted weighted amount for exposures with recognized CRM techniques.

8.1 Recognition Requirements

Licensed banks may use, for capital adequacy purposes, CRM techniques to reduce their weighted amount of credit risk exposures for capital adequacy purposes. In order for a licensed bank to benefit from such techniques, it must satisfy the following recognition requirements:

1. All documentation used for CRM purposes must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal reviews to verify this and have a well-founded legal basis to reach this conclusion. Such reviews should be re-conducted whenever necessary to ensure continued enforceability of the documents;
2. The legal mechanism by which collateral is pledged or transferred must ensure that licensed banks have the right to liquidate or to take legal possession of the collateral in a timely manner in the event of default, insolvency, bankruptcy (or other pre-defined credit events in the

transaction documentation) of the counterparty (and, where applicable, of the custodian holding the collateral);

3. Licensed banks must take all necessary steps to fulfill the requirements under the law applicable to the bank's interest in the collateral for obtaining and maintaining an enforceable security interest, e.g., by registering it with a register, or for exercising a right to net or set off in relation to title transfer collateral;
4. Licensed banks must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are properly observed, and that collateral can be liquidated promptly; and
5. Where the collateral is held by a custodian, licensed banks must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.

8.2 CRM Techniques

The following types of CRM techniques are recognized for the reduction of the weighted amount of a credit exposure, provided that they fulfill the recognition conditions set out above:

1. Collateral: A collateralized transaction is one in which licensed banks have a credit exposure or potential credit exposure which is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty;
2. Netting: Where licensed banks have legally enforceable netting arrangements for loans and deposits they may calculate capital requirements on the basis of net credit exposures; and
3. Guarantees: Where guarantees are direct, explicit, irrevocable and unconditional and the CBL is satisfied that the licensed bank fulfills certain minimum operational conditions relating to risk management processes, it may

allow licensed banks to take account of such guarantees in calculating capital requirements. Only guarantees issued by entities with a lower risk weight than the counterparty will lead to reduced capital charges. The uncovered portion, however, should retain the risk weight of the underlying counterparty.

8.21 Collateralized Transactions

In the simple approach, the portions of claims collateralized by the market value of recognized collateral receive the risk weight applicable to the collateral instrument. Mismatches in the maturity of the underlying exposure and collateral will not be allowed, i.e. the collateral must be pledged for at least the life of the exposure.

8.211 Risk Weights for Collaterals

The risk weight on the collateralized portion will be subject to a floor of 20%. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty. However, the 20% floor for the risk weight on a collateralized transaction will not be applied and a 0% risk weight can be applied provided the exposure and the collateral are denominated in the same currency, and either:

1. the collateral is cash on deposit and gold or
2. the collateral is in the form of Government securities or
3. the collateral is in the form of provident fund balances.

8.212 Eligible Collaterals

The following types of financial collaterals are eligible for recognition:

- I. Cash on deposit with the licensed bank, including certificates of deposit or comparable instruments issued by the licensed bank.

- II. Gold.
- III. Debt securities issued by:
 - i. The government of any country;
 - ii. MDBs, or those issued by banks or securities firms and rated by a recognized ECAs with their ratings equivalent to Credit Quality Grade of 3 or better.
- IV. Short-term debt instruments issued by banks and with a short-term rating from a recognized ECAs equivalent to Credit Quality Grade (banks) of 3 or better.
- V. Debt securities not rated by a recognized ECAs but meet all of the following conditions:
 - i. Issued by a bank;
 - ii. Classified as senior debt;

Where a licensed bank takes eligible collateral from a counterparty of a credit exposure or a third party on behalf of the counterparty, it is allowed to take account of the risk mitigating effect of the collateral in calculating the capital requirement. However, regulatory capital relief will only be allowed if the collateral instruments and the risk mitigation process satisfy all the specific requirements for individual CRMs in addition to the minimum conditions mentioned above.

8.22 On-Balance Sheet Netting

Where a bank: has a well-founded legal basis for concluding that the netting or offsetting agreement is enforceable in each relevant jurisdiction regardless of whether the counterpart is insolvent or bankrupt; is able at any time to determine those assets (loans) and liabilities (deposits) with the same counterpart that are subject to the netting agreement; monitors and controls its roll-off risks; and monitors and controls the relevant exposures on a net basis; it may use the net exposure of loans and deposits as the basis for its capital adequacy computation.

