Transfer Pricing

Overhead Transfer Rate Review

For National Credit Union Administration

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1. Executive Summary

1.1. Purpose of Analysis

PricewaterhouseCoopers LLP ("PwC", "us" or "we") has been engaged by the National Credit Union Administration ("NCUA") to evaluate the Overhead Transfer Rate ("OTR") administered between the National Credit Unit Administration Operating Fund ("NCUAOF") and the National Credit Union Share Insurance Fund ("NCUSIF"). The OTR is one of two sources of funding for NCUA's operating budget and is intended to transfer "insurance-related" expenses of NCUAOF to NCUSIF.[1]

This study and its conclusions are limited to the evaluation of the reasonableness and soundness of the methodology adopted by NCUA in the calculation and administration of the OTR given NCUA's dual role as regulator and insurer. This study does not express an opinion related to any issues that may be perceived with regards to NCUA's dual role as regulator and insurer, oversight or lack thereof of NCUA's budget or an interpretation of Congressional intent behind Title II of the Federal Credit Union Act of 1970 which established NCUSIF.

1.2. Overview of Analysis

To complete this study PwC undertook the following steps:

1) Conducted interviews with and requested key information from NCUA personnel deemed to be relevant for purposes of developing a comprehensive understanding of the methodology currently employed by NCUA in the calculation of the OTR (the "OTR Methodology") including details and assumptions underlying various steps;

2) Identified and conducted interviews with "key stakeholders" in the U.S. credit union system that included credit unions and trade associations for federal and state chartered credit unions as well as that for the state regulatory authorities;

3) Identified the stakeholders' views on attributes that a sound OTR Methodology should possess as well as the concerns and issues with regards to the current OTR Methodology as perceived by the stakeholders;

4) Developed a set of criteria to evaluate the current OTR Methodology based on the concerns and issues identified by the key stakeholders; and,

5) Evaluated NCUA's current OTR Methodology against the set of criteria so as to arrive at a conclusion of the soundness and reasonableness of the current OTR Methodology and develop recommendations and suggestions for improvement.

1.3. Scope of Opinion

The services were performed, and this study prepared, at the direction of and in accordance with instructions provided by NCUA, exclusively for the sole benefit of and use by NCUA. The services and study are not intended for, nor may they be relied upon by any other party. This study and its contents may not be distributed to, discussed with, or otherwise disclosed to any third party without PwC's prior written consent. This study is not to be referred to or quoted, in whole or in part, in any

[1] The other source being the operating fees collected from federally chartered credit unions.

offering memorandum, prospectus, registration statement, public filing, loan or other agreement or document without our express written approval, which may require that we perform additional work.

PwC accepts no duty, obligation, liability or responsibility to any party, other than NCUA, with respect to the services and/or this study. PwC makes no representation regarding the sufficiency of the services for any purpose.

The underlying prospective financial information referred to in this study, unless otherwise referenced, was prepared and developed by NCUA management. PwC did not prepare any prospective financial information nor develop any assumptions therein. It is NCUA's responsibility to consider our comments and make its own decisions based on the information available to it. Because events and circumstances frequently do not occur as expected, there will usually be differences between predicted and actual results, and those differences may be material. We take no responsibility for the achievement of predicted results.

1.4. Summary of Conclusions

As part of the analysis conducted for this study, PwC performed interviews with personnel from NCUA and other stakeholders in the U.S. credit union system, including, but not limited to:

- Personnel from the NCUA Office of Examination & Insurance who are associated with and have knowledge of the design and implementation of the OTR Methodology.
- A Senior Principal Examiner who also has experience with the Examination Time Survey used as a key input to the OTR Methodology. A Principal Examiner is generally an experienced examiner who has been involved in examination reviews and field examinations for federally insured credit unions.
- Identified stakeholders in the credit union system (referred to as the "key stakeholders" in this study) that include industry groups such as the Credit Union National Association ("CUNA"), the National Association of Federal Credit Unions ("NAFCU"), and the National Association of State Credit Union Supervisors ("NASCUS"). Both CUNA and NAFCU are trade associations that service the needs and operations of credit unions. CUNA is associated with both federal and state credit unions, and NAFCU is associated with federal credit unions only. The third industry group, NASCUS, is an association for the state supervisors who oversee the operation of the state chartered credit unions. PwC also interviewed management personnel from the third largest federally insured credit union, the Boeing Employees Credit Union ("BECU"), which is a state chartered credit union.

In conjunction with the interviews, PwC obtained and studied the following documents that were made available to it by one or more of the parties mentioned above or located in the public domain to develop a comprehensive understanding of the history, constituent steps, assumptions and data sources associated with the current OTR Methodology:

- 2008 and 2009 Overhead Transfer Rate Board Action Memorandum: The Office of Examination and Insurance at NCUA presents the 2009 and 2010 recommended OTR to the NCUA Board for approval in the 2008 and 2009 OTR Board Action Memorandum, respectively;
- 2003 Overhead Transfer Rate Task Force Proposal: This is the proposal submitted by a five member NCUA Task Force that was formed in 2003 to review the OTR Methodology;
- 2001 Overhead Transfer Rate Review Report prepared by Deloitte & Touche;
- 2001 paper on OTR titled "Caught in a Regulatory Vise: The Peculiar Problem Faced by Federally Insured State-Chartered Credit Unions" by Lawrence White, received from BECU;
- 2001 white paper received from NASCUS titled "Restructuring the NCUA";
- Government Accountability Office ("GAO") 2003 report on credit unions;
- 2007 NCUA Annual Report;
- NCUA organizational charts;

- 2007 revised Federal Credit Union Act;
- Data on the credit union system from the 2010 Statistical Abstract, U.S. Census Bureau.

Based on the interviews and the aforementioned material, PwC identified the following criteria for purposes of evaluating the current OTR Methodology and recommending possible refinements for NCUA's consideration:

1) Transparency - The OTR Methodology and its underlying steps, assumptions and data sources should be communicated clearly and regularly to stakeholders in the credit union system so as to develop broad and consistent understanding among stakeholders. Of fundamental importance to the computation of the OTR is the distinction between activities and associated expenses deemed to be in keeping with NCUA's role in managing the NCUSIF (i.e., expenses that can be characterized as being "insurance-related" and thus included in the OTR) and others classified as those in keeping with NCUA's role as regulator (and thus excluded from the OTR). Given this, the OTR Methodology should be based on a classification that represents a consensus (among NCUA and other stakeholders in the credit union system) with regards to the classification of such activities.
2) Accuracy - Subject to the classification of activities as insurance and regulatory-related, the calculation of the OTR should be predicated on a methodology that is able to measure and track the expenses associated with such activities accurately and consistently across different parts of the organization and over time.
3) Equity - The calculation and administration of the OTR should not, ex-ante and for reasons beyond the control of the credit unions, favour or disadvantage one type of credit unions (i.e. federal versus state chartered) over another.
4) Reasonable administrative burden - The OTR Methodology needs to be such as to balance the objectives of criterion 1 through 3 while keeping costs of implementation manageable.

The findings and conclusions of this study, which are based on an analysis of available facts and circumstances, are presented below.

1.4.1. Transparency

Based on PwC's review, the OTR Methodology was considered lacking in terms of the extent to which the classification of NCUA's activities between insurance and regulatory (upon which the methodology is fundamentally dependent) represents a consensual view on such classifications in the industry. Further, there was found to be dissatisfaction within the industry with respect to NCUA's efforts to communicate and explain the OTR Methodology in adequate detail.

It is recommended that NCUA should consider providing more visibility on how it characterizes its activities to the different industry groups and credit unions and possibly solicit their feedback with regards to the reasonableness and accuracy of the classification. NCUA should also consider steps aimed at making the methodology itself more transparent, along with all of the assumptions and steps that are utilized. Possible ways of achieving this include more frequent interactions with the stakeholders through different channels (e.g. meeting, publications, etc.).

1.4.2. Accuracy

PwC analyzed the following five elements from the perspective of their ability to accurately and consistently "measure" the expenses associated with the management of NCUSIF and incurred on behalf of all federally-insured credit unions:

1.4.2.1. Implementation of Examination Time Survey - Education and Training of Examiners

Based on PwC's review, the current definition of insurance and regulatory activities is appropriately communicated to the examiners through well-structured tools and training modules. The process provides enough resources for examiners to learn how to fill the Examination Time Survey properly.

1.4.2.2. Examination Time Survey Reliability

Based on PwC's review, the statistical methodology used by NCUA to estimate the non-insurance percentage of workload hours for each program in order to determine the OTR can be considered reasonable. While the sampling methodology obtains representation across regions, Supervisory Examiner Groups, Principal Examiners, work hours and federal credit unions it can be improved with respect to the representativeness of the distribution of credit unions by asset size in the sample relative to the population.

In order to obtain a more representative sample, it is recommended that some consideration of sample allocation by asset size and CAMEL rating should be taken into account as there appears to be some correlation between these characteristics and the percent of "insurance-related" work hours.[2] Additionally, it is recommended that NCUA use sample sizes that are consistent with the calculated sample sizes for the two main types of activities (i.e. programs) under survey, and specifically, that NCUA consider increasing the sample sizes for the Federal Supervision (Code 22) Program.

1.4.2.3. Other Allocation Factors

Based on PwC's review, the allocation factors used to determine the insurance/regulatory percentage of costs for certain NCUA cost centers (i.e., the Division of Insurance and NCUA's central offices which are referred to as "Other NCUA Cost Centers" and these allocation factors are referred to as "Other Allocation Factors") were found to be based on methods that are less objective and verifiable as compared to the Examination Time Survey results used to determine the equivalent split for examiner costs. Given that costs for Other NCUA Cost Centers constitute a significant portion of NCUA's overall budget, the final OTR as determined based on these Other Allocation Factors as an input can potentially be "distorted".

It is recommended that NCUA consider adopting a more formal and documented process for determining the Other Allocation Factors that are based on a standard and consistent criteria.

1.4.2.4. Imputed State Supervisory Authority Value Calculation

Based on PwC's review, the exclusion of an estimate of "overhead-type costs" that State Supervisory Authorities ("SSAs") incur in their performance of "insurance-related" activities can lead to a potential underestimation of the Imputed SSA Value relative to the actual "insurance-related" costs incurred by the SSAs and borne by Federally Insured State Credit Unions ("FISCUs") through the operating fees paid by them. Application of the overall percent of "insurance-related" hours based on the Examination Time Survey implemented for Federal Credit Unions ("FCUs") to the total examination hours imputed for FISCUs in order to calculate an estimate of the total "insurance-related" hours for FISCUs was found to be reasonable given that the distributions of FCUs and FISCUs across asset sizes and CAMEL ratings is not dissimilar.

It is recommended that the Imputed SSA Value should reflect an estimate of the "insurance-related" costs incurred by SSAs and borne by the FISCUs through the operating fees paid by them. An estimate of SSA overhead-type costs should be incorporated in the current calculation of the Imputed SSA Value. The estimate of SSA overhead-type costs could be estimated as a percentage of the current Imputed SSA Value based on a corresponding figure for NCUA.

1.4.2.5. Insured Asset Shares

Based on PwC's review, the use of the share of insured assets as the basis to allocate the insurance costs between FCUs and FISCUs was found to be reasonable and appropriate.

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[2] The CAMEL rating system, which refers to the adequacy of Capital, the quality of Assets, the capability of Management, the quality and level of Earnings, and the adequacy of Liquidity, is used for purposes of assessing the riskiness of credit unions and classifying credit unions based on that measurement.

1.4.3. Equity

Based on PwC's review, there was no reasonable basis to conclude that the OTR methodology ex-ante and for reasons beyond the control of credit unions, favours or disadvantages any one type of credit unions (i.e. federal versus state chartered) over another.

1.4.4. Reasonable Administrative Burden

Based on PwC's review, even though the calculation methodology is a multi-layered complex algorithm, the costs and burdens of implementation were not viewed by management as significant impediments.

1.5. Organization of Study

This rest of the study is organized as follows:

- Section 2 - "Background": This section contains an overview of background information on which the study is based, including an overview of NCUA financing structure and the OTR.

- Section 3 - "Overview of Existing OTR Computation and Administration": This section contains an overview of the current OTR Methodology, with a discussion of the underlying steps, assumptions and data sources.

- Section 4 - "Methodology": This section contains a description of the methodology that PwC adopted for purposes of this study.

- Section 5 - "Economic Analysis": This section contains PwC's review of NCUA's existing OTR Methodology based on the identified evaluation criteria.

- Section 6 - "Conclusions": This section contains our conclusions.

2. Background

2.1. NCUA

NCUA is an independent federal agency that charters and supervises credit unions throughout the United States and its territories. In accordance with the Federal Credit Union Act introduced in 1934 by the Congress, NCUA aims to serve, protect and promote a safe, stable national system of cooperative financial institutions that encourage thrift and offer a source of credit for their members. NCUA also administers NCUSIF, which was created in 1970, under Section 1783 of the Federal Credit Union Act, as an insurance fund to provide insurance protection to all the account holders in all federally insured credit union.

Consequently, NCUA performs a dual role - it is the charterer and primary regulator of credits unions (specifically the federally chartered credit unions) and has broad safety-and-soundness regulatory powers for all credit unions (including the state chartered credit unions) whose deposits/credit shares are insured by NCUSIF. This dual role as a regulator and an insurer puts NCUA in a unique position that is unlike any other federal or state agency in the United States.

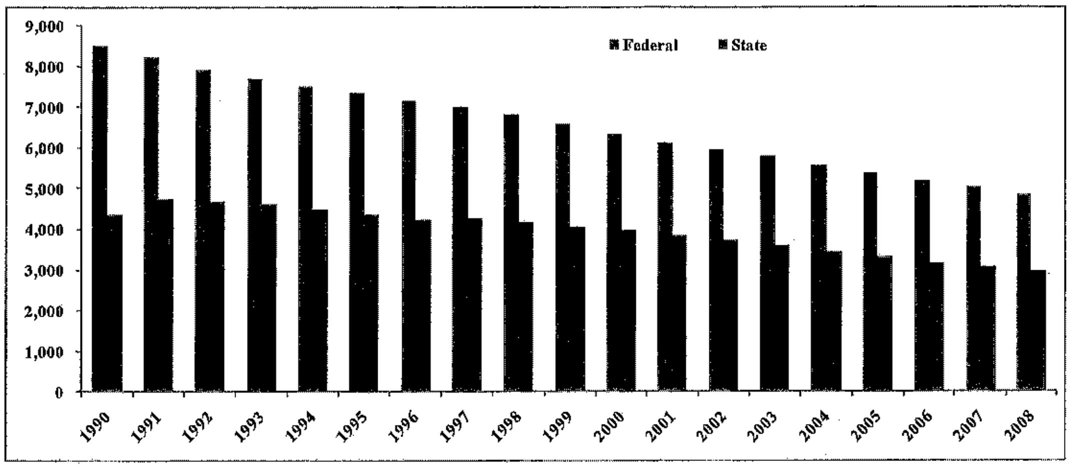
2.2. Credit Union System

A credit union is a cooperative financial institution that is owned and controlled by its members and operated for the purpose of promoting thrift, providing credit at reasonable rates, and providing other financial services to its members. In the United States, credit unions can be chartered by either the federal government through NCUA (i.e. the federal credit unions), or by the state governments through the SSAs (i.e. the state chartered credit unions). This system of having both federal and state chartered credit unions is called "dual chartering". Financial institutions in the United States have a long history of dual chartering; the three major categories of depository institutions, commercial banks, savings banks and credit unions, have federal and state chartering agencies. Dual chartering for commercial banks began in 1863; it was extended to savings and loan institutions in 1933, and with the announcement of the Federal Credit Union Act in 1934, dual chartering was extended to the credit union system.

