

THE RELATIONSHIP BETWEEN KNOWLEDGE-BASED ECONOMY AND FINANCIAL REPORTING QUALITY ON FINANCIAL STATEMENT COMPARABILITY

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ABSTRACT

Purpose –The present study aims to assess the relationship between the indices of innovation, training and human resources, information infrastructure, communication, and economic and institutional regimes and financial statement comparability and financial reporting quality of Iranian and Iraqi firms.

Design/methodology/approach – This paper's method is descriptive-correlations based on published information from listed firms on the Stock Exchange during 2012-2017 by using a sample of 35 firms for Iraq and 174 firms in Iran. The method applied in hypothesis testing is linear regression using panel data.

Findings –The obtained results indicate a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, and institutional and economic regimes and financial statement comparability and financial reporting quality for both countries. This implies that financial statement comparability and financial reporting quality increase innovation, training and human resources, information infrastructure, connections, and institutional and economic regimes.

Originality/value – Since the present study carried out synthetically in the emergent financial markets of Iran and Iraq to figure out the effect of indices of innovation, training and human resources, information infrastructure, connections, and institutional and economic regimes on financial statement comparability and financial reporting quality, it can provide useful information in this field.

Keywords: Knowledge-Based Economy, Financial Statement Comparability, Financial Reporting Quality

INTRODUCTION

Having an economy based on knowledge and information can help us achieve power and attract more business firms' capital. Hence, today business firms are fully aware of the role and significance of this factor in elevating their position and have taken a decisive step to secure that because the effect of using knowledge and then utilizing that in different areas is evident. Business firms attempt to exploit that to their benefits, so they, and the countries, currently try to employ knowledge in their economic sections and enhance their performance. Within the past decades, the topic of knowledge and the information-based economy is in vogue, and the significance of that is realized in a short period, such that several patterns and definitions are introduced, the most important of which is the index of a knowledge-based economy by the World Bank. Such information, which is presented at the business level, should also have a series of characteristics. In general, comparability based on the prevailing conceptual framework of the Financial Accounting Standards Board and International Accounting Standards (2008) includes qualitative characteristics of information that enable the users to detect and assess the differences and similarities between two sets of economic phenomena. The significance of financial statement comparability is to the

point that the conceptual declaration No. FASB 8 states that one of the most important reasons for the need for financial reporting standards is the growth of financial information comparability by the business firms, and it is also expressed in the Iranian financial reporting concepts (2011) that if the information is related and reliable, its usefulness would be limited in case of non-comparability and non-understandability. Financial statement comparability has several advantages (including information quality enhancement, stock liquidity, turnover increase, and the decline of benefits derived from using confidential information) (DeFranko et al., 2011; Barth et al., 2013; Brochet et al., 2012).

Furthermore, comparable accounting information is like an effective supervisory factor that can be used for controlling and limiting the accrual earnings management (Yu, 2008; Sohn, 2016). Accounting literature has presented numerous reasons for confirming such a view. For example, comparable accounting information has declined the cost of collecting and processing information for financial users, investors, and analysts and legal institutions and enable them, by comparing the financial information of the desired firm with other similar firms, to better recognize any manipulation in accounting figures and accruals of business firms by managers (Gong et al., 2013; Engelberg et al., 2016). This will enhance the quality of financial reporting because financial reporting's primary goal is to show the economic effects of financial events and operation on a business firm's performance and condition and help the outsiders make better decisions (Wolk et al., 2001). According to declaration 1 of the Financial Accounting Standards Board, financial accounting concepts No. 1 (1980), financial reporting's primary goal is to provide high-quality information about expected cash flows of firms for investors to make wise decisions. Hence, since many investors' decisions rely on high-quality financial reporting, it is of special significance, so realizing the determining factors in financial reporting quality is important. Hence, a knowledge-based economy is used in this paper as a factor that can contribute to financial reporting quality to specify whether or not such a relationship is significant because the quality of financial reporting relies extensively on the type of presented information. Since the knowledge-based economy depends on knowledge-based information, it is expected from such an economy to enhance financial reporting and financial statement comparability at the business firm level.

Hence, by assessing the topical literature, the present study focused on the following topics:

First, since no study carried out, so far, in this field of accounting, this paper can contribute to the development of science and knowledge and fill the existing gap in the literature. Second, given the significance and the role information plays in the current world, analyzing the utilization of commercial units and, at a broader level, countries from the knowledge-based economy is of utmost importance. Because, in the current world that spins around knowledge and information technology, organizations, institutes, and business units have the first hand to be in line with knowledge and employing human and cognitive resources instead of physical power. Hence, evaluating such a phenomenon in a rising market like Iran with its peculiar economic condition can provide valuable information for academics, analysts, and regulators. So in this paper, the concept of comparability considers the accounting system as a result of economic events of financial statements, and two accounting systems are comparable economically when they perform similar activities and issue related reports. Therefore, the chance of comparability is higher in similar firms in the same market and firms with a standard line of business within a particular industry.

Moreover, firms' comparability with related income (including accrual quality, earnings forecast, and smoothed profits) is higher than other firms. Thus, the present study's innovation is that it presents a bunch of evidence from the benefits the comparability provides for analysts, investors, and creditors. Second, it shows how a knowledge-based economy can contribute to comparability and following that the quality of financial reporting because the predictability of such a phenomenon on firms' comparability procedure is vital for financial statement users who make their most important economic decisions based on such a phenomenon.

Theoretical Principles and Hypothesis Development

It is necessary for the information providers and disclosures to completely disclose all the firm's significant realities to enable the users to decision-making and prevent their deviation. Hence, the manner of disclosure of annual financial reporting is essential and should reflect the information related to a business firm's economic realities in the form of a transparent, significant, and comparable method. In other words, these reports should be readable and free of any complicated words to allow the users to review them and decide. On the other hand, such information should be comparable to firms in the same business line and the rivals. The higher these two features in financial statements, the higher is their quality. These financial statements are the most critical information source of decision-making for the users. Using new technologies, specialized labor force, improving economic structures, and increasing efficiency, a knowledge-based economy influences the growth of information values proposed by the managers, the manner proposing information, and financial statement figures. In this type of knowledge-based economy, all business unit sections are under the influence, the efficiency is increased, earnings volatilities are declined, and return is increased, consequently. Hence, that in which way does the growth of knowledge and information direct the comparability and financial reporting quality is essential because such an approach is in vogue in Iran, and ignoring that may seriously hurt the value of business unit stocks and subsequently lead to irreparable damages to the business units in the age of technology and knowledge.

