

**A SURVEY ON THE EFFECTIVENESS OF INTERNAL
CONTROL SYSTEMS IN TURKISH BANKING INDUSTRY**

MAHMUT BURAK ÖZBEK

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ULUSLARARASI FİNANS YÜKSEK LİSANS PROGRAMI

OKAN AYBAR

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**(TÜRK BANKACILIK ENDÜSTRİSİNDE İÇ KONTROL
SİSTEMLERİNİN ETKİNLİĞİ ÜZERİNE BİR ARAŞTIRMA)**

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Tez Danışmanının Adı Soyadı (İmza): Okan AYBAR

Jüri Üyesinin Adı Soyadı (İmza) : Prof. Dr. Oral ERDOĞAN

Jüri Üyesinin Adı Soyadı (İmza) : Kenan TATA

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ABSTRACT

Internal control represents a continuous process in which takes part the board of directors, senior management and all level of personnel, and whose aim is to ensure that all the established goals will be reached. The main objectives of the internal control process are: efficiency and effectiveness of activities; reliability, completeness and timeliness of financial and management information; compliance with applicable laws and regulations. In this study, COSO evaluation model was used in order to make an evaluation on the effectiveness of internal control systems of Turkish banks, covering all regulations stipulated by the Basel Committee on Banking Supervision. As the impact of each of the banking function on the effectiveness of internal controls were investigated, it was shown that an efficient internal control system might have prevent or detect from time the problems that led to losses, or that at least could have limit their value.

ÖZET

İç Kontrol, belirlenen tüm hedeflerin gerçekleşmesini sağlayan; Yönetim Kurulu, Üst Düzey Yöneyiciler ve tüm seviyelerdeki personeli içinde barındıran devamlı bir uygulamayı temsil eder. İç Kontrol'un temel amaçları: aktivitelerin etkinlik ve verimliliği; güvenilirlik, finansal ve yönetim verilerinin bütünlüğü ve zamandan muaf oluşu; uygulanan yasa ve regülasyonlarla uyumluluğudur. Bu araştırmada, Basel Bankacılık Gözetim Komitesinin tüm regülasyonları göz önünde bulundurularak COSO değerlendirme modeli, Türk bankalarındaki İç Kontrol mekanizmalarının verimliliğini ölçmek için kullanılmıştır. İç Kontrol'un bankacılık fonksiyonlarındaki etkinliği araştırıldıkça etkili bir İç Kontrol mekanizmasının kayıplara sebep veren sorunları önlediği veya en azından bu sorunların değerlerini sınırlandırdığı görülmüştür.

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ABBREVIATIONS

COSO	: The Committee of Sponsoring Organisations
BRSA	: Banking Regulation and Supervision Agency
CMB	: Capital Markets Board
GM	: General Motors
CEO	: Chief Executive Officer
IBM	: International Business Machines
RISC	: Reduced Instruction Set Computing
GE	: General Electric
GD	: General Dynamics
SIMEX	: Singapore International Monetary Exchange
ING	: International Netherlands Group
UK	: United Kingdom
VAR	: Value-at-risk
US	: United States
MOF	: Ministry of Finance
FRBNY	: Federal Reserve Bank of New York
FDIC	: Federal Deposit Insurance Corporation
CPA	: Certified Public Accountant
SEC	: Securities and Exchange Commission
AAA	: American Accounting Association
AICPA	: American Institute of Certified Public Accountants
FEI	: Financial Executives International
IIA	: The Institute of Internal Auditors
IMA	: Institute of Management Accountants
ICBS	: International Conference of Banking Supervisors

IOSCO	: International Organization of Securities Commissions
SIG	: Standard Implementation Group
IAIS	: International Association of Insurance Supervisors
BIS	: Bank for International Settlements
BRSB	: Banking Regulation and Supervision Board
EU	: European Union
SPSS	: Statistical Package for Social Sciences

1. INTRODUCTION

The need for a prudential supervision in order to maintain stability and confidence in the banking system is the main result of the recent years' globalization process. Strong internal control, including an internal audit function and an independent external audit are part of a sound corporate governance, which in turn can contribute to an efficient and collaborative working relationship between bank management and bank supervisors. (Palfi and Muresan (2009))

This increasing interest shown in the internal control and its continuous character is the consequence of an analysis, which was made upon the causes that lead to significant losses for many banks. The Basle Committee on Banking Supervision was the one who has studied recent banking problems in order to identify the major sources of internal control deficiencies. Its analysis identified that an inadequate internal control system was the major cause of those losses. As a result, it reinforces the importance of having an highly qualified and experienced management, the most suitable internal and external auditors and, moreover, that bank supervisors focus more attention on strengthening internal control systems and continually evaluating their effectiveness.

In this study, the necessity of an effective and efficient internal control system for ensuring the safe and soundness of a credit institution's activity will be underlined and the evolution of internal control systems and its reflections to Turkish Banking Industry will be examined.

As regards the research methodology, it is based on a survey analysis on the effectiveness of internal control systems in Turkish banks. In order to reach to a conclusion, a questionnaire was created based on the model COSO which is used to evaluate the effectiveness of banks. Thus, starting

form a study made by the Basle Committee on Banking Supervision, we tried to identify what are the fundamental elements of an internal control should be to maintain an effective approach in Turkish Banking.

2. LITERATURE REVIEW

A system of an effective internal control is a critical component of an organisation's management and a foundation for its safe and sound operations. A system of strong internal controls can help to ensure that the goals and objectives of an organisation will be met, that it will achieve long-term targets and maintain reliable financial and managerial reporting. Such a system can also help to ensure that the organisation will comply with laws and regulations as well as policies, plans, internal rules and procedures, and reduce the risk of unexpected losses and damage to the organisation's reputation. The following presentations of internal control, in essence, cover the same ground.

In USA, the Committee of Sponsoring Organisations of the Treadway Commission (COSO) issued Internal Control-Integrated Framework in 1992, which defined internal control as a process, ensured by an entity's board of directors, management and other personnel. According to COSO, such a system was designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- i) effectiveness and efficiency of operations
- ii) reliability of financial reporting and
- iii) compliance with applicable laws and regulations.

The Rutteman Report (1994) in United Kingdom defined internal control in the paper Internal Control and Financial Reporting: Guidance for Directors of Listed Companies registered in the UK as the whole system of controls, financial and otherwise, established in order to provide reasonable assurance of effective and efficient operations, internal financial control and compliance with laws and regulations.

In Canada, the Canadian Institute of Chartered Accountants (CoCo, 1995) issued the Guidance of Control along the same lines as COSO. In CoCo's

Guidance of Control, control is put into context with how a task is performed. It says, "A person performs a task, guided by an understanding of its purpose (the objective to be achieved) and supported by capability (information, resources, supplies and skills). The person will need a sense of commitment to perform the task well over time. The person will monitor his or her performance and the external environment to learn about how to do the task better and about changes to be made. The same is true of any team or work group. In any organization of people the essence of control is purpose, commitment, capability, and monitoring and learning".

The above criteria create the basis for understanding control in an organisation and for making judgements about the effectiveness of it, a characteristic, which was from the very old time the subject of many studies (Gibbs and Keating (1995); Tongren (1995); Turnbull Report (1999)).

In Turkey, Banking Regulation and Supervision Agency (BRSA), in order to observe the risks confronted by banks and to control them and with the aim of defining the bases and procedures related with risk management systems and internal audit systems to be founded by the banks prepared "Regulations about Internal Control and Risk Management of Banks" and it went into effect being published in the Official Gazette numbered 24312 and dated 08.02.2001. With this regulation, the executive committee is to assign one of its members to fulfill the function of internal control (Elitaş and Özdemir (2006)). With "the notification pertaining to the system to be used in intermediary institutions" published on July 14, 2003 by Capital Markets Board (CMB), bases and procedures pertaining to internal audit systems were regulated which are to be founded in order for the observation of risks confronted by the intermediary institutions and controlling them. Furthermore, on November 1, 2006 "The Regulations on the Internal Systems of Banks" are published by BRSA, with the purpose

is to lay down procedures and principles concerning the internal control, internal audit and risk management systems to be established by banks and the functioning of these systems.

Increasing density of company actions, deteriorating economic conditions, increasing competition have led companies to more efficient management and working methods. Internal control with the function of independent evaluation of activities such as financial formation, production, marketing and management is more advantageous for the companies (Ak (2004)). Internal control can be defined as a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives. According to Yılançı (2003); "Internal control aims to lead the company activities in a way to increase the efficiency and power of competition; to manage the company's wealth reasonably; to provide investment and management consultancy to enable the prevention of faults and frauds. According to Moeller and Witt (1999) internal control system's essential role is helping an entity achieve its performance and profitability targets, and prevent loss of resources on the ground of efficiency and effectiveness.

As regards bank's internal control, according to Turkish literature (Kepekçi (1982); Uzay (2003); Eşkazan (2003a, 2003b); Yurtsever (2003); Erdoğan (2005); Kayım (2006)), it consists of an ensemble of measures at management's disposal intended to ensure bank's proper functioning, a correct management of bank's assets and liabilities, and a true recording in accounting evidences. This definition expresses the striking feature of internal control and the participants to this process, but it is not complete. It does not include the part related to the content of this activity, which is detailed throughout its objectives. So, the internal control system's essential role is to pursue the following goals (Yurtsever (2008)):

- to respect all managerial policies and legal regulations, and to accomplish with regularity, in an economical, efficient and effective way, all the targets set out to do;
- to use efficiently and optimum the resources, and to protect the assets by preventing and detecting the deviations, errors and frauds;
- to keep correct and complete accounting records, so that it allow the information to be presented in the financial situations, according to the accounting standard adopted, and to ensure those information the following qualitative characteristics (Aldridge and Colbert (2003))
- controllability; considered to be good is not always enough for an information; the internal control has to give the possibility to check its exactitude;
- relevancy; the information always need to be gear to the pursued aim;
- availability; it is not enough to take possession of the information because, sometimes it might be too late; that is why internal control has to avoid such situation and to ensure the procurement of an information in a suitable time.

In order to achieve its goals, internal control system should be organised according to a range of old qualitative principles (Rezaee (1995)), such as organisation, self-control, continuity, universality, independence, informing, harmony, personnel' quality. (Messier, Glover, and Prawitt (2006))

Sequentially, we are going to try to present the regulatory framework of the internal control system defined by the Basle Committee in Banking Supervision comparative with the Turkish one, trying as well to highlight the necessity of its efficiency and effectiveness.

3. THE PROGRESSES INCREASING THE IMPORTANCE OF INTERNAL CONTROL

One meaning of globalization refers to "paper entrepreneurialism" and to the explosive growth of international financial markets: "Dwarfing the growth of trade in manufactured goods, these financial markets draw on the \$20 trillion of swaps, options, and other derivatives that circulate around the world." In these markets, investors speculate on minute spreads in global interest rates, as well as in foreign currency exchanges that currently trade \$2.5 trillion a day. According to Blau (1999), technological innovations in banking have helped to fuel this growth in speculative capacity. For example, when Chemical Bank purchased Chase Manhattan, it also acquired the \$130 million centre in Bournemouth, England that Chase had built to process transactions from around the world. A satellite network connected this 323,000-square foot facility to offices in New York, Hong Kong, Luxembourg, and Tokyo; the telecommunications lines to London could transmit the equivalent of the city's telephone directory in 90 seconds. The total value of all transactions it handled reached trillions of dollars a year and the money naturally tended to go where more of it could be made in the fastest manner possible. "In essence, the financial markets are now so interlocked it is estimated that political and economic changes elsewhere account for 80 percent of the turbulence in a given market. As a result, a rise of interest rates in New York can easily spark a sell-off in Mexico."

This relentless quest for the highest rate of profit frequently deprives some countries of funds. For example, in the last decade of the 20th century; Sweden, Canada, Italy and Spain were deeply in debt and faced a capital shortage; however, U.S. investors were particularly uninterested in these investment opportunities. Rather than seek out these investment venues, from 1990 to the end of 1993, American investors absorbed a net total of \$127 billion in the then-robust Asian and Latin American markets. In

1993, the Philippine market increased 133 percent; at the same time, Hong Kong, Indonesia, Malaysia, Thailand, and Brazil roughly doubled. Poland experienced the sharpest increase (718 percent), but Turkey managed to gain 214 percent, and Zimbabwe also increased 123 percent. According to Blau, “Countries that were deeply in debt simply could not compete with speculative opportunities like these.”

As the ability to speculate increased in the last years of the 20th century, though, so did the associated risks. Blau (1999) points out that some of the major financial downturns have affected the once-great, including Hedge fund manager George Soros, who lost \$600 million by betting against a strong Japanese yen; Procter & Gamble, which lost \$102 million on leveraged derivatives purchased from Bankers Trust Co.; and Nick Leeson, an unsupervised 28-year-old stock trader who wagered a total of \$27 billion, primarily on differences in futures contracts between Singapore and Osaka. “Leeson lost \$1.4 billion and bankrupted his employer, Barings P.L.C., a British investment firm that was 233 years old.”

3.1. The Role of the Market for Corporate Control

According to Jensen (1993) there are only four control forces operating on the corporation to resolve the problems caused by a divergence between managers' decisions and those that are optimal from society's standpoint. They are the

- i) capital markets,
- ii) legal/political/regulatory system,
- iii) product and factor markets, and
- iv) internal control system headed by the board of directors.

As explained elsewhere (Jensen (1989a, 1989b, 1991), Roe (1990, 1991)), the capital markets were relatively constrained by law and regulatory

practice from about 1940 until their resurrection through hostile tender offers in the 1970s. Prior to the 1970s capital market discipline took place primarily through the proxy process. (Pound (1993) analyzes the history of the political model of corporate control.)

