

COMPTROLLER'S - APPLICATION OF THE TARGETED RISK APPROACH IN THE IDENTIFICATION, MEASUREMENT, AND ASSESSMENT OF RISK

Supervision by Risk

Supervision by risk requires examiners to determine how certain existing or emerging issues facing a bank or the banking industry affect the nature and extent of risk in that institution. Based on that risk evaluation, examiners then structure regulatory supervisory plans and actions. Supervision by risk builds upon the risk-based supervisory philosophy historically used by the OCC. This enhancement provides consistent definitions of risk, a structure for assessing these risks, and a more integrated use of risk assessment in the supervisory process.

The OCC recognizes that banking is a business of taking risk in order to earn profits. Risk levels, however, must be appropriately managed and controlled. Banking risks also must be evaluated in terms of their significance. These assessments should be ongoing.

Supervision by risk leaves the responsibility for controlling risks with bank management. The OCC assesses how well a bank manages this risk over time, rather than only assessing the condition at a single point in time. With supervision by risk, the OCC functions in more of an oversight than an audit role. Supervision by risk allows the OCC to supervise by concentrating systemic risk and institutions or areas that pose the greatest risk to the system.

For the entire industry, the OCC's supervision by risk identifies areas that, in aggregate, pose the potential for presenting an unacceptable level of risk to the banking system and the federal deposit insurance fund. For those high-risk activities and/or activities that have become particularly risky because of market conditions, the OCC's goal is to communicate with, and influence, the industry through direct supervision, policy, and regulation. In situations where an individual bank is not properly managing its risks, the OCC's goal is to use appropriate means to influence bank management to adjust its practices to conform with sound fundamental banking principles.

Some risk are inherent to banking. A wide body of knowledge exists within the industry on how to identify, measure, control, and monitor these inherent risks. Supervision by risk acknowledges those inherent risks and performs limited testing in examinations directed at confirming whether adequate controls are in place. Other risks in the industry are more diverse and complex. These more sophisticated risks require enhanced controls and monitoring by both the bank and the OCC. The OCC is committed to directing its most significant resources to these complex and evolving risks, especially where they present material, actual, or potential risks to the banking system.

Risks that large banks assume are generally diverse and complex and warrant a risk-oriented supervisory approach. Under this approach, examiners do not attempt to prohibit appropriate risk-taking, but rather ensure that banks understand and control the levels and types of risk they assume. In situations where risk is not properly managed, the OCC tries to direct bank management to take corrective action so that the bank is managed in a safe and sound manner. In all cases, the OCC's supervisory focus is to ensure that bank management identifies, measures, controls, and monitors risks to ensure sufficient capital is present in light of the risks.

Risks that community banks assume are generally less diverse and complex than those of larger banks. Under this approach, examiners verify the existence of adequate controls and risk management systems by testing transactions. Examiners will focus attention on the risk management systems and the methods management uses to identify, measure, control, and monitor risk in those community banks or in areas that are more diverse and complex.

Supervision by risk allocates greater resources to those areas with higher risks. The OCC accomplishes this by:

- Identifying risks using common definitions. This set of risks forms the basics for supervisory assessments and actions.
- Measuring risk based on common evaluation factors. Risk measurement is not always quantified in dollar terms; it is sometimes a relative assessment of exposure. For example, numerous internal control deficiencies may indicate a bank has an excessive amount of transaction risk.
- Evaluating risk management to determine if bank systems adequately manage and control the identified risk levels. The sophistication of the systems will vary based on the level of risk present and the size and/or complexity of the institution.
- Assigning greater resources to areas of higher or increasing risk, both within an individual institution and among banks in general. This is done through the supervisory strategy.
- Performing examinations based on the risks, reaching conclusions on risk profile and condition, and following up on areas of concern.

To accomplish these tasks, examiners should discuss preliminary conclusions of this risk-based supervisory strategy with bank management and adjust conclusions and strategies based on these discussions, if appropriate. The OCC can then focus supervisory efforts on significant risks, i.e., the areas of highest risk within a bank and within the banking system.

