International Financial Reporting Standards and Value Relevance: The Banking Industry

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ABSTRACT

Accounting is developing based on the economic development of societies and the political framework of countries. Given the wide use of accounting standards for financial reporting in global markets, increasing market integration and global policy foundations can accelerate the evolution of financial reporting standards and related practices internationally. The purpose of this study is to investigate the relationship between IFRS standards and the value of companies listed on the Tehran stock exchange. This is empirical research in the field of positive accounting research that is based on the actual information of the financial statements of companies listed on the Tehran Stock Exchange. This research is applied in terms of the relationship between causal variables, applied in terms of purpose and descriptive in terms of method, in which historical information of companies and statistical methods are used to evaluate hypotheses. The statistical population includes all the banks listed on the Tehran Stock Exchange in 2013-1017 and 11 banks were selected as the sample. The panel data method was used to evaluate the study model. The results show that in the period before the implementation of IFRS, financial reporting standards had a significant and positive relationship of 0.041 units with the bank value, while in the post-implementation period IFRS negatively affected the bank value.
Keywords: International Financial Reporting Standards, Bank Value

Introduction

Today, accounting seeks to integrate globally into both markets and policies. The ultimate goal of these policies is to reduce the costs of communications and information technology. To achieve this integration, financial reporting standards and performance must be considered (Achlinter, 2005).

The growth of international trade, capital flows, and increasing economic cohesion over the past two decades has enforced the desire to harmonize accounting standards among countries. Therefore, it is necessary to develop sustainable comprehensive accounting standards based on clear principles and economic realities. These standards must be consistent enough to help everyone access to them and understand their meaning (Sajjadi and Arabi, 2012).

More coordination at the international level leads to codify more comprehensive standards. The constant globalization of the stock market causes companies to accept changes. If a company presents the results of its activities in an incomprehensible way to foreign investors, the possibility of accessing external financial resources will be reduced. As countries become more cooperative, access to a unique set of global accounting systems will become easier (Draz, 2012).

Financial statements are the most important source of information to reflect the performance outcomes and financial condition of business units. For this reason, the basics of preparing financial statements, which are the same as accounting standards, are of particular importance.

It is believed that the more valid standards and criteria are used in the preparation of financial statements, the lower the information risk and the higher the quality of financial statements. Since financial statements are a substantial source of information for economic decisions and cover a wide range of users, their contained information should not be misleading.

To improve the global business environment and attract foreign investors, it is necessary to provide financial information based on IFRS, otherwise, it will be very difficult to make decisions and satisfy foreign stockholders. Therefore, acceptance of international standards is necessary for presence in international monetary and financial markets. International Financial Reporting Standards (IFRS) is a set of accounting standards developed by the International Accounting Standards Board (IASB) which tries to prepare the financial statements of stock companies in the form of a global standard.

International standards are now required on the stock exchanges of 114 countries. Implementing IFRS has many benefits, including lowering interest rates and inflation, revaluing foreign exchange rates, attracting foreign investment, preventing the outflow of domestic capital due to risk, breaking sanctions, access to cheap financial resources, comparability of financial statements with other companies, the presence of Iranian companies in foreign stock exchanges, achieving more share of global trade, accelerating privatization, and decreasing fraud and corruption in business. But the main reason for Iran to attend this tradition, like many other countries, is to attract foreign investment in companies listed on the stock exchange.

Auditors' mastery of IFRS standards, teaching the application of IFRS standards in the banking industry to independent bank auditors, carefully considering new reliable information, especially fair value, describing bank risks should also be attended. Besides, recently, the Central Bank's Deputy Supervisor does not allow banks to submit non-transparent financial reporting, which includes audit reports (Hejazi, 2013).

Undoubtedly, the disclosure of information about irrevocable fair value not only does not strengthen the status of our financial statements to attract foreign investors but also highlights the lack of transparency in the banking system, which should be strictly avoided since it highlights fundamental weaknesses in the financial reporting system and distrust of these reports (Hejazi, 2013).

If there is any ambiguity in the IRA's approach to IFRSS-recognized gains and losses, a lot of time and energy will be spent to resolve it. For this reason, it is better to resolve such issues predictably with the help of the government and parliament (Hail and Leuz, 2009).

