Risk Management in Banks–Beyond Regulations

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Greek philosopher Heraclitus once observed "No man ever steps in the same river twice, for it is not the same river and he is not the same man." The same principle applies to the area of risk management. The risk landscape has been evolving since inception, more so in the 21st century. As new risks are unfolding, bank's traditional risk management techniques become inadequate. Thus, the hunt for innovative and efficient methods to address the new problems are constantly challenging risk managers and regulators alike.

Winds of Change Buffets Banking Sector

Banking has been evolving since the beginning. Even though change is a constant factor in the banking sector, the current phase of change stands out in terms of its range, depth and complexity. Geopolitical developments like the Russia-Ukraine conflict and growing tension in the Middle East have created significant uncertainty in the world economy, business and financial market. Commodity prices, including food and energy, have increased sharply as concern about supply disruptions has grown. With a view to containing rise in prices, central banks all over the world are tightening the monetary policy pushing the interest rate northward. All these changes have given rise to an enhanced sense of uncertainty, unpredictability and skepticism in the minds of banker.

Further, if we consider the winds of change blowing from the collapse of existing world order, threats of de-globalization and prioritization of short-term national interests over the global good, we can begin to appreciate the daunting nature of the task confronting risk managers and regulators around the world.

Besides, one can observe the paradigm shift in the way financial institutions are providing banking, insurance and other financial services to customers. Increasing number of customers are now opting to avail financial services through convenient, credible and secure online delivery apps. No doubt COVID-19 was the catalyst which propelled more and more people to accept and adopt technology to carry out their normal banking transactions. Observing the momentous change brought about by technology in offering financial services, we can-not but appreciate what Bill Gates had said way back in 1994 "Banking is necessary, but banks are not."

Banks, on their part, are going the extra mile to harness technology to reinvent traditional business models and offer faster, cheaper and more convenient financial products and services. They are not falling behind in offering a plethora of technological products and services to a wide range of customers from the common man to globe-trotting businessman. Besides, Environmental, Social and Governance (ESG) movements are expecting

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greater commitments from banks to the cause of Corporate Social Responsibility (CSR) and societal transformation while conducting banking operation.

To sum up, the pace of change in financial services, coupled with significant change in the external environment, have made the current changes stand out compared to those in the past.

Evolving Risk Scenarios in the 21st Century

In the 21st century, the array of risks faced by financial institutions are complex in nature. Although each institution's risk profile is unique and constantly evolving, several major challenges are vitiating the overall risk environment. While this is not an exhaustive list, we briefly discuss some of the common threats and challenges that are confronting banking system today.

Geopolitical uncertainty: Banks are closely tied to global financial market and economies, making them highly susceptible to geopolitical risk. Recent conflicts in the Middle East, growing concerns about potential US-China tensions over Taiwan and the Russian invasion of Ukraine have raised heightened concerns about geopolitical stability. Adverse geopolitical events can lead to sudden shifts in market sentiment and significant increases in uncertainty, enhancing the vulnerabilities of financial institutions and markets. They can dampen consumption and distort business plans, disrupt supply chains, all which can have cascading effects on the global economy.

Climate change: Basel Committee on Banking Supervision (BCBS) has aptly underscored the significance of climate change in the following words. "Climate change may result in physical and transition risks that could affect the safety and soundness of individual banking institutions and have broader financial stability implications for the banking system" (BIS, 2022). Reserve Bank of India (RBI) views climate-related financial risks as a potential source for systemic risk facing the banking sector. It has urged upon banks to "identify, measure, monitor, manage and report the exposure related to climate-related and environmental risk in a manner proportionate to the size, complexity of its business operations and risk profile" (RBI, 2022). Extreme weather events like floods and cyclones, landslides and prolonged drought can severely stress productivity, disrupt business continuity and cause damage to physical infrastructure. They can potentially disrupt multiple segments of the economy carrying significant economic cost and financial losses. To make things worse, climate change related risk events are hard to predict and their impacts are difficult to assess.

