Ontario

Deposit Insurance
Corporation of Ontario

Société ontarienne
d'assurance-dépôts

Application Guide:

Internal Capital Adequacy Assessment Process (ICAAP)

January 2018

Ce document est également disponible en français.

This document provides additional information regarding the ICAAP submission requirements, mandatory stress tests and summary key metrics report.

Contents

ICAAP SUBMISSION TEMPLATE

Credit unions are required to submit a document summarizing their ICAAP and incorporating the elements outlined in the following template. While the use of this sample submission template is not mandatory, the summary should cover all the elements outlined. The submission template should be as concise as possible, while incorporating all material issues.

Please note that completion of the Key Metrics Report outlined in Appendix A of this template (in Excel format) is mandatory for submission purposes.

Table 1: ICAAP Submission Elements

1	Executive Summary
2	Background on ICAAP
3	Statement of Risk Appetite
4	Material Risks
5	Capital Planning
6	Stress and Scenario Testing
7	Conclusions and Next Steps
Appendix 1	Sample ICAAP Submission Report
Appendix A	Key Metrics Report

1. EXECUTIVE SUMMARY

This summary should provide a brief overview of the ICAAP methodology and results, including:

- an outline of the significant risks faced by the credit union. The use of Enterprise Risk Management (ERM) summaries is encouraged for consistency and to avoid duplication of risk documentation
- a summary of main findings of the credit union's ICAAP analysis including:
  - the level and composition of internal capital it determines it should hold;
  - whether it has adequate capital resources over its planning horizon; and
  - results and impacts of optional and/or mandatory stress test analysis
- a summary of the financial position of the credit union, its business strategy, balance

  sheet structure and projected profitability. Sample high level commentary is provided in Appendix 1: Sample ICAAP Submission
- confirmation that the credit union has assessed its capital as adequate, given the size and complexity of its business; or, if not, the actions planned to remediate the situation.

2. BACKGROUND ON ICAAP

This section should provide a brief overview of the credit union's ICAAP, including the credit union's risk management framework, business planning and capital management processes.

3. STATEMENT OF RISK APPETITE

This section should provide a brief description of the credit union's risk appetite and set out the frequency of review of the risk tolerances by management and the board. This would be set out under the credit union's enterprise risk management (ERM) framework. For clarity, summary documentation derived from the ERM framework can be submitted by way of an appendix to the ICAAP submission, and referenced as appropriate in the submission itself.

4. MATERIAL RISKS

This section should provide a concise description of the credit union's risk identification process. This should include a summary of how each material risk is identified and quantified for capital allocation purposes, including the methodology, assumptions and calculations used. Key risks which should be considered as part of an ICAAP include:

- Credit Risk
- Risk Concentrations
- Market Risk
- Operational Risk
- Interest Rate Risk
- Liquidity Risk
- Any other significant risks identified

Sample methodologies are provided in Appendix 1.

a. Credit Risk

Increased credit risk may be evident where loan portfolios indicate a rising average risk profile as a result of various factors. These may include higher cautionary ratings due to operational challenges that may not result in weaker credit quality.

In contrast, these may include concerns about performance and condition factors, which may indicate lower overall quality. One approach is to establish target portfolio risk rating levels, above which additional capital may need to be allocated in addition to any collective loan loss provisions.

b. Risk Concentrations

The impact of concentration risk should be reflected on a credit union's ICAAP.

When assessing credit concentration risk, it is important to ensure that adequate additional capital is provided for all risk categories that are not widely diversified.

Commercial Loans

In particular, credit unions should establish a process that identifies and categorizes commercial concentration risk, in order to determine whether additional capital should be allocated. For example, this might include applying higher risk weights to larger loans, different industry categories or to portfolio balances in excess of target limits (e.g., 30% in any one-industry sector).

c. Market Risk

Credit unions should determine any balance sheet items that are subject to market risk and potential capital allocation, including the impact under stress conditions. These include investments such as CUCO Co-op shares (ABCP), Central 1 shares, and other assets held at fair value. Valuations should also consider the potential impact on the balance sheet of Central 1 and the extent of a related capital call.

d. Operational Risk

Credit unions should consider whether current conditions represent potentially higher levels of operational risk.

Under the existing standardized approach, credit unions are required to allocate capital for 15% of the last 3 years average total income. Credit unions should ensure that this requirement remains appropriate given any change in projected income levels, growth and its operating environment. This may include allocating a more consistent level of capital regardless of planned income reductions or lower than normal recent income streams. For example, net interest income would likely be lower in a consistent low interest rate environment, and consequently reduce the required capital for operational risk.

e. Interest Rate Risk

Under the existing standardized approach, credit unions are required to allocate capital based on their interest rate risk exposure. Credit unions should ensure that the methodologies and assumptions applied fully recognize any changes in exposures.

Further information and expectations are provided in DICO's Guidance Note: Structural (Interest Rate) Risk Measurement and Management.

f. Liquidity Risk

This relates to the potential impact on capital of having to fund operations and growth with higher cost funding than would normally be expected, including the use of securitization vehicles.
This might include brokered deposits, line of credit or other facilities. This potential impact and capital allocation could be included as part of Pillar II and/or as part of a stress test scenario.

