FINANCIAL REPORTING QUALITY FOR BANKS IN EGYPT AND THE UAE

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Abstract

The purpose of this paper is to investigate the determinants of financial reporting quality for banks in Egypt and the UAE over the period 2008 to 2013. Multiple regression analysis is used to test the relationship between financial reporting quality as a dependent variable and certain independent variables. The results indicate that international financial reporting standards, global financial crisis, accounting conservatism, market structure in terms of concentration and intellectual capital performance for banks in Egypt and the UAE have a significant impact on financial reporting quality but bank size and market structure in terms of efficiency have not. These results might help the banking and accounting regulators to address the factors affecting financial reporting quality. In addition, it provides useful comparative information for investors and hence helps them to make informed decisions. It is one of a few studies which address the impact of the nature of accounting standards on financial reporting quality in emerging economies through investigating the impact of IFRS adopted by the UAE Banks and local accounting standards adopted by the Egyptian banks on financial reporting quality. In addition, the study, for the first time, is exploring whether intellectual capital performance may be an underlying determinant of financial reporting quality.

Keywords: Financial Reporting Quality, IFRS, Global Financial Crisis, Accounting Conservatism, Market Structure, Intellectual Capital Performance Bank Size, Egypt, the UAE

1. INTRODUCTION

Quality of financial reporting is recalling being in the focus of the accounting practitioners and academic because of the occurrence of several recent accounting scandals such as BT Italia (CNBC, 2017), Tesco accounting fraud scandal (Fortune, 2017) and Obsidian Energy Ltd. (SEC, 2017). The main purpose of financial reporting is to provide useful information to the internal and external stack holders i.e. management, investors and creditors. The term useful financial information used in the accounting literature refers to the level of the quality of this information as represented by certain fundamental and enhancing characteristics (IASB, 2010).

Enormous benefits have addressed in the accounting literature for the quality of financial reporting and of these are, Houcine (2017) using a sample of 25 Tunisian listed companies over the period 1997-2013 studied the impact of financial reporting quality on corporate investment efficiency and found that the consequences of financial reporting quality are better resources allocations and investment decisions. Koo et al. (2017) studied the impact of financial reporting quality on the corporate dividend policy and found that financial reporting quality as a governance tool motivates managers to pay dividends through fixing the free cash flow problems.

The results of the study of Lin et al. (2014) indicated the positive impact of financial reporting quality on firm performance during the global financial crisis in the UK. Martinez-Ferrero (2014) on a sample of 1960 companies from 25 countries over the period 2002-2010 examined the impact of financial reporting quality on corporate performance. The results indicated that there is a positive relationship between financial reporting quality and financial performance. Martinez-Ferrero et al. (2013) investigated the impact of financial reporting quality on corporate social responsibility based on a sample of 747 international listed non-financial companies over the period 2002-2010. The results revealed that companies with featured by financial reporting quality are more conservatism and avoid earnings management practices and hence more socially responsible.
From the above, it can be concluded that financial reporting quality is important in the accounting literature because of its benefits and hence studying the determinants of financial reporting quality will be useful for users of accounting information. This paper addresses the fundamental question of whether there are differences in the level of financial reporting quality across banks in Egypt and the UK and, if the answer is yes, why do these differences occur?

The study achieves the following contributions. First, it is one of a few studies which comparing financial reporting quality in the context of the adoption of IFRS and the adoption of local standards for developing countries. Second, investors usually have different responses to IFRS environment and local accounting standards in stock markets. Thus, it is interesting to explore whether the relationship between financial reporting quality and the type of accounting standards is similar for developing countries. Third, it explores for the first time whether intellectual capital performance influences financial reporting quality.

The study is expected to present valuable information for decision makers and regulators of the accounting profession in Egypt and the UAE through examining the determinants of financial reporting quality in Egypt (local accounting standards environment) and the UAE (IFRS environment).

The remainder of this paper is structured as follows: the second section discusses the definition and measurement of financial reporting quality, the third section formulates the hypotheses, the fourth section covers the research method used, the fifth section presents the empirical results, and section sixth provides the conclusions.

2. DEFINITION AND MEASUREMENT OF FINANCIAL REPORTING QUALITY

Financial reporting is the end product of the accounting process which aims to provide financial information to the interested users such as investors, creditors, employees, management. The financial information must be used to add value to its users. There are certain characteristics of the useful financial information and these are fundamental qualities and enhancing qualities.

Relevance and faithful representation are representing the major qualities of useful financial information. Relevance includes three sub-criteria which are predictive value, confirmatory value and materiality. Faithful representation includes three sub-criteria which are completeness, neutrality and free from error. Enhancing qualities are comparability, verifiability, timeliness and understandability (see, for instance, IASB, 2010). These qualities can be used as criteria to measure to what extent the measure used to represent the financial reporting quality is relevant to the purpose of the study.

Various measures have been used in the literature to represent financial reporting and these are: earnings management (Abdulmalik & Ahmad, 2016); Quality of earnings (Lin et al., 2014); Accrual-Based Earnings Management (Dechow & Dichev, 2002); Earnings Predictability (Dichev & Tang, 2009); gross current accrual (Francis et al., 2005); Real Earnings Management (Roychowdhury, 2006); Earnings Persistence (Francis et al., 2004); Earnings Aggressiveness (Bhattacharya et al. 2003); Earnings Smoothing (Schipper & Vincent, 2003) and the level of voluntary disclosure (Botosan & Plumlee, 2002). Cheung et al. (2010, p.149) stated that 'The notion of quality in relation to financial reporting is ambiguous and contestable' and this can be used to justify the reason for having several measures in the literature to represent the financial reporting quality.