8.23 Guarantees

Where guarantees are direct, explicit, irrevocable and unconditional, banks may take account of such credit protection in calculating capital requirements.

8.231 Minimum Conditions

1. A guarantee (or counter-guarantee) must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
2. Other than non-payment by a protection purchaser of money due in respect of the credit protection contract it must be irrevocable; there must be no clause in the contract that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure;
3. It must also be unconditional; there should be no clause in the protection contract outside the control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner in the event that the original counterpart fails to make the payment(s) due;
4. In addition to the legal certainty requirements above, the following conditions must also be satisfied:
 - I. On the qualifying default or non-payment of the counterpart, the bank may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such

documentation to the bank, or the guarantor may assume the future payment obligations of the counterpart covered by the guarantee. The bank must have the right to receive any such payments from the guarantor without first having to take legal actions in order to pursue the counterpart for payment;

- II. The guarantee is an explicitly documented obligation assumed by the guarantor;
- III. Except as noted in the following sentence, the guarantee covers all types of payments the underlying obligor is expected to make under the documentation governing the transaction, for example notional amount, margin payments, etc.; and
- IV. Where a guarantee covers payment of principal only, interests and other uncovered payments should be treated as an unsecured amount.

8.232 Eligible Guarantors

Credit protection given by the following entities will be recognized: sovereign entities, public sector entities and other entities with a risk weight of 20% or better and a lower risk weight than the counterparty.

8.233 Risk Weights for Guarantees

The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight of the underlying counterpart. A zero risk weight will be applied to that portion of loans guaranteed by GOL and CBL.

9.0 Capital Adequacy Assessment Process

In assessing the adequacy of a bank's capital levels in light of its risk profile, the CBL shall consider, among other things, on (a) the potential loss absorbency of the instruments included in the bank's capital base, (b) the appropriateness of risk weights as a proxy for the risk profile of its exposures, (c) the adequacy of provisions and reserves to cover loss expected on its exposures and (d) the quality of its risk management and controls.

Notwithstanding the above, each bank shall be required to adopt a forward-looking approach to capital management (including the conduct of appropriate stress testing).

This section sets out the minimum requirements that all licensed banks should observe in establishing and managing the capital adequacy assessment process (CAAP). CAAP is a regular process through which senior management assesses their bank's capital against its risk profile (type and level of risk). The purpose of CAAP is to complement the above capital adequacy requirements and the supervisory review process, and it enables senior management to ensure that their bank has adequate capital to support all material risks it is exposed to.

The main components of CAAP are:

1. Board and senior management oversight;
2. Comprehensive assessment of risks;
3. Monitoring and reporting; and
4. Internal control review.

9.1 Board and Senior Management Oversight

Senior management of the licensed bank should develop a capital adequacy strategy which must be discussed and approved by the board. In constructing such strategy, the board and senior management should take into their consideration the following factors:

1. The current risk profile of the bank;
2. The local and other relevant external regulations;
3. The strategy and business plan with a focus on risk exposure growth (lending, investments and off-balance sheet);

4. The current operating environment in terms of market practice, competition, consumer behavior;
5. Access to external capital sources;
6. Future sources and uses of funds;
7. The bank's dividends policy;
8. The desired level of capital;
9. Set capital levels and manage available capital in anticipation of possible events or changes in market conditions that could have an adverse effect; and
10. Have in place feasible contingency arrangements to maintain or strengthen capital positions in times of stress, as appropriate in the light of the risk profile and systemic importance of the bank.

The bank's board of directors has the responsibility for:

1. Setting the bank's tolerance for risks;
2. ensuring that management establishes a framework for assessing the various risks, develops a system to relate risk to the bank's capital level, and establishes a method for monitoring compliance with internal policies;
3. adopting and supporting strong internal controls and written policies and procedures; and
4. ensuring that management effectively communicates these policies and procedures throughout the bank.

9.2 Comprehensive Assessment of Risks

Each licensed bank should have in place adequate policies and procedures designed to ensure that the licensed bank identifies, measures, and reports all material risks it is exposed to. The major risks that should be covered through CAAP are credit, market, operational, interest rate in the banking book and liquidity risks. Where such risks cannot be measured precisely, a process should be developed to estimate these risks.

