Chapter

Perspective Chapter: The Audacity of Risk – Contemporary Failures

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Abstract

In Modern society, risk is a complicated concept often taken for granted, and measured, calculated and predicted as a surety in most instances using mathematical and calculative analysis as concrete affirmation of market behavior. While this approach to risk is widely used and accepted as a premise to market assertion, it does not incorporate some of the facets crucial to understanding risk. The focus of contemporary risk management, especially for financial houses, in which some of the biggest culprits are banks, is on measuring and predicting risk rather than understanding this evolving concept. This chapter delves into the social aspects of risk that are usually ignored and presents some of the demits of banking and other financial institutions that plague a heavily calculative approach to risk. Our research on which this chapter is based has found that this measurable and calculative approach to risk has impaired the ability of risk to be explored in other dimensions. For example, the concept of risk, if better understood before being measured, can possibly lead to better decision making both at the micro and macro level of operations that can eventually result in a more stable, robust financial system.

Keywords: risk, rewards, social investment, banking, contemporary failures

1. Introduction

The concept of risk has always been contentious since it entered the world of business in the early 1800s. However, although there has been widespread debate on the best way to manage and operationalize risk, there has been, for the most part, consensus on the methods that should be used. A calculable mathematical approach has been accepted as a valid and superior mechanism to understand and appreciate risk over all other approaches. This measurable, quantitative practice of perceiving risk has led to the development and adoption of a variety of complex matrices used by financial institutions (especially banks) to provide close to accurate assessment of some services like credit and investments.

While this computable status quo to risk acknowledgement is unlikely to experience any revolutionary changes, some prominent risk scholars (like Michael Power and Annette Mikes), have questioned the numerical imaging of risk and provided another path through which risk can be appreciated and understood. Power [1, 2]

argued that our obsession with measuring and calculating risk as a management technique has subjugated us to the risk management of something, anything, nothing and everything. This according to Power is because we are possibly omitting the social aspects of risk in our matrix. Mikes [3] contended that the calculative culture embedded in risk management is well-established in the banking industry but may be awry if the social attributes of risk are continuously ignored.

With this in mind, this chapter presents a critical discourse on the challenges of risk management in banking institutions and a debate on whether or not risk can be metamorphosized into a notion that includes both numeric and social factors. A brief history of risk management is presented in Section 2, followed by a discussion on why social factors are crucial to the concepts of risk and risk management. Section 4 discusses how the acknowledgement of the social facets of risk can help reshape risk management in the banking industry. The chapter concludes with a discourse on the future of risk management in banking institutions.

2. Risk management: A brief history

Risk management can be traced back to the early seventeenth century when John Arbuthnot asserted that the probability of an event occurring can be calculated [4]. This was based on what is now known as the "probability theory", that was developed by Pascal in 1657. This theory contends that possible results of an unknown situation can be translated into a known one through calculation and measurement. Although this may sound abstruse, the theory itself is not abstract; it was adopted from the Asipu Indians in the early 1600's. The Asipu were known for being brilliant and they instituted the probability theory by using special stones to try to determine the existence of God.

Throughout its trajectory, risk took on different forms. Nonetheless, its grounded mode in measurement and calculation remained unchanged. It entered almost all aspects of life along the way; including safety, engineering, psychology and public service. However, it was not until the early 1900's that risk entered the world of business. Today, risk management at financial institutions takes an unmodified culture of quantification and measurement. This has been the cemented path of risk ever since its inception in the early 1600s. Along this route, the perception of risk and its accompanying management strategies has been questioned by several theorists. For example, McGoun [5], claimed that although the calculable approach to risk management has validity and credibility (for instance in assessing and measuring returns and promoting economic prosperity), it is inherently flawed and encourages a personal practice of wealth creation for managers and experts that can eventually end in financial detriment. The financial crisis that began in 2007 can be akin to what McGoun was alluding to. Nevertheless, risk management has remained largely unchanged even in the face of the financial crisis. In 2003, in his book, risk and morality, Adams [6] noted that the moral codes that guide risk decisions have been absent from the risk atmosphere.

This argument is crucial since it sets the stage for a new and emerging sphere to risk management. Although similar arguments have been made in the past, (for example by Berger and Luckmann [7] and Beck et al. [8]), Adams developed a risk thermostat that included the social facets of risk management and proposed punishment for those managers and experts not incorporating the social face of risk. Adding to the quagmire of this debate is Hall in 2009 and Buckley [9] who impugned that the reason why risk did not

undergo any significant change after the financial crisis that began in 2007, is not because of social neglect, but rather the political nature of risk regulation and the continuing debate about the importance of risk in economic wealth creation.

