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Internal Controls in Jordanian Banks and Compliance Risk

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Abstract
The study aim to determine the tools and techniques of internal control that could be applied through its dynamic systems and by deploying a risk management approach that banks could establish when addressing compliance risk for monitoring and control purposes; also investigating whether or not Jordanian banks are applying integrated internal controls to deal with possible compliance risks. The researcher distributed the 15 questionnaires for banks in Jordan undertaken. Interviewer-administered questionnaire was conducted.The findings have revealed that Jordanian banks apply integrated internal controls through its dynamic and the enforcement of those controls into systems, people and processes in order to mitigate and deal with compliance risks that could be facing those banks. Moreover internal controls in banks to be successful in promoting sound and effective in order to deal with compliance risks, regulators and governments should demonstrate to banks in Jordan how significant internal controls are, so that they can be able to cope with the risks they are exposed to more efficiently. In addition this study will be of value to those interested in compliance management through integrated internal controls in the banking industry.
Keywords: Internal Controls, Risk management, Compliance, Jordanian banks.

1. Introduction

In our times, the business world has confronted phenomenal changes and difficulties, bringing about a huge number of compliance regulations. Banks of all sizes are currently more concerned than any other time about compliance risk management. New banking products, expanded government scrutiny, and the intense focus on compliance prerequisites deliver more serious risks and a larger set of guidelines and regulations. Banks as financial intermediaries have to be highly responsible and apply sound and effective internal controls in order to conduct compliance processes, identify and assess risks, implement and monitor those controls and mitigate those risks related to compliance (MetricStream, 2016).

Operational risk is inherent in all banking products, activities, processes and systems; it is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The definition includes legal risk but excludes strategic and reputational risk (The Board of Directors' Decision, 2007). Compliance risk, which is often overlooked as it blends into operational risk that results from failure to comply with tax, accounting, settlement, systems, legal and valuation regulations. It also blends into transaction processing, such as market and credit transactions (Mainelli, 2002). Compliance risk is defined as any activity or action inside a bank which affects adversely upon its integrity or reputation because of failure to comply with laws, sets of principles, benchmarks of good practice or regulations. Furthermore, it is seen as opposing to common legal rules and regulatory requirements yet moves towards "integrity" risk (Edwards and Wolfe, 2004).

Compliance risk management is most effective when the banks' culture emphasizes high standards of honesty and integrity to the processes and procedures through applicable and effective internal controls. Internal control is a basic part of bank management and an establishment for the safe and sound operation of banking organization. A system of strong internal controls can guarantee that the goals and objectives of a banking organization will be met, that the bank will accomplish long-term profitability targets, and keep up dependable monetary and managerial reporting. Such a system can likewise guarantee that the bank will comply with laws and regulations, as well as policies, plans, internal rules and procedures, and decrease the risk of unexpected [illegible]

[illegible] organization's board of directors, management and other faculty, intended to provide sensible assurance with respect to the achievement of objectives in the following categories: Effectiveness and efficiency of operations, Reliability of financial reporting, Compliance with applicable laws and regulations" (Ayagre et al, 2014).

According to The Banking Regulation and Supervision Board (2001), the internal control activities should be outlined and executed to tackle risks as an essential part of day-to-day operations empowering to monitor the risks identified within a framework of risk assessment as it should be concerning with: a) Policies and procedures related to the decision-making process; b) Scope and implementation of risk management; c) The process of setting and implementing limits and standards concerning risks; d) Controls over the data processing infrastructure; e) Financial and managerial reporting; f) Personnel policy; g) Identification of responsibilities; h) Auditing; and Prevention of fraud transactions.

This research will be assessing the influence of internal controls on organizations in general, followed be an investigation of the influence of internal control that could be applied through its dynamic systems and by deploying a risk management approach that banks could establish when addressing compliance risk for monitoring and control purposes. This will form an overview of how Jordanian banks are affected by internal controls in reference to their practice of risk management.

Problem statement

Banking sector is vitally important as banks play an important role in the economy for collecting deposits and providing credits. Banks are considered to be highly responsible and apply sound and effective internal controls in order to conduct compliance processes, identify and assess risks, implement and monitor those controls and mitigate those risks related to compliance. For this reason this research aims to determine the techniques of internal controls and how they assist in mitigating compliance risks. And, investigating whether or not Jordanian banks are applying integrated internal control systems to deal with possible compliance risks

Study Importance

The overall project would contribute in displaying the important role of internal control in the practice of risk management in Jordanian banks. It gives an overview of how to deal with compliance risks. Hopefully, this research will shed some light towards the importance of implementing different internal controls, and the benefit resulting from such an implementation not only to banks but other organizations as well.

- Emphasis on the importance of integration between the risk management department and the different management levels.
- Suggest processes to be followed proactively to reduce the probability of having compliance risks.
- Assessing the vital role, the risk management department plays in all business processes.
- Evaluates the importance of the Three Lines of Defense in assuring governance, risk management and compliance approaches.
- Evaluates the importance of the internal auditors in providing assurance about the management's performance and duties.
- Evaluates the importance of assuring quality for enhancing the organization's performance and maximizing value.
- Evaluates the importance of embedding internal controls into computerized-systems in order to ease processes for people working at the organizations.
- Evaluates the importance of embedding internal controls into the culture of the organization to help employees understand the procedures and processes within the organization.