The dual chartering system is viewed by many as a system of implicit competition between the two types of charters, with the states and federal regulatory bodies offering charters with different attributes and incentives. This is viewed as ensuring that the credit union industry is diverse and constantly evolving as competition for membership between the regulatory authorities promotes innovation. It also provides regulators incentive to increase efficiency and reduce their costs.

Over the last two decades, the number of credit unions, both federal and state chartered, has gone down, federal credit unions experiencing a larger decline in numbers than the state chartered credit unions. However, the proportion of federal credit unions in the system has been relatively stable across these years. Federal credit unions have accounted for about 62 percent of all credit unions while state chartered credit unions accounted for the remaining 38 percent over the 1990 - 2008 period. Figure 1 below illustrates the trend in the absolute number of credit unions, federal and state chartered, over the last two decades.

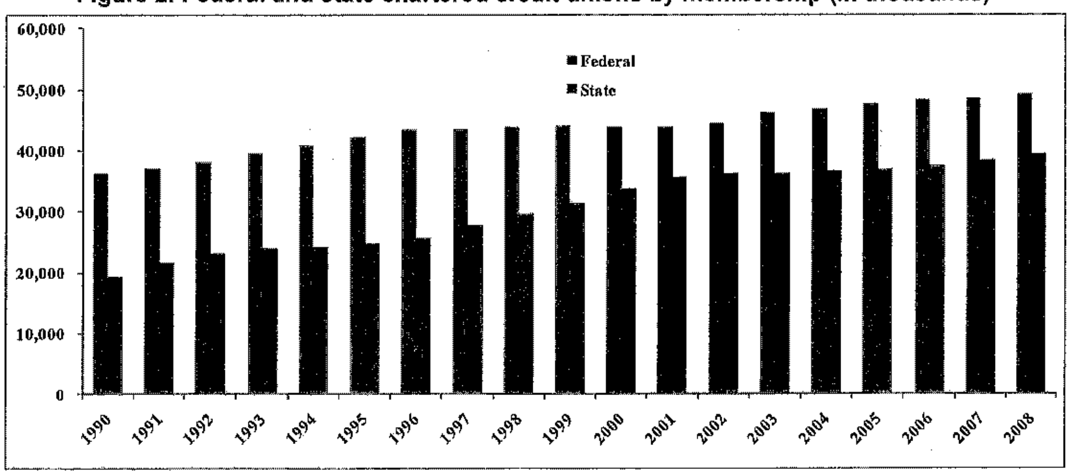
Figure 1: Number of federal and state chartered credit unions



Source: PwC analysis based on the 2010 Statistical Abstract, U.S. Census Bureau

During the same time period, the number of members enlisted under both federal and state chartered credit unions has increased steadily, with the increase in membership for state chartered credit unions outpacing the increase in federal credit unions. The state chartered credit unions share of membership has also increased during this time period from about 35 percent in 1990 to 45 percent in 2008, whereas that of the federally chartered credit unions has gone down from 65 percent in 1990 to 55 percent in 2008. Figure 2 below illustrates the trend in membership for federal and state chartered credit unions over the last two decades.

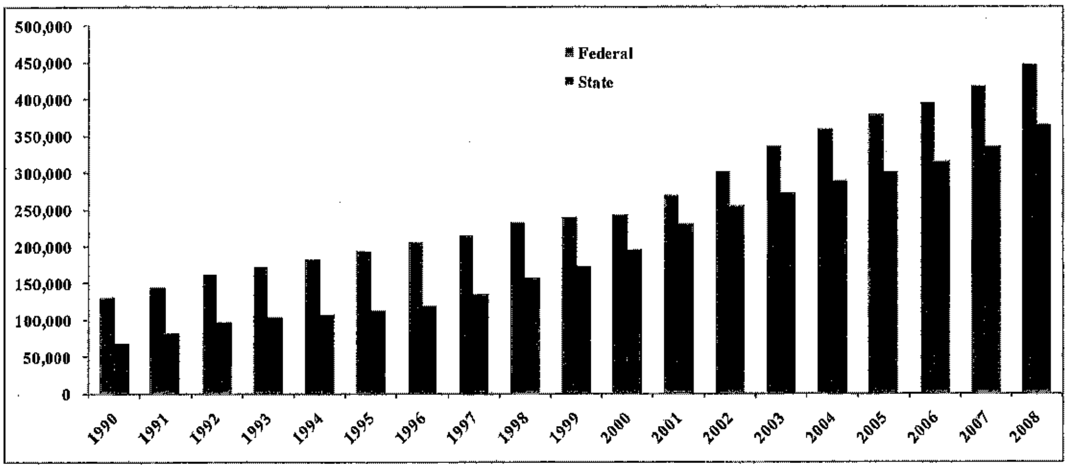
Figure 2: Federal and state chartered credit unions by membership (in thousands)



Source: PwC analysis based on the 2010 Statistical Abstract, U.S. Census Bureau

The total assets under management in both federal and state chartered credit unions have also increased over this period, with the increase in total assets for state chartered credit unions being slightly higher than that of the federal credit unions. The state chartered credit unions share of total assets increased during this time period from about 34 percent in 1990 to 45 percent in 2008, whereas that of the federally chartered ones has gone down from 66 percent in 1990 to 55 percent in 2008. Figure 3 below illustrates the trend in total assets under management at federal and state chartered credit unions, over the last two decades.

Figure 3: Federal and state chartered credit unions by total assets (in USD millions)



Source: PwC analysis based on the 2010 Statistical Abstract, U.S. Census Bureau

Similar to other sectors in the economy, the recent economic downturn over the last couple of years has adversely affected the credit union system. The biggest impact of the recession has been the losses that the credit unions have incurred from home mortgage delinquencies. The number of credit union closures has also increased, which has elevated the need for increased safety-and-soundness reviews from the regulatory agencies. As an insurer of federal insured credit unions, NCUSIF is obligated if a federal insured credit union fails to perform. Therefore, industry risks associated with the credit union business also affect NCUSIF. The federal insured credit unions with questionable business practices require NCUSIF to book a reserve for the identified and anticipated losses from credit unions' failures.[3] NCUSIF recorded a $758.7 million reserve for losses as of December 31, 2009 and $278.3 million as of December 31, 2008.[4]

2.3. NCUA Financing Structure

Under the Federal Credit Union Act of 1934, NCUAOF was created as a revolving fund in the United States Treasury under the management of the NCUA Board. This fund was intended to assist NCUA in providing administration and service to the federal credit union system and coordinating required supervisory involvement with the state charting authority for state-chartered credit unions insured by NCUSIF. With the backing of the full faith and credit of the U.S. government, NCUA administers the NCUSIF, which insures the savings of more than 90 million account holders in all federal credit unions and the substantial majority of state-charted credit unions.

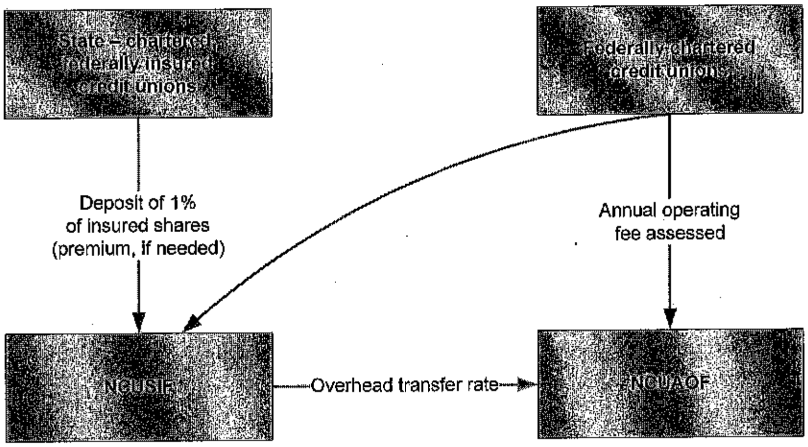
NCUAOF is financed through two sources. First, all FCUs are assessed an annual fee that is based on the credit union's asset size as of December 31 of the prior year. This fee is designed to cover the costs of providing administration and services, as well as regulatory examinations to the federal credit union system. In addition, the Federal Credit Union Act authorizes NCUA to expend funds from the NCUSIF for administrative and other expenses related to the insurance activities performed for all federally insured credit unions, including the FCUs and FISCUs. These funds are transferred through the OTR and accounts for a substantial portion of funding for NCUAOF.

To implement the OTR, NCUA needs to allocate the operating costs between insurance (safety-and-soundness) and non-insurance (regulatory/compliance/legal issues) related activities that its staff performs. The NCUA Board reviews this OTR fee structure annually and, in order to meet the requirements of stakeholders, NCUA must evaluate the components and calculation methodology used to determine the OTR to provide greater equity and accuracy in allocating the NCUAOF

[3] Credit unions experiencing financial difficulty are identified through the NCUA supervision and examination process. NCUSIF then determines the estimated losses from such credit unions.
[4] NCUSIF Financial Statements for the year ended December 31, 2009.

overhead costs in accordance with the Federal Credit Union Act. Figure 4 below illustrates the financing sources of NCUSIF and NCUAOF.

Figure 4: NCUA financing sources



2.3.1. Overhead Transfer Rate

NCUA is both a regulator and an insurer. Shortly after the creation of NCUSIF, GAO, in 1972, identified the need to allocate costs between these two roles. Section 1783 of the Federal Credit Union Act depicts the following:

> *"**1783(a)** There is hereby created in the Treasury of the United States a National Credit Union Share Insurance Fund which shall be used by the Board as a revolving fund for carrying out the purposes of this title. Money in the fund shall be available upon requisition by the Board, without fiscal year limitation, for making payments of insurance under section 207 of this title, for providing assistance and making expenditures under section 208 of this title in connection with the liquidation or threatened liquidation of insured credit unions, <u>and for such administrative and other expenses incurred in carrying out the purposes of this title as it may determine to be proper</u>." - Title II*

For this purpose, the Federal Credit Union Act authorizes NCUA to expend funds from NCUSIF for administrative and other expenses related to the insurance activities. This overhead transfer from NCUSIF for insurance services provides a substantial portion of funding for NCUAOF.

2.3.2. NCUA Insurance and Regulatory Activities

While NCUA's role as a regulator is limited to FCUs, its role as an insurer encompasses FCUs as well as FISCUs. NCUA performs its insurance and regulatory functions mainly through examination reviews of federally insured credit unions. With respect to FCUs, NCUA views these examination reviews serving the dual purpose of ensuring regulatory compliance as is consistent with its regulatory role as well as performing "safety-and-soundness" assessments of these credit unions in keeping with its role as the insurer. The examination reviews of FISCUs, which are conducted by NCUA in collaboration with the relevant SSAs, are limited purely to "safety-and-soundness" issues given that NCUA does not have regulatory purview over these credit unions. Thus, collectively through the examination reviews, NCUA assesses if a particular credit union is compliant with rules and regulations that apply to federally chartered credit unions and if the credit union poses risks to the NCUSIF.

In the course of their examination reviews, NCUA examiners focus on the following seven "risk areas":

- Credit Risk – the risk of non-repayment of loans and investments undertaken by the credit union;

- Interest Rate Risk – the risk that the credit union fails to adequately manage changes in market interest rates to maintain an appropriate net interest margin;
- Liquidity Risk – the risk that the credit union will not be able to liquidate assets quickly and with minimal loss in value;
- Transaction Risk – the risk that fraud or errors will cause a loss to the credit union;
- Compliance Risk – the risk that the credit union will fail to comply with laws and regulations, prudent ethical standards, and contractual obligations;
- Strategic Risk – the risk that poor business decisions or improper implementation of strategic goals will reduce the credit union's earnings and net worth; and
- Reputation Risk – the risk that the credit union's public image will be tarnished due to improper actions on the part of officials, management, or staff.

The NCUA examiners as well as the state examiners employ a common automated platform - AIRES which stands for Automated Integrated Regulatory Examination Software - to collect, analyze and report information as part of their examination of credit unions. The insurance functions completed for both FCUs and FISCUs are similar in nature and are based on assessment of risk to NCUSIF, which entails evaluating the seven risk factors mentioned above.

2.3.3. OTR History

In 1972 GAO recommended that "insurance-related" and regulatory related costs be allocated between NCUA and NCUSIF. In the following years until 1980, various cost allocation methodologies were implemented by NCUA, including direct charges to NCUSIF for insurance expenses (e.g. cost of closing institutions, liquidation and merger costs, etc.), and time spent by examiners on supervising (as opposed to examining) institutions. Over the 1981 to 1984 period, the OTR ranged between 30 and 34 percent.

From 1985 through 1994, NCUA's Office of Examination and Insurance ("E&I") conducted annual studies to determine an appropriate factor for allocating NCUA's total operating expenses between the "insurance-related" and regulatory related activities. E&I designed examiner survey forms to determine the percent of time devoted to regulatory-related and "insurance-related" issues. During this period, E&I used the following process to gather empirical data:

- E&I had all NCUA examiners complete survey forms for each federal credit union examination completed during a certain time period;
- The survey forms captured the examiners' estimates of the hours spent on completing various examination scope components; and
- The examiners submitted the survey forms, and E&I compiled the data and developed a recommendation to the NCUA Board.

During this ten year period, the survey results on the percent of insurance-related hours varied between 50.1 percent and 60.4 percent; however, the OTR was maintained at 50 percent. From 1994 to 2000, based on E&I recommendations, the OTR was kept at 50 percent by NCUA. In 2000, the scope and methodology of the examiner survey was revised to include principal examiners, regional staff, and central office staff. The surveys resulted in "insurance-related" percentages for each group which resulted in a weighted average OTR of 66.72 percent.

Following the increase in OTR from 50 percent to 66.72 percent, in 2001, Deloitte and Touche was engaged to complete a study on the cost allocation process. The study included recommendations for improvement that were implemented beginning in 2002. These recommendations included improving communication of the survey process and results, improving the survey process by automating and varying the frequency/timing, and updating the survey definitions and purpose.