While the product and factor markets are slow to act as a control force, their discipline is inevitable-firms that do not supply the product that customers desire at a competitive price cannot survive. Unfortunately, when product and factor market disciplines take effect it can often be too late to save much of the enterprise. To avoid this waste of resources, it is important for us to learn how to make the other three organizational control forces more expedient and efficient. (Jensen (1993))

Substantial data support the proposition that the internal control systems of publicly held corporations have generally failed to cause managers to maximize efficiency and value. More persuasive than the formal statistical evidence is the fact that few firms ever restructure themselves or engage in a major strategic redirection without a crisis either in the capital markets, the legal/political/regulatory system, or the product/factor markets. But there are firms that have proved to be flexible in their responses to changing market conditions in an evolutionary way. For example, investment banking firms and consulting firms seem to be better at responding to changing market conditions. (Jensen (1993))

The capital markets provided one mechanism for accomplishing change before losses in the product markets generate a crisis. While the corporate control activity of the 1980s has been widely criticized as counterproductive to American industry, few have recognized that many of these transactions were necessary to accomplish exit over the objections of current managers and other constituencies of the firm such as employees and communities. For example, the solution to excess capacity in the tire industry came about through the market for corporate control. Every major

U.S. tire firm was either taken over or restructured in the 1980s. In total, 37 tire plants were shut down in the period 1977 to 1987 and total employment in the industry fell by over 40 percent. (U.S. Bureau of the Census (1987))

Capital market and corporate control transactions such as the repurchase of stock (or the purchase of another company) for cash or debt creates exit of resources in a very direct way. When Chevron acquired Gulf for \$13.2 billion in cash and debt in 1984, the net assets devoted to the oil industry fell by \$13.2 billion as soon as the checks were mailed out. In the 1980s the oil industry had to shrink to accommodate the reduction in the quantity of oil demanded and the reduced rate of growth of demand. This meant paying out to shareholders its huge cash inflows, reducing exploration and development expenditures to bring reserves in line with reduced demands, and closing refining and distribution facilities. The leveraged acquisitions and equity repurchases helped accomplish this end for virtually all major U.S. oil firms (Jensen (1986b, 1988)).

The era of the control market came to an end, however, in late 1989 and 1990. Intense controversy and opposition from corporate managers, assisted by charges of fraud, the increase in default and bankruptcy rates, and insider trading prosecutions, caused the shutdown of the control market through court decisions, state antitakeover amendments, and regulatory restrictions on the availability of financing. (Swartz (1992), and Comment and Schwert (1993)).

In 1991, the total value of transactions fell to \$96 billion from \$340 billion in 1988. LBOs and management buyouts fell to slightly over \$1 billion in 1991 from \$80 billion in 1988. The demise of the control market as an effective influence on American corporations has not ended the restructuring, but it has meant that organizations have typically postponed addressing the problems they face until forced to by financial difficulties

generated by the product markets. Unfortunately the delay means that some of these organizations will not survive-or will survive as mere shadows of their former selves. (Jensen (1993))

3.2. The Failure of Corporate Internal Control Systems

According to Jensen, with the shutdown of the capital markets as an effective mechanism for motivating change, renewal, and exit, we are left to depend on the internal control system to act to preserve organizational assets, both human and nonhuman. Throughout corporate America, the problems that motivated much of the control activity of the 1980s are now reflected in lacklustre performance, financial distress, and pressures for restructuring. Kodak, IBM, Xerox, ITT, and many others have faced or are now facing severe challenges in the product markets. We therefore must understand why these internal control systems have failed and learn how to make them work. (Jensen (1993))

By nature, organizations abhor control systems, and ineffective governance is a major part of the problem with internal control mechanisms. They seldom respond in the absence of a crisis. The recent GM board revolt which resulted in the firing of CEO Robert Stempel exemplifies the failure, not the success, of GM's governance system. General Motors, one of the world's high-cost producers in a market with substantial excess capacity, avoided making major changes in its strategy for over a decade. The revolt came too late: the board acted to remove the CEO only in 1992, after the company had reported losses of \$6.5 billion in 1990 and 1991 and an opportunity loss of over \$100 billion in its R&D and capital expenditure program over the eleven-year period 1980 to 1990. (Jensen (1993))

Unfortunately, GM is not an isolated example. IBM is another testimony to the failure of internal control systems: it failed to adjust to the substitution away from its mainframe business following the revolution in the Workstation and personal computer market-ironically enough a revolution that it helped launch with the invention of the RISC technology in 1974 (Loomis (1993)). Like GM, IBM is a high-cost producer in a market with substantial excess capacity. It too began to change its strategy significantly and removed its CEO only after reporting losses of \$2.8 billion in 1991 and further losses in 1992 while losing almost 65 percent of its equity value. (Jensen (1993))

Eastman Kodak, another major U.S. company formerly dominant in its market, also failed to adjust to competition and has performed poorly. Its \$37 share price in 1992 was roughly unchanged from 1981. After several reorganizations, it only recently began to seriously change its incentives and strategy, and it appointed a chief financial officer well-known for turning around troubled companies. (Unfortunately he resigned only several months later-after, according to press reports, running into resistance from the current management and board about the necessity for dramatic change.) (Jensen (1993))

General Electric (GE) under Jack Welch, who has been CEO since 1981, is a counterexample to our proposition about the failure of corporate internal control systems. GE has accomplished a major strategic redirection, eliminating 104,000 of its 402,000 person workforce (through layoffs or sales of divisions) in the period 1980 to 1990 without the motivation of a threat from capital or product markets. But there is little evidence to indicate this is due to anything more than the vision and persuasive powers of Jack Welch rather than the influence of GE's governance system. (Jensen (1993))

General Dynamics (GD) provides another counterexample. The appointment of William Anders as CEO in September 1991 (coupled with

large changes in its management compensation system which tied bonuses to increases in stock value) resulted in its rapid adjustment to excess capacity in the defense industry-again with no apparent threat from any outside force. (Jensen (1993))

GD generated \$3.4 billion of increased value on a \$1 billion company in just over two years (Murphy and Dial (1992)). Sealed Air (Wruck (1992)) is another particularly interesting example of a company that restructured itself without the threat of an immediate crisis. CEO Dermot Dumphy recognized the necessity for redirection, and after several attempts to rejuvenate the company to avoid future competitive problems in the product markets, created a crisis by voluntarily using the capital markets in a leveraged restructuring. Its value more than tripled over a three-year period.

These companies are hold up as examples of successes of the internal control systems, because each redirection was initiated without immediate crises in the product or factor markets, the capital markets, or in the legal/political/regulatory system. The problem is that they are far too rare. Although the strategic redirection of General Mills provides another counterexample (Donaldson (1990)), the fact that it took more than ten years to accomplish the change leaves serious questions about the social costs of continuing the waste caused by ineffective control. It appears that internal control systems have two faults. They react too late, and they take too long to effect major change. Changes motivated by the capital market are generally accomplished quickly-within one and a half to three years. As yet no one has demonstrated the social benefit from relying on purely internally motivated change that offsets the costs of the decade-long delay exhibited by General Mills. (Jensen (1993))

In summary, it appears that the infrequency with which large corporate organizations restructure or redirect themselves solely on the basis of the internal control mechanisms in the absence of crises in the product, factor,

or capital markets or the regulatory sector is strong testimony to the inadequacy of these control mechanisms.

3.3. Some Evidences From Banking: Barings and Daiwa Bank

Founded in 1762, Barings Bank (previously known as Baring Brothers & Co.) was the oldest merchant banking company in England. Barings collapsed on February 26, 1995 as the result of the activities of one of its traders, Nick Leeson, who lost \$1.4 billion by investing in the Singapore International Monetary Exchange (SIMEX) with primarily derivative securities. This was actually the second time the bank had been faced with bankruptcy. Following the collapse, Barings was purchased by the Dutch bank/insurance company ING (for the nominal sum of one pound) and today no longer exists as a corporate entity; however, the Baring family's name lives on in Baring Asset Management. An autobiography of Leeson and the events leading up to the collapse of Barings were dramatized in the movie "Rogue Trader." According to Wolfgang H. Reinicke (1998), in view of recent developments in the derivatives markets, the Basle Committee recognized that its existing formula focused too much on credit risk and too little on market and operational risks. As a result, a series of intense discussions took place within the committee, as well as between regulators and the private sector over the next few years.

This initiative resulted in what represented a dramatic shift in the global public policy framework developed in the late 1980s. In an effort to accommodate the changes that had taken place in the markets, the Basle Committee issued for comment a proposal on a capital standard based on market risk in April 1993; however, the private sector responded with sharp criticisms that the proposed reforms were too complex for smaller institutions to manage, and too difficult for the public to understand, and still too primitive for banks that had already been active in the derivatives market by using much more sophisticated risk management techniques.

In the controversy that ensued, the future of global regulatory arrangements was determined by regulators who soon came to realize that there was only one way they could hope to control what, by 1994, had become a rapidly evolving and ever more complex industry: “They would have to not only engage the private sector to a much larger degree in the agenda setting and formulation of global public policy, but also make extensive use of public-private partnerships during implementation.” This served as the catalyst for embracing a new approach, a process that significantly accelerated following the collapse of the Barings Group, a major U.K. bank, in February 1995.

According to Reinicke (1998), the collapse occurred with almost no warning and happened quickly. The collapse itself involved the extensive proprietary use of derivatives to establish large, highly leveraged positions in Nikkei 225 (Japanese equities) futures on the futures exchanges in Singapore and Osaka. Reinicke writes, “Barings' collapse came on the heels of other financial crises involving derivatives, such as those of the government of Orange County, California, and the German firm Metallgesellschaft.”

The collapse of the Barings Bank identified three fundamental shortcomings that had to be addressed in order to establish a revised framework for global public policy:

1. As late as the end of 1993 Barings had a capital ratio well in excess of the Basle Agreement's 8 percent requirement, and in January 1995 it was still considered a safe bank; the fact that Barings found itself in receivership only two months later could not but raise serious doubts about the adequacy of the regulatory system for capital requirements;
2. The collapse showed that internal controls at Barings were totally inadequate to support the activities of its traders; and

3. It was evidence that regulators in different countries had failed to communicate with each other to a degree sufficient to reduce at least in part the information asymmetry that globalization had created.

Against the background of these events and the shortcomings they revealed, the Basle Committee accelerated its efforts and in April 1995 issued for comment a proposal for an entirely new approach toward the regulation and calculation of banks' capital requirements. For the first time in their history, banks would be allowed to use their own internal risk management models, which they use for their routine day-to-day trading and risk management, to determine their capital requirements.

Regulators would no longer impose or enforce strict, uniform, quantitative limits on the activities of banks. Rather, in recognition of the growing complexity and innovative dynamism of the global financial services industry, the Basle Committee acknowledged that, provided certain qualitative and quantitative safeguards were present, the banks' own control and risk management mechanisms would prove superior to any that regulators could impose. The committee proposed to allow banks to use their own in-house risk models, also called value-at-risk (VAR) models, which are designed to assess and monitor market risk (the form of risk perceived to be the greatest threat arising from the emergence of the derivatives markets) and, on the basis of these models, to calculate their own capital charges. At the same time, however, banks would be required to use a common approach to measure risk, the so-called "value-at-risk" approach. Reincke notes that value-at-risk is an estimate, to a certain level of confidence, of the maximum possible loss in value of a portfolio or financial position over a given period of time; the Group of Thirty had recommended such an approach in the past.

The Barings collapse confirmed that internal controls at Barings were clearly insufficient to detect what was taking place with Leeson's

derivatives trades. While initial accounts cantered on the fraudulent activities of Leeson, and evidence suggests that Leeson was in fact engaged in highly speculative transactions and deliberately tried to deceive his superiors, his actions were not the only reason for the group's failure. To offset mistaken trades, which were aimed at arbitraging minute-to-minute differences in Nikkei futures prices between the Singapore and Japanese exchanges, Leeson recorded large unmatched trades in an Error Account, superstitiously numbered 88888. This settlement account had been placed under his control in July 1992 by the firm's London Office for the purpose of netting minor trading mistakes inside Singapore books. The net position was to be closed each day and the net value of gains and losses incurred in negating the position were to be recorded as part of the Singapore unit's daily profit. (See Figure 1) This 88888 account - and the authority to use it - remained in Singapore even after the reporting system was revised to book all errors straight through to London. Totally inadequate internal communications, controls, and channels of accountability, as well as insufficient regulatory oversight, compounded these findings by UK regulators as did a lack of communication between regulators in the United Kingdom, Japan, and Singapore.

Figure 1: Leeson's Accounting Schemes

Trading Losses Posted to Account 88888	-
x	
Margin Calls on Trading Position at a percent	-
ax	
Funding From:	+(1 + a)x
Leeson's Commission Income (Feb. to Dec 1992)	
Premiums From Selling in-the-money Options (Dec. 1992 - Oct. 1994)	
Transfers requested from London (From 1993 on)	
<hr/> Incremental Net Accounting Income Posted in Singapore	0

Source: Kane, Edward J. and Kimberly DeTrask (1998)

The most glaring aspect of the lack of internal communication is that it was common knowledge on the futures markets that Barings was building an increasingly risky position. As one U.S. fund manager put it, "The futures community [had] known of this mega-position for about the last three months." In New York the manager of one of the biggest hedge funds said that "news of Barings' purchase of contracts had been the subject of 'intense discussion' in the financial markets for at least two weeks," and short of completely inadequate in-house communications, it is inconceivable that senior management was unaware of these developments.

The failure of Barings' management to prevent the collapse of Barings also resulted from Barings' flawed internal controls and channels of accountability. "Leeson was responsible for both the trading and the settlement sides of the Singapore operations, which made it easier for him to conceal his contracts from his superiors." Nevertheless, senior management officials at Barings had been made aware of this situation as early as 1992. At that time the head of Barings' Securities operations in Singapore alerted the firm's management in London to the potential dangers of having Leeson manage both trading and settlement. In March 1992 he wrote to the head of equities in London, "My concern is that we are in danger of setting up a structure which will subsequently prove disastrous and with which we will succeed in losing either a lot of money or client goodwill or probably both." According to Nikki Tait, the fact that Leeson had no gross position limits on proprietary trading operations made the potentially dangerous management structure even worse.