Study Hypotheses

There is no statistically significant relationship Jordanian banks listed in Amman Stock Exchange that apply integrated internal controls in order to mitigate compliance risk

Jordanian Banks listed in Amman Stock Exchange do not apply the integrated internal control in order to mitigate compliance risk.

Literature review

Objectives of internal control

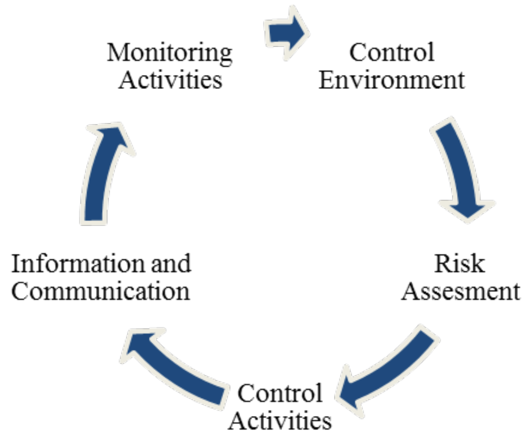
In (1992), COSO's Internal Control – Integrated Framework ('1992' Framework) became one of the most widely accepted internal control framework in the world. The framework states that internal control differs according to the context, industry and nature of business. Internal control may cause conflict if not clearly defined, especially when it is built into law, regulations or rules. Internal control is extensively characterized as a procedure that is affected by the board of directors, management and other personnel. It is intended to provide reasonable assurance in regards to the achievement of the following objectives: a) effectiveness and efficiency of operations; b) reliability of financial reporting; c) compliance with applicable laws and regulations (COSO, 1992).

According to Agbejule and Jokipii (2009), when these three objectives are properly achieved, internal control should be considered effective; internal controls are to provide administrative management with applicable assurance that financial data is accurate and reliable and that the banking organization conforms to policies, plans, procedures, laws, regulations and contracts; resources are defended against loss and fraud; assets are utilized financially and efficiently; and established objectives for operations or projects can be met.

Generally, banks set up internal control systems to identify and oversee risks. It is utilized to reinforce risk management systems. All banks ought to have individual internal control systems able of providing an assurance that risks are managed in an effective way. Therefore, the objective of an effective internal control system is to provide an assurance that a bank is efficiently and effectively directs its operations and according to its mission statement, that its management data and financial reporting are dependable, and that it advances compliance with applicable laws, and regulations. If a bank does not have the viable internal control system, it is conceivable that the bank could be vulnerable (Länsiluoto et al, 2016). Internal control is now linked to risk management; internal control should cover the identification and mitigation of risks as the new recognition of internal controls is that internal control exits to assist the organization in managing its risks and promote effective governance processes (Spiraand Page, 2003).

COSO (1992) distributed a point of interest report on internal control: Internal Control - Integrated Framework, referred to as "COSO". The framework classifies an organization's internal control system into five integrated components which should be built into business forms over the whole organization in its way to accomplishing goals; these are derived from the way management runs a business, and are integrated with the management process. The components are; Control environment, Risk assessment, Control activities, Information and communication and Monitoring activities.

Figure 1: Integrated Internal Control Framework



Source: Author's own design based on COSO's Internal Control framework

The first component, control environment, allows an organization to set sensible goals and guarantee that the organization has adequate assets to seek after them (Länsiluoto et al, 2016). According to Bowling and Rieger (2005), control environment assures bankers that they are in the business of risk management. It reflects the agreement on risk management and the appetite for taking the risk. Also, it includes the bank's structure, a board of directors, human resource policies and procedures, responsibilities and ethical values. In addition, this component addresses the methods and style in which internal control initiatives are implemented (Henderson and Media, 2016).

The second component is the risk assessment. It includes risk analysis; taking into consideration the probability and impact as a basis for deciding how they should be managed (Bowling and Rieger, 2005). It is the identification and analysis of relevant risks to achieve the predefined objectives (COSO, 1992).

The third component is controlled activities. These are the policies and procedures that can help in ensuring that management's orders are completed appropriately and effectively (Henderson and Media, 2016). In addition, control activities occur all through the banking organization, at all managerial levels and within all functions. They incorporate a scope of activities, such as authorizations, approvals, checks, reviews of operating performance, security of resources and segregation of duties (COSO, 1992).

According to Henderson and Media (2016), the fourth component which is information and communication are the techniques used to provide training to the employees responsible for the control activities. The Human resources department might conduct classroom training to the workers, instructing them on all risk management strategies. However, COSO (1992) states that information must be identified, caught and communicated in a structure and time period that let individuals complete their obligations. Information system produces reports containing operational, financial and compliance-related information, which make it potential to run and control the business.

Effective communication should be structured in a more extensive manner and streaming down, across and up the banking organization. All workforces must get a clear message from top management that control obligations must be considered important. They must understand their own part in the internal control system, and in addition how individual activities relate to the work of others. They should have a method for communicating significant information upstream. Furthermore, there should be effective communication with external parties, for example, clients, suppliers, regulators and shareholders.

Finally, the fifth component, monitoring activities according to Agbejule and Jokipii (2009) refer to a procedure of assessing the quality of controls. It covers continuous and periodical assessments of the supervision of internal controls by management; it guarantees that controls are working as proposed and that they are altered appropriately. Also, the process will depend primarily on an assessment of risks and the effectiveness of ongoing monitoring procedures (COSO, 1992). Monitoring incorporates all management oversight of the organization's systems of internal control (Agbejule and Jokipii, 2009).

