

Dimensions of Risk Management in Financial Sector

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Introduction

The etymology of the word “Risk” can be traced to the Latin Word “Rescum” meaning Risk at sea or that which cuts. Risk is associated with uncertainty and reflected by Way of charge as the fundamental/basis, i.e., in the case of business, it is the capital, which is the cushion that protects the liability holders of an institution. These risks are interdependent and events affecting one area of risk can have ramifications and penetrations for a range of other categories of risk.

Risks are highly interdependent and cannot be segmented and managed safely by independent units. **The Objective should be to move from “Risk is not my responsibility” mindset to “Risk is everyone’s responsibility.”**

We may define Risks as uncertainties resulting in adverse outcome, adverse in relation to planned objective or expectations. ‘Financial Risks’ are uncertainties resulting in adverse variation of profitability or outright losses.

This chapter defines the topography of the expanding area of risk management in financial institutions and services in the 1990. This topography has evolved from the industry’s history, its economies, and the extraordinary change in its environment, specifically; two broad categories of risk are the basis for classifying financial services risk: (1) product market risk and (2) Capital market risk.

Economists have long classified management problems as relation to either the product markets or the capital markets. Product market decisions that impact the operation portions of the profit and loss statement. They include decisions about prices, marketing operating systems, labour costs, technology, quality, channels of distribution, and strategic focus. Product market risks pertain to the risks inherent in the operating side of a financial services firm.

Capital market decisions relate to the financing and financial support of product market activities. They relate most directly to the balance sheet of the firm. The results of product market decisions must be compared to the required rates of return that result from capital market decisions to determine if managements is creating or destroy value. If product market returns exceed capital costs, then positive value is being created for the owners (shareholders) of the firm. If product market returns do not capital market standards, then value is being eroded of destroyed, In that sense, the entire process of management can be thought of as the achievement of the highest possible value through joint product and capital market decision making.

With product markets and capital markets so defined, it is clear that understanding the risks associated with both categories is integral to the value of any firm. Product market risks relate to variations in the operating cash flows of the firm. Capital market risks relate to variations in value associated with different financing instruments and required rates of return in the economy.

The risks associated with one category have a symbiotic relationship with the other. Product market risks can affect capital market-required rates of return. Similarly, capital market decisions affect the risk tolerance of product market decisions. Ultimately, only when product market risk and capital market risks are combined can the total risk of the company be estimated. The following remarks emphasize that products market risks and capital market risks are both separate and interdependent. This makes the analysis of total risk in financial services vastly more complex.

Historical Perspective

During the past decade, even the objective of risk management in financial services companies has been significantly redefined. Many financial services executives recall a time when risk management, while not unimportant, was a reasonably circumscribed process in which midlevel professionals were charged with minimizing losses. Preventing credit losses or other deterioration in asset values topped the risk management agenda. It is only as light say that the quality of management was defined by the degree to which risk was

avoided. From an organizational perspective, responsibility for risk management was often delegated to staff specialists. Even the best firms seldom considered total firm risk from a Stockholder's standpoint. Excellence in risk management did not characterize the best competitors. Most firms used the same approach to risk. The Credit policy of lending department managed default risk, auditors managed operational risk, and the insurance department managed risk. Once assured that these departments were adequately budgeted and staffed, most senior executives took little further strategic interest in risk management. Simply put, for many companies, risk was something to be minimized or avoided.

The new risks of doing business in financial services were frequently no traditional in nature. Interest rate change-not traditional credit risk-eroded asset value. International business and international expansion caused huge losses for firms that had not been accustomed to these risks. Computer systems replaced manual systems and complicated the audit trail of many transactions. Regulatory changes rearranged the profitability financial services franchises. The remaining financial services landscape was nearly unrecognizable to many who had previously coped successfully. For many firms, the entire philosophy of risk management required rethinking and restructuring.

Risk management finally won the attention of senior executives in the 1980s and 1990s. At that time, profits were often impacted as much by risk management as by any other single management variable.

Today, management understands and strategic management of risk is an important competitive advantage. Aggressively pursuing the right kind of risk is central to long-term profitability and positive value creation. Finally, risk management provides a powerful means of both defense and offense in today's competitive marketplace for financial services. Those firms who manage risk well will dominate those who do not. However, as is stressed below, managing risk does not mean making it disappear.

