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The Implications of Prompt Corrective Action for Insurance Firms

Therese M. Vaughan

Abstract: S. 40, the National Insurance Act of 2007, requires the development of a system of Prompt Corrective Action (PCA) for federally chartered insurers. This paper discusses the issues associated with developing a system of PCA and makes recommendations regarding its structure. First, the paper considers the historical motivation for the development of PCA in banking and insurance. Second, the paper provides an overview of PCA in banking and reviews the evidence regarding the extent to which banking regulators rely on PCA and its effects on FDIC costs. Third, the paper provides an overview of the risk-based capital requirements in insurance, and compares those requirements with PCA in banking. Fourth, the paper considers the banking requirements related to Least Cost Resolution (LCR) and related language in S. 40. The paper concludes that PCA requirements should be included in any Optional Federal Charter (OFC) legislation, and that NAIC RBC requirements provide a good initial structure. Second, the paper concludes that other regulatory authority giving the Commissioner discretion to intervene beyond PCA is essential in any OFC system. S. 40 would benefit from the inclusion of a provision requiring review of costly insolvencies and transparency with respect to the results of that review and the costs of resolving insolvent insurers. Finally, S. 40 provides a clear objective for resolving insolvencies, a positive change from current insurance laws, but the appropriateness of the objective is dependent on the continued existence of the current guaranty fund system.

About the Author: Former Iowa Insurance Commissioner **Therese M. Vaughan** is the Robb B. Kelley distinguished professor of insurance and actuarial science at Drake University, where she had previously served as director of the Insurance Center and chair of the Insurance Department from 1988 to 1994. She served as president of the National Association of Insurance Commissioners (NAIC) in 2002 and has been active in the NAIC's regulatory modernization efforts, international affairs and coordination with banking and securities regulators, both in the United States and internationally. Vaughan holds a Ph.D. in managerial science and applied economics from The Wharton School at the University of Pennsylvania.

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Background

The NAIC's Solvency Policing Agenda of 1990 included a number of initiatives aimed at strengthening state insurance solvency regulation. The effort took place against a backdrop of strident criticism of state insurance regulation. Life and property-liability insurer insolvencies had increased during the latter half of the 1980s. This increase in insolvencies, coupled with Congressional criticism of insurance regulatory failures, prompted an aggressive effort to improve the system. One of the most far-reaching efforts was the development of risk-based capital requirements (RBC) for insurance companies. The RBC requirements in insurance were implemented along with a series of triggers for regulatory and company action as an insurer's capital level declined – state insurance regulation's version of prompt corrective action (PCA). [1]

S. 40, the National Insurance Act of 2007, establishes a federal regime for insurance regulation and introduces an optional federal charter for insurers subject to regulation by the Commissioner of National Insurance housed in the U.S. Treasury. Section 1217 of the bill requires the development of a system of PCA for federally chartered insurers "to ensure that any hazardous financial condition of such a national insurer is resolved effectively and efficiently, with the fewest possible losses." Specifically, the bill charges the GAO with conducting a study to

[1] The formula for life and health insurance companies was approved by the NAIC in December 1992, effective for the 1993 annual statements filed in March 1994. The RBC formula for property-casualty insurers became effective for the 1994 annual statements and was first filed in March 1995. RBC requirements for specialty health insurers and HMOs were implemented in 1998. While the NAIC has no authority to compel states to adopt any NAIC model, the NAIC's accreditation program, discussed later, provides strong encouragement for states to adopt the risk-based capital and a number of other solvency-related models. As a result, the NAIC RBC Model Act has been adopted by nearly all states and the District of Columbia. The one exception is New York, which is not accredited. The NY Insurance Department requires insurers to submit their RBC calculations to the Department and to the NAIC, but NY's RBC statute, which authorizes the Insurance Department to take regulatory action based on RBC levels, does not apply to property/casualty insurance companies.

identify the appropriate structure of procedures and requirements for taking PCA with respect to national insurers and making recommendations within 6 months of the enactment of the bill. In developing its recommendations, the GAO must consider the elements of Section 12 of the Federal Deposit Insurance Corporation Act (i.e., PCA in banking) and the NAIC Model Regulation to Define Standards and Commissioner's Authority for Companies Deemed to be in Hazardous Financial Condition of the NAIC, as updated in 2006. Within the following 6 months, the National Insurance Commissioner must promulgate regulations that are appropriate and consistent with the GAO recommendation. The bill indicates that these regulations may encompass capital measures and categories, capital standards, supervisory criteria, restrictions on permissible actions of such insurers, requirements for such insurers, procedures, provisions regarding conservatorship and receivership of such insurers, and other provisions that the Commissioner considers to be appropriate and consistent. Clearly, much of the detail is left to later development.

This paper analyzes the issues associated with introducing a system of PCA for federally chartered insurance companies. It proceeds in five parts. First, the reasons for the development of PCA requirements in banking and insurance are presented. Second, the paper summarizes the PCA elements of Section 12 of the Federal Deposit Insurance Corporation Act and empirical research on the effectiveness of PCA in banking. The third section presents an overview of the current PCA system in insurance and the evidence regarding its success. The fourth section considers a concept related to PCA and known as Least Cost Resolution. Finally, the paper draws conclusions and makes recommendations.

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The Objectives of Prompt Corrective Action

Benston and Kaufman (1997) summarize the history surrounding the introduction of PCA in banking regulation. Between 1983 and 1990, more than 900 savings and loans were "resolved," i.e., placed in conservatorship or merged/closed with the assistance of the Federal Savings and Loan Insurance Corporation. There was increasing concern about the financial condition of commercial banks and fear that they would suffer the same fate. Numerous studies pointed to the existence of deposit insurance as part of the problem, concluding that it reduces market discipline and encourages banks to take on more risk. Regulators were accused of failing to take timely action.[2] The Federal Home Loan Bank Board, the regulator of the savings and loan institutions in the 1980s, responded to the savings and loan crisis by easing regulatory requirements including minimum capital requirements and regulatory accounting rules. This permitted savings and loans to continue in business and to adopt increasingly risky business strategies in an effort to save themselves, thus increasing the ultimate losses suffered by the insurance fund.

Market Discipline and the Principal/Agent Conflict. It is well-recognized that the existence of deposit insurance (and guaranty funds in insurance) creates incentives for increased risk-taking by reducing market discipline. In the absence of deposit insurance/guaranty funds, depositors/policyholders have an incentive to monitor the financial solvency of the financial institutions with which they contract. With coverage from deposit insurance or guaranty funds, depositors/policyholders have a reduced incentive to purchase from financially stable institutions. The institution's owners, on the other hand, have an incentive to engage in risky

[2] The savings and loan regulators were not the only ones subject to criticism during this time period. A 1985 staff report of the House Banking Committee criticized the OCC's and Federal Reserve's supervision of Continental Illinois Bank, which failed in 1984. (FDIC 1997)

activities. This is because the gains accrue to the benefit of the owners, while the losses in the case of insolvency are borne by the guaranty fund/deposit insurance fund. Without the market discipline imposed by risk-averse customers, the risk profile of the financial institution can be expected to increase.[3]

Furthermore, this tendency toward increased risk-taking increases as the financial condition of the bank/insurer diminishes. That is, shareholders in a thinly capitalized institution have an even greater desire for risk-taking. Intuitively, the owners have even less to lose. There is a tendency to "go for broke" as the firm's prospects get worse, a phenomenon well understood by regulators. Thus, as the financial condition of a bank or insurance company deteriorates, excessive risk-taking increases the potential losses to deposit insurance or the guaranty fund.

