International Journal of Finance and Managerial Accounting, Vol.1, No.4, Winter 2017

The Value Relevance of Net Financial Expenses during the Period of Imposing Sanctions: The Case of Iran

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ABSTRACT

Based on valuation model of residual earnings, we cannot use earnings and losses of balance sheet items recorded in fair value for valuation purposes, for the balance sheet provides a perfect estimate of such items' value. The purpose of this study is to examine whether net financial expenses are related to the market price of stocks in Iran, because after initial recording of financial debts, no adjustments are done in historical cost regime. We expect to see an improvement in this relationship during severe fluctuations in the country's economy. 35 companies were selected from firms listed in Tehran Stock Exchange and we a period of eleven years, 2005-2015 was studied. The statistical test for data analysis is regression testing. The results show that net financial expenses are value relevant and there is an increasing trend in value relevance of these expenses during imposing the sanctions. This trend is particularly strong from 2009 onwards

Keywords:

Value Relevance, Net Financial Expenses, Valuation, Residual Earnings.

1. Introduction

Net income is one of the most important financial information presented in income statement. Earnings are widely used as a summary measure of operating performance for firms (Chandra & Ro, 2008). The research presented so far generally assumes that all earnings components have identical associations with stock returns. A large amount of researches show that this is not necessarily the case (Beisland, 2009). If an earnings component has different characteristics from other earnings components, then aggregation leads to a loss of information content (Schiemann & Guenther, 2013). One of the important components of income are net financial expenses. A considerable amount of financial resources of firms listed in Tehran Stock Exchange is supplied with long-term bank resources. Therefore, interest incurred from loans received constitutes a huge part of net financial expenses and thereby income statement. Beisland (2013) suggests that if the fair values of a firm's net financial debts are recorded on the firm's balance sheet, the valuation of the firm is simplified and the residual earnings model can be replaced by the residual operating income model. Based on accounting standards, financial assets and commitments are recorded at fair value or amortized historical cost. Penman (2013) suggests that there is no difference between amortized historical cost and fair value in slowly changing interest rate regimes. If this contention is valid, then in the aggregate, the book values and fair values of net financial liabilities should be similar (Beisland, 2013). Beisland (2013) maintains that this conclusion is invalid for fast changing interest rate regimes. Therefore, this reasoning raises an important question of whether Beisland's argument can be applied in Iran, and whether the value relevance of net financial expenses increases during imposing sanctions and thereby in the period of increasing the economy's instability.

2. Literature Review

According to FASB (1999) and IASB (2008), the primary objective of financial reporting is to provide high-quality financial reporting information concerning economic entities, primarily financial in nature, useful for economic decision making. According to IASB (2006) and IASB (2008), providing high quality financial reporting information is important, because it will positively influence capital providers and other stakeholders in making investment, credit, and similar resource allocation decisions enhancing overall market efficiency (Beest et al., 2009). Accounting Information plays an important role when shareholders evaluate a firm's prospects in forming their investment decisions. In accounting research, statistical associations between accounting information and share prices are used to assess the degree of value relevance of accounting information for shareholders (Beisland & Hamberg, 2013). Most standard setters view value relevance, along with other attributes, as an important characteristic of accounting information. value relevance can be defined as the ability of financial statement information to capture and summarize information that determines the firm's value. Value relevance research does not focus on how accounting information is used in valuation. Instead, this line of research asks if accounting information is able ex post to explain variations in stock prices over time and/or between companies (Beisland, 2009).

The value of a company's equity is equal to the present value of its future dividends. The clean surplus relation (CSR) indicates that a change in book equity is equal to the value of net earnings minus net dividends. Thus, under the CSR, there is no dirty surplus (other comprehensive income). If the CSR holds, then the dividend model can be restated as the renowned residual earnings (or income) model (Beisland, 2013):

$$V_0^E = B_0 + \sum_{t=1}^{\infty} \frac{E(\mathrm{EARN}_t - r_E * \mathrm{B}_{t-1})}{(1+r_E)^t}$$