5. CAPITAL PLANNING

This section should include:

- a description of the credit union's capital planning and management process, including an outline of how ICAAP is incorporated into this process; and
- a 3-year summary forecast capital position based on the annual business plan

6. STRESS AND SCENARIO TESTING

This section should briefly summarize:

- the stress tests undertaken and the rationale for their choice;
- the methodology and assumptions used in each scenario tested; and
- how the credit union would manage its business and capital to ensure that sufficient levels of capital are available under stress conditions

Potential capital impacts of stress testing scenarios may not necessarily be incorporated in ICAAP capital requirements, but may be useful when considering the adequacy of existing and planned capital levels.

Mandatory Stress Tests

The objectives of the mandatory stress tests are to help gauge the capacity of each credit union to withstand a similar set of potentially severe events using a similar approach. Results of these stress tests should not be misinterpreted as potential weaknesses. Rather, results should be considered against actual performance and trends when assessing current and planned capital levels. Each credit union is required to include the following mandatory stress tests in its ICAAP analysis:

1. The impact on the credit union's capital resulting from a standardized 200 bps interest rate shock (single factor test);
2. An economic downturn which includes a 30% reduction in real estate and security valuations, with resulting impacts on the level of delinquencies and credit defaults for material risk areas; and
3. A (reverse stress test) scenario that in management's view would most likely cause a breach of minimum regulatory capital requirements.

Sample methodologies are provided in Appendix 1.

Considerations for Mandatory Stress Tests

1. Interest Rate Shock

The credit union's short-term interest rate risk represents its major exposure in this stressed scenario. The shock tests should be stressful and representative of potential conditions.

A reasonable rate shock should also apply to on/off balance sheet exposures that are held at market value or available for sale beyond oneyear term. For the purpose of calculating the stress result, the largest negative result identified should be used.

Please refer to DICO's Guidance Note: Structural (Interest Rate) Risk Measurement and Management for further details.

2. Economic Downturn

Credit unions are expected to consider all material risk areas in their stress testing scenario, including all major loan segments as set out in Table 2 on page 8. Where appropriate, credit unions should also consider including sub categories in order to fully recognize any difference in risk exposures and potential losses.

When determining potential impacts and losses, credit unions should assess a range of possible outcomes by applying stress conditions to varying criteria. These should include historical and recent loss experience.

In estimating losses based on historical experience, credit unions should ensure that historical loss experience contains at least one period when losses were substantially elevated, and revenues substantially reduced, such as the downturn of a credit cycle. In addition, credit unions should ensure that any historical loss data used are consistent with its current and projected exposures.

Table 2 below sets out a range of sample stress factors that may be applied to historical experience (credit unions may adopt higher factors as appropriate). Applying both the lower and higher factors would help establish a range of outcomes of each consideration and also aggregate ("high" and "low") loss projections for each major loan category. These should then be compared to the range of potential loss ratios when developing final stress scenario estimates.

Under stress conditions, it is expected that losses could be significant and likely much higher than experienced to date.

Potential impacts should be based on conservative estimations and reasoned judgment that reflect stress conditions using loss projections in the mid to upper level of a range of possible outcomes. Lower projections should be supported by comprehensive rationale.

Table 2: Material Risk Areas and Sample Considerations

<table>
<tr><th rowspan="2">Material Risk Areas</th><th rowspan="2">Considerations</th><th rowspan="2">Stress factor</th><th rowspan="2">Loss Ratios[1]</th><th colspan="2">Loss Application</th></tr>
<tr><th>Year 1</th><th>Year 2</th></tr>
<tr><td>Equity Investments[2]</td><td>30% reduction in security values</td><td>1.0</td><td>30%</td><td>100%</td><td>0%</td></tr>
<tr><td>Residential Mortgage Loans (uninsured)</td><td>30% reduction in real estate values
Revised Loan to Value ratios
Apply losses to amounts >70% LTV</td><td>1.0</td><td>2% - 5%</td><td>40%</td><td>60%</td></tr>
<tr><td>Personal Loans</td><td rowspan="5">Minimum 10 years of data
Worst Year Impairment
Worst year Probability of Default (PD)
Worst year Loss Given Default (LGD)
Worst Year Losses

Average Impairment
Average Probability of Default (PD)
Average Loss Given Default (LGD)
Average Losses

Collective Provision</td><td rowspan="5">1.0-2.0
1.0-2.0
1.0-2.0
1.0-2.0
2.0-4.0

2.0-4.0
2.0-4.0
2.0-4.0
3.0-5.0</td><td>1% - 3%</td><td>40%</td><td>60%</td></tr>
<tr><td>Commercial Real Estate</td><td>1% - 3%</td><td>60%</td><td>40%</td></tr>
<tr><td>Commercial Construction Loans</td><td>1% - 5%</td><td>60%</td><td>40%</td></tr>
<tr><td>Other Commercial</td><td>1% - 3%</td><td>60%</td><td>40%</td></tr>
<tr><td>Agricultural</td><td>0.5% - 1.5%</td><td>60%</td><td>40%</td></tr>
</table>

[1] % of portfolio
[2] Excludes CUCO Co-op and Central 1 Shares

3. Reverse Stress Test

The objective of reverse stress testing is to identify a scenario that could result in the failure of the credit union. This would likely incorporate a series of events. For example, it could include one or more of the following:

- a more significant downturn or recession with more wide ranging impact on growth, earnings and capital;
- the occurrence of one or more potential significant events identified under the credit union's ERM process; and
- a black swan event.

