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The Risk-Focused Examination

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In October 2007 the National Association of Insurance Commissioners (NAIC) passed the “Annual Financial Reporting Regulation,” otherwise known as the “Model Audit Rule” or “MAR” for short. Together with codification of statutory accounting principles, this laid the groundwork for the risk-focused examination approach now incorporated in the *Financial Condition Examiners Handbook*. The risk-focused exam approach has completely changed the manner in which regulatory examiners approach their work, particularly in the actuarial area:

1. Efficiency is a major goal. Resources are allocated where they are expected to be most effective, and work is limited to that which is necessary to come to an overall conclusion about the company’s current state.
2. Sample testing is done only where it is both necessary and effective in coming to a conclusion.
3. There is a greater emphasis on the process by which the financials are produced and less emphasis on the actual results. This includes a thorough examination of corporate governance.
4. The scope of the exam includes not only the traditional risk of financial misstatement, but also an assessment of “prospective” risks not contemplated in the current balance sheet. This includes a good look at the company’s risk management function.

A holistic approach is used. The actuarial area (“reserves”) is examined in the context of the whole company’s risk profile. So, the actuarial exam is closely coordinated with the rest of the exam and actuaries work closely with non-actuaries, within the company, within the exam staff, and between the company and the examiners.

BACKGROUND

The risk-focused examination approach is the result of a long series of related events that have occurred in both the insurance industry and the larger corporate environment. Congress passed the Sarbanes-Oxley Act (known as SOX) in 2002 in an attempt to solve financial reporting problems of public companies that had come to light as a result of investigations into the financial scandals (Enron, etc.) of the early 21st century. These financial scandals were partially enabled by more financial engineering in both products and company structures,

accompanied by weak risk management, weak accounting controls, and inability of auditors and regulators to keep up. SOX put responsibility for financial reporting squarely on company management. This enabled auditors to adopt a risk-focused approach, thereby creating a win-win situation for both company managements and auditors: The management could reduce the audit budget by demonstrating controlled financial reporting, and auditors could focus their limited resources on problem areas instead of looking at everything.

Being financial intermediaries, life insurance companies were automatically part of the events driving SOX, but there were other factors that also entered into the movement toward a risk-focused approach for statutory financial reporting. Ironically, simplified (formulaic) statutory minimum reserve standards were created by Elizur Wright in 1858 so that actuarial examinations could be performed more efficiently: Examiners would only have to do sample checking of reserve factors against a tabular factor in a book instead of re-evaluating the company’s entire valuation method in order to come to a conclusion on reserve adequacy. As late as 1985, there was no requirement for cash flow testing from the regulators or from the actuarial profession. It was not necessary to involve an actuary in the examination since well-qualified non-actuarial examiners could look up whole life (and other traditional life) minimum reserve factors from a published table, or health reserve factors from other official factor books, and could evaluate claim triangles. With the introduction of interest-sensitive products having a flexible crediting rate closely related to the rate earned on assets backing the reserves, it became apparent that simplified formula reserves might become inadequate if the company could not earn the guaranteed minimum crediting rate. This situation was exacerbated by the inflationary and unstable interest rate experience of the 1980s, which caused further disintermediation between assets and liabilities.

In response to this experience, regulators have gradually introduced more dynamic and flexible valuation requirements. The commissioners’ annuity reserve valuation method (CARVM) was introduced in 1980, requiring multi-scenario analysis of deferred annuities, with the scenarios depending on lapse and mortality



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experience rather than interest rate paths. Dynamic valuation interest rates were introduced in 1982. The American Academy of Actuaries (Academy) then drafted “Recommendation #7” requiring cash flow testing (CFT), and in 1985 New York incorporated this draft language into Regulation 126: This was the first U.S. regulatory requirement for asset adequacy analysis.

Flexible mortality assumptions for term life insurance were introduced in 2000 and subsequently addressed in the Valuation of Life Insurance Policies Model Regulation commonly known as “Regulation XXX.” Various iterations of Regulation XXX followed as new product designs were introduced. The year 2009 saw the introduction of AG43 for variable annuities, requiring a stochastic projection of interest rate and equity return scenarios, along with dynamic lapse and mortality assumptions that were fully responsive to varying economic conditions in different scenarios. (The need for AG43 followed more than 10 years of research and committee work by the Academy, which was unable to find an appropriate simplified valuation method for valuing variable annuities with guaranteed minimum income benefits [GMIBs].) Around the same time, it became apparent that ordinary life insurance and other products were also moving in the same direction, with multiple options and dynamic crediting rates embedded in these products. Thus, there began discussions of a principle-based reserve (PBR) concept for valuation, wherein calculation methods and assumptions for minimum required statutory reserves are more dynamic and flexible.