Risk management has emerged with a perception that risk can be accurately measured based on past or historical data as a solid guide for future uncertainty. This approach has worked well in the past for financial experts, especially banking institutions, whose wealth creation depends on a system of assessment and measurement. This may be why banks did not seize the opportunity to reform risk management by venturing into other ways in which risk can be appreciated. Rather, they developed an impetus for conventional risk management by measuring and evaluating almost anything and everything relating to future events and labelling it as risk.

3. Risk and banking: An unmodified culture of measurement and calculation

The eventual meltdown of the financial system that began in 2007 resounded globally. Hundreds of banks had to close their operations in the United States and around the world. This should have signaled the beginning of a new era for banking and risk management; one colored with changes and emerging opportunities, because, although the effects of the financial crisis were catastrophic, it presented a new and impending opportunity for risk management reform. However, this opportunity, at best, was minimally capitalized. Very few changes, amendments and revisions were made to the system that support risk decisions. Rather than examine the philosophy of risk and the opportunities for forging changes and improvements, risk managers and other risk experts (especially at banking institutions) continued along the kindred path that triggered the financial collapse.

Even to date, this solidified structure of measurement and calculation continues to be the bona fide identity of risk management. But why has there been little or no change to the system? Especially in the face of such a global calamity? Not only was the financial crisis of 2007 destructive but it shook the economies of almost all of the G-8 countries. The United States, the most notable international powerhouse, under the leadership of President Barack Obama, had to allocate, invest and expend an unprecedented $787 billion in an effort to stimulate the American economy. This underscores the argument about the magnitude of the effects of the crisis. So why then were experts willing to forgo an opportunity for reform (however gradual) and opt instead to follow a similar path that brought the crisis in the first place?

In our research on the financial crisis and banking institutions, we uncovered three major reasons for the unwillingness to change.

3.1 First reason: Familiarity

Familiarity with the system and ease of use is one of the major reasons for the reluctance to change. The embedded risk policies and procedures are repeated constantly, over and over again, leading to a conformity of routinization. These routine risk actions do not require a conscious plan or process and expend little or no effort because it is well established in the institution. In context, risk managers and other risk experts at banks are reluctant to invest the time, effort and resources needed to divert from the old structure into a new one. The cost of this investment can be significant but may be well justified if it means preventing future debacles.

3.2 Second reason: False belief

Risk management in banking institutions has endured a journey of rigorous tests and trials. This has helped to shape its perception as a well-entrenched and ingrained ideology legitimized in measurement and calculations. As a result, managers and experts alike do not believe that the system is flawed and hence is unwilling to effect changes. When strong beliefs about procedures that are well established are called into question, risk managers shift blame on other variables. For example, with the financial crisis that began in 2007, a lot of the blame by risk experts was allocated to accountants who were chastised for producing and distributing outdated financial statements that did not reflect current market values.

3.3 Third reason: Economic prosperity

Banking and other financial institutions constitute a large percentage of the financial powerhouses of most Western economies. They are the primary generators and creators of monetary, commercial, fiscal and economic wealth. This wealth is a testament to the standard of living and industrial prosperity of any country. It also serves as strong evidence of the capability and influence for a dominant economic position on the world stage. The primary weapon of this massive wealth creation is the backbone of these countries (banking and other financial institutions) and risk management is a crucial part of their arsenal. Therefore, to alter, adjust, change, modify or reshape the principles and procedures that have been responsible for propelling these economic giants would be ludicrous.

Another reason why the system of risk management is unlikely to change is the financial rewards that the current system produces for managers and CEO's with little or no accountability or punishment for significant errors, carelessness or due diligence failures. In other words, the current system encourages enormous financial gains for the risk manager when he or she makes the right calculation but no losses to the manager when the wrong estimation surfaces.

Nevertheless, despite these arguments, risk management in its current state is far from perfect. No one is proposing any radical or subversive changes to risk managements structures, but to continue with a dependence on a regime marred by measurement and calculations may be counterproductive. For those who argue that the system has worked well for several years and is likely to continue to flourish in the future, there is an underlying problem with this viewpoint. If a system is working well, does that mean there is no room for improvement? How well is the risk management system working if it is responsible for the Asian crisis of 1997, and the global financial collapse of 2007? As previously mentioned, any changes to the current cemented risk management system is unlikely to be revolutionary and no one is proposing that it should be. However, recognition that there is room for growth and the possibility to prevent future financial chaos, may be the first steps to incorporating social ideas into the risk management pool.