Various methods of determining a company's value are divided into three categories: what a company has, what a company earns, or what the company will earn in the market. Of course, value determination is not an exact science. The value of a company is defined by financial figures (facts), but common sense and intuitive judgment also play a role in this process. The monetary value of many concepts (such as customer loyalty, history, growth, ongoing prosecution, self-sacrificing employees, a desirable long-term lease, a doubtful debt item, or goodwill value) is not easily determined [In calculating the price of a share in the future and present, none of the above items or the market view of a share, shareholders' trust in that share, etc is not considered but it is better to include an adjustment factor in the calculations for these items and then insert them in the company's financial statements]. Also, implementing different methods to determine the values of various factors causes different amounts of company value (Nikoumaram, 2011).

A rational rule is to set the value of the company at five times the current annual profit. If this method is used, the average profit of five years should be used. It should be noted that companies try to lower taxes as much as possible by assuming less profit in financial reports (Bernard, 2012).

Given the proclamation of 15/11/2016 by the Securities and Exchange Organization, all banks, credit institutions, and insurance companies registered Securities and Exchange Organization, whose financial period starts from the first of April, 2016 and after, and all the companies listed on the Tehran Stock Exchange and Iran Fara Bourse Co. (IFB), whose financial period starts from the first of April, 2016 and after, and their registered capital is more than 10 thousand billion Rials are asked to submit two sets of annual financial statements following International Financial Reporting Standards (audited) and Iranian Accounting Standards (audited).

Therefore, this study seeks to investigate the role of IFRS in value relevance in the banking industry.

Background

Rafiei Ehsanabad and Mir Mohammad Hosseini (2016) in an article entitled "Moving Towards International Financial Reporting Standards (IFRS) in Iran: New Opportunities and Challenges", studied the application of International Reporting Standards (IFRS) on the one hand, and fundamental changes in the financial reporting process, on the other hand, application of IFRS, the possibility of the mutual acceptance of companies' shares in different stock exchanges of the world, use of human knowledge in accounting, more effective evaluation of companies by international financial institutions, saving time and money to prepare financial statements, better use of technologies such as XBRL (extensible business reporting language) to increase information transparency and to better protect the rights of investors for the beneficiary countries - whose initial foundations have been laid since 2014 by large companies in the Tehran Stock Exchange.

Yari (2018) in the article "International Financial Reporting Standard (IFRS) for small and medium enterprises (SMEs)" provided a useful theoretical framework for better decision making and implementation of international standards in the form of reporting in small and medium enterprises. Despite the fact that most of these companies fail before their first anniversary, their performance should not be overlooked. This study provides implications for IFRS revision for SMEs and will help to better understand the future complexities of the SMEs convergence process because apparently after the full acceptance of international standards of large companies in some Iranian companies, small and medium companies must also implement these standards.

Fakhari and Saberi Sarabi (2018) examined the accounting skills of financial managers to establish IFRS in Iran. The results show that currently the managers of large companies listed on the Tehran Stock Exchange are not ready to implement international standards and need training. Knowledge acquisition: The ability of financial managers of large Iranian stock companies to apply international reporting standards has not been studied so far and accounting policymakers can use these findings.

Foroughi (2018) reviewed the acceptance of International Financial Reporting Standards (IFRS) in small and medium enterprises (SMEs) and reported that the adoption of these standards in SMEs is a specific process determined by the International Accounting Standards Board (IASB), which is a pioneer in drafting and approving laws for SMEs. ISAB develops a simple and complete version of International Financial Reporting Standards based on known principles to significantly reduce disclosure measurements and requirements. Therefore, the purpose of this study is to investigate the acceptance of international financial reporting standards in small and medium-sized enterprises.

Methodology

This is applied cross-sectional research conducted by the descriptive-correlation method. The data are quantitatively collected.

The statistical population includes all the banks listed on the Tehran Stock Exchange in 2013-2017. Among them, 11 banks were selected as a statistical sample. The sampling method is a full census.

Methods and Tools of Data Collection

The information required for this research is gathered through the library method and reviewing the financial statements and explanatory notes of companies listed on the Tehran Stock Exchange (as one of the most important capital markets), annual reports and yearbooks of the Tehran Stock Exchange, CDs including information of the listed companies in 2013-1017 and stock information sites. Theoretical topics of the research have been collected through the study of dissertations, publications, books, and internal and external articles available in libraries and the Internet.

Hypotheses

International Financial Reporting Standards (IFRS) have a significant impact on the value relevance in the banking industry.

Conceptual and operational definitions
The dependent variable: The bank value using the Gordon model
Here:
   (Price per share at the beginning of the year zero), E0 (earnings per share at the end of the year zero), b (percentage of retained earnings). k (rate of return expected by stockholders)
r (rate of return on investment). br (growth rate of earnings per share and dividends).