Credit unions with a strong capital position will likely be able to withstand a stress scenario with a number of plausible but exceptional events before potential failure. When considering a likely event, credit unions should assess the dependency (and potential shock) for income and growth, or on-going obligations on any material assets and liabilities, including:

- Commercial Lending
- Joint Ventures
- Securitizations
- Investment Share Capital
- Dividends
- Funding costs
- Brokered deposits
- Pension expense

Sample methodologies are provided in Appendix 1.

7. CONCLUSIONS AND NEXT STEPS

This section should provide a brief outline of:

- adequacy of capital and/or remedial actions
- how ICAAP results have been integrated into risk limits setting and monitoring and incorporated into the decision making process
- how the ICAAP results are reported to the board
- the nature of any third party review of the ICAAP
- any plans to enhance the ICAAP going forward

Appendix 1

Sample ICAAP Submission Report

Note: The information provided in this sample report is provided for illustration purposes only. Amounts indicated may not fully reflect all related financial considerations and impacts.

Credit unions are expected to consider this as a guide only and should modify and adapt the type of information as appropriate to address all key elements outlined, while meeting their own requirements.

CREDIT UNION

ICAAP Submission Report

DATE________________________________

Contents

1. EXECUTIVE SUMMARY

The ICAAP helps ensure that our credit union has adequate capital in relation to its risk profile, develops strategies for maintaining its capital levels, enhances its capital management practices, and develops improved risk measurement and risk management techniques.

In our ICAAP we consider projected growth, enterprise risks associated with credit and operating activities, our current ALM risk measurements and the capital impact from various stress testing scenarios to determine our capital requirements. In addition to the mandatory required stress tests, we have considered a stress test involving a number of potential events occurring at the same time, to determine the extent of issues that would cause the credit union to fall below minimum regulatory requirements.

ERM and ALM analysis was considered to ensure that all critical and material potential risks were identified and considered. The growth assumptions used for capital planning are based on our most recent Strategic Plan. Our capital requirements are aligned with these growth projections and will continue to support the ongoing operations and corporate strategies.

Highlights of our key business and financial metrics are provided below:

Financial Position Summary

Our current and planned financial position is strong and improving. We anticipate continued growth of our major business lines over the current planning cycle and see no material issues that would restrict further business development initiatives. Risk-weighted capital is projected to increase from 10.89% to 11.05% over the next three years even with planned reduction of $3 million in investment share capital.

Business Strategy

Our business strategy continues to focus on organic growth. Key initiatives include:

- Focus of growing deposit base with focus on brokered deposits
- Repositioning and renovations of existing branch network
- Increase in residential loans from mortgages brokers
- Increase in commercial loans through expansion of loan syndications with other financial institutions
- Additional loan syndications to improve liquidity and interest margins
- Continue share of wallet initiatives
- Ramp up training and development initiatives to maximize resources as part of our “service excellence” program and business development plans

Balance Sheet Structure

There are no significant planned changes to the existing balance sheet structure although we do anticipate an increase in insured residential mortgage loans, loan securitizations and related borrowings. Aggregate risk-weighted assets are projected to grow by 8% primarily due primarily to an increase of 10% in commercial loans.

An overview of the projected balance sheet structure for the period 2014-2016 is provided in Table 1 below.

Table 1: Projected Balance Sheet Structure 2014-1016

Balance Sheet Structure 2014-2016						
	2014		2015		2016	
Assets	$	%	$	%	$	%
Cash/Investments	204	13.0%	216	13.0%	230	13.0%
Loans	1,345	85.7%	1,415	85.0%	1,502	85.1%
Residential Mortgages (Insured)	185	11.8%	200	12.0%	225	12.8%
Residential Mortgages (Uninsured)	360	22.9%	360	21.6%	371	21.0%
Personal Loans	220	14.0%	245	14.7%	280	15.9%
Commercial Loans	580	37.0%	610	36.6%	626	35.5%
Allowances	-75	-4.8%	-83	-5.0%	-88	-5.0%
Other Assets	95	6.1%	117	7.0%	120	6.8%
Total Asssets	1,569	100.0%	1,665	100.0%	1,764	100.0%
Total RWA*	955		1,034		1,119	
Deposits	1,300	82.9%	1,380	82.9%	1,450	82.2%
Borrowings	108	6.9%	117	7.0%	126	7.2%
Other Liabilities	57	3.6%	55	3.3%	64	3.6%
Total Capital	104	6.6%	113	6.8%	124	7.0%
Total Liabilities	1,569	100.0%	1,665	100.0%	1,764	100.0%

**Risk Weighted Assets*

Projected Profitability

Profitability is projected to gradually improve over the next three years as summarized in Table 2 below. Key drivers include slightly higher projected interest margins and lower loan costs. Operating expenses remain in line with current levels and include continual improvements in technology and banking systems.