4. Acknowledging the social facets of risk

When the current risk system fails (like it did with the last financial crisis) the broader society in most instances, is affected directly or indirectly. Retirement funds, education trusts, entertainment savings and monies for everyday living were grossly

diminished and, in some cases, completely lost during the last financial crisis. Not only did this lead to a reduced standard of living, but it also left a lasting negative impact on the people who were affected. The stress that was experienced by those who lost their life's work cannot be measured by any kind of mathematical device that we use to measure the risk that created it. The decline in mental health, the unforgettable deterioration in cognitive abilities and the pains felt by the loss of loved ones were all social. Some people committed suicide after losing their life savings and nothing to rely on to survive. To them, living was now meaningless. In other words, the downturn in human happiness and decline in family bonds that the debacle created was certainly not mathematical and could not be measured in any numeric form.

If the adverse impact created by risk management's reliance on numbers is social, why then are these not considered in the risk management mix? The answer lies in the lack of morals in risk decisions. In 2003, Adams developed a framework in which he proposes that risk should be understood before being managed. If we apply this logic, then understanding the impact a failure would have on society if managers were to completely trust the numeric outcomes would certainly lead to changes in some risk decisions. More care and consideration would be taken and this may help lessen the blow, if the projections turn out to be incorrect. A case in point is the 2007/2008 financial debacle that capsized the world's economic and financial systems that were built on mathematical risk attributes. If we are to examine Canada and the United States as two causalities of the financial fallout, we would find that the impact on the two economies were very divergent. How were two economies that are so closely tied economically and have similar governing systems, experience such different impingement from the financial blow? Here, perhaps is the tale of two countries, that view the fallout from a risk crisis differently and so prepared adversely.

4.1 The Canadian experience

Mark Carney, the current prime minister of Canada (2025) was then the senior associate deputy minister of finance in 2004, before the financial crisis. His previous experience at Goldman Sachs, and extensive background in risk management, sovereign risk, capital markets and investment banking created a rich resolution of foresight, intellect and financial resourcefulness to examine the housing market in the United States and the over-inflated prices, rising market investments and continuous profit creation through almost any means [10]. This prosperous trend, while, welcomed by the U.S market experts as a sign of continued financial growth and a prelude to sustained economic wealth creation, was worrisome to Carney. He argued that such immense profits in an economy cannot be sustained in the long term and would lead to eventual financial collapse of the markets. He took his concern to the then prime minister of Canada, Paul Martin, who was, initially unwilling to heed to the advice [11]. However, the added moral implications that Carney cited was the deciding factor. Carney, outlined along with the cost of the financial failure, the social implications for Canadians both at home and abroad [12]. The loss of retirement savings, education plans, daily livelihood and the possibility of Canada being pushed into a state of poverty before recovery, was too much for the prime minister to bear [11]. To add insult to injury, Carney reminded the prime minster that all this would be his burden to bear for Canadians will never forget that he had the opportunity to soften the fall but refused.

Eventually, Paul agreed, and gave Carney the authority to implement a plan to ensure that if the U.S financial system collapses, the Canadian people would be

adequately protected. That plan included the buttress of the Basel II capital banking requirements, safeguards to secure jobs and encouragements for savings [13]. A year and a half later the financial fall began. While hundreds of banks went bankrupt and many more had to be bailed out by the U.S government, not a single bank in Canada had to rely on government funds to continue operations. Carney was hailed as a Canadian hero and was subsequently hired by the Bank of England for his role in protecting Canada from the brunt of the financial debacle.

On the contrary, in the U.S.A. the welcomed boom in profitability and rising housing costs was not seen as a signal to an economic disaster, but was rather celebrated as a flag of continued economic longevity.

4.2 Risk and morality

In his framework, Adams conceptualizes risk as a network of interrelated workings of the organizational environment, human actions and rewards or sanctions for those actions. According to him, risk is a changing embodiment that should be approached and managed integrally with a moral undertone. It is crucial to note that no one is suggesting that the risk measurement and speculative coats be removed. However, by refusing to acknowledge the tragic outcomes of historical failures, we are missing an important opportunity to include social dynamics into the risk atmosphere.

Risk is a constructed behavior [14], supported by a management system that is idealistic and self-seeking. One approach to solving this self-seeking interest is to replace it with ethically justifiable actions through routine practices and habits that promote the greater good, similar to what happens in corporations that promote corporate social responsibility. However, if these actions are to be grounded in a moral archetype, then banking institutions themselves must contain, or promote the means to encourage and sustain risk decisions as a moral compass.