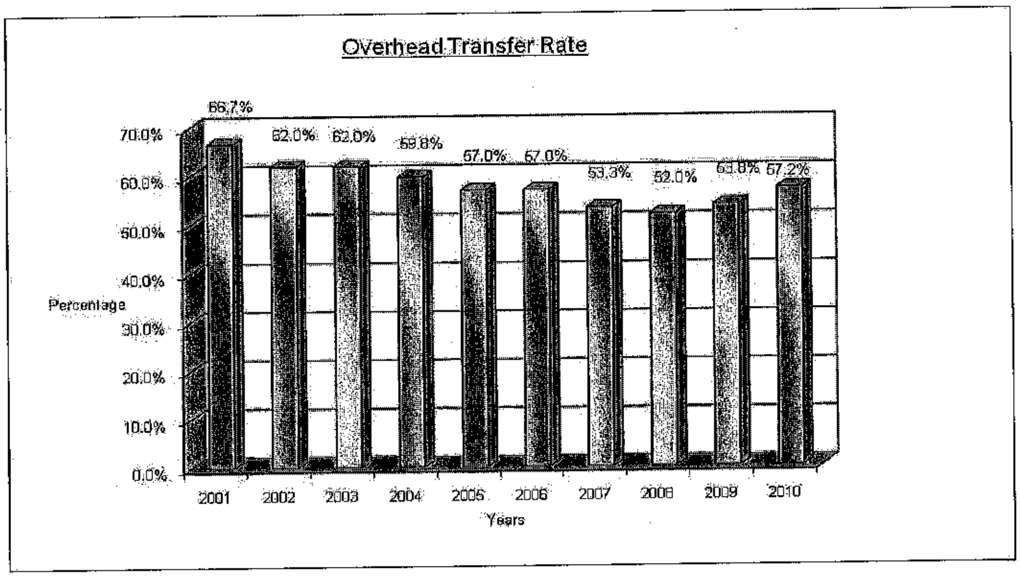
In 2002, the OTR was set at 62 percent. E&I implemented Deloitte and Touche's recommendations to automate the survey collection process, enhance guidance and training for examiners, collect surveys on an ongoing basis (beginning in June 2002), and establish a help-line and public folders to better communicate issues. Automated survey collection began in June 2002. At year end, examiners had uploaded 167 surveys.

In November 2003, the NCUA Board used a refined method to calculate and assess the OTR. The new method is more comprehensive, with the formula expanded to take additional factors into account. The calculation methodology approved in 2003 has been applied by NCUA to calculate the OTR annually. The key components of the OTR calculation methodology include:

- The results of an annual Examination Time Survey performed by a randomly selected group of principal examiners;
- NCUA's resource workload budget;
- NCUA's financial budget;
- The distribution of insured assets between federally chartered and state chartered federally insured credit unions; and
- An estimate of the value of "insurance-related" work conducted by state regulators.

In the following years, the OTR amount declined gradually, with a value of 53.8 percent in 2009. In 2010, the OTR increased slightly to 57.2 percent. Figure 5 below shows the OTRs during the 2001 - 2010 period.

Figure 5: OTR rates in the 2000s



2.3.4. Ramifications of the OTR

A higher OTR results in a lower operating fee charged to FCUs. Since the OTR funds a portion of NCUA's budget, when the OTR increases the amount of NCUA's budget funded by operating fees paid by FCUs falls. This might have significant effects on the interactions between the related parties. A lower federal operating fee makes the federal charter more attractive to the credit unions and extends a competitive edge to the federal charter over the state charter. It might also make state chartered credit unions switch to the federal charter.

The OTR is an expense that reduces NCUSIF's income, which in turn reduces the amount of funds available for dividends (or to offset premiums). NCUSIF pays all the federally insured credit unions dividends whenever its collective earnings, consisting of the one percent deposits received from the credit unions and the interest earnings from the assets net of costs, exceeds the deposits received by more than 1.3 percent.[5] The dividend payment is allocated by FCUs and FICUs' insured share of assets. A higher OTR increases NCUSIF costs, which in turn potentially reduces the amount of dividends paid out. This reduction in pay out affects both FCUs and FISCUs uniformly.

Some state regulators set their operating fees in line with NCUA's operating fee structure, to stay competitive in the market. Thus, a higher OTR, resulting in a lower federal operating fee, may force the SSAs to lower the operating fees they collect from the FISCUs. Since the state regulators, unlike NCUA, do not receive any additional funds from NCUSIF for the "insurance-related" activities, this in turn may cause a potential decrease in funding for the state regulator's examination and safety-and-soundness program.

[5] The NCUA Board sets up the normal NCUSIF operating level at 1.3 percent and the operating level is typically reviewed by the NCUA Board at the end of each calendar year.

3. Overview of Existing OTR Computation and Administration

This section presents an overview of the current OTR Methodology, with a discussion of the underlying steps, assumptions and data sources. For expositional purposes, the key steps associated with the OTR Methodology are depicted in Figure 6 and listed below.

1) Classification of NCUA's operational activities into those deemed to be in keeping with its role as a regulator (i.e. "regulatory" activities) and other activities deemed to be associated with its role as an insurer (i.e. "insurance-related" activities).

2) Allocation of NCUA's total budgeted time/hours for the year between "insurance-related" and "regulatory" activities based on survey of hours spent by NCUA examiners over the preceding twelve-month cycle and other allocation factors.

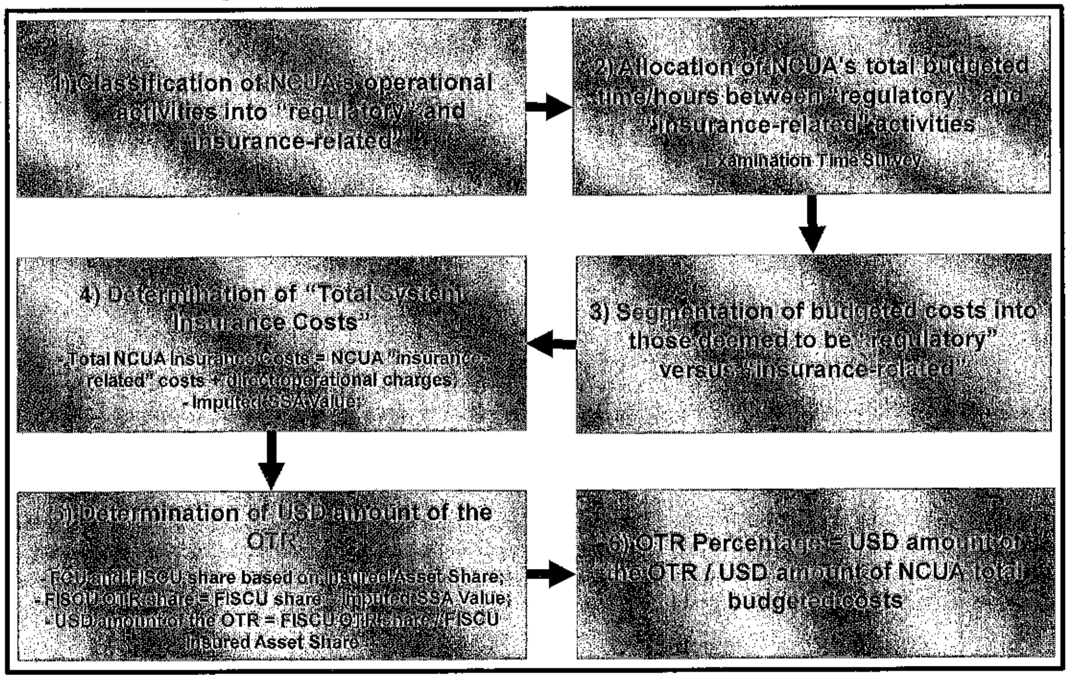
3) Segmentation of budgeted costs (under different categories) based on the allocation percentage determined for workload hours for the associated categories of expenses as determined in the previous step and other allocation percentages for cost categories that are not covered by the survey into those deemed to be "insurance-related" versus "regulatory".

4) Determination of total estimated "system wide" costs of "insurance-related" activities (referred to herein as the "Total System Insurance Costs") as:
   a. The sum of all costs classified as "insurance-related" in the steps above plus other direct operational charges (together referred to herein as the "Total NCUA Insurance Costs"); plus
   b. An estimate of the costs associated with the "insurance-related" work performed by the SSAs for the benefit of FISCUs (the "Imputed SSA Value").

5) Determination of the U.S. Dollar ("USD") amount of the OTR through the following steps:
   a. Allocation of the Total System Insurance Costs between FCUs and FISCUs based on the relative share of insured assets (referred to herein as the "Insured Asset Share") for each category of credit unions;
   b. Subtraction of the Imputed SSA Value from the amount of the Total System Insurance Costs allocated to FISCUs to determine the USD amount of the OTR that should be "borne" by FISCUs (referred to herein as the "FISCU Share of OTR") using their Insured Asset Share as an allocation basis; and
   c. Finally, division of FISCU Share of OTR by their Insured Asset Share to determine the total USD amount of the OTR that should collectively be "borne" by FCUs and FISCUs.

6) Division of the USD amount of the OTR by the USD amount of the total budgeted costs for NCUA to determine the applicable OTR (as a percentage)

Figure 6: Diagrammatic illustration of the OTR Methodology



The subsequent sections present the steps, inputs and other details associated with the computation of the OTR. These sections draw on the description of the OTR Methodology as contained in the NCUA Board Action Memorandum dated November 19, 2009.

3.1.1. NCUA's Definition of Insurance and Regulatory Activities

The starting point in the calculation of the OTR is the classification of NCUA's activities into two categories - the "insurance-related" activities are those that are in keeping with its role as an insurer of all federally insured credits units (i.e. FCUs and FISCUs) while the "regulatory" activities are those that are deemed by NCUA to be "driven by" its role as a regulator and charterer of credit unions (i.e. FCUs). The "insurance-related" functions mostly involve activities related to analyzing safety-and-soundness of the insured assets of all federally insured credit unions. All other "insurance-related" activities involve evaluating exposure to losses among these credit unions. The "insurance-related" functions are thus viewed by NCUA as including the following:

- Evaluating financial trends and Call Report data[6];
- Determining the credit union's solvency position;
- Evaluating risks and potential costs, the credit union presents to NCUSIF (as and when applicable);
- Assessing management's efforts to protect earnings and net worth by identifying, evaluating, controlling, and monitoring internal and external risks; and
- Assessing management's abilities to develop strong policies and a reliable internal control structure.

Non-insurance or regulatory activities, specifically as they relate to examination or supervision contacts with FCUs, focus on issues of compliance with the laws and regulations that NCUA enforces.

[6] Call report refers to the reports that are submitted by federal insured credit unions to NCUA and contain data on a credit union's financial condition and other operating statistics.

Time incurred by NCUA on regulatory activities is associated with its efforts to review, report, or document areas that include, but are not limited to, the following:

- Compliance with consumer protection laws, NCUA rules and regulations, the Federal Credit Union Act and bylaws;
- Review of previously cited regulatory violations, areas of concern, and corrective actions taken; and
- Call report accuracy and timeliness.

Based on NCUA's definition/characterization of its activities (as "insurance-related" versus "regulatory"), the subsequent steps in NCUA's OTR calculation are aimed at estimating and determining the costs that it incurs specifically on "insurance-related" functions after making adjustments that affect the allocation of the "burden" of these costs among FCUs and FISCUs as is described below. Appendix A contains the actual figures associated with each of these steps for the 2010 OTR calculation.

3.1.2. Step 1 - Workload Program

The first step in the actual computation of the OTR is the allocation of the total hours budgeted by NCUA (the "Workload Budget Hours" or the "Workload Budget") for its various personnel through which it performs its insurance and regulatory functions into those that relate to its regulatory function and those that relate to its insurance function. This allocation is achieved by using two distinct procedures/mechanisms, each of which applies to one or more NCUA categories of activities or "Programs":

- The Examination Time Survey is the source of the allocation basis for "Core Programs" that cover "contacts" with credit unions related to their examination ("Federal Examination" code 10) or supervision ("Federal Supervision" code 22) which together account for the majority of the Workload Budget Hours;
- The allocation basis for NCUA's Workload Budget Hours associated with "Other Core Programs" and "Special Programs" is based on as assessment of the specific characteristics of these Programs and their overall purpose.

3.1.2.1. Examination Time Survey

The key personnel with respect to NCUA's Federal Examination and Federal Supervision programs are the field examiners who conduct these examinations and reviews of the different credit unions. The primary responsibility for a particular credit union with respect to examination is assigned to one examiner known as the "Principal Examiner" ("PE"). All field examiners are organized into 63 groups referred to as "Supervisory Examiner" ("SE") groups that are spread across NCUA's five regions. The Examination Time Survey (referred to herein as "ETS") is a survey that E&I administers to a randomly selected SE group from each region.[7] The survey is completed by all PEs for each selected SE group from each region. The PEs are chosen based on their background and experience in specific fields. The PEs may be supported by other field examiners and subject matter experts in order to provide an accurate determination of the proportion of time devoted to "insurance-related" and regulatory activities.

As mentioned above, the ETS is used to determine the percentage of Workload Budget Hours related to regulatory and "insurance-related" tasks for the following two programs:

- Federal Examination (Code 10); and
- Federal Supervision (Code 22).

Since 2007, the ETS has been implemented through an online form on the AIRES server. Examiners receive training and detailed instructions on how to fill out the ETS. There are twelve categories of activities on the survey form, modelled on the risk based examination program. For each of these

[7] In June 2002, NCUA used a lottery system to select one SE from each region to participate in the survey. The survey responsibilities rotate on an annual basis to the next SE in alphabetical order.

categories, the examiner has to input the hours spent on regulatory and "insurance-related" activities. A full year's worth of survey results are used to calculate the percentage of hours devoted to regulatory (and insurance-related) activities for the Federal Examination and Federal Supervision Programs.

3.1.2.2. Percentage of Regulatory Time Spent on Other Core Programs and Special Programs

The time spent on regulatory activities for Other Core and Special Programs is determined based on a review of the characteristics of the Programs (i.e. the underlying purpose behind the Program). The Workload Budget Hours associated with Programs deemed to have primarily a regulatory purpose would all be treated as regulatory. Other Programs, such as the "State Exam and Supervision Program," have all their Workload Budget Hours treated as "insurance-related" based on fact that the NCUA does not have regulatory responsibilities with respect to FISCUs. Other Core and Special Programs that are deemed to have a "mixed role" have their associated Workload Budget Hours classified based on the percentage of regulatory versus "insurance-related" costs utilizing the results from the ETS for the Federal Examination Program. For the Small Credit Unions Program, the percent of time spent on regulatory activities was estimated through informal surveys to the department head.

3.1.2.3. Workload Budget

As described, NCUA's Workload Budget provides the budgeted hours for NCUA's activities associated with its Core and Special Programs. These hours make up the "productive" hours for NCUA's examiners and other specialized staff working on the core and special programs. Once the regulatory percentages are determined for all the Core and Special Programs, they are applied to the budgeted hours for each of these Programs as specified in the Workload Budget to determine the total hours characterised as "regulatory" (or conversely as "insurance-related"). Adding the hours thus classified together, the total hours classified as "regulatory" (or conversely as "insurance-related") are determined. Dividing this amount by the total budgeted hours for all Core and Special Programs is used to determine the weighted average percentage of Workload Budget Hours that can be characterized as "regulatory" (or conversely as "insurance-related"). This weighted percentage of total Program hours that is ascribed to NCUA's regulatory role is then treated as the "regulatory cost driver" (the "Regulatory Cost Driver") - i.e. the percentage of NCUA's total costs that stem from its regulatory role, used in subsequent steps of the OTR calculation.