Table 2: Projected Income 2014-1016

Income	2014	2015	2016
Net Interest Income	34.51	38.00	43.5
Other Income	12.55	14.00	14.1
Dividends	1.25	1.30	1.4
Operating Expenses	36.08	38.30	42.3
Taxes	1.57	3.30	3.5
Net Income	8.16	9.00	10.4
ROAA	0.53%	0.56%	0.60%
ROE	8.07%	8.24%	8.76%

The main findings of the ICAAP are as follows:

- Current capital ratios are well above the minimum regulatory levels. For the planning period 2014-2016, the credit union’s capital level is projected to be sufficient to support operations and on and off-balance sheet growth;

- Additional capital requirements for all significant risk areas have been identified;
- The ICAAP has confirmed that the established internal capital ratio minimum level of 2.0% above the regulatory minimum requirement for the capital-to-asset ratio and 2.5% above the regulatory minimum requirement for the risk-weighted ratio remain appropriate;
- Our current risk weighted capital level of 10.89% is also sufficient to cover the mandatory stress test scenarios.

Conclusion

Based on this initial assessment, we believe that our current capital levels are appropriate to cover current and planned risk exposures and provide a sufficient capital cushion for any potential losses under reasonable stress conditions. We have a current capital surplus of $1.5 million, or 1.61% after taking into consideration additional Pillar II allocations.

2. BACKGROUND ON ICAAP

Risk Management Framework

The Risk Management framework has been developed to achieve business objectives and ensure that no single event or combination of events will materially impact the credit union. This framework involves a number of related policies, processes and programs.

The Board Risk Management policy sets out the philosophy and approach for the management of risk, and sets the parameters within which management will operate to identify, assess, respond and monitor risk. Regular reporting is required to ensure efficient and effective monitoring and oversight. The credit union has established an Enterprise Risk Management ("ERM") program covering all operating areas that expose us to material financial, operational, legal, regulatory or reputational risks.

Business Planning Process

Our planning process begins with preparation for strategic planning. Emerging strategies from Senior Management and Board deliberations form the base for the annual business plan. Strategic planning generally has a 1 year outlook, but may include multiyear elements depending on the initiatives being contemplated. High level inputs are provided to the business units which align expectations with the goals and initiatives derived from the strategic planning process. These inputs include targets for growth/ sales, and profit, in addition to other standardized key performance metrics.

The Senior Management team provides regional update sessions for all staff and elected representatives to attend. This provides clarity on the annual strategic initiatives, and allows access for staff to key decision makers to answer questions and add additional depth where required.

After initial completion of business unit plans, a roll up is completed to gauge a baseline or starting point, relative to the initial expectations noted above.

From there, the business unit owners deliberate with Senior Management to rationalize the plan and ensure consistency across market segments. While this collaboration occurs, a series of validation and reviews occur centrally to vet various aspects of the plan and test for reasonableness.

The core business plan generally is focussed on a one year outlook, but is rolled forward to a second year to provide a longer term perspective. Variability in budget drivers suggests a longer term outlook is not meaningful beyond 2 years; the exception to this 2 year outlook is the capital part of the plan which includes a 5 year forecast. The planning document includes a look back process to back test the assumptions and outcomes for liquidity, structural risk, and capital planning purposes.

Elements of stress testing are also applied to measure outcomes for scenarios identified by the Board for planning purposes. At this point the consolidated plan is presented to the Audit Committee for recommendation to the Board prior to year end.

Capital Management Process

The credit union maintains policies and procedures relative to capital management to ensure that capital levels are sufficient to cover risks inherent in the business. The main objectives for managing capital are:

- to maintain appropriate capital levels to ensure compliance with regulatory requirements under current and projected economic conditions;
- to ensure that the quantity, quality and composition of capital needed reflects the inherent risks of the credit union and to support the current and planned operations and portfolio growth;
- to provide an appropriate cushion for the variety of risks to which the credit union is exposed; and
- to provide a solid foundation for business expansion and ongoing reinvestment in business capabilities, including technology and process automation and enhancement

3. STATEMENT OF RISK APPETITE

The credit union is committed to managing the overall risk inherent in the organization and makes concerted efforts to ensure best practices are not only met, but exceeded, when it comes to the mitigation of controllable risk. The composition of our balance sheet is indicative of the credit union’s risk appetite and reflects our continued efforts to ensure growth is achieved without compromising the overall risk profile of the balance sheet.

The credit union has established a minimum risk-weighted capital level of 10.5% which provides a 2.5% cushion over and above minimum regulatory requirements for additional Pillar II allocations and stress scenarios. This is considered reasonable given the level of risk and requirement for growth. The credit union’s risk appetite is set out in the ERM policy.

The aggregated risk appetite is set as moderate, in line with its focused strategy of improving and sustaining profitability. Capital at risk (above ICAAP allocations) should not exceed 0.75% of assets, or approx $11.25M.