From the above, it can be noticed that several measures have been used in the literature to represent financial reporting quality without preferring one measure on another. Following Lin et al. (2014) earning quality will be used as a measure of financial reporting quality in the present study as follows:

\[
\text{Earnings Quality} = \frac{\text{Operating Cash Flow for Bank } i \text{ in Year } t (\text{OCFi})}{\text{Net Income After Tax for Bank } i \text{ in Year } t (\text{NPAFi})}
\] (1)

The higher the ratio is, the lower the quality of earnings.

3. FORMULATION OF HYPOTHESES

The accounting and banking literature provides some factors which can be considered as relevant determinants of financial reporting quality in the context of Egypt and the UAE banking and of these are: IFRS, global financial crisis, market structure, intellectual capital performance, and bank size. These are now considered in turn in more detail.

3.1. IFRS and financial reporting quality

As discussed in section 2, the conceptual framework for financial reporting - which is concerned with providing quality financial information to the end users - is embedded in the application of the international financial reporting standards and hence it can be presupposed that the quality of information of the companies adopting IFRS will be higher than companies adopting local accounting standards.

The disclosure level requested by the IFRS leads to raising the trust of the investors in the quality of the financial information because of improving the level of understanding of the information (Levitt, 1998). The IFRS bound the number of accounting methods used for treating accounting transactions, and provide clear guidelines for applying these methods and this, in turn, should help in improving the quality of earnings (Ewert & Wagenhofer, 2005).

The IFRS which were adopted for public financial reporting are better than national accounting standards because it provides more precise, complete and timely financial information. In addition, IFRS are a credible source of financial information for investors and hence help in taking informative valuation and investment decisions (Ball, 2006). The disclosure of information under IFRS is better than under national standards because they are more focus on the capital market, added value to
investors and more inclusive (Daske and Gebhardt, 2006).

The IFRS require use one of three levels to measure fair value but the data needed to calculate level one measure (more accurate compared with the other two levels) might not be available and hence companies will be forced to use level two or three measure which in turn might produce less accurate outcomes and hence reduce the quality of provided financial information (Hoogendoorn, 2006). The adoption of IFRS led to enhance the quality of disclosed financial information through better understandability and in turn, reduced the information analysis cost for investors to take decisions which had a positive impact in reducing the cost of capital of companies (Lee et al., 2010).

Increasing in the level of information disclosure under IFRS compared with national GAAP lead to reduce the incentive for earnings management because this behaviour can be easily discovered by the users over the period 1998-2014. They found that the board of directors and auditors and in turn this should lead to improvements in the quality of the reported earnings (see, for instance, Chow et al., 2010; Ismail et al., 2013; and Bova & Pereira, 2012). The adoption of IFRS might be beneficial for multinational companies which are operating in many countries because it helps in attracting foreign funds and hence the adoption cost might be justifiable for these companies compared to its counterpart small companies which are working in one country and not seeking for these types of benefits and therefore adoption cost can’t be justified (Rankin et al., 2012).

Several studies investigated the theories discussed above and of cost are: García et al. (2017) studied using a sample of 923 companies from Latin America over the period 2000-2014 the impact of adopting IFRS on quality of accounting. The results showed that the positive impact as indicated by increasing earnings timeliness and value relevance of accounting measures.

Dayanandan et al. (2016) examined the impact of IFRS adoption on financial reporting quality in Europe and they concluded that IFRS adoption led to improving the quality of financial reporting represented by the reduction in income smoothing and earnings management.

Houque et al. (2016) studied the influence of IFRS adoption on earnings quality in 16 European countries over the period 1998-2014. They found that the adoption of IFRS led to improving the quality of earnings in all countries. These results are in with the results of Da Silva and Randi (forthcoming) of their study in Brazil and the results of Hassan (2015) in Nigeria.

Krismiaji et al. (2016) for a sample of IFRS adopted publicly listed companies on the Indonesian Stock Exchange over the period 2008-2011 examined the impact of IFRS adoption on the accounting quality. The results revealed that IFRS have a positive impact on accounting quality.

Gatsios et al. (2016) investigated based on a sample of Brazilian non-financial companies listed at the BMF&F-Bovespa, over the period 2004-2013 the impact of IFRS adoption on the equity cost. The results appeared that the adoption of IFRS did not lead to a reduction in the equity cost in the Brazilian market. This result is in line with the result of Daske (2006) in a sample of German firms over the period 1993-2002.

Páucan (2015) argued that applying of IFRS will lead to increase in the quality of accounting information. Yurisandi and Puspitasari (2015) using a sample of listed companies in Indonesian Stock Exchange with the highest market capitalization over the period 2009-2013 studied the impact of IFRS adoption on financial reporting quality. The results of this study showed that the IFRS adoption has a positive impact on the financial reporting quality represented by relevance, understandability and comparability.

Cameran et al. (2014) for a sample of adopted IFRS private Italian companies and adopted Italian GAAP private Italian companies investigated the influence of adopting IFRS on quality represented by earnings quality and found that adopting IFRS did not improve the quality of financial reporting.

The results of Pelucio-Grecco et al. (2014) about the consequences of the adoption of IFRS on the earning management for Brazilian non-financial listed companies over the period 2006-2011 showed that the adoption of IFRS led to a reduction in earnings management.

Houque et al. (2014) examined the impact of IFRS adoption on the information quality of financial reporting for all publicly listed firms in France, Germany and Sweden in 2003 and 2011 and found that IFRS adoption has a positive impact on the quality of financial reporting.

Muller (2014) used a sample of companies listed on Deutsche Börse, London Stock Exchange and NYSE Euronext over the period 2003-2008 to study the consequences of adopting IFRS on the quality of the information provided by the consolidated accounts. He concluded that the quality of the financial information is increased with the adoption of IFRS.

Dimitropoulos et al. (2013) on a sample of 101 firms listed on the Athens Stock Exchange over the period 2001-2008 examined the influence of IFRS adoption on accounting information quality. The results revealed that the adoption of IFRS led to fewer earnings management, more timely loss recognition and greater value relevance of information as indicators to the quality of financial information.

