THE EFFECT OF ADOPTING IFRS ON ENTITIES' FINANCIAL PERFORMANCE ON AN EMERGING MARKET: THE CASE OF ROMANIA

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Abstract
An efficient electricity market that acts for the benefit of its customers and investors is an engine of economic and social development. The adaptation of International Financial Reporting Standards (IFRS) as a financial reporting framework for the energy market listed on the capital market influenced the presentation of information in the financial statements. The flexibility offered by IFRS, on the one hand, to the choice of possible solutions, to the application of alternative treatments, estimates according to the judgments of the decision-makers, favors the application of strategies to the benefit of certain categories of financial information users. On the other hand, the application of IFRS leads to an increase in the comparability of the information presented in the financial statements, but also to the transparency of the reporting. In this context, we consider of interest the present research whose objective has been focused on identifying whether the changes brought by the adoption of IFRS by listed electricity companies in the Romanian capital market through disclosures in the financial statements have affected the image of financial performance at the level of the market studied, and in what way there have been changes in the image of the financial performance.

Keywords
International Financial Reporting Standards, Government Policy and Regulation, International Accounting Standards, Transparency.

JEL Classification
G300, M410, M480

Introduction

The issue of transparent corporate governance is addressed in many international papers. Moreover, the implementation of IFRS by listed companies in different countries has led to an increase in the transparency of the financial information presented by listed companies, as well as the possibility of attracting foreign investors.

Companies listed on a capital market in the EU area are required to report their financial statements in accordance with International Financial Reporting Standards.

In Romania, the process of harmonization of Romanian accounting with IFRS and European legislation started in 2005. IFRS were adopted as a financial reporting framework for companies listed on the Bucharest Stock Exchange starting with 2012, based on the Order of the Minister of Public Finance no. 1286 of 2012 (OMFP 1286/2012) and the Order of the

Minister of Public Finance no. 2844 of 2016 (OMFP 2844/2016), as amended and supplemented. On the one hand, the companies which, at the date of entry into force of OMFP 1286/2012, were already listed on the BSE, were obliged to adapt their accounting policies (which were in line with a national financial reporting framework) provided by IFRS. On the other hand, companies that have been accepted on the capital market after 2012 have also been forced to apply IFRS.

Our study is based on the analysis of the financial indicators that the sample entities reported for 10 years (2007-2016), of which 5 years before the adoption of the IFRS and 5 years after the adoption of the IFRS. In the first part, we present a brief analysis of the specialized literature in the field, then we continue with the presentation of the research methodology, by interpreting the results and reaching conclusions. As far as we know, a similar study was not conducted on the Romanian capital market, with other researchers studying the effect of adopting IFRS only in the year of implementation.

Literature Review

Research in the field show mixed results of the financial measures reported with the adoption of IFRS (Mirsiglioglu et al, 2013). Therefore, there are studies that prove that the adoption of IFRS leads to an improvement in accounting quality and others that cannot establish a clear improvement in accounting quality due to the adoption of IFRS. Other papers offer researchers a relevant background in this field (N. Soderstrom & K. J. Sun, 2007). They argue that despite the adoption of IFRS, the quality of accounting in an international context is relative because accounting quality is a function of the entity's overall institutional framework, being influenced by the economic and legal system of the entity's country of residence. However, other scholars, after studying the existed literature between 1960 and 2005, concluded that a direct link between reporting specific to a jurisdiction and the international accounting convergence process could not be found. (Baker & Barbu, 2007).

Other studies show that changing the entity's management earnings in their own interest influences the quality of published financial information (Beneish, 2001). From this point of view, IFRS provides an opening through the possibility of setting up accounting policies based on alternative treatments. But, according to other researchers, the imposition of rules in financial reporting that contributes to increased transparency limits the ability of managers to use strategies that pursue their own interest (Hunton et al, 2006). Evidence has been found that in the transition period from national standards to international standards, accounting quality of financial reporting has decreased (Lin et al., 2012).

Over time, it has been investigated the relevance of accounting information and financial reports and how they influence the image of companies, with different views and results. Thus, one study demonstrates that only two of the reports analyzed were significant (Agka et al, 2007), while another (Callao et al, 2007) could not identify any improvement in presenting financial information on the Spanish market.