From the evidence available to date, it appears that such concerns were not communicated to Barings' external auditors, who almost certainly would have included them in the annual report on management systems and controls, based on UK banking regulations that were submitted to the Bank of England. Senior executives at Barings conceded that they did not really understand the esoteric business of derivatives, so their guidance for Nick

Leeson was not strategic in nature but was rather quantitative: “Rather than set long-term vision, with controls and attention to relationships, they simply asked Leeson to deliver more of the profits to which they had become accustomed. Was Leeson wrong? Yes. But so was the strategy, or the lack of it.”

Barings has not been the only such financial institution so effected by insufficient internal controls, although every situation is unique. For example, in spite of the notoriety and infamy of the Leeson case, over a year later Sumitomo Bank faced an estimated \$1.8 billion loss also attributable to a single rogue trader.

In the wake of Leeson and the Barings Bank episode, the growth of global financial transactions, insider trading, executive remuneration, and misuse of pension funds, has been added to the list of corporate shenanigans that have fuelled changes in the regulatory environment. For example, Broadhurst and Ledgerwood report that in 1993, the Caux Round Table, based in Switzerland, adopted an international code for multinational firms in Europe, North America and Japan; this international code identifies five basic principles that go well beyond the earlier codes that focused on more restricted abuses. Those principles are:

- 1) Stakeholder responsibility;
- 2) Social justice;
- 3) Mutual support;
- 4) Environmental concern; and,
- 5) Avoidance of illicit operations and corrupt practices.

Subsequent to the collapse of Barings, SIMEX also reviewed its regulatory rules, auditing, surveillance, and clearing practices, as well as exchange-wide systems to strengthen safeguards against settlement risks. According to Lall and Liu, SIMEX appointed an international advisory panel comprised of distinguished professionals and regulators from the international futures industry to seek advice on the best practices in global futures exchanges and to identify areas for cooperation with other futures exchanges. As Leeson had

been based in Singapore, officials there attempted to improve supervisory coordination for futures trading in an increasingly global environment. As a result, SIMEX appointed Dr. Roger Rutz as its consultant on risk management.

The international advisory panel recommended:

- (1) The enhancement of customer protection rules;
- (2) An upgrading of the clearing system and procedures to incorporate real-time settlement and critical risk management systems;
- (3) The promotion of information sharing among exchanges;
- (4) The imposition of a requirement that clearing firms register senior officers with SIMEX;
- (5) The strengthening of SIMEX's Market Surveillance Department; and,
- (6) Enhancements to the large trade reporting system.

Dr. Rutz's recommendations addressed all areas of SIMEX's operations, with an emphasis on risk management, capital requirements, and the clearing system; his major suggestions included:

- Devising comprehensive internal risk analysis procedures to identify high risk accounts and members in need of closer monitoring. These procedures would include stress testing of positions, analysis of daily settlements and margin calls, as well as analysis of position and market concentration.
- Enhancing SIMEX's monitoring ability, including notification by member firms when a margin call is issued for any account in excess of their adjusted net capital, reporting large positions, aggregation of accounts, and reconciliation of reported positions.
- Increasing SIMEX's power to control or direct the operations of member firms in highly vulnerable positions.
- Regulating higher position limits through explicit hedging, arbitrage, risk management, and other qualitative and financial exposure criteria.
- Establishing procedures to manage high risk situations including improved information-gathering to help evaluate challenging situations, and improved

default procedures to transfer to other clearing members, in bulk, those positions carried by defaulting brokers who threaten the system's integrity.

This evidence showed that the now-infamous Singapore-based derivatives trader, Nicholas Leeson, drove Britain's venerable Barings Bank to bankruptcy. Although the evidence to date suggests that Leeson was in fact involved in shady deals, it appears that other factors were also involved in the bank's collapse. Leeson's superior knew, or should have known, what the trader was up to, and had been provided with advance notice concerning his activities. Furthermore, Leeson was not the only trader engaged in such activities, and the philosophy of many financial institutions of the day appeared to encourage the sorts of techniques employed by Leeson. In the final analysis, the Leeson case demonstrates what can happen when one individual is entrusted with too much power, and only time will tell if the remedial steps taken since then will preclude such recurrences in the future.

At Daiwa, as in Barings, a trader who operated out of a subsidiary office far from firm headquarters ran up unacknowledged losses. Also as at Barings, higher-management checks and balances on the settlement of trading activities were distressingly incomplete. Most of Daiwa's \$1.1 billion in trading losses were funded by the simple expedient of not booking out of custody the transfer of the particular securities that were sold at a loss, as depicted in Figure 2. Leeson controlled the posting of net settlements; conspiring with colleagues, Toshihide Iguchi controlled postings to the custody account. Iguchi's unprofitable trades moved the securities physically out of Daiwa's vaults, but their departure was simply not booked. From an accounting point of view, this simple fraud served to transform losing trades into accounting 'nonevents.' Each unbooked trade became the accounting equivalent of a tree falling in a foreign forest far beyond earshot of the firm's Osaka headquarters.

Figure 2: Daiwa's Accounting Scheme

Trading Revenue on Selected Securities (Posted as Other Revenue)	+x
Custody Account for the Same Securities (Not Debited)	
<hr/>	
Surplus Available for Funding Other Losses	+x

Source: Kane, Edward J. and Kimberly DeTrask (1998)

Three other significant differences emerge. First, the duration of the fraud at Daiwa was four times longer than that at Barings. Second, Daiwa's regulators and top management in the home country admitted their involvement in the cover-up. Third, while the losses at each institution were of similar magnitude, Leeson's activities caused Baring's collapse; Iguchi's fraud led to Daiwa's expulsion from operating in the United States, but did not induce the bank's demise.

According to their official testimony, Baring's management had the misfortune of discovering Leeson's losses after he had abandoned his office and fled the country, at which time it was too late to save the bank. The Iguchi dealings came to light under less climactic circumstances. After twelve years of unauthorized trading of U.S. Treasury obligations that cumulated to \$1.1 billion in losses, Toshihide Iguchi, Executive Vice President of The Daiwa Bank, Ltd, articulated his activities in a July 17, 1995 thirty-page confession letter to Daiwa President Akira Fujita. On August 8, Fujita informally notified Yoshimasa Nishimura, Banking Bureau Chief of the Japanese Ministry of Finance (MoF) about the losses. Daiwa did not inform U.S. regulators of the scandal until September 18, when it formally reported the losses to the Federal Reserve Bank of New York (FRBNY). Japanese regulators also received formal notice on that date.

Once informed of the scandal, U.S. authorities acted quickly – Iguchi was arrested on September 23 and Cease and Desist Orders were issued jointly by the New York State Banking Department, FRBNY, the Board of Governors, and the FDIC on October 2. These orders severely limited the activities of

both the bank and Daiwa Trust Co., and called for an independent CPA firm to conduct a forensic review of the \$1.1 billion in securities trading losses, to prepare a complete reconciliation and verification of bank assets, and to perform a comprehensive audit of internal controls, custody business, risk-management, and management information systems for both Daiwa and Daiwa Trust.

4. THE DEVELOPING STANDARDS FOR INTERNAL CONTROL SYSTEMS

The importance of Sarbanes-Oxley Act should not be understated. It is the most extensive amendment of securities law since the 1930's, and was the result of a wave of corporate and accounting scandals, including, but not limited to Enron, WorldCom, Tyco, Xerox, Sunbeam, Adelphia and Arthur Anderson. The guilty ones have generally been senior management who have manipulated accounting information to enrich themselves through the provisions of their stock options.

The Enron Corporation debacle was a disaster for its executives, employees, accountants, investment bankers, and investors. Everyone from employees to underwriters and even corporate executives suffered as a result of Enron's fallout. The disaster did not stop with Enron. Financial scandals involving WorldCom, Qwest, Global Crossing, Tyco, and Enron ultimately cost shareholders \$460 billion. Effects of Enron changed the way companies do business. In an effort to restore investor confidence, large corporations which in the past had worked to keep their audit costs low found it necessary to spend additional money on annual financial reviews and now pour more resources into annual audits than in pre-Enron years. Some corporations, such as General Electric, went beyond the new legal requirements, setting more stringent internal control standards in response to the Enron bankruptcy.

The accounting profession also suffered from these financial scandals. At one time the accounting industry was dominated by the Big Five accounting firms, however, Enron's collapse led to the demise of Enron auditor Arthur Anderson.

The accounting profession in the United States was once largely self-regulating. As a result of Enron and other corporate scandals, new rules

and regulations in the United States passed by Congress and enacted by the Securities and Exchange Commission ("SEC").

The first government response to Enron in the United States was an SEC order requiring chief executive officers ("CEOs") of the largest American companies to certify their financial statements. Then, in another effort to put an end to corporate scandals, Congress enacted the Sarbanes-Oxley Act of 2002 ("the Act," or "Sarbanes-Oxley"). The Act has been called "the most significant legislation governing US securities markets since the 1930s." Remarkably, the Act became law a mere seven months after Enron filed for bankruptcy. The Act was introduced into Congress in early July 2002 and was signed into law by President Bush by the end of that month. Receiving a vote of ninety-seven to zero in the United States Senate, the Act was designed to take precautions on all the Enron-WorldCom-Global Crossing chicanery and to provide tough criminal penalties for those who violate its provisions. While Sarbanes-Oxley was the leader in many new requirements, it was primarily designed to restore financial confidence in American securities markets. Chief executive officers and other corporate officials also found themselves on notice: executives could be subject to lengthy prison terms and substantial fines if their financial records were judged as fraudulent. Sarbanes-Oxley's new guidelines apply not only to American companies, but also to foreign corporations whose securities trade in the United States.

4.1. The Internal Control Model COSO

Internal control means different things to different people. This causes confusion among businesspeople, legislators, regulators and others. Resulting miscommunication and different expectations cause problems within an enterprise. Problems are compounded when the term, if not clearly defined, is written into law, regulation or rule.

4.1.1. What is Internal Control?

Internal control is broadly defined as a process, effected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

Internal control can be judged as effective in each of these categories if:

- i) the board of directors and management have reasonable assurance that they understand the extent to which the entity's operations objectives are being achieved
- ii) published financial statements are being prepared reliably and
- iii) applicable laws and regulations are being complied with.

The first category addresses an entity's basic business objectives, including performance and profitability goals and safeguarding of resources. The second relates to the preparation of reliable published financial statements, including interim and condensed financial statements and selected financial data derived from such statements, such as earnings releases, reported publicly. The third deals with complying with those laws and regulations to which the entity is subject. These distinct but overlapping categories address different needs and allow a directed focus to meet the separate needs.

Internal control systems operate at different levels of effectiveness. Internal control can be judged effective in each of the three categories, respectively, if the board of directors and management have reasonable assurance that:

- They understand the extent to which the entity's operations objectives are being achieved.
- Published financial statements are being prepared reliably.
- Applicable laws and regulations are being complied with.

While internal control is a process, its effectiveness is a state or condition of the process at one or more points in time.

Internal control consists of five interrelated components. These are derived from the way management runs a business, and are integrated with the management process. Although the components apply to all entities, small and mid-size companies may implement them differently than large ones. Its controls may be less formal and less structured, yet a small company can still have effective internal control. The components are:

- **Control Environment**

The control environment sets the tone of an organization, influencing the control consciousness of its people. It is the foundation for all other components of internal control, providing discipline and structure. Control environment factors include the integrity, ethical values and competence of the entity's people; management's philosophy and operating style; the way management assigns authority and responsibility, and organizes and develops its people; and the attention and direction provided by the board of directors.

- **Risk Assessment**

Every entity faces a variety of risks from external and internal sources that must be assessed. A precondition to risk assessment is establishment of objectives, linked at different levels and internally consistent. Risk assessment is the identification and analysis of relevant risks to achievement of the objectives, forming a basis for determining how the risks should be managed. Because economic, industry, regulatory and

operating conditions will continue to change, mechanisms are needed to identify and deal with the special risks associated with change.

- **Control Activities**

Control activities are the policies and procedures that help ensure management directives are carried out. They help ensure that necessary actions are taken to address risks to achievement of the entity's objectives. Control activities occur throughout the organization, at all levels and in all functions. They include a range of activities as diverse as approvals, authorizations, verifications, reconciliations, reviews of operating performance, security of assets and segregation of duties.

- **Information and Communication**

Pertinent information must be identified, captured and communicated in a form and timeframe that enable people to carry out their responsibilities. Information systems produce reports, containing operational, financial and compliance-related information, that make it possible to run and control the business. They deal not only with internally generated data, but also information about external events, activities and conditions necessary to informed business decision-making and external reporting. Effective communication also must occur in a broader sense, flowing down, across and up the organization. All personnel must receive a clear message from top management that control responsibilities must be taken seriously. They must understand their own role in the internal control system, as well as how individual activities relate to the work of others. They must have a means of communicating significant information upstream. There also needs to be effective communication with external parties, such as customers, suppliers, regulators and shareholders.

- **Monitoring**

Internal control systems need to be monitored—a process that assesses the quality of the system's performance over time. This is accomplished

through ongoing monitoring activities, separate evaluations or a combination of the two. Ongoing monitoring occurs in the course of operations. It includes regular management and supervisory activities, and other actions personnel take in performing their duties. The scope and frequency of separate evaluations will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures. Internal control deficiencies should be reported upstream, with serious matters reported to top management and the board.”