On the other hand, a knowledge-based economy means the production, distribution, and utilization of economic information based on knowledge to benefit socioeconomic conditions used by people, firms, and non/business units (Dahlman & Anderson, 2000). Hence, such a growth in the knowledge-based economy, which is primarily based on knowledge and information, can cause business firms to pay special attention to their disclosed information, enhancing financial statement information comparability. In the following, we will discuss the relationship between these two variables.

Financial Statement Comparability

Accounting scholars consider financial statements as designing economic events using the accounting figures (De Franco et al., 2011). Considering that, two firms have comparable statements when the manner of such a design is the same. In other words, if firms report the same accounting figures for economic events and different ones for different economic events, we will have comparable financial statements. By aligning with fundamental qualitative characteristics of financial information, we can achieve, to some extent, the comparability. For example, a degree of comparability will be obtained when different firms regulate an honest presentation feature for reflecting similar events. An economic event, however, can be presented honestly, but with different methods. Permitting different accounting methods for reflecting the same economic event will lower the comparability (Financial Accounting Standards Board). The lack of comparability can be broad due to generally accepted accounting principles, applying these principles by firms, and the transaction structure. Firms can set their transaction structure to show those characteristics that lead to the accounting method. Firms can select different accounting methods that are certified by accounting standards or judge the estimation of accruals. Such selections can lower the comparability. Accounting standards, compilers attempt to provide the standards to lead to the growth of comparability. Besides, other qualitative features proposed in conceptual declaration No. 8 also have the same objective. However, it is expected from firms' financial statements to have a considerable difference in the amount of comparability (Kim et al., 2013).

Several methods exist to assess the concept of comparability. Presently, the conventional method for measuring this concept is to apply the model of De Franco, et al., (2011). This model is established based on the relationship between earnings and stock return. In this approach, the stock return is an index for reflecting economic realities, and accounting profit is an index for indicating the accounting system's output. This model, however, has some errors. Kalogirou (2013) refers to a

condition where De Franco et al. proposed index cannot show the comparability appropriately. He states that in situations where the accounting system presents the information with delay and firms have different capital costs, the said index has less comparability. Neel (2017) also declares that return can reflect capital cost differences that do not necessarily mirror profit. De Franco, et al., (2011) model merely uses the profitability criteria, and stock return is only reflective of shareholders' interests and does not consider other creditors. This is while the comparability of financial statements is for all accounting information users. The other problem of De Franco, et al., (2011) method is that returning as the reflection index for economic events may cause severe the separation of economic similarities from comparability (Kim et al., 2013).

On the other hand, according to the common conceptual framework of the financial accounting standards board and international standards board (2010), comparability is considered as one of the qualitative characteristics for enhancing the quality and qualitative feature of information can enable the users to realize the similarities and differences of two sets of economic phenomena. The users of financial statements should be able to compare the business firm's financial statements to recognize the process of change in financial status, financial performance, and financial flexibility of the business firm. The users should also compare the business firms' financial statements to assess the financial status, financial performance, and financial flexibility of them. Hence, it is necessary to measure and present the effects of transactions and other similar events inside the business unit. During the time for that business unit with consistency and procedural coordination should be regulated in terms of measurement and presenting related topics.

The need for comparability should not be mistaken for absolute uniformity, and such a feature should not prevent the application of improved accounting methods. Whenever the used accounting policy is not adaptable to the qualitative features of "relatedness" and "reliability", continuing to use that policy would not be appropriate for the business unit. Similarly, in case of alternative strategies of "more related" and "more reliable", it would not be suitable for the business firm to no change the accounting policies. De Franco et al. (2011) propose two definitions from financial statement comparability as follows:

First, two accounting system firms are comparable if they provide similar financial statements for an assumed economic event set.

Second: firms with correlated economic events and similar accounting of these events will have correlated financial statements.

Financial Reporting Quality

High financial reporting quality will, to a great extent, lower the information asymmetry between firms and investors and also limits the motivations of managers for participation in those activities that have a low and negative value (Chen et al., 2011). Moreover, Gaio & Clara (2011) declare that high-quality accounting information would reduce information asymmetry, increasing investment efficiency. The presence of information asymmetry causes the emergence of some problems, including ethical risks and inappropriate selection. Akerlof, et al., (1970) declare that information asymmetry will increase the chance of false selection, and this will occur for people before making transactions in the market. Information asymmetry increases the risk of incorrect selection of liquidity suppliers, causing the decline of price announcements and, finally, the drop of liquidity (Bharath et al., 2008). According to the agency theory, financial reporting quality and disclosure are two primary control mechanisms for debilitating information asymmetry and information risk and better supervising managers' performance (Bushman & Smith, 2001). Firms with high reporting quality are less likely to waste investment in capital items and provide a framework for that.

Further, such firms are extremely stable and different from other firms (Biddle & Hilary; Verdi, 2006; Verdi, 2006; Beatty et al., 2009; Biddle et al., 2009). The high quality of accounting information can be one of the ways to prevent and lower the earnings management because it is believed that firms with high reporting quality benefit from information content and a high-quality profit (Biddle et al., 2009). Wallace & Naser (1995) carried out in Hong Kong study on the

comprehensive assessment of mandatory disclosure in annual reports of firms and figure out that the financial reporting quality of firms audit by the four big global audit firms has a significant difference from that of the firms not audited by such firms.

Knowledge-Based Economy

Knowledge-based economy means the production, distribution, and use of knowledge-based economic information, which in addition to production and distribution, can improve the economic and social conditions through being used by individuals, companies, and commercial and non-commercial units (Dahlman & Anderson, 2000).

The term knowledge-based economy first entered economic science terminology in 1996 by the Organization for Economic Co-operation and Development (OECD). This organization is defined as the knowledge-based economy as the production, distribution, and use of economics knowledge and information. According to a report provided by the organization, 50% of this organization's member countries have been based on knowledge. However, the importance of knowledge has become evident only in recent years, resulting from a deep understanding of the impact of knowledge and growing technology in economic growth.

Since 1996, there have been several definitions of a knowledge-based economy, which will be discussed below. For example, in 2000, the Asia-Pacific Economic Cooperation (APEC) considered production, distribution, and better use of knowledge and information as the primary stimulus for growth, distribution of wealth, and employment in society and industry. According to a report presented by the organization in the same year, the countries which enjoy sustainable development are more reliable than other countries for four reasons:

1. In these countries, innovative national systems support and rapidly expand innovation and technological change.
2. In these countries, human resources have been highly developed, which means that there are high-level educational facilities in these countries and always exist throughout individuals' working lives and even more than their working life.
3. The infrastructure for information and communication technology (ICT) in these countries is robust.
4. In these countries, creative ideas and innovation in business environments are welcomed and supported.