In the literature, research is carried out on the impact of IFRS on disclosing information on financial performance. A study on the impact of IFRS adoption on loss and earnings recording shows that entities adopting IFRS have a faster recognition of losses and greater earnings relevance, all of which contribute to assurance of superior accounting quality (Barth et al., 2006). According to a study in the UK (Iatridis, 2010), focused on the effect of adopting International Financial Reporting Standards (IFRS) on the quality of financial information in the UK, it was demonstrated that less information asymmetry and earning manipulation would lead to disclosure of informative and quality accounting information and will therefore help investors make informed and impartial judgments. A study on the European Union on how the adoption of IFRS reduces the cost of equity (Siqi, 2010) shows that while the mandatory adoption of IFRSs considerably lowers the cost of entities' equity,

the effects depend on the force of law enforcement of the countries under review. It is also invoked the call to best practices in order to stimulate change in an increasingly competitive environment and with fewer resources to improve organizational performance (Dumitru et al, 2013).

Research Methodology
In order to achieve the proposed objective, we analyzed the importance of the electricity market operators in terms of the BET and BET-X index, listed on the Bucharest Stock Exchange (BSE), taking into account the date on which they were admitted to trading. We used as criteria for selection the importance of listed entities in the market they represent in the Romanian economy (the share of turnover in the total sector of the Romanian economy along with the social responsibilities allocated to listed companies), corroborated with the date of admission to trading. Thus, we have identified and selected for the study the electricity and heating, gas, hot water and air conditioning supply market, the only market on the BVB, represented by entities that are entirely in the top 15 companies from the point of view of BET and BET-XT index during the analyzed period. The focus of the research was also based on the importance that energy market operators have for the Romanian economy, and not only given the social responsibilities assigned to them.

Given the importance of the energy market in an emerging, and not only, economy, corroborated with the social responsibilities assigned to market-based companies, we believe that investigating, according to the proposed objective, the financial statements published by the energy market companies is relevant regarding the identification of the influence of the application of IFRS on the presentation of financial information, in particular those presenting financial performance.

The research counts 180 observations carried on financial indicators in 10 years for the electricity market. In order to facilitate the methodology, we divided our research into two steps:

Step I:
For the purpose to observe the effect of IFRS application by listed electricity entities on the presentation of information in the individual financial statements (IFRS being mandatory from 2012), more precisely if there have been changes in presentations in financial statements of financial performance information and changes in the image of financial performance, we investigated the evolution of turnover compared to total revenues, as well as the evolution of total expenditure in total revenues over time, as follows: the first time period of 5 years prior to the mandatory application of IFRS (2007-2011) and the second time interval being 5 years after the application of IFRS (2012-2016). The results were determined using the formulas:

$$\frac{T}{R} = \frac{\frac{\sum \frac{Turnover}{Revenue}}{n}}{m} \qquad (1)$$

where:

T/R= Turnover/Revenues average on electricity market listed on the stock exchange
n = number of years
m = number of entities that form the electricity market listed on the stock exchange

$$\frac{E}{R} = \frac{\sum \frac{Expenditures}{Revenue}}{m} \qquad (2)$$

where:

E/R = Expenditures/Revenues average on electricity market listed on the stock exchange

n = number of years

m = number of entities that form the electricity market listed on the stock exchange

The main purpose of the comparisons is to observe their trend before and after adoption of IFRS to determine whether IFRS has had an impact on disclosures that give a picture of the financial performance. We also took into account the situation where the identification of major differences in the obtained results can be caused by the market dynamics, the prices regulated by ANRE and by the demand for electricity. Therefore, in parallel, the average prices for one megawatt/hour (MW/h) of the analyzed period were analyzed, but also the quantity of MW/h sold, as a result of the average prices and the average of the quantities sold in the analyzed years. Income developments have been established in relative amounts using the following formula:

$$I = \frac{\sum_{i} I_j}{m} \qquad (3)$$

where:

$I_{(j/i)} = P_{(j/i)} \times Q_{(j/i)}$ = income

$I_{j/i}$ = evolution of the income in the analyzed period (%)

$P_{j/i}$ = evolution of the price in the analyzed period (%)

$Q_{j/i}$ = evolution of the energy quantity sold in the analyzed period (%)

i = current year; j = next year

I = the average evolution of revenues registered by the electricity market listed on the stock exchange

m = number of entities that form the electricity market listed on the stock exchange.