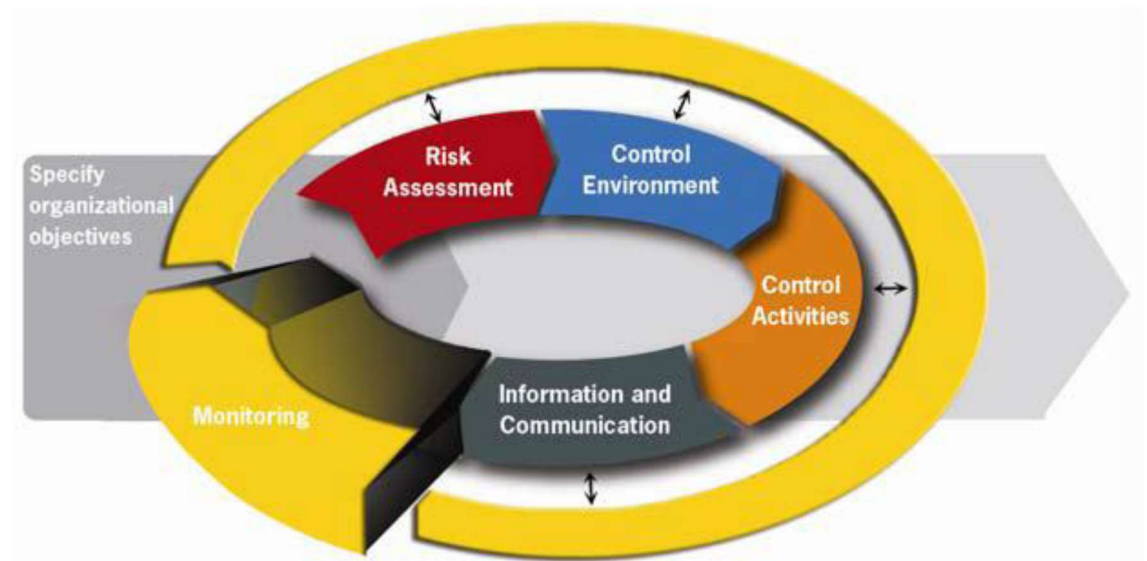


Figure 3: Monitoring Applied to the Internal Control Process

These components combine to form an integrated system of controls. To conclude that internal control is effective in any category of objectives (operations, financial reporting, or compliance) all five components must be present and functioning. The Integrated Framework uses three dimensions, illustrated in the cube below, that provide management with criteria by which to evaluate internal controls.

The Committee of Sponsoring Organizations (COSO) is a voluntary private sector organization dedicated to improving the quality of financial reporting through business ethics, effective internal controls and corporate governance. COSO was originally formed in 1985 to sponsor the National Commission on Fraudulent Financial Reporting, an independent private

sector initiative which studied the causal factors that can lead to fraudulent financial reporting and developed recommendations for public companies and their independent auditors, for the SEC and other regulators, and for educational institutions. The National Commission was jointly sponsored by five major professional associations in the United States, the American Accounting Association(AAA), the American Institute of Certified Public Accountants(AICPA), Financial Executives International(FEI), The Institute of Internal Auditors(IAA), and the National Association of Accountants (now the Institute of Management Accountants(IMA)). The Commission was wholly independent of each of the sponsoring organizations, and contained representatives from industry, public accounting, investment firms, and the New York Stock Exchange. The Chairman of the National Commission was James C. Treadway, Jr., Executive Vice President and General Counsel, Paine Webber Incorporated and a former Commissioner of the U.S. Securities and Exchange Commission. Currently, the COSO Chairman is David L. Landsittel

Before Sarbanes Oxley Act was enacted, COSO had been operating to ensure the effectiveness of the firms' internal audits to fight against the corporate scandals and several audit failures. After the act its approaches on internal control systems has been majorly used.

The COSO Framework considers not only the evaluation of hard controls, like segregation of duties, but also soft controls, such as the competence and professionalism of employees. Especially in the United States, these concepts have been adopted by many organizations, as well as by many governmental entities. Applying COSO to practice is not so simple as adopting it in theory, however. No defined approach exists for auditing "soft" controls like the integrity and ethical values of staff, the philosophy and operating style of management, and the effectiveness of communication.



Figure 4: COSO Cube

The first dimension is objectives. Internal controls are designed to provide reasonable assurance that objectives are achieved in the following categories: effectiveness and efficiency of operations (including safeguarding of assets), reliability of financial reporting, and compliance with applicable laws and regulations (left to right, across the top of the cube).

The second dimension required by COSO is an entity-level focus and an activity-level focus (front to back, across the right side of the cube). Internal controls must be evaluated at two levels: at the entity level, and at the activity or process level.

The third dimension includes the five components of internal controls (bottom to top, on the face of the cube) The framework works in the following manner: For any given objective, such as reliability of financial reporting, management must evaluate the five components of internal control at both the entity level and at the activity (or process) level.

4.1.2. What Internal Control Can Do?

Internal control can help an entity achieve its performance and profitability targets, and prevent loss of resources. It can help ensure reliable financial reporting. And it can help ensure that the enterprise complies with laws and regulations, avoiding damage to its reputation and other consequences. In sum, it can help an entity get to where it wants to go, and avoid pitfalls and surprises along the way.

4.1.3. What Internal Control Cannot Do?

Unfortunately, some people have greater, and unrealistic, expectations. They look for absolutes, believing that:

- Internal control can ensure an entity's success that is, it will ensure achievement of basic business objectives or will, at the least, ensure survival.

Even effective internal control can only help an entity achieve these objectives. It can provide management information about the entity's progress, or lack of it, toward their achievement. But internal control cannot change an inherently poor manager into a good one. And, shifts in government policy or programs, competitors' actions or economic conditions can be beyond management's control. Internal control cannot ensure success, or even survival.

- Internal control can ensure the reliability of financial reporting and compliance with laws and regulations.

This belief is also unwarranted. An internal control system, no matter how well conceived and operated, can provide only reasonable--not absolute--assurance to management and the board regarding achievement of an entity's objectives. The likelihood of achievement is affected by limitations inherent in all internal control systems. These include the realities that judgments in decision-making can be faulty, and that breakdowns can

occur because of simple error or mistake. Additionally, controls can be circumvented by the collusion of two or more people, and management has the ability to override the system. Another limiting factor is that the design of an internal control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs.

4.1.4. Roles and Responsibilities

Management: The chief executive officer is ultimately responsible and should assume "ownership" of the system. More than any other individual, the chief executive sets the "tone at the top" that affects integrity and ethics and other factors of a positive control environment. In a large company, the chief executive fulfills this duty by providing leadership and direction to senior managers and reviewing the way they're controlling the business. Senior managers, in turn, assign responsibility for establishment of more specific internal control policies and procedures to personnel responsible for the unit's functions. In a smaller entity, the influence of the chief executive, often an owner-manager, is usually more direct. In any event, in a cascading responsibility, a manager is effectively a chief executive of his or her sphere of responsibility. Of particular significance are financial officers and their staffs, whose control activities cut across, as well as up and down, the operating and other units of an enterprise.

Board of Directors: Management is accountable to the board of directors, which provides governance, guidance and oversight. Effective board members are objective, capable and inquisitive. They also have a knowledge of the entity's activities and environment, and commit the time necessary to fulfill their board responsibilities. Management may be in a position to override controls and ignore or stifle communications from subordinates, enabling a dishonest management which intentionally misrepresents results to cover its tracks. A strong, active board, particularly when coupled with effective upward communications channels

and capable financial, legal and internal audit functions, is often best able to identify and correct such a problem.

Internal Auditors: Internal auditors play an important role in evaluating the effectiveness of control systems, and contribute to ongoing effectiveness. Because of organizational position and authority in an entity, an internal audit function often plays a significant monitoring role.

Other Personnel: Internal control is, to some degree, the responsibility of everyone in an organization and therefore should be an explicit or implicit part of everyone's job description. Virtually all employees produce information used in the internal control system or take other actions needed to effect control. Also, all personnel should be responsible for communicating upward problems in operations, noncompliance with the code of conduct, or other policy violations or illegal actions.

A number of external parties often contribute to achievement of an entity's objectives. External auditors, bringing an independent and objective view, contribute directly through the financial statement audit and indirectly by providing information useful to management and the board in carrying out their responsibilities. Others providing information to the entity useful in effecting internal control are legislators and regulators, customers and others transacting business with the enterprise, financial analysts, bond raters and the news media. External parties, however, are not responsible for, nor are they a part of, the entity's internal control system.

4.2. Basel Principles for the Assessment of Internal Control Systems

The Basel Committee on Banking Supervision was established as the Committee on Banking Regulations and Supervisory Practices by the central-bank Governors of the Group of Ten countries at the end of 1974

in the aftermath of serious disturbances in international currency and banking markets (notably the failure of Bankhaus Herstatt in West Germany). The first meeting took place in February 1975 and meetings have been held regularly three or four times a year since.

The Committee's members come from Argentina, Australia, Belgium, Brazil, Canada, China, France, Germany, Hong Kong SAR, India, Indonesia, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Countries are represented by their central bank and also by the authority with formal responsibility for the prudential supervision of banking business where this is not the central bank. The present Chairman of the Committee is Mr Nout Wellink, President of the Netherlands Bank.

The Committee encourages contacts and cooperation among its members and other banking supervisory authorities. It circulates to supervisors throughout the world both published and unpublished papers providing guidance on banking supervisory matters. Contacts have been further strengthened by an International Conference of Banking Supervisors (ICBS) which takes place every two years.

The Committee's Secretariat is located at the Bank for International Settlements in Basel, Switzerland, and is staffed mainly by professional supervisors on temporary secondment from member institutions. In addition to undertaking the secretarial work for the Committee and its many expert sub-committees, it stands ready to give advice to supervisory authorities in all countries. Mr Stefan Walter is the Secretary General of the Basel Committee.

The Committee provides a forum for regular cooperation between its member countries on banking supervisory matters. Initially, it discussed modalities for international cooperation in order to close gaps in the

supervisory net, but its wider objective has been to improve supervisory understanding and the quality of banking supervision worldwide. It seeks to do this in three principal ways: by exchanging information on national supervisory arrangements; by improving the effectiveness of techniques for supervising international banking business; and by setting minimum supervisory standards in areas where they are considered desirable.

The Committee does not possess any formal supranational supervisory authority. Its conclusions do not have, and were never intended to have, legal force. Rather, it formulates broad supervisory standards and guidelines and recommends statements of best practice in the expectation that individual authorities will take steps to implement them through detailed arrangements -statutory or otherwise- which are best suited to their own national systems. In this way, the Committee encourages convergence towards common approaches and common standards without attempting detailed harmonisation of member countries' supervisory techniques.

One important objective of the Committee's work has been to close gaps in international supervisory coverage in pursuit of two basic principles: that no foreign banking establishment should escape supervision; and that supervision should be adequate. In May 1983 the Committee finalised a document *Principles for the Supervision of Banks' Foreign Establishments* which set down the principles for sharing supervisory responsibility for banks' foreign branches, subsidiaries and joint ventures between host and parent (or home) supervisory authorities. This document is a revised version of a paper originally issued in 1975 which came to be known as the "Concordat". The text of the earlier paper was expanded and reformulated to take account of changes in the market and to incorporate the principle of consolidated supervision of international banking groups (which had been adopted in 1978). In April 1990, a Supplement to the 1983 Concordat was issued with the intention of improving the flow of prudential information between banking supervisors in different countries.

In June 1992 certain principles of the Concordat were reformulated as Minimum Standards. These Standards were communicated to other banking supervisory authorities who were invited to endorse them, and in July 1992 the Standards were published.

As an outcome of the ongoing collaboration in the supervision of international banks, the Committee has addressed a number of related topics. It has collected information on most national systems for supervising banks' foreign establishments; it has examined the obstacles to effective supervision arising from bank secrecy regulations in different countries; and it has studied authorisation procedures for new foreign banking establishments. In October 1996, the Committee released a report drawn up by a joint working group also containing supervisors from offshore centres, which presented proposals for overcoming the impediments experienced by banking supervisors in conducting effective consolidated supervision of the cross-border operations of international banks. This report was endorsed by supervisors from one hundred and forty countries who attended the International Conference of Banking Supervisors (ICBS) in June 1996 and considerable progress has taken place in a number of countries to remove or overcome obstacles to effective consolidated supervision.

The topic to which most of the Committee's time has been devoted in recent years is capital adequacy. In the early 1980s, the Committee became concerned that the capital ratios of the main international banks were deteriorating just at the time that international risks, notably those vis-à-vis heavily-indebted countries, were growing. Backed by the Group of Ten Governors, the members of the Committee resolved to halt the erosion of capital standards in their banking systems and to work towards greater convergence in the measurement of capital adequacy. This resulted in the emergence of a broad consensus on a weighted approach to the measurement of risk, both on and off the balance sheet.

There was a strong recognition within the Committee of the overriding need for a multinational accord to strengthen the stability of the international banking system and to remove a source of competitive inequality arising from differences in national capital requirements. Following comments on a consultative paper published in December 1987, a capital measurement system commonly referred to as the Basel Capital Accord (or the 1988 Accord) was approved by the G10 Governors and released to banks in July 1988. This system provided for the implementation of the framework with a minimum capital ratio of capital to risk-weighted assets of 8 percent by end-1992. Since 1988, this framework has been progressively introduced not only in member countries but also in virtually all other countries with active international banks. In September 1993, a statement was issued confirming that all the banks in the G10 countries with material international banking business were meeting the minimum requirements laid down in the 1988 Accord.

The 1988 capital framework was not intended to be static but to evolve over time. In November 1991, it was amended to give greater precision to the definition of those general provisions or general loan-loss reserves which could be included in capital for purposes of calculating capital adequacy. In April 1995, the Committee issued an amendment to the Capital Accord, to take effect at end-1995, to recognise the effects of bilateral netting of banks' credit exposures in derivative products and to expand the matrix of add-on factors. In April 1996, a further document was issued explaining how Committee members intended to recognise the effects of multilateral netting.

The Committee has also undertaken work to refine the framework to address risks other than credit risk, which was the focus of the 1988 Accord. In January 1996, following two consultative processes, the Committee issued the so-called Market Risk Amendment to the Capital

Accord, effective end-1997 at the latest, designed to incorporate within the Accord a capital requirements for the market risks arising from banks' open positions in foreign exchange, traded debt securities, equities, commodities and options. An important aspect of this amendment is that, as an alternative to a standardised measurement method, banks are permitted, subject to strict quantitative and qualitative standards, to use internal value-at-risk models as a basis for measuring their market risk capital requirements. Much of the preparatory work for the market risk package was undertaken jointly with securities regulators and the Committee believes it is capable of application to non-bank financial institutions.