3.1.3. Step 2 - Application of "Regulatory Cost Drivers" to NCUA Financial Budget

After determining the Regulatory Cost Driver which represents the weighted average percentage of NCUA's budgeted "productive" hours that are ascribed to its regulatory role, this percentage (along with certain other "cost drivers" discussed below) is applied to NCUA's budgeted costs for the relevant year under different categories/cost centers to determine the total amount of NCUA's costs that are classified as "Non-Insurance Costs". For 2009, the costs associated with the Core and Special Programs accounted for 58 percent of NCUA's total budgeted costs and the Regulatory Cost Driver as determined in Step 1 was directly applied to such costs. For the remaining costs, different cost drivers were assigned to determine the amount of Non-Insurance Costs. For instance, the cost center "Asset Management Assistance Center and Assistance Program" was assigned a cost driver of zero percent given that this represents the NCUSIF function that handles liquidation payouts, management of assets acquired from liquidation and recoveries for the NCUSIF and as such none of the associated costs can be classified as Non-Insurance Costs.

3.1.4. Step 3 - Calculation of NCUSIF Costs

The purpose of Step 2 was to determine the portion of NCUA's budgeted costs that is related to its regulatory role. The subtraction of this amount from NCUA's total budget yields the portion of NCUA's budget that is associated with its role of managing the NCUSIF. Under Step 3, the following amounts associated with the operational costs of providing NCUSIF deposit insurance are added to this budget figure in order to arrive at a measure of Total System Insurance Costs:

- Certain direct operational charges to NCUSIF; and
- The Imputed SSA Value that represents an estimate of the costs associated with the "insurance-related" work performed by the SSAs for the benefit of the FISCUs and is thus part of the total "system wide" operational costs of providing NCUSIF deposit insurance.

3.1.4.1. Direct Operational Charges to NCUSIF

Direct operational charges to NCUSIF include costs associated with providing state examiners with equipment and training. These costs are not included in NCUA's total budgeted costs referenced in the previous steps.

3.1.4.2. Imputed SSA Value

The incorporation of the Imputed SSA Value is driven by the need to account for the fact that not all "insurance-related" costs associated with NCUSIF (and thus "borne" by the credit unions) are incurred by NCUA. A portion of the total "system wide" cost of providing the NCUSIF federal share insurance is actually incurred by the SSAs that recover such costs through the operating fee charged to FISCUs. The estimation of the Imputed SSA Value and its incorporation in the OTR calculation is in recognition of the fact that absent these SSAs and the work performed by them, NCUA's "insurance-related" costs would be higher. This estimation involves the following four steps:

Imputed SSA Value Step 1: Gross Workload

The first step in this process is to determine, using an identical criteria as for FCUs, what level of examination time would be required to examine all FISCUs. To do this, first the examination hours NCUA actually expended on FCUs during the prior fiscal year are examined, by asset size and CAMEL rating. Next, this estimate of hours for FCUs by CAMEL rating/asset size is applied to the distribution of FISCUs across CAMEL/asset size category in order to arrive at an estimate of the total hours needed to perform the similar function for the FISCUs as is performed for the FCUs. These two steps together are used to arrive at an estimate of the exam hours needed if NCUA were to conduct all of the state examination work in a manner that is equivalent to what is employed for FCUs.

Imputed SSA Value Step 2: Net Workload

Step 1 calculates the hours needed if NCUA were to conduct examinations in all FISCUs. The same distribution of insurance to non-insurance ratio that is used for FCUs as determined in previous steps is applied to determine the total hours it would take NCUA to supervise FISCUs to meet its role as insurer.[8]

Imputed SSA Value Step 3: Additional Staff Needed

In this step, the additional hours computed in step 2 above is converted to the number of additional examiners required to accomplish these additional tasks. Using NCUA's workload budget and taking into consideration adjustments for various benefits, training, and administrative time, a productivity ratio and the resulting productive hours are calculated per full-time equivalent ("FTE") examiner. Using this productive hours per examiner and the net additional hours, the number of FTE examiners needed to accomplish the additional tasks are then computed.

In order to perform these incremental activities, additional staff and other resources (overhead) to manage and administer these additional examiners would be required (e.g. additional Supervisory Examiners, Regional Office Analysts, Human Resource Personnel, facilities, etc.). To estimate the incremental resources, NCUA's staffing patterns and organizational structure were reviewed and ratios of examiners to other positions based on ratios that are actually employed in running the agency were developed. The estimate of additional FTE examiners and staff are computed on this basis.

[8] In addition, adjustments for the deferred examination program, an adjustment for needed additional supervision and an adjustment for unnecessary state review are also made to calculate additional hours that NCUA would have spent if it were to examine and supervise, from an insurance perspective only, all FISCUs using the same insurance-based criteria applied to FCUs.

Imputed SSA Value Step 4: Imputed Cost

Finally, the average cost per FTE is used to compute the total cost of these incremental resources. The average cost used is based on the actual budget for regional offices and field staff and includes all costs, such as travel, training, facilities, consumables (e.g., supplies), in addition to salary and benefits, necessary to run a field program.

In addition, other adjustments are made to account for the potential impact of the additional workforce. With this additional staffing, there would be an impact on the workload of the Office of Human Resources ("OHR"). Thus, a proportionate increase in OHR's budget is projected. In addition to increases in certain costs, there would be some areas of savings to NCUA if it conducted all of the "insurance-related" FISCU work. There would be no need to pay for the training of state examiners, or providing SSAs with computers and other equipment. The final Imputed SSA Value is calculated by making adjustments for these costs and savings.

3.1.5. Step 4 - Allocation of NCUSIF Costs

The final step is the calculation of the OTR amount, both as a U.S. dollar ("USD") value and as a percentage of the total NCUA budgeted costs. In Step 3, the total "system wide" costs of providing the NCUSIF federal share insurance is determined that takes into account the "insurance-related" work performed by the SSAs. Once this total cost is calculated, it is allocated between FCUs and FISCUs using their respective Insured Asset Shares as a proportional allocation basis. Finally, since the SSAs actually provide part of the "insurance-related" services to FISCUs associated with NCUSIF, the FISCU share of the total "system wide" NCUSIF insurance cost is adjusted by deducting the Imputed SSA Value to determine the cost of NCUSIF insurance to FISCUs that is incurred specifically by NCUA.

Next, the USD amount of NCUA's costs associated with managing the NCUSIF to be absorbed by FISCUs through the OTR (as calculated previously) is divided by FISCUs' Insured Asset Share (i.e. proportional allocation basis). This yields the total USD amount of NCUA's costs of managing the NCUSIF that is "borne" by <u>all</u> insured credit unions through the OTR. For the 2010 calculations, this USD amount was $115.0 million. Upon determination of the USD amount of the OTR, this value is divided by the total NCUA budget to calculate the OTR as a percentage of the NCUA budget. For the 2010 calculations, this value was calculated as 57.2 percent.

4. Methodology

4.1. Description of Approach

This study and its conclusions are based on facts and data presented to PwC by NCUA, which has verified to PwC the accuracy of these facts presented in this study. In keeping with our regular practice, PwC has not independently audited these representations as part of the preparation of this study, although PwC has determined that the facts as presented appear reasonable. PwC based its understanding of the functions performed, risks assumed, and resources employed by various parties on discussions with NCUA personnel, discussions with key stakeholders (these include industry groups such as CUNA, NAFCU, and NASCUS, and representatives from federally insured credit unions such as the BECU), relevant literature and other information available in the public domain. An overview of the overall approach is presented below followed by a more detailed description of the process undertaken by PwC in its review of the OTR Methodology.

To complete this study PwC undertook the following steps:

1) Conducted interviews with and requested key information from NCUA personnel identified as being relevant in order to develop a comprehensive understanding regarding the NCUA's OTR Methodology, the constituent steps and underlying assumptions;

2) Identified and conducted interviews with "key stakeholders" in the U.S. credit union system that included credit unions and trade associations for federal and state charter credit unions as well as that for the state regulatory authorities;

3) Identified the stakeholders' views on attributes that an appropriate OTR Methodology should possess as well as the concerns and issues with regards to the current OTR Methodology as perceived by these stakeholders;

4) Developed a set of criteria to evaluate the current OTR Methodology based on the concerns and issues identified by the key stakeholders; and

5) Evaluated NCUA's current OTR Methodology against the set of criteria so as to arrive at a conclusion on the soundness and reasonableness of the current OTR Methodology and develop recommendations and suggestions for improvement.

4.2. Methodology

As part of its analysis, PwC conducted interviews with personnel from NCUA and other identified stakeholders in the U.S. credit union system, including, but not limited to:

- Personnel from NCUA whose current or past responsibilities included the implementation of the OTR Methodology and presentation of these calculations to the NCUA Board. Among the personnel interviewed were those that had familiarity with the 2003 special task force that proposed revisions to the existing OTR Methodology at the time.
- A senior PE with experience in field examinations as well as with the ETS. A PE is an experienced examiner who is involved in examination reviews and field examinations for federally insured credit unions. The interviewed PE has responsibility to fill out the time survey on behalf of all the examiners that worked on the credit unions for which the PE was the Examiner in Charge.

- Industry groups such as CUNA, NAFCU, and NASCUS. The description of each of these trade groups are as follows:
  - CUNA: CUNA is a national trade association serving America's credit unions. The not-for-profit trade group is governed by volunteer directors who are elected by their credit union peers. In partnership with state credit union leagues, CUNA provides many services to credit unions, including representation, information, public relations, continuing professional education, and business development. CUNA represents about 97 percent of all credit unions, including both the FCUs and FISCUs, which gives them the unique opportunity to represent both the federal and state credit unions equally.

    The members interviewed include the Senior Vice President and the Chief Economist.
  - NAFCU: NAFCU is a trade association that exclusively represents the interests of federal credit unions before the federal government and the public. NAFCU provides its members with representation, information, education, and assistance to meet the challenges that cooperative financial institutions face. Over the years, NAFCU has been a highly effective force in influencing legislation and regulation affecting federal credit unions.

    The members interviewed include the General Counsel for Regulatory Affairs and the Chief Economist.
  - NASCUS: NASCUS, a professional regulators association, is the primary resource and voice of the 47 state governmental agencies that charter, regulate and examine the nation's state-chartered credit unions. NASCUS is the only organization dedicated to the defense and promotion of the state credit union charter and the autonomy of state credit union regulatory agencies. NASCUS also represents the interests of state agencies before Congress and is the liaison to federal agencies, including the NCUA. NASCUS also has been focused on preserving the dual chartering system and representing the interests of state-chartered credit unions.

    The members interviewed include the President and CEO, the Senior Vice President for Regulatory Affairs and the Vice President for Communications and Public Affairs.

In conjunction with the interviews, PwC obtained and studied the following documents that were made available to it by one or more of the aforementioned parties or located in the public domain to develop a comprehensive understanding of the history, constituent steps, assumptions and data sources associated with the current OTR Methodology:

- Documents received from NCUA and from NCUA website -
  - 2008 and 2009 Board Action Memorandum ("BAM"): Through the BAM, the Office of Examination and Insurance at NCUA presents the following year's recommended OTR to the NCUA Board for approval. The BAM includes a brief summary of the current OTR calculations including the summary results of the time survey. The detailed calculations are also included in the appendix. The BAM is made available to the public and interested parties through the NCUA website.
  - 2003 Task Force Proposal: This is the report submitted by a five member NCUA Task Force that was formed in 2003 to review the OTR Methodology. This is a detailed report on the analyses performed by the 2003 task force, and it includes in depth discussions on the proposed methodology, the then-current OTR Methodology, the Examination Time Survey, history of OTR and its legal and philosophical basis, other alternatives considered, and some potential criticisms and responses. The discussions included in this report are not only aimed at explaining the proposed OTR Methodology, but also at justifying the need to update the existing methodology with the new one.
  - 2007 NCUA Annual Report: The annual report includes financial information pertaining to NCUA and also some relevant industry statistics pertaining to the credit union system as a whole.

  - Organizational charts: The organizational charts received from NCUA provide information on the internal NCUA structure and identifies the number of personnel employed at each regional office.
  - 2007 revised Federal Credit Union Act: The Federal Credit Union Act provides the historical background for the creation of the NCUA and the NCUSIF and the implementation of the OTR.
- Documents received from other sources -
  - GAO 2003 report on credit unions: The GAO report provides an overview of the state of the credit union system around 2003 and a third party assessment of the then-current NCUA OTR calculations.
  - 2001 paper on OTR titled "Caught in a Regulatory Vise: The Peculiar Problem Faced by Federally Insured State-Chartered Credit Unions" by Lawrence White, received from BECU: This paper was commissioned by BECU to serve as an evaluation of the OTR Methodology from an FISCU perspective. The paper presents the OTR concerns and issues and some potential solutions for these issues, as identified by the author.
  - 2001 white paper received from NASCUS titled "Restructuring the NCUA": This was a white paper commissioned by the NASCUS to evaluate NCUA's dual role as an insurer and a regulator.
  - Data on the credit union system from the 2010 Statistical Abstract, U.S. Census Bureau: This is a time series data that look at FCUs and FISCUs over 40 year period. The variables reported include, but are not limited to, the number of FCUs and FISCUs, FCUs and FISCUs by membership, and FCUs and FISCUs by assets under management.
  - Data and information on the operations of the Federal Deposit Insurance Corporation ("FDIC") from the FDIC website and the FDIC 2009 Annual Report: The FDIC annual report provides information and data on the operations and workings of the FDIC and some relevant financials.
  - Data and information on the operations of the Office of Comptroller of Currency ("OCC") from the OCC website and the OCC 2009 Annual Report: The OCC annual report provides information and data on the operations and workings of the OCC and some relevant financials.

Based on the interviews and the material studied, PwC identified four criteria for purposes of evaluating the current OTR Methodology and recommending possible revisions/amendments/modifications for NCUA's consideration. The criteria (each of which is subsequently referred to as an "Evaluation Criterion" and collectively referred to as the "Evaluation Criteria") are listed below.

1. <u>Transparency</u>

The OTR Methodology and its underlying steps, assumptions and data sources should be communicated clearly and regularly to stakeholders in the credit union system so as to develop broad and consistent understanding among these stakeholders. Of fundamental importance to the computation of the OTR is the distinction between activities and associated expenses deemed to be associated with NCUA's role in managing the NCUSIF (i.e. expenses that can be characterized as being "insurance-related" and thus included in the OTR) and other activities classified as those in keeping with the NCUA's role as regulator (and thus excluded from the OTR). Given this, the OTR Methodology should be based on a classification that represents a consensus (among the NCUA and other stakeholders in the credit union system) with regards to such activities.