Step II:

We have studied the impact of adopting IFRS in the disclosures in the balance sheet (from the point of view of reporting equity and profit on total assets) compared to the presentation of the Profit and Loss Account (reporting the profit on the total revenue) in order to identify the impact adoption of IFRSs on financial performance published by entities in the market under study. In this respect, we have used relative indicators calculated on the basis of the data from the financial statements reported in the analyzed period regarding: total assets, total equity, total revenues, total expenses and profit, according to the table below:

Table no. 1 Method of calculating relative indicators

Calculated indicators	Formula
Pr/R	Profit / Total Revenues
Pr/TA	Profit / Total Assets
Eq / TA	Equity / Total Assets

Source: authors' research

These indicators, along with those calculated at the previous step, were considered relevant to meeting the objective of our research.

Results and Discussion

According to the applied research methodology, we compared different time intervals (interval I - before adoption of IFRS and interval II - after the adoption of IFRS) for the listed on the stock exchange companies forming electricity market listed on BSE, established on the same principle, namely: time interval I consisting of observation the trend of presenting financial information 5 years before the adoption of IFRS, and the interval II formed by observing the possible differences in the results obtained within the next 5 years since the adoption of IFRS. Thus, in Table no. 2 we find out the averages of indicators calculated before and after adoption of IFRS:

Table no. 2 Relative indicators studied before and after adoption of IFRS

	Before IFRS					After IFRS					Mean Before IFRS	Mean After IFRS
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016		
Pr./R %	5,69	4,72	2,12	1,05	5,37	2,17	16,16	11,85	11,77	9,83	3,79	10,36
Pr./TA %	1,47	1,25	0,45	0,36	1,95	0,72	4,54	4,83	5,04	3,89	1,10	3,80
Eq/TA %	62,79	62,88	64,27	63,16	61,03	62,13	58,26	63,80	68,14	69,80	62,83	64,43
E/R %	98,61	96,44	97,88	98,95	95,19	96,99	85,63	89,31	89,06	90,72	97,42	90,34
T/R %	89,22	97,97	94,30	89,39	89,90	91,12	91,22	91,93	91,54	91,44	92,16	91,45

Source: authors' research

As we can see from Table no. 2, the average share of expenditures in total revenues decreased by more than 7.08% in the post-adoption period of the IFRS compared to the previous period, while the average share of turnover in total revenues recorded a decrease of only 0.71%.

Table no. 3 below shows briefly the percentages related to the evolution of the analyzed indicators:

Table no. 3 Evolution of the indicators studied and their average before and after adoption of IFRS

|	Before IFRS				After IFRS				Mean before IFRS	Mean after IFRS
	2008/ 2007	2009/ 2008	2010/ 2009	2011/ 2010	2013/ 2012	2014/ 2013	2015/ 2014	2016/ 2015		
T/R %	109,81	96,25	94,79	100,58	101,35	100,11	100,78	99,57	100,36	100,45
E/R %	97,80	101,49	101,10	96,20	101,88	88,29	104,30	99,72	99,15	98,55
Pr./ R%	82,95	44,92	49,36	512,72	40,44	744,51	73,33	99,30	172,49	239,40
Pr./T A %	85,36	36,22	78,57	547,06	632,40	106,37	104,37	77,17	186,80	230,08
Eq/T A%	100,14	102,22	98,26	96,63	93,78	109,50	106,80	102,43	99,31	103,13
I%	152,92	78,91	101,70	115,08	97,26	111,60	103,53	100,72	112,15	103,28

Source: authors' research

According to Table no 3, following the implementation of IFRS a slight increase in the average share of turnover in total revenues (0.09%) can be observed, while the average

share of expenditures in total revenues tends to decrease (0.60%). If these changes are due to a change in the financial reporting framework from the national framework to IFRS, it can be argued that the adoption of IFRS leads to the presentation of the companies from the electricity market listed on BSE in a more favorable way in terms of expenditure and revenue.