Cyber leap: A major cyber incident, if not properly addressed, can seriously upend the financial system of a country, including critical banking infrastructure. This can lead to broader systemic implications. The potential loss from such incidences can be monumental and the damage to public trust and confidence can be significant. Broadly, a couple of factors have exacerbated this risk. COVID-19 has given a phenomenal fillip to the digital adoption by the common public. Second, with the digital transformation, malicious actors are finding new opportunities to threaten the global financial system. Keeping up with the speed of digital and other transformations has become a significant risk management challenge in the days to come.

Digital assets: The landscape of digital assets is rapidly evolving, driven by technological advances and changing consumer preferences. Blockchain technology, Decentralized Finance (DeFi) and smart contracts are going to play considerable roles in shaping the future of financial assets.

Digital assets typically exist in digital formats which can be easily accessed, traded, or sold across global financial markets. Modern digital assets, especially those based on blockchain technology, are touted to provide transparency and security through decentralized immutable ledgers. Reduced intermediaries and streamlined processes often result in lower transaction costs particularly in doing financial transactions.

However, due to the decentralized nature of the digital asset market, complex product structures and absence of regulatory supervision, regulators around the world have expressed concerns around key risks including cybersecurity risk, systems failure, compliance risk, customer due diligence risk, regulatory risk, including challenges of risk management and compliance of AML/CFT provisions, etc. Especially, in the case of cryptocurrencies, market prices can be highly volatile. The intrinsic value of digital assets is oftentimes subjective in nature with proclivity to high level of volatility. The Reserve Bank of India's Governor Shri. Shaktikanta Das in the foreword to Financial Stability Report (Issue No. 25) has expressed his opinion about cryptocurrencies in the following words "Cryptocurrencies are a clear danger. Anything that derives value based on make believe, without any underlying, is just speculation under a sophisticated name" (RBI, 2022).

However, as an alternative, central banks around the world including RBI have launched their own digital currencies. RBI in the Concept Note on Central Bank Digital Currency (CBDC) has observed "CBDC, being a sovereign currency, holds unique advantages of central bank money viz. trust, safety, liquidity, settlement finality and integrity" (RBI, Report, 2022). These developments potentially reshape business models around payment and settlement system disrupting legacy market system and provide credible alternative to private virtual currency without any associated risks.

Regulatory expectation: As the banking system has become more complex and as unconventional risks are looming large in the horizon, it is expected that banking regulations are going to be more stringent. Regulators are expected to come up with a slew of measures to improve the safety and soundness of the banking sector. Prominent among them would be the issue of upgraded version of existing Basel III Framework popularly known as the "Endgame" or "Basel IV". Banks, on their part, will have to devote significant efforts and resources to comply to the new provisions and understand their impact on the existing business model.

Regulatory expectations would also include that banks treat their customers fairly, provide clear and accurate information and refrain from deceptive practices. This would further encompass transparent pricing, honest advertising and equitable treatment in lending practices. With the rise in digital banking, regulators expect banks to set up robust cybersecurity frameworks that include risk assessments, incident response plans and fortification of security arrangement.

As banks increasingly collaborate with fintech firms, regulators' expectation would also include that such partnerships should be robust and comply with all existing financial regulations. Aspects such as banks' third-party risk management programs, fintech partnerships and the deployment of emerging technologies like Artificial Intelligence (AI) and Distributed Ledger Technology (DLT) are likely to come under increased regulatory scrutiny too.

New face of customer's expectation

Customer's experience is the key differentiator in today's fast paced banking. As digital transformation revolutionized the bank's functioning, expectations of banks' customer have also evolved significantly. Customer loyalty has become the thing of the past as transfer of accounts can take place at the click of a mouse.

Today's customers expect seamless access to banking services through digital channels of their choice. Online and mobile banking have become crucial enabling factors for customers to carry out transactions, check balances, apply for loans, pay taxes and do many more things, anytime and anywhere. The new generation clients demand personalized experience tailored to meet individual needs based on a deeper understanding of their distinctive preference, inclination and behavior.