Independent variable: International Financial Reporting Standard
IFRS is a virtual variable. If the financial statements have been prepared by the IFRS standard, No. 1, otherwise, No. 0 will be considered.

Control variables
ACexiit: is a fictitious variable that indicates the existence of an audit committee in bank i in year t. If there is an audit committee in the bank, No. 1, otherwise No. 0 will be considered.
Leverageit: The ratio of total debt to total assets of the company in year t.
ROAit: Indicates the return on assets to the company in year t, which is calculated based on the ratio of net income to total assets.
Sizeit: Indicates the size of the company in year t, which is calculated based on the natural logarithm of the total assets.

Data analysis method
In the present study, the data are of the combined type. Recognizing the use of an integrated or panel method for estimation, and using a fixed-effects model or random-effects if the panel method is accepted requires testing hypotheses. To test the hypothesis, the financial statements of companies listed on the Tehran Stock Exchange were used. The data of 11 banks under review were classified using Excel software and pre-analyzed.

Results
Descriptive Statistics
Table (1) presents several concepts of descriptive statistics of the variables, including mean, median, minimum observations, maximum observations, and standard deviation.

Table 1.Descriptive statistics of the variables

Variable	Mean	Median	Max	Min	Sd
IFRS	0.4176	0.4500	1	0.00000	0.36814
Bank value	0.2433	0.2321	0.66	0.02	1.25417
Company size	13.959	13.796	18.739	10.104	1.3476
Financial leverage	0.62362	0.63251	0.92587	0.08263	0.20321

Panel data unit root test
The results of Levin, Lin, and Chu tests as a model with y-intercept are presented in Table 2.

Table 2.Results of the variables stability test

Variables	Levin, Lin, and Chu (LLC) Tests		Results
	Statistics	Probability	
IFRS	-14.2981	0.0000	Steady
Bank value	-14.1178	0.0000	Steady
Company size	-10.6431	0.0000	Steady
Financial leverage	-6.0771	0.0000	Steady

Given the results of the stability test in Table (2), at the 95% confidence level, the dependent variable of the board size in the y-intercept model is stable in the Levin, Lin, and Chu tests. These results are derived according to the numerical value Levin, Lin, and Chu statistics as well as their level of probability. For the IFRS variable, considering that the value Levin, Lin, and Chu tests statistics is (-14.2981) and the probability level for this variable is 0 (prob <0.05), this variable is steady and there is no need for differentiation. The same analysis applies to other variables.

Regression default tests

Table 3.Results of defult tests

	Coefficient test	Pearson's correlation	Variables	
Row	IFRS	Bank value	Company size	Financial leverage
IFRS	1			
Bank value	***0.155	1		
Company size	***0.103	0.0486	1	
Financial leverage	***0.157	**0.035	*0.001	1

White test	Hypothesis	F	Probability	Result
Before applying IFRS	First	27.4955	0.0000	Variance heterogeneity of error component
After applying IFRS		31.2417	0.0000	Variance heterogeneity of error component

	Hypothesis	F	Probability	Result
Before applying IFRS	First	192.5675	0.0000	Autocorrelation of error component
After applying IFRS		191.3643	0.0000	Autocorrelation of error component

Normality of the error component	Hypothesis	Jack-Bra statistics	Probability	Result
Before applying IFRS	First	12.5895	0.0018	Abnormality of error component
After applying IFRS		14.2963	0.0012	Abnormality of error component

Table (3) shows the correlation coefficients between the research variables. All variables were evaluated at 99, 95, and 90% levels. Because the correlation values between the independent variables are low, the lack of autocorrelation between the variables is confirmed as one of the basic conditions of regression.

The assumption of residual variance homogeneity was tested by the White test. The results of this test in Table (3) show that in all models, the null hypothesis about variance homogeneity is rejected. Therefore, generalized least squares (GLS) regression is used to eliminate the variance heterogeneity in these models.

Analysis of study hypotheses

After confirming the classical hypotheses related to the regression and significance of research variables and specifying the model estimation method, the model should be estimated by F-Limmer and Hausman tests. Eviews 9 software was used to detect the relationship between variables.