In order to affirm that this image improvement is due to the adoption of IFRS rather than to the influence of the price and the quantity of electricity sold, we calculated the income from the electricity supply by multiplying the quantity of electricity supplied with the average price regulated by the National Regulatory Authority in the field of energy (ANRE).

According to the ANRE Report of 2016, the average price of electricity transport and the total amount of electricity supplied on the electricity market is shown in Figure 1:
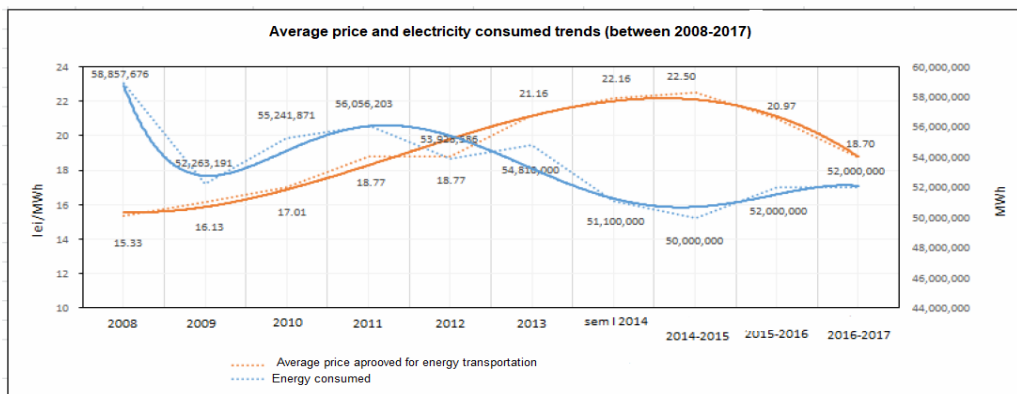
Fig. no. 1 The tendency of the average price approved for the transportation of electricity and electricity consumption (2008-2017 period)
*Source: ANRE report 2016, p. 37*

Table no. 4 summarizes the evolution of revenues (expressed in relative magnitude) calculated on the basis of the evolution of the average electricity price and the evolution of the supplied electricity:

Table no. 4 Income evolution calculated on the basis of the evolution of the average price and the evolution of the quantity of electricity delivered (I) at market level during the analyzed period

	2008/ 2007	2009/ 2008	2010/ 2009	2011/ 2010	2013/ 2012	2014/ 2013	2015/ 2014	2016/ 2015	Before IFRS	After IFRS
I %	152,92	78,91	101,70	115,08	97,26	111,60	103,53	100,72	**112,15**	103,28

Source: authors' research

We can see from the Table no. 4 and Fig. no. 2 that there is a downward trend in electricity sales in the electricity market listed on BSE after the adoption of IFRS, which shows that the amount of energy delivered and, implicitly, the price of electricity decreased in the post-adoption period. In the context of a slight increase in the price during the period 2012-2015 and then (in 2016), it returned to the level of the price in 2012 and the quantity delivered by the companies decreased slightly during the period 2012- 2015, and in 2016 returned to the level delivered in 2012, the trend of revenue growth in revenues (according to Table 2) could be attributed to the application of IFRS rather than to changes in the amount of energy delivered or the price.
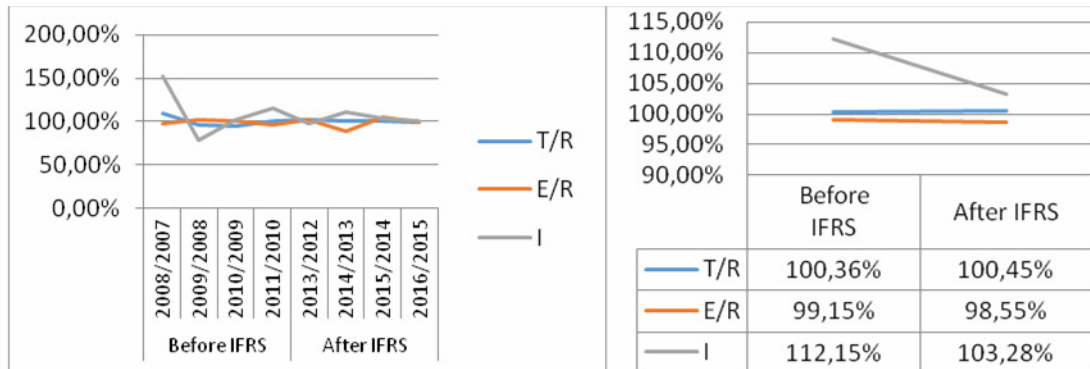
Fig. no. 2 Turnover trend in total revenues (T / R) and revenues calculated on the basis of the evolution of the average price and the evolution of the delivered electricity quantity (I) during the analyzed period, compared to the trend of the share of expenditures
Source: Source: authors' projection