According to Ayagreet al. (2014), the internal control components and business processes must collaborate continuously for a sound, effective internal control framework. The consistent and collaborative interaction of an internal control system with business procedures are an essential for the effectiveness of an inner control framework. Control goals and measures that are derived from the monitoring and assessment of risks must be integrated into operational business units, and business practices, through an effective data. Furthermore, communication of control component that guarantees the smooth stream of data to the workforce in charge of internal controls over the organization.

Internal control systems

The effectiveness of internal control system allows firms to react in the appropriate way to risks, and fulfill performance and profitability objectives, and safeguard assets against any loss. Also, Reliability of financial reporting which covers the planning of reliable financial statements, including procedures for reporting any control vulnerabilities with using appropriate actions to mitigate and correct those vulnerabilities. Moreover, compliance with applicable laws and regulations determines adherence to the laws and regulations the banking organization is liable to (Länsiluoto et al., 2016). Effectiveness has been introduced as an important dependent variable as it gives the way to decide the proper fit in the middle of control and the banking variables. Internal control can be effective when the board of directors and management have sensible assurances that they understand the degree to which the organization's operations objectives are being accomplished, distributed financial statements are dependably arranged, and the laws and regulations are being complied (Agbejule and Jokipii, 2009).

A dynamic internal control system is a challenge to compliance risk management. When operations and business relationships expand, the organization's risk profile grows. In order to help monitor risk internally, the organization needs systems and information to sustain compliance (Rasmussen, 2013). Applying such a system needs the establishment of governance, risk management and compliance (GRC) framework based on three lines of defense, encouraging user participation and reinforcement of the structure in the organization's GRC efforts (McClean, 2012).

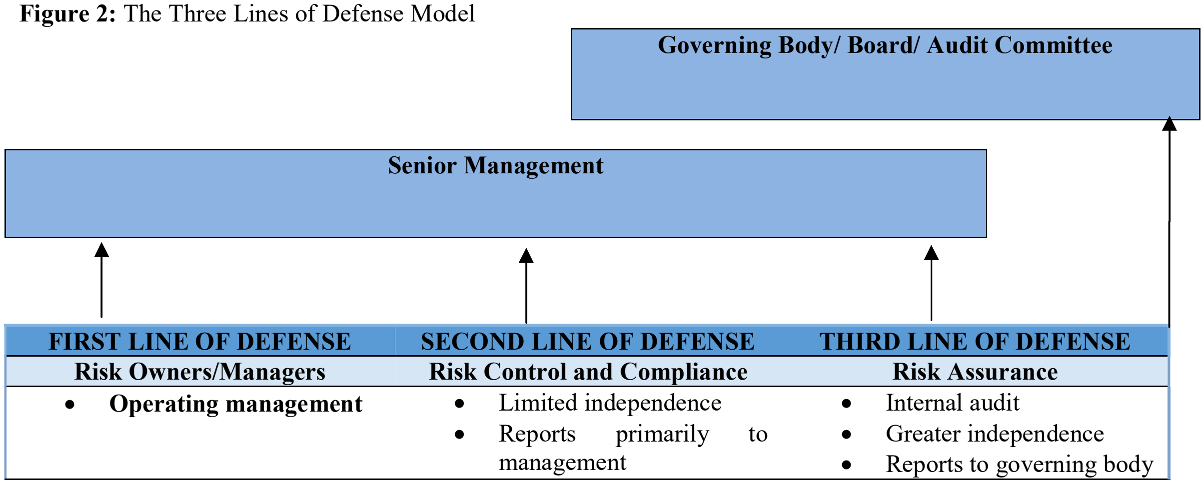
Firstly, the dynamic system of internal control according to Rasmussen (2013) is to succeed in today's business environment through integration, building and supporting business processes with the view of governance, risk management and compliance (GRC). Coordinated and integrated efforts are required to address legal, regulatory, ethical and reputational risks bearing down upon the organization.

There are many approaches that were not integrated in the past. Using these approaches is likely to expose the business to failure; unanticipated risk, growing fines, penalties, misalignment of values and impacts the reputation directly. Integrated GRC provides visibility; knowledge across compliance and ethic processes. McClean (2012) believes that every member of the organization is responsible for governance, risk management, and compliance, from top management to business process owners and frontline staff. Every individual within an organization who contributes to the organization's performance must deal with operational challenges and regulatory requirements. To Rasmussen (2013), intelligence about processes and technologies is required in an organization; the objective is to make a one-time decision that is effective and comply with regulations, risk management and maximize value from the convergence of technology, people, and process. Mature GRC allows the organization to understand the performance; the ability of achieve objectives reliably while addressing uncertainty and acting with integrity.

According to Basel Committee on Banking Supervision (2014), governance sets the distribution of the authority and responsibility of a bank to be followed out by the bank's board and senior management. This could be made by determining the objectives and the strategy of the bank, electing and overseeing workforce, operating the business on a daily basis, protecting interests, meeting obligations, stratify culture, actions and behavior with integrity and compliance, as well as embedded controls. It also views risk management as the process of identifying risks and emerging risks and both qualitative and quantitative measurements. Compliance is about supporting policies and procedures and providing reports on how the bank is managing compliance risk.