On the other hand, Dahelman & Anderson (2000) have defined the knowledge-based economy as an economy in which, in addition to production and distribution, knowledge and information are used to improve economic and social conditions by individuals, organizations, and business units.

In 2007, Debnath suggested another definition for this term and defined it as an economic system that produces knowledge for economic growth and development and then expands it subsequently.

In 1999, the World Bank launched a project called Knowledge for Development, which helped countries move toward a knowledge-based economy. This project used 109 structural and qualitative variables for a knowledge-based economy, four main variables of which were as follows:

1. Economic and Systemic incentives
2. Innovation system
3. Education and Human Resources
4. Information Infrastructure (Smith, 2002).

Knowledge-based economy leads to creativity and innovation management and then turns them into ideas. In this way, this economy changes the economic infrastructure of a country, organization, or individual, so that the sectors related to the production, distribution, and consumption of knowledge and information such as research and development, education, and technology products, including hardware and software become more critical and replace the production, distribution, and consumption of raw materials and physical capital. In general, a

knowledge-based economy means moving the economy from physical capital to knowledge and information based on the production, distribution, and consumption of knowledge and information and its impact on various economic sectors to create wealth, growth, employment, and welfare improve social conditions.

In general, according to the definition provided by OECD, a knowledge-based economy has two main features of the modern economy:

1. In this economy, knowledge has become more important, both quantitatively and qualitatively than in the past.
2. In this economy, Information and Communication Technology (ICT) is the new economy's main engine.

The Relationship Between the Knowledge-Based Economy and Financial Statement Comparability

An economy that relies on knowledge and information greatly aids businesses in gaining more power and capital. Therefore, today's business units are aware of the role and importance of this element in raising their position and have taken a fundamental step to achieve it because the impact of applying knowledge in different areas is quite evident, and business units are also trying to use it to improve their performance. Business units and countries today are trying to use their economic sectors' knowledge and improve their performance. Thus, knowledge and information-based economy have received wide attention in recent decades so that many patterns and definitions have been introduced to it, the most famous of which is the index provided by the World Bank. This information, which is provided for business units, should also have several features. For example, this information should be comparable so that users can decide whether to hold or sell their investments based on them. On the other hand, several factors in the analysis of companies' financial information refer to the importance of comparability. According to the Stock Exchange Commission (SEC) (2000), when investors want to judge business units' financial performance, they make comparisons and judge business units' efficiency and performance by comparing investments. According to the Financial Accounting Standards Board (FASB) conceptual statement, comparability is one of the indicators of useful information. Particularly, FASB (1980) stated that investors and creditors' decisions mainly involve evaluating alternative opportunities and are not acceptable if comparative information is not available. Although accounting textbooks emphasize the importance of comparability, it has not been so far comprehensively defined, and various definitions have been provided for it in journals, articles, and textbooks of accounting. For example, FASB (2010) defined comparability as the quality of information which allows users to identify and evaluate the differences and similarities between two sets of economic phenomena. Also, FASB (1980) emphasized that more accurate identification of these similarities and differences allows analysts and users to understand better and predict economic events. Comparable business units are better tested than other companies. Besides, there is more data transfer between comparable companies. Gleason, Jenkins, & Johnson (2008) also show that the impact of the information related to a business unit's financial statements can be seen in other related companies' financial statements and operating decisions. In general, it can be said that the quality of corporate information that is comparable is higher than other companies. De Franco, et al., (2011) state that greater comparability reduces financial adjustments and allows external users to obtain more information with greater ease and lower cost. Sohn (2016) also states that comparability reduces the cost of collecting and processing information for investors, creditors, and legal entities and enables them to compare the company's financial information with other similar business units and better identify companies' manipulation' accounting figures and accruals by management. Therefore, by increasing the comparability of companies' financial statements, managers are less motivated to apply accruals-based earnings management and, in turn, turn to real earnings management. Because it has a judgmental nature and is much more difficult to discover (Sohn, 2016). On the other hand, the comparability of financial statements greatly improves the quality of financial reporting because financial reporting's main purpose is to show the economic

effects of financial events and operations on the business unit's performance and status. In this way, it helps external users to make the best decision (Wolk et al., 2001). On the other hand, according to the Financial Accounting Concepts (No. 1987), increasing the quality of financial reporting also optimizes users' financial statements decisions. Knowledge and expertise are among the most important items affecting the preparation of the information. Financial reporting is also the result of gathering this information. Thus, knowledge and expertise and even information technology in reporting financial statements can bring very beneficial business unit results. Therefore, based on what was said above, in this study, we expect that an economy, which relies on knowledge and expertise (knowledge-based economy), can positively impact the quality of financial reporting and comparability of financial statements. Therefore, the research hypotheses are as follows:

H₁: There is a significant relationship between the knowledge-based economy and financial reporting quality.

H₂: There is a significant relationship between the knowledge-based economy and financial statement comparability.

METHODOLOGY

The method of data collection and analysis is causal-correlational. The statistical population of the present study includes all listed firms on the Tehran Stock Exchange during 2012-2018. The screening method is used for sampling, and finally, the statistical sample of the study is selected after applying the following conditions:

For homogeneity of the statistical population of the study, the following conditions are considered in the statistical population:

- Audited financial information about each firm should be available,
- Firms should be active in the Stock Exchange during 2012-2018, and;
- Firms should not be affiliated with banks and financial institutions (investment firms, financial intermediaries, holdings, and banks).

Total number of companies (Iraq)	Eliminated companies in total (Iraq)	Total number of companies (Iran)	Eliminated companies in total (Iran)	Description
Total companies listed on the Tehran and Iraq Stock Exchange		395		123
Elimination of financial intermediation, financing, insurance and investment	88		72	
The removal of companies that have entered the stock exchange during the research period	24		12	
Removed due to lack of access to information	109		4	
Statistical community		174		35

Moreover, the data analysis method is cross-sectional and year-by-year (panel data). In this paper, the multivariate linear regression method is used for hypothesis testing. Descriptive and inferential statistical methods are used for data analysis. The frequency distribution table is used to describe data and test the hypotheses at the inferential level, the F-Limer, Hausman, Normality, and Multivariate Linear Regression tests are employed. To examine the hypotheses, the following models are analyzed using the Stata 14 Software.