Various forms of regulation exist to counter this decrease in market discipline and increased tendency toward risk-taking (capital requirements, investment restrictions, etc.) However, the success of these tools depends on the regulators enforcing them. Economists have suggested that regulators may not have the same incentives as taxpayers to minimize deposit insurance/guaranty

[3] Economists explain this phenomenon as an effort to maximize the value of the deposit insurance or guaranty fund put option, the value of the firm's claim on the deposit insurance funds if the insurer becomes insolvent. Economically, the owners of the firm have a put option on the assets of the insurer, with a strike price equal to the value of the insurer's liabilities. As with puts generally, the value of the option increases as the volatility or risk of the underlying asset increases. Thus, as the risk profile of the insurer increases, the value of the put option, and hence the value of the firm to the equity owners, increases. (For a concise explanation, see Downs and Sommer, 1999).

The empirical evidence is consistent with the theory of reduced market discipline and increased risk-taking in the presence of insurance guaranty funds. Lee, Mayers, and Smith (1997) found that the asset risk of property-casualty insurance companies increased after the enactment of state guaranty fund laws. They concluded that guaranty funds create counterproductive investment incentives, and the effect is stronger for stock companies than for mutual companies (where ownership and policyholder interests are merged). After studying almost 250 property-casualty insurers that failed between 1986 and 1999, Grace, Klein, and Phillips (2007) find strong support for the hypothesis that more highly leveraged insurers are more costly to resolve in bankruptcy, supporting the conclusion of increased risk-taking in insurers as capital levels decrease. They also find that guaranty fund losses are higher for insurers where a greater portion of policyholders have guaranty fund coverage.

fund costs, a problem known as the principal/agent conflict. (In this case, the taxpayers are the principals, the regulators are their agents.) Regulator concern about reputational issues, for example, may cause them to delay taking action against a distressed bank/insurer, permitting it to continue in operation even though it does not fully comply with regulations. This problem is known as "regulatory forbearance." In part, PCA is an effort by public policymakers to address regulatory forbearance and to create systems that promote timely regulatory action on troubled insurers and depository institutions.

The Structure of Prompt Corrective Action. Following the large losses of the savings and loan crisis, a number of solutions were offered to address the problem of regulatory forbearance and excessive risk-taking by banks. (See Benston and Kaufman, 1997.) Prompt Corrective Action was adopted as a part of the Federal Deposit Insurance Corporation Improvement Act (FDICIA) of 1991 and contains several key features:

1. Specific statutory capital requirements;
2. Discretionary regulatory action should capital decrease below a specified "tripwire";
3. Mandatory prescribed regulatory action and restraints on bank activities should capital decrease to a lower level; and
4. Mandatory "resolution" of the bank if capital falls to an even lower, but still positive level.

To summarize, PCA imposes authority and requirements for regulatory action and a series of increasingly severe restrictions on bank activity as bank capital levels decline. The motivation is twofold. First, PCA requirements limit the discretion of regulators, thus squarely attacking the

problem of regulatory forbearance. Second, the existence of a clearly defined set of restrictions on banks as capital levels fall gives banks an incentive to keep capital levels above some minimum. The threat of regulatory action encourages banks to hold a level of buffer capital in excess of regulatory requirements.

Similar to the prompt corrective action requirements in banking, in the early 1990s, state insurance regulators created a series of triggers and regulator responses to decreasing capital requirements. As indicated earlier, these insurance PCA provisions were introduced as a part of the risk-based capital requirements.

While the structure of insurance PCA is similar to that for banking, the historical evidence suggests that the motivation was somewhat different. The motivation was laid out in a February 1990 memo from James Schacht of Illinois to the members of the Task Force.[4] Noting that the fixed minimum capital requirements that existed in the states were "practically irrelevant for an established operating company," Schacht went on to say:

> While we all have our various rules of thumb as to the proper relationship between reserves and surplus, writings and surplus, reinsurance leverage and so forth, they usually lack a statutory basis and, therefore, enforcement becomes very difficult, if not impossible. While regulators often do take action when a company appears hazardous, there always seems to be a team of lawyers and other experts ready to challenge them. Persuasion sometimes works but from a

[4] Schacht, James. 1990. Memorandum to Members of the Examination Oversight Task Force Re: NAIC Solvency Policing Agenda for 1990 and Review of Capitalization Requirements for Insurers, February 22.

practical standpoint regulatory action cannot be taken until the company has penetrated its minimum capital and surplus requirements.

Thus, while PCA in banking appeared to be aimed primarily at reducing regulatory forbearance and encouraging banks to hold more capital, the PCA system developed by insurance regulators was aimed primarily at overcoming the obstacles regulators faced in taking regulatory action, by giving them clear statutory authority to intervene at positive capital levels. This difference in motivation may explain some of the differences between the systems developed for insurance and banking. While insurance PCA requires company and regulator action at various levels and gives the regulator clear statutory authority to take action, it is less specific about the nature of the regulatory action that must be taken and does not contain specific limitations on insurer activities at different capital levels. Significant discretion is left to the regulators.

Regulatory Forbearance in Insurance Regulation. Insurance PCA's focus on obstacles to regulatory action rather than regulator forbearance is understandable in light of the structure and incentives created by the state system of regulation. Although Dingell's infamous "Failed Promises" report charged regulator forbearance in the oversight of four failed insurance companies,[5] the more powerful charges related to the lack of resources and regulatory tools.[6] Some researchers, in fact, have suggested that the state-based system *reduces* the problem of regulatory forbearance.

[5] "The single overriding weakness plaguing the supervision of domestic and foreign insurance companies is the widespread practice of wishful thinking by regulatory officials." (Subcommittee on Oversight and Investigations, 1994, pp. vii and 6)
[6] These included the failure of regulators to require audited financial statements, no requirement for actuarial certification of loss reserves in most states, a lack of actuarial expertise in insurance departments, poor oversight of reinsurance and MGA arrangements, deficient capital and surplus requirements, the frequency of financial exams, poor interstate coordination and cooperation, and generally inadequate staffing and resources. All are areas that the NAIC and the states subsequently addressed, many of them in the Solvency Policing Agenda.

Examining data from the late 1980s, Willenborg (2000) found that the likelihood of solvency-related regulatory action against a distressed insurer was positively related to the number of states in which the insurer operates. That is, the more states a company is licensed in, the quicker the regulator acts. According to Willenborg, this is a result of the overlapping nature of state regulation. Multiple states monitor the financial condition of a multistate insurer. Because individual states can act in response to a troubled company (e.g., by revoking the company's license to do business in the state), the domestic regulator can no longer engage in unfettered negotiation with the insurer. As a result, a domestic regulator has less discretion when responding to a distressed multistate insurer than it does in the case of a single state insurer. In a study that looked at the insolvency costs of almost 250 insurers that failed between 1986 and 1999, Grace, Klein, and Phillips (2007) found support for Willenborg's conclusion. They found that single state insurers were more costly to resolve and conclude that this could be an indication of greater regulatory forbearance in the liquidation of single state firms.[7]

Regulators can attest to the fact that pressure from other states to act keeps them on their toes. A part of the Solvency Policing Agenda of 1990 was aimed at increasing this peer pressure. Today, the NAIC has a Financial Analysis Division (FAD) which performs financial analysis on nationally significant insurers. Issues are referred to the Financial Analysis Working Group (FAWG) of the NAIC, and domestic regulators are called to appear before the FAWG to discuss the problems and what they are doing in response. The FAWG is composed of some of the best financial regulators in the country and provides a forum for these regulatory experts to

[7] Cost was measured as the cumulative net guaranty fund assessments as a percentage of the assets of the insolvent insurer in the year prior to the first formal regulatory action.

understand the problem and to provide advice based on their understanding and on what they have learned from other troubled company situations. Of course, the FAWG has no authority to compel a domestic regulator to take a particular action.