In the equation above, V_0^E is the value of a firm's equity at time 0, B is the book value of the firm's equity, EARN is the firm's net earnings, and r_E is the required rate of return on the equity (for simplicity, this rate of return is assumed to be constant). If the balance sheet is perfect in the sense that all items are recorded at fair value, the equity value will simply be equal to the book value of equity, and the forecasted residual earnings will be equal to zero for all future years. Under these 'perfect accounting' conditions, all values will be provided by the balance sheet, and the income statement will have no relevance for valuation purposes. However, under

conservative accounting rules, the book values of assets are typically underestimated and the book values of liabilities are sometimes overestimated; therefore, using these rules, the value of residual earnings will be greater than zero and the income statement will typically provide value-relevant information (Beisland, 2013).

In most countries, the accounting that is performed for operating items is generally conservative. For instance, PPE (property, plant and equipment) assets are typically depreciated excessively quickly, generating accounting values that are lower than the fair values of these assets. Moreover, intangible assets are also frequently either underestimated in value or not recognized on the balance sheet at all. In addition, liabilities are often treated conservatively in the context of accounting in general, operating liabilities and provisions are rarely underestimated (Beisland, 2013).

Penman (2013) suggests that the residual earnings model can be disaggregated so that residual earnings can be calculated for each item in balance sheet. Therefore, the equity equals to the sum of the book value for all these items and the sum of present value of those residual earnings expected to be generated by each balance sheet item in the future. Residual earnings for each item recorded in fair value can be ignored, since all residual earnings related to these items will be zero.

The regression specifications so far have implicitly assumed that aggregate accounting numbers like bottom-line earnings and book equity are the metrics of interest. However, these aggregated measures are sometimes disaggregated into components. Various earnings components may have different levels of value relevance. In fact, a large amount of empirical research found that the valuation of earnings differs across earnings items. When analyzing the relationship of accounting earnings with stock prices or stock returns, one normally looks at net earnings, changes in net earnings or unexpected net earnings. Some researchers have, however, used more detailed data to describe this relationship (Beisland, 2009). Early studies examining associations between "earnings components" and returns and future earnings defined earnings components as income statement line items (Lipe, 1986; Fairfield et al., 1996). However, earnings components can also be thought of as earnings provided by cash or accruals (Sloan, 1996) or those that are transitory, permanent, or price-irrelevant (Ramakrishnan and Thomas, 1998), discretionary or non-discretionary (Subramanyam, 1996), expected and unexpected, recurring and non-recurring, normal and abnormal, etc (Bratten, 2009).

One of the important components in income statement are net financial expenses. Penman (2013) argues that if net financial debts are recorded in fair value, then financial items in balance sheet are not responsible for any future residual earnings. Therefore, financial items can be ignored in predicting residual earnings. Thus, if net financial debts are recorded in fair value, firm's valuation is simplified and the residual earnings model can be replaced by the residual operating earnings model:

$$V_0^E = B_0 + \sum_{t=1}^{\infty} \frac{E(\mathrm{OI}_t - r_F * NOA_{t-1})}{(1+r_F)^t}$$

In the above equation, OI is operating income, and NOA is net operating assets. Residual operating income is defined as the difference between a firm's operating income and its required return on net operating assets. The required rate of return on NOA, r_F (where F denotes 'firm' in contrast to E for 'equity'), deviates from the required rate of return on equity if a company has (net) financial liabilities or assets (Penman, 2013).

According to fifth chapter of Iran's conceptual framework of financial reporting, assets and debts initially are recorded at their transaction cost. Herein, recorded historical cost is equivalent to replacement cost of an asset. According to the conceptual framework, historical cost regime is the basis for measuring the elements from which financial statements are constructed and current values will be used to adjust this regime, provided that this adjustment is compatible with reliability and cost-benefit characteristics.

According to paragraph 24 of revised Iranian standard of No.15, Investments, the amount of interest and dividends earned from investments are investment return and normally are considered as gains. These gains are reflected in financial statements as non-operating gains. According to this standard, the net selling value is used for current marketable investments including investment in derivatives. Lower-cost-and- net selling value or net selling value is used for other current investments. Finally, the two

following methods are used for long-term investments: (1) cost less accumulated impairment or (2) revaluation as an alternative treatment. Therefore, both current and historical values are used for investments. For financial debts, if we take a look at financial statements of firms listed in Tehran Stock Exchange, interest-bearing debts like loans and sometimes bonds parade in long-term debts section.