This risk appetite is incorporated into the ERM risk questionnaire, where each risk is measured against the risk tolerance of $11.25M. This policy is reviewed annually by senior management and the Board.

4. MATERIAL RISKS

A summary of material risks requiring additional capital under Pillar II is set out in Table 3. Where applicable, the capital allocation indicated is in addition to existing Pillar I requirements. The credit union has taken a very conservative approach to assessing additional capital requirements. This is in part due to limited historical data of specific loan categories for comparative and analytical purposes at this time.

Table 3: Summary of Material Risks

Category	Risk Description	Quantification	Capital Allocation	Reference
Credit Risk	Commercial Loan Portfolio Risk Increasing level of overall risk	Weighted average risk rating 3.1 Benchmark set at 3.0 Excess risk exposure of $52.9M	$4.5M	Table 4
Concentration Risk	Commercial Loan exposure >30% of aggregate loans	Exposure >30% risk weighted at 110% Aggregate excess exposure $300M or $30MRWA	$2.4M	Table 5
	Industry Sector concentration	HHI approach	$1.5M	Table 6
Other Risks	As determined under ERM	Estimations based on combined probability and impacts of largest two risk exposures	$3.0M	Table 7

4.1 Credit Risk

An aggregate risk rating of 3.0 (moderate) has been established for the commercial loan portfolio. Any excess risk above this level is allocated additional capital. At this time, the aggregate risk rating is 3.11 resulting in an excess exposure of $56.5M.

Additional capital of $4.5 M has been allocated, as noted in Table 4 below.

Table 4: Credit Risk

Risk Category	Loan Balances (A)	Risk Weight (C)	Weighted Risk Rating [A/B] X C
Undoubted	15,000,000	1	0.03
Low	38,700,000	2	0.14
Moderate	380,000,000	3	2.13
Cautionary	87,900,000	4	0.66
Unsatisfactory	2,900,000	5	0.03
Unacceptable	10,500,000	6	0.12
Total (B)	**535,000,000**		**3.11**
Benchmark Risk			3.00
Excess Risk Level (D)			0.11
Excess Risk Exposure (E)	56,500,000	(D X B)	
Additional Capital (E X 8%)	4,520,000		

4.2 Concentration Risk – Excess Risk Exposure >30%

The credit union allocates additional capital for commercial loan exposures above 30%. Amounts above this limit are required to be risk-weighted at 120%.

The commercial loan portfolio is currently $535M (42%) or $152.5M above the benchmark limit, resulting in an additional capital allocation of $2.44M, as noted in Table 5 below.

Table 5: Concentration Risk - Commercial Loans

Outstanding Loans	
Commercial Loans	535,000,000
Total Loans	1,275,000,000
Risk Limit (30%)	382,500,000
Excess Risk Exposure	152,500,000
Additional Risk Weight (20%)	30,500,000
Additional Capital	2,440,000

4.3 Concentration Risk – Industry Sector Concentration

The credit union uses the “Herfindahl-Hirschman Index” (HHI) to help assess potential concentration risk by industry classification.

The HHI is one approach used for identifying industry concentration risk and may be a useful tool in helping to quantify higher levels of risk in the loan portfolio above certain thresholds. Key factors in the HHI approach are the concentration of larger loans within each risk category and the concentration level applied.

An HHI index is based on the average loan balances within each industry sector and the aggregate balances compared to the entire portfolio. The amount of additional capital required is determined from the value of loans in excess of the established concentration limit. A higher concentration level applied results in a lower amount of additional capital.
For capital allocation purposes, we have adopted a conservative concentration level of 5% for any one industry sector, although policy concentration limits are much higher.

Based on current portfolio concentration levels, this requires an additional capital allocation of $1.6M, as noted in Table 6 below. This is primarily the result of higher concentration levels in the Real Estate and Accommodation/Food Services sectors, including a number of large loans within these sectors.