McClean (2012), recommends managing GRC through the establishment of the Three Lines of Defense since they help in achieving success by deploying all levels of the employee in GRC. Cocheo (2014), views the three line of defense as the assurance to check and balances. According to IIA (2013), these three "lines" are important due to their role within the organization; they provide an effective way to improve communication regarding risk management and control. Also, they provide assurance on the ongoing operations as they help in improving risks and controls' clarity besides helping to improve the effectiveness of risk management system.

Figure 2: The Three Lines of Defense Model



Source: Author's own design based on Three Lines of Defense.

The first line of defense is business line management, which is responsible for identifying and managing risks. For McClean (2012), this line is concerned about setting the expectation for business operations and internal controls as front line business is responsible for commitment to compliance and risk management frameworks, policies, procedures and internal controls. Setting organization's principles here will lead to great enhancements of the bank's risk posture. Furthermore, IIA (2013) sight to the first line is the function where operational managers own and manage risks and are responsible for executing corrective actions to address process and control insufficiency. Operational management is accountable for sustaining effective internal controls and implementing risk and control procedures on a daily basis. This line identifies, assesses, controls and mitigates risks, with directing the improvement and execution of internal policies and procedures and assuring that activities are reliable with objectives. Also, mid-level managers design and implement detailed procedures that serve controls and oversee the execution of the procedures by the workers. Cocheo (2014) summarizes the first line as the recognition of business line management responsibility for identifying and managing risks with compliance to processes and systems.

A single line of defense can be inadequate (IIA, 2013). The second line of defense according to McClean (2012) is establishing risk, compliance, security and legal authority which are accountable for defining policies, a procedure for governance, risk management, and compliance, monitoring for new and emerging risks with vulnerabilities that might occur. What is more, he believes this line must track progress and communicate with the upper management and the organization's board of directors to show that GRC program is performing effectively and efficiently. IIA (2013) views the second line as a risk management function that encourages and monitors the execution of effective risk management implementations by operational management and helps risk owners in defining the target risk exposure and reporting sufficient risk related data through the organization. It also views this "line" as a compliance function that monitors different certain risks. Cocheo (2014) view the second line as an independent corporate operational risk management function. At smaller entities, segregation of duties and independent review is enough, while larger entities can establish a reporting structure. The business units must aggregate all risks the bank faces in order to get a strong overall level of taken risk; to see the risk appetite established by the board. IIA (2013) added that management sets these function to make sure the first line of defense is designed appropriately and operated as planned.

The third line of defense according to McClean (2012), is assigning assurance duties to internal audit (IA). This line operates as an independent management level that provides assurance to the board that the first two lines are conducting, managing and overseeing GRC processes effectively. It also identifies risks when the failure of the organization to execute required procedures and controls. Cocheo (2014) believes that this "line" is a challenge of the bank's operational risk management controls, processes, and systems. However, IIA (2013) view the third line as the assurance provided by the internal audit that covers efficiency and effectiveness of operations, safeguarding of assets, reliable and integral reporting, and compliance with laws, regulations, policies, and contracts. It also covers risk management and internal control framework. This "line" covers the overall organization from divisions, units, and functions.

To increase overall facility with handling risks, organizations can turn to Enterprise Risk Management (ERM) as it can be a use of both a risk management tool and a method to capitalize on possible opportunities (Azira, 2016). As states by IIA (2009), Organizations are exposed to all business risks; social, ethical and environmental, as well as financial, operational. Erbschloe, (2016) added investment oriented risks and market risks. According to IIA (2009), identifying and managing such risks into the acceptable level, organizations are being under pressure. To improve organization's governance processes, ERM should be used; such planned, consisted and constant process assist organizations in identifying, assessing, determining the responses to and reporting on opportunities and threats that impact the accomplishment of its purposes (IIA, 2009).

Enterprise Risk management is an information-intensive process that is utilized to measure all of an organization's risks with the understanding of them. It enables top managers to aggregate, prioritize and manage risks effectively while business unit managers improve decision making (Erbschloe, 2016). The benefits of ERM include integrated reporting of various risks at board level; enhanced understanding of the key risks and their implication; greater management concentration on problems that matters the most and prioritizing them; more internally concentration on doing the right thing in the right way and more informed risk-taking and assessment (IIA, 2009).

Internal audit is required in the internal control process to establish the validity and reliability of information, and to provide an assessment of the system's internal control, such as gathering data, quantifying and evaluating those to resulting with a clear understanding of capability, maturity, quality, and value of people, process, technology of the organization that is being assessed which assists greatly in decision making and moving forward (Agrasala, 2009). Internal audit adds value by assessing and making recommendations on the effectiveness of the mechanisms that are in place to ensure that the organization achieves its objectives (ThomsonReuters). Internal audit also provides gap analysis; to compare the organization's actual performance with its potential performance answering two questions: "Where are we?" and "Where do we want to be?" (Agrasala, 2009).