Research Model

In this paper, a model (1) is used for assessing the relationship between the knowledge-based economy and financial statement comparability, and model (2) is used for assessing the relationship between the knowledge-based economy and financial reporting quality:

Model (1)

$$ACOMP_{it} = a_0 + a_1lnis_{it} + a_2lnes_{it} + a_3lneir_{it} + a_4lniact_{it} + a_5OWN_{it} + a_6ROA_{it} + a_7Ret_{it} + a_8Growthsales_{it} + a_9age_{it} + a_{10}size_{it} + a_{11}LEV_{it} + a_{12}IINV_{it} + a_{13}Year_{it} + a_{14}Industry_{it} + \varepsilon_{it}$$

Model (2)

$$FRQ_{it} = a_0 + a_1lnis_{it} + a_2lnes_{it} + a_3lneir_{it} + a_4lniact_{it} + a_5OWN_{it} + a_6ROA_{it} + a_7Ret_{it} + a_8Growthsales_{it} + a_9age_{it} + a_{10}size_{it} + a_{11}LEV_{it} + a_{12}IINV_{it} + a_{13}Year_{it} + a_{14}Industry_{it} + \varepsilon_{it}$$

Operational Definitions of Research Variables

Dependent Variables

Financial statement comparability (ACOMP)

The model of De Franco et al. (2011), which is constituted from accounting profit and stock return, is used as follows:

Based on this model, the accounting system of a firm is a function that converts the economic events to financial reports, and the higher the similarities between the accounting functions of the two firms, the higher is the comparability of financial statements.

Eq. 1-4- financial statement comparability model

$$\begin{aligned} E(NI)_{iit} &= \alpha_i + \beta_1 RET_{it} + \varepsilon \\ E(NI)_{ijt} &= \beta_{ij} + \beta_j RET_{it} + \varepsilon \\ ACOMP_{ijt} &= -\frac{1}{4} \sum |E(NI)_{iit} - E(NI)_{ijt}| \end{aligned}$$

ACOMP_{ijt}: financial statement comparability of the firm i^{th} and the firm j^{th}

E(NI): expected firm profit

E(NI)_{ijt}: expected industry profit

RET: 6-month stock return

Financial reporting quality

In this paper, financial information accuracy is used as a financial reporting quality:

Financial information accuracy: Bharath, et al., (2001) state that financial information accuracy is one of the determining variables for financial reporting quality that is calculated according to the following equation:

$$\Delta WC_{it} = a_0 + a_1 CFO_{it} + a_2 AR_{it} + a_3 INV_{it} + a_4 AP_{it} + a_5 DEPR_{it} + a_6 OTHER_{it} + \varepsilon_{it}$$

CFO: cash flow obtained from the operation

AR: change in accounts receivable

INV: change in inventory

AP: change in accounts payable and deferred liabilities

DEPR: depreciation cost of fixed and intangible assets

OTHER: net other accruals which are calculated as follows:

$$OTHER_{it} = OP - (CFO + \Delta AR + \Delta INV + \Delta AP - DEPR)$$

Where

OP: is the operating profit of the business firm

ε_{it} : the number of errors that is assumed to have 0 mean and fixed variances. The experimental criterion for measuring financial reporting quality is the absolute value of errors. The smaller the size of errors, the higher is the quality of financial reporting.

Independent Variable

Knowledge-based economy

The index is introduced in 1998 by the World Bank with five subcategories, and following the elimination of the performance index in 2008, 4 indicators are defined as the knowledge-based economy. Vinnychuk et al. (2014) make a change in these components and used the information technology and high-tech goods criteria. In this paper, the used components in the study of Vinnychuk et al. (2014) are used for the indices of institutional regimes and innovation systems. In the human resources section, however, due to lack of access to the data used in the study of Vinnychuk et al. (2014), the components of human training of the World Bank are used. Since, in most of the studies, the criterion of training costs is used, knowledge-based economy costs are also used in this index. In this paper, due to data unavailability on personal computers, four components are used instead of 5 components of Vinnychuk et al. (2014). The summary of such components and indices is presented in the following:

Innovation system indicators (Inis)

Patent request of residents

Applications that individuals offer to create a new product, process, or way of doing something, a unique solution, or fix previous methods' problems. Such requests also enjoy a 20-year exclusive advantage. The unit of this variable is number, and its extraction source is the World Bank.

Non-residents' Patent Application

Non-citizens make the non-resident patent in a society with similar privileges and definitions as resident patents. The source of extraction of this variable is the World Bank.

Research and Development Researchers

This indicator refers to the number of researchers and professionals who present or develop new concepts, tools, and theories, along with new operational methods. Therefore, in this section, research, and development, including primary, applied, and experimental study. The source of extraction of this variable is also the World Bank.

Scientific and Technical Articles

It refers to articles published in Physics, Chemistry, Mathematics, Medicine, Environment, Biomedicine, Engineering and Technology, and Earth and Space Sciences. The source of extraction of this variable is also the World Bank.

Research and Development Costs

It refers to the percentage of Gross Domestic Product (GDP), which includes the capital and current expenditures in four sectors of corporate, government, higher education, and private education. This variable is a percentage of GDP whose extraction source is the World Bank.

GRES

It is the gross domestic product incurred in the research and development sector. This variable's unit is the purchasing power of the dollar, and its source of extraction is the following website: uis.unesco.org.

Hi-Tec Produced Goods

It means producing products with high research and development intensity. Its extraction source is the World Bank.

Hi-Tec Exported Goods

It means exporting products with high research and development intensity, and its source of extraction is also the World Bank.

Exporting ICT Goods

It refers to the export of information and communication technology goods, and the source of its extraction is the World Bank.

Indicators of Education and Human Resources (Ines)

Enrollment in high school

It is the number of people who have enrolled in high school, regardless of age. It is calculated in proportion to the total population. Which is in percentage and is extracted from the World Bank.

Enrollment in Average High School

It is the same as the previous index and is extracted from the World Bank and is calculated in terms of percentage and regardless of individuals' age.

Educational Expenses

Expenditures made by the government in education, which are in percentage and are also extracted from the World Bank.

Adult education rate

It refers to individuals over 15 with a minimum of literacy to read and write short stories about everyday life. It is extracted from the World Bank based on a percentage of the population over 15 years old.

Information and Communication Infrastructure Indicators (IniacI)

Fixed bandwidth

It refers to a fixed-bandwidth subscription for fast public Internet access. Its unit is bit by the second and is also extracted from the World Bank.