Changes in valuation methods have led to changes in the examination approach. As CFT supersedes formulaic reserves in both importance and complexity, examiners will shift their attention away from formulaic reserves and toward CFT. As the simplified formulaic reserve standards are replaced by dynamic valuation standards closely resembling CFT, examination emphasis will also shift toward these new standards, and much of the work done to examine CFT can be replaced by examination of the dynamic methodology.

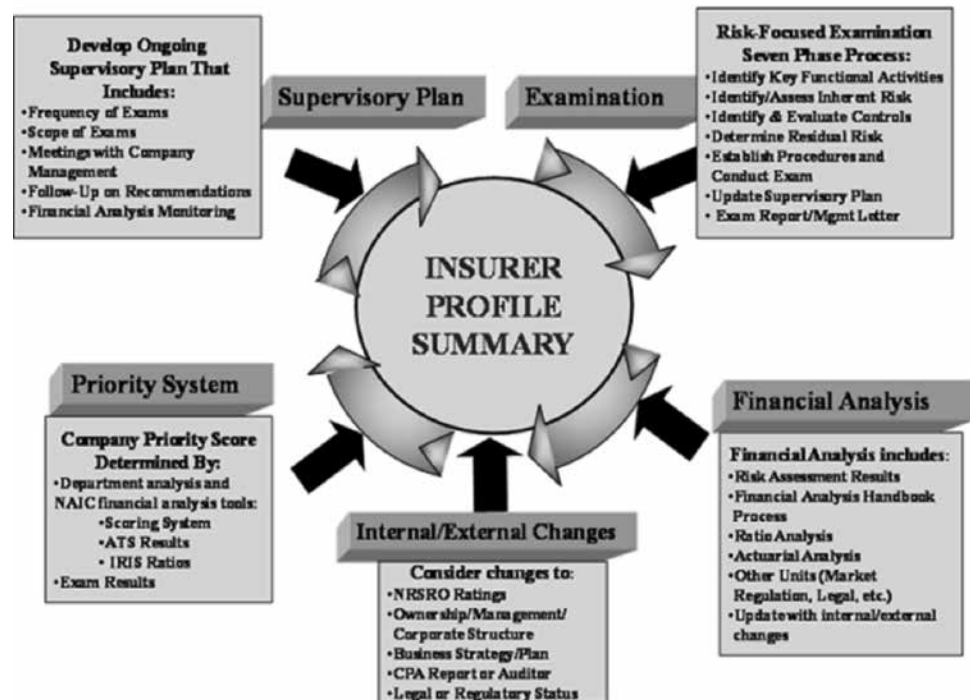
THE COMPANY ACTUARY’S NEW ROLE UNDER MAR

Reserves and other actuarial liabilities are subject to the same new requirements as other balance sheet items under both SOX and MAR. This means that the actuary must not only perform the calculations correctly, but must document the reasons for choosing a particular accounting basis or set of actuarial assumptions. The actuary must also document and test all controls on the valuation process and demonstrate why he or she believes that the financials under his scope are stated correctly in the financial statements. Thus, the actuary’s responsibilities no longer begin and end with valuation calculations. Rather, the scope of the actuary’s responsibilities now includes validation of the inputs used in the valuation process, as well as following the valuation results all the way through recording in the ledger and finally in the published statement.

THE EXAMINING ACTUARY’S NEW ROLE UNDER THE RISK-FOCUSED APPROACH

The examining actuary’s role has been changed to mirror the changes in the company actuary’s role. The risk-focused examination is part of the “risk-focused surveillance cycle,” which is a dynamic process under which the state is regularly reviewing new information from the company to determine the next steps in its supervisory program. The purpose is to assure that state resources allocated to insurance supervision are allocated most efficiently.

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The Risk-Focused Examination Seven-Phase Process is illustrated in this graphic from the NAIC *Financial Condition Examiners Handbook*, copyright 2014 by the National Association of Insurance Commissioners, used with permission.