An Economic Context

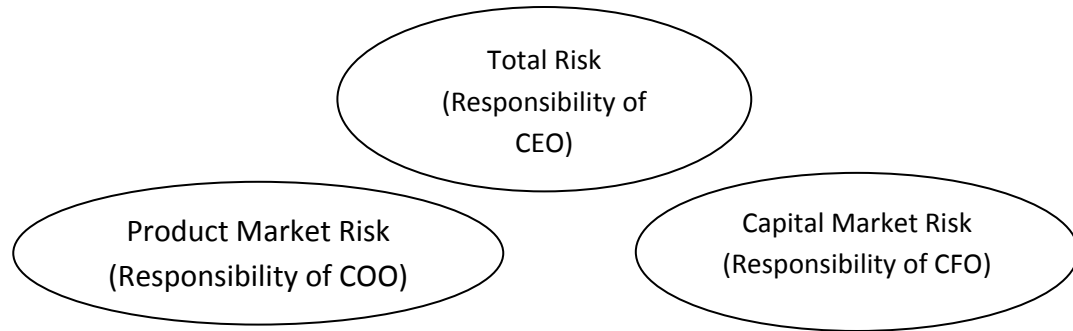
In creating and augments economic value, management acts to maximize the aggregate net present value of the firm's cash flow. This objective applies to financial and no financial firms alike. The relevant cash flows in financial services firms derive from financial (i.e, paper) assets, including investments, loans, contracts and other financial transactions. Positive net present value assets increase the firm's value negative net present value assets reduce it. In this model, the total value of the firm equals the sum of all the present values-at current required rates of return-of all financial assets.

Although the value of the firm is the sum of the economic worth of all assets of the company, the value can also be disaggregated. For example, one part of value derives from the size and variability of the cash flows from the product markets. A second part of value derives from the risk adjusted discount rate used to evaluate those cash flows. At a given level of cash flows, a lower discount rate increases value and a higher one reduces value. Conversely, at a given discount rate, a higher level of cash flows increases the firm's value; a lower level of cash flows reduces it.

In organizational terms, the cash flows that come from product markets are sometimes considered the responsibility of the Chief Operation Officer (COO) of the firm, and the discount rates by which they are evaluated are considered the responsibility for integrating both product market cash flows and risks and capital market requirements and risks. Diagrams this Representation of the firm.

Diagram

Total Financial Services Firm Risk



- ❖ Credit
- ❖ Credit
- ❖ Strategic
- ❖ Regulatory
- ❖ Operating
- ❖ Commodity
- ❖ Human Resources
- ❖ Legal
- ❖ Product

- Interest Rate
- Interest Rate
- Liquidity
- Currency
- Settlement
- Basis

Together, product market and capital market decisions determine how (and if) the firm competes and prospers. Distinguishing product market and capital market risk is the first step in managing them. In all firms, but especially financial firms, some categories of risk apply to both the product market and capital market categories. Despite this overlap or ambiguity, risks can be assigned to a primary category. The remainder of the chapter refers to this distinction as the “topography” of financial services risk management.

Risk may be defined a danger, volatility of outcomes, of simply uncertainty. Risk is not simply the incidence of adverse outcomes. Unpredictable, favorable outcomes are also a form of risk. Opportunity losses can be as important as actual losses. Foregoing a positive net present value investment conceptually is just as significant as the cost of negative net present

value decision. When wealth maximization is the objective, selling an asset too soon may be as costly as holding it too long.

In capital markets, the firm interacts with owners and lenders. In the product markets, it interacts with customers and suppliers. In both capital markets and product markets, the financial institution functions within legal and regulatory constraints that limit its risk management alternatives. Finally, the economic environment provides the institutional context in which these two markets function.

The following paragraph describes the most important product market and capital market risks for financial service firms and their owners.

Product Market Risks

Risk in the product markets relate to the operational and strategic aspects of managing operation revenues and expenses. These risks include.

Default (credit) risk: The most basic of all product market risks in a bank or other financial intermediary is the erosion of value due to simple default or nonpayment by the borrower. In nonbank financial institutions, the equivalent of default risk is the risk that a financial asset will become valueless due to obligor's inability or unwillingness to pay. Banks manage this risk by: (1) making intelligent lending decisions so that the expected risk of borrowers is both accurately assessed and priced: (2) diversifying across borrowers so that Credit are not concentrated in time; and (3) purchasing third-party guarantees (credit insurance) so that default risk is entirely or partially shifted away from the lenders. Accepting an appropriate level of credit risk is perhaps the single largest source of "value added" in the banking and financial intermediation business.

Strategic (business) risk: This is the risk that entire lines of business may succumb to competition or obsolescence. An example is the relative disappearance of the traditional market for large, low-risk corporate lending that has been largely replaced by commercial paper. In the language of strategic planners, commercial paper is a "Substitute" product for large corporate

loans. Those banks that placed great emphasis on large corporate loans (sometimes called wholesale banking) experienced the risk that this business would go away during the 1980s and a large expense base was built upon a shaky revenue base.