Chua et al. (2012) in their study in Australia over the period 2004-2009 about the impact of IFRS adoption on accounting quality represented by earnings management, timely loss recognition and value relevance found that the impact is statistically positive on these measures.

Houque et al. (2012) for a sample of companies in 46 countries over the period 1998-2007 studied the influence of the IFRS adoption on Earnings Quality. The results revealed that IFRS adoption has a positive impact on the earnings quality.

Liu et al. (2011) investigated for a sample of IFRS adopted listed companies the influence of IFRS on accounting quality in China over the period 2005 to 2008. The results indicated an increase in the level of accounting quality in response to a reduction in earnings management and improvement in value relevance.
The results of a survey conducted by Ballas et al. (2010) in Greece about the impact of IFRS adoption on financial reporting quality revealed that the adoption of IFRS has a positive impact on financial reporting quality. 

Iatridis (2010) examined for a sample of 241 IFRS adopted UK companies over the period 2004-2005 the influence of this adoption on the quality of financial statement information. The results revealed improvement in the quality of financial information represented by a reduction in earnings management, more timely loss recognition and more value relevant accounting measures.

Callao et al. (2007) argued that the usefulness of IFRS based prepared financial statements in the international context is higher than the financial statements prepared based on local accounting standards.

Adoption of IFRS will be measured through a dummy variable equal to 1 for the UAE banks and 0 for the Egyptian banks.

Based on the above theoretical argument and empirical evidence, the first hypothesis is:

H1: There is a relationship between IFRS and financial reporting quality.

3.2. Global financial crisis and financial reporting quality

The global financial crisis has a series of negative impact on the UAE economy represented by:

- The employment market suffered from the losses of jobs, the unemployment rate is increased, reduction in the working hours and income (Otobe, 2011).
- Severe reduction in the profitability, profit margins, the growth of credit and asset, and international ratings of UAE Islamic and commercial banks (Hasan & Dridi, 2010).
- The liabilities of UAE banks have increased, and the construction and banking industries faced a huge amount of loss (El Laboudy, 2010).
- The hotel occupancy rates in Dubai and Abu Dhabi is reduced and the performance of banks and financial markets became deficient (Habibi, 2009).
- The property prices fall. Several ongoing projects were stopped due to the lack of fund and pessimistic about the future (Khan, n.d.).

The level of investor confidence in the financial information provided by the financial reports is decreased during the financial crisis and this, in turn, had an impact on their investment decisions (see, for instance, Hameed et al. 2010; and Beaver, 1968).

Arthur et al. (2015) argued that the awareness of the management of the companies about the decreasing in the level of confidence by the investors in the financial information during the financial crisis period is an induce to provide reliable financial information through i.e. avoiding earnings management to increase this level of confidence and in turn lead to improvements in financial reporting quality.

So, it can be presupposed that the occurrence of the global financial crisis might have a negative impact on the perception of users about the reliability of the accounting information. This, in turn, could have a positive impact on the quality of the financial reporting to build up a trust in the financial information provided by these reports.

Previous studies have recognized evidence that the financial crisis has an impact on financial reporting quality as follow: Costa (2016) investigated the impact of financial crisis on earnings management on a sample from EU-25 over the period 2006-2014. The results found that earnings management is decreased during the financial crisis period.

Gulati and Kumarthe (2016) examined the influence of global financial crisis on the profit efficiency of Indian banks over the period 2003/04 to 2012/13. The results showed that banks’ profit efficiency declined during the global financial crisis.

Xu and Ji (2016) explored the consequences of the global financial crisis on earnings management for a sample of Chinese top listed companies and found that earnings management increased during the financial crisis period.

Kacharava (2016) studied the impact of Financial Crisis on Earnings Management in the UK over the period 2004-2014 using a sample of 358 listed firms and found that earnings management increased during the financial crisis periods. Cimini (2015) examined the impact of the global financial crisis on earnings management on a sample of 11 844 firm-year observations listed in the EU over the period 2006-2012. He concluded that earnings management decreased during the global financial crisis.

Persakisa and Iatridis (2015) using a sample of 652,512 firm-years observations from 18 developed countries over the period 2005-2012 tested the influence of global financial crisis on earnings quality and found that earnings quality is decreased during the financial crisis period.

Arthur et al. (2015) for a sample of companies from 14 European countries over the period 2005-2010 investigated the impact of the global financial crisis on earnings quality. The results revealed a positive relationship between global financial crisis and earnings quality.

Bepari et al. (2013) studied the relationship between global financial crisis and the value relevance of earning for a sample of Australian companies. The results revealed that the value relevance of earnings has increased during the financial crisis period.

Filip and Raffournier (2014) investigated the consequence of the 2008-2009 financial crisis on earnings management for a sample of 8,266 firm-year observations from 16 European countries. The results indicated that earnings management has decreased during the financial crisis.

Clubmadrid (2009) examined the impact of the global financial crisis on Arab counties and results showed that global financial crisis led to oil prices decline, fall in direct foreign investment, fall in remittances & tourism and fall in export.

Azzali et al. (n. d.) examined the influence of global financial crisis on the value relevance of earning for a sample of 193 firms in Italy over the period 2006-2011. The results pointed out that the value relevance of earnings has decreased during the financial crisis period.

A dummy variable equal to 1 for the year 2008 and 0 for other years will be used to represent a global financial crisis.

Based on the above theoretical argument and empirical evidence, the second hypothesis is:

H2: There is a relationship between global financial crisis and financial reporting quality.
3.3. Accounting conservatism and financial reporting quality

Accounting conservatism can be considered as a policy adopted by the company to avoid the overstated assets/revenues and/or understated liabilities/expenses and hence help in providing reliable financial information to its users (see, for instance, Feltham & Ohlson, 1995; Watts & Zimmerman, 1986; and Bliss, 1924).