Examiners must focus on the consolidated company risk profile to fully implement supervision by risk. This consolidated approach recognizes that risks at individual institutions may be mitigated or increased on a company-wide basis. Individual bank risk profiles, however, must be determined for the lead bank and significant national bank affiliates for the examiner to fully evaluate the consolidated risk profile.

In summary, the supervision by risk approach provides the OCC and the banking industry with:

- A high level of consistency in supervision because it sets and uses minimum core procedures.
- An allocation of resources based on risk.
- Sufficient flexibility to allow examiners to tailor the supervisory effort to the risk present.
- Less supervisory intervention in areas of low risk.
- Help in determining the sufficiency of each bank's capital and risk management systems.

Definition of Risk

For purpose of the OCC's discussion of risk, the OCC assesses banking risk by its impact to capital and earnings. From a supervisory perspective, risk is the potential that events, expected or unanticipated, may have an adverse impact on the bank's capital or earnings.

The simple existence of risk is not necessarily reason for concern. To put risks in perspective, examiners should decide if the risks a bank is undertaking are warranted. Generally, risks are warranted when they are understandable, measurable, controllable, and within the bank's capacity to readily withstand adverse performance. If examiners determine risks are unwarranted, they must communicate with management and the directorate to mitigate or eliminate the unwarranted risks. Appropriate actions for the bank to take may include reducing exposures, increasing capital, or strengthening risk management processes.

Risk Management

Because market conditions and company structure vary, no single risk management system works for all companies. Each institute should develop its own risk management program tailored to its needs and circumstances. The sophistication of the risk management system will increase with the size, complexity, and geographic diversity of each bank or company. All sound risk management systems, however, have several common fundamentals. For example, bank staff responsible for implementing sound risk management systems perform those duties independent of the bank's risk-taking activities. Regardless of the risk management program's design, each program should include:

- Risk identification. Proper risk identification focus on recognizing and understanding existing risks or risks that may arise from new business initiatives. Risk identification should be a continuous process, and should occur at both the transaction and portfolio level.
- Risk measurement. Accurate and timely measurement of risks is a critical component of effective risk management. A bank that does not have a risk measurement system has limited ability to control or monitor risk levels. Further, the sophistication of the risk measurement tools a bank uses should reflect the complexity and levels of risk it has assumed. The bank should periodically verify the integrity of the measurement tools it uses. Good risk measurement systems assess both individual transactions and portfolios.
- Risk control. The bank should establish and communicate limits through policies, standards, and/or procedures that define responsibility and authority. These control limits should be meaningful management tools that can be adjusted if conditions or risk tolerance change. The bank should have a process to authorize exceptions or changes to risk limits when they are warranted.
- Risk monitoring. Banks should monitor risk levels to ensure timely review of risk positions and exceptions. Monitoring reports should be frequent, timely, accurate, and informative; and should be distributed to appropriate individuals to ensure action when needed.

Effective risk management requires an informed board of directors. The board must guide the company's strategic direction. A key component of strategic direction is endorsing the organization's risk tolerance by approving policies that set standards, either orally or in writing. Well-designed monitoring systems allow the board to hold management accountable for operating within established tolerance levels.

Capable management and appropriate staffing also are critical to effective risk management. Bank management is responsible for the implementation, integrity, and maintenance of risk management systems. Management also must keep the directors adequately informed. Management must:

- Implement the company's strategic direction.
- Develop policies, formal or informal, that define the institution's risk tolerance that are compatible with the bank's strategic goals.
- Oversee the development and maintenance of management information systems to ensure they are timely, accurate, and informative.
- Ensure that strategic direction and risk tolerance are effectively communicated and adhered to throughout the organization.

When examiners assess risk management systems, they consider policies, processes, personnel, and control systems. A significant deficiency in one or more of these components constitutes a deficiency in risk management. All of those systems are important, but the sophistication of each will vary depending upon the complexity of the bank. Noncomplex community banks normally have less formalized policies, processes, and control systems in place than do large banks.