A second example of strategic risk occurs when a bank is not ready or able to compete in a newly developing line of business. Late entry by some banks into credit cards and home equity loans made it difficult for them to achieve a competitive advantage. Early entrants enjoyed a unique advantage over newer entrants. The seemingly conservative act of waiting for the market to develop posed a risk in itself. Business risk accrues from jumping into lines of business but also from staying out too long, a major operating risk of any financial services firm in the 1990s. This explains strategic planning's increasing importance to every financial services firm worldwide.

Regulatory risk: In the highly regulated world of financial services, regulatory risk looms much larger than in many other businesses. Most profit centers of financial services firms are licensed to do business. Two important risks surround such licenses. First, the license to operate may be revoked, which renders significant capital investments worthless. Extreme examples of this may include the nationalization of banks, as has frequently occurred outside the U.S in the last two decades. Alternatively, banks may be closed in the domestic market due to regulatory rulings on risk and viability

A second more subtle regulatory risk occurs when the protected nature of a license is compromised as competitors obtain licenses to do business in a restricted market. Examples of this in commercial banking include the licensing of new competitors in domestic, regional markets.

Operating risk: This is the risk that systems simply do not function properly, resulting in losses of funds of value. In the 1990s several investment banks reportedly lost significant sums due to trading errors that their systems did not detect. Perhaps no element of the management process has more potential for surprise than systems malfunctions. In an earlier and simpler era when

systems were less automated, they were also more visible. Complex, machine-based systems produce what is known as the “black box effect” The inner workings of systems can become opaque to their users. Because developers do not use the systems and users often have not developed the system, no one grasps its entirety. This lack of understanding constitutes a significant product market risk. No financial services firm can ignore it.

Commodity risk: Commodity prices affect banks and other lenders in complex and often unpredictable ways. For example, the oil price increases in the 1970s were followed by the collapse in the 1980s. In the first instance, the price increases negatively impacted the general economic. They undermined the viability and value of many borrowers, especially major energy consumers. The macro effect of energy prices increases on inflation also contribute to a rise in interest rates, which adversely affected the value of many fixed-rate financial assets. The subsequent crash in oil prices sent the process in reverse with nearly equally devastating effects. The value of energy-related stocks and bonds plummeted. Many energy companies declared bankruptcy. The example suggest that prices of primary commodities and agricultural goods can have the same effect either through the fundamental business risk of clients and customers of through interest rate effects.

Human resources risk: Few risks are more complex or difficult to measure than those of personnel policy: recruitment, training, motivation and retention. Risk to the value of financial assets is generally accept, but risk to the value of the financial assets as represented by the work force represents a much more subtle from of risk. The departure of an employee with specialized knowledge can bring certain systems to halt. Of course, protecting against that risk requires paying for multiple individuals with similar knowledge. And experience. This human redundancy is conceptually equivalent to safety redundancy in operating systems. It is not in expensive, but it may well be cheaper that the risk of loss.

Concurrent with the risk of loss of key personnel is the risk of inadequate of misplaced motivation among management personnel. Absence of incentive-or presence of the wrong incentives- can produce disastrous financial results. When incentives are tied to individual

performance, they can undermine cooperative effort. Conversely, group incentives can undermine individual motivation. If incentives are tied to short-term results, they can compromise the long term. One observer once noted, "The risk of incentive compensation systems is that they work" They can be wonderful, of dangerous, of both. It is a risk that demands attention.

"Objective" vs. "Subjective" incentive programs represents a different array of risks. Objective programs are based entirely on quantifiable data and are sometimes called formula systems.

Legal risk: This is the risk that the legal system will expropriate value from the shareholders of financial services firms. Legal risks take many forms: (1) lender liability lawsuits when borrowers claim that their bankruptcy was caused by a bank's promises not to foreclose or to grant additional credit; (2) litigation for toxic waste problems on repossessed real estate; and (3) damages for negligence in an "agency" business such as trust accounts. The legal landscape today is full of risks that were simply unimaginable even a few years ago. Moreover, these risks are very hard to anticipate because they are often unrelated to prior events.

Product risk: There is major risk that a financial services product may become obsolete or uncompetitive. Automatic Teller Machines (ATMs) exemplify such risk. Early on, several banks made large investments to develop a competitive advantage in ATM technology were developing their own products for sale to multiple clients. When the manufacturers' machines proved superior to those developed by the banks themselves, the risk of loss in this misplaced R & D investment was not trivial.