Quality assurance is also required in the internal control process since its responsibility for evaluating the internal system and providing recommendations in line with the best business practices (BSC, 2002). Organizations should have a policy and related procedures for the quality assurance. They also have to create and execute a methodology for the continuous improvement of value. The strategy, policy and procedures should have a formal status (ENQA, 2005). According to Sprague (2016), quality assurance concentrates on issues regarding information security management, privacy, and data governance issues. Also, it concentrates on business risk assessment and customer satisfaction. Senaweera (2008) added that it is important that banks should satisfy customers rather than controlling them, banks should take care of customers' satisfaction from their feedback. In order to get customers' satisfaction, banks should assure employees' satisfaction by finding joy in their working hours. Also, Williford and Small (2013), stated that Effective lines of communication with employees regarding compliance concerns, questions, or complaints are important. That could also be a way of enhancing the organization's performance and increases its value besides its reputation.

Secondly, to implement internal controls in an organization, the support of department heads and the employees is essential in the implementation process (ICDF, 2003). Integrated Compliance needs the enforcement of internal controls through people, system, and processes (Rasmussen, 2013). To begin with people, internal controls are most effective when they are embedded and integrated into the organizational culture, the organizational board should promote values of honesty and integrity' and the need to assure that an appropriate policy is in place; to ease the understanding of the policies and procedures of the organization (Edwards and Wolfe, 2004).

According to Williford and Small (2013), it is important that employees are trained on the programs objectives and relevant policies, "It is recommended that training is tracked, attested to, documented, and followed up". Moreover, Rasmussen (2013) states that the internal controls should be embedded into technology that provides a system for people to ease compliance monitoring, enforce practices, report issues and noncompliance across the organization. According to Ernst&Young (2010), Segregation of duties is vitally important; to embed internal controls processes manually, there must be an assurance that no single individual has the authority to execute two or more conflicting sensitive transactions.

Application of internal control systems in Jordanian banks

There are several studies that were conducted to address the applications of internal control systems in the main Jordanian banks. According to Al-Zubi, et al. (2014), an effective system of internal control relies on an effective management and the awareness of employees of the policies and procedures. Therefore, a questionnaire was distributed to different levels of management of the Jordanian commercial, investment and Islamic banks to ensure that they are implementing easy and understandable internal controls effectively and efficiently. Based on the statistics that were made, Jordanian commercial banks are applying controls; risk assessment, information and communication components and their employees are complying with the rules and procedures. Also, internal control systems are mostly verified by management and the systems include operational and compliance nature as well as financial controls. However, monitoring components are relatively applied.

A study done by Bawaneh (2011) reveals that Jordan Banking Sector has been paying corporate governance a great deal of interest. Al-Zubi et al. (2014) founded that high scale of respondents had claimed that structures, reporting lines and proper authorities and responsibilities were to achieve the bank's objectives.

The results of Al-Jarrah (2012) state that banks in Jordan have been aware of risks and have undertaken appropriate actions to mitigate risks. Al-Zubi et al. (2014) founded that high scale of respondents had claim that the bank's management has a clear strategy of the way of assessing risk and determining tolerance level, and how to manage the risk to an acceptable level. On the other side, Imane (2014) compared risk management to Islamic banks in Jordan and found that these banks have failed in managing risks as they find it difficult to prioritize their main risk. According to Al-Zoubi, et al. (2007), the decision makers of Jordanian banks implement a reactive approach of following the market and the instructions of the supervisory authorities. They added that half of the small and medium sized Jordanian banks have done a process for identifying risks. However, small banks haven't implement risk management approach. Also, they added that "Most of the strategies don't yet formally document the risk profile and the extent of risk control of the organization. This applies for few large banks". Moreover, the reporting flows between the business lines are clearly defined.

Abdullatif and Kawuq (2015) founded that the role of internal auditors in risk management of Jordanian banks was limited; they were focused on managing risks that are related to compliance, they were less focused on those related to the economy and culture. Most of the respondents pointed out that there were improper roles in dealing with the risks. Al-Zoubi, et al. (2007) founded that Internal Audit is informed about the policies and procedures, but not involved in implementing them. Furthermore, a study conducted by Al-Shobaki, et al. (2010) revealed that the level of banks that implement quality assurance is moderate which means that there is awareness of quality assurance concepts. However, customers' viewpoints were otherwise; banks have little focus on customers' needs and complaints. Another study assessed the quality assurance in the Jordanian commercial banks by Mualla (2011), and added that the banks' interest in quality assurance was low according to customers' viewpoints.

Al-Zubi et al. (2014) study shows that moderate scale of respondents claims that human resource department keeps conference and training course to achieve the bank's objectives. Also, the high scale of respondents had claimed that job ethical values and employee's integrity were apparent.

The moderate scale of respondents had claimed that the bank's management uses information technology. The study by Hayale and Abu-Khadra (2006) revealed that Jordanian domestic banks are using effective fraud and error reduction controls. However, it states that these banks lack in applying other Control System dimensions (Physical access, Logical access, Data security, Documentation standard, Disaster Recovery, the internet, communication and E-Control and Output security controls). In addition, the study had evaluated control systems at Jordanian banks and their effectiveness level of integrity, confidentiality, and availability of the bank's data.

The banks that were included in the research were domestic banks (local and foreign). The research covered the banks' headquarters only, and the majority of the respondents had four or more years of experience in their positions; all respondents pointed out that segregation of duties were implemented in their banks.

Statistical Analysis

This part deals with method and procedures used in this study, since it gives a detailed description of study methodology, population, sample , tools used for data collection, and explains statistical methods used to analyze data; in order to obtain the results .