The examination is a deep dive to reassess the inherent risks in the company’s operations and get the latest detailed information. The examination process has been divided into “phases,” with most of the early work consisting of getting familiar with the company and its businesses, as well as its staffing, risk management policies, IT environment, etc. Then, there is a very formal and thorough risk assessment process to determine how well the company management has mitigated the risk of a material misstatement in the financials. Finally, the examiners do sample testing only where the residual risk is deemed to be material.

Phase 1 of the risk-focused examination is to “Understand the company and identify key functional activities to be reviewed.” In Phase 1 the examiners try to answer the question: Who and what are we dealing with? Phase 2 is to “Identify and assess inherent risk in activities.” The question to be answered in Phase 2 is: What can go wrong? Together, these phases constitute the planning portion of the exam in which examiners gather and review as much information as possible in order to start to define the company’s risk profile and develop an approach for examining the company. During Phase 1 the examiners will hold preliminary high level meetings with the company to understand the company’s organization, business strategy, products, markets, and risk management process. The information reviewed includes public statements, insurance department records (including annual statements), and some preliminary information solicited from the com-

pany, such as organizational charts, board meeting minutes, and auditors’ reports (internal and external). With this information the examiners begin the process of identifying the inherent risks in the company’s operations. These risks will include products, markets, operations (corporate governance), and staffing adequacy and competency.

The risk assessment will also be based partially on quantitative aspects (materiality). Actuarial examiners will look at not only the amount of reserves for a particular product, but also the risk exposure (e.g., face amount or income) and the sensitivity of the product to the economic environment. So, for example, a policyholder option that currently has a reserve of zero may still contain a high inherent risk if a downturn in interest rates would result in a high reserve.

Risks reviewed include not only the risk of misstatement in the financials for current in-force business, but also “prospective” risks, which is a very broad category of risks that includes such things as under-staffing, underpricing, deteriorating new business, or excessive compensation commitments.

In Phase 2 the examiners look at “inherent” risk, which means the risk that exists without regard to any risk mitigation that may have been implemented by the company. This risk is analyzed both qualitatively and quantitatively, following a very formalized structure fully described in the *Examiners Handbook*. The basic

question to be answered in this phase is “What can go wrong?” and, secondarily, “Is it, or could it be, significant?” in terms of its impact on the company’s operations. Note that the word “wrong” is very broadly interpreted to include not only lack of current profitability, but anything that might inhibit the company’s long-term success. A good example is reputational risk, where a company must either take a large current loss to resolve an issue (e.g., mis-handling of claims over an extended period of time) or else face the prospect of a bigger loss later on due to deterioration in the company’s reputation.

The actuarial examiners fully participate in Phases 1 and 2, focusing on “Reserves” and any other aspect of the examination where the chief examiner solicits their support. Typical areas for other actuarial analysis would include reinsurance and pricing. In particular the actuarial examiners will look closely at the corporate governance around the valuation process, including reporting relationships all the way from the person who runs the valuation program up to the board of directors.

The result of Phase 2 will be full documentation of inherent risks, including a preliminary rating of high, low, or medium for each risk. For risks rated other than low, the examiners will then proceed to Phase 3 —Identify risk mitigation strategies and controls. In this phase the examiners attempt to answer the questions: “How is the company managing and mitigating its risks?” and “Is it effective?” The examiners solicit and review detailed information on the company’s risk management process, control structure, and testing program. This includes a review of management’s own documentation, as well as internal and external audit reports. It also includes the interviewing of departmental managers and selective interviewing of lower-level managers to determine if the documentation is complete and accurate. For example, a manager may implicitly be relying on a control that is not formally documented or reviewed by the auditors.

In Phase 4 the examiners determine residual risk by analyzing the risk mitigation strategy, including any available documentation, as well as information obtained through interviews. Note that a lack of docu-

mentation indicates a control weakness, despite any apparent benefits from the control, because it indicates a lack of management oversight and an inability of management to rely on those controls in signing off on the financial statements. “If it isn’t documented, then it doesn’t exist!!” Documentation is necessary not only for management’s own review but also for any subsequent reviews or testing done by internal audit, risk management, or outside auditors.