2. <u>Accuracy</u>

Subject to the classification of activities as "insurance-related" and other activities, the calculation of the OTR should be predicated on a methodology that is able to measure and track the expenses associated with such activities accurately and consistently across different regions and over time.

3. Equity

The calculation and administration of the OTR should not, ex-ante, favour or disadvantage one type of credit unions (i.e. federal versus state chartered) over another.

4. Reasonable Administrative Burden

The OTR Methodology needs to be such as to balance the objectives of criterion 1 through 3 while keeping costs of implementation manageable.

5. Economic Analysis

This section presents a summary of PwC's review of NCUA's existing OTR Methodology based on the Evaluation Criteria identified above. The objective of the review was to arrive at a review of the OTR Methodology with respect to the specific Evaluation Criterion and to make recommendations if warranted by the review. The concerns and issues associated with the OTR Methodology that were considered under each specific Evaluation Criterion were validated by the key stakeholders interviewed by PwC as part of the review process.

5.1. Transparency

Two specific attributes of the OTR Methodology and its implementation were considered under this section. First, given how important NCUA's classification of its activities as "insurance-related" and "regulatory" is to the OTR calculation, PwC sought an understanding of whether there was agreement among the stakeholders in the credit union system with regards to the reliability of this classification. The second question considered here was whether there is reasonable understanding among the stakeholders of the OTR Methodology, steps and inputs that go into the calculation and the underlying assumptions.

5.1.1. Definition of Insurance and Regulatory Activities

A consistent concern that was commonly expressed by the key stakeholders regarding the OTR Methodology is with respect to how NCUA classified its activities (and thereby costs) as "insurance-related" and "regulatory". From the perspective of these industry groups and credit unions, the lack of an industry-mandated definition of "insurance-related" and "regulatory" activities made the classification adopted by NCUA as potentially biased. A prevailing view among some sections of the industry is that certain costs that get classified by NCUA as being consistent with its role as insurer (e.g. those related to the safety-and-soundness of credit unions) would have to be undertaken by NCUA even if its role were solely that of a regulator. Additionally, the costs that should be included in the OTR should be limited to those associated with additional reviews and site visits by examiners of credit unions whose original safety-and-soundness reviews revealed specific concerns from an insurer's perspective.

5.1.2. Assumptions and Calculation Steps

The calculation of the OTR involves multiple steps, data sources and underlying assumptions. Our discussions with the stakeholders revealed a prevalent view that there was not a satisfactory level of understanding within the industry with regards to the various components of the OTR calculation. While NCUA periodically issues BAMs, Board Action Bulletins and other publications about the OTR calculation, these documents were not viewed as being sufficient in explaining to the industry the methodology in adequate detail. The key stakeholders expressed that the method needs more transparency, the assumptions need to be made public and the calculation steps need to be explained in more detail. Additional concerns were expressed by these stakeholders regarding related subjects such as the NCUA budget, the target equity ratio, etc. which are perceived to be either affected by or have influence on the OTR amount. In addition, one key stakeholder commented that the OTR decisions are made by NCUA without any formal notice or comment as required by the Administrative Procedure Act.

Conclusion

Based on PwC's review, the OTR Methodology was considered lacking in terms of the extent to which the classification of NCUA's activities between insurance and regulatory (upon which the methodology is fundamentally dependent) represents a consensual view on such a characterization in the industry. Further, there was found to be dissatisfaction within the industry with respect to NCUA's efforts to communicate and explain the OTR Methodology in adequate detail.

Recommendations

A review and assessment of the reasonableness of NCUA's definition and characterization of its activities among those related to insurance and those consistent with its role as a regulator was outside the scope of this study. However, it is PwC's view that NCUA should consider providing more visibility on how it characterizes its activities to the different industry groups and credit unions and possibly solicit their feedback with regards to the reasonableness and accuracy of the classification. This would be a step towards developing a classification basis that incorporates the industry's views on the matter and would serve to dispel potential confusion and concerns within the industry.

NCUA should also consider steps aimed at making the methodology itself more transparent, along with all of the assumptions and steps that are utilized. Possible ways of achieving this include more frequent interactions with the stakeholders through different channels (e.g. meeting, publications, etc.). NCUA should also check if the OTR decisions are subject to the Administrative Procedure Act and if formal notice or comments are required on its OTR calculation process and results.

5.2. Accuracy

In this section, the following elements of the OTR methodology are analyzed from the perspective of their ability to accurately and consistently "measure" the expenses associated with the management of NCUSIF incurred on behalf of all federally-insured credit unions:

1) Education and training of examiners with respect to the distinction between "insurance-related" activities and "regulatory" activities;

2) Reliability and accuracy of the results attained from the ETS;

3) Reasonableness of other allocation factors used to determine Regulatory Cost Drivers;

4) Validity of Imputed SSA Value calculation; and

5) Validity of Insured Asset Shares.

This section concludes with an analysis of the sensitivity of the results of the OTR calculation on the variance of the ETS results, other allocation factors and Imputed SSA Value.

5.2.1. Implementation of ETS - Education and Training of Examiners

As discussed in the section above, the definition of what constitutes an "insurance-related" activity versus a "regulatory" activity is an important input in the overall OTR Methodology. Of significant importance is also how consistently this classification is applied throughout the implementation of ETS and other steps of the OTR calculation.

NCUA administers the ETS to a randomly selected SE group from each region.[9] The survey is completed by all PEs for each selected SE group from each region. The PEs are chosen based on their background and experience in specific fields. The PEs may be supported by other field examiners and subject matter experts in order to provide an accurate determination of the proportion of time devoted to insurance and non-insurance related activities. The survey responsibilities rotate

[9] NCUA's operations are divided into five regions, each containing between 9 and 18 SE groups.

on an annual basis to the next SE group in alphabetical order. Rotational sample selection guarantees that all PEs are eventually selected for participation in the survey.

For the implementation of ETS, NCUA holds a formal training session for survey participants and a subsequent teleconference for the survey participants, their supervisors, and a regional office analyst from each region. The formal training session provides detailed steps on how to fill out the ETS online. Online help that can be contacted via a specific and dedicated email address for survey participants to request help with the survey is maintained. The regional office analyst and the Office of the Chief Information Office customer services are also made available as resources to provide support on the survey. In addition, NCUA sets up a public folder to store information such as Frequently Asked Questions, summary reports and training information.

The ETS form provides twelve time categories, including planning/scope development, call report review, supervisory committee review, financial analysis, loan analysis, investment analysis, liquidity analysis, asset liability management, compliance, information system technology, management and examination report/JC/follow-up. For each time category, the time survey instruction provides detailed examples on activities covered and whether such activities should be characterized as "insurance-related" or "noninsurance-related". Based on our interview with an NCUA examiner, the ETS form and instruction is clear and easy to understand. By referencing the instructions, the examiner had no difficulties in allocating time between "insurance-related" activities and "noninsurance-related" ones.

Based on the forgoing, NCUA personnel in charge of examinations and reviews have a clear understanding of the classification between "insurance related" and "non-insurance related" activities. Furthermore, this classification is communicated to the examiners through what can be considered well-structured tools and training modules.

Conclusion

Based on PwC's review, the current definition of insurance and regulatory activities is appropriately communicated to the examiners through well-structured tools and training modules. The process provides enough resources available for examiners to learn how to fill out the Examination Time Survey. Given the scope of this study, it was not possible for PwC to ascertain whether all examiners have a uniformly high level of understanding of the definition of "insurance-related" and regulatory activities.

5.2.2. ETS Reliability

The results of the ETS are an important input in the OTR calculation through the determination of the Regulatory Cost Drivers (used to determine the portion of costs associated with regulatory activities as opposed to insurance). The ETS is completed by all PEs for each selected SE group from each region. The survey responsibilities rotate on an annual basis to the next SE group in alphabetical order. The reliability of the results attained from the ETS is particularly dependent on the following factors:

1) Adequacy of the sample size and representation relative to the population; and
2) Achieved margin of error for the estimated percentage of "insurance-related" activities per the survey results.

5.2.2.1. Sample Size and Representation Relative to Population

The results of the ETS covering the period from June 1, 2008 through May 31, 2009 (the "2008-09 ETS") were reviewed by PwC with respect to the representativeness and sufficiency of the sample relative to the underlying population. Table 1 presents the 2008-09 ETS' sample attributes in terms of its coverage of regions, SE groups, PEs, work hours under the Federal Supervision (code 22) program, work hours under the Federal Examination (code 10) program and the number of FCUs covered relative to the population.

Table 1: 2008-09 ETS sample attributes

	Number of Regions	Number of SE Groups	Number of PEs	Estimated Supervisory Examiner Groups work hours under Federal Supervision (code 22)	Estimated Supervisory Examiner Groups work hrs under Federal Examination (code 10)	Number of FCUs contacted under code 22 or code 10[10]
Selected in survey	5	5	31	4,859	17,064	279
Total in population	5	63	289	105,850	369,750	6,989
Percent to total	100%	8%	11%	5%	5%	4%

Source: PwC computation based on data provided by NCUA

An annual rotation of survey participants by SE group obtains representative coverage of the population across all regions and SEs, while minimizing the burden on field staff. Due to the rotational nature of the sample selection, slight departures from the population distribution can be reasonably expected in any given sample. Given this and based on the results shown in Table 1, the 2008-09 ETS sample can be considered to obtain adequate size and representation across regions, SE Groups, PEs, work hours and FCUs.

A credit union's insured asset size and its CAMEL rating have a direct correlation with the intensity of "insurance-related" review and activity required for that credit union. The percent of "insurance-related" activities for FCUs under the ETS by asset size and CAMEL rating can be seen in Table 2 below. The 2008-09 ETS results show that the bigger the credit union, the higher percentage of total examination hours that is insurance-related and the riskier the credit union according to the CAMEL rating, the higher the percentage of total examination hours that is insurance-related. Thus, it is crucial that the distribution of the ETS sample by asset size and CAMEL rating is consistent with the population under the ETS.

Table 2: Percent of insurance-related activities for surveyed FCUs by asset size and CAMEL rating

Percent of insurance-related activities for FCUs in each category (2008-09 survey)	Assets < $10M	$10 - $100M	$100 - $250M	$250 - $500M	>$500M
CAMEL 1	51.14%	59.47%	56.11%	63.18%	57.96%
CAMEL 2	59.09%	63.49%	57.91%	64.34%	66.77%
CAMEL 3	59.51%	62.45%	60.71%	63.74%	
CAMEL 4	67.53%	70.77%	78.67%		
CAMEL 5	67.44%				

Source: PwC computation based on data provided by NCUA

PwC compared the distribution of credit unions by: a) CAMEL rating; and b) asset size in the 2008-09 ETS sample with that in the overall population. Table 3 presents this comparison for CAMEL ratings while Table 4 shows the same comparison for asset sizes.

[10] The number of FCUs contacted under code 22 or code 10 and selected in the ETS sample includes duplicates.

Table 3: Distribution FCUs by CAMEL rating

Number of FCUs as of May 31, 2009	CAMEL 1	CAMEL 2	CAMEL 3	CAMEL 4	CAMEL 5	Total
Selected in survey (no duplicates)	39	90	48	11	1	189
Total FCUs	825	2,780	993	172	12	4,782
% Selected in survey (no duplicates)/Total	5%	3%	5%	6%	8%	4%
Sample distribution	**20.6%**	**47.6%**	**25.4%**	**5.8%**	**0.5%**	**100.0%**
Population distribution	17.3%	58.1%	20.8%	3.6%	0.3%	100.0%

Source: PwC computation based on data provided by NCUA

Table 4: Distribution of FCUs by asset size

Number of FCUs as of May 31, 2009	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M	Total
Selected in survey (no duplicates)	52	76	32	16	13	189
Total FCUs	2,124	1,970	375	160	153	4,782
% Selected in survey (no duplicates)/Total	2%	4%	9%	10%	8%	4%
Sample distribution	**27.5%**	**40.2%**	**16.9%**	**8.5%**	**6.9%**	**100.0%**
Population distribution	44.4%	41.2%	7.8%	3.3%	3.2%	100.0%

Source: PwC computation based on data provided by NCUA

Based on this comparison, it can be seen that while the distribution of credit unions by CAMEL rating in the sample is not significantly dissimilar to that in the population, this does not hold true to the same extent for the distribution of credit unions by asset size. Credit unions with less than $10 million in assets were under-represented in the sample as compared to the population while those with greater than $100 million in assets were slightly over-represented.

5.2.2.2. Achieved Margin of Error

NCUA determines the number of credit unions selected tin the survey based on a target margin of error of three percent at the 90, 95 and 99 percent confidence levels for the non-insurance workload percentage as estimated from the survey results.

PwC validated the formula used to calculate the required sample size to achieve the desired margin of error and found this to be accurately applied. Next, PwC reviewed a summary of the 2008-2009 ETS results captured separately for the Federal Examination (Code 10) and Federal Supervision (Code 22) Programs, including the means and standard deviations for the estimated non-insurance percentage determined for each Program through the survey. Since the survey results for the Federal Examination (Code 10) and Federal Supervision (Code 22) Programs are separately applied to relevant total workload hours associated with each Program, the sample size for the Federal Examination (Code 10) and Federal Supervision (Code 22) Programs should be evaluated separately so as to determine whether the respective sample sizes achieve the target margin of error.

Based on the results of 2008-09 ETS, PwC estimated that at the 95 percent confidence level, the achieved margin of error was approximately two percent for the Federal Examination (Code 10) Program and five percent for the Federal Supervision (Code 22) Program. The Federal Supervision (Code 22) Program had range of responses for the percent of non-insurance hours from 0 to 100 percent with a much larger standard deviation than that for Federal Examination (Code 10) Program.

Given this fact, in order to achieve the same three percent precision goal for the Federal Supervision (Code 22) Program, a sample size of 454 FCUs was needed as compared to only 56 for the Federal Examination (Code 10) Program as shown in Table 5.[11] While the actual sample size in the 2008-09 ETS for Federal Examination (Code 10) Program was comfortably above the required threshold, the sample size for the Federal Supervision (Code 22) Program of 143 credit unions was below the required threshold necessary for the target margin of error of three percent.

Table 5: 2008-09 survey sample size statistics

2008 - 2009 survey result	Federal Supervision (Code 22)	Federal Examination (Code 10)
Number of FCUs selected in the survey	143	186
Sample size at 95% confidence interval and 3% margin of error	454	56

Source: Data provided by NCUA

Conclusion

Based on PwC's review, the statistical methodology used by NCUA to estimate the non-insurance percentage of workload hours for each program in order to determine the OTR can be considered reasonable. While the sampling methodology obtains representation across regions, SE Groups, PEs, work hours and FCUs it can be improved with respect to the representativeness of the distribution of credit unions by asset size in the sample relative to the population.

Recommendations

An annual rotation for ETS survey participant selection obtains representative coverage of the population across all regions, SE Groups, PEs, work hours and FCUs, while minimizing the burden of field staff. Due to the rotational nature of the sample selection, slight departures from the population distribution are to be expected in any given sample. However, in order to obtain a more representative sample some consideration of sample allocation by asset size and CAMEL rating should be considered as there appears to be some correlation between these characteristics and the percent of "insurance-related" work hours.