Methodology

A survey strategy was adopted in this research. Qualitative data was collected through the creation of a questionnaire that was conducted with headquarters of Jordanian banks in order to determine the tools and techniques of internal control that are being applied in those Jordanian banks to address, monitor and control possible compliance risks.

Population and sampling

The study population consists of Jordanian Banks listed on Amman Stock Exchange, Researcher have been distributed questionnaires and collected them for 15 banks for the year 2016 on managers of compliance department in Jordanian banks, The questionnaire was conducted with the risk managers, operational risk managers, business continuity officers, the head of business analysis and process departments and others within the risk management departments of every bank within the sample (15) questionnaires were collected that is (100 %) of the distributed total questionnaires one questionnaire was disregarded so the surveyed sample was (16)

Data collection method

The data obtained was transferred into qualitative data through arranging it in tabular forms and presenting it with the aid of figures. Some results were combined together to provide better analysis of the data collected. The results were presented in two phases; the first one presents the descriptive data of the study sample, while the second presents the variables establishing a general view about the sample's characteristics, the attitude of the sample.

Study Instrument

The questionnaire that was conducted included closed-ended and Likert scale questions. Likert scale is often used to get participant's agreement with declarations of "strongly agree" to "strongly disagree". The questionnaire was divided into two sections: general questions regarding the bank and questions related to internal controls and compliance within the bank.

Questionnaire Scale Selection:

Researchers used five points Likert Scale since it is one of the most scales used to measure opinions and responses, due to ease understanding, since study sample indicates the extent of their agreement on each paragraph according to the scale in question, and as follows

Strongly agree	Agree	To some Extent	Disagree	Strongly disagree
5	4	3	2	1

To measure study sample evaluation degree corporate governance principles implementation of the public shareholding companies listed in Amman Stock Exchange , three levels scale was used , where the interval was calculated by dividing the difference between the highest value of the scale (5) and the lowest value (1) over three , This means that the interval is as follows 1-5 / 3 = 1.33.

Thus, the three levels as follows:

A - Low degree = 1-2.33.

B - Medium degree 2.34-3.67

C - High degree 3.68-5

Test standard amounting (3) , the output of dividing the sum of the highest value of the scale (5) and the lowest value in which (1) over (2) , that is { (5 +1) / 2 = 3 } , for the purpose of diagnosis sampling unit responses negative and positive as follows: Limits of negative response are 1-299 Limits of positive response are 3-5.

Therefore study instrument in its final form directed to public shareholding companies listed on the Amman Stock Exchange consists of (69) paragraph as attached with

Instrument reliability

The aim of reliability test is to reduce the risk of having error and avoid biasness in the research. Cronbach alpha is used to test the reliability of the questionnaire and it is found that alpha= 0.862 which is good because it is greater than accepted percent 0.60. This indicates that for each measurement of a variable, the item is correlated and consistent.

The result section of this report was connected to the discussion section, to ease the process of understanding and discussing. The Statistical Package for Social Sciences (SPSS) was applied in analyzing the data received; it includes the analysis of the sample characteristics according to Age, working experience, education, and working hours through the use of descriptive Statistics, primarily frequencies and percentages. Also, analysis and description of study variables are from a statistical view through means and standard deviation. Furthermore, a reliability test was conducted through Cronbach's Alpha to help in testing the reliability of the scale.

Table 1: Age of employees working in banks

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	21-30	4	26.7	26.7	26.7
	31-40	7	46.7	46.7	73.3
	41-50	4	26.7	26.7	100.0
	Total	15	100.0	100.0	

The above table shows the ages of employees that are accountable at the risk management department. The table shows that the highest percent, with a highest percentage of 46.7% belong to the employees with ages that are between 31-40 years old. I believe that this percentage of the employees reflects the majority of respondents that were young and might be in pace with new methods and processes. The ages between 21-30 and 41-50 have the same percentage of 26.7%.

Table 2: Working experience

Working experience		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2-5	4	26.7	26.7	26.7
	6-10	2	13.3	13.3	40.0
	Over 10	9	60.0	60.0	100.0
	Total	15	100.0	100.0	

The table shows that the highest percentage of 60% represents the employees that works in Jordanian banks and accountable at the risk management departments have experience more than 10 years. There is no doubt that the longer they have been involved the more knowledgeable about the banks processes and procedures. I believe that employees with years of working higher than the ten years will have positive effect on the answers provided as they will be the most certainly more reliable than the ones with lesser years working at the banks.

Table 3: Education

Education		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	BA	8	53.3	53.3	53.3
	Master	7	46.7	46.7	100.0
	Total	15	100.0	100.0	

Education is the most important input for planning purposes, as it influences the proper performance of an individual. It has more prone effects on the organization's operations and controls. It is found that 53.3% of the employees that are accountable at the risk management departments have Bachelor degree and the rest have master degree. I believe that those with Masters Degree have more ability of those with Bachelor Degree to identify, assess, monitor and control risks within the banks.

Table 4 : Working hours

Working hours		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 20	1	6.7	6.7	6.7
	21-30	6	40.0	40.0	46.7
	31-40	6	40.0	40.0	86.7
	More than 40	2	13.3	13.3	100.0
	Total	15	100.0	100.0	

The above table shows the highest percent, with a percentage of the employees at the risk management departments of Jordanian banks working between 21-40 hours per week. This indicates a "normal' working hours that could be helpful to be in consistence with the dynamics of internal controls to address compliance risks.