Note that through Phase 4 the examiners have not independently tested anything, but instead have obtained all available evidence of risk mitigation by management, including testing by management or auditors. The purposes of Phases 1 through 4 are, in fact, to independently evaluate testing by others to see if the examiners can rely on it and avoid unnecessary independent testing. As a result of Phase 4 the examiners will document the amount of residual risk present in each of the identified inherent risks, after judging the effectiveness of any risk mitigants. This is done through a formalized structured process in which the examiner rates the inherent risk, the potential effectiveness of the control, and the testing of that control, both qualitatively and quantitatively. The *Examiners Handbook* provides a calculation method for determining residual risk so that examiners may use a consistent approach. Examiners may override the formulas through use of judgment, but the rationale for assigning a rating must be fully documented, regardless of whether the rating is fully explained on an objective basis or whether it is partially subjective.

Neither the target company nor the state examiners desire that the examiners do any unnecessary testing because it would waste the examiners’ time and detract from the achievement of their objectives, and it would unnecessarily increase the overall budget for the examination. Therefore, after the preliminary ratings of residual risk are determined, the examiners may take a second look at any area where documentation of effective controls appears to be lacking, before moving on to Phase 5. This can save time and money, as it may

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result in finding documentation that the company failed to produce in the first go-round because of inadequate communication, or it may reveal effective controls that are simply undocumented or not sufficiently tested.

Phase 5 of the risk-focused examination consists of detailed testing. The amount and scope of the detailed testing will depend on the residual risks resulting from Phase 4. The actuarial examiners will coordinate with other examiners to get an overall assessment of the residual risks. Then, a testing plan will be developed that takes into account both the materiality and severity of the residual risks. Testing will be prioritized on a proportional basis with respect to the company's overall risk profile. In general, any residual risk with a rating other than low will be tested. The size and scope of the test matrix will depend, as always, on the materiality of the risk and the complexity of the risk profile. Even risks with a residual rating of low may be chosen for testing, if the examiners deem the inherent risk to be so high as to cause concern about the effectiveness of controls.

Phase 6 of the examination involves updating the state's priorities in their supervisory plan. As noted above, the examination is part of the "risk-focused surveillance cycle," and the next steps in that cycle will be based on the results of the examination. Phase 7 involves the documentation of the examination results, including a report, a management letter, and various structured report details included in the state regulatory system. Quite often, the actuarial report will be positioned as an appendix to the overall examination report. As noted above, the examination report and supporting documentation will help the state insurance department determine the next steps in its surveillance of the target company.

GENERAL CONSIDERATIONS

1. U.S. public companies have a head start on the risk-focused examination process, as the same process (i.e., a risk-focused audit) has been used for the company's GAAP financials since the introduction of SOX. Such companies would already be familiar with the process of identifying risks, identifying controls, and testing and documentation. Therefore, the

company would at least have a longer experience in using the process that supports a risk-focused examination. Moreover, many of the same controls used for GAAP financials are used for statutory financials.

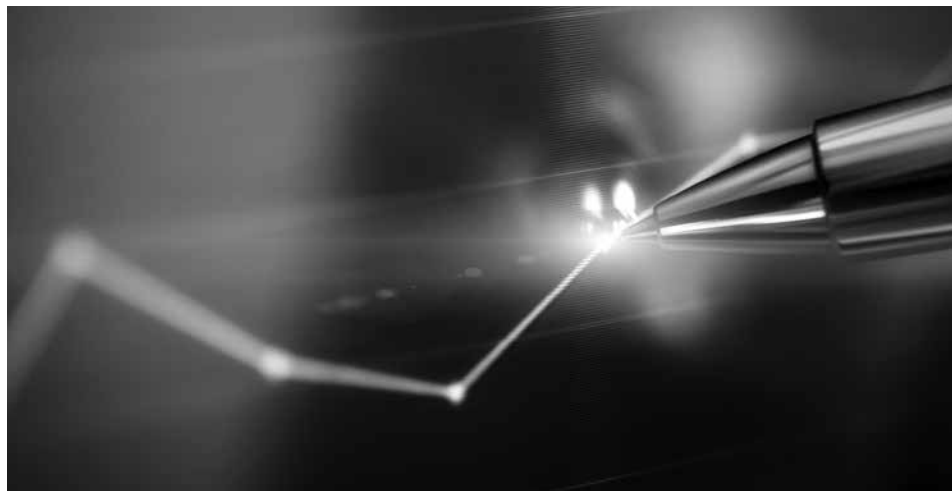
However, in the actuarial area (reserves) the process is not completely redundant unless the statutory reserve calculation is equal to the GAAP reserve. At the very least the statutory reserve will usually involve a different assumption set, and it often involves a different formula, a different process, or even an independent system. In extreme cases, the statutory reserve will be completely independent of the GAAP reserve, including a different staff assignment. Moreover, the reporting of the statutory reserve involves a separate ledger and reporting process, even if the reported figure is exactly the same.