In an age where instant gratification is the norm, customers expect fast and efficient service. From quick transaction processing to rapid response times for inquiries and issue resolution, banks need to minimize delays and red tape to maintain competitive edge. In this regard, implementation of AI and machine learning can significantly boost operational efficiency and customer experience through multiple platforms including phone, email, chatbots and social media.

Modern banking customers value transparency. Clear communication regarding fees, terms and policies helps to build trust. Banks must be transparent in their operations and ensure that customers fully understand the products and services they are availing. Trust can further be reinforced by sound corporate governance system and ethical practices.

Meeting these comprehensive expectations requires banks to continuously innovate, invest in technology and place customer's experience at the forefront of their strategies.

Steep Challenge before Risk Management

Since the beginning, banks around the world are being challenged by risk-reward paradox. Taking too little risk can result in missed opportunity. Taking too much risk can often prove to be fatal. Ultimately, finding a judicious balance between risk and reward can ensure stable profit and long-term viability of a financial institution. A sound risk management system can enable a bank to achieve this objective by maximizing risk adjusted return.

Risks in the 21st century, however, have evolved to become far more complex and demanding than at any time in its history. They have become quicker to emerge, less predictable and far more variable in severity. To make matters worse, globalization and social media have increased the speed and distance with which risk can travel across regions, sectors, even countries.

Rise of Non-linear Risks: So far, banks have been dealing with financial risks arising from their operations such as credit, market, operational, liquidity and technology risks which are linear in nature. For example, credit risk increases when a bank give loan to a borrower. Similarly, market risk arises when a bank acquire an asset for trading. In case of linear risk, standard risk management techniques are used to identify, measure, manage and monitor such types of risks.

However, the 21st century banking has brought into focus certain types of risks which are non-linear in nature such as geopolitical risk, climate risk, reputation risk, regulatory risk etc.

Today's risks can be much more complex, unpredictable and come with significant impact. The traditional risk management measures often prove to be ineffective in addressing them. These types of risks are harder to quantify and manage because of their intricate interactions and dependencies.

Linear risks like credit risk typically materialize after a lag period before it poses a serious threat to the business. In case of non-linear risks, circumstances can change quickly ratcheting up the scope for risk events to transpire. At the same time, the impacts of such events are highly variable and can change quickly.

Further, in an emerging economy like that of India, there can be a rise in unforeseen risks which are difficult to identify and manage. Unforeseeable risks can arise from a variety of sources, including large scale urbanization, unexpected capital outflow, migration of talent out of country, etc. It is essential that banks understand the nature of these risks and proactively develop strategies for dealing with them with appropriate contingency plan.

In the face of the changing circumstances, the ongoing monitoring and review of 'Non-Linear Risk' is critical to ensure risk management strategies to remain effective and relevant in a world of uncertainty.

Banking Regulation and Risk Management Process

Banks are among the most regulated entities in a country. Because of the pivotal role they play in the economic life of people and the trust they enjoy from the public, supervisory oversight and prudential regulation are considered as integral components of the banking ecosystem.

Regulation entails framing of rules and guidelines within which financial institutions must operate. It pertains to areas such as bank's formation, licensing arrangement, capital adequacy requirements, operational boundaries and risk management guidelines, etc.

Among the reasons why banks are regulated include macro-economic stability, protection of depositors' interest, promotion of efficient and competitive financial system and prevention of systemic shocks.

Regulators set norms and standards to ensure that banks do not take on excessive risk and that they manage their risks effectively and in an efficient manner. Since regulation refer to a set of rules, procedures, controls intended to protect the banks against risks, regulatory compliance is sometimes considered as sufficient condition to guarantee long-term survival of a bank. However, such a presumption may not be true for the following reasons.

First, risk management process of a bank is typically a bank specific and bank driven process. It involves an internal assessment of bank's risk exposures and development of an appropriate risk management system to manage and monitor them. In developing the process, the regulatory guidelines at best serve as helpful markers. For instance, while framing risk management policy or setting up risk management framework, banks are guided by the Master Circulars, Master Directions, Notifications and Guidance Notes, etc. issued by RBI from time to time.