In the early 1990s, also as part of the Solvency Policing Agenda, the NAIC created a Financial Regulation Standards and Accreditation Program that recognizes states that have adopted various NAIC models, have adequate resources, perform examinations and analysis effectively, and act in a timely manner in troubled company situations. Every five years, accredited states are subject to a rigorous on-site review, where a team of reviewers look at files that document the examination and analysis processes for a sample of companies. Troubled companies are almost certain to be included in that review. The team makes a recommendation to the Financial Regulation Standards Accreditation Committee (FRSAC) on whether the state's accreditation should be continued. The team also provides a management comment letter to the state, making recommendations for improvement. As a part of the accreditation requirements, the state is required to comply with the NAIC's Troubled Company Handbook. This Handbook charges states with taking action in a timely manner, and provides examples of the action that may be taken. It is the strongly held view of state insurance regulators that the peer oversight inherent in the accreditation program has resulted in significant improvement in state insurance solvency regulation.

With federally chartered insurers, this peer state monitoring is no longer present, and the advantage of state regulation in reducing regulatory forbearance is arguably lost. The inclusion of a requirement for prompt corrective action in an OFC system is thus a positive feature of S.

40, although the significant differences between banking and insurance must be recognized in its design. As indicated earlier, much of the detail is left to the GAO and National Insurance Commissioner to develop. The next section reviews the current structure of PCA in banking and in insurance in an attempt to identify what a PCA system for federally chartered insurers might look like.

Prompt Correction Action in Banking Regulation – An Overview

The PCA provisions applying to insured depository institutions are found in Section 38 of the Federal Deposit Insurance Act. In short, Section 38 does the following:

1. Categorizes insured depository institutions based on their capital position relative to regulatory standards, with five capital levels ranging from “well-capitalized” to “critically undercapitalized.” The rules established in FDICIA require U.S. bank capital positions to meet three tests: an overall leverage test based on the ratio of Tier I capital (primarily stockholder equity) to total assets, and two ratios based on risk-weighted assets (risk-based capital tests). Banking regulators are charged with establishing the minimum relevant capital measure, subject to some restrictions on the leverage limit. They are also permitted to establish additional relevant capital measures. The leverage test threshold for critically undercapitalized institutions has been set at 2%. If the federal regulator determines that an insured depository institution is in an unsafe or unsound condition or, based on its CAMELS rating, is engaging in an unsafe or unsound practice, the regulator may reclassify the bank

into the next lower capital category.[8] This permits regulator judgment to have some impact in moving the PCA category of the bank to level requiring more intense corrective action.

2. Requires an undercapitalized institution to submit a capital restoration plan to the regulator and specifies the contents of the plan. Section 38 also establishes the criteria for whether the federal regulator will accept the plan and time frames for agency action. It establishes requirements for oversight of undercapitalized institutions by federal banking regulators, including close monitoring of the institution's compliance with capital restoration plans, restrictions, and requirements.

3. Establishes restrictions on the activities of insured depository institutions, with those restrictions becoming increasingly severe as capital declines.

4. Establishes time frames for regulatory action with respect to a critically undercapitalized institution. The regulator must appoint a receiver or take other action that the regulator and FDIC determine would better achieve the purpose of this section (i.e., to minimize the long-term loss to the Deposit Insurance Fund). If the regulator does the latter, a receiver must be

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[8] The CAMELS rating system is used by federal and state banking regulators to provide a convenient summary of the banks condition. The acronym "CAMELS" stands for *C*apital adequacy, *A*sset quality, *M*anagement, *E*arnings, *L*iquidity, and *S*ensitivity to market risk. A bank is assigned a rating from 1 to 5 for each component and a composite rating. Banks with ratings of 1 or 2 are considered to present few, if any, supervisory concerns, while banks with ratings of 3, 4, or 5 present moderate to extreme degrees of supervisory concern. The CAMELS rating system assesses an institution's overall condition based on both quantitative and qualitative elements. The quantitative assessment considers various financial statement data, key ratios, the level of classified assets, etc. The qualitative assessment considers factors such as the adequacy of board and senior management oversight, policies, risk management practices, and management information systems. Examiners use their professional judgment to increase or decrease ratings based on qualitative assessments.

appointed in 90 days unless a new determination is then made. In any event, a receiver must be appointed if the institution is critically undercapitalized on average during the calendar quarter beginning 270 days after the date on which the institution became critically undercapitalized, with some exceptions.

The key features of banking PCA are summarized in Exhibit I.

Exhibit I: Prompt Corrective Actions for Depository Institutions (FDICIA of 1991)

	Risk-Based Capital		Lever-age	Mandatory Action	Discretionary Action
Category	**Total**	**Tier I**	**Tier I**		
Well-capitalized	>10	>6	>5	• No capital distributions, no management fees to a person with control, if the institution would be undercapitalized after the payment	
Adequately capitalized	>8	>4	>4	• No capital distributions, no management fees to a person with control, if the institution would be undercapitalized after the payment	
Undercapitalized **	<8	<4	<4	• Regulator must closely monitor the condition of the bank • Regulator must require a capital restoration plan and closely monitor the bank's compliance with the plan and other restrictions and requirements imposed • No capital distributions or payment of management fees permitted • Restrictions on asset growth • Prior regulatory approval required for acquisitions, branching, and new lines of business	Regulator may: • Order recapitalization or acquisition by another institution if grounds exist for appointing a conservator or receiver • Restrict transactions with affiliates • Restrict interest rates paid on deposits • Restrict asset growth more stringently • Require the institution to alter or terminate any activity the regulator determines poses excessive risk to the institution • Order a new election of directors, require the institution to dismiss directors or senior executives and/or to employ other qualified executives • Prohibit deposits from other depository institutions • Require divestiture of subs or divestiture of the depository

					institution • Require a divestiture by a parent of nondepository subsidiaries • Require any other action that would better carry out prompt corrective action
Significantly Undercapitalized ***	<6	<3	<3	• Same as for Undercapitalized • Pay of officers is restricted; no bonuses with out regulatory approval In addition, the regulator must take one or more of the following actions: • Order recapitalization or acquisition by another institution* • Restrict transactions with affiliates (with some exceptions)* • Restrict deposit interest rates (with some exceptions)* • Restrict asset growth more stringently • Require the institution to alter or terminate any activity the regulatory determines poses excessive risk to the institution • Order new election of directors, require institu-tion to dismiss directors or senior executives &/or employ other qualified executives • Prohibit deposits from other institutions • Require divestiture of subs or divestiture of the depository institution • Require a divestiture by a parent of nondepository subsidiaries • Require the institution to take any other action that would better carry out prompt corrective action	• Any provision applying to critically undercapitalized institutions, if such action is necessary to carry out prompt corrective action

Critically Undercapitalized			<2 (based on tangible equity)	• Same as for Significantly Undercapitalized • Payments on subordinated debt are prohibited • Receiver/conservator must be appointed within 90 days, unless the FDIC concurs with the primary regulator that other actions would better achieve the purpose of PCA**** FDIC must, by regulation or order, restrict the activities of the institution and, at a minimum, prohibit it from doing the following: • Entering into any material transaction • Extending credit for any highly leveraged transaction • Amending the institution's charter or bylaws • Making any material change in accounting methods • Paying excessive compensation or bonuses • Paying interest that would exceed the prevailing interest rate in the institution's normal market areas • Engaging in any covered transaction of the Federal Reserve Act (Section 23A(b)).	

* Regulator must implement, unless it determines the action would not further the purpose of PCA.
** Also applies to adequately capitalized institutions that the regulator has determined to be in an unsafe or unsound condition or engaging in an unsafe or unsound practice.
***Also applies to undercapitalized institutions that fail to submit and implement capital restoration plans or that the regulator has determined to be in an unsafe or unsound condition or engaging in an unsafe or unsound practice.
**** If a receiver or conservator is not appointed, a redetermination must be made by the end of another 90-day period. A receiver must be appointed within 270 days after the institution became critically undercapitalized, unless the institution meets certain criteria and the regulator and chair of the FDIC board both certify that the institution is viable and not expected to fail.