9.3 Monitoring and Reporting

Each licensed bank should establish an adequate system for monitoring and reporting risk exposures and assessing how its changing risk profile affects the need for capital. The bank's senior management or board of directors should, on a regular

basis, receive reports on the bank's risk profile and capital needs. These reports should allow senior management to:

1. Evaluate the level and trend of material risks and their effect on capital levels;
2. Evaluate the sensitivity and reasonableness of key assumptions used in the capital assessment measurement system;
3. Determine that the bank holds sufficient capital against the various risks and is in compliance with established capital adequacy strategy and targets; and
4. Assess its future capital requirements based on the bank's reported risk profile and make necessary adjustments to the bank's business plan.

9.4 Internal Controls and Risk Management Review

A process of internal controls, reviews and audit to ensure the integrity of the overall management process should be in place. Effective control of the capital assessment process includes an independent review and, where appropriate, the involvement of internal or external audits. The licensed bank's board of directors has a responsibility to ensure that management establishes a system for assessing the various risks, develops a system to relate risk to the bank's capital level, and establishes a method for monitoring compliance with internal policies. The board should regularly verify whether its system of internal controls is adequate to ensure well-ordered and prudent conduct of business.

Each licensed bank should conduct an annual review of its internal controls and risk management process to ensure its integrity, accuracy, and reasonableness. Areas that should be reviewed include:

1. Appropriateness of the bank's capital assessment process given the nature, scope and complexity of its activities;
2. Identification and management of large exposures and risk concentrations;
3. Accuracy and completeness of data inputs into the bank's assessment process;
4. Reasonableness and validity of scenarios used in the capital adequacy assessment process; and

5. Stress testing and analysis of assumptions and inputs.

10. Reporting Requirements

The attached reporting format collects information on the capital adequacy position of licensed banks. The return comprises 4 major parts.

- Part 1: Capital Adequacy Ratio Computation Worksheet.
- Part 2: Schedule of on-balance sheet exposures recognized under credit risk mitigation (CRM).
- Part 3: Schedule of on-balance sheet exposures not recognized under credit risk mitigation (CRM).
- Part 4: Schedule supporting the computation of risk weighted off-balance sheet exposures.

11. Issued this 29th day of July, A.D. 2013 in the City of Monrovia, Republic of Liberia.

Capital Adequacy Computation Worksheet							
All Figures in L\$'000							
On-Balance Sheet Items							
Risk Weight	Assets		Value (V)	Weight (W)	Weighted Value (W x V)	Effect of CRM	Final Weighted Value
Zero	(A)	Cash Items	-	-	-		
		Cash	-				
		Eligible Checks/Drafts	-				
		Others	-				
	(B)	Due from CBL	-	-	-		
		Current Account	-				
		Reserve Requirement	-				
		Other Claims	-				
	(C)	Performing GOL Securities	-	-	-		
		Treasury Bills	-				
		Government Securities	-				
		Other Claims on GOL	-				
	(D)	Fully Secured Claims (inclusive of Credit)	-	-	-		
		By Cash	-				

		By GOL Securities	-				
	(E)	Claims on Eligible International Organizations	-	-	-		
	(F)	Claims on Eligible Multilateral Development Banks (MDBs)	-	-	-		
	(G)	Eligible Claims on Sovereigns	-	-	-		
	Sub-Total of Zero-Weight Category		-		-		-
20%	(A)	Eligible Claims on Banks	-	-	-		-
	(B)	Eligible Claims on Corporates	-	-	-		-
	(C)	Eligible Claims on Public Sector Entities (PSEs)	-	-	-		-
	(D)	Eligible Claims on Sovereigns	-	-	-		-
	Sub-Total of 20% Weight Category		-		-		-
50%	(A)	Eligible Claims on Banks	-	-	-		-
	(B)	Eligible Claims on Corporates	-	-	-		-
	(C)	Eligible Claims on Public Sector Entities (PSEs)	-	-	-		-
	(D)	Eligible Claims on Sovereigns	-	-	-		-
	(E)	Eligible Past Due Exposures	-	-	-		-
	Sub-Total of 50% Weight Category		-		-		-
75%	(A)	Eligible Claims on Public Sector Entities (PSEs)	-	-	-		-
	(B)	Retail Exposures	-	-	-		-