In June 1999, the Committee issued a proposal for a new capital adequacy framework to replace the 1988 Accord, and this has been refined in the intervening years, culminating in the release of the New Capital Framework on 26 June 2004. The new Framework consists of three pillars: minimum capital requirements, which seek to develop and expand on the standardised rules set forth in the 1988 Accord; supervisory review of an institution's capital adequacy and internal assessment process; and effective use of disclosure as a lever to strengthen market discipline and encourage safe and sound banking practices. The Committee believes that, taken together, these three elements are the essential pillars of an effective capital framework. The new Framework is designed to improve the way regulatory capital requirements reflect underlying risks and to better address the financial innovation that has occurred in recent years, as shown, for example, by asset securitisation structures. The changes aim at rewarding the improvements in risk measurement and control that have occurred and providing incentives for such improvements to continue.

The publication of the Framework in June 2004 represented the culmination of nearly six years of challenging work. During those years, the Basel Committee consulted extensively with banks and industry groups

in an attempt to develop significantly more risk-sensitive capital requirements that are conceptually sound. At the same time, the Committee considered the characteristics and needs of markets and supervisory systems in numerous countries. To achieve its aims, the Committee undertook a careful review of the existing rules and of the recent advances attained in the industry. It consulted widely and publicly with industry representatives, supervisory agencies, central banks and outside observers.

Following the June 2004 release, which focused primarily on the banking book, the Committee turned its attention to the trading book. In close cooperation with the International Organization of Securities Commissions (IOSCO), the international body of securities regulators who monitor the activities of securities firms and investment houses, the Committee published in July 2005 a consensus document governing the treatment of banks' trading books under the new Framework. For ease of reference, this new text was integrated with the June 2004 text in a comprehensive document released in June 2006.

Committee members, as well as several other countries, have already introduced the new rules, or are in the process of introducing them. Consistent implementation of the new Framework across borders has consequently become a critical and challenging task for the Committee. To encourage collaboration and shared approaches, the Committee's Standard Implementation Group (SIG) serves as a forum on implementation matters. The SIG discusses issues of mutual concern with supervisors outside the Committee's membership through its contacts with regional associations. One challenge that supervisors worldwide face increasingly under Basel II is the need to approve the use of certain approaches to risk measurement in multiple jurisdictions. While this is not a new concept for the supervisory community -the Market Risk Amendment of 1996 involved a similar requirement- Basel II extends the scope of such approvals and demands an

even greater degree of cooperation between home and host supervisors in the future. To help address this challenging issue, the Committee issued guidance on information sharing and on supervisory cooperation and allocation mechanisms in the context of Advanced Measurement Approaches in 2006 and 2007, respectively.

In addition to work on the Concordat and capital standards, the Committee has addressed issues of significant supervisory interest. These include accounting, auditing, anti-money laundering, and various types of risk, such as credit, liquidity, market and operational risk. The work of the Committee on these topics often culminates in the publication of supervisory guidance, standards or sound practices papers. Recent publications address, among other things, liquidity risk management and its supervision, bank's financial instrument fair value practices, external audit quality, and implementation of compliance principles.

The Committee issued in July 2009 a package of documents to strengthen the Basel II capital framework, with regard notably to the treatment of certain complex securitisation positions, off-balance sheet vehicles and trading book exposures. This package also covered key aspects of risk managements and disclosure in the context of the Pillar 2 and the Pillar 3 rules. These enhancements are part of a broader effort the Committee has undertaken to strengthen the regulation and supervision of internationally active banks, in light of weaknesses revealed by the financial market crisis which started in 2007. The 2008 publications of the Committee, on liquidity and on valuation issues in particular, reflected part of these efforts, but further developments on other aspects are ongoing. In order to provide an appropriate and timely response to events which go beyond the sole banking sphere, the Committee has been liaising more closely since the beginning of the crisis with other relevant international financial bodies, like in particular the Financial Stability Forum.

The Committee has been working closely with securities and insurance supervisors to study the challenges presented by the development of diversified financial conglomerates. Initially this cooperation was through an informal Tripartite group of supervisors from each of the three sectors. This group was succeeded in 1996 by the Joint Forum on Financial Conglomerates, constituted under the aegis of the Basel Committee, IOSCO and the International Association of Insurance Supervisors (IAIS). The Joint Forum is mandated to elaborate ways to facilitate the exchange of information between supervisors and to enhance supervisory coordination, and to develop principles toward the more effective supervision of financial conglomerates. In addition, the Committee, together with IOSCO, has issued ten joint reports since 1995 dealing with the management, reporting and disclosure of the derivatives activities of banks and securities firms. The Committee and IOSCO have also worked together on the capital adequacy of trading activities, as mentioned above.

The Committee has also undertaken work on a number of technical banking and accounting issues in conjunction with outside bodies. These include the International Accounting Standards Committee, the International Auditing Practices Committee of the International Federation of Accountants and the International Chamber of Commerce. This work has resulted in papers on interbank confirmation procedures, on relationships between bank supervisors and external auditors and on uniform rules for foreign exchange contracts. In addition, contacts have been developed with the European Commission and the European Banking Federation.

In order to enable a wider group of countries to be associated with the work being pursued in Basel, the Committee has always encouraged contacts and cooperation between its members and other banking supervisory authorities. It has circulated to supervisors throughout the world published and unpublished papers, as well as more general

information about its work. In many cases, supervisory authorities in non-member countries have seen fit publicly to associate themselves with the Committee's initiatives. Contacts have been further strengthened by biennial International Conferences of Banking Supervisors. Fifteen such conferences have been held to date, the first in London in 1979. The most recent conference, hosted jointly by the National Bank of Belgium and the Belgian Banking, Finance and Insurance Commission, took place in Brussels in September 2008.

The Basel Committee maintains close relations with a number of fellow bank supervisory groupings. These include the Offshore Group of Banking Supervisors, with members from the principal offshore banking centres; and supervisory groups from the Americas, the Caribbean, from the Arab States, from the SEANZA countries of the Indian sub-continent, South-East Asia and Australasia, from central and eastern European countries, from the African continent and from Central Asia and Transcaucasia. The Committee assists these groups in a variety of ways, by providing suitable documentation, participating as appropriate in the meetings, offering limited Secretariat assistance and hosting meetings between the principals to coordinate future work.

The principles agreed by the Basel Committee have been widely disseminated through these international conferences and supervisory groupings. A large number of countries outside the Group of Ten have given their support to the fundamental objective of ensuring that no international banking activity should escape supervision. As a result there now remain only a very few territories around the world where banking companies are licensed and allowed to operate without serious efforts to accompany a licence with effective supervision and cooperation with other supervisory authorities. Moreover, the Committee has always worked to raise the level of supervisors' consciousness of their mutual interdependence where the international activities of banks within their

jurisdictions are concerned. The development of close personal contacts between supervisors in different countries has greatly helped in the handling and resolution of problems affecting individual banks as they have arisen. This is an important, though necessarily unpublicised, element in the Committee's regular work.

The wider role of the Committee in promoting sound supervisory standards worldwide has intensified. The Communiqué issued by the G7 Heads of Government following the Lyon Summit in June 1996 called for the Committee to participate in efforts to improve supervisory standards in the emerging markets. As a result, and in close collaboration with many non-G10 supervisory authorities, the Committee in 1997 developed a set of *Core Principles for Effective Banking Supervision*, which provided a comprehensive blueprint for an effective supervisory system. A number of steps have been taken to encourage countries to implement the “Core Principles”, including the establishment of a Liaison group comprised of both G10 and non-G10 countries. As a first step to full implementation, an assessment of the current situation of a country's compliance with the Core Principles should take place. To facilitate implementation and assessment, the Basel Committee in October 1999 developed the *Core Principles Methodology*. Over the past year, the Committee has been reviewing the Core Principles and the Methodology in close collaboration with the assessors and with non-G10 supervisors. Revised versions of the two papers were issued in October 2006.

Until the end of the 1990s, the Basel Committee had organised an active training programme on banking supervisory issues. Since 1987, the Secretariat had also organised annual supervisory seminars at the BIS for promising young bank supervisors, attended by persons from about thirty-five countries worldwide. In addition, the Secretariat has conducted several training courses annually at regional locations and is regularly invited to lecture at training courses organised by the regional groups themselves or other official organisations. In 1999 the Bank for International Settlements, in a joint initiative with the Basel Committee,

set up the Financial Stability Institute to take over and develop a multi-level educational programme. The Committee's Secretariat remains heavily involved in efforts to assist bank supervisors from around the world in strengthening their surveillance methods by means of an intensive FSI programme of conferences, seminars and workshops.

4.2.1. The Objectives and Role of the Internal Control

Internal control is a *process* effected by the board of directors, senior management and all levels of personnel. It is not solely a procedure or policy that is performed at a certain point in time, but rather it is continually operating at all levels within the bank. The board of directors and senior management are responsible for establishing the appropriate culture to facilitate an effective internal control process and for monitoring its effectiveness on an ongoing basis; however, each individual within an organisation must participate in the process. The main objectives of the internal control process can be categorised as follows:

1. efficiency and effectiveness of activities (performance objectives);
2. reliability, completeness and timeliness of financial and management information (information objectives); and
3. compliance with applicable laws and regulations (compliance objectives).

Performance objectives for internal controls pertain to the effectiveness and efficiency of the bank in using its assets and other resources and protecting the bank from loss. The internal control process seeks to ensure that personnel throughout the organisation are working to achieve its goals with efficiency and integrity, without unintended or excessive cost or placing other interests (such as an employee's, vendor's or customer's interest) before those of the bank.

Information objectives address the preparation of timely, reliable, relevant reports needed for decision-making within the banking organisation. They also address the need for reliable annual accounts, other financial

statements and other financial-related disclosures and reports to shareholders, supervisors, and other external parties. The information received by management, the board of directors, shareholders and supervisors should be of sufficient quality and integrity that recipients can rely on the information in making decisions. The term reliable, as it relates to financial statements, refers to the preparation of statements that are presented fairly and based on comprehensive and well-defined accounting principles and rules.

Compliance objectives ensure that all banking business complies with applicable laws and regulations, supervisory requirements, and the organisation's policies and procedures. This objective must be met in order to protect the bank's franchise and reputation.

4.2.2. The Major Elements of an Internal Control Process

The internal control process, which historically has been a mechanism for reducing instances of fraud, misappropriation and errors, has become more extensive, addressing all the various risks faced by banking organisations. It is now recognised that a sound internal control process is critical to a bank's ability to meet its established goals, and to maintain its financial viability.

Internal control consists of five interrelated elements:

1. management oversight and the control culture;
2. risk recognition and assessment;
3. control activities and segregation of duties;
4. information and communication; and
5. Monitoring activities and correcting deficiencies

The problems observed in recent large losses at banks can be aligned with these five elements. The effective functioning of these elements is

essential to achieving a bank's performance, information, and compliance objectives.

1. Management Oversight and the Control Culture

i) Board of directors

The board of directors provides governance, guidance and oversight to senior management. It is responsible for approving and reviewing the overall business strategies and significant policies of the organisation as well as the organisational structure. The board of directors has the ultimate responsibility for ensuring that an adequate and effective system of internal controls is established and maintained. Board members should be objective, capable, and inquisitive, with a knowledge or expertise of the activities of and risks run by the bank. In those countries where it is an option, the board should consist of some members who are independent from the daily management of the bank. A strong, active board, particularly when coupled with effective upward communication channels and capable financial, legal, and internal audit functions, provides an important mechanism to ensure the correction of problems that may diminish the effectiveness of the internal control system.

The board of directors should include in its activities (1) periodic discussions with management concerning the effectiveness of the internal control system, (2) a timely review of evaluations of internal controls made by management, internal auditors, and external auditors, (3) periodic efforts to ensure that management has promptly followed up on recommendations and concerns expressed by auditors and supervisory authorities on internal control weaknesses, and (4) a periodic review of the appropriateness of the bank's strategy and risk limits.

One option used by banks in many countries is the establishment of an independent audit committee to assist the board in carrying out its responsibilities. The establishment of an audit committee allows for

detailed examination of information and reports without the need to take up the time of all directors. The audit committee is typically responsible for overseeing the financial reporting process and the internal control system. As part of this responsibility, the audit committee typically oversees the activities of, and serves as a direct contact for, the bank's internal audit department and engages and serves as the primary contact for the external auditors. In those countries where it is an option, the committee should be composed mainly or entirely of outside directors (i.e., members of the board that are not employed by the bank or any of its affiliates) who have knowledge of financial reporting and internal controls. It should be noted that in no case should the creation of an audit committee amount to a transfer of duties away from the full board, which alone is legally empowered to take decisions.

ii) Senior management

Senior management is responsible for carrying out the directives of the board of directors, including the implementation of strategies and policies and the establishment of an effective system of internal control. Members of senior management typically delegate responsibility for establishing more specific internal control policies and procedures to those responsible for a particular business unit. Delegation is an essential part of management; however, it is important for senior management to oversee the managers to whom they have delegated these responsibilities to ensure that they develop and enforce appropriate policies and procedures.

Compliance with an established internal control system is heavily dependent on a well documented and communicated organisational structure that clearly shows lines of reporting responsibility and authority and provides for effective communication throughout the organisation. The allocation of duties and responsibilities should ensure that there are no gaps in reporting lines and that an effective level of management control is extended to all levels of the bank and its various activities.