IG Reviews. Section 38 of the Federal Deposit Insurance Act also requires the Inspector General (IG) of the appropriate federal banking agency to review the agency's supervision of an institution that results in a material loss to the deposit insurance fund. The IG must determine why the institution's problems resulted in a material loss and make recommendations for preventing such a loss in the future. The report is distributed to the Comptroller General of the U.S., the FDIC, and the appropriate state bank supervisor, if any. It is required to be made available to any member of Congress and to the public on request. (In distributions to the public, the statute permits the agency to excise information that discloses trade secrets of the institution or information that could disclose the identity of a customer.) IG reviews are a key element of the PCA system in banking. An IG review provides an opportunity for the regulator to learn from mistakes and to improve supervisory practices. The public disclosure enables public oversight. The mere threat of public disclosure provides an incentive for regulators to exercise their supervisory responsibilities effectively, providing a form of sentinel effect.

Assessing the Effectiveness of PCA in Banking. Some early studies concluded PCA requirements were successful in encouraging banks to hold more capital. Aggarwal and Jacques (2001) found a significant decline in the number of undercapitalized institutions during the year after FDICIA was passed, and concluded that the PCA provision of FDICIA were a major success in improving the safety and soundness of the U.S. banking system. While this provides some support that PCA *may* have contributed to higher capital, it is not conclusive. Changes in the economic environment were at least partially responsible for the improvement in capital position. In addition, the requirements of the original Basel Capital Accord were introduced at

about the same time, and it is difficult to separate that effect from the effect of FDICIA.[9] Jackson (1999) concluded that the introduction of the Basel Accord was followed by an increase in risk-weighted capital ratios in a number of countries.

Other studies have raised questions about the effectiveness of PCA in reducing deposit insurance losses. In a study of formal enforcement actions taken by banking and securities regulators during the 1990s and early 2000s, Wellons (2005) noted the rarity of enforcement actions during this time period and concluded that the results could suggest that weak banks are not the object of prompt corrective actions as much as they should be. Peek and Rosengren (1996) found that more than 2/3 of New England banks and savings banks that were downgraded to CAMEL 4 between 1988 and 1994 had a tangible capital ratio that indicated they were adequately capitalized under PCA. Eisenbeis and Wall (2002) found that substantial losses continue to be imposed on deposit insurance funds from failed banks and have even increased since the introduction of PCA. However, as Kaufman (2004) notes, the increase was largely due to a few large insolvencies, and the losses do not indicate PCA failed since the losses may have been even greater in the absence of PCA.

The most comprehensive study of recent years was released by the U.S. Government Accountability Office (GAO) in 2007. The GAO found little evidence that FDICIA-inspired PCA was commonly used by regulators. However, that doesn't mean regulators failed to act. Rather, the regulators generally responded to a bank's safety and soundness problems prior to its

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[9] The Basel Accord is the capital standard developed by the Basel Committee on Banking Supervision (BCBS) for internationally active banks. It was revised in 2004, and the new version is known as Basel II. It is being phased in for large U.S. banks. See http://www.bis.org/publ/bcbs128.htm.

capital deteriorating to a PCA trigger level. Other regulatory authority permitted the regulators to take action prior to capital levels hitting the PCA tripwires. Specifically, Section 8 of the Federal Deposit Insurance Act authorizes a banking regulator to issue a cease and desist order and/or an order to remedy the problem if the bank has engaged or is about to engage in an unsafe or unsound practice. The GAO found that regulators have tended to make greater use of this authority than the authority granted by the PCA provisions of FDICIA, in part because capital is a lagging indicator and not necessarily a timely predictor of problems at banks and thrifts.[10]

One of the big problems with PCA is its reliance on financial statement measures of capital that are often overstated. Several studies have found that troubled banks often underreserve for loan losses and overvalued other assets.[11] Walter (2004) notes that, in practice, it is often difficult to identify a deteriorating bank, and the determination involves subjective judgments by examiners. He identifies a number of red flags, including rapid asset growth, risk management deficiencies, asset quality deterioration, liquidity difficulties, and the bank's unwillingness to cooperate with examiners. Kaufman (2004) reached consistent conclusions. He found that large deposit fund losses were associated with very rapid growth in assets, exceptionally high earnings on assets and/or equity, and well above average capital ratios shortly before the bank's failure. He concluded that regulators should focus their attention more on uncovering evidence of fraud and

[10] In an earlier study, Peek and Rosengren (1996) concluded that examiners usually identify problems before PCA tripwires are triggered.

[11] GAO (1990), Shibot, Critchfield, and Bohn (2002). De Juan (2002) provides several examples of non-U.S. banks that became insolvent under circumstances in which PCA would not have been useful because assets had been understated. He emphasized the need for an effective supervisory system as a precondition for the successful implementation of PCA.

gross mismanagement at larger banks, to rely more heavily on readily visible, low-cost red flags of danger, and to improve their reaction time in responding to evidence they uncovered.[12]

The unsurprising conclusion from these results is that a focus on capital is not sufficient to ensure that regulators take timely action. The potential for financial statements to overstate capital is well-recognized, both in banking and insurance. Assets may be overstated, liabilities may be understated. Risk profiles of banks and insurers will vary in ways that RBC formulas don't recognize. There are certain risks and factors that RBC formulas do not account for – liquidity risk, the risk of fraud, the quality of management, and competitive advantage of the company.

Effective regulatory monitoring systems go beyond a reliance on capital. It is important for regulators to be cognizant of red flags that demand their attention – excessive growth, excessive use of reinsurance (in insurance), investment strategies outside the norm, entry into new lines of business. History indicates these are potential indicators of future problems. As the GAO concluded, regulatory capital is a lagging indicator. In short, by the time capital levels hit the trigger, it is often too late. The horse is out of the barn.

The challenge, then is to create incentives for regulators to act in a timely manner, recognizing that significant regulatory judgment is involved. Creating statutory thresholds for these

[12] In response to perceived regulatory forbearance in the Superior National Bank failure, Kaufman (2001) has recommended increasing the values of the capital ratios for the tripwires in PCA. Others argue that the problem is not the tripwires, but agree with Kaufman that PCA would be improved by increasing regulatory emphasis on other factors, including, for example, the valuation of assets. Rosenblum (2002) suggested that regulators refine the rules governing reserves or limit the discretion of seriously troubled banks to set their own reserve levels instead of trying to find a better threshold capital level for critically undercapitalized institutions.

situations is difficult, to say the least. However, the IG reviews, by providing a transparent review and assessment of the regulator's performance following an insolvency, may provide a powerful means of addressing the problem of regulatory forbearance. According to Benston and Kaufman (1997), several critical reports were produced soon after the FDICIA requirements became effective. The agencies modified their procedures and received more favorable reports subsequently.

Prompt Corrective Action in State Insurance Regulation

The NAIC's Risk-Based Capital (RBC) for Insurers Model Act requires each insurer to submit a report to its domestic regulator by March 1 of RBC levels at the end of the prior calendar year. The report must also be filed with the NAIC and with insurance commissioner in any state in which the insurer is licensed. [13]

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[13] While the specific RBC formulas have changed over the years, the general structure of RBC requirements for insurance companies has remained largely the same. All formulas include risk related to both the asset and liability sides of the balance sheet. The formulas include a "covariance adjustment" that reduces the capital required by assuming diversification across some risk categories. Most of the input for the RBC calculations comes from statutory financial statements. However, the capital charge for asset-liability mismatch for life insurers is based in part on internal models.

The four main categories of charges for life and health insurers are asset risk (C1), the risk of adverse insurance experience, (C2), the risk of asset-liability mismatch (C3), and general business risks (C4). The C3 calculation is undergoing evolution, largely in response to the development of new life insurance and annuity products. C3 Phase I was introduced in 2000 and incorporates a charge for interest rate risk for annuities and single premium life insurance based on internal models; C3 Phase II became effective in 2005 and uses internal models to assess the market risk of annuities with guaranteed benefits. C3 Phase III is expected to be introduced in 2009 and will cover market risk for life products.