The results presented can demonstrate that the application of IFRS by the entities within the sample has led to a more favorable presentation of the earnings and expense information in the financial statements.

Taking into account the Pr / TA, Eq / TA and Pr / R indicators (found in Tables no 2 and no 3) we note the trend of post-adoption IFRS growth and more favorable performance of the entities in the market analyzed after the first year adoption of IFRS. We point out that the indicators under review are lower than in the previous year compared to the year of adoption (see Figure 3), for which the adoption of IFRS apparently does not bring significant improvements in the company's image in the year of adoption of IFRS (as other researchers have concluded).
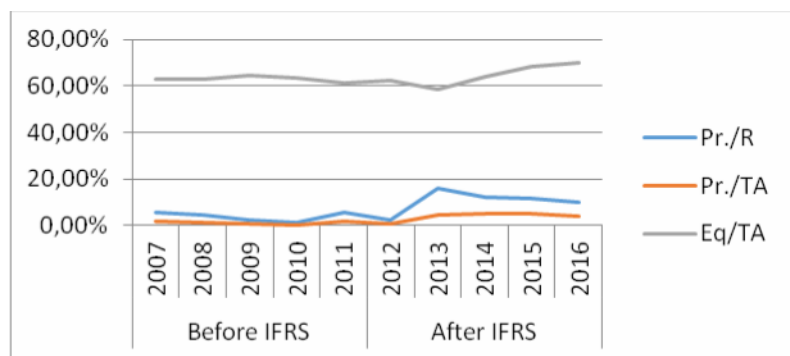
Fig. no. 3 Comparative presentation of the financial indicators of entities in the sample before and after adoption of IFRS
Source: authors' projection

However, in the years following the adoption of IFRS, we note that the ratio of profit to total assets fluctuate relatively little, being stabilized, which may increase investor confidence in the companies under review. This assumption is also being tested and demonstrated by the ratio of equity to total assets, which is more than 10% higher in the post-adoption period. In this respect, we can say that there is an improvement in the image of the analyzed entities but also at the market level.

Conclusions

Corroborating the results obtained and previously presented in the context of the research undertaken, we can state that the change of the financial reporting framework from the national framework to the IFRS, after the first year, led to a more favorable presentation of the image of the indicators suggesting the performance financial. Moreover, the increase of more than 10% in the post-adoption period of the IFRS, the ratio between equity and total assets is another proof that supports the demonstration and places the changes brought not only in the area of social responsibilities assigned to operators in the energy market, but also in the size of investors' perception of the capital market for entities in the electricity market.

The limits of our research consisted mainly of the small number of companies listed on BSE operating in the emerging market. The data were also collected manually from the BVB platform and the research did not take into account other factors that could influence the results.

Additional studies could be conducted on other entities included in other sectors of activity listed on the Bucharest Stock Exchange or by studying the effect of adopting IFRS at the level of all companies listed on the Romanian stock exchange. Moreover, studies on the adoption of IFRS could also be carried out on companies in insolvency both at the time of the adoption of IFRSs and those who have entered into insolvency after the adoption of IFRS.

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