It is important that senior management takes steps to ensure that activities are conducted by qualified staff with the necessary experience and technical capabilities. Staff in control functions must be properly remunerated. Staff training and skills should be regularly updated. Senior management should institute compensation and promotion policies that reward appropriate behaviours and minimise incentives for staff to ignore or override internal control mechanisms.

iii) Control culture

An essential element of an effective system of internal control is a strong control culture. It is the responsibility of the board of directors and senior management to emphasise the importance of internal control through their actions and words. This includes the ethical values that management displays in their business dealings, both inside and outside the organisation. The words, attitudes and actions of the board of directors and senior management affect the integrity, ethics and other aspects of the bank's control culture.

In varying degrees, internal control is the responsibility of everyone in a bank. Almost all employees produce information used in the internal control system or take other actions needed to effect control. An essential element of a strong internal control system is the recognition by all employees of the need to carry out their responsibilities effectively and to communicate to the appropriate level of management any problems in operations, instances of non-compliance with the code of conduct, or other policy violations or illegal actions that are noticed. This can best be achieved when operational procedures are contained in clearly written documentation that is made available to all relevant personnel. It is essential that all personnel within the bank understand the importance of internal control and are actively engaged in the process.

In reinforcing ethical values, banking organisations should avoid policies and practices that may inadvertently provide incentives or temptations for inappropriate activities. Examples of such policies and practices include undue emphasis on performance targets or other operational results, particularly short-term ones that ignore longer-term risks; compensation schemes that overly depend on short-term performance; ineffective segregation of duties or other controls that could allow the misuse of resources or concealment of poor performance; and insignificant or overly onerous penalties for improper behaviours.

While having a strong internal control culture does not guarantee that an organisation will reach its goals, the lack of such a culture provides greater opportunities for errors to go undetected or for improprieties to occur.

2. Risk Recognition and Assessment

Banks are in the business of risk-taking. Consequently it is imperative that, as part of an internal control system, these risks are being recognised and continually assessed. From an internal control perspective, a risk assessment should identify and evaluate the internal and external factors that could adversely affect the achievement of the banking organisation's performance, information and compliance objectives. This process should cover all risks faced by the bank and operate at all levels within the bank. It differs from the risk management process which typically focuses more on the review of business strategies developed to maximise the risk/reward trade-off within the different areas of the bank.

Effective risk assessment identifies and considers internal factors (such as the complexity of the organisation's structure, the nature of the bank's activities, the quality of personnel, organisational changes and employee turnover) as well as external factors (such as fluctuating economic conditions, changes in the industry and technological advances) that could adversely affect the achievement of the bank's goals. This risk assessment

should be conducted at the level of individual businesses and across the wide spectrum of activities and subsidiaries of the consolidated banking organisation. This can be accomplished through various methods. Effective risk assessment addresses both measurable and non-measurable aspects of risks and weighs costs of controls against the benefits they provide.

The risk assessment process also includes evaluating the risks to determine which are controllable by the bank and which are not. For those risks that are controllable, the bank must assess whether to accept those risks or the extent to which it wishes to mitigate the risks through control procedures. For those risks that cannot be controlled, the bank must decide whether to accept these risks or to withdraw from or reduce the level of business activity concerned.

In order for risk assessment, and therefore the system of internal control, to remain effective, senior management needs to continually evaluate the risks affecting the achievement of its goals and react to changing circumstances and conditions. Internal controls may need to be revised to appropriately address any new or previously uncontrolled risks. For example, as financial innovation occurs, a bank needs to evaluate new financial instruments and market transactions and consider the risks associated with these activities. Often these risks can be best understood when considering how various scenarios (economic and otherwise) affect the cash flows and earnings of financial instruments and transactions. Thoughtful consideration of the full range of possible problems, from customer misunderstanding to operational failure, will point to important control considerations.

3. Control Activities and Segregation of Duties

Control activities are designed and implemented to address the risks that the bank identified through the risk assessment process described above. Control activities involve two steps: (1) the establishment of control policies and procedures; and (2) verification that the control policies and procedures are being complied with. Control activities involve all levels of personnel in the bank, including senior management as well as front line personnel. Examples of control activities include:

- *Top level reviews* - Boards of directors and senior management often request presentations and performance reports that enable them to review the bank's progress toward its goals. For example, senior management may review reports showing actual financial results to date versus the budget. Questions that senior management generates as a result of this review and the ensuing responses of lower levels of management represent a control activity which may detect problems such as control weaknesses, errors in financial reporting or fraudulent activities.

- *Activity controls* - Department or division level management receives and reviews standard performance and exception reports on a daily, weekly or monthly basis. Functional reviews occur more frequently than top-level reviews and usually are more detailed. For instance, a manager of commercial lending may review weekly reports on delinquencies, payments received, and interest income earned on the portfolio, while the senior credit officer may review similar reports on a monthly basis and in a more summarised form that includes all lending areas. As with the top-level review, the questions that are generated as a result of reviewing the reports and the responses to those questions represent the control activity.

- *Physical controls* - Physical controls generally focus on restricting access to tangible assets, including cash and securities. Control activities include physical limitations, dual custody, and periodic inventories.

- *Compliance with exposure limits* - The establishment of prudent limits on risk exposures is an important aspect of risk management. For example, compliance with limits for borrowers and other counterparties reduces the

bank's concentration of credit risk and helps to diversify its risk profile. Consequently, an important aspect of internal controls is a process for reviewing compliance with such limits and follow-up on instances of non-compliance.

- *Approvals and authorisations* - Requiring approval and authorisation for transactions over certain limits ensures that an appropriate level of management is aware of the transaction or situation, and helps to establish accountability.

- *Verifications and reconciliations* - Verifications of transaction details and activities and the output of risk management models used by the bank are important control activities. Periodic reconciliations, such as those comparing cash flows to account records and statements, may identify activities and records that need correction. Consequently, the results of these verifications should be reported to the appropriate levels of management whenever problems or potential problems are detected.

Control activities are most effective when they are viewed by management and all other personnel as an integral part of, rather than an addition to, the daily activities of the bank. When controls are viewed as an addition to the day-to-day activities, they are often seen as less important and may not be performed in situations where individuals feel pressured to complete activities in a limited amount of time. In addition, controls that are an integral part of the daily activities enable quick responses to changing conditions and avoid unnecessary costs. As part of fostering the appropriate control culture within the bank, senior management should ensure that adequate control activities are an integral part of the daily functions of all relevant personnel.

It is not sufficient for senior management to simply establish appropriate policies and procedures for the various activities and divisions of the bank. They must regularly ensure that all areas of the bank are in compliance with such policies and procedures and also determine that existing policies

and procedures remain adequate. This is usually a major role of the internal audit function.

“Principle 6: An effective internal control system requires that there is appropriate segregation of duties and that personnel are not assigned conflicting responsibilities. Areas of potential conflicts of interest should be identified, minimised, and subject to careful, independent monitoring.”

In reviewing major banking losses caused by poor internal controls, supervisors typically find that one of the major causes of such losses is the lack of adequate segregation of duties. Assigning conflicting duties to one individual (for example, responsibility for both the front and back offices of a trading function) gives that person access to assets of value and the ability to manipulate financial data for personal gain or to conceal losses. Consequently, certain duties within a bank should be split, to the extent possible, among various individuals in order to reduce the risk of manipulation of financial data or misappropriation of assets.

Segregation of duties is not limited to situations involving simultaneous front and back office control by one individual. It can also result in serious problems when there are not appropriate controls in those instances where an individual has responsibility for:

- approval of the disbursement of funds and the actual disbursement;
- customer and proprietary accounts;
- transactions in both the "banking" and "trading" books;
- informally providing information to customers about their positions while
- marketing to the same customers;
- assessing the adequacy of loan documentation and monitoring the borrower after loan origination; and
- any other areas where significant conflicts of interest emerge and are not

mitigated by other factors.

Shortcomings in control activities, however, reflect the failure of a variety of efforts to determine that business is being conducted in the expected manner, from high-level reviews to maintenance of specific checks and balances in a business process. For example, in several cases management did not appropriately respond to information they were receiving. This information took the form of periodic reports on the results of operations for all divisions of the organisation that informed management of each division's progress in meeting objectives, and allowed them to ask questions if the results were different from their expectations. Often, the divisions that later reported significant losses at first reported profits -far in excess of expectations for the apparent level of risk-that should have concerned senior management. Had thorough top level reviews occurred, senior management may have investigated the anomalous results and found and addressed some of the problems, thus limiting or preventing the losses that occurred. However, because the deviations from their expectations were positive (i.e., profits), questions were not asked and investigations were not started until the problems had grown to unmanageable proportions.

4. Information and Communication

Some banks have experienced losses because information in the organisation was not reliable or complete and because communication within the organisation was not effective. Financial information may be misreported internally; incorrect data series from outside sources may be used to value financial positions; and small, but high-risk activities may not be reflected in management reports. In some cases, banks failed to adequately communicate employees' duties and control responsibilities or disseminated policies through channels, such as electronic mail, that did not ensure that the policy was read, understood and retained. As a result, for long periods of time, major management policies were not carried out. In other cases, adequate lines of communication did

not exist for the reporting of suspected improprieties by employees. If channels had been established for communication of problems upward through the organisational levels, management would have been able to identify and correct the improprieties much sooner.

5. Monitoring Activities and Correcting Deficiencies

Many banks that have experienced losses from internal control problems did not effectively monitor their internal control systems. Often the systems did not have the necessary built-in ongoing monitoring processes and the separate evaluations performed were either not adequate or were not acted upon appropriately by management.

In some cases, the absence of monitoring began with a failure to consider and react to day-to-day information provided to line management and other personnel indicating unusual activity, such as exceeded exposure limits, customer accounts in proprietary business activities, or lack of current financial statements from borrowers. In one bank, losses associated with trading activities were being concealed in a fictitious customer account. If the organisation had a procedure in place that required statements of accounts to be mailed to customers on a monthly basis and that customer accounts be periodically confirmed, the concealed losses would likely have been noticed long before they were large enough to cause major problems for the bank.

In several other cases, the organisation's division or activity that caused massive losses had numerous characteristics indicating a heightened level of risk such as unusual profitability for the perceived level of risk and rapid growth in a new business activity that was geographically distant from the parent organisation. However, due to inadequate risk assessment, the organisations did not provide sufficient additional resources to control or monitor the high-risk activities. In fact, in some instances, the high risk activities were operating with less oversight than activities with much lower risk profiles and several warnings from the internal and external

auditors regarding the activities of the division were not acted upon by management.

While internal audit can be an effective source of separate evaluations, it was not effective in many problem banking organisations. A combination of three factors contributed to these inadequacies: the performance of piecemeal audits, the lack of a thorough understanding of the business processes, and inadequate follow-up when problems were noted. The fragmented audit approach resulted primarily because the internal audit programs were structured as a series of discrete audits of specific activities within the same division or department, within geographic areas, or within legal entities. Because the audit process was fragmented, the business processes were not fully understood by internal audit personnel. An audit approach that would have allowed the auditors to follow processes and functions through from beginning to end (i.e., follow a single transaction through from the point of transaction initiation to financial reporting phase) would have enabled them to gain a better understanding. Moreover, it would have provided the opportunity to verify and test the adequacy of controls at every step of the process.

In some cases, inadequate knowledge and training of internal audit staff in trading products and markets, electronic information systems, and other highly sophisticated areas also contributed to internal audit problems. Because the staff did not have the necessary expertise, they were often hesitant to ask questions when they suspected problems, and when questions were asked, they were more likely to accept an answer than to challenge it.

Internal audit may also be rendered ineffective when management does not appropriately follow-up on problems identified by auditors. The delays may have occurred because of a lack of acceptance by management of the role and importance of internal audit. In addition, the effectiveness of internal audit was impaired when senior management and members of the

board of directors (or audit committee, as appropriate) failed to receive timely and regular tracking reports that indicated critical issues and the subsequent corrective actions taken by management. This type of periodic tracking device can help senior management confront important issues in a timely manner.

5. INTERNAL CONTROL IN TURKISH BANKING

5.1. Structural Legislations in Turkish Banking

At the end of 1999, a Stand-By Agreement was signed with the International Monetary Fund, which aims at fighting with inflation, implementing monetary and exchange rate policies as well as fiscal policy strategies and structural reforms. The disinflation program, which is the core target of the agreement, rests on three pillars:

- Up-front fiscal adjustment at the very beginning of the program
- A firm exchange-rate commitment supported by consistent income policies
- Structural reforms

The disinflation program has been supported by the structural reforms in three fundamental areas; namely *banking sector, social security and international arbitration*. The most recent structural reforms are the reflections that Turkey has finally decided to act upon its long lasting problems. It is widely recognized that the chronic high inflation is the main problem that hinders the economy from attaining a sustainable rate of growth and integrating into the global world economy. A more effective supervision and surveillance of banking systems are of the greatest importance among today's international banking regulations. In this context, Turkey is now more eager to take additional measures that will strengthen the financial structure of banking sector and lead to a more effective supervision and surveillance of the system.

The most radical change towards strengthening the supervision and financial structures of banks is *the new Banking Law (No.4389)*. With the new Banking Law, which was prepared by taking into account the European Union directives and other generally accepted international

practices, the compliance with the international standards in the field of banking supervision, which is an on-going process, was mostly achieved, in addition to increase the efficiency of supervision and surveillance of banking system towards the main target of establishing stability and soundness of the system. The main changes to be brought by the new Banking Law No.4389, which was superseded by the Law No.4491, are as follows:

1. Establishment of Banking Regulation and Supervision Board (BRSB) as an organizationally and financially autonomous body, independent of political authority,
2. Transfer of powers on banking supervision and surveillance to Banking Regulation and Supervision Board,
3. The requirements of bank foundation were made more demanding,
4. Banks are required to establish appropriate internal control and risk management systems,
5. Definition of large exposures and credit limits,
6. More detailed and comprehensive measures shall be taken against banks, whose financial conditions weaken severely,
7. Personal obligations of bank shareholders and managers for the misuse of bank resources shall be increased.