Table 6: Concentration Risk – Industry Sectors

Industry Sector (Contributor)	Number of Loans	Exposure ($000s)	% of portfolio	#	>$10M Average	#	>$5M Average	#	>$1M Average	Concentration Limit	Sum of Assets > Con. Limit	Capital Conversion factor 8%	Additional Capital Required
NAICS - Agriculture (11)										5%			
NAICS - Mining/Oil/Gas (21)													
NAICS - Utilities (22) - number													
NAICS - Construction (23)	25	$ 50,000,000	9.35%							5%	$ 23,250,000	$ 1,860,000	$ 74,400
NAICS - Manufacturing (31-33)	20	$ 30,000,000	5.61%							5%	$ 3,250,000	$ 260,000	$ 13,000
NAICS - Wholesale (41)	5	$ 11,000,000	2.06%							5%	$ -	$ -	$ -
NAICS - Retail (44-45)	10	$ 15,000,000	2.80%							5%	$ -	$ -	$ -
NAICS - Transportation/Warehousing (48-49)													
NAICS - Information/Cultural (51)													
NAICS - Finance/Insurance (52)													
NAICS - Real Estate-Total (53)	400	$ 300,000,000	56.07%	6	$ 19,000,000	11	$ 7,000,000	30	$ 3,000,000	5%	$ 273,250,000	$ 21,860,000	$ 722,843
NAICS - Professional/Scientific/Tech'l (54)													
NAICS - Management Companies (55)													
NAICS - Administration Companies (56)													
NAICS - Education (61)													
NAICS - Health Care (62)	5	$ 25,000,000	4.67%			2	$ 7,000,000			5%	$ -	$ -	$ -
NAICS - Arts/Recreation/Entertainment (71)	10	$ 7,000,000	1.31%							5%	$ -	$ -	$ -
NAICS - Accommodation/Food service (72)	50	$ 85,000,000	15.89%	2	$ 16,000,000	12	$ 7,000,000	9	$ 2,300,000	5%	$ 58,250,000	$ 4,660,000	$ 804,039
NAICS - Other Services (81)	35	$ 12,000,000	2.24%							5%	$ -	$ -	$ -
NAICS - Public Administration/Gov't (91)													
TOTAL	560	$ 535,000,000	100.00%								Total assets	$ 1,898,019,000	$ 1,614,282

4.4 Other Significant Risks

Under our ERM program, we have identified two high risk exposures for additional capital allocations, as set out in Table 7 below.

Table 7: Other Risks

Risk Area	Capital Allocated	Likelihood
Legal	$1.0M	Moderate
Financial	$2.0M	Low – Moderate

A summary of the key risk issues identified in our ERM program for the above areas is provided below:

Legal
We reviewed the potential legal costs surrounding failure from our outsourcing contracts. These are reviewed on a regular basis and, while remote, the impact could be high. The amount of capital allocated was achieved by adjusting the probability factor within the risk quantification in the ERM model to 4 times the baseline amount.

Financial
We reviewed the potential liquidity event as a result of a reputational issue. Over the past year there have been minor instances of system outages that have affected member access and funds availability. Additional resources have been allocated, although it is too early to confirm that all issues have been fully resolved. Additional capital has been allocated by adjusting the probability factor within the risk quantification in the ERM model to 5 times the baseline amount.

5. CAPITAL PLANNING

The capital plan is an integral part of the planning process. Since risk-weighted capital is determined in part by asset mix, the initial business plan roll-up forms the basis for the capital plan. The plan includes asset growth rates and related return on assets, various dividend rates based on known or planned trends, and other Board guidelines used in the planning process.

Several of the share classes pay capital dividends, which contribute directly to tier 1 capital. Essentially the funds are moved directly from retained earnings as the purest source of capital growth, to a Member/Owner restricted share account. The capital plan is intended to cover minimum regulatory requirements as well as management buffers. Planning is also done to estimate the impact of regulatory changes to capital requirements to the best extent they can be determined.

Changes in capital levels can be planned for by modifying driver rates. The Act requires credit unions to maintain a minimum capital ratio of 4% and a risk-weighted capital ratio of 8%. The credit union has a stated policy that it will maintain at all times capital equal to the minimum required by the Act, plus a prudent cushion. The Board has established a minimum capital ratio of 6% and a minimum risk-weighted capital ratio of 10.5%. These limits are reviewed by the Board and may be increased as a result of significant increasing risk. ICAAP is now integrated into the credit union's capital planning process.

All significant risks are assessed and considered when determining the extent of additional capital allocations as a result of higher risk conditions not already captured. This includes an assessment of "stress conditions" to ensure that the current limits above minimum regulatory requirements remain appropriate.

Summary Forecast Capital Position

A summary of the 3-year forecast capital position is provided in Table 8 below.

Table 8: Capital Forecast 2014-2016

Capital Forecast 2014 - 2016 ($Millions)				
	1Q14	4Q14	4Q15	4Q16
Assets				
Cash/Investments	195.0	203.91	216.4	229.7
Loans	1,275.0	1333.24	1,415.1	1,501.9
Allowances	-75.0	-78.43	-83.2	-88.3
Total Asssets	1,500.0	1568.52	1,664.8	1,766.9
Total RWA	900.0	955.09	1,033.8	1,119.0
Income		2014	2015	2016
Net Interest Income	8.3	34.51	38.0	43.5
Other Income	3.0	12.55	14.0	14.1
Dividends	0.3	1.25	1.3	1.4
Operating Expenses	8.6	36.08	38.3	42.3
Taxes	0.4	1.57	3.3	3.5
Net Income	2.0	8.16	9.0	10.4
ROAA	0.52%	0.53%	0.56%	0.60%
ROE	7.96%	8.07%	8.24%	8.76%
Capital				
Tier 1	65.0	71.21	80.3	90.6
Tier 2	18.0	17.00	16.0	15.0
Investment Shares	20.0	20.0	20.0	20.0
Total	103.0	108.2	116.3	125.6
Reg Capital	98.0	104.2	113.3	123.6
Leverage %	6.53%	6.64%	6.80%	7.00%
RWA %	**10.89%**	**10.91%**	**10.96%**	**11.05%**
Required ICAAP %	**9.28%**	**9.28%**	**9.28%**	**9.28%**
Surplus	1.61%	1.63%	1.68%	1.77%

As outlined, we project continued capital surpluses over the next three years despite planned annual asset growth of 6%. Our capital plan includes planned repayments and reduction of investment share capital. The assumptions used for the forecast for 2014 to 2016 are based on the projected growth and profitability levels discussed with the Board as part of the 2011 budgeting and strategic planning process. As indicated, risk-weighted capital is expected to increase from 10.89% to 11.05% over the next three years as a result of improved profitability due to improved interest margins and cost controls.