There are two types of accounting conservatism conditional -there is a justifiable cause for adoption such as valuing inventory based on lower of cost or net realisable policy and unconditional – there is no justifiable cause for adoption such as adopting of accelerating depreciation method (see, for instance, Beaver & Ryan, 2000; and Penman & Zhang, 2002).

Basu (1997) argued that conditional accounting conservatism is concerned with immediate recognition of potential loss and deferring recognition of potential profit and as such using faithful representation criteria it provides information which is high-value relevance in terms of loss and less value relevance in terms of profit.

Wang (2006) argued that accounting conservatism is playing a crucial role in enhancing the quality of financial reporting. Conditional conservatism reduces the quality of financial reporting because its assumption in recognizing future income led to decreasing earnings persistence and predictability (see, for instance, Chen et al., 2014; Francis & Martin, 2010; Kim & Kross, 2005; Penman & Zhang, 2002).

Lafond and Watts (2008) argued that accounting conservatism is enhancing financial reporting quality if it prevents information asymmetry between management and investors (this happens with immediate potential loss recognition) and spoiling financial reporting quality if it encourages information asymmetry (this happens with postponing potential profit recognition).

Cost of equity and the precision of analysts’ prediction can be used as indicators to assess the impact of conditional conservatism on the quality of financial reporting that is if the impact is positive then the cost of equity is lower (see, for instance, Garcia et al., 2011; Chan et al., 2009; and Francis et al., 2004) and the prediction of the analysts is accurate (see, for instance, Pae & Thornton, 2010; Helbok & Walker, 2004; and Mensah et al., 2004).

Cost of debt and information asymmetry between creditors and debtors in equity market can be used as indicators to assess the impact of conditional conservatism on the quality of financial reporting that is if the impact is positive then the cost of debt is lower (see, for instance, Francis & Schipper, 1999; Lev & Zarowin, 1999; and Collins et al., 1997) and elimination of information asymmetry (see, for instance, Kim et al., 2013; and Lafond & Watts, 2008).

There is quite a number of studies about the influence of accounting conservatism on the financial reporting quality and of these are: Thijsen and Iatridis (2016) examined the relationship between Conditional conservatism and value relevance of financial reporting on a sample of European and North American listed firms over the period 2009-2015. They concluded that conditional conservatism has a positive impact on the value relevance of financial reporting.

Hu et al. (2014) investigated the influence of accounting conservatism on the corporate information environment on a sample of 24,235 firms from 43 countries over the period 1998-2008. They found that conservatism has a positive impact on the corporate information environment.

Kordlouie et al. (2014) investigated using a sample of 102 listed companies in Tehran Stock Exchange over the period 2006-2010 the influence of accounting conservatism on the quality of financial reports. The results pointed that there is a positive relationship between accounting conservatism and the quality of financial reports.

Lin et al. (2014) studied the influence of accounting conservatism on earnings manipulation on a sample of 13,738 observations from companies in Taiwan over the period 1996-2012. The results showed that accounting conservatism has a negative impact on earnings management.

Lyimo and Tanzania (2014) studied using a sample of companies listed in Bombay stock exchange over the period 2006 to 2012 the impact of conditional conservatism on earnings quality. The results revealed that conservatism does not affect the quality of reported earnings.

Mohammadi et al. (2013) investigated the impact of accounting conservatism on the quality of accounting information using a sample the firms listed on the Tehran Stock Exchange over the period 2006-2011. The results revealed that accounting conservatism has a positive impact on the accounting information quality.

Fan and Zhang (n. d.) studied the influence of conservatism on accounting information quality. They found that conservatism has a positive impact on the quality of accounting information.

These diverse results are what make this study exceptional to examine the impact of conditional conservatism on financial reporting quality in emerging economies represented by the Egyptian and the UAE banking industry.

Previous studies used different measures for accounting conservatism and of these are the asymmetric accruals-to-cash-flow ratio and the book-to-price ratio (Ball & Shivakumar, 2005), the market-to-book ratio and hidden reserve measure (Penman & Zhang, 2002), the negative accruals measure (Givoly & Hayn, 2000), and the asymmetric timeliness of earnings model (Basu, 1997).

Literature did not provide any criteria to prefer a measure over another and as such the present study will be measuring the accounting conservatism using Penman (2013) model because of the availability of data needed for calculating this ratio as follows:

\[
\text{Accounting conservatism} = \frac{\text{Net Income Before Tax for Bank i in Year t (NPBTit)}}{\text{Operating Cash Flow for Bank i in Year t (OCFit)}} \(2\)
\]

Based on the mixed results of the above-mentioned studies, the third hypothesis is: \(H3\): There is a relationship between accounting conservatism and financial reporting quality.
3.4. Market structure and financial reporting quality

Market structure can be classified into four types based on the level of competition in the market and these are perfect competition, imperfect competition, oligopoly, and monopoly. The range of the level of competition can be ranged from one with the perfect competition type to zero with the monopoly type. The probability for the firm(s) to achieve abnormal profit can be ranged from zero with the perfect competition type to one with the monopoly type (see, for instance, Huang et al., 2017; Kim et al., 2016; and Ye et al., 2012).

The market power of the firms in the market is a key element in shaping the structure of the market. The behaviour of the firms with market powers is shaping the level of competition in the market based on the nature of the relationship among them. Firms with strong market powers might arrange a form of illegal arrangement through collusion to dominate the market and hence achieve abnormal profits on the expense of other firms in the market. Meanwhile, the market can be dominated by the most efficient firms in the market and these firms can achieve abnormal profits as well. So, the reason of the market to be concentrated might be collusion among a group of a small number of firms (see, for instance, Hoxha, 2013; Iveta, 2012; Sharma & Bal, 2010; Li, 2009; and Neuberger et al., 2008).