Phone lines

It includes complete active telephone lines and public telephones. Its unit is per 100 individuals, and its source is the World Bank.

Mobile subscriptions

It refers to active mobile phone lines. Its unit is per 100 individuals, and its source is the World Bank.

Internet users

It refers to the number of users who have used the Internet in the last 12 months. Its unit is per 100 individuals, and its source is the World Bank.

Indicators of Economic and Institutional Regimes (Ineir)

Government effectiveness index

This index shows the quality of public services, the quality of civil services, and the amount of independence from political pressures, designing quality, and implementing the government's committed policy and credit to such systems. This variable's unit is a score between -2.5 and +2.5, and its source is also the variable of good governance website in the World Bank.

Corruption control index

For computing this index, a checklist is used for assessing the components. These components include bribes, appointing relatives and friends, insignificant office jobs, extortion, and embezzlement. There is always a direct relationship between government involvement in economic activities and the amount of corruption. The primary weapon against corruption is transparency, so that this factor can be considered a rapid remedy in supervisory methods. The score of this index is between 0 and 100.

Index of the rule of law

This index shows the amount of trust in social regulations, especially the quality of contract implementation, ownership rights, police, courts, and the probability of crime and violence. This variable's unit is a score between -2.5 and +2.5, and its source is also the variable of good governance website in the World Bank.

Law quality index

This index shows the government's capabilities for collecting and implementing sound and regulative policies that enhance the private section's chance of development. This variable's unit is a score between -2.5 and +2.5, and its source is also the variable of good governance website in the World Bank.

Economic freedom index

Nontariff barriers score between 0 and 20, where 0 shows no limitation in international commerce, and 20 shows the highest amount of restriction.

In this study, the World Bank calculation is used to assess the index of the knowledge-based economy. In this method, the following procedures are applied respectively:

- 1- The raw data were initially gathered for each component,
- 2- Data were sorted based on their absolute value (raw data) from larger to smaller,
- 3- Assess how many countries with the same or fewer values are placed after a certain country based on the component, and;
- 4- The following formula is applied in each country.

$$Normalized(U) = 10 \frac{N(W)}{N(C)} - 5$$

Where

U is the collected raw data, NC is the total number of sample countries in the study, and NW is the number of countries with a rank lower or equal to a country in a certain variable.

- 1- A figure between 0 and 10 will be obtained in each country by calculating the above formula,
- 2- In the case of following the above procedures, the significance of difference will be diminished for each component in variables, and data of each index will be achieved by calculating the geometric mean of all components.

Control Variables

Ret: stock return that is equal to the market value of the current year minus that of the previous year divided by market value of the last year;

Growthsales: sales growth that is equal to the sales of the current year minus that of the previous year divided by sales of the past year;

Age: firm age that is equal to the time interval between data of establishment and the year understudy

IINV: institutional shareholder, the number of shares available to investors, public institutions, banks, insurance, and governmental institutions

Size: firm size, the natural logarithm of firm assets

LEV: financial leverage is equal to total liabilities divided by total assets

ROA: Return on assets is equal to net profit divided by total assets

OWN: major shareholder, shareholders with 5% ownership and higher 1, otherwise, 0

Industry: dummy variable for industry

Year: dummy variable for year

Data Analysis

Descriptive Statistic

Variable	obs	Mean	Std.dev	Min	Max
FRQ	1002	-0.188	0.345	-3.497	-0.0001
ACOMP	1002	1.783	0.296	0.368	4.303
INIS	1002	9.995	2.906	6.035	17.343
INES	1002	3.365	1.315	1.028	4.449
INIACL	1002	11.767	4.296	3.474	14.712
INEIR	1002	2.074	0.087	1.953	2.366
ROA	1002	0.096	0.209	-3.181	1.242
RET	1002	43.596	94.654	-64.485	859.498*
Age	1002	37.484	13.757	10	70
GRW	1002	1.354	29.075	-5.506	902.671*
LEV	1002	0.547	0.373	0.003	4.166
SIZE	1002	13.429	2.13	9	19.374
INVE	1002	0.274	0.173	0	0.934
BIG1	1002	0.349	0.476	0	1
AIS	1002	0.495	0.5	0	1
LOSS	1002	0.145	0.352	0	1
BSF	1002	0.753	0.431	0	1
BSI	1002	0.841	0.365	0	1
Mchange	1002	0.263	0.441	0	1
Mtenure	1002	3.793	3.066	1	15

The sales growth and return values are 859.498 and 902.671, showing that the study's general sample is made of Iranian and Iraqi firms. Since hotels are also included in Iraqi firms, the maximum of these two variables is higher.

Unit Root TEST

By assessing the unit root of research data, all variables are at no unit root level (stationary). The obtained LM statistic for each variable is reported in Table 3.

variable	Level	variable	Level
Acomp	0.317	FRQ	0.945
Lnes	0.175	Lnis	0.502
Lneir	0.192	Lniacl	0.311

Ret	0.803	Roa	0.625
GRW	0.125	Age	0.202
Size	0.902	LEV	0.695
Big1	0.738	Inve	0.752
Loss	0.211	AIS	0.781
Bsi	0.111	Bsf	0.293
Mtenure	0.159	Mchange	0.151

Collinearity Test

As depicted in Table 4, given the obtained VIF statistic, which is less than 10 for all variables, there is not collinearity in model variables, so there is no problem concerning collinearity in regression.

Variable	VIF	1/VIF
Iniac1	6.55	0.152
Inis	3.48	0.287
Size	3.18	0.314
BSF	2.62	0.381
Ineir	2.03	0.491
BIG1	1.67	0.597
AIS	1.65	0.607
ROA	1.57	0.638
LOSS	1.54	0.650
Mtenure	1.54	0.650
Mchange	1.38	0.722
LEV	1.33	0.752
Inve	1.18	0.845
Ines	1.15	0.868
BSI	1.11	0.903
RET	1.09	0.916
Age	1.08	0.927
GRW	1.06	0.942
Mean VIF	1.96	

Sensitivity Analysis

	FRQ	ACOMP	Inis	Ines	Ineir	Iniac1	ROA	RET	GRW	Age	SIZE	LEV	INVE	BIG1	AIS	LOS	BSF	BSI	Mchange	Mtenure
FRQ	1																			
ACOMP	0.009	1																		
Inis	-0.256	-0.127	1																	
Ines	-0.145	0.069	0.247	1																
Ineir	-0.162	-0.081	0.699	0.221	1															
Iniac1	0.384	0.107	-0.719	-0.328	-0.452	1														