The statistics that was collected includes some answers of general questions at section 1 of the questionnaire that were asked to the employees working at the Jordanian banks and have shown that all of the Jordanian banks have a mission statement and have documented all internal policies and procedures that related to performing all significant administrative processes. Also, these internal policies and procedures are periodically reviewed and up to date. Moreover, all the Jordanian banks within the sample have an organizational chart that defines lines of authority and responsibility and the organizational chart is being up to date, this indicates that the banks are highly responsible and can easily identify their organization with its programs and objectives. This can be supportive to communicate their purpose and programs efficiently and effectively.

Descriptive Analysis:

Mean and standard deviation is used to describe attitudes toward following questions:

	Table 5 : Descriptive Statistics					
No	**Statements**	**N**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**
1	**Your bank applies integrated governance, risk management and compliance (GRC)**	15	4	5	4.60	.507
2	**Senior management set expectations for business operations and internal controls**	15	3	5	4.47	.743
3	**It is the responsibility of the senior management for identifying and managing risks with compliance to processes and systems**	15	4	5	4.40	.507
4	**Management level has the responsibility for defining policies, processes and procedures for governance, risk management and compliance (GRC)**	15	3	5	4.20	.676
5	**Management level monitors new and emerging risks and vulnerabilities**	15	3	5	4.40	.632
6	**Management tracks progress and communicates with the board of directors**	15	4	5	4.67	.488
7	**The internal auditors provide assurance to the board about the management's performance and duties**	15	4	5	4.80	.414
8	**The internal auditors have full access to all books, records, and personnel within the bank**	15	3	5	4.47	.743
9	**The internal auditors frequently review submitted reports regarding compliance**	15	4	5	4.73	.458
10	**Your bank concerns about quality assurance**	15	3	5	4.73	.594
11	**Your bank concentrates on business risk assessment and continuous improvement of value**	15	4	5	4.87	.352
12	**Your bank also takes care of employees and customers' satisfaction from their feedback**	15	3	5	4.73	.594
13	**Your bank has embedded internal controls into a computerized system**	15	4	5	4.87	.352
14	**Sufficient training opportunities are provided by your bank to improve employee's work related competencies in accordance with the bank's program**	15	4	5	4.67	.488
15	**Responsibilities are divided among staff members (so that no single employee has the authority to execute two or more conflicting sensitive transactions) thereby maintaining appropriate segregation of duties**	15	4	5	4.53	.516
16	**If segregation of duties is not practical, supervisory oversight exists at any level over these conflicting sensitive transactions**	15	3	5	4.40	.632
	Valid N (listwise)	15				

Above table shows that there are positive attitudes toward the above sixteen questions because their means are above mean of the scale (3). Also, it is found that question (11) and question (13) have the highest mean between the over questions.

It is shown that Jordanian banks apply integrated governance, risk management and compliance and their mean is (4.60). Their senior management set expectations for business operations and internal controls with a mean of (4.47). Also, with a mean of (4.40) the senior management has the responsibility for identifying and managing risks with compliance to processes and systems, monitors new and emerging risks and vulnerabilities, tracks progress and communicates with the board of directors. Furthermore, the internal auditors of Jordanian banks provide assurance to the board about the management's performance and duties, have full access to all books, records, and personnel within the bank, and frequently review submitted reports regarding compliance. This indicates that they are applying governance, risk management and compliance with the use of three Lines of Defense which means that they provide an effective way to improve communication regarding risk management, control and providing assurance on the ongoing operations. For the quality assurance, all Jordanian banks concern about quality assurance with a mean of (4.73). They concentrate on business risk assessment and continuous improvement of value, and take care of employees and customers' satisfaction from their feedback. However, some banks that were interviewed said that their banks have a strategy of taking care of employees. However, it is not completely applied.

Moreover, All Jordanian banks within the sample have embedded internal controls into the computerized system with a mean of (4.87), and those banks provide training to their employees to improve their work-related competencies in accordance with the bank's program. Also, with a mean of (4.53), Jordanian banks divide responsibilities among staff members thereby maintaining appropriate segregation of duties and if it is not practical, supervisory oversight exists at any level over these conflicting sensitive transactions which give a mean of (4.40).

There is no a negative attitude toward any question of these attitudes. This provides an indicator that internal controls in Jordanian banks are applied and employees are acting according to policies and procedures, thus achieving compliance.

Reliability test

The aim of reliability test is to reduce the risk of having error and avoid biasness in the research. Cronbach alpha is used to test the reliability of the questionnaire and it is found that alpha= 0.862 which is good because it is greater than accepted percent 0.60. This indicates that for each measurement of a variable, the item is correlated and consistent.

Hypothesis testing:

Jordanian banks listed in Amman Stock Exchange apply integrated internal controls in order to mitigate compliance risk.

One sample t test is used to test above hypothesis , it is found that t value = 19.455 is significant at 0.05 level , this means that the hypothesis is accepted; Jordanian banks listed in Amman Stock Exchange apply integrated internal controls in order to mitigate possible compliance risks.

Also, the following tables show that each process that leads to an integrated internal control is applied in order to mitigate compliance risk because t value for each one is significant at 0.05 levels.