Turkey's effort in adapting to international banking regulations and her unceasing efforts towards this goal is worth to be mentioned. As compared to similar developing countries, it will not be wrong to say that Turkish public authorities and banking system closely monitor the developments in the international financial systems and they are quite sensitive to enforce the necessary regulations within this scope. With the awareness of the fact that the soundness of the banking system is of vital importance in an

environment where banks are major player in financial system and are involved in international banking activities, Turkey is continuing to take measures to improve both the quality and the effectiveness of banking surveillance system on basis of the EU directives and BIS principles.

In October 2005, a new banking law was passed (Banking Law 5411, of October 19th 2005, published in the Official Gazette 25983, of November 1st 2005), superseding Banking Law 4389, of June 18th 1999 (published in the Official Gazette 23734, of June 23rd 1999).

The new law was in response to IMF pressure on Turkey to improve its supervisory and regulatory environment. It increased the regulatory powers of the Banking Regulation and Supervisory Agency (BRSA), including granting it the right to conduct on-site inspections, determine corporate governance structures, determine processes and principles, and amend the Turkish regulatory framework to bring it into line with that of the EU.

According to Article 54 of Law 5411, the total amount of financing a bank may provide to a group of real or legal persons, who are in direct or indirect credit relationships, may not exceed 25% of the bank's own funds. It also retained the concept introduced under Law 4389 of "major credits" (defined in Article 54 of Law 5411 as financing in excess of 10% of the bank's own funds). The total of such major credits cannot be eight times the bank's total funds (equity capital/resources).

Banks are required to maintain minimum net-worth-to-risk-asset ratios of 8%, in line with the standards set by the Basel-based Bank for International Settlements. Banks' net general foreign-currency positions are restricted to a maximum 20% of their capital base.

Investment banks are forbidden from accepting deposits. Apart from this restriction, all banks registered in Turkey are theoretically able to undertake almost any type of financial business-from underwriting

securities to straight lending and deposit taking. Under Article 79 of Law 5411, all banks are required to become members of the Banks Association of Turkey within one month of receiving their operating permits.

The BRSA, answerable directly to the prime minister and the Council of Ministers, oversees the implementation and supervision of banking regulations. The institution began operations at the beginning of September 2000.

The BRSA is also responsible for approving applications to establish new banks and submit successful applications to the Council of Ministers for ratification. Banks resident in Turkey seek permission from the BRSA for mergers and liquidations and before establishing partnerships with individuals or corporations based outside the country. Under Law No. 5411, the BRSA is now responsible for the principles and procedures related to liquidity requirements.

5.2. Constitutional Regulations About Internal Control

In the Regulation on Banks' Internal Control and Risk Management Systems (*Published in the Official Gazette, issue no. 24312, on 8 February 2001*) internal control function is described as all of the control activities which are performed under the governance and organizational structure established by the bank's board of directors and senior management and in which each individual within the organization must participate in order to ensure proper, efficient and effective performing of the bank's activities in accordance with the management strategy and policies, and applicable laws and regulations and to ensure the integrity and reliability of accounting system and timeliness and accessibility of information in the data system; and internal control system as all of the financial, operational and other control systems which are carried out by internal controllers and which involve monitoring, independent evaluation and timely reporting to management levels systematically in order to ensure that all the bank

activities are performed by management levels in accordance with current policies, methods, instructions and limits.

According to The Regulation on the Internal System of Banks (*Published in the Official Gazette dated November 1, 2006 Nr. 26333*) For the purpose of monitoring and controlling the risks to which they are exposed, banks must establish and operate adequate and effective internal systems in conformity with the scope and nature of their activities, capable of adaptation to changing conditions, and covering all their branches and units, and their partnerships subjected to consolidation in accordance with regulations introduced on the basis of the Law, in the framework of the procedures and principles stipulated in this Regulation. (Article 4)

The units included within the scope of the internal systems shall be established under the board of directors, within the institutional structure of the bank. The board of directors may transfer all or part of its duties and responsibilities concerning the internal systems to the officer in charge of these systems. Several officers in charge of the internal systems may be appointed on condition that their duties and responsibilities are segregated on the basis of the units included within the scope of the internal systems. The responsibility for the internal systems may only be assigned to one of the non-executive directors or to committees composed of such directors or to the audit committee. In the event that the director in charge of the internal systems, or a member of the committee in charge of the internal systems, resigns or is removed from such office, such that, in the latter case, the number of members falls below two, or ceases to have the required qualifications, a director with the same qualifications must be appointed in lieu of him within fifteen days.

Banks shall determine procedures and principles for the institutional structure and functioning of their internal systems, also considering the

scope and nature of their activities, on condition that such procedures and principles are not contrary to the provisions of this Regulation.

The board of directors shall have the ultimate responsibility for establishing the internal systems in accordance with the procedures and principles specified in this Regulation (Article 5), operating them in an effective, adequate and suitable manner, securing the information provided from the accounting and financial reporting system, and determining the powers and responsibilities within the bank.

According to Article 6, the board of directors shall appoint at least two non-executive directors from among itself as members of the bank audit committee to assist the board of directors in carrying out its audit and supervision activities.

The audit committee shall have the duty and responsibility, on behalf of the board of directors, to supervise the efficiency and adequacy of the bank's internal systems, the functioning of these systems and of the accounting and reporting systems in accordance with the Law and applicable regulations, and the integrity of the information that is generated, to carry out the necessary preliminary assessment for the selection of independent audit institutions and rating, valuation and support service institutions by the board of directors, to monitor regularly the activities of the institutions selected by the board of directors and with which contracts have been signed, and to ensure that the internal audit activities of the partnerships subject to consolidation in accordance with regulations introduced under the Law are maintained and coordinated in the consolidated fashion. (Article 7)

According to the regulation (Article 8) the top-level management shall have the duty and responsibility:

a) To develop proposals concerning practices which are considered necessary for performing the activities as is due within the scope of their

duties and responsibilities, ensuring the efficiency of these activities and developing them;

b) To coordinate the bank personnel employed in the units for which they are responsible, to make a division of tasks among such personnel in view of their competencies and to monitor whether they effectively perform their duties and responsibilities;

c) To analyse deficiencies or errors arising in the units for which they are responsible and to report these or the measures considered necessary to the relevant internal systems officer;

d) To use initiative according to their authorization where unexpected circumstances arise;

e) To make timely and reliable reporting to the board of directors about important risks to which the bank is exposed; and

f) To perform other tasks assigned by the board of directors.

Article 15 is about the control of actions to execute activities of banks constitute the operational activities. The aim of the controls related to operational activities is to ensure the efficiency and effectiveness of operations. Banks must implement the following control activities in relation to operational activities.

Reporting: Preparation of daily, weekly or monthly reports on extraordinary events, doubtful transactions, non-conformities, and general performance, for submission to the senior management.

Physical controls: Setting rules and limitations on access to, and utilization and keeping of, tangible assets, including financial assets such as cash and

securities owned by the bank or held in custody in the name of clients or other parties, and making inventories of all tangible assets at regular intervals;

Approval and authorization: Establishing bilateral and cross verification and signature procedures, and obtaining approval or authorization for transactions above certain limits.

Interrogation and reconciliation: Interrogating the accuracy of transaction details, activities, and outputs related to risk management models, comparing the accounts, and carrying out reconciliations at regular intervals.

Checks of compliance with limits and monitoring of violations and non-conformities: Checking compliance with general and special risk limits and monitoring violations of limits.

Article 19 is about The Internal Control Unit. According to this article the internal control system, the internal control activities, and how they are to be executed, shall be designed by the internal control unit together with the toplevel managers of the other relevant units, having considered the characteristics of all activities carried out by the bank.

The internal control unit shall be staffed with one manager and with professionally qualified personnel in a sufficient number according to the scale of the bank and the nature and complexity of its activities. The internal control unit shall be physically located within the head office of the bank.

In the case of banks established abroad which operate in Turkey through branch offices, the internal control unit shall be created in the central branch office.

Whether the internal control activities are carried out, whether the rules and limitations are complied with and whether the targets have been reached shall be checked at the various management levels specified and at the relevant control steps and points and shall be reported by the internal

control personnel to the internal control unit through normal means or urgently, also considering the nature of the findings.

The procedures and principles concerning the distribution of internal control activities between the personnel carrying out the operational activities of the bank and the internal control personnel, the number of internal control personnel to be allocated for each internal control activity, and the control mechanisms and methods to be used, shall be determined jointly by the manager of the internal control unit and the high-level management concerned. The coordination and cooperation of the internal control personnel with the other personnel conducting the activities of the bank in the location where the internal control personnel perform their duties shall be ensured by the internal control unit.

Control results reported to the internal control unit shall be kept in this unit. Such reports shall be separated as between those made by the operational personnel and those made by the internal control personnel and shall be further classified according to their nature. The reports so grouped shall be evaluated by the manager of the internal control unit and the relevant high-level management, and the necessary measures shall be taken to improve the internal control system or to conduct the internal control activities without any disruption.

In periods of up to three months each, the audit committee shall be provided with information concerning actions mentioned above.

The manager of the internal control unit must have a minimum of seven years experience in banking. The manager of the internal control unit shall assess whether the internal control personnel have the qualifications that are required by their duties, powers and responsibilities, shall prepare training programmes to improve their professional knowledge, skills and abilities, and shall monitor whether they are performing their duties impartially without being influenced by the executive units.

Article 20 expresses the duties and powers of internal control personnel; the internal control personnel attached to the internal control unit shall conduct their duties in the units or branches where the operational activities are executed and in the head office. Banks may keep permanent internal control personnel in certain branches, considering the share of the branch activities in the total business volume of the bank, the operational risks carried by those branches, their impact within the total risk profile of the bank, their numbers of personnel, and the possibilities of controlling their daily activities from the centre. The posts of the internal control personnel shall be changed at intervals considered appropriate by the manager of the internal control unit. The internal control personnel shall not engage in any activity other than internal control activities.

The internal control personnel shall request information based on reports from the units concerned in order to monitor, review and control the reliable performance of all activities of the bank, shall implement controls or reviews based on general or special observations and monitoring through various control documents and tools, shall put their findings in the form of reports, and shall prepare warning messages and communicate them to the units concerned. The internal control personnel shall be provided with the authority to demand additional explanations from bank personnel concerning matters which they monitor, review and control, and to seek their opinions.

The internal control unit regulations, prepared by the internal control unit, considered appropriate by the relevant internal systems officer, and approved and adopted by the board of directors, shall include provisions concerning the required educational status, experience, levels of knowledge and skill, and other qualifications of internal control personnel.

6. EMPIRICAL RESEARCH

In this section, statistical methods used for the the collection and analysis of data of the variables in COSO internal control evaluation model and findings emerging from these methods are explained. In the analysis of collected statistical data, SPSS (Statistical Package for Social Sciences) version 17 and Microsoft Excel 2007 software were used.

6.1. Collection and Evaluation of Data

For the data used in this study, a questionnaire was created based on the model COSO which is used to evaluate the efectiveness of banks. The questionnaire is consist of 7 sections and 26 questions. The first question is to get information about the structure of the bank concerning its subject to regulations stipulated by the Basel Principles. The following 5 sections are the basical components of COSO. Internal control consists of five interrelated components. These are derived from the way management runs a business, and are integrated with the management process. Although the components apply to all banks, small and mid-size banks may implement them differently than large ones. Its controls may be less formal and less structured, yet a small bank can stil have effective internal control. The components are:

- Control Environment
- Risk Assessment
- Control Activities
- Information and Communication
- Monitoring

The survey forms were sent to the Centers' of Internal Control Units of 12 private bank in Istanbul, by e-mail. Managers or directors of each internal control unit were informed about the aim and the significance of the survey by talking in person. Afterall, 146 forms were evaluated.

6.2. The Tests and the Analysis Methods Used in the Study

To evaluate the effectiveness of internal control system different statistical tests and analysis are employed. The independent t-test is used to for a difference between two independent groups (like males and females) on the means of a continuous variable (Kalaycı (2006)).The sample group, t-test was used for is as follows:

- The banks those are subject to regulations stipulated by the Basel Principles in all areas.
- The banks those are NOT subject to regulations stipulated by the Basel Principles in all areas.

The relationship between the sample group and the objectives of internal control has been tested by independent t-test.

Regression analysis includes any techniques for modeling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps us understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables are held fixed.

In the study, the dependent variables are:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

The independent variables are:

- i) Control Environment,
- ii) Risk Assessment,
- iii) Control Activities,

- iv) Information and Communication, and
- v) Monitoring

Through the regression analysis, the effects of five independent variables on the dependent variables were investigated.

6.3. Findings

This study is applied to the internal control unit staff and senior managers. Demographic characteristics of the 146 answer examined is as below:

Table 1: To be subject to regulations stipulated by the Basel Principles in all areas

	Frequency	Percentage
YES	93	63,7
NO	53	36,3

6.4. The Effect of Internal Control System on the Effectiveness and Efficiency of operations

6.4.1 The Effect of Basel Principles

H0: To be subject to regulations stipulated by the **Basel Principles** in all areas does not have an effect on Effectiveness and efficiency of operations.

H1: To be subject to regulations stipulated by the **Basel Principles** in all areas does have an effect on Effectiveness and efficiency of operations.

The above hypotheses were tested using independent t test carried out with 95% confidence interval.

Table 2: Classification of the mean of the first objective

	Is your bank subject to regulations stipulated by the Basel Principles in all areas?	N	Mean
Operations are effective and efficient.	YES	93	4,1539
	NO	53	3,091

Test result (Sig. (2-tailed) = 0,000) is smaller than 0.05. It shows us; there is a significant difference between means. So that; H0 hypothesis was rejected, hypothesis H1 is accepted.

It means being subject to regulations stipulated by the Basel Principles, has a positive distinctive effect on the effectiveness and efficiency of operations.

6.4.2. The Effect of the Components of Internal Control

In this part of the study the correlations between the first objective; Effectiveness and efficiency of operations and each component of internal control were investigated.