Level of competition in the market can influence the quality of financial reporting through the reported earnings figure. That is increasing in the level of market competition might motivate the management of the companies to adopt possible earning management techniques because of the inability to compete with the hope of improving the market value of the companies to keep the existence investors and attract potential investors to invest in their companies (see, for instance, Bagnoli & Watts, 2010; Shleifer, 2004; Christie et al., 2003; and Kole & Leh, 1997) but this, in turn, will lead to decreasing in the level of financial reporting quality. Competition is a critical factor to prevent the companies from adopting policies needed for achieving quality in financial reporting to be protected from competitors who might benefit from certain types of disclosed misreporting (see, for instance, Congon, 2003; Darrough & Stoughton, 1990; and Verrecchia, 1983). Competition is a market power that forces managers to perform in the best curiosity of owners which in turn reflect positively on financial reporting quality (see, for instance, Laksmana & Yang, 2014; Cheng et al., 2013; and Baggs & Bettignies, 2007).

Several studies have been conducted to investigate the influence of product market competition on financial reporting quality and of these are: Iqbal et al. (2017) examined the impact of product market competition on reporting quality on a sample of firms in China. The results revealed that the more competitive the market the high the quality of financial reporting.

Kordestania and Mohammadi (2016) studied the relationship between product market competition and earnings management for a sample of 77 companies listed in Tehran stock exchange over the period 2002-2011. The results pointed that there is a positive relationship between product market competition and earnings management.

Majeed and Zhang (2016) studied the influence of product market competition on earnings quality on a sample of Chinese firms over the period of 2000-2014. The results indicated that there is a positive relationship between product market competition and earnings quality.

Paktinat and Javid (2015) investigated the effect of Product Market Competition on Earning Quality for a sample of 101 listed companies in the Tehran Stock Exchange over the period 2008-2012. They found that relationship between product market competition and earning quality is positive and significant.

Laksmana and Yang (2014) on a sample of US firms over the period 1988 -2007 examined the relationship between product market competition and earnings management. The results showed that there is a negative relationship between product market competition and earnings management.

Mohebbi and Kamyabi (2014) investigated the relationship between product market structure and earnings quality for a sample of 143 companies listed in Tehran Stock Exchange over the period 2008-2012. They found that product market structure has a positive impact on earnings quality.

Datta et al. (2013) using a sample of 6019 firms in the Compustat over the period 1967-2009 studied the impact of product market power on corporate earnings management. They concluded that there is a negative relationship between product market power and corporate earnings management.

Mitra et al. (2013) examined the impact of product market power on the level of real earnings management for a sample of 7,571 firms listed in the Compustat over the period 1990-2006. The results showed that there is a negative relationship between product market power and the level of real earnings management.

Balakrishnan and Cohen (n. d.) on a sample of 1,564 firm-year observations in France over the period 2002-2006 investigated the relationship between product market competition and financial accounting misreporting. The results showed that there is a negative relationship between product market competition and financial accounting misreporting.

Various measures have been used in the banking literature to represent the level of market concentration and of these are the Herfindahl-Hirschman index, the Gini coefficient of concentration, the comprehensive industrial concentration index, the entropy index and the N firms concentration ratio (see, for instance, Radulescu & Tanascovici, 2012; Adams et al., 2009; and Peria & Mody, 2004). The present study will use the N firms concentration ratio to measure the level of market concentration in the UAE and Egyptian banking market for two reasons: the first is that the literature did provide an evidence that one measure is better than others and the second is that data needed to calculate N firms concentration ratio is available.

Monopolies and Mergers Commission in the UK (1996, p. 12) states that:

'The complex monopoly is a situation where individuals or companies, account for at least 25 percent of the supply or acquisition of particular goods or services, followed by a course of conduct, by agreement or not, that prevents, restricts or distorts competition'. So having 25% of the market share in terms of assets can be used as criteria to determine how many banks should be chosen to establish the measure of market concentration.
among colluded banks. The other measure of the level of market concentration is the share in terms of assets of bank i in year t divided by a total assets market share in year 1.

Based on the above argument, the fourth hypothesis is:

H4: There is a negative relationship between the level of market concentration and financial reporting quality.

3.5. Intellectual capital performance and financial reporting quality

Intellectual capital is intangible assets which help the firms in the process of maximizing the value creation of wealth and hence gain competitive advantage through it is components represented by internal capital, external capital and human capital (see, for instance, Bharathi, 2010; Campbell & Abdul Rahman, 2010; Joshi et al., 2010; El-Bannany, 2008; Kamath, 2007; and Göh, 2005). Each component includes several items as follows: internal capital such as (corporate culture – leadership – communication – management process – information systems – network – computer software), external capital such as (brands – goodwill – customer loyalty – customer satisfaction – market share) and human capital such as (education – intelligence – knowledge – expertise – training) (El-Bannany, 2013; pp.43-44). So the measuring of intellectual capital performance (ICP) should be through measuring the performance of these items collectively.

Relationship between performance and disclosure has been addressed in numerous studies but in different themes as follows: Improving in the level of the companies’ environmental performance i.e. reduction in the level of pollution can be considered as a competitive advantage and hence companies might not be interested in disclosing this information to sustain their competitive advantage and this might lead to decreasing in the level of environmental information disclosure (see, for instance, Clarkson et al., 2008; Al-Tuwaijri et al., 2004; and Niskanen & Nieminen, 2001). Meng et al. (2014) studied the relationship between corporate environmental performance and environmental disclosure in China and found that the relationship is non-linear (see, for instance, Bannany, 2008; Al-Tuwaijri et al., 2008; Al-Tuwaijri et al., 2009).