ROA	0.10 7	0.17	- 0.24 5	- 0.07 9	- 0.11 7	0.29 4	1													
RET	0.03 9	0.97 9	- 0.15 5	0.04 5	- 0.10 8	0.17 5	0.19 5	1												
GR W	- 0.23 5	0.08 1	0.02 3	0.04 1	0.01 8	- 0.11 8	0.05 9	0.06 6	1											
Age	- 0.00 2	-0.05	- 0.11 6	- 0.02 6	- 0.02 6	0.14 7	- 0.03 6	0.03 3	- 0.04 9	1										
SIZE	0.32 7	0.03 7	- 0.52 8	- 0.24 3	- 0.32 5	0.73 5	0.27 8	0.08 6	- 0.10 2	0.06 1	1									
LEV	- 0.11 2	- 0.00 7	-0.15	0.02 6	- 0.13 4	0.03 4	- 0.33 1	- 0.02 6	- 0.00 4	0.06 7	0.05 9	1								
INV E	- 0.03 9	0.00 7	0.12 1	0.06 7	0.07 1	- 0.18 2	- 0.12 1	- 0.01 4	- 0.02 1	0.01	- 0.30 5	0.08 7	1							
BIG 1	- 0.06 5	- 0.02 3	0.17 3	0.06 5	0.09 8	0.24 4	0.11 4	0.05 2	- 0.05 2	0.08 1	0.01 6	0.18 9	0.16 3	1						
AIS	- 0.09 8	- 0.05 6	0.17 8	0.08 1	0.13 9	0.20 4	- 0.01 7	0.06 5	0.04 8	- 0.00 1	0.15 2	0.08 4	0.02 2	0.52 7	1					
LOS S	- 0.14 5	- 0.10 8	0.23 3	0.11	0.15 1	- 0.37 4	- 0.50 4	0.14 6	- 0.07 5	0.05 9	- 0.33 6	0.23 6	0.11 7	0.15 9	0.03 4	1				
BSF	0.35 9	0.08 7	- 0.56 6	- 0.26 5	- 0.34 9	0.07 82	0.25 4	0.14	0.10 2	0.15 2	0.56 3	0.03 1	- 0.10 7	- 0.17 7	- 0.13 9	-0.3	1			
BSI	0.00 3	0.04 1	- 0.16 8	- 0.12 2	- 0.12 7	0.24 4	0.02 2	0.05 3	0.00 5	0.06 3	0.15 1	0.12 9	0.08 2	- 0.08 3	- 0.06 8	-0.08	0.19	1		
Mch ange	0.05 4	- 0.02 9	- 0.03 7	- 0.00 9	0.00 3	0.06 4	- 0.07 8	- 0.02 9	- 0.04 8	0.03 2	0.02 9	0.03 5	0.01 4	0.11 2	0.00 8	0.09	0.03	-0.03	1	
Mten ure	- 0.04 5	- 0.00 8	0.07 1	0.05 1	0.04 9	- 0.15 4	0.07 5	- 0.01 9	0.07 2	- 0.09 2	- 0.09 7	- 0.16 1	0.00 3	- 0.21 9	- 0.04 1	-0.05	-0.09	0.03	-0.51	1

This test, referred to as sensitivity analysis, examines the relationship between the model's used variables two-by-two, the above matrix's output. This matrix's diameter is always equal to 1 since it assesses the correlation between the variable and itself. This means total correlation and the closer these figures for 1. The more is the correlation, and the closer to 0, the higher is the chance of no correlation. The correlation interval is between -1 to +1, where negative figures indicate inverse correlation, and positive figures show a direct correlation.

The Results of Model Estimation (1)

VARIABLE (ACOMP)	Model (1)		Model (1) Iran		Model (1) Iraq	
	Coef.	p-value	Coef.	p-value	Coef.	p-value
Inis	0.007	0.013	0.146	0.045	0.006	0.010
Ines	0.001	0.000	0.015	0.000	0.029	0.001
Ineir	0.010	0.000	0.211	0.034	0.069	0.008
Iniac1	0.006	0.027	0.038	0.029	0.004	0.000
ROA	0.002	0.057	0.981	0.000	0.022	0.000
RET	0.003	0.000	0.003	0.000	0.002	0.000
GRW	0.052	0.046	0.149	0.000	0.001	0.000
Age	-0.007	0.000	-1.486	0.000	-0.004	0.055
SIZE	0.083	0.064	-0.002	0.000	0.013	0.001
LEV	0.008	0.111	0.005	0.010	0.045	0.034
INVE	0.040	0.059	-0.015	0.005	5.357	0.000

BIG1	0.013	0.061	0.015	0.000	0.074	0.017
AIS	-0.010	0.093	-0.035	0.036	-0.011	0.000
LOSS	0.056	0.001	0.097	0.105	0.059	0.125
BSF	-0.006	0.037	0.014	0.000	-0.029	0.000
BSI	0.043	0.054	0.009	0.000	0.054	0.031
Mchange	0.056	0.027	-0.004	0.041	0.083	0.064
Mtenure	0.007	0.074	-0.008	0.076	0.019	0.083
-con	1.575	0.000	-63.894	0.000	-0.273	0.719
R-SQ	0.9701		0.3444		0.2915	
R-SQ2	0.9223		0.0263		0.0544	
P-value model	Wald Chi 2 (18)=2.13e+06		F (17,516)=15.95		F (15,85)=2.33	
P-value model	Prob>chi 2=0.000		Prob>F=0.000		Prob>F=0.0077	
F-limer	F (157,615)=1.20		F (123,516)=1.53		F (33,85)=1.45	
F-limer	Prob>F=0.0664		Prob>F=0.000		Prob>F=0.0865	
Huassman	Wald Chi 2 (18)=23.45		Wald Chi 2 (17)=130.64		Wald Chi 2 (15)=39.05	
Huassman	Prob>chi 2=0.1740		Prob>chi 2=0.000		Prob>chi 2=0.0006	

According to the above table results, the F-Limer Test's level of significance for the model (1) for all three modes is 0.0664, 0.000, and 0.0865, which is higher than the 10 % significance level. So research data are panel based on this test and are not pooled. Moreover, according to the Hausman Test results, the fixed-effect model is used in Iran and Iraq for these models, and the random-effects model is used for the general model. Moreover, according to the tests results, the p-value of all models is 0.00, which shows that all models enjoy the required signatures.

