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The importance of EBIT- EBITDA disclosure in annual reports: A comparison from Turkey

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Abstract

Financial statement analysis is the process of reviewing and analyzing a company's financial statements to make better economic decisions. When analyzing company's financial performance and calculating some ratios it is better to use EBIT (Earnings Before Interest and Taxes) information rather than net income. This is a measure of a firm's profit that includes all expenses except interest and income tax expenses. It is the difference between operating revenues and operating expenses. This is an important factor contributing to the widespread use of EBIT is the way in which it nulls the effects of the different capital structures and tax rates used by different companies. By excluding both taxes and interest expenses, the figure honest in on the company's ability to profit and thus makes for easier cross-company comparisons. EBITDA (Earnings Before Interest, Taxes, Depreciation and Amortization) is also popular among highly leveraged and capital-intensive firms that require lots of depreciation calculations, such as utilities or telecommunications companies. This is because these firms have high depreciation rates and large interest payments on debt, often leaving them with negative earnings. In this study evolution of EBIT and EBITDA disclosure in the financial data part of the annual reports of companies listed in BIST 50 (Borsa Istanbul) is investigated by comparing the year 2010 and year 2015 information.

Keywords: *Financial statements, financial statement analysis, EBIT, EBITDA, BIST, Turkey*

1. Introduction

Financial statement analysis is the process of reviewing and analyzing a company's financial statements to make better economic decisions. When analyzing company's financial performance and calculating some ratios it is better to use EBIT (Earnings Before Interest and Taxes) information rather than net income. This is a measure of a firm's profit that includes all expenses except interest and income tax expenses. EBITDA which is another data is calculated by adding back the non-cash expenses of depreciation and amortization to a firm's operating income (EBIT).

In the following section calculating EBIT and EBITDA is presented. On the third section financial ratios with EBIT and EBITDA is discussed with an example. Then the research setting is explained and findings of the research are demonstrated. In this study evolution of EBIT and EBITDA disclosure in the financial data part of the annual reports of companies listed in BIST 50 (Borsa Istanbul) is investigated by comparing the year 2010 and year 2015 information. Finally, the conclusion is presented.

2. Calculating EBIT and EBITDA

EBIT and EBITDA are one of the operating measures most used by analysts since net income information is not sufficient enough to declare companies real performance. Since the companies' real job is to operate business, operating income or EBIT information is much more important

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than the net income. While calculating the final line for income statement-net income- companies have to consider non-operating decisions like interest expenses (a financing decision), tax rates (a governmental decision). These expenses are related with the management and governmental decisions. While evaluating companies real performance these decisions must be excluded from the real performance measures.

In this section of the study EBIT and EBITDA calculation is presented.

Table 1. Profit and Loss Statement (Income Statement) for EBIT-EBITDA calculation

Star Company Profit and Loss Statement For the Year Ended December 31,2015	
Sales	$100.000
(-) Operating Expenses	-20.000
(-) Depreciation and Amortization Expense	-30.000
Operating Profit (EBIT)	**50.000**
(-) Interest Expense	-20.000
Earnings Before Taxes	30.000
(-) Taxes	-10.000
Net Income	**20.000**

EBIT-Earnings Before Interest and Tax is the difference between operating revenues and operating expenses. This is an important factor contributing to the widespread use of EBIT is the way in which it nulls the effects of the different capital structures and tax rates used by different companies. By calculating EBIT, it nulls the effects of the different capital structures and tax rates used by different companies In the example above company's sales during the year is $100.000 and has $20.000 operating expenses and $30.000 depreciation and amortization expense. During 2015 company also has $20.000 interest expense and $10.000 tax expense. While net income is equal to $20.000, EBIT of this company is equal to 50.000. The differences between two figures are interest and tax expenses. While calculating EBIT both taxes and interest expenses excluded to see the honest figure in on the company's real ability to profit. This information is so important thus makes for easier cross-company comparisons.

EBITDA-Earnings Before Interest, Taxes, Depreciation and Amortization is calculated by adding back the non-cash expenses of depreciation and amortization to a firm's operating income (EBIT). EBITDA is being used for evaluating the raw earnings power of a company since it is a measure of a company's operating performance. It is very important information of the company in order to evaluate a company's performance without having to factor in financing decisions, accounting decisions or tax environments. If a company is an industrial company depreciation expense may be huge in amount. Because of this reason especially for industrial companies EBITDA is vital information to see the companies' real profit from their real business. In table 3 also shows how EBITDA measure is important for manufacturing companies versus service companies.