These key assumptions are summarized in Table 9 below.

Table 9: Key Assumptions

Key Assumptions	2014	2015	2016
Asset Growth			
Cash and Investments	1.00%	1.00%	1.00%
Loans and Mortgages (exc. Securitized)	5.00%	5.00%	5.00%
Securitized Loans	8.00%	9.00%	10.00%
Other Assets	1.00%	1.00%	1.00%
Liabilities			
Deposits	6.00%	6.00%	6.00%
Borrowings (exc. Securitizations)	4.00%	4.00%	4.00%
Borrowings (inc. Securitizations)	8.00%	9.00%	10.00%
Other Liabilities	1.00%	1.00%	1.00%
Off-Balance Sheet Growth	10.00%	10.00%	10.00%

6. STRESS AND SCENARIO TESTING

A summary of the results of stress tests are summarized in Table 10 below.

Table 10: Summary Mandatory Stress Test Results (Year 1)

Scenario	Consideration	Impact	Impact on RWA	Reference
1	Interest rate shock	$0.81	0.09%	6.1
2	Economic Downturn	$10.60	1.18%	6.2
3	Reverse Stress Test	$26.09	2.89%	6.3

6.1 Scenario 1

Interest Rate Shock

The impacts of potential changes in interest rates are summarized in Tables 11 and 12 below for year 1 and year 2. The impact reported in 6.1 (0.09%) is net of the 0.09% impact already identified and reported in regulatory capital under Pillar II risk.

Table 11: Interest Rate Shock – Year 1

Basis Points Change in Rates	NII Amount	Impact $	% Assets	%RWA
200	41,250	3,341	0.22%	0.37%
100	39,123	1,214	0.08%	0.13%
50	38,450	541	0.04%	0.06%
0	37,909	0	0.00%	0.00%
-50	37,108	-801	-0.05%	-0.09%
-100	36,690	-1,219	-0.08%	-0.14%
-200	36,309	-1,600	-0.11%	-0.18%

Table 12: Interest Rate Shock - Year 2

Basis Points Change in Rates	NII Amount	Impact $	% Assets	%RWA
200	40,872	2,963	0.20%	0.33%
100	38,750	841	0.06%	0.09%
50	38,150	241	0.02%	0.03%
0	37,909	0	0.00%	0.00%
-50	37,450	-459	-0.03%	-0.05%
-100	36,990	-919	-0.06%	-0.10%
-200	36,709	-1,200	-0.08%	-0.13%

Assumptions include an immediate and sustained shock, constant pre-payments and target balances under a 95% confidence level.

6.2 Scenario 2

Economic Downturn

A summary of the assumptions used and potential impacts on capital are set out in Table 13 below. Results are based on a number of considerations, including historical evidence and stress factors. For residential mortgages, historical data has not been used as there is only limited loss experience. Instead, mortgages have been segregated by credit score, with losses applied to higher risk loans only.

The range of possible outcomes is set out using various criteria and stress factors.

Actual estimated impacts are based on the upper range of possible outcomes.

Table 13: Economic Downturn

Impact Area	Balance Sheet $	Worst Year PD	Average PD	Worst Year LGD	Average LGD	Worst Year Losses	Average Losses	Collective Provision	Projected Losses ($)		Estimated Losses ($)	% of Portfiolio	Year 1	Year 2
									High	Low				
Equity Investments (Fair Value)	2.45										0.74	30.00%	0.74	0.00
Residential Mortgage Loans (uninsured) LTV >70%	69								1.04	0.69	1.00	1.45%	0.40	0.60
Personal Loans	75	4.75%	1.10%	25.00%	15.00%	2.00%	1.50%	0.15%	3.56	0.74	2.50	3.33%	1.00	1.50
Commercial Real Estate Loans	125	3.50%	1.00%	15.00%	9.00%	0.80%	0.30%	0.10%	2.63	0.68	2.00	1.60%	1.20	0.80
Commercial Construction Loans	180	10.00%	2.00%	15.00%	10.50%	3.00%	1.25%	0.75%	10.80	2.27	7.50	4.17%	4.50	3.00
Other Commercial	160	5.00%	1.50%	15.00%	10.00%	2.00%	0.90%	0.50%	4.80	1.44	4.00	2.50%	2.40	1.60
Agricultural	210	1.10%	0.50%	8.00%	3.00%	1.80%	0.75%	0.25%	0.74	0.19	0.60	0.29%	0.36	0.24
Total											**18.34**		**10.60**	**7.74**

6.3 Scenario 3

Reverse Stress Test

Our risk management philosophy is focused on ensuring that no one single major risk factor will cause the credit union to fall below minimum capital requirements as determined under ICAAP.