Besides, as shown in the table, hypotheses testing results show a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, economic and institutional regimes, and financial statement comparability. Because p-values of them are 0.013, 0.000, 0.000, and 0.027, respectively, smaller than the 5% significance level and their coefficients are respective positive values of 0.007, 0.001, and 0.010 0.006 showing a positive and significant relationship exist between these variables and financial statement comparability. The results are in line with the results of model estimation for Iran and Iraq because the p-value of these variables for the Iranian firms is 0.045, 0.000, 0.034, and 0.029 and 0.010, 0.001, 0.008, and 0.000 for Iraqi firms. Since it is lower than the 5% significance level, the relationship with financial statement comparability between these two countries is confirmed. Since their coefficients are positive, this relationship is positive and direct, implying that by increasing these indices, financial statement comparability will increase both in Iran and Iraq.

Results of model estimation (2)

VARIABLE (FRQ)	Model (2)		Model (2) Iran		Model (2) Iraq	
	Coef.	p-value	Coef.	p-value	Coef.	p-value
Inis	0.003	0.000	0.016	0.050	0.004	0.000
Ines	0.023	0.006	0.003	0.000	0.007	0.008
Ineir	0.005	0.028	0.069	0.008	0.004	0.000
Iniacl	0.023	0.007	0.018	0.000	0.015	0.000
ROA	-0.122	0.044	-0.151	0.186	-0.183	0.008
RET	-0.003	0.000	-0.009	0.025	0.004	0.000
GRW	0.007	0.013	0.026	0.004	0.010	0.158
Age	-0.0004	0.007	-0.003	0.002	-0.0004	0.076
SIZE	0.018	0.000	0.023	0.004	0.094	0.013
LEV	-0.001	0.040	-0.129	0.026	-0.005	0.085

INVE	0.123	0.026	0.044	0.021	2.981	0.071
BIG1	0.044	0.106	0.023	0.004	0.014	0.009
AIS	-0.033	0.002	-0.033	0.000	-0.076	0.261
LOSS	0.056	0.027	0.017	0.000	-0.009	0.019
BSF	0.082	0.026	0.018	0.000	0.015	0.018
BSI	-0.011	0.000	-0.014	0.005	-0.011	0.091
Mchange	0.033	0.000	0.028	0.042	0.002	0.057
Mtenure	0.005	0.002	0.004	0.000	0.001	0.005
-con	-0.552	0.011	-0.117	0.705	-1.957	0.079
R-SQ	0.0322		0.0189		0.2435	
R-SQ2	0.2517		0.0451		0.0031	
P-value model	Wald Chi 2 (18)=51.23		Wald Chi 2 (18)=14.74		F (15,85)=1.82	
P-value model	Prob>chi 2=0.000		Prob>chi 2=0.6794		Prob>F=0.0440	
F-limer	F (157,615)=9.63		F (123,515)=4.06		F (33,85)=18.26	
F-limer	Prob>F=0.000		Prob>F=0.000		Prob>F=0.000	
Huasman	Wald Chi 2 (18)=21.57		Wald Chi 2 (17)=21.22		Wald Chi 2 (15)=34.11	
Huasman	Prob>chi 2=0.2515		Prob>chi 2=0.2166		Prob>chi 2=0.0033	

According to the above table results, the F-Limer Test's significance level for the model (2) for all three modes is 0.000, which is smaller than the 10% significance level, so research data are panel based on this test and are not pooled. Moreover, according to the Hausman Test results, the fixed-effects model is used in Iran and Iraq for these models, and the random-effects model is used for the general model. Moreover, according to the test results, the model's p-value for the general mode and Iraqi firms is 0.000 and 0.440, showing that these models enjoy the required significance level.

Besides, as can be seen in the table, hypotheses testing results show a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, economic and institutional regimes, and financial statement comparability. Because p-values are 0.000, 0.006, 0.028, and 0.007, respectively, smaller than 5% significance level and their coefficients are respective positive values of 0.003, 0.023, and 0.005 0.023, positive and significant relationship exist between these variables and financial statement comparability. The results are in line with the results of model estimation for Iran and Iraq because the p-value of these variables for the Iranian firms is 0.050, 0.000, 0.038, and 0.000 and 0.000, 0.008, 0.000, and 0.000 for Iraqi firms. Since it is lower than the 5% significance level, the relationship with financial statement comparability between these two countries is confirmed. Since their coefficients are positive, this relationship is positive and direct, implying that by increasing these indices, financial statement comparability will increase both in Iran and Iraq.

Additional Analyses of the Model (1)

VARIABLE (ACOMP)	Model (1)		Model (1) Iran		Model (1) Iraq	
	Coef.	p-value	Coef.	p-value	Coef.	p-value
Inis	0.045	0.034	0.131	0.000	0.009	0.000
Ines	0.024	0.062	0.039	0.000	0.025	0.000
Ineir	0.097	0.006	0.344	0.058	0.273	0.001
Iniacl	0.044	0.000	0.029	0.009	0.002	0.047
ROA	0.035	0.047	0.534	0.000	0.023	0.006
RET	0.003	0.000	0.004	0.000	0.001	0.079
GRW	0.002	0.268	0.162	0.003	0.003	0.129
Age	-0.0003	0.055	-0.001	0.087	-0.002	0.189
SIZE	0.012	0.041	-0.021	0.002	0.032	0.000

LEV	0.010	0.101	0.148	0.022	0.020	0.034
INVE	0.012	0.010	-0.067	0.027	0.057	0.028
BIG1	0.013	0.015	0.027	0.003	0.079	0.024
AIS	-0.010	0.054	-0.007	0.004	-0.077	0.064
LOSS	0.008	0.246	0.029	0.303	0.044	0.054
BSF	-0.006	0.000	0.003	0.000	-0.031	0.196
BSI	0.031	0.059	0.056	0.027	0.043	0.061
Mchange	0.029	0.009	-0.035	0.258	0.009	0.004
Mtenure	0.057	0.028	-0.004	0.307	0.009	0.128
-con	1.574	0.000	4.980	0.000	1.432	0.446
R-SQ	0.9653		0.1956		0.2915	
R-SQ2	0.9645		0.0915		0.0544	
P-value model	F (18,772)=1194.79		Wald Chi 2 (17)=162.50		F (15,85)=2.33	
P-value model	Prob>F=0.000		Prob>chi 2=0.000		Prob>F=0.0077	