The International Accounting Standards Board (IASB) recently set up a Working Group to propose a convergence model for the revaluation of property, plant, and equipment. Under the revaluation model, property, plant, and equipment are carried at fair value at the date of revaluation less subsequent depreciation. Revaluations are to be made often enough so that the carrying amount does not significantly differ from fair value at the balance sheet date. The practice of upward asset revaluations for firms reporting in accordance with international standards appears to be common. Upward revaluation adjustments are taken directly to equity, unless they represent the reversal of a revaluation decrease previously recognized as an expense, in which case they should be recognized as income. Downward revaluation adjustments are used initially to reverse any previous upward revaluations in equity and then recorded as an expense. Academic research has shown that upward revaluations of property, plant, and equipment are correlated with stock prices and are helpful in predicting future earnings. Fair values also provide relevant information regarding dividend restrictions. In addition to improved predictive value, fair values provide greater feedback value and more timely financial information than historical cost measures of property, plant, and equipment (Herrmann et al., 2006).

It is widely recognized that inflation of the general price level and the relative price adjustments distort and cloud the meaning of corporate accounts. The distortion arises primarily because under current accounting practice, firms carry many physical and financial assets and liabilities at original cost or book value, figures that are expressed in dissimilar units and that may deviate widely from current market value or replacement cost. The importance of such effects has increased greatly in the past ten years, as has the rate of change in general price levels (Shoven & Bulow, 1975). Due to prevailing inflationary conditions in Iran during recent years, fair values of long-term assets and liabilities have considerably increased compared with their historical cost-based book values, which have decreased the qualitative characteristics of relevancy and thus, usefulness of information reflected in financial statements. Jenkins and Kane (2006) suggest that book value is misspecified to the extent recognized assets and liabilities are not reported at current value. This misspecification suggests that book value cannot alone produce effective valuations.

The unique role of oil revenues in the structure of government budgets and expenditures is a special characteristic of the developing oil export economies like Iran. Oil revenues are the main source of financing government expenditures and imports of products in Iran. Since on average 60% of government revenues come from oil and gas, the budget is especially affected by sudden negative or positive shocks in oil prices (Faraji Dizaji, 2014). Over the past several decades, economic sanctions have become a popular tool of statecraft in international politics, and no country has used economic sanctions more often than the United States (Hufbauer et al., 2009). In some instances, economic sanction regimes imposed by the United States are joined by other states or international communities, such as the United Nations or the European Union. One would expect unilateral sanctions imposed by only the United States to have a smaller adverse effect than multilateral sanctions simply because a larger number of countries is engaged in the latter (Neuenkirch & Neumeier, 2016). Bi- and multilateral economic sanctions significantly reduce the target state's GNP as well as the volume of bilateral trade between the imposing state and the sanctioned target state (Hufbauer et al., 2009). Economic sanctions often appear to have devastating consequences on the overall quality of life of the citizens of the target state (Neuenkirch & Neumeier, 2016). Economic sanctions can impose huge costs on the target state's public as they often inflict severe economic damage. Both unilateral and multilateral economic sanctions are found to lead to a significant decline in GDP per capita, a slump in exports and imports, and a contraction of international capital flows, that is, withdrawal of foreign direct investment, foreign aid, and financial grants, as well as high inflation (Neuenkirch & Neumeier, 2016). During the past decade, Iran has faced different international and unilateral sanctions which caused disturbance of the economic system. Iran has been subject to international sanctions by various entities since 1979.