Hypothesis 1: IFRS has a significant effect on the value of the banking industry.

$$Vt_{it} = \beta_0 + \beta_2 IFRS_{it} + \beta_3 SIZE_{it} + \beta_4 LEV_{it} + \varepsilon_{it}$$

Table 4. Results of F-Limer and Hausman tests (after applying IFRS)

Model	Test type	F-Limer test	Hausman test
Model (1)	Statistics value	1.84	2.12
	P-Value	0.033	0.037
	Model type	Panel	Fixed effects

Based on the F-Limer test in Table (4), in the first model of the hypotheses, the P-Value at the 95% confidence level is (0.033), in other words, (P-Value<0.05), the null hypothesis that the model is pulling (which is the hypothesis about the equal y-intercept for all sections) is rejected and the opposite hypothesis is accepted. So, a separate y-intercept should be considered for each of the studied sections (companies). Therefore, the panel method can be used for estimation. Also, according to the results of Hausman test for the first hypothesis, considering that for 0.037, the value of the Hausman statistics for the first model is 2.12, and on the other hand, the P-Value is <0.05, the null hypothesis is rejected. Rejection of the null hypothesis (H0) indicates that the random effects method is incompatible and the fixed effects method should be used.

Table 5. Results of estimating the first hypothesis (after applying IFRS)

Dependent variable: value of the banking industry				
	Coefficient	Sd	t	Sig.
Fixed effects	0.200786	0.084514	2.375756	0.0178
IFRS	-0.027335	-0.010825	-2.530772	0.0117
Financial leverage	0.013131	0.007833	2.483824	0.0134
Company size	0.165373	0.080733	2.055304	0.0401
Adjusted coefficient of determination	63%			
Durbin-Watson test	1.56			
F	-3.415			
Probability (F)	0.0000			

The results of Table 5 show that in the first model, when the dependent variable is the "value of the banking industry", according to the t-value of IFRS (-0.530) and its level of probability (0.0117), IFRS has a significant negative relationship with the value of the banking industry (coefficient = -0.0273). So, the significant and negative relationship between the two variables is confirmed. Because the adjusted coefficient of determination is high (0.78), the ability to explain the model is appropriate. The Durbin-Watson test (D.W = 1.56) indicates the absence of autocorrelation in the model, and based on the Fisher F test (-3.415) and (prob = 0.0000), the total regression fit is valid.

Note: It should be noted that the implementation period of IFRS in the banking industry has been for the years 2016-2017, so it is necessary to examine this hypothesis for the years before the implementation of IFRS. In fact, this study is for the years 2013, 2014, and 2015, the results of which are shown below.

Table 6. Results of the F-Limer and Hausman tests (before applying IFRS)

Model	Test type	F-Limer test	Hausman test
Model (1)	Statistics value	4.356	8.5267
	P-Value	0.0000	0.045
	Model type	Panel	Fixed effects

Based on the F-Limer test in Table (6), in the second model of the hypotheses, the P-Value at the 95% confidence level is (0.0000), in other words, (P-Value<0.05), the null hypothesis that the model is pulling (which is the hypothesis about the equal y-intercept for all sections) is rejected and the opposite

hypothesis is accepted. So, a separate y-intercept should be considered for each of the studied sections (companies). Therefore, the panel method can be used for estimation. Also, according to the results of the Hausman test for the first hypothesis, considering that for 8.5267, the value of the Hausman statistics for the second model is 0.045, and on the other hand, the P-Value is <0.05, the null hypothesis is rejected. Rejection of the null hypothesis (H_0) indicates that the random effects method is incompatible and the fixed effects method should be used.

Table 7. Results of estimating the first hypothesis (before applying IFRS)

Dependent variable: profit predictability				
	Estimation cofficint	Standard error	t	Probability
Fixed effects	0.013101	0.007633	2.482834	0.0134
IFRS	0.014001	0.006372	2.008074	0.0452
Financial leverage	0.013633	0.007465	2.630886	0.0088
Company size	0.010421	0.003712	2.807363	0.0052
Adjusted coefficient of determination	77.55%			
Durbin-Watson test	2.156			
F	547.196			
Probability (F)	0.0000			

The results of Table 7 show that in the first model, when the dependent variable is the "value of the banking industry", according to the t-value of IFRS (2.008) and its level of probability (0.0452), IFRS has a significant positive relationship with the value of the banking industry. So, the significant positive relationship between the two variables is confirmed. Because the adjusted coefficient of determination is high (0.78), the ability to explain the model is appropriate. The Durbin-Watson test (D.W = 2.156) indicates the absence of autocorrelation in the model, and based on the Fisher F test (54.196) and (prob= 0.0000), the total regression fit is valid.