Hummel and Schlick (2016) argued that companies with high sustainability performance tend to have a prominent level of sustainability disclosure to inform the market about their excellence performance. However, companies with low sustainability performance tend to have a low level of sustainability disclosure to hide their deficient performance and protect their legal existence. They provided empirical evidence to this argument using a sample of 151 European companies in 2011.

Beattie and Smith (2010) argued that there is a negative relationship between the level of contribution of human capital in value creation for the companies and the level of externally disclose information about this contribution because companies prefer not to disclose this type of information to sustain their competitive advantage. The results of their study using a questionnaire sent to 591 HR directors in 2008 in the UK provide evidence to this argument.

Williams (2001) argued that the relationship between intellectual capital performance and intellectual capital disclosure is positive. That is companies with good intellectual capital performance tend to disclose more information about the intellectual capital to show their superior performance to their stockholders and vice versa. However, the results of his study about the relationship between intellectual capital performance and intellectual capital disclosure using a sample of 31 FTSE 100 listed companies over the period 1996-2000 revealed that the relationship is negative.

Several measures have been used in the literature to represent intellectual capital performance and of these are the Skandia Navigator (Skandia, 1999), Intangible Assets Monitor (Sveiby, 2007), Balanced Scorecard (Kaplan & Norton, 1992), Value Explorer (Andriesson, 2006) and the Value Added Intellectual Coefficient (VAIC) (Pulic, 1998).

The VAIC is adopted as a measure of intellectual capital performance in banks by many authors (see, for instance Singh et al., 2016; El-Bannany, 2012; Puntillo, 2009; Kamath, 2007; Mavridis & Kyrmizoglou, 2005; and Pulic & Bornemann, 1997), because of it is simplicity and availability of data needed to calculate its components.

The VAIC will be adopted in this study and will be calculated as explained by Pulic (1998) as follows:

\[ \text{VAIC} = \frac{\text{VA}}{\text{CA}} \]

Where:

- **VA** = Value added = output – input
- **CA** = Capital assets
- **VAHC** = Value-added for human capital = VA + HC
- **VACA** = Value-added for physical capital = VA + CA
- **VAIC** = Value Added for Intellectual Capital

Presupposing that increase in the level of disclosure of the relevant information i.e. intellectual capital lead to increase in the quality of financial reporting quality because it will be having an impact on the stakeholders’ decisions and based on the discussion and results of the studies mentioned above, the fifth hypothesis is:

H5: There is a relationship between intellectual capital performance and financial reporting quality.

3.6. Bank size and financial reporting quality

Firm size literature indicated that larger firms compared to smaller ones are expected to have higher level of financial reporting quality for reasons such as protect its reputation in the market; attract external funds; discourage the intervention of the governmental bodies and political visibility (see, for instance, Alhassan & Asare, 2016; Mondal & Ghosh, 2012; and Joshi et al., 2010).

Bassiony et al. (2016) studied the impact of firm size on earnings management for a sample of 50 most active firms in the Egyptian stock exchange over the period 2007-2011. The results showed that no relationship between firm size and earnings management.

Results of the study of Höglund and Sundvik (2016) using a sample of 1386 Finland small firms revealed that these firms cannot prepare high-quality financial reports as a result of the lack of the
resources and expertise.

Olowokure et al. (2016) examined the influence of firm size on financial reporting quality for a sample of 13 listed deposit money banks in Nigeria in 2014. The results pointed that firm size has a negative impact on financial reporting quality. Yasser et al. (2016) using a sample of 420 firms from Asia-Pacific region over the period 2011-2013 examined the impact of firm size on financial reporting quality. The results showed that firm size has a negative impact on financial reporting quality.

Yasser and Al Mamun (2015) investigated the relationship between firm size and earnings management for a sample of publicly listed companies in Australia, Malaysia and Pakistan over the period 2011-2013. They found that there is a negative relationship between firm size and earnings management.

Hassan and Farouk (2014) studied the effect of firm size on earnings quality for a sample of 7 listed oil and gas companies in Nigeria for the period of 2007-2011. They concluded that firm size has a negative impact on earnings quality.

Atanasovski (2013) examined the impact of firm size on the financial reporting quality for a sample of 32 listed entities in Macedonia using 2010 data. The results showed that firm size has a positive impact on the financial reporting quality.

Hassan and Bello (2013) explored the influence of firm size on earnings management for all 39 listed manufacturing firms in the Nigerian Stock Exchange in 2010. The results indicated that firm size has a negative influence on earnings management.

Various measures have been used to represent the size of the firm and of these are total assets, annual sales, market capitalisation, total deposits and number of employees (see for instance, Benbouzid et al., 2017; Sharif et al., 2016; Wong & Deng, 2016; and El-Bannany, 2013). Total deposits will be used in this study to represent the bank size because it reflects what extent the customers are satisfied with the banking services provided by certain bank regardless of its assets size.

Based on the above argument, the sixth hypothesis is:

\[ H_6: \text{There is a relationship between bank size and financial reporting quality.} \]

### 4. RESEARCH METHODS

Table 1 shows the study sample and study period. To overcome the data availability problem seven Egyptian banks and eight UAE banks are representing the study sample over the period 2008-2013. Other banks are excluded because of incompleteness data. The central bank of the UAE (2017) issued circular 20/99 on 25\(^{th}\) January 1999 to impose the adoption of the IFRS by banks, finance companies and investment companies operating in the UAE from the financial year 1999.