- **Policies** reflect the bank's intent and commitment to pursuing desired results. They set standards and courses of action to pursue, implement, or enforce specific objectives. Good policies link with, and reflect, a bank's underlying mission, values, and principles. They also clarify the bank's tolerance for risk. Mechanisms should be in place to trigger a review of policies in the event that activities or tolerances change. Policies may be written or unwritten depending upon the effectiveness of management and complexity of the area or bank. In any event, standards should be articulated and adhered to in practice.
- **Processes** are the procedures, programs, and practices that govern how a bank will pursue its objectives. Processes define how daily activities are carried out. Good processes are consistent with the underlying policies, are efficient, and include checks and balances.
- **Personnel** are the staff and managers that execute or oversee performance of the processes. Good staff and managers are qualified; competent, and perform as expected. They understand the bank's mission, values, policies, and processes. Compensation programs should be designed to attract, develop, and retain qualified personnel.

- **Control Systems** are tools and information systems that bank managers use to measure performance, make decisions, and assess effectiveness of existing processes. These feedback devices must be timely, accurate, and informative. They measure performance and assist in decision-making.

Categories of Risk

The OCC has defined nine categories of risk for bank supervision purposes. These risk are: **Credit, Interest Rate, Liquidity, Price, Foreign Exchange, Transaction, Compliance, Strategic, and Reputation**. These categories are not mutually exclusive, any product or service may expose the bank to multiple risks. For analysis and discussion purposes, however, the OCC identifies and assesses the risks separately.

Credit Risk

Credit Risk is the risk to earning or capital arising from an obligor's failure to meet the terms of any contract with the bank or otherwise fail to perform as agreed. Credit risk is found in all activities where success depends on counter-party, issuer, or borrowed performance. It arises any time bank funds are extended, committed, invested, or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet.

Credit risk is the most recognizable risk associated with banking. This definition, however, encompasses more than the traditional definition associated with lending activities. Credit risk also arises in conjunction with a broad range of bank activities, including selecting investment portfolio products, derivatives trading partners, or foreign exchange counter-parties. Credit risk also arises due to country or sovereign exposure, as well as indirectly through guarantor performance.

Interest Rate Risk

Interest rate risk is the risk to earning or capital arising from movements in interest rates. The economic perspective focuses on the value of the bank in today's interest rate environment and sensitivity of that value to changes in interest rates. Interest rate risk arise from difference between the timing of rate changes and the timing of cash flows (re-pricing risk); from changing rate relationships among different yield curves affecting bank activities (basis risk); from changing rate relationship across the spectrum of maturities (yield curve risk); and from interest-related options embedded in bank products (options risk). The evaluation of interest rate risk must consider the impact of complex, illiquid hedging strategies or products, and also the potential impact on fee income which is sensitive to changes in interest rates. In those situations where trading is separately managed this refers to structural positions and not trading portfolios.

The assessment of interest rate risk should consider risk from both an accounting perspective (i.e., the effect on the bank's accrual earnings) and the economic perspective (i.e., the effect on the market value of the bank's portfolio equity). In some banks, interest rate risk is captured under a broader category of market risk. In contrast to price risk, which focuses on the market-to-market portfolios (e.g., trading accounts), interest rate risk focuses on the value implications for accrual portfolios (e.g., held-to-maturity and available-for-sale accounts).

Liquidity Risk

Liquidity risk is the risk to earnings or capital arising from a bank's inability to meet its obligations when they come due, without incurring unacceptable losses. Liquidity risk includes the inability to manage unplanned decreases or changes in funding sources. Liquidity risk also arises from the bank's failure to recognize or address changes in market conditions that affect the ability to liquidate assets quickly and with minimal loss in value.

As with interest rate risk, many banks capture liquidity risk under a broader category-market risk. Liquidity risk, like credit risk, is a recognizable risk associated with banking. The nature of liquidity risk, however, has changed in recent years. Increased investment alternative for retail depositors, sophisticated off-balance sheet products with complicated cash-flow implications, and a general increase in the credit sensitivity of banking customers are all examples of factors that complicate liquidity risk.