For property-casualty insurers, the four main risk categories are asset risk, credit risk, underwriting risk, and other business risks. In 2005, in response to several p/c insolvencies in the early 2000s (particularly the insolvency of Reliance Insurance Company), the NAIC added a trend test to the RBC formula for property-casualty insurers. The trend test may trigger a company action level based on the ratio of a company's claims and expenses to premiums. The NAIC is currently investigating the inclusion of a catastrophe risk charge that would incorporate results of the company's internal catastrophe modeling.

In addition to requiring that insurers calculate and report their RBC levels, the Model Act contains requirements that trigger company and regulatory action depending on the insurer's RBC level. Various RBC triggers are expressed as multiples of the Authorized Control Level (ACL) RBC, where the ACL RBC is the RBC requirement calculated according to the RBC instructions. There are four triggering events.

*Company Action Level Event***.** A Company Action Level (CAL) Event may occur in one of three ways:

1. The insurer's total adjusted capital is greater than or equal to 1.5 times ACL RBC but less than 2 times ACL RBC.
2. A life and health insurer's total adjusted capital is greater than or equal to 2.0 times ACL RBC but less than 2.5 times ACL RBC, and the adjusted capital has a negative trend.
3. A property and casualty insurers has total adjusted capital greater than or equal to 2.0 times ACL RBC, but less than 3.0 times ACL RBC, and triggers a special trend test for property and casualty insurers.

When a CAL Event is triggered, the insurer must submit to the Commissioner within 45 days an RBC Plan containing proposals for corrective actions the insurer intends to take to address the RBC deficiency. The Model Act identifies the elements of the RBC plan.[14] The insurer must file the plan in all states in which it is licensed. The domestic commissioner must respond within

[14] It must identify the conditions which contribute to the CAL Event, contain the corrective action proposals, provide financial projections for at least a five year period, including the current year, identify key assumptions and the sensitivity of projections to the assumptions, and identify the quality of and problems associated with the insurer's business, including assets, anticipated business growth, associated surplus strain, extraordinary exposure to risk, and mix of business and use of reinsurance.

60 days, notifying the insurer whether the plan should be implemented or, alternatively, is deficient. Further requirements apply if the plan is determined to be deficient.

*Regulatory Action Level Event***.** A Regulatory Action Level (RAL) Event is triggered when

1. The insurer's total adjusted capital is greater than or equal to its ACL RBC, but less than 1.5 times ACL RBC.
2. The insurer fails to file an RBC report or to submit a required RBC plan in a timely manner.
3. The commissioner determines that an RBC Plan is unsatisfactory or that the insurer has failed to adhere to its RBC Plan and the failure has had a substantially adverse effect on the ability of the insurer to address its RBC inadequacy. The Commissioner must inform the insurer that a Regulatory Action Level Event has occurred.

When a RAL Event is triggered, the commissioner must require the insurer to prepare and submit an RBC Plan (or a Revised RBC Plan) within 45 days. After examination and analysis of the insurer's assets, liabilities, operations, and RBC Plan, the commissioner must issue a corrective order specifying the corrective actions to be taken by the company.

*Authorized Control Level Event***.** An Authorized Control Level (ACL) Event is triggered when

1. The insurer's total adjusted capital is between 0.7 and 1.0 times its ACL RBC.
2. The insurer has failed to respond satisfactorily to a corrective order.

When an ACL Event is triggered, the commissioner must take the same actions required under a RAL Event. In addition, if the commissioner deems it to be in the best interests of the policyholders, creditors, and public, the commissioner may place the insurer under regulatory control.

*Mandatory Control Level Event***.** A Mandatory Control Level (MCL) Event is triggered when the insurer's total adjusted capital is less than 0.7 times its ACL RBC. In that case, the insurer **must** place the insurer under regulatory control. The commissioner may forego action for up to 90 days if he or she finds there is a reasonable expectation that the Mandatory Control Level Event may be eliminated within the 90 day period. If the insurer is a property-casualty insurer writing no business and running off existing business, the commissioner may allow the insurer to continue its run-off under the supervision of the insurer.

The requirements contained in the NAIC RBC Model are summarized in Exhibit II.

Exhibit II: Actions Required by the NAIC RBC Model

Category	Risk-Based Capital Level	Mandatory Action	Discretionary Action
Company Action Level	200%	• Insurer must provide the commissioner with an RBC Plan proposing corrective actions	
Regulatory Action Level	150%	• Same as for Company Action Level • Commissioner must perform examination of analysis of assets, liabilities and operations of insurer • Commissioner must issue an order requiring corrective action	
Authorized Control Level	100%	• Same as for Regulatory Action Level	• Place insurer under regulatory control
Mandatory Control Level	70%	• Place insurer under regulatory control • If the insurer is a property-casualty insurer in run-off, the commissioner may allow supervised runoff	

Assessing the Effectiveness of PCA in Insurance. The extent to which PCA requirements in insurance have increased capital levels or reduced risk taking is unclear. Unfortunately, there has been relatively little research in this area, particularly when compared with the extensive research on the banking industry. Similar to the case for banks, capital levels for insurers improved during the 1990s.[15] However, as with banks, it is unclear that the introduction of RBC and prompt corrective action was the cause.

While there has been little research on the effect of PCA on insurer capital levels, there has been considerable research on the trigger for prompt corrective action – RBC levels. And the results of the research are not terribly promising. According to Cummins, Harrington, and Klein (1995), less than half of the companies that later failed had RBC ratios that would have required company action one to three years prior to insolvency. Only 15 to 20% had ratios at a level requiring regulatory action. Grace, Harrington, and Klein (1998) find that insurance RBC scores are less powerful than the Financial Analysis Solvency Tracking (FAST) tool that was developed by the NAIC in the early 1990s.[16] Cummins, Grace and Phillips (1999) also found that that the RBC ratio performed poorly as a predictor of insolvencies, and was worse than the FAST ratios. Adding cash flow simulation variables improved the predictability for both FAST and RBC. Pottier and Sommer (2000) compared the predictions of the NAIC's RBC and the A.M. Best Capital Adequacy Ratio (BCAR) and concluded that BCAR significantly outperformed the NAIC's RBC ratio. Furthermore, RBC and BCAR together were no better

[15] IN 2006, the percentage of life and property/casualty insurers in each category were: Company Action Level (0.79%), Regulatory Action Level (0.54%), Authorized Control Level (0.20%), and Mandatory Control Level (0.99%). In total, 2.52% of insurers were subject to any action based on RBC levels. Between 1995 and 2006, the percentage of life and property/casualty insurers subject to action ranged from 2.4% (in 1998) to 3.8% (in 2002).

[16] FAST develops a composite score for each insurer based on the results of approximately 20 financial ratios. Annual and quarterly financial statement data filed electronically with the NAIC is used as the input for the scoring process. These scores are used to prioritize companies for further review.

than BCAR alone. It is worth noting that a significant difference between the NAIC's RBC and A.M. Best's BCAR is the inclusion of qualitative information in the BCAR ratio.[17]

In spite of the low ability of insurance risk-based capital ratios to predict insurer insolvencies, researchers have been reluctant to recommend an increase in the thresholds.[18] Because risk-based capital systems are imperfect and will inevitably result in the misclassification of some firms, any system of PCA based on them will also be imperfect. Some firms that are destined to fail will be treated as healthy (a Type I error), while the regulator will take action against some healthy firms that are incorrectly identified as troubled (a Type II error). Both errors result in costs. The objective of insurance regulation (and of banking regulation) should be to minimize the social costs of the combined type I and type II errors. (See Cummins, Harrington, and Klein 1995, Harrington 2005).