However, in 2012, the Iranian economy collapsed under the economic strain of sanctions imposed to stop Iran from violating the international Nuclear Non-Proliferation Treaty (Shahabi et al., 2015). During the past decade in Iran, because of reporting assets at historical cost, prevailing inflationary economy (specially from 2010 onwards), acquisition of some companies' assets by state exchange in previous years and subsequent fluctuations in exchange rates, recorded amounts in financial statements don't reflect real values of companies and in some cases that current value of company's assets are considerably different from their book value, they are not reflected in financial statements and accounting books. In such a situation, if we take a look at statistics related to deposits' and loans' interests declared by the Central Bank of Iran during the past 12 years (table 6), we realize that interest rates have fluctuated, which the main part of this fluctuation is related to the second half the past decade, that is from 2010 onwards. Moreover, the inflation rate has increased considerably. It is natural that in this situation, historical values reflected in the balance sheet are different from realities in the balance sheet date and reflect the values that differ enormously from fair values. Since historical costs are used for reflecting debts and some investments, we expect that in periods after the acquisition and followed by fluctuations in inflation and interest rates, the value of investments and debts reflected in historical costs differs from that of their market value. In this situation that Beisland's argument about countries with unstable financial market and changing interest rate is in question, we assume that the value relevance of net financial expenses in Iran is more than countries like Norway and along with increasing instability in country's economy, this value relevance will increase as well. This issue is examined during imposing sanctions on Iran's economy. Therefore, the research questions are: Can Beisland's argument be applied in Iran? and will the value relevance of net financial expenses increase during severe fluctuations in Iran's economy?

Disaggregated earnings components will have greater predictive ability for future earnings to the extent they have differential persistence. When earnings components with differential persistence are aggregated, information is lost. Relative to aggregate earnings, earnings components will be most informative for firms which have differential persistence based on the composition of their components and the related persistence levels of each component. Prior research has documented a decline in both the value relevance and the persistence of earnings over the past few decades. Standard setters have moved to a balance sheet approach with an emphasis on the fair values of balance sheet accounts rather than an income statement approach which followed principles of historical cost and matching. Thus, an open question is whether information from the components compensates for the apparent loss of information from earnings (Bratten, 2009).

Ball & Brown (1968), Beaver et al. (1979), Chen et el. (2001), Myring (2006), Dobija & Klimczak (2010), Ahmadi & Aghalatifi (2010), Hashemi et al. (2013), Thaghafi & Salimi (2005), Rahnamaye Roodposhti et al. (2010), Baghumian et al. (2013), and Izadinia et al. (2013) show that accounting earnings are value relevant. In contrast, according to Gong et al. (2006), and Zariffard & Nazemi (2005), there is a weak relationship or no relationship between earnings and returns. Thaghafi and Baghumian (2009) argue that the reasons for low value relevance of earnings are market inefficiencies and the behavior of investors. Hayn (1995) argues that net losses have no information content.

Hashemi et al. (2013) argue that changes in net earnings affect the relationship between accounting earnings and current returns of stocks. And if changes in earnings are segregated into their components using the concept of residual earnings, these components reinforce the value relevance of earnings.

The line items of earnings were examined in the previous research. Hosseinzadeh and Ahmadinia (2009) examine the value relevance earnings' components, including operating income, income before taxes, net income and accrual items with stock returns and conclude that operating income, income before taxes, and net income are value relevant. Izadinia et al. (2012) show that current operating income along with the variable of book-to-market ratio are positive predictors of the next years' returns, and the change in operating income can explain the change in the returns around the announcement of changes in earnings. In addition, Etemadi and Imani Barandagh (2007) show that there is no relationship between non-operating components and returns. But Mehrani & Behbahaninia (2008) and Izadinia & Dorri sadeh (2010) argue that non-operating income is more

relevant for Iran's market. The results of Shahryari et al. (2015) also show that operating and non-operating income have increasing information content about stock prices.

Line items and components in income statement have been examined in many researches. Ohlson and Penman (1992) ran some regressions using different components of net earnings as explanatory variables. These components were net earnings, operating expenses, depreciation expenses, tax expenses, other revenue and expenses items, and extraordinary items. They found that the decomposition of earnings increases the explanatory power of their regression. Jafari (2009) examines the information content of earnings components, including sales, gross income, operating income, income before taxes and net income with stock prices and returns and finds that among the independent variables, operating income and gross income have significant and direct relationship with stock prices. Valipour et al. (2010) examine the relevancy of the levels and components of reported earnings, including sales revenue, gross income, operating income, income before taxes and net income, in order to predict the value of company and find that the levels and components of income statement are relevant information in firms' valuation.