**Table 1.** The sample of the Egyptian and the UAE banks in the study (2008-2013)

<table>
<thead>
<tr>
<th>Banks Names and Abbreviations</th>
<th>Egypt banks</th>
<th>UAE banks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab International Bank (AIB)</td>
<td>Abu Dhabi Commercial Bank (ADCB)</td>
<td></td>
</tr>
<tr>
<td>Al Watany Bank of Egypt (AWB)</td>
<td>Abu Dhabi Islamic Bank (ADIB)</td>
<td></td>
</tr>
<tr>
<td>Banque Misr (BM)</td>
<td>Bank of Sharjah (BoS)</td>
<td></td>
</tr>
<tr>
<td>Bank of Alexandria (BOA)</td>
<td>Commercial Bank International (CBI)</td>
<td></td>
</tr>
<tr>
<td>Commercial International Bank (CIB)</td>
<td>National Bank of Abu Dhabi (NBAD)</td>
<td></td>
</tr>
<tr>
<td>National Bank of Egypt (NBE)</td>
<td>National Bank of Umum Al Qawain (NBQA)</td>
<td></td>
</tr>
<tr>
<td>PIRAEUS Bank Egypt (PIRAEUS)</td>
<td>Sharjah Islamic Bank (SIB)</td>
<td></td>
</tr>
</tbody>
</table>

Multiple regression analysis will be used for the following study model:

\[
FRQ_{it} = \alpha_{0} + \alpha_{1} IFRS + \alpha_{2} GFC + \alpha_{3} AC + \alpha_{4} CRASS + \alpha_{5} LGICP + \alpha_{6} LGDEP + \alpha_{7} EFASS + \mu_{it}
\]  

(3)

where:

- FRO = the dependent variable - financial reporting quality for bank \(i\) in year \(t\); represented by the quality of earnings measured as the ratio of Operating Cash Flow for Bank \(i\) in Year \(t\) to Net Income After Tax for Bank \(i\) in Year \(t\);
- \(\alpha_{0}\) = constant;
- \(\alpha_{1,2,3,4,5,6,7}\) = the independent variables coefficients;
- \(\mu_{it}\) = disturbance term - that is the usual error term.

Details of the definitions of the independent variables are given in Table 2.

**Table 2.** Description of independent variables and expected signs

<table>
<thead>
<tr>
<th>Variable and abbreviation</th>
<th>Measurement</th>
<th>Expected sign</th>
<th>Actual sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Financial Reporting Standards (IFRSt)</td>
<td>Dummy variable equal to 1 for UAE Banks and 0 for Egyptian Banks</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Global Financial Crisis (GFCit)</td>
<td>Dummy variable equal to 1 for the year 2008 and 0 for other years</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Accounting Conservatism (ACit)</td>
<td>The value of Net Income After Tax for Bank (i) in Year (t) minus Operating Cash Flow for Bank (i) in Year (t)</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Market structure (CR3ASSt) [s-c-p hypothesis]</td>
<td>Total assets for the biggest 3 banks in year (t)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Intellectual capital performance (ICPi)</td>
<td>Value-added of human capital plus value added of physical capital for bank (i) in year (t)</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Bank size (LGDEPi)</td>
<td>Logarithm of total deposits for bank (i) in year (t)</td>
<td>?</td>
<td>NS*</td>
</tr>
<tr>
<td>Market Structure (EFASSit) [efficiency hypothesis]</td>
<td>Total assets for bank (i) in year (t) divided by total market assets in year (t)</td>
<td>-</td>
<td>NS*</td>
</tr>
</tbody>
</table>

Note: *NS* = not significant

Data source: Annual reports and Bankscope database
5. THE RESULTS ANALYSIS

5.1. Descriptive statistics

As explained in section 4 above, study sample and study period were chosen based on the best available data that is to avoid data availability and completeness problems.

Table 3 reports the descriptive statistics for financial reporting quality and the independent variables selected in this study. Financial reporting quality for the sample banks throughout the study period varies from -25.81 to 54.31 and the mean is 2.58. The independent variables represented by IFRS, global financial crisis, accounting conservatism, market structure (s-c-p hypothesis), intellectual capital performance, bank size and market structure (efficiency hypothesis) all vary as well and this should increase the confidence level in the results as argued by Naser and Al-Khatib (2000).

Table 3. Descriptive statistics for the dependent and independent variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Reporting Quality (FRQit)</td>
<td>2.58</td>
<td>11.27</td>
<td>-25.81</td>
<td>54.31</td>
</tr>
<tr>
<td>International Financial Reporting Standards (IFRSt)</td>
<td>0.53</td>
<td>0.50</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Global Financial Crisis (GFCit)</td>
<td>0.17</td>
<td>0.37</td>
<td>0.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Accounting Conservatism (ACit)</td>
<td>-1.218</td>
<td>5.409</td>
<td>-26.278</td>
<td>9.240</td>
</tr>
<tr>
<td>Market Structure (CR3ASSit) [s-c-p hypothesis]</td>
<td>0.33</td>
<td>0.04</td>
<td>0.26</td>
<td>0.39</td>
</tr>
<tr>
<td>Intellectual capital performance (ICPi)</td>
<td>0.26</td>
<td>0.33</td>
<td>-0.92</td>
<td>0.73</td>
</tr>
<tr>
<td>Bank size (LGDEPt)</td>
<td>4.43</td>
<td>0.63</td>
<td>2.23</td>
<td>5.30</td>
</tr>
<tr>
<td>Market Structure (EFASSit) [efficiency hypothesis]</td>
<td>0.06</td>
<td>0.07</td>
<td>0.00</td>
<td>0.24</td>
</tr>
</tbody>
</table>

Note: N = 90 observations (42 Egypt & 48 UAE)

5.2. Test for multicollinearity

Multicollinearity is a statistical problem occurred if the explanatory variables in the study model are highly correlated with each other and hence the results might be misleading. This can be discovered through the preparation of Pearson correlation matrix among these explanatory variables (Gujarati, 1995; Pan & Jackson, 2008; Rogerson, 2001; Hair et al., 1993; and Kennedy, 1992).