Table 6: One-Sample Statistics

	N	Mean	Standard Deviation	Std. Error Mean
Applying integrated Governance, Risk Management and Compliance	15	4.4556	.44305	.11440
Applying Internal Audit	15	4.6667	.35635	.09201
Applying Quality Assurance	15	4.7778	.46576	.12026
Embedded Internal Controls into systems	15	4.8667	.35187	.09085
Enforced internal Controls through people	15	4.6667	.48795	.12599
Implement Segregation of Duties	15	4.4667	.44186	.11409
Total	15	4.5958	.31769	.08203

Table 7: One-Sample Test

	Test Value = 3					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Applying integrated Governance, Risk Management and Compliance	12.724	14	.000	1.45556	1.2102	1.7009
Applying Internal Audit	18.114	14	.000	1.66667	1.4693	1.8640
Applying Quality Assurance	14.783	14	.000	1.77778	1.5198	2.0357
Embedded Internal Controls into systems	20.546	14	.000	1.86667	1.6718	2.0615
Enforced internal Controls through people	13.229	14	.000	1.66667	1.3964	1.9369
Implement Segregation of Duties	12.856	14	.000	1.46667	1.2220	1.7114
Total	19.455	14	.000	1.59583	1.4199	1.7718

As it shown in above tables, Jordanian banks apply integrated governance, risk management and compliance which provide visibility; knowledge across compliance to address legal, ethical and reputational risks. Also, the Jordanian banks apply internal audit which establishes the validity and reliability of information to provide a clear understanding of capability, quality and value of the bank. Those banks also apply quality assurance which means that they take care of their employees and customers' satisfaction in order to evaluate the internal system. Furthermore, the dynamic of internal controls are enforced by embedding those controls into computerized system, this means that the Jordanian bank has a technology that eases the process for people working at the banks for monitoring compliance, report issues and noncompliance across their bank. Also, Jordanian banks embedded internal controls into their organization culture to assure that policies are in place. Segregation of duties is embedded in Jordanian banks which provide an assurance that no single individual has the authority to execute two or more conflicting sensitive transactions

Result

Enterprise risk management, internal audit, quality assurance. Also, applying internal controls through the culture of the bank and people, embedding them into computerized systems and processes that being done with segregation of duties. All that can help in mitigating compliance risks efficiently and effectively.

The findings have revealed that Jordanian banks apply integrated internal controls through its dynamic and the enforcement of those controls into systems, people, and processes in order to mitigate and deal with compliance risks that could be facing those banks which will enhance the bank's performance and adding value

Recommendations

Researcher recommend that internal control systems should be applicable and easy to understand, incentives should be made to employees that act in compliance with the internal controls, and banks should make rotation from time to time to positions that are able to be rotated in order to break the routine for employees and to notice if there is any error that was made by an employee to consist with compliance.

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Appendix A- Questionnaire

Dear Respondent
Greetings
The researcher is conducting a field study entitled Internal Controls in Jordanian Banks and Compliance Risk s listed in Amman Stock Exchange , You are kindly requested to answer the questions attached , knowing that that all answers will be treated confidentially , and for scientific research purposes only

Section 1: Please check below to consent on your agreement to fill this survey

AGREE	**[ ]**	**DISAGREE**	**[ ]**

Age	[ ] 21 - 30	[ ] 31 - 40	[ ] 41 - 50	[ ] Over > 50

Job Title	

Working Experience	[ ] Less =< 1 year	[ ] 2 - 5 years	[ ] 6 - 10 years	[ ] Over > 10 years

Education	[ ] High School or Less	[ ] Bachelors	[ ] Masters	[ ] Doctorate

Working Hours	[ ] Less =< 20	[ ] 21 - 30	[ ] 31 - 40	[ ] More than > 40

No.		Yes	No
1	Does your bank have a mission statement?		
2	Has your bank documented all internal policies and procedures that related to performing all significant administrative processes?		
3	Are these policies and procedures periodically reviewed and up to date?		
4	Does your bank have an organizational chart that defines lines of authority and responsibility?		
5	Is the organizational chart up to date?		

Section 2: Likert scale questions

Strongly Disagree (SD-) * Disagree (D) * Neutral (N) * Agree (A) * Strongly Agree (SA+)

No.	Statement	SD -	D	N	A	SA +
1	Your bank applies integrated governance, risk management and compliance (GRC)					
2	Senior management set expectations for business operations and internal controls					
3	It is the responsibility of the senior management for identifying and managing risks with compliance to processes and systems					
4	Management level has the responsibility for defining policies, processes and procedures for governance, risk management and compliance (GRC)					
5	Management level monitors new and emerging risks and vulnerabilities					
6	Management tracks progress and communicates with the board of directors					
7	The internal auditors provide assurance to the board about the management's performance and duties					
8	The internal auditors have full access to all books, records, and personnel within the bank					
9	The internal auditors frequently review submitted reports regarding compliance					
10	Your bank concerns about quality assurance					
11	Your bank concentrates on business risk assessment and continuous improvement of value					
12	Your bank also takes care of employees and customers' satisfaction from their feedback					
13	Your bank has embedded internal controls into a computerized system					
14	Sufficient training opportunities are provided by your bank to improve employee's work related competencies in accordance with the bank's Program					
15	Responsibilities are divided among staff members (so that no single employee has the authority to execute two or more conflicting sensitive transactions) thereby maintaining appropriate segregation of duties					
16	If segregation of duties is not practical, supervisory oversight exists at any level over these conflicting sensitive transactions					