Price Risk

Price risk is the risk to earnings or capital arising from changes in the value of portfolios of financial instruments. This risk arises from market-making, dealing and position-taking activities in interest rate, foreign exchange, equity, and commodities markets.

Many banks use the term price risk interchangeably with market risk. This is because price risk focuses on the changes in market factors (e.g., interest rates, markets liquidity, and volatilities) that affect the value of traded instruments. The primary accounts affect the value of traded instruments. The primary accounts affected by price risk are those which are re-valued for financial presentation (e.g., trading accounts for securities, derivatives, and foreign exchange products).

Foreign Exchange Risk

Foreign exchange risk is the risk to earning or capital arising from movement of foreign exchange rates. This risk is found in cross-border investing and operating activities. Market-making and position-taking in foreign currencies is price risk.

Foreign exchange risk is also known as translation risk and is sometimes captured as a component of market risk. Foreign exchange risk arises from accrual accounts denominated in foreign currency, including loans, deposits, and equity investments (i.e., cross-border investing). Accounting conventions require quarterly revaluation of these accounts at current rates. This revaluation translates the foreign denominated accounts into U.S. dollar terms.

Transaction Risk

Transaction risk is the risk to earnings or capital arising from problems with service or product delivery. This risk is a function of internal controls, information systems, employee integrity, and operating processes. Transaction risk exists in all products and services.

Transaction risk is also referred to as operating or operational risk. This risk arises on a daily basis in all banks as transactions are processed. It is a risk that transcends all divisions and products in a bank.

Compliance Risk

Compliance risk is the risk to earnings or capital arising from violations of, or nonconformance with laws, rules, regulations, prescribed practices, or ethical standards. Compliance risk also arises in situations where the laws or rules governing certain bank products or activities of the bank's clients may be ambiguous or untested. Compliance risk exposes the institution to fines, civil money penalties, payment of damages, and the voiding of contracts. Compliance risk can lead to a diminished reputation, reduced franchise value, limited business opportunities, lessened expansion potential, and lack of contract enforceability.

Compliance risk is often overlooked as it blends into operational risk and transaction processing. A portion of this risk is sometimes referred to as legal risk. This is not limited solely to risk from failure to comply with consumer protection laws; it encompasses all laws as well as prudent ethical standards and contractual obligations. It also includes the exposure to litigation from all aspects of banking, traditional and nontraditional.

Strategic Risk

Strategic risk is the risk to earning or capital arising from adverse business decisions or improper implementation of those decisions. This risk is a function of the compatibility of an organization's strategic goals, the business strategies developed to achieve those goals, the resources deployed against these goals, and the quality of implementation. The resources needed to carry out business strategies are both tangible and intangible. They include communication channels, operating systems, delivery networks, and managerial capacities and capabilities.

Strategic risk focuses on more than an analysis of the written strategic plan. It focuses on how plans, systems, and implementation affect the bank's franchise value. It also incorporates how management analyzes external factors that impact the strategic direction of the company.

Reputation Risk

Reputation risk is the risk to earnings or capital arising from negative public opinion. This affects the institution's ability to establish new relationships or services, or to continue servicing existing relationships. This risk can expose the institution to litigation, financial loss, or damage to its reputation. Reputation risk exposure is present throughout the organization and is why banks have the responsibility to exercise an abundance of caution in dealing with its customers and community. This risk is present in activities such as asset management and agency transactions.

The assessment of reputation risk recognizes the potential impact of the public's opinion on a bank's franchise value. This risk is inherent in all bank activities. Banks which actively associate their name with products and services, such as with fiduciary services, are more likely to have higher reputation risk exposure. As the bank's vulnerability to public reaction increases, its ability to offer competitive products and services may be affected.

Measuring and Assessing risk

To ensure effective supervision by risk, the OCC requires a common framework to document decisions about risk. The risk assessment system (RAS) provides a concise method of communicating and documenting judgments regarding the quantity of risk, the quality of risk management, the level of supervisory concern (measured as aggregate or composite risk), and the direction of risk. The common definitions explained above are critical to identifying risk consistently. A list of evaluation factors that examiners should consider in making the assessments is also provided. These evaluation factors are not mandatory checklists, but rather provide an overview of issues that can assist the examiner in making decisions within the RAS.