Component of Control	Correlation Coefficients
Control Environment	0,682
Risk Assessment	0,631
Control Activities	0,762
Information and Communication	0,8012
Monitoring	0,693
Dependent variable: Effectiveness and efficiency of operations	

Table 3: Coefficients of correlation between the first dependent variable and each of the control component

When the correlation coefficients above were examined it was seen that there is a greater correlation especially between the component; “Information and Communication” and the objective “effectiveness and efficiency of operations.”

6.5. The Effect of Internal Control System on the Reliability of Financial Reporting.

6.5.1 The Effect of Basel Principles

H0: To be subject to regulations stipulated by the Basel Principles in all areas does not have an effect on the reliability of financial reporting.

H1: To be subject to regulations stipulated by the Basel Principles in all areas does have an effect on the reliability of financial reporting.

The above hypotheses were tested using independent t test carried out with 95% confidence interval.

Table 4: Classification of the mean of the second objective

	Is your bank subject to regulations stipulated by the Basel Principles in all areas?	N	Mean
Financial reporting is reliable.	YES	93	4,3847
	NO	53	3,4545

Test result (Sig. (2-tailed) = 0,000) is smaller than 0.05. It shows us; there is a significant difference between means. So that; H0 hypothesis was rejected, hypothesis H1 is accepted.

It means being subject to regulations stipulated by the Basel Principles, has a positive distinctive effect on the reliability of financial reporting.

6.5.2. The Effect of the Components of Internal Control

The correlations between the second objective; reliability of financial reporting and each component of internal control were investigated as below:

Table 5: Coefficients of correlation between the second dependent variable and each of the control component

Component of Control	Correlation Coefficients
Control Environment	0,665
Risk Assessment	0,589
Control Activities	0,864
Information and Communication	0,682
Monitoring	0,663
Dependent variable: Reliability of financial reporting	

When the correlation coefficients above were examined it was seen that there is a greater correlation especially between the component; “Control Activities” and reliability of financial reporting.

6.6. The Effect of Internal Control System on the Compliance with applicable laws and regulations.

6.6.1. The Effect of Basel Principles

H0: To be subject to regulations stipulated by the Basel Principles in all areas does not have an effect on the compliance with applicable laws and regulations.

H1: To be subject to regulations stipulated by the Basel Principles in all areas does have an effect on the compliance with applicable laws and regulations.

The above hypotheses were tested using independent t test carried out with 95% confidence interval.

Table 6: Classification of the mean of the third objective

	Is your bank subject to regulations stipulated by the Basel Principles in all areas?	N	Mean
Compliance with applicable laws and regulations.	YES	93	4,5387
	NO	53	3,591

Test result (Sig. (2-tailed) = 0,000) is smaller than 0.05. It shows us; there is a significant difference between means. So that; H0 hypothesis was rejected, hypothesis H1 is accepted.

It means being subject to regulations stipulated by the Basel Principles, has a positive distinctive effect on the compliance with applicable laws and regulations.

6.6.2. The Effect of the Components of Internal Control

The correlations between the third objective; compliance with applicable laws and regulations and each component of internal control were investigated as below:

Component of Control	Correlation Coefficients
Control Environment	0,504
Risk Assessment	0,385
Control Activities	0,694
Information and Communication	0,613
Monitoring	0,487
Dependent variable: Compliance with applicable laws and regulations	

Table 7: Coefficients of correlation between the third dependent variable and each of the control component

When the correlation coefficients above were examined it was seen that there is a greater correlation especially between the components; “Control Activities and Information&Communication” and compliance with applicable laws and regulations

7. CONCLUSION

Internal control, as it was defined by the Basel Committee on Banking Supervision, represents "a continuous process in which takes part the board of directors, senior management and all level of personnel, and whose aim is to ensure that all the established goals will be reached." We have to stress that internal control is not just a procedure or a policy, performed at a certain point in time, but rather it is a continually operating action at all levels within the bank.

Considering the stipulations of the same regulations, the main objectives of the internal control process are:

- Effectiveness and efficiency of operations.
- Reliability of financial reporting.
- Compliance with applicable laws and regulations.

The first mentioned is the performance objective and it refers to the effectiveness and efficiency of the bank in using its assets and other resources and, therefore in protecting the bank from loss. By its rules, the internal control needs to ensure that the personnel throughout the bank are working to achieve its goals with efficiency and integrity, without excessive costs or placing other interests before those of the bank.

The second mentioned is the information objective, which regards the preparation of timely, reliable and relevant reports needed for decision-making within the bank. It also addresses the need for financial statements, reliable annual accounts and other financial information for shareholders, board of directors, supervisors and other external parties, whose quality and integrity are absolutely necessary in making decisions.

The last mentioned is the compliance objective, which needed to be reached in order to protect the bank's franchise and reputation, by

respecting the laws and regulations, the supervisory requirements and the organisation's policies and procedures.

As a conclusion, if the internal control system is properly designed, and there is a continuous cooperation between the entire bank's staff, it might bring a lot of benefits to the organisation as a whole, that we are going to present, as it follows. Thus, a system of effective internal controls:

- is a critical component of bank management and a foundation for the safe and sound operations of banks;
- contributes to the accomplishment of the bank's goals, objectives and long-term profitability targets;
- contributes to the maintenance of reliable financial and managerial reporting, as well as to compliance with laws, regulations, policies, plans and internal rules and procedures;
- decreases the risk of unexpected losses and the risk of damage to the bank's reputation.

Besides the strengths mentioned above, required for a strong internal control system, we have to be aware that it also might have a lot of weaknesses.

Thus, as important as an internal control structure is to an organisation, an effective system is not a guarantee that the organisation will be successful. An effective internal control structure will keep the right people informed about the organisation's progress (or lack of progress) in achieving its objectives, but it cannot turn a poor manager into a good one. Internal control cannot ensure success, or even survival. Internal control is not an absolute assurance to management and the board of directors about the organisation's achievement of its objectives. It can only provide reasonable assurance, due to limitations inherent in all internal control systems. For example, breakdowns in the internal control structure can occur due to a

simple error or mistake, as well as faulty judgments that could be made at any level of management. (Palfi, Cristina and Mariana Muresan (2009))

The types of control breakdowns typically seen in problem bank cases were grouped by the Basle Committee into the following five categories: (Palfi, Cristina and Mariana Muresan (2009))

- i) Lack of adequate management oversight and accountability, and failure to develop a strong internal control culture within the bank. Without exception, cases of major losses reflect management inattention to, and laxity in, the control culture of the bank, insufficient guidance and oversight by board of directors and senior management, and a lack of clear management accountability through the assignment of roles and responsibilities. These cases also reflect a lack of appropriate incentives for management to carry out strong line supervision and maintain a high level of control consciousness within business areas.
- ii) Inadequate recognition and assessment of the risk of certain banking activities, whether on- or off-balance sheet. Many banking organisation that have suffered major losses neglected to recognise and assess the risks of new products and activities, or update their risk assessment when significant changes occurred in the environment or business conditions. Many cases highlight the fact that control systems that function well for traditional or simple products are unable to handle more sophisticated or complex products.
- iii) The absence or failure of key control structures and activities, such as segregation of duties, approvals, verifications, reconciliations and reviews of operating performance.

- iv) Inadequate communication of information between levels of management within the bank, especially in the upward communication of problems. To be effective, policies and procedures need to be effectively communicated to all personnel involved in an activity. Some losses in banks have occurred because relevant personnel were not aware of or did not understand the bank's policies. In several instances, information about inappropriate activities that should have been reported upward through organisational levels was not communicated to the board of directors or senior management until the problems became severe. In other instances, information in management reports was not complete or accurate, creating a falsely favourable impression of business situation.

- v) Inadequate or ineffective audit programs and monitoring activities. In many cases, auditors were not sufficiently rigorous to identify and report the control weaknesses associated with problem banks. In other cases, even though auditors reported problems, no mechanism was in place to ensure that management corrected the deficiencies.

The conclusion reached by these experiences, after analysing the five major elements of the internal control process defined by the Basel Committee (management oversight and the control culture, risk assessment, control activities, information and communication, monitoring) is that an efficient internal control system might have prevented or detected from time the problems that led to losses, or that at least could have limited their value. So, an efficient internal control system is a significant part of a bank's management, which could sustain a bank in reaching its objectives and its goals of profitability.

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APPENDIX

ANKET

Değerli İç Kontrol mensubu,

Bu anket, Türkiye’de faaliyet gösteren bankaların İç Kontrol Sistemlerinin Etkinliğinin Değerlendirilmesi konusunda İstanbul Bilgi Üniversitesi, Uluslararası Finans Yüksek Lisans Bölümünde gerçekleştirilen bir tez çalışmasına temel oluşturacaktır.

Bu çalışmanın sonucunda ulaşılabilecek bilgiler Bankanızla da paylaşılca olup tamamen bilimsel amaçlarla yapılan bu çalışmaya verilecek cevaplar hiç bir yerde yayınlanmayacak ve kesinlikle gizli tutulacaktır.

Anketi cevaplayarak çalışmamıza yapmış olduğunuz katkıdan dolayı teşekkür ederiz.

Okan AYBAR

M.Burak ÖZBEK

Tez Çalışması Yöneticisi

Uluslararası Finans Yüksek Lisans Öğrencisi

1. Bankanız, Basel Prensiplerinin öngördüğü düzenlemelere her alanda tabi midir? (Lütfen uygun kutucuğu işaretleyiniz.)

Evet

Hayır

2. İç kontrol sistemi için sağlanmış kontrol ortamı açısından aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

		1	2	3	4	5
1	Kontrol Ortamı	Yönetim iç kontrol sisteminin etkin bir şekilde çalışmasını destekleyip bu yaklaşımının şirket çalışanları tarafından da benimsenmesini sağlamaktadır.				
2		İç kontrol sistemi işletme politika ve amaçları uyum içindedir.				
3		İç kontrol amaçlarını gerçekleştirebilmek amacıyla birimler arasında etkin bir koordinasyon mevcuttur.				
4		Denetim komitesi iç kontrol sistemini etkileyebilecek is risklerini sürekli gözlemlemek amacı ile yeterli kaynak ve zaman ayırmaktadır.				
5		Çalışanların görev, yetki ve sorumlulukları açık ve net olarak belirlenip, sürekli olarak güncellenmektedir.				

3. İç kontrol sistemi içerisinde risk yönetimi ile ilgili olarak aşağıdaki ifadelerene ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

			1	2	3	4	5
6	Risk Yönetimi	Banka içerisinde departmanlar bazında risk değerlendirmesi yapılmıştır.					
7		Riski yönetmek ve etkilerini hafifletmek için yeterli ve sürekli güncellenen bir aksiyon planı mevcuttur.					
8		Yönetim ve çalışanlar hangi risklerin yönetim tarafından kabul edilebilir olduğunu tam olarak anlamışlardır.					
9		Süreç ve kontroller değişen risklere uygun olarak sürekli güncellenmektedir.					

4. İç kontrol sistemi içerisinde oluşturulmuş kontrol prosedürleri açısından aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

			1	2	3	4	5
10	Kontrol Prosedürleri	İş süreçlerinin analizine dayalı her süreç ve birim için saptanmış yazılı standartlar mevcuttur.					
11		Kayıtların ve varlıkların kaybolmasını sınırlayan, hileyi önleyen kontroller mevcuttur. (Fiziksel kontroller ve görevlerin ayrımı gibi.)					

			1	2	3	4	5
12	Kontrol Prosedürleri	İşlemlerin eksiksiz ve doğru muhasebeleştirilmesini gerçekleştirecek prosedürler mevcuttur.					
13		Yapılan işlemlerin kaydı yapılıp işlemi gerçekleştiren ve kontrol eden tarafından ayrı ayrı onayı yapılmaktadır.					
14		Politika ve prosedür klavuzlarında tanımlanan kontroller pratikte de niyet edildiği şekilde uygulanmaktadır.					
15		Yasal düzenlemelerdeki değişiklikler yönetim tarafından iç kontrol sistemine zamanında ve tam olarak aktarılmaktadır.					

5. İç kontrol sistemi içerisinde işletmenin IT alt yapısı ve işletme içi iletişim ile ilgili aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

			1	2	3	4	5
16	IT Yapısı	Tüm çalışanlar tarafından anlaşılabilir ve desteklenen bir iç kontrol ortak dil yapısı mevcuttur.					
17		Finansal raporlamaya temel oluşturan bilginin doğruluğunu garanti edecek prosedürler oluşturulmuştur.					
18		Birbirinden bağımsız sistemler arasında akan verinin doğru bir şekilde aktarıldığına dair kontroller mevcuttur.					
19		IT alt yapısında oluşabilecek önemli bir aksaklığa karşı oluşturulmuş, sürekli güncellenen bir acil durum planı mevcuttur.					

6. İç kontrol sisteminin gözetimi açısından aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

			1	2	3	4	5
20	Gözetim	İç kontrol sisteminin etkinliği yönetim tarafından sürekli olarak değerlendirilip gözlemlenmektedir.					
21		İç kontrol sisteminin denetimini yapan birimin gözlemci rolü ile çatışacak operasyonel sorumlulukları alması önlenmiştir.					
22		Organizasyonun amaç ve planları ışığında oluşturulmuş performans ölçütleri kullanılmaktadır.					

7. Şu anda çalıştığınız bankaya ilişkin aşağıdaki ifadelere ne ölçüde katıldığınızı belirtiniz.

1- Kesinlikle Katılmıyorum 2- Katılmıyorum 3- Ne katılıyorum ne katılmıyorum 4-Katılıyorum 5- Kesinlikle Katılıyorum

			1	2	3	4	5
23	Genel Değerlendirmeler	Bankada faaliyetler etkin ve verimli olarak gerçekleştirilmektedir.					
24		Finansal raporlama güvenilir bir şekilde yapılmaktadır.					
25		Bankada faaliyetler yasa ve düzenlemelere uygun olarak gerçekleştirilmektedir.					

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MAHMUT BURAK ÖZBEK ULUSLARARASI FİNANS YÜKSEK LİSANS PROGRAMI 2011