Fairfield et al. (1996) examined the predictability of future earnings based on the information obtained from earnings' components (operating income, non-operating income, taxes and special items) and found cross-sectional persistence of these various items will increase the predictability of one-year-ahead of ROE.

Lipe (1986) decomposed earnings into six components (gross income, administrative and general expenses, depreciation expenses, interest expenses, taxes, and other items) and examined the relationship among these components and shares return. He found that unexpected returns are better explained by disaggregating the unexpected components shocks for the majority of firms. Lipe also has shown that the extent to which the unexpected return is responsive to each component's earnings shock is related to his measure of persistence (Bratten, 2009). Bratten (2009) examined the predictability of earnings' components including sales, cost of goods sold, administrative and general expenses, interest, non-operating income, taxes, minority interests, special items and net earnings. His results have shown that the decomposition of earnings makes predictability of future earnings better than aggregated net earnings or less decomposition. Beisland (2013) examined the effect of net financial expenses on equity valuation in Norway and his results have shown that, on average, net financial expenses are recorded in values close to fair value. So the residual earnings of net financial expenses will be zero. In this study the residual income can be replaced by the residual operating income model.

3. Methodology

As discussed above, we expect that when the difference between historical values and market values of assets and debts increases in unstable markets, net financial expenses related to these assets and debts are relevant to share prices and returns. For this purpose, we use two regression models, book value model and net financial expenses model, which will be explained later. Therefore, we assume that:

Hypothesis 1: net financial expenses related to those balance sheet items not valued in fair values, are relevant to share prices.

As the economic condition of Iran deteriorates, the difference between book values reflected in balance sheet and their fair values increases more quickly. So we expect that as the sanctions against Iran increase, the value relevance of net financial expenses increases as well.

Hypothesis 2: there is an increasing trend in the value relevance of net financial expenses during the period of increasing sanctions.

Methodology

For data collection, we use historical information contained in Iranian Rahavard Novin database and financial statements of firms listed in Tehran Stock Exchange and we used data for eleven years, 2005-2015. For data analysis, we use SPSS and Excel. In previous researches, researchers used share prices at the end of fourth month after the fiscal year. Given that when financial statements are issued to the public, the reaction to these statements lasts for a limited period, we use the exact date of issuance and share prices at the same date. If the financial statements are issued after the close of market or near that time, we use the price of the next day. The use of such datum can lead to improve the results obtained from studying market's reaction to financial statements.

The following criteria are applied in selecting firms in the sample:

- Financial, investment, and service firms are excluded from the selected sample.
- Firms with a 19 March fiscal year-end are included.
- The data on variables used in the models are available on databases for each year in the sample period.
- The company shares have been traded during the financial year, and will not interrupt the transaction for more than 4 months.
- The shares have been traded in the first 4 months of the year.
- They should be profitable in all years.

By observing the criteria aforementioned, only 35 companies were eligible. We use all these companies in our study.

We use the research framework of Beisland (2013) for testing the first hypothesis. In the residual earnings model, a firm's equity value is a function of its book value and accounting net earnings. Therefore, the price model is often used in value relevance studies:

$$P_{i,t} = \beta_0 + \beta_1 BPS_{i,t} + \beta_2 EPS_{i,t} + \varepsilon_{i.t} \quad (1)$$

In the equation above, $P_{i,t}$ is the stock price of company *i* in year *t*, BPS is a firm's book value per share, and EPS is a firm's earnings per share. If the balance sheet is 'perfect' in the sense that all items are valued at their fair values, then, the regression coefficient of BPS, will be equal to one, whereas, the regression coefficient of EPS, will be zero. However, under a conservative accounting regime, the BPS of a firm will be lower than the shares' fair value. Moreover, the value of the residual earnings will be greater than zero. The residual earnings that are embedded in the EPS will cause, the regression coefficient of EPS, to be greater than zero (Beisland, 2009).