Assessments of risk in the RAS must reflect both current and prospective view of the company's or bank's risk profile. This assessment drives supervisory strategies and activities. It also facilitates discussions with bank management and directors and helps to ensure more efficient examinations.

The RAS is used for all banks. The OCC has, however, developed two versions of the RAS, one for community banks and one for large banks. This allows for a common supervisory philosophy while recognizing the differing levels and complexities of risk present in each bank.

Examiners should discuss conclusions from the RAS with appropriate bank management and the board. Bank management's input may help clarify or modify the examiner's RAS conclusions. While the OCC does not require bankers to adopt a similar process, examiners must effectively communicate the rationale for their decisions in evaluating risk to ensure effective supervision. These discussions will help the OCC and bank management reach a common understanding of the risks, focus on the strengths and weaknesses of risk management, and ensure that future supervisory plans are achieved.

The Risk Assessment System for Large Banks

Once the risks in a company are identified using the common definitions explained above, examiners use the common framework provided by the RAS to assess the risk exposure for the nine types of risk. For seven of the risks (Credit, Interest Rate, Liquidity, Price, Foreign Exchange, Transaction and Compliance), the supervisory process includes an assessment of the:

- **Quantity of risk**, which is the level or volume of risk that exists and is assessed as high, moderate, or low.
- **Quality of risk management**, which includes how well risk are identified, measured, controlled, and monitored and is assessed as weak, acceptable, or strong.
- **Aggregate risk**, which is a summary judgment that reflects the level of supervisory concern considering both the quantity of risk and the quality of risk management, weighing the relative importance of each. The examiner's assessment of aggregate risk may be impacted by mitigating factors, not necessarily considered in the quantity of risk and quality of risk management decisions. An example of a mitigating factor is insurance. Aggregate risk is assessed as high, moderate, or low. Aggregate risk assessments direct the specific activities and resources outlined in supervisory strategies.
- **Direction of risk**, which indicates the likely changes to the risk profile over the next 12 months and is assessed as decreasing, stable, or increasing. Decreasing direction indicates the examiner anticipates that aggregate risk will decline over the next 12 months. Stable direction indicates the examiner anticipates that the aggregate will remain unchanged. Increasing direction indicates the examiner anticipates the aggregate risk will be higher 12 months in the future. When aggregate credit risk is moderate and direction is decreasing, the examiner can anticipate that aggregate credit risk will be low or lower in 12 months. The direction of risk often influences the supervisory strategy.

For the other two categories of risk, strategic risk and reputation risk, examiners' judgment of risk is less quantifiable. These risks affect the bank's franchise value but are not direct risks that examiners can precisely measure in an examination. These risks require examiners to consult with supervisory offices to ensure all elements are considered. Given the less explicit nature of these risks, the OCC's risk assessment and

measuring process is modified. For strategic risk and reputation risk, the supervisory process includes an assessment of the:

- **Composite risk**, which is a summary judgment that reflects the level of risk of supervisory concern incorporating all elements that affect strategic risk and reputation risk. It is assessed as high, moderate or low. Composite risk assessments direct the specific activities and resources outlined in supervisory strategies.
- **Direction of risk**, which is the examiners' view of likely changes to the risk profile over the next 12 months, as explained above. It is assessed as decreasing, stable, or increasing.

The combined assessments of each significant national bank allow the examiner to assess the consolidated risk profile of the holding company. The relative importance of each risk, both for the individual bank and for the holding company, should influence the development of the strategy and the assignment of resources.

Examiners should complete a **consolidated** RAS quarterly. Examiners must also complete the RAS for each significant national bank affiliate every 12 months. The bank RAS should be updated more frequently if deemed appropriate based on the consolidated risk profile. The consolidated and individual bank RAS conclusions are recorded in SMS.