Discussion and Conclusion
The purpose of this study was to identify the impact of International Financial Reporting Standards (IFRS) on the value revalance in the banking industry. Based on the results obtained in the first model and when the dependent variable is the value of the banking industry in the period after the implementation of IFRS, according to the value of t-statistic of the IFRS variable (-0.530) and its level of probability (0.0117), the IFRS variable had a significant and negative relationship with the bank value (r = -0.0273). Therefore, a significant and negative relationship between the two variables is confirmed. Also, in the period before the implementation of IFRS, according to the value of t-statistic, the variable of financial reporting standards (2.008) and its probability level (0.0452), the variable of financial reporting standards had a significant and positive relationship with the bank (r = 0.014). Therefore, a significant and positive relationship between the two variables is confirmed. It is concluded that the International Financial Reporting Standard No. 9 has facilitated and improved the accounting of financial assets compared to the previous standard - International Accounting Standard No. 39. The number of classifications has been reduced from four to three because the "ready-to-sell" category does not remain in the International Financial Reporting Standard No. 9. This eliminates the need to recover profits and losses due to the former non-recognition of financial assets of stockholders' equity and reduces the complexity of financial reporting information. The emphasis on accounting and conventional value reporting has been increased. The International Financial Reporting Standard No. 9 has helped to reduce the recognition level for the classification and accounting of financial assets, to strengthen the reporting stability of financial information of financial assets, and to better understanding and comparing that information. The overall effect of International Financial Reporting Standard No. 9 is that the emphasis on accounting for the fair

value of financial assets rather than using other valuation techniques such as expired cost or historical cost is reinforced. In addition, accounting for financial asset losses is less complex. Of course, the new standard will lead to a change in accounting to reduce value and will be challenging. For example, more judgment is needed. Devaluation estimation is not a science but an art, because it involves difficult judgments and new models are developed for these judgments. Preparers of reports and financial statements will make new judgments, auditors will review them, and users of financial statements including securities regulators should comprehend them. Credit risks are at the heart of banks, and implementing a new standard depends heavily on the banks' process and credit systems. Accounting requirements, regulations, and internal risk management encounter impairment of financial assets. To adapt IFRS, each accounting solution should minimize the need for additional systems, processing, and internal changes, and also ensures that the difference between these requirements is well understood and managed. Depreciation of financial assets is currently measured in terms of "losses". In other words, no decrease in value can be identified in the initial recognition of a financial asset. Impairment is recognized when objective evidence indicates that the asset is impaired due to current events after the initial recognition of the asset. Losses related to the reduction of value of financial assets for financial assets calculated at expiration cost are measured differently from financial assets at fair value with the identified profit and loss in the comprehensive profit and loss. International Financial Reporting Standard No. 9 effectively reviews financial asset losses, which at fair value is measured as any decrease in the fair value of profit or loss or the comprehensive profit for a year depending on the classification of financial assets. For allocated financial assets assessed at expired cost, an economic unit should evaluate the evidence of loss at each reporting date. If there is evidence, then a loss assessment should be performed. If a loss is identified, the profit or loss must be taken into account immediately. The amount of the recoverable amount is usually based on the present value of the expected future cash flows at the date of the loss evaluation or the value discounted from the present value at the effective rate of return at the date that the financial asset is issued. Excessive disclosure has also been suggested. Offers to devalue seem to be very challenging for banks. However, the current disclosure by the International Standards Committee shows that significant changes are on the way. In contrast, the new IAS39 standard will only need to assess the devalue of measured assets at expired cost; therefore, the expected cash flow model will become the only devaluation model for financial assets. Adoption of International Financial Reporting Standards for financial reporting purposes, by requiring banks to protect capital against expected credit losses calculated according to the current method of risk weighting. This approach acknowledges that in some cases the goals of central bank legislators and developers of accounting standards are not in line. At this stage, it is difficult to determine which approach is accepted in Iran, and The Central Bank must provide a solution. This bank has provided a translation of Basel Committee guidelines to other banks. According to the guidelines of this committee, banks are required to use one of the standardized, fundamental, or advanced approaches to protect capital against credit risk. Banks that have chosen the advanced approach can use some of the provided information to apply the Basel Committee guidelines for applying the tolerable loss model, such as the internal estimation of determining the required loss according to Basel II, assuming default and default risk. The results of this study manifested that the relationship between investment efficiency and capital structure after and before the adoption of IFRS needs further study. Future scholars are encouraged to examine the impact of IFRS on investment performance.

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