Net earnings consist of operating income and net financial expenses. In our study, this issue is examined that whether net financial expenses help a firm's valuation. Net earnings are decomposed into two components and we run the following regression:

$$P_{i,t} = \beta_0 + \beta_1 BPS_{i,t} + \beta_2 OIPS_{i,t} + \beta_3 FINPS_{i,t} + \varepsilon_{i.t} \quad (2)$$

In the above equation, OIPS is the operating income per share, and FINPS is the net financial expenses per share. If the book value of net financial liabilities differs significantly from the fair value of these liabilities, then a firm's net financial expenses will include components of the firm's residual earnings. Net financial expenses will then be relevant when the equity value is estimated and therefore their regression coefficient of β_3 will be significantly different from zero. By contrast, if net financial liabilities are recorded at their fair value or at a value that is close to this fair value, then there will be no components of residual earnings embedded in the net financial expenses. In this situation, the FINPS will not be relevant to estimations of the value of a firm's equity, and the regression coefficient for FINPS will be equal to zero (Beisland, 2013).

In order to test the second hypothesis, first, we run the regression of net financial expenses as independent variables and share prices as dependent variables. Then, we obtain the coefficient of determination for this regression in each year. Finally, we use the obtained coefficients in another regression as dependent variables and the variable of Time as an independent variable for each year. We can study the trend of value relevance of net financial expenses using this regression introduced by Thaghafi and Baghumian (2009):

$$AR_t^2 = \alpha_0 + \alpha_1 TIME + \varepsilon_t \quad (3)$$

The variable of TIME shows the number of years after the inception of imposing sanctions related to the nuclear program.

4. Results

Table 1 shows the descriptive statistics for research variables. The means for all variables are greater than the medians and the amount of means lies between that of medians and third quarters.

Table 1: descriptive statistics for the variables in the regression models of 1 and 2

		price	EPS	BPS	OIPS	FINPS
N	Valid	385	385	385	385	385
	Missing	0	0	0	0	0
Mean		6989.6234	1106.4586	2532.7635	1292.7833	243.2056
Median		4381.0000	722.0667	2112.2925	918.8995	147.7950
Std. Deviation		7228.41164	1148.58555	1481.87004	1378.40652	386.72306
Minimum		573.00	.00	633.82	-507.90	.00
Maximum		49810.00	7987.60	11933.93	13448.41	4970.10
Percentiles	25	2378.5000	371.7261	1573.4150	429.8344	53.6670
	50	4381.0000	722.0667	2112.2925	918.8995	147.7950
	75	9494.5000	1587.4967	3136.6388	1674.7285	290.8990

Table 2 presents the correlation coefficient and the coefficient of determination for regression model 1, showing a high explanatory power by variables. Table 3 shows that the variable of earnings per share has a high explanatory share of the change in price per share. This significant coefficient for earnings per share shows that a firm's earnings are value relevant and, therefore, we can't argue that balance sheet items are recorded in values close to fair value. The use of conservative accounting principles in dealing with these items results in generating positive residual earnings in the future. Beisland (2013) suggests that the adjusted coefficient for this model is usually a number close to 50 percent. But the coefficient obtained here is greater than the number mentioned by Beisland (2013).

Table 4 shows the correlation coefficient and coefficient of determination for the second model, which are smaller than the previous one. Table 5 presents a significant relationship among independent variables and share prices. The coefficients for income variables are greater than that of balance sheet variable. Since there is a highly significant relationship between net financial expenses and share prices, this result is inconsistent with that of Beisland (2013), but consistent with his prediction about unstable financial markets. This result shows that financial debts are not recorded in fair values. Beisland (2013) obtained the same regression coefficients for earnings per share and operating income per share, but here, these coefficients are different, reflecting the importance of net financial expenses in Iran's environment. What we can interpret from the results is the confirmation of the first hypothesis, that is, net financial expenses related to balance sheet items not recorded in fair values are value relevant.