Second, the regulatory compliance often minimizes the likelihood of a bank failure. But it can-not totally exterminate the possibility of a bank failure. It is the bank's internal governance structure and prevailing risk culture that often determine the efficacy of its risk management system. The best of risk management strategy would fail if a bank does not have appropriate risk culture to support it.

Third, a bank is run by its own internal policies, guidelines, norms and process. It is the responsibility of bank's management to ensure smooth running of a bank. Regulators have no direct role in the day to day running a bank. However, if the regulators are not satisfied with the functioning of a bank, they can issue direction, guidelines to facilitate the bank to undertake course correction measures before it is too late.

Fourth, no set of regulation can anticipate every possible risk and failure to manage that risk. This is particularly true in case of non-linear risks, like geopolitical risk, climate risk, reputation risk, strategic risks etc. These risks can arise abruptly without any warning and often laced with catastrophic consequences. In fact, banks are in a better position to detect these risks earlier than others through their monitoring mechanism.

To sum up, risk management is a comprehensive process to identify, assess and mitigate risk. It goes much beyond the regulatory compliance. It is not about just ticking off boxes. It is about creating a well-integrated system that protects the banks from various threats.

Strategic Framework for Risk Management

According to Prof. Kaplan and Prof. Mike (2012) of Harvard Business School, it is advisable for organizations to match their risk management approach to the nature of threats they face. According to them, risks faced by an organization can be classified under three categories based on their nature and source of origination, namely;

Category 1- Preventable risk

Category 2- Strategic risk

Category 3- External risks

Each of these three categories of risks requires separate approach and strategy for effective control and management (Kaplan & Mikes, 2012).

Preventable risk: Preventable risk refers to those risks which originates from within the organization. They refer to the risks associated with the operation or working of an organization. Since, these risks arise from internal sources, it is within the bank's capacity to control and manage them. It is desirable to reduce or eliminate these risks as they do not bring any profit in return. Examples of these risks include embezzlement of funds by the bank employee, attempts to circumvent law, insider trading, flawed product design, system failure, etc.

For example, an overzealous manager might disburse loans to borrowers to meet business target without completing documentation process. Although, in the short run, this brings additional business to the bank, in the long run, such actions can put the bank's interest in jeopardy.

The strategies to annul preventable risk would include establishment of a sound risk culture, a robust internal control system and an independent and effective audit system. The first step in establishing a sound risk culture is to clearly define the mission, value system and operational boundaries of an organization (Kaplan & Mikes, 2012).

The Mission: A powerful mission statement communicates bank's goals, purpose, appetite and approach in matters of risk management which acts as a reference point for all employees of the bank to follow. This provides to the employees a sense of purpose and direction to act. It helps to convert compliance ridden risk management approach to proactive strategic endeavour.

The Values: Bank should communicate the values that should guide the employee behavior towards risk management. Clear value statements motivate the employees to avoid violation of bank's standards, norms and procedures.

The Boundaries: A sound risk culture sets boundaries within which bank's employees are required to perform. An explicit definition of boundaries is an effective way to guide actions. It helps organization to identify potential risk, prioritize them and provides a framework to take strategic decisions.

No matter how skillfully a bank formulates its mission, values and boundaries for the bank, they may not, by themselves, ensure their acceptance at the ground level. It requires total commitment from the bank's top management not only to adopt the risk management process themselves but also to inspire others to adopt it. As they say, more than anything else, the top management in the organization walking the talk goes a long way in establishing a sound and effective risk culture in the bank.

In addition, a robust internal control systems matters a lot for a bank to achieve its objectives and to overcome challenges. It helps the bank to assess, measure, evaluate its risk exposure and ensures that they remain within the acceptable boundaries. They also monitor the effectiveness of risk management function at the ground level and report whether internal rules, regulations are duly complied.

Further, a capable and independent internal audit system examines, evaluates and performs an independent assessment of the institution's internal control system and report its findings back to senior management of the bank. It also conducts risk-based audits and reviews the internal governance structure, processes and mechanisms to ascertain that they are sound and effective and they have been implemented in the bank systematically and consistently.