			-		-		-
	Sub-Total of 75% Weight Category		-		-		-
100%	(A)	Eligible Claims on Banks	-		-		-
	(B)	Eligible Claims on Corporates	-		-		-
	(C)	Eligible Claims on Public Sector Entities (PSEs)	-		-		-
	(D)	Eligible Claims on Sovereigns	-		-		-
	(E)	Eligible Past Due Exposures	-		-		-
	(F)	Other Exposures	-		-		-
	(G)	Fixed Assets	-		-		-
	Sub-Total of 100% Weight Category		-		-		-
150%	(A)	Eligible Claims on Banks	-		-		-
	(B)	Eligible Claims on Corporates	-		-		-
	(C)	Eligible Claims on Public Sector Entities (PSEs)	-		-		-
	(D)	Eligible Claims on Sovereigns	-		-		-
	Sub-Total of 150% Weight Category		-		-		-
Total Risk-Weighted On-Balance Sheet Items			-		-		-
Off-Balance Sheet Items							
Risk Weight	CCF	Off-Balance Sheet Items	Value (V)	Credit Equivalent	Weighted Value		

	Direct Credit Substitutes (General Guarantees of Indebtedness, Stand-by LCs serving as Financial Guarantees, Bankers' Acceptances)			
0%	Fully Secured	-	-	-
0%	Eligible International Organizations	-	-	-
0%	Eligible Multilateral Development Banks (MDBs)	-	-	-
0%	Eligible Claims on Sovereigns	-	-	-
20%	Eligible Claims on Banks	-	-	-
20%	Eligible Claims on Corporates	-	-	-
20%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
20%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Claims on Banks	-	-	-
50%	Eligible Claims on Corporates	-	-	-
50%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
50%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Past Due Exposures	-	-	-
75%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
100%	Eligible Claims on Banks	-	-	-
100%	Eligible Claims on Corporates	-	-	-

100%

			-		-
100%		Eligible Claims on Public Sector Entities (PSEs)	-		- -
100%		Eligible Claims on Sovereigns	-		- -
150%		Eligible Claims on Banks	-		- -
150%		Eligible Claims on Corporates	-		- -
150%		Eligible Claims on Public Sector Entities (PSEs)	-		- -
150%		Eligible Claims on Sovereigns	-		- -
		Sub-Total of 100% Credit Conversion Factor	-		- -
		Transaction-Related Contingencies (Performance Bonds, Bid Bonds, Warranties, Stand-by LCs related to Particular Transactions); Other Commitments with an Original maturity of over one year (Formal Stand-by Facilities and Credit Lines, Undrawn Term Loans)			
0%	50%	Fully Secured	-		- -
0%		Eligible International Organizations	-		- -
0%		Eligible Multilateral Development Banks (MDBs)	-		- -
0%		Eligible Claims on Sovereigns	-		- -
20%		Eligible Claims on Banks	-		- -
20%		Eligible Claims on Corporates	-		- -
20%		Eligible Claims on Public Sector Entities (PSEs)	-		- -

20%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Claims on Banks	-	-	-
50%	Eligible Claims on Corporates	-	-	-
50%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
50%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Past Due Exposures	-	-	-
75%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
100%	Eligible Claims on Banks	-	-	-
100%	Eligible Claims on Corporates	-	-	-
100%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
100%	Eligible Claims on Sovereigns	-	-	-
150%	Eligible Claims on Banks	-	-	-
150%	Eligible Claims on Corporates	-	-	-
150%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
150%	Eligible Claims on Sovereigns	-	-	-
Sub-Total of 50% Credit Conversion Factor		-	-	-
20%	Short-Term Self Liquidating Trade-Related Contingencies (Shipping Guarantees, Documentary Letters of Credit, Trade-Related Acceptances)			

0%	Fully Secured	-	-	-
0%	Eligible International Organizations	-	-	-
0%	Eligible Multilateral Development Banks (MDBs)	-	-	-
0%	Eligible Claims on Sovereigns	-	-	-
20%	Eligible Claims on Banks	-	-	-
20%	Eligible Claims on Corporates	-	-	-
20%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
20%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Claims on Banks	-	-	-
50%	Eligible Claims on Corporates	-	-	-
50%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
50%	Eligible Claims on Sovereigns	-	-	-
50%	Eligible Past Due Exposures	-	-	-
75%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
100%	Eligible Claims on Banks	-	-	-
100%	Eligible Claims on Corporates	-	-	-
100%	Eligible Claims on Public Sector Entities (PSEs)	-	-	-
100%	Eligible Claims on Sovereigns	-	-	-