While the tendency of guaranty funds and deposit insurance to diminish market discipline in both banking and insurance is well-recognized, there is reason to believe that the effects may differ between the sectors, and this may have implications for the design of a system of PCA. Harrington (2005) agrees that insurance guarantees reduce market discipline. However, he points to other characteristics of the insurance and banking markets (buyer sophistication, firm franchise value, completeness of the protection provided by deposit insurance or guaranty funds)

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[17] Some incremental changes to the RBC formulae have been made since these studies were done. As noted in footnote 12, a trend test was added to the RBC formula for property-casualty insurers, in part because RBC had failed to identify the Reliance Insurance Company's financial problems in a timely manner. In the life formula, refinements have been made to the C3 charge for interest rate risk to better address the issues of asset-liability mismatch on newer product designs. Nonetheless, it is unlikely that the changes have been significant enough to cause major changes in the conclusions of these prior studies.

[18] Following the failure of Reliance Insurance Company, the Pennsylvania Insurance Department proposed a doubling of the Company Action Level RBC Threshold, but it was rejected in lieu of the trend test mentioned earlier.

and concludes that market discipline in insurance is stronger than in banking. Furthermore, according to Harrington, systemic risk is lower in insurance than in banking.[19] These differences in market discipline and systemic risk create differences in the relative cost of various classification errors in designing risk-based capital systems and imposing prompt corrective action. Given deficiencies in market discipline and the potential for systemic risk, the cost of misclassifying an insolvent firm as solvent is higher in banking than in insurance. This leads him to the conclusion that risk-based capital standards in insurance should be less stringent than those for banking.[20]

It is worth noting in this context that for most leading firms in the financial services industry, market forces, not minimum regulatory capital requirements, appear to play the dominant role in the firms' capital decisions (Joint Forum 2001). Firms typically carry an amount of capital well above regulatory requirements, and the multiple for insurers tends to be higher than that for banks.

Conclusions about the relative importance of RBC versus other regulatory tools parallel the conclusions for banking regulation. When regulators identify a troubled insurer, particularly a property-casualty insurer, they frequently find that capital is overstated. In property-casualty

[19] Harrington does not specifically discuss financial guaranty insurance, which may be a noteworthy exception in light of current developments.
[20] See also Kupiec and Nickerson (2005), who demonstrate analytically that assuming identical asset risks, the amount of capital needed for an insurer to achieve a low level of insolvency is lower than for banks. They conclude that harmonizing capital requirements across banks and insurers could significantly reduce aggregate liquidity and efficiency. Epermanis and Harrington (2006) examine premium growth surrounding the downgrade of property/casualty insurer ratings and find significant evidence of market discipline for rated insurers. Sommer (1996) finds evidence that riskier insurers have lower premiums, further evidence of market discipline.

insurance, the culprit is often understated loss reserves.[21] Given the long-term nature of insurance liabilities, where claims are paid many years into the future and estimates of future loss experience must be made, there is plenty of opportunity for over-optimism or mischief in establishing loss reserves. The difficulty of estimating loss emergence patterns years into the future creates the possibility of large errors. Underlying loss distributions can shift unexpectedly due to court decisions and other factors. By the time the company or regulator realizes that claims are coming in at a level higher than priced for, the revised claims trends may increase reserves not only on this year's business, but on policies written for several years in the past. Unfortunately, initial estimates of the reserve deficiency in a troubled company frequently have a tendency to grow.

The limitations of relying solely on accounting data in a solvency screening system were well-recognized early on, and this problem could become more pronounced with the trend toward reliance on internal models to value various assets, liabilities, and capital requirements.

The underlying premise of PCA is that risk-based capital levels deteriorate relatively slowly, proceeding neatly through a set of thresholds and triggering various actions by regulators and the regulated institution. The reality is that a company may very quickly exhaust its capital as a result of poor business decisions and their aftermath. Placing an insurer in receivership can generate other problems, including more difficulty getting recovery from reinsurers.[22] Schacht

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[21] A.M. Best, after examining 218 property-casualty insurer insolvencies between 1993 and 2002, concluded that reserve deficiencies accounted for more than half of all p/c insurer insolvencies. The current upheaval in the credit markets and decline in liquidity of certain structured securities has highlighted the difficulty of valuing some assets also.

[22] In its study of U.S. reinsurance collateralization requirements, the NAIC stated: "Reinsurance collections have become a more difficult and contentious process where the willingness to pay seems to be as big an issue as the ability to pay. Collections in a liquidation environment are even more difficulty." The report summarized the

and Hepler (2007) describe the case of the Mission insolvency. On March 11, 1985, Missouri Insurance regulators approved a plan for the continued operation of Mission. In mid-May 1985, the California department concluded that reserves were understated by $64.3 million. By mid-October, refusal of reinsurers to pay claims resulted in reinsurance recoverables being the fastest growing asset on the company's balance sheet. By October 1985, there were nearly $900 million in unpaid claims and a reserve deficiency of $169 million. A similar series of events (deteriorating loss reserve adequacy, problems with collectibility of reinsurance) contributed to the massive deficit in the insolvency of Reliance Insurance Company, exacerbated by the decrease in asset values during 2001.

Like banking regulators, insurance regulators have recognized that there are a number of other indicators that should concern them – unusual investment strategies, entering new lines of business that the insurer is unfamiliar with, excessive use of reinsurance, and rapid growth in premiums. The culture of insurers varies, and regulators often have an intuitive sense of which companies and managers they need to monitor more closely.[23]

Even before an insurer hits the RBC company action level, the regulator may step in, and the NAIC Hazardous Financial Condition Model Regulation, discussed later, provides the authority to do so. Regulators may uncover problems through their financial analysis, examinations, or other interactions with the company or others, causing them to intervene confidentially before

experiences of the receivers of Legion and Reliance Insurance Companies, both of which had difficulties collecting on reinsurance balances. (NAIC 2006a)

[23] Grace and Leverty (2007) find that management quality does matter. Using the efficiency of management as a proxy for the quality of management, they find a negative relationship between management quality and the likelihood of property-liability insurer insolvency. They also find a negative relationship between management quality and the length of time under regulatory scrutiny.

RBC thresholds are applicable. Even before the insurer hits the company action level, the regulator can and does require a company to develop a corrective action plan and to provide monthly or weekly reporting. Insurance department staff may be placed on site to monitor the situation. According to several regulators, this form of intervention is more common than formal action based on RBC thresholds.[24]

Comparing the PCA Requirements in Banking and Insurance. Comparing the summaries of the PCA systems in insurance and banking that are found in Exhibits I and II, certain similarities between the banking system of PCA and the system adopted by state insurance regulators are evident:

1. Regulatory action is triggered by decreases in capital levels in relation to regulatory standards.
2. At a certain level, the insurer/bank must submit a capital restoration plan to the regulator.
3. At a certain level, the regulator must assume control as a receiver, conservator, or liquidator.
4. Regulators have a certain amount of discretion in how they handle a distressed bank or insurance company, constrained by the specific requirements of a PCA system.

[24] Regulators continue to improve their tools for solvency oversight. In June 2004, the NAIC adopted a new risk-focused surveillance framework affecting both analysis and examinations. The framework is intended to expand the regulatory focus on operations and the quality of risk management processes of an insurer and to more closely tie the various functions of solvency oversight "to enable regulators to be more proactive and better positioned to respond to a multitude of threats to an insurer's financial stability" (NAIC 2004). The Financial Condition Examiners Handbook was revised in 2006 to incorporate the revised risk-focused exam approach, and the new approach will be a required element of the NAIC's accreditation program beginning in 2010. The revisions to the Examiners Handbook place greater emphasis on a company's risk management culture, corporate governance structure, risk assessment systems and control environment. They also call for greater coordination with the internal and external auditors. Implementation of the revised Examiners Handbook, as well as the proposed revisions to the Hazardous Financial Condition Model, discussed below, would continue to expand the ability of regulators to identify and intervene in troubled company situations.