Strategic risks: In order to generate income, banks accept various types of risks such as credit risk, market risk, operational risk, liquidity risk, interest rate risk, etc. For example, in order to increase its interest income, a bank may willingly assume credit risk by lending money. Taking risk is an integral part of a bank's strategic outfit. Bank tries to maximize its risk adjusted return by consciously accepting calculated risk instead of assuming risk indiscriminately. At the same time, it is also equally true to say that not taking risk is the greatest risk of all.

The Strategic risks can be managed through conventional risk management system designed to reduce the likelihood of a risk event from happening and to reduce or moderate the impact of the event if it occurs.

The Risk Management process of a bank typically involves identification, evaluation, monitoring, mitigation and reporting of risks. It involves the following four steps, namely;

Identify Risks: The Risk Management process begins with risk identification. Risk identification process involves systematic capture of all potential risks arising from its operation both at the transaction (or individual) level and the portfolio (aggregate) level.

Measure Risks: The second step involves measurement of risk. It refers to the process of assessing and quantifying the potential loss associated with a particular risk. This stage is an essential precursor to risk control and monitoring process.

Monitor Risks: As the risk profile of a bank goes on changing, banks continuously monitor their risk position to detect early warning signals of emerging risk and/or breach of existing risk boundaries. As the senior management are supposed to take management decision and take remedial action based on the monitoring reports, these reports should be timely, accurate, as well as informative.

Control Risks: The main purpose of risk management is to control the risk to keep it within the boundaries of a bank's risk appetite. Every bank seeks to establish and communicate the risk boundaries to the rank and file of the organization through policies, standards and procedures guiding risk management activity.

The Risks faced by banks are highly interdependent. Heavy interdependencies exist between financial risk and business risk, business risk and operational risk and operational risk and financial risk. With such a complex, interlocking system of bank-wide risks, it is obvious that a holistic and integrated approach for risk management is a preferable option than a silo-based risk management strategy. In this connection, Integrated Risk Management (IRM) refers to a comprehensive and unified approach that organizations adopt to identify, assess, prioritize and manage all potential risks they face.

External risks: Certain type of risks emanate from external sources such as climate change related weather events, geopolitical developments, economic swings and cyber risk, etc. These events occur outside the banking system. Therefore, banks have little control or influence over these types of risk. Hence, control of external risks requires a completely different type of approach and strategy.

Typically, external risks have a high degree of uncertainty about their timing, direction, and impact. Accordingly, models based on historical data have limited efficacy in assessing and managing external risks. However, the following techniques are widely used by banks in assessing these types of risks.

Stress tests: Stress Testing is a standard technique used by banks to assess their potential vulnerability to uncommon but possible events. It indicates how a bank's financial position gets affected in a severe but plausible situation. This information empowers the senior management of a bank to take preemptive action to control fat tail risk. Banks could use stress tests to find out, for example, how an event such as disruption of supply chain caused by war between two countries, would affect the profitability and solvency of a bank so that necessary strategy can be formulated to safeguard bank's interest.

Scenario analysis: Scenario analysis, on the other hand, assume the simultaneous change of several risk factors and quantify their combined impact on bank's financial position. These analyses can be based on hypothetical (for example, breakdown of communication systems, sudden or prolonged severe economic downturn, breakdown of payment and settlement system, etc.) and historic scenarios (for example, natural disasters, sudden rise in oil prices, stock market crash, exit of FDI from the economy, etc.). The benefit of this method is that it takes into consideration the inter-workings among risk factors and thereby, enables a bank to capture a holistic picture of its vulnerabilities. Accordingly, bank takes specific actions to reduce their impact.

Why Risk Management is Tricky?

Risk Management is not an intuitive subject. Rather, it is plagued by a number of biases and blind spots which often clouds the judgement while taking risk management decisions. Prof. Kaplan and Prof. Mike have elaborately discussed about them (Kaplan & Mikes, 2012). Some of these biases having repercussions on risk management have been discussed below:

First, as human beings, we overestimate our ability to predict the future which is primarily determined by chance. As a result, we become overconfident about our assessment of future projections based on which we do risk assessment. In the process, we tend to deliberately undermine the possibility of the projection going wrong.