Table 2: The summary of model 1

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.838[a]	.702	.700	3958.60827
a. Predictors: (Constant), EPS, BPS				

Table 3: The coefficients of model 1 [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	397.777	423.662		.939	.348
	BPS	.562	.229	.115	2.451	.015
	EPS	4.670	.296	.742	15.776	.000
a. Dependent Variable: price						

Table 4: The summary of model 2

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.826[a]	.682	.679	4094.24587
a. Predictors: (Constant), FINPS, BPS, OIPS				

Table 5: The coefficients of model 2 [a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-538.961	423.723		-1.272	.204
	BPS	1.412	.205	.290	6.888	.000
	OIPS	3.554	.255	.678	13.920	.000
	FINPS	-2.646	.718	-.142	-3.685	.000
a. Dependent Variable: price						

Now we examine the trend of net financial expenses' value relevance during imposing sanctions. As we discussed above and because of increasing the fluctuations in exchanges, inflation and interest rates in Iran, we expect to see an increase in value relevance of net financial expenses during the past 11 years from 2005 to 2015. Iran's nuclear dossier was sent to the security council of the UN on February of 2007 that led to the issuance of 6 resolutions against Iran, the last of which was approved in June of 2010. Following that, the most severe bilateral sanctions by the US and European Union were approved and implemented. These sanctions were lifted in January 2016 followed by the nuclear contract. According to the announcement of the Central Bank in Iran, the inflation rate, the interest rates on deposits and loans, and the official rate of one of the most reliable exchanges (US Dollar) during the period from 2004 to 2015 are as follow. We can see in table 6 that the deposit and loan rates fluctuate and the rate of US Dollar has seen a steady increase. Moreover, the inflation rate has faced periodical and general increases, except for the last two years. Followed by the increase of sanctions since 2010, the fluctuations of these variables have also increased. For example, the rate of US Dollar has seen an increase of more than double.

For examining the trend of net financial expenses' value relevance during the past 11 years from 2005 to 2015, first, we obtain the adjusted coefficient of determination for the regression of price and net financial expenses. These numbers are obtained for each year and we can see them in table 7. In this table, we can find that the adjusted coefficients of determination during the first half of the sanction period are negative and do not have any significant amounts, but as you can see, the coefficient becomes positive from 2010, hits 0/676 in 2014, and finally decreases in 2015. As we discussed before, the economic sanctions are gradually increased during the period under study and at the final station of imposing sanctions, the most important sectors of the economy, that is the banking and energy sectors, were sanctioned from 2010. Along with severe fluctuations in aforementioned variables in the second half of the past 11 years, the value relevance of net financial expenses has seen an increasing trend. This trend has enjoyed a significant growth.

In order to examine the significance of this trend, we use a simple regression in which the adjusted coefficient of determination is used as a dependent variable and the variable of time is the only independent variable. The results are shown in table 8. The table shows that the positive trend presented in table 7 is significant. Therefore, the second hypothesis, that is an increasing trend in value relevance of net financial expenses during imposing sanctions, is confirmed.

Table 6: The inflation, interest, and exchange rates over the past 12 years

Year	Inflation rate (percent)	Interest rate for deposits		The interest rate for loans in different sectors of Iran's economy					
		1 year	5 years	Industry and Mining	Housing	Agricultural	Commerce and Service	Export	The official US Dollar rate (at the end of the year) in Iranian Rials
2004	15/2	13	17	15	, 18, 21 15	13/5	Min 21	14	8,864
2005	10/4	13	17	16	15-16	16	16	16	9,140
2006	11/9	7-16	16	14	14	14	14	14	9,243
2007	18/4	7-16	16	12	12	12	12	12	8,956
2008	25/4	Max 15	Max 19	12	12	12	12	12	9,717
		17/25	19						
2009	10/8	14/5	17/5	12	12	12	12	12	9,834
2010	12/4	14	17	12, 14					10,364
2011	21/5	12/5	15	11, 14					12,260
		Optional	Optional	14, 15					
2012	30/5	Optional	Optional	14, 15					12,260
2013	34/7	Optional	Optional	14, 15					25,102
2014	15/6	22	-	21, 22					27,994
2015	11/9	20	-	21					30,240
		18	-	20					
Source: http://www.cbi.ir									

Table 7: The adjusted coefficient of determination for price and net financial expenses regression during years between 2005 and 2015