			-		-
150%		Eligible Claims on Banks	-		-
150%		Eligible Claims on Corporates	-		-
150%		Eligible Claims on Public Sector Entities (PSEs)	-		-
150%		Eligible Claims on Sovereigns	-		-
		Sub-Total of 20% Credit Conversion Factor	-		-
Total Risk-Weighted Off-Balance Sheet Items					-
Total Risk-Weighted On and Off-Balance Sheet Items					-
Total Capital Computation					
		Core Capital:			-
		Paid-in-Capital			-
		Statutory Reserves			-
		Premium on Capital			-
		Retained Earnings			-
		Other Distributable and Legal Reserves			-
		Deductions from Tier One (1) Capital:			-
		Treasury Shares			-
		Goodwill, Pre-operating Expenses, intangible assets			-
		Current Year Cumulative Net Losses			-

		-	
	Total Qualifying Tier One (1) Capital	-	
	Supplementary Capital:		
	Hybrid Capital Instruments	-	
	Subordinated Term Debt	-	
	Qualifying Subordinated Term Debt (Limited to 50% of Tier 1)	-	
	Total Tier Two (2) Capital	-	
	Total Qualifying Tier Two (2) Capital	-	
	Total Qualifying Capital (Qualifying Tier 1 + Qualifying Tier 2)	-	
	Deduction from Total Qualifying Capital:	-	
	Investments in Unconsolidated Subsidiaries	-	
	Investments in Capital of other Financial Institutions	-	
	Connected Lending of Capital Nature	-	
	Other	-	
	Adjusted Capital Base	-	
Capital Adequacy Ratio			
	Adjusted Capital Base/Total Risk Weighted On & Off Balance Sheet Items		#DIV/0!
	Regulatory Capital Adequacy Ratio		10.00%
	Surplus/(Deficit)		#DIV/0!

Schedule of On-Balance Sheet Exposures Not Recognized Under Credit Risk Mitigation					
0%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-
	9				-
	10				-
		Total 0% Weighted	-		-
20%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-

	9				-
	10				-
		Total 20% Weighted	-		-
50%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-
	9				-
	10				-
		Total 50% Weighted	-		-
75%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-
	9				-
	10				-

		Total 75% Weighted	-		-
100%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-
	9				-
	10				-
		Total 100% Weighted	-		-
150%		Counterparty	Amount	Type of Counterparty	Weighted Value
	1				-
	2				-
	3				-
	4				-
	5				-
	6				-
	7				-
	8				-
	9				-
	10				-
		Total 150% Weighted	-		-
Total On-Balance Sheet Risk Weighted Exposures Not Recognized Under CRM					-

Schedule Supporting the Computation of Risk Weighted Off-Balance Sheet Exposures							
CCF		Counterparty	Amount	Type of Counterparty	Risk Weight	Credit Equivalent	Weighted Value
100%	1					-	-
	2					-	-
	3					-	-
	4					-	-
	5					-	-
	6					-	-
	7					-	-
	8					-	-
	9					-	-
	10					-	-
		Total 0% Weighted	-				-
50%		Counterparty	Amount	Type of Counterparty			Weighted Value
	1					-	-
	2					-	-
	3					-	-
	4					-	-
	5					-	-
	6					-	-
	7					-	-
	8					-	-
	9					-	-

	10					-	-
		Total 20% Weighted	-				-
20%		Counterparty	Amount	Type of Counterparty			Weighted Value
	1					-	-
	2					-	-
	3					-	-
	4					-	-
	5					-	-
	6					-	-
	7					-	-
	8					-	-
	9					-	-
	10					-	-
		Total 50% Weighted	-				-
Total Risk Weighted Off-Balance Sheet Exposures							-