Additionally, it is recommended that NCUA use sample sizes that are consistent with the calculated sample sizes for both the Federal Examination (Code 10) and Federal Supervision (Code 22) Programs, and specifically, that NCUA consider increasing the sample sizes for the Federal Supervision (Code 22) Program. With respect to the current sample selection methodology, that is, one SE Group is selected from each region, NCUA should consider selecting more than one SE Group from each region for the yearly ETS.

5.2.3. Other Allocation Factors

In addition to the Core and Special programs, there are Other NCUA Cost Centers for which the insurance/regulatory related percentages, the Other Allocation Factors, are not based on the ETS. These Other Allocation Factors are generally based on an assessment by department heads and the objectives and functions associated with these cost centers. The Other NCUA Cost Centers include the Division of Insurance and NCUA's central offices. Table 6 below provides the 2010 NCUA budget and the estimated "insurance-related" portion of these costs. The total cost for other NCUA cost areas was $85.1 million, which amounted to 42 percent of the total 2010 NCUA budget of $200.9 million. The Other Allocation Factors applied to the 42 percent of the NCUA budget thus have a material impact on how much of NCUA's total budgeted costs are deemed to be insurance-related.

As shown in Table 6, the percent of the overall budget that is made up examiner costs and which is deemed to be "insurance-related" based on the results of ETS was 68.9 percent. The equivalent figure of the other NCUA cost areas based on the Other Allocation Factors was 69.3 percent.

[11] At 95 percent confidence interval.

Table 6: 2010 NCUA budget and insurance-related cost

Based on 2010 OTR calculation (in million USD)	Total 2010 budget	Regulatory related cost	% regulatory related cost / Total 2010 budget	Insurance related cost	% "Insurance-related" cost / Total 2010 budget
Examiner costs (regional offices and field)	115.8	36.0	31.1%	79.7	68.9%
Other NCUA Cost Centers (Divisions of Insurance and central offices)	85.1	26.1	30.7%	59.0	69.3%
Total	200.9	62.2	69.0%	138.7	69.0%

Source: PwC computation based on data from 2010 OTR BAM

The following provides a brief overview of the Other NCUA Cost Centers and how the Regulatory Cost Drivers (or conversely the percentage of "insurance-related" costs) is in the 2010 OTR calculation for these cost areas:

- Divisions of Insurance ("DOI"): Each of NCUA's five regions has a regional DOI devoted to overseeing charters and fields of membership. Some NCUSIF "insurance-related" tasks (e.g., insurance coverage questions) are performed by DOI. In the 2010 OTR calculation, DOI's regulatory related percentage was estimated to be 71 percent.
- Asset Management and Assistance Center Costs ("AMAC"): AMAC conducts credit union liquidations and performs management and asset recovery. By definition, all of the AMAC costs were determined to be non-regulatory in nature. As a result, AMAC's regulatory related percentage was estimated to be zero percent in the 2010 OTR calculation.
- Office of Small Credit Union Initiatives ("OSCUI"): OSCUI's primary roles are described as assisting NCUA's risk mitigation program and foster credit union development, particularly the expansion of services provided by small credit unions to all eligible consumers. In the 2010 OTR calculation, OSCUI's regulatory related percentage was estimated to be 90 percent.
- Office of Corporate Credit Unions Costs ("OCCU"): OCCU supervises all corporate credit unions, including non-federally insured state-chartered corporate credit unions due to the systemic risk these institutions pose. Corporate credit unions provide a variety of investment services and payment systems for other credit unions. In the 2010 OTR calculation, OCCU's regulatory related percentage was estimated to be 20 percent.
- For the Office of Chief Financial Officer, the Office of Chief Information Officer and the Office of Human Resources, the regulatory related percentages for these three cost centers were all estimated to be 20 percent.
- For all other costs, which include NCUA board, the Office of Inspector General, etc., the regulatory related percentage calculated for total Core and Special Programs by using the ETS result was applied to such cost areas.

Conclusion

Based on PwC's review, the Other Allocation Factors used to determine the insurance/regulatory percentage of costs for Other NCUA Cost Centers were not found to be based on methods that can be considered as objective and verifiable as the ETS results used to determine the equivalent split for examiner costs. Given that these costs for Other NCUA Cost Centers constitute a significant portion of NCUA's overall budget, the final OTR as determined based on these Other Allocation Factors as an input can potentially be "distorted".[12]

[12] A similar issue was identified for the percent of non-insurance hours estimated for the Small Credit Unions Special Programs. Given the limited number of hours accounted for by this program, the potential distortion resulting from an unreasonable allocation to insurance vs. non-insurance related activities can be considered to be small.

Recommendations

PwC recognizes that implementing a survey of the scope and magnitude of the ETS may neither be feasible nor necessary, especially when the cost centers in question are associated with divisions or departments whose scope and activities are clearly laid out such that it can reasonably be ascertained as either 100 percent regulatory in nature or 100 percent insurance-related. For other NCUA cost areas, NCUA may be better served by having a process that is more objective, formal and verifiable for purposes of determining the percentage of "insurance-related" and regulatory costs. In the absence of such a formal and documented process it is difficult to verify whether the process adopted:

a) Yields results that are consistent across time in terms of their characterization and classification of the department/division activities are "insurance-related" versus regulatory; and/or

b) Robust enough to account for how a department's scope and nature of activities may change over time (e.g. due to change in the economic or regulatory environment).

Based on this, it is our recommendation that NCUA consider adopting a more formal and documented process for determining the Other Allocation Factors that are based on standard and consistent criteria.

5.2.4. Imputed SSA Value Calculation

As discussed above, in Step 3 of the OTR calculation, the estimated "insurance-related" costs in the NCUA budget plus an estimate of costs associated with the "insurance-related" activities conducted by the SSAs (i.e. the Imputed SSA Value) is allocated among FCUs and FISCUs based on their Insured Asset Share. One key assumption for the calculation is that the Imputed SSA Value provides a best estimate of the insurance costs incurred by SSAs and borne by FISCUs through operating fees.

Given the lack of accurate data on "insurance-related" costs incurred by SSAs and borne by FISCUs through operating fees as well as issues of comparability between NCUA costs and SSA costs, NCUA is not able to rely on actual costs incurred by SSAs on "insurance-related" activities. As a result, NCUA estimates this portion of the total "system wide" costs of "insurance-related" activities associated with NCUSIF (i.e. the Total System Insurance Costs) under the Imputed SSA Value calculation. NCUA calculates the Imputed SSA Value as the "incremental" "insurance-related" costs that NCUA would have to incur if the SSAs did not perform any "insurance-related" activities with respect to FISCUs whose assets are insured by NCUSIF. A description of this calculation is contained in section 3.1.4.2.

The step in determining the overall share of the Total System Insurance Costs that is "borne" by the FISCUs is especially important given the associated implications of equity between FCUs and FISCUs (that is addressed in detail under section 5.3). Given this, the Imputed SSA Value should ideally reflect a best estimate of the "fully burdened" costs incurred by the SSAs on "insurance-related" activities that are borne by the FISCUs via the operating fees paid by them. However, the step as implemented in the current OTR calculation excludes an estimate of the "fixed/overhead costs" (i.e. those costs that are unrelated to the number of examination hours) that SSAs incur in their performance of "insurance-related" activities. Other things equal, this implies that the Imputed SSA Value is potentially underestimated under the current method relative to the actual "insurance-related" costs incurred by the SSAs and borne by the FISCUs through the operating fees paid by them through the operating fee.[13]

[13] The fixed/overhead costs associated with NCUA's provision of "insurance-related" services to FCUs could be defined as the overhead costs that NCUA incurs and that are not dependent on the number of examination hours. Of the 2010 NCUA budget of $200.9 million, $ 138.7 million was estimated to be "insurance-related" costs. Out of the $138.7 million "insurance-related" costs, $79.7 million (calculated as the insured-related portion of regional cost and field costs, e.g. $115.8 million - $36.0 million) was incurred by field examiners, and the rest ($59.0 million and 43 percent of the total insurance relate costs) was incurred by other NCUA regional and central offices and could be treated as fixed/overhead costs. However, when the Imputed SSA Value is calculated, the costs that are based on the examination hours are imputed. The only consideration for the fixed/overhead cost is the additional cost that would have incurred by the Office of Human Resources for the additional hours spent by NCUA on the insurance activities for FISCUs. Consequently, since SSAs would have incurred certain level of fixed/overhead costs for its insurance activities, by treating the Imputed SSA Value as incremental NCUA

Since the ETS only covers FCUs, NCUA has to estimate the examination hours that would have to be incurred and the applicable percentage of these hours that would be incurred on "insurance-related" activities on FISCUs in the Imputed SSA Value calculation. Under the first step of the Imputed SSA Value calculation, the average examination hours for FCUs are summarized by asset size and CAMEL rating of FCUs. The average examination hours for FCUs in each asset size / CAMEL rating grouping are then multiplied by the corresponding number of FISCUs for the same asset size / CAMEL rating grouping in order to estimate the total examination hours that would have to be incurred on such FISCUs. The total of such estimated hours for all FISCUs across all asset size / CAMEL rating groupings is then calculated as the estimate of examination hours that would have to be incurred on all FISCUs.

Finally, the percent of "insurance-related" hours based on the ETS for the Federal Examination (Code 10) Program is applied to the total imputed FISCUs examination hours in order to calculate the total "insurance-related" hours that would have to be incurred on FISCUs. The inherent/implicit assumptions in the validity of this step in the Imputed SSA Value calculation are:

a) The percentage of total examination hours that is "insurance-related" does not systematically vary across credits unions that differ in terms of their asset size / CAMEL rating groupings (which is not the case as is discussed in section 5.2.2.1 and Table 2); and/or

b) The distribution of FCUs across asset size / CAMEL rating groupings is not dissimilar to the corresponding distribution for FISCUs such that results from one population can be extrapolated to the other.

Regarding the first assumption, the 2008-09 ETS results show that the bigger the credit union, the higher percentage of total examination hours that is "insurance-related" and the riskier the credit union according to the CAMEL rating, the higher percentage of total examination hours that is insurance-related. Therefore, the first assumption does not hold true.

If the second implicit assumption does not hold true such that the distributions of FCUs and FISCUs are significantly dissimilar, applying the overall percent of insurance related-hours for FCUs (which represents a weighted average across different "types" as captured by asset size / CAMEL rating groupings) to the total imputed examination hour for FISCUs would result in an inaccurate estimate that is skewed by factors specific to the population of FCUs and not shared by FISCUs.

In order to test the validity of this assumption, PwC compared the distribution of FCUs across asset size / CAMEL rating groupings with that for FISCUs as shown in Table 7 and Table 8 below.

Table 7: Distribution of FCUs by asset sizes and CAMEL ratings

FCUs (%) in each category (as of June 2009)	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M	TOTAL
CAMEL 1	4.0%	8.2%	2.3%	1.2%	1.6%	17.3%
CAMEL 2	25.7%	25.0%	4.4%	1.7%	1.3%	58.1%
CAMEL 3	12.3%	6.9%	1.0%	0.3%	0.3%	20.8%
CAMEL 4	2.2%	1.1%	0.1%	0.1%	0.1%	3.6%
CAMEL 5	0.1%	0.1%	0.1%	0.0%	0.0%	0.3%
TOTAL	44.4%	41.2%	7.8%	3.3%	3.2%	4,782/100%

Source: PwC computation based on data provided by NCUA

"insurance-related" costs, this step does not capture the true insurance costs incurred by SSAs and borne by FISCUs through operating fees.

Table 8: Distribution of FISCUs by asset sizes and CAMEL ratings

FISCUs (%) in each category (as of June 2009)	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M	TOTAL
CAMEL 1	4.4%	8.0%	1.9%	1.0%	2.2%	17.5%
CAMEL 2	20.8%	25.5%	5.4%	2.6%	2.8%	57.1%
CAMEL 3	8.9%	8.1%	2.6%	0.7%	0.8%	21.0%
CAMEL 4	1.3%	1.4%	0.7%	0.3%	0.5%	4.2%
CAMEL 5	0.0%	0.1%	0.0%	0.0%	0.0%	0.1%
TOTAL	35.5%	43.0%	10.6%	4.7%	6.3%	2,906/100%

Source: PwC computation based on data provided by NCUA

As the tables above illustrate, that the distributions for FCUs and FISCUs across asset size / CAMEL rating grouping is not dissimilar for the period in question. Consequently, using the overall percent of "insurance-related" hours based on the Examination Time Survey for FCUs to the total imputed FISCUs examination hour is not likely to undermine the accuracy of the results. Nevertheless, there is no certainty that this will continue to be the case in the future.

Conclusion

Based on PwC's review, the exclusion of an estimate of "fixed/overhead costs" that SSAs incur in their performance of "insurance-related" activities can lead to a potential underestimation of the Imputed SSA Value relative to the actual "insurance-related" costs incurred by the SSAs and borne by the FISCUs through the operating fees paid by them. Application of the overall percent of "insurance-related" hours based on the ETS implemented for FCUs to the total examination hours imputed for FISCUs in order to calculate an estimate of the total "insurance-related" hour for FISCUs is not unreasonable given that the distributions of FCUs and FISCUs across asset size and CAMEL ratings is not dissimilar.

Recommendations

The Imputed SSA Value is one of the most critical inputs to the OTR calculation and has an important bearing on how concerns related to equity between FCUs and FISCUs are addressed (as explained under the relevant section on equity below). To this end, the Imputed SSA Value should reflect an estimate of the "insurance-related" costs incurred by SSAs and borne by the FISCUs through the operating fees paid by them.

Ann estimate of SSAs' overhead-type costs should be incorporated in the current calculation of the Imputed SSA Value. The SSA fixed/overhead costs could be estimated as a percentage of the current Imputed SSA Value based on NCUA's estimate of SSAs' cost structure and a corresponding figure for NCUA.[14]

5.2.5. Insured Asset Shares

The basis used for allocating the total insurance costs between FCUs and FISCUs is the ratio of insured assets of FCUs and FISCUs respectively to the total insured assets of all credit unions (referred to in this document as the Insured Asset Shares). By using this as the allocation basis, the

[14] It is recommended that NCUA estimate the overhead-type costs that are incurred by SSAs and incorporate this estimate in the Imputed SSA Value computation. Due to the potentially excessive administrative burden associated with estimating this figure for each SSA (especially given the limited availability of data on specific SSAs), the overhead-type costs could be estimated by referencing NCUA's own cost structure. For example, it may be reasonable to assume that SSAs would have to incur overhead costs similar to NCUA's Office of the Chief Financial Officer and the Office of the Chief Information Office in their conduct of insurance related activities. The insurance related component of NCUA's costs for the Office of the Chief Financial Officer and the Office of the Chief Information Office were estimated as $1.5 million and $2.7 million respectively in the 2010 OTR calculation. This figure amounts to 5.4 percent of the insurance related cost incurred by the NCUA regional office and field ($79.7 million). Applying this percentage (i.e. 5.4 percent) to the cost of full time equivalent positions for FISCUs ($21.2 million) as determined under the Imputed SSA Value calculation, the SSAs' overhead-type costs can be estimated as $1.1 million.