Removing one of the explanatory correlated variables can be used as a solution to the multicollinearity problem. In this context, Neter et al. (1985) argued that correlation among all or some of the study model independent variables does not mean that the model will not be fit or the prediction will be misleading provided that it is within the range of the observations. In addition, Neter et al. (1985) argued that removing some independent variables to overcome the multicollinearity problem might lead to reducing the explanation ability of the model or mistakes in the model specification. So, multicollinearity test results should be interpreted with caution to avoid the problems addressed above.

The correlation matrix of the independent variables is shown in Table 4. The maximum value of is only 0.91 so we can assume that multicollinearity is not a critical problem because it does not exceed 0.99 as argued by El-Bannany (2002).

Table 4. The correlations matrix for the independent variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>IFRSt</th>
<th>GFCit</th>
<th>ACit</th>
<th>CR3ASSit</th>
<th>LGICPit</th>
<th>LGDEPt</th>
<th>EFASSit</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFRSt</td>
<td>-</td>
<td>0.000</td>
<td>0.179</td>
<td>-0.914**</td>
<td>0.014</td>
<td>0.001</td>
<td>-0.165</td>
</tr>
<tr>
<td>GFCit</td>
<td>0.000</td>
<td>-0.223*</td>
<td>0.091</td>
<td>-0.212*</td>
<td>0.009</td>
<td>-0.110</td>
<td>-0.033</td>
</tr>
<tr>
<td>ACit</td>
<td>0.179</td>
<td>-0.212*</td>
<td>-0.914**</td>
<td>-0.097</td>
<td>-0.363</td>
<td>-0.303</td>
<td>0.000</td>
</tr>
<tr>
<td>CR3ASSit</td>
<td>-0.914**</td>
<td>0.091</td>
<td>-0.212*</td>
<td>-0.363</td>
<td>-0.303</td>
<td>0.757</td>
<td>-0.380**</td>
</tr>
<tr>
<td>LGICPit</td>
<td>0.014</td>
<td>0.009</td>
<td>0.363</td>
<td>-0.303</td>
<td>0.757</td>
<td>-0.380**</td>
<td>-0.033</td>
</tr>
<tr>
<td>LGDEPt</td>
<td>0.001</td>
<td>-0.110</td>
<td>0.303</td>
<td>0.380**</td>
<td>0.000</td>
<td>0.000</td>
<td>0.160</td>
</tr>
<tr>
<td>EFASSit</td>
<td>-0.165</td>
<td>-0.033</td>
<td>0.303</td>
<td>-0.380**</td>
<td>0.000</td>
<td>0.160</td>
<td>-0.023</td>
</tr>
</tbody>
</table>

Note: ** Correlation is significant at the 0.01 level (2-tailed)  
* Correlation is significant at the 0.05 level (2-tailed)

5.3. Regression results and discussion

The results presented in Table 5 shows that the regression model is significant and explains 40% of the relationship between the financial reporting quality and the independent variables and this indicates that the model is well specified.

The coefficients of international financial reporting standards, global financial crisis, accounting conservatism, market structure in terms of concentration and intellectual capital performance for banks in Egypt and the UAE are statistically significant but bank size and market structure in terms of efficiency are statistically not significant.

The coefficient of International Financial Reporting Standards is significant with a negative sign. This recommends that there is a negative relationship between International Financial Reporting Standards and financial reporting quality. The results are in line with results of Cameran et al.
The coefficient of Global Financial Crisis is significant with a negative sign. This suggests that the Global Financial Crisis has a negative impact on financial reporting quality. The results are in line with the results of many previous studies referred to in section 3.3 which indicated that accounting conservatism will be having a positive impact on the financial reporting quality. The results revealed that IFRS has a positive impact on the quality of financial reporting. An interpretation of this result might be that IFRS are not convenient to the UAE environment.

Global financial crisis hypothesis assumes that the crisis will be having an impact on the financial reporting quality. The results revealed that global financial crisis has a negative impact on financial reporting quality and this is not in line with the results of many previous studies referred to in section 3.2 which showed that global financial crisis will reduce the level of investors’ confidence in the accounting information and as a result firms will try to eliminate this perception through improving the quality of financial reporting.

Accounting conservatism hypothesis presumes that adopting accounting conservatism approach will be having an impact on the quality of financial reporting. The results revealed that accounting conservatism has a negative impact on financial reporting quality and this is not in line with the results of many previous studies referred to in section 3.3 which indicated that accounting conservatism will be having a positive impact on the quality of financial reporting.

Market structure hypothesis assumes that the level of competition in the market has a positive impact on financial reporting quality. The results pointed that increase in the level of market concentration is encouraging banks from adopting an approach to increase the financial reporting quality of banks in Egypt and the UAE over the period 2008 to 2013. The study has provided insight into the determinants of financial reporting quality for banks in Egypt and the UAE.

The regression results show that international financial reporting standards, global financial crisis, accounting conservatism, market structure in terms of concentration and intellectual capital performance for banks in Egypt and the UAE have a significant impact on financial reporting quality but bank size and market structure in terms of efficiency have not.

International financial reporting standards hypothesis presupposes that adopting IFRS will be having an impact on the financial reporting quality. The results revealed that the quality of financial reporting quality for firms adopted local standards were better than firms adopted IFRS. These results are in contrary to the results of the majority of previous studies referred to in section 3.1 which revealed that IFRS has a positive impact on the financial reporting quality. An interpretation of this result might be that IFRS are not convenient to the UAE environment.
quality because they are protected from competition and hence do not get any extra benefits from adopting this approach. The study results supported this hypothesis using concentration ratio measure rather than efficiency measure which in line with the results of the previous studies referred to in section 3.4.

Intellectual capital performance hypothesis assumes that increases in the intellectual capital performance will be having a positive impact on the financial reporting quality. The results showed that banks with lower intellectual capital performance have higher intention to adopt the financial reporting quality. The study results are not in line with this hypothesis. Possible interpretation of this result is that the negative impact of the internal and external capital components was higher the positive impact of the human capital component.

REFERENCES