If 'Morality' is to become a part of risk decisions, there are other factors to consider. For example, who would be responsible for designing and implementing the new moral component of risk? What form would it take? Is it likely to bring any real improvement to the risk management function? Who would benefit most? What would be the opportunity cost of including moral behavior in risk decisions? We are proposing that the risk management system be revisited and revised without the forceful hand of regulators, but we concur that any real change in the risk management process may be a task too mountainous for voluntary occurrence from management and must be coerced by investors and consumers.

The inclusion of morality in risk decisions will not be an easy task. Hunt, argues that the reason why morality is unlikely to be included in risk management decisions is because of the expansion of calculative approaches to risk management [15]. This underscores the "false belief" argument, that managers do not see this approach as being faulty and when it fails, more numeric matrices are introduced as a means of correction. This is like adding water to a quagmire. According to Hunt, this behavior is unlikely to change since it is not only well established, but it suits managers and experts accurately since they benefit from it.

5. Risk and banking: Navigating the future

The debate on risk has been calm in recent years. However, after the financial crisis it was intensified, energetic and profound. This is mostly because of the impact

it has on human life and everyday living. Nevertheless, the affliction, convulsion and distress caused by the market crash has long been forgotten. It would only be relevant again, not if, but when another market failure occurs. It is unfortunate, that the imprints from the debacle have been erased and banks and other financial institutions are back to normal, using the same principles and wherever possible adopting an additive approach, magnifying the old ways and believing that the solution is to incorporate bigger, more accurate predictive measures. Operating outside the realms of measurement is not an option for these financial giants; the rewards that this approach brings is too great to gamble with its future. Hence, the financial crisis of 2007 that shook the core of our financial institutions and pushed it to the brink of complete collapse was not enough for risk managers and experts to explore possible options outside the boundaries of computerized estimations based on pure mathematical assimilations. The question that remains is: What will it take for changes to the risk atmosphere to occur? Changes that do not only rely on estimations and uncertainty but are also grounded in social ideals. Changes that recognize the crucial role of the banking system in our society and explore ways to strengthen and buttress risk decisions based on the social impact if the numbers are not accurate. Changes that do not rely on the voluntary role of corporate social responsibility but rather, tied to operating policies and supported by regulation.

We are certainly not proposing that going forward banks and other financial institutions revolutionize their risk process that has been the landmark of the institution for centuries. Rather we are advocating for and recommending that banks re-examine their current risk models and adjust it to include the social impact that any decision taken would have on the owners of the capital if the numbers do not pan out. This may involve a starting point of taking an ethical approach that does not include maximum profits in the matrix, nor enormous returns.

It may be common knowledge that investors are well aware that risks taken involve a certain possibility that you may lose. Nevethteless, in a drive to line their pockets and bolster super profits, banking institutions have failed miserably in their caring role as guidance barristers that show consideration for their customers and clients who trust them. The irony is that the losses incurred are not usually borne by the institution themselves but by the average investor who knows very little about the functioning of the bank procedures and who may easily choose moderate returns over total losses.

It is easy to suggest changes. Getting the responsible parties to listen is the difficult part. Surely, changes to the risk management system should not only include a social realm, but also behavioral patterns that include less risky practices. This may lead to a decline in wealth creation that would most likely be met by fierce objection by banks and other financial powerhouses. Regulating this unfamiliar path would be problematic but crucial, especially since it has been tried once before.

After the financial crisis, the then president of the United States, (President Obama) focused on recovery efforts. His next steps were to implement changes to curb the chances of a re-occurrence. The Dodd Frank Act was the result. A significant document that proposed sweeping changes to the financial industry, especially banks. While most commended the document, as the banks recovered, they rallied the new president in 2018 (Donald Trump), to remove the security barriers from their domain. The banks complained that the regulatory requirements were stifling and restricting their profit and wealth creation. President Trump, who was already an opponent and an antagonist to regulation, did not need much convincing to shred the document, rolling back protections against careless and ludicrous behavior. Before

long, the Dodd Frank Act became a distant memory and banks worldwide who rely on America's leadership, began to follow suit in scrapping measures that were meant to protect the customer from self-seeking ravenous risk managers.

Banks are a critical part of our society. The roles and functions that banks are tasked with is too mountainous to understate. From providing security for our lifelong savings, to providing an improved standard of living for our communities through loans and wealth creation. However, banks are not perfect institutions, and sometimes their risk management systems can lead to abysmal results, damaging and hurting the very communities that they were intended to serve. Preventing this from happening may be too high a goal to achieve, since the practices embedded in banks and their risks structures are designed to promote and advance prosperity and riches over all else. Unfortunately, the beneficiaries are the very same people tasked with implementing change. This is like asking police officers to police themselves. Be that as it may, all is not lost. The burst and boom cycles that the last financial chaos was blamed on, is a story all too familiar. What this means is that risk management systems would never fully be held responsible for any failures that ensues, regardless of the evidence to suggest that its culpable. Hence, implementing changes that can help improve the risk process (however small) that includes considering the social impact, is a task too towering. It is likely that banks will continue to do well in the future but risk devastating more human lives in the process using the current approach.