"insurance-related" costs included in by the OTR "apportioned" between FCUs and FISCUs in a manner that mirrors the basis used to determine how premiums from NCUSIF are charged to the credit unions and how dividends are paid out. When NCUSIF transfers funds to NCUAOF through the OTR, the funds that are potentially available for dividends to be paid out to FCUs and FISCUs will decrease for each credit union in proportion to the credit union's insured assets. Similarly, in the case that NCUA assesses an insurance premium payment by FCUs and FISCUs to NCUSIF; the premium is paid as a percentage of the insured assets. Thus the "insurance-related" costs through the OTR are ultimately "borne" by FCUs and FISCUs by the effect it has on dividend paid by NCUSIF to the credit unions or the premium charged to them each of which is done on the basis of the credit union's insured assets. Thus, the OTR "burden" for FCUs and FISCUs is always proportional to their insured assets. Therefore, it is imperative that the OTR calculation takes into account the same asset allocation basis to allocate the insurance costs between FCUs and FISCUs which is consistent with the mechanism used for the determination of dividend payouts/premium charges.

The OTR is ultimately be "borne" by FCUs and FISCUs in proportion to their insured assets. If a different allocation basis was used to allocate the total insurance costs between FCUs and FISCUs, as discussed above, this would create a distortion between the insurance costs that were intended to be borne by FCUs and FISCUs (e.g. according to the different allocation base) and the true costs that would be borne by FCUs and FISCUs through the mechanism governing how the dividend or insurance premium is assessed.

Conclusion

Based on PwC's review, the use of the share of insured asset as the basis to allocate the insurance costs between FCUs and FISCUs was found to be reasonable and appropriate.

5.2.6. Sensitivity Analysis

The purpose of this section is to quantify the impact of changes in some of the inputs in the OTR calculation discussed above on the final OTR so as to indicate the relative importance of each of these inputs.

ETS Results

Table 9 and Table 10 provide the sensitivity of the OTR calculation due to variations in the ETS results for the Federal Examination Program or the Federal Supervision Program when the ETS results vary by five percentage points and ten percentage points. For the OTR calculation, an increase in the percentage of regulatory activities as determined from the ETS will decrease the amount of cost associated with NCUA insurance activities and will subsequently decrease both the OTR in percentage terms and the USD amount. Based on the sensitivity analysis, for the Federal Examination Program, a five percentage point increase in the percentage of regulatory related activities will result in a 0.8 percentage point decrease in the OTR and $1.5 million reduction in the USD amount of the OTR. Similarly, for the Federal Supervision Program, a five percentage point increase in the percentage of regulatory related activities will result in a 0.6 percentage point decrease in the OTR and $1.1 million reduction in the USD amount of the OTR. Similar results hold for the ten percentage point increase and decreases in the percentage of regulatory related activities.

Table 9: Sensitivity analysis - percentage of regulatory related activities (Federal Examination Program)

Change in percentage of regulatory related activities - Federal Examination Program	Change to percentage OTR	Change to USD amount OTR (in million USD)
-10%	1.5%	3.1
-5%	0.8%	1.5
+5%	-0.8%	(1.5)
+10%	-1.5%	(3.1)

Source: PwC computation based on data provided by NCUA

Table 10: Sensitivity analysis - percentage of regulatory related activities (Federal Supervision Program)

Change in percentage of regulatory related activities - Federal Supervision Program	Change to percentage OTR	Change to USD amount OTR (in million USD)
-10%	1.1%	2.2
-5%	0.6%	1.1
+5%	-0.6%	(1.1)
+10%	-1.1%	(2.2)

Source: PwC computation based on data provided by NCUA

Other Allocation Factors

Table 11 provides the sensitivity of the OTR calculation due to variations in the Other Allocation Factors for Other NCUA Cost Centers when these factors vary by five percentage points and ten percentage points, respectively. For the OTR calculation, an increase in the percentage of regulatory related activities for Other NCUA Cost Centers will decrease the amount of cost associated with NCUA insurance activities and will subsequently decrease both the OTR in percentage and the USD amount of the OTR. As shown in Table 6, the overall percentage of regulatory related activities was estimated to be 30.7 percent. Based on the sensitivity analysis, for Other NCUA Cost Centers, a five percentage point increase in the percentage of regulatory related activities will result in a 2.1 percentage point decrease in the OTR and $4.3 million reduction in the USD amount of the OTR. A ten percentage point increase in the percentage of regulatory related activities will result in a 4.2 percentage point decrease in the OTR and $8.5 million reduction in the USD amount of the OTR.

Table 11: Sensitivity analysis - percentage of regulatory related activities (Other Allocation Factors)

Change in percentage of regulatory related activities - Other Allocation Factors	Change to percentage OTR	Change to USD amount OTR (in million USD)
-10%	4.2%	8.5
-5%	2.1%	4.3
+5%	-2.1%	(4.3)
+10%	-4.2%	(8.5)

Source: PwC computation based on data provided by NCUA

Imputed SSA Value

The 2008-09 Imputed SSA Value was calculated to be $21.1 million. For the OTR calculation, an increase in the amount of the Imputed SSA Value will increase the Total System Insurance Costs and subsequently increase the amount of costs on the insurance activities allocated to credit unions according to the Insured Asset Share. An increase in the amount of the Imputed SSA Value also translates into an increase in the amount of the insurance costs borne by FISCUs through operating fees paid to SSAs. With only a portion of the increase in Imputed SSA Value allocated to FISCUs and the amount of insurance costs borne through operating fees increased by the whole amount of the increase in the Imputed SSA Value, the amount of the insurance costs borne through the OTR by FISCUs will decrease. Subsequently, the OTR in percentage terms and the USD amount of the OTR will decrease with the increase in the amount of the Imputed SSA Value.

Table 12 provides the sensitivity of the OTR calculation due to variations in the Imputed SSA Value when this value varies by $3.0 million, $5.0 million and $10.0 million, respectively. Based on the sensitivity analysis, a $5.0 million increase in the amount of the Imputed SSA Value will result in a 3.0 percentage point decrease in the OTR and $6.0 million reduction in the USD amount of the OTR. Similar results hold for the $3.0 million and $10.0 million increase and decreases in the amount of Imputed SSA Value.

Table 12: Sensitivity analysis - Imputed SSA Value

Change in Imputed SSA Value (in million USD)	Change to Percentage OTR	Change to USD amount OTR (in million USD)
(10.0)	6.0%	12.0
(5.0)	3.0%	6.0
(3.0)	1.8%	3.6
3.0	-1.8%	(3.6)
5.0	-3.0%	(6.0)
10.0	-6.0%	(12.0)

Source: PwC computation based on data provided by NCUA

5.3. Equity

Equity considerations require that the calculation and administration of the OTR should not, ex-ante and for reasons beyond the control of the credit unions, favour or disadvantage one type of credit union (i.e. federal versus state chartered) over another. FCUs indirectly "bear" "insurance-related" costs through the OTR that is administered by NCUAOF for NCUSIF (and which impacts the amount of premiums charged or dividends paid) as well as directly through the operating fees paid by FCUs to the NCUA. Similar to this, FISCUs indirectly "bear" "insurance-related" costs incurred by NCUA through the OTR that is administered by NCUAOF for NCUSIF as well as directly bear the "insurance-related" costs incurred by the respective SSAs through the operating fees charged by them.

A widespread concern in industry, especially among FISCUs and the associated industry groups, is that the existing calculation and administration of the OTR inherently disadvantages FISCUs relative to FCUs. The basis for this concern is the argument that a higher OTR (due to a higher proportion of NCUA's budget being characterized as "insurance-related" costs) adversely affects both FCUs and FISCUs through its impact on premiums charged (or dividends paid) by NCUSIF (on the basis of Insured Asset Shares). In addition, the higher OTR specifically and favourably affects FCUs through a one-for-one reduction in their operating fees (given that a higher proportion of the NCUA budget is covered by the OTR). Under this view, a higher OTR (through an overestimation of the NCUA budget's composition of "insurance-related" costs) effectively amounts to a cross-subsidy by the FISCUs (that are insured by NCUA through NCUSIF but chartered and regulated by state authorities) to the FCUs (that are insured as well as chartered and regulated by NCUA).

In order to assess the validity of this concern, PwC reviewed the OTR Methodology, specifically with respect to the steps associated with the calculation of the Imputed SSA Value to highlight the following observations:

- First, the inclusion of the Imputed SSA Value step ensures that of NCUA's total costs that are determined to be "insurance-related" ($140.3 in 2010) only a portion ($115.0 in 2010) are received via the OTR while the remainder ($25.3 million in 2010) is recovered <u>only</u> from FCUs through the operating fees paid by them;

- Second, the higher the Imputed SSA Value, with all other factors held constant, the greater the amount of NCUA's total "insurance-related" costs that are recovered solely from FCUs through their operating fees;
- Third, the factors that result in a higher portion of NCUA's budgeted costs being classified as "insurance-related" (e.g. ETS results) are also used in the calculation of the Imputed SSA Value; and,
- Finally, to the extent that the Imputed SSA Value is an unbiased and fair estimate of the "insurance-related" costs incurred by SSAs on the FISCUs, the OTR Methodology yield an equitable outcome in terms of the proportion of "insurance-related" costs "borne" by the FCUs and FISCUs, respectively, through the OTR versus that which is paid for by them via their respective operating fees paid to the separate regulators.

PwC reviewed the OTR calculation and found that the OTR calculation is designed to ensure that insurance costs borne through the operating fees and the overhead transfer is the same for FCUs and FISCUs if the Imputed SSA Value provides a reasonable estimate of the insurance costs incurred by SSAs and borne by FISCUs through operating fees. FCUs and FISCUs are paying a part of the insurance costs through the overhead transfer and are paying the rest through their operating fees to NCUA and SSAs. Table 13 below shows that with respect to the 2010 OTR, the ratio of the "insurance-related" costs borne through the OTR relative to the total insurance costs (i.e. including that which is paid for via the respective operating fees) is the same for FCUs and FISCUs, *to the extent that the Imputed SSA Value is a reasonable estimate of the actual SSA "insurance-related" costs.*

Table 13: FCUs and FISCUs insurance costs

Based on 2010 OTR calculation (in million USD)	Formula	Total	FCUs	FISCUs
Total insurance costs incurred by NCUA	a	140.3		
Imputed SSA Value	b	21.1		
Total insurance related costs	c=a+b	161.3		
Percent of insured shares	d		54.6%	45.4%
Insurance costs incurred for FCUs and FISCUs	e=c*d		88.1	73.3
2010 overhead transfer to NCUSIF	f	115.0		
Insurance costs borne through the OTR	g=f*d		62.8	52.2
Insurance costs borne through operating fees	h=e-g		25.3	21.1
Percent of insurance costs through the OTR to total	i=g/(g+h)		71.3%	71.3%

Source: PwC computation based on data provided by NCUA

Additionally, in order to evaluate the concern among FISCUs and associated industry groups, PwC analyzed the ratio of total operating fees to total insured assets (the "Operating Fee to Insured Asset Share") for the FCUs and compared this to the corresponding ratio for FISCUs. While this comparison is clouded by the differences between regulations governing the chartering of FCUs versus those for FISCUs, it was nevertheless applied under the view that if the OTR Methodology inherently favoured the FCUs versus FISCUs, this is likely to be reflected in a lower Operating Fee to Insured Asset Share for FCUs relative to FISCUs.[15]

Table 14 below shows the Operating Fee to Insured Asset Share for FCUs and FISCUs for 2007 through 2009. Based on this there does not appear to be a reasonable basis to conclude that the OTR favors one type of credit unions over another.

[15] The state operating fees are the cumulative fees across all state charters. The aggregate fees, to some extent, mitigate the concerns associated with the variability across states.

Table 14: Operating fee to Insured Asset Share (2007 - 2009)[16]

% Operating fees / Amount of insured asset shares	FCUs	FISCUs
2007	0.0207%	0.0195%
2008	0.0201%	0.0214%
2009	0.0206%	0.0171%
Average 2007 - 2009	0.0205%	0.0192%

Source: PwC computation based on data provided by NCUA

Conclusion

Based on PwC's review, there was no reasonable basis to conclude that the OTR Methodology ex-ante and for reasons beyond the control of the credit unions, favours or disadvantages any one type of credit unions (i.e. federal versus state chartered) over another.

5.4. Reasonable Administrative Burden

The OTR Methodology needs to balance the objectives of transparency, accuracy and equity as listed above, while keeping costs of implementation manageable. The OTR Methodology should be easily implementable without any unnecessary and unrealistic administrative burden.

Conclusion

Based on PwC's review, even though the calculation methodology is a multi-layered complex algorithm, the costs and burdens of implementation were not viewed by management as significant impediments.

[16] Appendix B presents the 2007 - 2009 financial data used for the calculation.

6. Conclusion

6.1. Overview of Approach

PwC has been engaged by NCUA to evaluate the OTR administered between NCUAOF and NCUSIF. To complete this study PwC undertook the following steps:

1) Conducted interviews with and requested key information from NCUA personnel identified as being relevant in order to develop a comprehensive understanding regarding the NCUA's OTR Methodology, the constituent steps and underlying assumptions;

2) Identified and conducted interviews with "key stakeholders" in the U.S. credit union system that included credit unions and trade associations for federal and state charter credit unions as well as that for the state regulatory authorities;

3) Identified the stakeholders' views on attributes that an appropriate OTR Methodology should possess as well as the concerns and issues with regards to the current OTR Methodology as perceived by these stakeholders;

4) Developed a set of criteria to evaluate the current OTR Methodology based on the concerns and issues identified by the key stakeholders; and

5) Evaluated NCUA's current OTR Methodology against the set of criteria so as to arrive at a conclusion on the soundness and reasonableness of the current OTR Methodology and develop recommendations and suggestions for improvement.

Based on the interviews and the material, PwC identified the following criteria for purposes of evaluating the current OTR Methodology and recommending possible revisions/amendments/modifications for NCUA's consideration:

1) Transparency - The OTR Methodology and its underlying steps, assumptions and data sources should be communicated clearly and regularly to stakeholders in the credit union system so as to develop broad and consistent understanding among them. Of fundamental importance to the computation of the OTR is the distinction between activities and associated expenses deemed to be associated with NCUA's role in managing the NCUSIF (i.e. expenses that can be characterized as being "insurance related" and thus included in the OTR) and others classified as those in keeping with the NCUA's role as regulator (and thus excluded from the OTR). Given this, the OTR Methodology should be based on a classification that represents a consensus (among the NCUA and other stakeholders in the credit union system) with regards to such activities.