The differences between the PCA system imposed on the regulators of depository institutions and that developed by insurance regulators are also apparent from comparing exhibits I and II. The key differences are:

1. Banking PCA contains triggers based on leverage ratios in addition to risk-based capital levels, while insurance PCA relies strictly on RBC.
2. Banking PCA includes specific requirements for regulators to suspend dividends and management fees, restrict pay to officers, limit asset growth, prohibit brokered deposits, restrict interest rates paid on deposits, and require approval for acquisitions, branching, and new activities. Insurance regulators, by contrast, have left themselves with considerable flexibility in determining what corrective actions to impose in the case of a troubled insurance company.
3. Banking PCA explicitly authorizes the regulator to move the company to a different action category based on the regulator's judgment that the bank is in an unsafe or unsound condition or engaged in an unsafe or unsound practice.

While there is some evidence that an insurer tends to take on more risk at low leverage ratios, it would be extraordinarily difficult to establish meaningful leverage ratios in insurance. The wide variety of business strategies, lines of insurance, products within lines of insurance, reinsurance arrangements, etc. makes a single number inappropriate.[25] Accounting for the differences among companies would likely produce a measure not unlike RBC.

[25] An indication of the diversity in the industry can be obtained by simply considering differences in capital levels between life insurers and property-casualty insurers. At the end of 2006, the ratio of policyholders surplus to assets (on a statutory basis) was 33.7%. During the past 5 years, it has generally been between 30% and 35%. For life companies, by contrast, the ratio of capital and surplus to admitted assets ranged between 5% and 6%. These large differences are consistent with the views taken by rating agencies regarding the capital requirements of different segments of the insurance industry.

A similar argument applies to the imposition of specific limitations on the activities of companies at different capital levels. Given the diversity in the insurance business, specific requirements would not be easy to construct, and they would be imposed on the basis of inherently imperfect measures of RBC. If the intent of the PCA requirements is to encourage insurers to hold a minimum level of capital, the mere threat of some regulatory action at certain RBC triggers provides that encouragement, and the NAIC model already provides that. If the intent is to address the problem of regulator forbearance, the statutory imposition of increasingly severe restrictions on activities as a function of capital is unlikely to solve the problem. As discussed earlier, it is not enough to focus on capital. Much regulatory action is taken outside authority provided by RBC. A better alternative is to institute a system of mandatory external reviews of costly insolvencies and to make the results public, a proposal supported by Schacht and Hepler (2007) and Grace, Klein, and Phillips (2002).

Finally, with respect to the discretion to move a bank to the next capital tier, the GAO (2007) found that banking regulators tend to rely on their authority to issue cease-and-desist orders for unsafe or unsound practices, rather than reclassification under PCA. Thus, this difference does not appear to be particularly meaningful.

NAIC Model Regulation to Define Standards and Commissioner's Authority for Companies Deemed to be in Hazardous Financial Condition. While the RBC model provides triggers for company and/or regulatory action based on capital levels, the general authority of state insurance regulators for companies that are deemed to be in hazardous

condition is found in a separate model, the NAIC Model Regulation to Define Standards and Commissioner's Authority for Companies Deemed to be in Hazardous Financial Condition (Hazardous Financial Condition Model Regulation). S. 40 charges the GAO with examining this model in addition to the PCA requirements in banking when it develops its recommendations for a PCA system for OFC insurers. As with the RBC statute, this model is an element of the NAIC's accreditation program and has been adopted substantially by all states. Unlike RBC, the statute does not mandate regulatory action based on particular triggers, but it does give the regulator the authority to take action under a broader set of circumstances. In that sense, it is more akin to the cease-and-desist authority granted to federal banking regulators under Section 8 of the Federal Deposit Insurance Act.

The Hazardous Financial Condition Model Regulation was originally developed in 1985. It identifies 15 standards the commissioner may use to identify troubled insurers, i.e., those whose condition renders their continued operation hazardous to the public or policyholders. These standards relate to adverse findings in a financial condition or market conduct examination report; the NAIC Insurance Regulatory Information System; the ratios of expenses and losses to premiums and net investment income; the insurer's investment portfolio; reinsurance considerations; operating losses over the last 12 months; insolvency of an affiliate, subsidiary or reinsurer; contingent liabilities; delinquency of a controlling person; the age and collectibility of receivables; competence, fitness, and reputation of the insurer's management; management failures to respond to regulatory inquiries; management releasing false or misleading financial statements; rapid growth; cash flow or liquidity problems.

If the commissioner determines that the insurer is in hazardous financial condition, the model permits the commissioner to issue an order requiring one or more corrective actions: buy reinsurance, limit new sales/renewals; reduce general and commission expenses; increase capital and surplus; suspend or limit the payment of dividends; file reports regarding the market value of assets; discontinue certain investment practices; document the adequacy of premium rates; file interim financial reports.

A working group of the NAIC is currently revising the model. As of January 2008, the proposed revisions would broaden the standards to include:

- Adverse findings in audit reports, actuarial opinions, reports or summaries;
- Findings from financial analysis tools;
- The results of cash flow testing;
- Operating loss over the last 12 months excluding capital gains;
- Insolvency of an obligor or any entity within the insurer's holding company system;
- Failure of the insurer to meet filing requirements;
- Reserves that don't comply with law, accounting standards, or sound actuarial principles;
- Persistent underreserving;
- Transactions among affiliates, subsidiaries, or controlling persons that do not provide sufficient value, liquidity, or diversity; and
- Any other finding determined by the commissioner to be hazardous to the policyholders, creditors, or general public.

With respect to corrective action that the commissioner may order, three additions to the model have been proposed. The commissioner would be empowered to order the company to: (1) Correct corporate governance practice deficiencies; (2) Provide a business plan to the commissioner; and (3) Notwithstanding any other provision of law limiting the frequency or amount of premium adjustments, adjust rates for any insurance product written by the insurer that the commissioner considers necessary to improve the financial condition of the insurer.

The proposed modifications reflect lessons learned over the last 20 years and the evolution in regulatory practices, which itself was a response to the evolution in insurance markets, products, and company activities. While they must still be debated at the NAIC, the likely outcome is an improved tool for regulatory action. The model does not compel regulatory action, but it does give regulators the necessary authority to take action -- the first step in reducing the cost of insurer insolvencies.

S. 40 does not currently contain all of the elements of the NAIC's Hazardous Financial Condition Model. Instead, Sections 1143 to 1145 of S. 40 give the Commissioner cease-and-desist authority patterned after Section 8 of the Federal Deposit Insurance Act. It would be useful to compare the current discretionary authority granted to the commissioner in Sections 1143 to 1145 with the revised Hazardous Financial Condition Model Act to ensure that the Commissioner has broad discretion to intervene in the activities of a potentially troubled insurance company.

Least Cost Resolution

In addition to creating a PCA system for banks, FDICIA gave banking regulators an unambiguous goal: to resolve the problems of insured depository institutions at the least possible long-term cost to the deposit insurance fund. This feature of FDICIA has become known as Least Cost Resolution (LCR). S. 40 lays out a similar – but not identical – objective: to resolve insolvencies effectively and efficiently, with the fewest possible losses.

The receivership/insolvency system in insurance has been subject to extensive criticism in recent years. (See Schacht and Hepler 2007; Grace, Klein, and Phillips 2002) In insurance, the process of resolving an insolvency involves multiple parties, each with potentially different interests. In a typical receivership, the commissioner appoints a deputy receiver to manage the liquidation process. Critics argue that deputy receivers have little incentive to close an estate, because it provides for their continued employment, and, as a result, it can take years to finally resolve an insurance company insolvency.[26]

On the other hand, the receiver has to deal with guaranty funds in every state in which there is a covered claim, potentially requiring interaction with 50+ jurisdictions with different guaranty fund laws, different interpretations, and different information systems. While some progress has been made in developing mechanisms to coordinate the interaction between the guaranty funds and the receiver and to streamlining processes, the inefficiencies of dealing with multiple jurisdictions continues to be an area of criticism.

[26] According to Hall (2000), the liquidators turn over on average only $0.33 for each $1 of preinsolvency assets to the guaranty funds. Hall concludes that the low recovery rate is partially due to regulatory failure before the company is taken over. However, part of the cost results from the receivership system, where receivers with lots of cash are reluctant to turn them over to guaranty funds, preferring to extract their own benefits.