Capital Market Risks

Capital markets and the risks inherent in them affect the value of all companies, but they are particularly significant for financial services firms. Indeed, the distinction between product market risks and capital market risk is blurred in the financial services industry because its products are bought and sold in the capital markets. For example, the interest rate risk connected with fixed-rate borrowing is generally a capital market risk; connected yet the risk of the same

fixed-rate may convert to credit risk, which is a product market risk. Financial services firms supply financial products, which carry such risks, to the industrial and consumer market. But financial services also include risks of their own relating to the capital markets in which they function.

Interest rate risk: In extreme conditions, interest rate fluctuations can create a liquidity crisis. The subject of interest rate risk, however, is much broader than liquidity crisis. The subject of interest rate risk, however, is much broader than liquidity. The fluctuation in the prices of financial assets due to changes in interest rates can be large enough to make default risk the major threat to a financial services firm's viability. The change in asset values caused by interest rate fluctuations is a function of both magnitude of change in the rate and the maturity of the asset.

Till 1970 the regulatory restrictions on banks greatly reduced many of the risks in the financial system. The deposits were taken in at mandatory rates and loaned out at legally established rates. Interest rates therefore remained unaffected by market pressures. The phrase.. 3-63'' i.e. bankers bring in short. Term deposits at 3%, lend long at 6% and be home for the day by 3:00 p.m. became a common reference about the bankers. In the 1950s, however and 60s, banks considered only the credit and liquidity risks as major constraints on profitability. Deregulation of the banking system in the 1970s however, got many bankers unprepared to manage interest rate risk to which their institutions were suddenly exposed. Many bank failures in the world in 70s, 80s and 90s were triggered out poorly managed interest rate risks. Many financial institutions funded their long-term fixed assets with short-term volatile liabilities. So long as deposits and lending rates remained regulated, such funding mismatches were not at all a problem. However, today insulating interest spread against frequent interest rate change has become the major strategic objective of banks' management.

Liquidity Risk: For experienced financial services professional, the foremost capital market risk is that of inadequate liquidity to meet financial obligations. The most obvious form is an inability to pay desired withdrawals. Depositors react desperately to desired withdrawals. Depositors react

desperately to the mere prospect of this situation. They can drive a finance intermediary to collapse the withdrawing funds at a rate that exceeds its capacity to pay.

Currency risk: The risk of exchange rate volatility can be described as a form of basis risk among currencies instead of basis risk among interest rates on different securities; Balance sheets comprised of numerous separate currencies contain large, camouflaged risks through financial reporting systems that do not require assets to be marked to market.

Exchange rate risk: affects both the product markets and the capital markets. For example, exchange rate volatility can influence the ability of borrowers to repay their loans.

Settlement risk: Settlement risk is a particular form of default risk which involves the banks' competitors. Every day, trillions of dollars are exchanged among domestic and international banks. These amounts settle obligations having to do with money transfer, check clearing, loan disbursement and repayment, and all other interbank transfers within the worldwide monetary system.

Basis risk: Basis risk is a variation on the interest rate risk theme, yet it creates risks that are less easy to observe and understand. To guard against interest rate risk, somewhat noncomparable securities may be used as a hedge. However, the Success of this hedging depends on a steady and predictable relationship between the two non-identical securities.

Risk Management—Not Risk Avoid – Is the Objective

Financial services firms, in addition to managing their own risk, also sell financial risk management to others. For example, they sell their service by bearing customer's financial risks through the products they provide. A financial firm can offer a fixed – rate loan to borrower with the risk of interest rate movements transferred from the borrower to the bank. The bank, in turn, can carry that risk (presumably with compensation) or pass the risk on (at some expense) in the form of a hedging transaction. Thus, while the risk itself is ultimately, the burden of the risk and its costs are both manageable and transferable.

Senior managers in today's deregulated, competitive financial services environment must understand the true value of their services. In a free-market environment for services, customers will not spend their money where they do not perceive value. In financial services, particularly, value is an elusive concept.

Financial services involve the process of intermediation between those who have financial resources and those who need them, either as a principal or as an agent. Thus, value breaks into several distinct functions, and includes the intermediation of the following:

- Default
- Maturity preference mismatch
- Currency preference mismatch
- Size of transaction
- Market access and information

All these function assume a degree of risk on the part of the financial intermediary. This risk can either be passed on to another risk bearer through hedging, or it can be carried for a price.

Conclusion

Risks in financial services are large in scope and scale than ever before. Many of the risks are of a traditional sort: credit risk, interest rate, liquidity risk. However, numerous risks are more recent, such as regulatory risk, currency risk, and human resources risk.

Some management has reacted to this daunting task by pulling back from risk. They decline to accept transactions where the risk is significant. While these techniques have an important place in the risk management process, they can also compromise a financial institution's value through excessive risk acceptance and avoidance will separate the winners from the losers in the years ahead.

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