Moreover, as can be seen in the table, hypothesis testing results indicate a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, economic and institutional regimes, and financial statement comparability. Because p-values of them are 0.034, 0.062, 0.006, and 0.000 that for indices of innovation, information infrastructure, connections, and economic and institutional regimes; they are lower than the 5% significance level with positive coefficients of 0.045, 0.097, 0.044 showing that a positive and significant association exists between these variables and financial statement comparability. These results are in line with that of the first test of the study with a difference that in additional analyses, there is no relationship between the indices of training and human resources and financial reporting quality at a 95% level because the p-value is more than 5% significance level. Still, at the 90% level, such a relationship is positive and significant. The results are roughly in conformity with that of the model estimation for Iran because the p-value of these variables for Iranian firms is 0.000, 0.000, 0.058, and 0.009 and for Iraqi firms is 0.000, 0.000, 0.001, and 0.047, respectively. Hence, since the p-value of these indices for Iraq is lower than the 5% significance level, the presence of a relationship with this country's financial statement comparability is confirmed. Since the coefficients of them are positive, this relationship is positive and direct. This means that, of increasing these indices, financial statement comparability goes up in Iraq, but since the p-value of the index of information and connection infrastructure in Iran is 0.058 more than 5% significance level, this relationship is not confirmed 95% level. Still, it is so at the 90% level of direct type. For indices of training and human resources, innovation, and economic and institutional regimes and financial statement comparability, a positive and significant relationship is evident at the 95% level, which aligns with Iraq and general mode results. These additional analyses conform to the results of the primary analyses of the study.

Additional Analyses Of The Model (2)

VARIABLE (FRQ)	Model (2)		Model (2) Iran		Model (2) Iraq	
	Coef.	p-value	Coef.	p-value	Coef.	p-value
Inis	0.004	0.000	0.0127	0.057	0.003	0.043
Ines	0.069	0.008	0.0035	0.000	0.038	0.029
Ineir	0.002	0.000	0.0699	0.008	0.016	0.050
Iniacl	0.013	0.054	0.0127	0.057	0.041	0.007
ROA	-0.003	0.004	-0.1282	0.169	-0.179	0.025
RET	-0.011	0.000	-0.0001	0.168	0.002	0.000
GRW	-0.050	0.000	0.0066	0.008	0.065	0.090
Age	-0.001	0.081	-0.0641	0.000	-0.005	0.041

SIZE	0.025	0.004	0.0162	0.017	0.199	0.101
LEV	-0.123	0.000	-0.1038	0.088	-0.077	0.111
INVE	0.093	0.165	0.0205	0.057	0.070	0.068
BIG1	0.039	0.151	0.0699	0.008	0.062	0.058
AIS	-0.063	0.014	-0.0499	0.019	-0.079	0.206
LOSS	-0.154	0.003	0.1438	0.010	-0.004	0.030
BSF	0.0123	0.002	0.0986	0.002	0.162	0.065
BSI	-0.059	0.043	-0.0731	0.018	-0.003	0.054
Mchange	0.013	0.001	0.0041	0.069	0.002	0.071
Mtenure	0.004	0.000	0.0018	0.014	0.041	0.059
-con	-0.557	0.101	-0.6657	0.036	-2.495	0.267
R-SQ	0.7135		0.8032		0.2832	
R-SQ2	0.7067		0.7604		0.1627	
P-value model	F (18,772)=13.09		F (18,638)=1.56		Wald Chi 2 (17)=54.27	
P-value model	Prob>F=0.000		Prob>F=0.0636		Prob>chi 2=0.000	

Moreover, as can be seen in the table, hypothesis testing results indicate a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, economic and institutional regimes, and financial statement comparability. Because p-values of them are 0.000, 0.008, 0.000, and 0.054 that are lower than the 5% significance level with positive coefficients of 0.004, 0.069, 0.002, and 0.013 showing that a positive and significant association exists between these variables and financial statement comparability, these results are in line with that of the first test of the study with a difference that in additional analyses, there is no relationship between economic and institutional regimes and financial reporting quality at the 95 % level because the p-value is more than 5% significance level. Still, at the 90% level, such a relationship is positive and significant. The results are roughly in conformity with that of the model estimation for Iran because the p-value of these variables for Iranian firms is 0.057, 0.000, 0.008, and 0.057 and for Iraqi firms is 0.043, 0.029, 0.050, and 0.007, respectively. Hence, since the p-value of these indices for Iraq is lower than the 5% significance level, the presence of a relationship with this country's financial statement comparability is confirmed. Since the coefficients of them are positive, this relationship is positive and direct. This means that increasing these indices. Financial statement comparability goes up in Iraq. Still, since the p-value of the index of innovation and economic and institutional in Iran is 0.057 more than a 5% significance level, this relationship is not confirmed at the 95% level. Still, it is so at the 90% level of direct type. For indices of training and human resources, information infrastructure, and connection, a positive and significant relationship is evident at the 95% level, which aligns with Iraq and general mode results. These additional analyses conform to the results of the primary analyses of the study.

DISCUSSION AND CONCLUSION

The results of the present study show that there is a positive and significant relationship between the knowledge-based economy and financial statement comparability. This result is in line with that of the Sohn (2016); Rudez & Mihalic (2007); Williams (2000); Tayles, et al., (2002); Chen (2005), who posit that knowledge-based economy is the main component of economic growth of countries and firms and that intellectual capital is the primary index of this economy. Hence, those firms that operate based on a knowledge-based economy and intellectual capital are more efficient, effective, and innovative. So, in these units, annual financial reports will be provided based on intellectual capital and knowledge, and their reports, to some extent, benefit from more accuracy, quality, reliance, and transparency than their rivals. According to financial accounting concepts No. (1987), the growth of financial reporting quality optimizes financial statement users' decisions. Knowledge and expertise are two leading effective items in information

collection. Financial reporting is also the result amalgamation of such information, so the inclusion of knowledge and expertise and even information technology in financial statement reporting can provide beneficial results for business units. The results of the test are separately following the results of the general sample for both countries, such that there is a positive and significant relationship between the indices of innovation, training and human resources, information infrastructure, connections, and economic and institutional regimes and financial statement comparability in both countries. This means that by increasing the indices of innovation, training and human resources, information infrastructure, connections, and economic and institutional regimes, financial statement comparability and financial reporting quality of business units will increase in both countries and general mode.

ACKNOWLEDGEMENT

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Received: 29-Apr-2022, Manuscript No. aafsj-22-11407; **Editor assigned:** 02-May-2022; PreQC No. aafsj-22-11407(PQ); **Reviewed:** 14-May-2022, QC No. aafsj-22-11407; **Revised:** 21-May-2022, Manuscript No. aafsj-22-11407(R); **Published:** 10-Jun-2022