6. Concluding thoughts

Much has been said about the management of risk and several researchers have concluded that risk management systems are central to the operations of banking and other financial institutions. These institutions form a global financial network that is responsible for securing and maintaining economic wealth and prosperity. Although it began with an idea of measuring the probability of whether God exists, risk management has maintained its core as a model rooted in measurement, estimation and calculation. This makes risk one of the principal contributors to profits, wealth and prosperity. However, the Asian crisis of 1997 and the global financial meltdown of 2007, called into question these measurement principles and estimation techniques used. Some risk proponents have begun to suggest that risk is a concept to be explored and as a result, the social side of risk should be included in the decision-making process.

The decline in human health, the loss of lives and the mental decay from the financial devastation caused by risk management during the 2007 crisis, could not have been measured by any mathematical equations or computer devices. The effects were all social. Hence, the call for risk to be an inclusive approach that recognizes the social effects of financial decisions, gained momentum but only for a short time. Before long, banks returned to their routine and familiar systems of wealth creation, especially since the losses were not borne particularly by the banks alone.

Risk is an ever-evolving concept but its roots in mathematical measurements make it difficult to welcome or execute social changes. One way to do this is voluntarily through ethics or corporate social responsibility. However, the voluntary nature of both of these constructs presents another challenge since the role of banking institutions in society is too critical to leave changes to choice.

The next best step then is to regulate or mandate changes to the risk profile. However, this too is even more precarious. For regulation would possibly involve

government intervention, which would result in a political battle for supremacy and control.

The quantification of risk itself does not pose a threat to the financial system, but the measures used can be flawed. This is the argument put forward by risk experts during and after the financial collapse. This argument justifies banks heavy reliance on the measurement system and helps solidify their belief and perception of risk as a purely mathematical construct.

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References

[1] Power M. The risk management of nothing. Accounting, Organizations and Society. 2009;**34**(6-7):849-855

[2] Power M. The risk management of everything. The Journal of Risk Finance. 2004;**5**(3):58-65

[3] Mikes A. Risk management and calculative cultures. Management Accounting Research. 2009;**20**(1):18-40

[4] Knight FH. Risk, Uncertainty and Profit. New York: Dover Publications; 1921

[5] McGoun EG. The history of risk "measurement". Critical Perspectives on Accounting. 1995;**6**(6):511-532

[6] Adams J. Risk and morality: Three framing devices. In: Ericson RV, Doyle A, editors. Risk and Morality. Toronto: University of Toronto Press; 2003. pp. 87-104

[7] Berger PL, Luckmann T. The Social Construction of Reality. Kent: Penguin; 1967

[8] Beck U, Lash S, Wynne B. Risk Society: Towards a New Modernity. Vol. 17. Munich: Sage; 1992

[9] Buckley A. Financial Crisis: Causes, Context, and Consequences. London: Pearson; 2011

[10] Scoffield H. Mark Carney Takes up his Mission. The Globe and Mail; 2008. Available from: https://www.theglobeandmail.com/report-on-business/mark-carney-takes-up-his-mission/article18442482/ [Accessed: March 1, 2025]

[11] Zorn L, Wilkins C, Engert W. Bank of Canada liquidity actions in response to the financial market turmoil. In: Bank of Canada Review. Ottawa: Bank of Canada; 2009

[12] Hornbrook M. Mark Carney: Interesting Times. CBC; 2011. Available from: https://www.cbc.ca/news/canada/mark-carney-interesting-times-1.990186 [Accessed: March 12, 2025]

[13] Quinn G, Argitis T. Carney Shows How Canada Controls Risk So Central Banks Can Too. Bloomberg; 2009. Available from: https://web.archive.org/web/20110629011213/http://www.bloomberg.com/apps/news?pid=newsarchive&sid=aQcJ7bw4QH.Y [Accessed: March 15, 2025]

[14] Roberts D, Salifu E. The social construction of risk: Evidence from UK banks. Asia-Pacific Management Accounting Journal (APMAJ). 2023;**18**(2):281-309

[15] Hunt A. Risk and modernization in everyday life. In: Ericson RV, Doyle A, editors. Risk and Morality. Toronto: University of Toronto Press; 2003. pp. 165-192