From our analysis, the following unlikely events would need to occur at the same time for an immediate/short term impact on capital:

- An interest rate shock of 200 bps as outlined in scenario 1
- An economic downturn with projected losses as outlined under scenario 2
- Although remote, a loss of 25% on our two largest loan exposures of $40 million (or multiple losses on other large loan exposures) could occur should real estate values collapse and secondary security and supporting guarantees fail to cover the deficiency
- A large fraud is a very low possibility. The largest loss to date is $100,000. Current practices and compliance audits are strong.
- Additional funding costs as a result of lack of securitization opportunities under tightening credit conditions
- A capital call from Central 1 as a result of significant losses on investments

A summary of potential impacts is provided in Table 14 below. Our current capital surplus above the minimum regulatory requirement is $26 million or 2.89% before capital allocation of Pillar II risks and stress tests. The aggregate impact of the issues identified could result in a complete erosion of surplus regulatory capital. However, as indicated, the likelihood of all but one of these events is low, very low or remote.

(Note: These projections exclude any increase in capital as a result of additional earnings as noted in our capital plan).

Table 14: Reverse Stress Test Impacts

	$Amount (million)	Potential Loss (millions)	Impact on Capital	Likelihood
Stress Test Scenario 1		$0.81	0.09%	Low
Stress Test Scenario 2		$10.60	1.18%	Very Low
Loss on 2 Largest Loans (25%)	$40	$9.90	1.94%	Remote
Large Fraud		$1.00	0.11%	Very Low
Capital call – Central 1		$1.80	0.20%	Very Low
Funding Shortfall	$200	$2.00	0.22%	Moderate
Total		$26.09	2.89%	

7. CONCLUSIONS AND NEXT STEPS

Current capital ratios are well above the minimum regulatory levels. For the planning period 2014-2016, the credit union's capital level is projected to be sufficient to support operations and on and off balance sheet growth. Additional capital requirements for all significant risk areas have been identified.

The established internal capital ratio minimum level of 2.0% above the regulatory minimum requirement for the capital-to-asset ratio and 2.5% above the regulatory minimum requirement for the risk weighted ratio remain appropriate. Our current risk-weighted capital level of 10.89% is also sufficient to cover all additional mandated stress test scenarios.

This is an initial ICAAP and still under development and refinement. We have identified a number of areas where additional monitoring of exposures will be incorporated into our existing processes and practices. ICAAP results are now reported to the Board at each Board meeting. A detailed report of capital allocations is provided together with a summary of assumptions and assessment criteria.

While our ICAAP has not been reviewed by any third party, we propose to engage a review in the next 12 months. Part of this engagement will be to identify any material deficiencies and opportunities for improvement, help ensure that all material risks are fully identified, and capital allocations are appropriately quantified.

We also propose to review all on and off balance sheet exposures with greater detail and further refine our stress testing scenarios.

Appendix A

Key Metrics Report

Credit Union Name:	ABC Credit Union		Financial Year End:		December 31, 2013
Submission date:	March 30, 2014		Risk Weighted Assets: ($000s)		$900,000
Board Approval:	March 15, 2014		Eligible Capital: ($000s)		$98,000
	Pillar 1 (Minimum Regulatory Capital)		ICAAP (Institution's assessment of Capital required for the risk)		(Reference) *1*
	$ Capital	**%RWA**	**$ Capital**	**%RWA**	
Credit risk	$65,000	7.22%	$69,500	7.72%	
Market risk	$0	0.00%	$0	0.00%	
Operational risk	$2,000	0.22%	$2,000	0.22%	
Other Risks	$4,190	0.47%	$4,190	0.47%	
Pillar I Risks	**$71,190**	**7.91%**	**$75,690**	**8.41%**	
Concentration Risk			$4,000	0.44%	
Interest Rate Risk	$810	0.09%	$810	0.09%	
Liquidity Risk			$0	0.00%	
Strategic Risk			$0	0.00%	
Legal Risk			$1,000	0.11%	
Financial Risk			$2,000	0.22%	
Pillar II Risks	**$810**	**0.09%**	**$7,810**	**0.87%**	
Required Internal Capital	$72,000	8.00%	$83,500	9.28%	
Current Total Capital	$98,000	10.89%	$98,000	10.89%	
Surplus/(Deficit)	**$26,000**	**2.89%**	**$14,500**	**1.61%**	
Additional Capital to cover stress testing 2			$11,410	1.27%	
Additional Capital to cover Basel III requirements ***3***					
Total Capital Required	**$72,000**	**8.00%**	**$94,910**	**10.55%**	
Current Total Capital	$98,000	10.89%	$98,000	10.89%	
Surplus/(Deficit)	**$26,000**	**2.89%**	**$3,090**	**0.34%**	

1. Please provide the section reference of the Submission Report for each risk
2. Excluding Reverse Stress Testing Requirement
3. BASEL III requirements have not yet been finalized. This is a note item only.