Schedule of On-Balance Sheet Exposures Recognized Under Credit Risk Mitigation

A. Collateralized Transactions													
		Counterparty	Value of Loan	Type of Qualifying Collateral	Collateralized Portion (CP)	Uncollateralized Portion (UP)	Risk Weight (CP)	Risk Weight (UP)	Risk Weighted (CP)	Risk Weighted (UP)	Total Risk Weighted Value	Risk Weight Without CRM	Effect of CRM
20%	1					-			-	-	-	-	-
	2											-	-
	3											-	-
	4											-	-
	5											-	-
	6											-	-
	7											-	-
	8											-	-
	9											-	-
	10											-	-
		Total	-		-	-			-	-	-	-	-
50%	1					-			-	-	-	-	-
	2											-	-
	3											-	-
	4											-	-
	5											-	-

	6										-	-
	7										-	-
	8										-	-
	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
75%	1				-			-	-	-	-	-
	2										-	-
	3										-	-
	4										-	-
	5										-	-
	6										-	-
	7										-	-
	8										-	-
	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
100%	1				-			-	-	-	-	-
	2										-	-
	3										-	-
	4										-	-
	5											

	6										-	-
	7										-	-
	8										-	-
	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
150%	1				-			-	-	-	-	-
	2										-	-
	3										-	-
	4										-	-
	5										-	-
	6										-	-
	7										-	-
	8										-	-
	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
Total Effect of CRM on Collateralized Transactions												-

B. Netting-Off Transactions									
		Counterparty	Value of Loan	Value of Eligible Deposit	Net Value of Loan	Applicable Risk Weight	Risk Weighted Value	Risk Weight Without CRM	Effect of CRM
20%	1				-		-	-	-
	2							-	-
	3							-	-
	4							-	-
	5							-	-
	6							-	-
	7							-	-
	8							-	-
	9							-	-
	10							-	-
		Total	-	-	-		-	-	-
50%	1				-		-	-	-
	2							-	-
	3							-	-
	4							-	-
	5							-	-
	6							-	-

	7						-	-
	8						-	-
	9						-	-
	10						-	-
	Total	-	-	-		-	-	-
75%	1			-		-	-	-
	2						-	-
	3						-	-
	4						-	-
	5						-	-
	6						-	-
	7						-	-
	8						-	-
	9						-	-
	10						-	-
	Total	-	-	-		-	-	-
100%	1			-		-	-	-
	2						-	-
	3						-	-
	4						-	-
	5						-	-
	6						-	-

	7							-	-
	8							-	-
	9							-	-
	10							-	-
	Total	-	-	-			-	-	-
150%	1				-		-	-	-
	2						-	-	-
	3						-	-	-
	4						-	-	-
	5						-	-	-
	6						-	-	-
	7						-	-	-
	8						-	-	-
	9						-	-	-
	10						-	-	-
	Total	-	-	-			-	-	-
Total Effect of CRM on Netting-Off Transactions									-

C. Guarantee Transactions

		Counterparty	Value of Loan	Eligible Guarantor	Covered Portion of Loan (CP)	Uncovered Portion of Loan (UP)	Risk Weight of Guarantor	Risk Weight of Counterparty	Risk Weight CP	Risk Weight UP	Total Risk Weighted	Risk Weight Without CRM	Effect of CRM
20%	1					-			-	-	-	-	-
	2											-	-
	3											-	-
	4											-	-
	5											-	-
	6											-	-
	7											-	-
	8											-	-
	9											-	-
	10											-	-
		Total		-		-	-			-	-	-	-
50%	1					-			-	-	-	-	-
	2											-	-
	3											-	-
	4											-	-
	5											-	-
	6											-	-
	7											-	-
	8											-	-

	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
75%	1				-			-	-	-	-	-
	2									-	-	-
	3									-	-	-
	4									-	-	-
	5									-	-	-
	6									-	-	-
	7									-	-	-
	8									-	-	-
	9									-	-	-
	10									-	-	-
	Total	-		-	-			-	-	-	-	-
100%	1				-			-	-	-	-	-
	2									-	-	-
	3									-	-	-
	4									-	-	-
	5									-	-	-
	6									-	-	-
	7									-	-	-
	8									-	-	-

	9										-	-
	10										-	-
	Total	-		-	-			-	-	-	-	-
1500%	1				-			-	-	-	-	-
	2									-	-	-
	3									-	-	-
	4									-	-	-
	5									-	-	-
	6									-	-	-
	7									-	-	-
	8									-	-	-
	9									-	-	-
	10									-	-	-
	Total	-		-	-			-	-	-	-	
Total Effect of CRM on Guarantee Transactions												-