2) Accuracy - Subject to the classification of activities as "insurance related" and others, the calculation of the OTR should be predicated on a methodology that is able to measure and track the expenses associated with such activities accurately and consistently across different regions and over time.

3) Equity - The calculation and administration of the OTR should not, ex-ante, favour or disadvantage one type of credit unions (i.e. federal versus state chartered) over another.

4) Reasonable administrative burden - The OTR Methodology needs to be such as to balance the objectives of criterion 1 through 3 while keeping costs of implementation manageable.

6.2. Summary of Conclusions

The findings and conclusions of this study, which are based on the analysis of all available facts and circumstances, are as follows:

6.2.1. Transparency

Based on PwC's review, the OTR Methodology was considered lacking in terms of the extent to which the classification of NCUA's activities between insurance and regulatory (upon which the methodology is fundamentally dependent) represents a consensual view on such a characterization in the industry. Further, there was found to be dissatisfaction within the industry with respect to NCUA's efforts to communicate and explain the OTR Methodology in adequate detail.

It is recommended that NCUA consider providing more visibility on how it characterizes its activities to the different industry groups and credit unions and possibly solicit their feedback with regards to the reasonableness and accuracy of the classification. NCUA should also consider steps aimed at making the methodology itself more transparent, along with all of the assumptions and steps that are utilized. Possible ways of achieving this include more frequent interactions with the stakeholders through different channels (e.g. meeting, publications, etc.).

6.2.2. Accuracy

PwC analyzed the following five elements from the perspective of their ability to accurately and consistently "measure" the expenses associated with the management of NCUSIF incurred on behalf of all federally-insured credit unions:

6.2.2.1. Implementation of Examination Time Survey - Education and Training of Examiners

Based on PwC's review, the current definition of insurance and regulatory activities is appropriately communicated to the examiners through well-structured tools and training modules. The process provides enough resources available for examiners to learn about how to fill the Examination Time Survey.

6.2.2.2. Examination Time Survey Reliability

Based on PwC's review, the statistical methodology used by NCUA to estimate the non-insurance percentage of workload hours for each program in order to determine the OTR can be considered reasonable. While the sampling methodology obtains representation across regions, SE Groups, PEs, work hours and federal credit unions, it can be improved with respect to the representativeness of the distribution of credit unions by asset size in the sample relative to the population.

In order to obtain a more representative sample, it is recommended that consideration of sample allocation by asset size and CAMEL rating should be taken into account as there appears to be some correlation between these characteristics and the percent of "insurance-related" work hours. Additionally, it is recommended that NCUA use sample sizes that are consistent with the calculated sample sizes for both programs under survey, and specifically, that NCUA consider increasing the sample sizes for the Federal Supervision (Code 22) Program.

6.2.2.3. Other Allocation Factors

Based on PwC's review, the Other Allocation Factors used to determine the insurance/regulatory percentage of costs for Other NCUA Cost Centers were not found to be based on methods that can be considered as objective and verifiable as the ETS results used to determine the equivalent split for examiner costs. Given that these costs for Other NCUA Cost Centers constitute a significant portion of NCUA's overall budget, the final OTR as determined based on these Other Allocation Factors as an input can potentially be "distorted".

Conclusion

It is recommended that NCUA consider adopting a more formal and documented process for determining the Other Allocation Factors that are based on standard and consistent criteria.

6.2.2.4. Imputed SSA Value Calculation

Based on PwC's review, the exclusion of an estimate of "overhead-type costs" that SSAs incur in their performance of "insurance-related" activities can lead to a potential underestimation of the Imputed SSA Value relative to the actual "insurance-related" costs incurred by the SSAs and borne by FISCUs through the operating fees paid by them. Application of the overall percent of "insurance-related" hours based on the ETS implemented for FCUs to the total examination hours imputed for FISCUs in order to calculate an estimate of the total "insurance-related" hour for FISCUs is not unreasonable given that the distributions of FCUs and FISCUs across asset sizes and CAMEL ratings is not dissimilar.

It is recommended that the Imputed SSA Value should reflect an estimate of the "insurance-related" costs incurred by SSAs and borne by FISCUs through the operating fees paid by them. An estimate of SSAs' overhead-type costs should be incorporated in the current calculation of the Imputed SSA Value. The estimate of SSAs' overhead-type costs could be calculated as a percentage of the current Imputed SSA Value based on a corresponding figure for NCUA.

6.2.2.5. Insured Asset Shares

Based on PwC's review, the use of insured assets as the basis to allocate the insurance costs between FCUs and FISCUs was found to be reasonable and appropriate.

6.2.3. Equity

Based on PwC's review , there was no reasonable basis to conclude that the OTR methodology ex-ante and for reasons beyond the control of the credit unions, favours or disadvantages any one type of credit unions (i.e. federal versus state chartered) over another.

6.2.4. Reasonable Administrative Burden

Based on PwC's review, even though the calculation methodology is a multi-layered complex algorithm, the costs and burdens of implementation were not viewed by management as significant impediments.

Appendix A. 2010 OTR Calculation Steps

The following provides the 2010 OTR calculation steps from the NCUA Board Action Memorandum on 2010 OTR dated November 19, 2009.

STEP 1 – Workload Program (2010)

Core Programs	2010 Workload Hours	Non-Insurance Percent	Non-Insurance Hours	Allocation Basis
Federal Examination	369,750	40%	149,342	Examiner time survey.
Federal Supervision	105,850	33%	34,645	Examiner time survey.
State Exam & Supv	130,784	0%	0	FISCU work is insurance-related.
State Exam Review	7,963	0%	0	FISCU work is insurance-related.
5300 Program	50,518	22%	11,139	FCU time uses examiner time survey. FISCU portion at all insurance-related.
Total Core Program	**664,865**	**n/a**	**195,125**	
Special Programs				
Fair Lending Exams	3,000	100%	3,000	Regulatory program.
Agricultural Lending	364	0%	0	NCUSIF risk management program.
FOM & Chartering	403	100%	403	Regulatory program.
RCMS	5,200	0%	0	NCUSIF risk management program.
RISOs	1,500	40%	606	Allocation based on % from time surveys.
Small Credit Unions	19,484	90%	17,629	For FCUs is a regulatory program. However, approximately 10% of the time in this program is related to work in FISCUs.
CUSO Exams	1,500	0%	0	NCUSIF risk management program.
Total Special Program	**31,451**	**n/a**	**21,638**	
Total Core & Special Programs	**696,316**	**n/a**	**216,763**	
Percent of Workload Programs devoted to NCUA's Non-Insurance Role			**31%**	

STEP 2 – Financial Budget (2010)

Cost Area 2010 Financial Budget	Dollar Budget ($M)	Non-Insurance Percent	Non-Insurance Cost ($M)
Divisions of Insurance: Primarily non-insurance (regulatory) function involving chartering and fields of membership, net of work related to share insurance coverage for members and FISCUs.	$5.1	71%	$3.6
All Other Region Costs: Based on non-insurance related portion of core and special workload programs.	$115.8	31%	$36.0
Asset Management Assistance Center and Assistance Program: NCUSIF function that handles liquidation payouts, manages assets acquired from liquidations and assistance programs, and manages recoveries for the National Credit Union Share Insurance Fund.	$3.5	0%	$0.0
Office of Small Credit Unions: Primarily non-insurance related function to facilitate the expansion of credit union services. However, 10% FISCU participation rate.	$5.3	90%	$4.8
Office of Corporate Credit Unions: NCUSIF risk management function other than chartering, FOM, and mergers.	$7.9	20%	$1.6
Office of Chief Financial Officer: Based on non-insurance percent, net of staff time associated with NCUSIF accounting.	$7.7	20%	$1.5
Office of Chief Information Officer: Combination of support for state and federal examiners and staff related to hardware and software, as well as efforts for program development driven by Examination and Insurance.	$13.7	20%	$2.7
Office of Human Resources: Based on non-insurance percent, adjusted for Division of Training and Development time related to training for state examiners and staff.	$10.7	20%	$2.1
All Other Costs: Based on non-insurance portion of core and special workload programs. Includes NCUA board, Office of Inspector General, etc.	$31.3	31%	$9.7
Total 2010 NCUA Budget	$200.9		**$62.2**

NOTE: The totals may not reconcile due to the results of rounding.

STEP 3 – Calculate NCUSIF Costs (2010)

Imputed NCUSIF Costs

	Millions
2010 Financial Budget	$200.9
Non-Insurance Costs (see Step 2)	- $62.2
SSA Imputed Value	+ $21.1
Direct Operational Charges to NCUSIF	+ $1.6
Total NCUSIF Imputed Costs	= $161.3

STEP 4 – Allocation of NCUSIF Costs (2010)

Insured Shares Allocation

	FCU	FISCU
Total Cost of Providing NCUSIF Insurance	$161.3	$161.3
Times Proportional Allocation Basis	54.6%	45.4%
Equals Allocated Insurance Costs	$88.1	**$73.3**

Net of Imputed SSA Value

	Millions
Total Allocated Insurance Costs - FISCUs	$73.3
Minus SSA Insurance Work Imputed Value	$21.1
Equals Net Cost of NCUSIF Insurance – FISCUs	**$52.2**

Dollar Amount of OTR

	FISCUs	FCUs	Dollar Amt
FISCU Portion of NCUA Insurance Cost	$52.2M	$62.8M	115.0M
Divided by Percentage of Insured Shares	45.4%	54.6%	

OTR as a Percent of Budget

Dollar Amount of OTR	$115.0M
Divided by NCUA Budget	$200.9M
Equals OTR	**57.2%**

Imputed SSA Value Step 1 – 2010

Gross Workload

Table 1

Average Exam Time (Hours) FCU (Dec. 2008)	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M
CAMEL 1	46	78	144	193	310
CAMEL 2	51	89	168	208	322
CAMEL 3	56	109	202	278	326
CAMEL 4	67	167	333	351	381
CAMEL 5	96	167	399	351	381

Table 2

FISCUs (#) in Each Category (as of June 2009)	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M
CAMEL 1	128	232	56	30	63
CAMEL 2	604	740	157	77	82
CAMEL 3	260	234	75	20	22
CAMEL 4	39	41	19	9	14
CAMEL 5	0	2	1	0	1

Table 3

Total Hours (Table 1 cells x Table 2 cells)	Assets < $10M	$10M - $100M	$100M - $250M	$250M - $500M	> $500M
CAMEL 1	5,888	18,096	8,064	5,790	19,530
CAMEL 2	30,804	65,860	26,376	16,016	26,404
CAMEL 3	14,560	25,506	15,150	5,560	7,172
CAMEL 4	2,613	6,847	6,327	3,159	5,334
CAMEL 5	0	334	399	0	381
Total	53,865	116,643	56,316	30,525	58,821
			Total Gross	Exam Hours	316,170

Imputed SSA Value Step 2 - 2010

Net Workload

Net of Insurance-Related Time

FISCUs	Hours
Gross FISCU Exam Hours	316,170
x Insurance Factor Based on Exam Time Survey	59.6%
= Total Insurance Hours w/out Risk-Based Scheduling	188,469

Net of Risk-Based Scheduling

	Hours
Total Insurance Hours w/out Risk-Based Scheduling	188,469
- Not Eligible for Deferral Hours	181,084
= Eligible for Deferral	7,385
x Adjustment for Risk-Based Scheduling	66.7%
= Annual Eligible for Deferral Hours	2,462
+ Not Eligible for Deferral Hours	181,084
+ Adjustment for Additional Supervision	978
= Total FISCU Hours with Risk-Based Scheduling	186,986

Net of NCUA Time in FISCUs

	Hours
Total FISCU Hours with Risk-Based Scheduling	186,986
+ 2010 Budgeted Supervision Hours	40,242
- 2010 Budgeted Insurance Review Hours	90,542
- 2010 Budgeted State Exam Report Review Hours	7,963
Total Additional FISCU Insurance Hours Needed	**128,723**

Imputed SSA Value Step 3 - 2010

Additional Staff Needed

Examiner Productive Time

2010 Core and Special Workload Program Hours	696,316
/ Total 2010 Workload Program Hours	1,272,649
= Productivity Ratio	54.7%
Total Work Hours in a Year Per Full Time Equivalent (FTE)	2,080
x Productivity Ratio	54.7%
= Productive Hours per FTE Examiner	1,138

Number of Examiners Needed

Net Additional FISCU Hours Needed	128,723
/ Productive Hours per FTE Examiner	1,138
= Number of Additional FTE Examiners Needed	**113.1**

Total Additional Staff Needed

Additional Staff Needed	Ratio Examiners to Position	FTEs Per Position
Examiners	1/1	113.1
Supervisory Examiners	1/9	12.6
Analysts	1/15	7.5
Directors	1/25	4.5
Other Regional Staff	1/20	5.7
= Number of Additional FTEs Needed		**143.4**

Imputed SSA Value Step 4 - 2010

Imputed Cost

Gross Cost

Total Cost of Regions (2010 Budget)	$120,860,762
/ FTEs in Regions (2010 Budget)	816.25
= Per Regional FTE Cost	$148,068
x Number of Additional FTEs Needed	143.4
= Cost of Additional Regional Positions	$21.2M

Net Cost

	Millions
Cost of Additional Regional Positions	$21.2
+ Additional OHR Costs (12.9% of $10.7 million budget)	$1.4
- SSA Training and Equipment Cost	$1.6
= Imputed SSA Value	**$21.1**

Appendix B. 2007, 2008 and 2009 Operating Fee to Insured Asset Share

Table B-1: 2007 Operating fee to Insured Asset Share

2007 (in million USD)	Total	FCUs	FISCUs
Operating fee	[illegible]	64.0	49.1
Amount of insured asset shares	560,832	308,917	251,915
Percent of insured asset shares	[illegible]	55.1%	44.9%
% Operating fee /Insured Asset Share		**0.0207%**	**0.0195%**

Table B-2: 2008 Operating fee to Insured Asset Share

2008 (in million USD)	Total	FCUs	FISCUs
Operating fee	[illegible]	72.4	64.0
Amount of insured asset shares	658,900	360,418	298,482
Percent of insured asset shares	[illegible]	54.7%	45.3%
% Operating fee /Insured Asset Share		**0.0201%**	**0.0214%**

Table B-3: 2009 Operating fee to Insured Asset Share

2009 (in million USD)	Total	FCUs	FISCUs
Operating fee	[illegible]	81.7	56.2
Amount of insured asset shares	724,800	395,741	329,059
Percent of insured asset shares	[illegible]	54.6%	45.4%
% Operating fee /Insured Asset Share		**0.0206%**	**0.0171%**

Table B-4: Average 2007 - 2009 Operating fee to Insured Asset Share

Average 2007 - 2009 (in million USD)	Total	FCUs	FISCUs
Operating fee	[illegible]	72.7	56.4
Amount of insured asset shares	648,177	355,025	293,152
Percent of insured asset shares	[illegible]	54.8%	45.2%
% Operating fee /Insured Asset Share		**0.0205%**	**0.0192%**

Source: PwC computation based on data provided by NCUA and data from 2007, 2008 and 2009 NCUA financial statements pwc.com