In a series of articles, Schacht and Hepler (2007) argue that the current system for resolving insolvencies is not equipped to deal with the current insurance market. It was designed for a simpler world, where insolvencies of local and regional companies involved simpler claims, such as auto and fire insurance. Today, insolvencies may involve national or even international companies. The companies are larger, their reinsurance arrangements are more complex, and they have a variety of arrangements with insureds, including various forms of alternative risk transfer. Liability insurance is a major part of the business of insolvent insurers, with claims that are complex and may involve multiple jurisdictions. These market changes have resulted in a system that unnecessarily increases the cost of resolving insurer insolvencies. These are consistent with the criticisms of Grace, Klein, and Phillips (2002).

These problems are exacerbated by a lack of accountability and transparency. Oversight by the courts and oversight of the deputy receiver by the commissioner is seen as lax, and there is insufficient transparency on costs to permit effective oversight by others. Although the domestic regulator of an insurance company controls the receivership, insolvency costs are spread among all states in which the insurers had obligations, reducing his or her incentive to manage the insolvency cost-effectively. (Grace, Klein, and Phillips 2002) There is no formal system for retrospective review of costly insolvencies to assess the adequacy of the regulatory response, as there is with the FDICIA-mandated Inspector General reviews.

Against this backdrop, S. 40's attempt to codify an objective of least cost resolution is welcome. In addition, the objective of least cost resolution would be supported by public disclosure of the cost of insolvencies and receiverships.[27]

One observation should be made, however. The objective of PCA in banking is to minimize losses to *the deposit insurance fund*. This requirement was a Congressional response to federal banking regulators embracing a policy of "too-big-to-fail" in the 1980s. In banking, the FDIC acts as both receiver and deposit insurer. Prior to FDICIA, the FDIC had a practice of resolving bank insolvencies to prevent losses for both insured and uninsured depositors (and, in some cases, even other unsecured creditors) (FDIC 1997). Critics argued that this exacerbated moral hazard by creating the perception that all deposits would be covered in the future, thus giving large uninsured depositors less incentive to monitor bank solvency. In FDICIA, Congress ordered the FDIC to stop protecting any uninsured stakeholder unless the proposed resolution was the least cost to the deposit insurance fund.[28]

S. 40 makes no distinction between losses that are covered by the guaranty fund and those that are not covered. That may be acceptable in an environment where there is a natural tension between industry-controlled guaranty funds and the receiver, which counters any tendency of receivers to push claims onto the guaranty fund (and may be contrasted with the world of

[27] Grace, Klein, and Phillips (2002) report on their inability to gather data on the cost of receiverships in order to complete an academic study. "This underscores the need to open receiverships to public scrutiny and renew efforts to develop adequate databases on receivership activities and finances."

[28] The one exception involves systemic risk. Where the failure to protect uninsured depositors and other creditors "would have serious adverse effects on economic conditions or financial stability," the regulator can petition the Secretary of the Treasury. Two thirds of the board of directors of the FDIC and the Board of Governors of the Federal Reserve System must support the action.

banking, where the receiver and deposit insurer are the same).[29] S. 40 would continue the current system of guaranty funds to the extent that state-based guaranty funds are accredited, and would create a national guaranty fund with a similar governance structure if any state fails to become accredited. Thus, it appears that this natural tension would continue. Moreover, the main criticism of the insurance resolution system has been the inefficiency of the system, rather than the allocation of assets between the guaranty fund and uninsured claims. Clearly, minimizing the costs of administration is good for all parties.

But absent that tension -- in a world where the receiver allocates assets between insured and uninsured claims – the distinction between claims covered and not covered by the guarantee fund is important. If the losses of those not intended to be covered by guarantee funds are covered, the market will worry even less about the financial stability of insurance companies, exacerbating the market discipline problems that regulation exists to counteract.

Recommendations and Conclusions

A system of prompt corrective action currently exists in state insurance regulation and provides thresholds for company and regulatory action similar to those required for banks by FDICIA. Section 1212(a)(4) of S. 40 calls for the Commissioner of National Insurance to establish by regulation risk-based capital standards that are consistent with the NAIC Risk-Based Capital for Insurers Model Act. The NAIC Model is the basis for the current PCA requirements of state

[29] The tension between guaranty funds and receivers has been evident in recent years, both at the NAIC during the drafting of the Insurance Receivership Model Act and amending of the Guaranty Fund Models and in the courts with litigation between guaranty funds and receivers over who gets the collateral that supported claims within the deductible on large-deductible policies. Brewer, Mondschean, and Strahan (1997) find that risk-taking by life insurers is higher in states where guaranty funds are financed with premium tax offsets than in states where the guaranty funds are underwritten by the industry. This is consistent with the theory that where guaranty funds bear the cost of insolvencies, they have a greater incentive to have meaningful regulatory requirements and to pressure regulators to take action against a distressed insurer.

insurance regulation and provides a plausible starting place for PCA for federally chartered insurers. Given the differences between insurance and banking, regulators should not attempt to harmonize the triggers for regulatory action between insurance and banking.

There are two key differences between current PCA requirements in banking and insurance. PCA in banking includes a leverage test, in addition to the risk-based capital thresholds. PCA in banking also contains a series of automatic restrictions on bank activities at various capital levels. Given the wide diversity in the insurance industry, with capital requirements that vary significantly by lines of insurance, it will be difficult to develop a simple leverage test for the insurance industry.

Similarly, given the complexity and diversity in insurance, it is unlikely that a standard set of limitations on company activities related to capital levels can be efficient. Regulatory capital requirements are only estimates of the "right" level of capital an insurer should hold, inevitably subject to errors. The simplifying assumptions necessary when establishing regulatory requirements will require that some companies hold too much or too little capital, both of which involve costs. Moreover, a focus on capital alone is insufficient. The RBC formula cannot include all risks, and the results are subject to manipulation based on accounting misstatements. The opportunity for mischief could increase given current trends toward the reliance on internal models in valuing certain assets and liabilities and in determining regulatory capital requirements. Ultimately, prompt regulator action will depend on the effective use of regulatory judgment in identifying and responding to troubled company situations.

The peer pressure in state insurance regulation provides a mechanism to discourage regulatory forbearance. This control will no longer be present in a system of federal regulation, and the possibility of regulatory forbearance will increase. One way to mitigate regulatory forbearance is to require ex post reviews of costly insolvencies, similar to the requirement that now exists in banking. Costly bank insolvencies are subject to review by the Inspector General, and the results of the review are made publicly available. A similar requirement is missing from the current insurance regulatory system. Requiring ex post review of major insurer insolvencies would inject a measure of accountability that is currently missing and would provide a strong disincentive for regulatory forbearance.

It is essential that S. 40 give the Commissioner adequate discretionary authority, since regulators frequently need to act before capital levels reach the RBC thresholds. State insurance regulators tend to use their authority under the Hazardous Financial Condition Regulation, which contains a range of standards for taking regulatory action and of actions that may be taken. Section 1143 through 1145 of S. 40 give the Commissioner of National Insurance cease-and-desist authority patterned after the cease-and-desist authority of banking regulators. It would be useful to compare Sections 1143 to 1145 to the NAIC's Hazardous Financial Condition Model to determine whether S. 40 gives the Commissioner the necessary level of discretionary authority.

Finally, Section 1217 of S. 40 introduces a standard for resolving distressed insurers: to ensure that any hazardous financial condition of a national insurer is resolved effectively and efficiently, with the fewest possible losses. It is appropriate that S. 40 contains an objective related to the cost of insurer insolvencies, particularly in light of the ongoing criticism of the state-based

receivership system. Requirements for transparency of liquidation costs would also be beneficial, providing an opportunity for public oversight and complementing the objective of least cost resolution. Finally, the loss minimization objective should be structured to discourage the creation of a system of “too-big-to-fail” in federal insurance regulation.

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