Overconfidence bias is evident when a bank might overestimate the probability of successful repayment by a potential borrower based on limited information, leading to an overly optimistic estimation of his creditworthiness. This narrow assessment of risk could leave the bank exposed to a potentially higher amount of credit risk.

Second, we also tend to use readily available information as an anchor based on which we undertake risk assessment. As a result, we become close minded and develop a blind side to new developments taking place in the risk environment. The anchoring bias gets compounded in the presence confirmation bias according to which, we tend to look for information that confirms our position and ignore information that challenges them. To make things worse, when things do not go as expected, we remain committed to the failed endeavor with higher amount of investment instead of focusing on cutting down the losses (throwing good money after bad).

For example, while taking investment decisions in a bank, the managers could anchor their estimates of future market performance to past trends without fully examining the possibility of potential negative impact arising from extreme or unexpected event. To make things worse, in the face of negative indicators or feedback, the bank may exhibit confirmation bias by focusing only on information that validates their initial investment decision while overlooking warning signs or contrary data. This could lead to a scenario where, despite mounting losses indicating a flawed investment strategy, the bank continues to allocate additional resources or funds with the hope to recoup/recover the existing losses.

Third, organizational biases can also hamper sound decision-making process in a bank. Specifically, when taking decision under uncertain conditions, people commonly fall victim to “groupthink” in which they strive to reach consensus within the group. People opposed to the decisions frequently remain quiet rather than disrupt the consensus in the group. Such consensus taken under illusions of unanimity is more likely to arise when the group is led by a dominating or overly self-assured leader who despises opposition to his authority.

As an example, suppose a risk management team is evaluating a high-risk investment opportunity. If the team leader or overseeing manager is assertive and he maintains that the investment will yield positive returns, other team members may be inclined to suppress their doubts or concerns to maintain group cohesion and avoid conflict. Even if some team members harbor legitimate reservations about the riskiness of the investment, groupthink may lead them to suppress these objections and align to the manager’s opinion to avoid challenging authority or causing friction within the team. In this case, a risky investment proposal gets approved without thorough consideration of potential downsides, leaving the bank exposed to significant financial losses.

Further, the effectiveness of a risk management process could be severely compromised when the bank exhibits ‘normalization of deviance’ trend. It describes a situation where instead of taking remedial action, banks tend to ignore minor deviations from established procedures and norms usually with good intentions. Over time, small and seemingly insignificant lapses eventually erode the risk culture and the compliance ethics where early warning signals are taken as false alarm.

Within the bank where this bias may manifest is in the area of compliance and risk management. Consider a situation where a bank’s compliance team identifies several minor regulatory violations or lapses in internal controls during routine audits. Over time, if these issues are repeatedly overlooked or brushed aside as insignificant by the management, a culture of normalization of deviance may develop within the organization. Subsequently, when more significant compliance breaches occur, they may not be appropriately addressed or escalated due to the ingrained culture of downplaying early warning signals.

A sound risk management process must strive to alleviate decision-making process from these biases. However, a bank's ability to ride through the storm eventually depends on how deeply the rank and file of an organization have embarked on risk management process and how the top management of the bank choose to respond and react during periods of financial stress.

Rules, regulations and compliance can mitigate some of the critical risks faced by a bank. But a sound, effective and responsive risk management system can overcome most of them securing a safe, secure and stable future for the bank. Under such circumstances, the management would generally function free from biases and would discern the world not as what they perceive it to be but as what it actually is or could possibly become.

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IIBF-IFC joint Certificate course on Climate Risk and Sustainable Finance

IIBF has jointly collaborated with IFC, World Bank Group to launch the self-paced E-Learning course in Climate Risk and Sustainable Finance in two levels-Foundation and Advanced, which has received encouraging response from the BFSI fraternity in India, as the delivery channel for capacity building for the frontline staff and Internal Control, Audit and Risk Management departments of banks. In order to reach out to the International fraternity, IIBF has endeavoured to launch the course for the foreign nationals from all the major countries. The same is under advanced stages of development and will be rolled out shortly.