Year	R	R Square	Adjusted R Square	Std. Error of the Estimate
2005	.054[a]	.003	-.027	8328.84273
2006	.050[a]	.002	-.028	8007.20508
2007	.079[a]	.006	-.024	6497.01258
2008	.153[a]	.023	-.006	3787.63334
2009	.004[a]	.000	-.030	5520.70218
2010	.218[a]	.047	.019	6637.79899
2011	.260[a]	.068	.039	4705.61073
2012	.486[a]	.237	.213	4195.80551
2013	.624[a]	.389	.371	7902.46371
2014	.828[a]	.686	.676	5271.75455
2015	.557 [a]	.311	.290	7555.82983
a. Predictors: (Constant), FINPS				

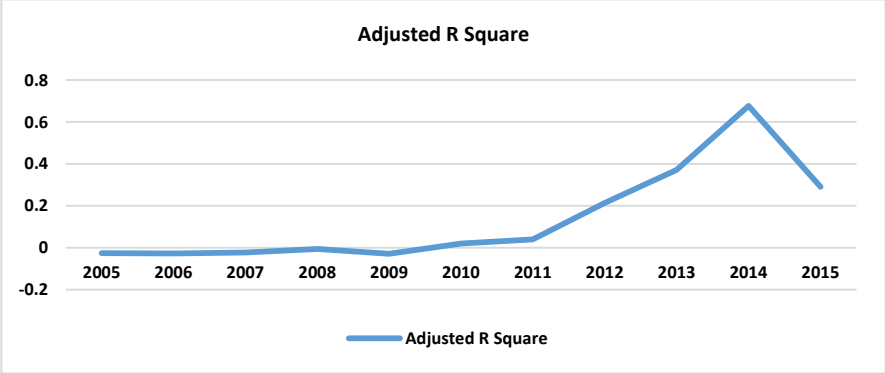

Figure 1: the trend of net financial expenses' value relevance over 11 years

Table 8: The trend of changes in net financial expenses' value relevance over 11 years, from 2005 to 2015

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.197	.094		-2.099	.065
	TIME	.055	.014	.801	4.010	.003
R=.801 R square= .641 Adjusted R square = .601 std. Error of the Estimate= .1448583						
a. Dependent Variable: AR2						

5. Discussion and Conclusions

IAS 39 (Financial Instruments: Recognition and Measurement) states that a financial asset or debt should be initially recognized in fair values and for the purpose of next measurements, all financial debts should be measured in amortized costs using effective interest method. IAS 39 requires the recognition of unrealized fair-value gains and losses for a larger set of financial and derivative-financial instruments. However, in Iranian accounting standards, there is no section about the accounting for those long-term debts that generate financial expenses. In most companies, these debts consist of loans received from banks and sometimes of bonds. Failure to measure these debts in fair values leads to a decrease in the value relevance of these items and, on the other hand, an increase in the value relevance of the correspondent income statement items. What we examined in this study was the increase in the difference between book values and current values of balance sheet items and, therefore, the increase in the value relevance of corresponding income amounts. The results show that net financial expenses are important variables in equity valuation and this result is inconsistent with that of Beisland (2013). Of course, Beisland (2013) predicted this result for countries like Iran with changing economic factors. The second section of analysis shows that there is an increasing trend in the value relevance of net financial expenses. The valuation of assets and debts in fair values in the economies with hyperinflation has been a crucial issue in accounting. Regularly over the past 11 years, from 2005 to 2015, international and unilateral sanctions has been imposed on Iran's economy and we have faced volatility and increase in the inflation, interest, and exchange rates. This situation has led to quick change in assets' and debts' fair values. Failure to recognize these changes will reduce the value relevance of asset and debt amounts and, on the other hand, will increase the value relevance of the correspondent income statement numbers. What we examined in this study was the examination of two period of imposing sanctions, from 2005 to 2015. In the first period, there were no significant changes in the value relevance of net financial expenses, but we find a highly increasing trend in the second period, obviously concerned to increasing the sanctions and the difference between historical and current values in that period.

In this paper, we studied the data of 11 years to test our hypotheses. The information related to the date of

financial statements issuance was just available from the beginning of this period. Therefore, the information before the period of imposing sanctions isn't available. But researchers can examine the available information for post-sanction years and test the trend of value relevance of net financial expenses during those years.

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