The statutory examination may rely on SOX testing to the extent that the process is the same. So, for example, a whole life reserve that involves exactly the same formula and valuation process, but a different valuation interest rate or mortality table, may require almost no additional testing for statutory reporting. Conversely, if the same valuation process is used for statutory and GAAP (including the same valuation software, inputs and staff), but two different formulas are used within the valuation software, then checking would involve only a test that the right formula is used, as well as the right reporting process.

2. The degree of automation is a big factor in determining inherent risk. To the extent that a process is locked down so that the chance of an inadvertent error is minimal, then there is less need for extensive testing. This means that the process must be performed beyond the control of the user so that the user cannot inadvertently cause an error through a manual step. In other words, nothing can go wrong because the user has no control over it. Most valuation processes are not fully automated. However, a valuation process can be almost fully automated if the user control is limited to inputting a few variable values or choosing a variable value (e.g., a table index) from a limited menu. In this case controls would

only be necessary to assure that the right choice was exercised. Actuaries typically like to use Excel workbooks in the valuation process because of their flexibility in accepting inputs or changes in formulas or data. Unfortunately, that flexibility also increases the inherent risk in the process because it multiplies the number of things that can go wrong. Thus, Excel workbooks must include controls that limit the ability of the user to make changes. Generally, this would include limited access to the workbook through password protection on both the workbook itself and the computer location where it is filed. It would also include protection against writing in the workbook other than a few restricted routine changes or inputs. One effective control is a program change log that describes the “before” and “after” statuses of the workbook, including tests of the impact of the change as well as regression tests to assure that there were no unintended changes.

3. A valuation process, whether it involves Excel workbooks, commercial software, or customized in-house software, can only be considered fully automated if the actuarial user cannot change the data input, the assumptions, or the formulas used. Changes in input data, assumptions or formulas may be routine (they are done every time the valuation is run) or non-routine. If they are routine, then there must be separate controls around these changes to assure that the correct data, assumptions and formulas are used in the current valuation. If they are non-routine, then they must be tested and locked down before the valuation process starts. For example, if the mortality table used for valuation of a term product is supposed to be re-evaluated every year, then there must be documented evidence explaining why it was or was not changed and why the current assumption is correct for the current valuation. Basing a decision on simple “actuarial judgment” is problematic because it is inadequate as a basis for management oversight, which means that corporate governance is insufficient. However, it is somewhat easier to invoke actuarial judgment if there is a formalized review and sign-off procedure to show that the proper corporate governance has occurred through an independent review of the assumption-setting process. Some



companies may choose to use an “assumption review committee” for this purpose.

4. Complexity is another important factor in inherent risk. In fact, one reason why actuarial processes get so much attention in an examination is that they tend to be the most complex parts of the reporting process, besides being the largest part of the liabilities, and they may be the part that is least understood by the CFO and other members of management. Therefore, because the asset adequacy testing process involves multiple scenarios, customized assumptions, and tasks that are less automated, it will get extra attention in the examination. Similarly, a minimum reserve requirement that involves more complex calculations, such as AG43 or universal life with secondary guarantees, contains more inherent risk than the valuation of more traditional products such as whole life.

PREPARING FOR THE RISK-FOCUSED EXAMINATION

The simplest thing that an actuary can do to prepare for a risk-focused examination is to try to look at his own situation from the regulator’s point of view. This would involve being able to answer a few routine questions:

1. Where do the regulators need to look? What are the risks the company is facing, both now and in the future? Is the company’s management worried about the right things?

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2. Does the company have an adequate risk management process in place? Is there a formalized process that identifies risks and takes action to mitigate them? What evidence does the company have that the process is working properly?
3. In particular, what evidence does the company have that the reserves are adequate and properly calculated according to minimum statutory standards? How does the appointed actuary know that the reserve calculations are appropriate and accurate?
4. Is staffing adequate and competent, and is corporate governance sufficient to enable the CEO to rely on the actuarial opinion?

Ideally, the company would automatically be prepared for a risk-focused exam through the company's own risk management process (regulatory compliance risk), but if this process is not well developed or less than robust, then actuarial managers may want to consider an independent peer review. ■

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