In this example EBITDA is equal to EBIT plus depreciation and amortization expense, $50.000+$30.000, equals to $80.000 Comparison of sales and three different income data and percentages are given in the table below.

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Table 2. Comparison of Sales, EBIT, EBITDA and Net Income

		Percentage of Sales
Sales	$100.000	100 %
EBIT	$50.000	50 %
EBITDA	$80.000	80 %
Net Income	$20.000	20%

As it seen from Table 2, the difference between three income concepts is obviously seen. While company is declaring 20% of net income margin, its EBIT margin is 2,5 times and EBITDA margin 4 times higher than this amount. In order to company's real ability to generate profit it is better to look EBIT or EBITDA rather than net income.

Table 3. EBIT-EBITDA measure manufacturing versus service company

Service Company A	
Income Statement	
Revenue	$100
Cash Expenses	80
Depreciation and Amortization	0
EBIT	**$20**
EBITDA	**$20**

Manufacturing Company B	
Income Statement	
Revenue	$100
Cash Expenses	80
Depreciation and Amortization	20
EBIT	**$0**
EBITDA	**$20**

3. Financial Ratios with EBIT and EBITDA

An important function of accounting is to provide performance measures, which indicate whether managers are achieving their business goals and whether the business activities are well managed. The evaluation and interpretation of financial statements and related performance measures is called financial analysis. For financial analysis to be useful, performance measures must be well aligned with the two major goals of business—profitability and liquidity. (Powers et.all, 2014)

An example is given below in order to calculate and discuss some ratios of XYZ Company.

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Table 4. XYZ company balance sheets summary balance sheet

	Years				
	1	**2**	**3**	**4**	**5**
Cash	14.168	18.416	20.142	28.856	10.380
Trading Assets	28.144	24.944	26.524	36.056	38.716
Total Current Assets	42.312	43.362	46.666	64.914	49.096
Property & Equipment	190.860	207.192	226.090	245.074	273.524
Less: Accumulated Depreciation	-90.338	-108.360	-120.566	-136.240	-144.572
Net Property & Equipment	100.522	98.832	105.526	108.834	128.952
Deposits and Other Assets	2.148	3.928	2.944	2.796	7.246
Total Assets	**144.982**	**146.122**	**155.136**	**176.544**	**185.294**
Accounts Payable	7.784	7.148	7.692	11.900	9.518
Accrued Liabilities	22.390	24.186	25.610	38.112	29.412
Other Short Term Liabilities	2.354	2.396	124	7.358	7.276
Total Current Liabilities	32.526	33.730	33.426	57.370	46.206
Long Term Loan	68.144	66.430	66.154	58.790	50.816
Other LT Liabilities	1448	1858	2.130	3.044	3.730
Total Equity	42.864	44.104	53.424	57.340	84.540
Total Liabilities & Equity	**144.982**	**146.122**	**155.136**	**176.544**	**185.294**

Table 5. XYZ company balance sheets summary profit and loss statement

	Years				
	1	**2**	**3**	**4**	**5**
Sales	261.968	249.060	269.602	304.654	362.346
Cost of Sales	191.498	186.850	200.586	223.906	275.134
Gross Profit	70.470	62.210	69.018	80.748	87.212
Operating Expenses	30.512	32.516	32.346	34.974	38.582
Depreciation & Amortization	19.204	18.450	18.032	17.990	16.644
Operating Profit (EBIT-Earnings Before Interest and Tax)	20.754	11.244	18.640	27.784	31.986
Interest Expense	3.926	3.516	3.526	4.168	6.918
Pre-tax Profit	16.828	7.728	15.114	23.616	25.068
Tax Expense	5.720	2.628	5.138	8.030	8.524
Net Profit	**11.108**	**5.100**	**9.976**	**15.586**	**16.544**

Balance sheets and profit or loss (income statement) of XYZ for 5 years are given above.

For the first year;

Net profit is equal to $11.108 and

EBIT is equal to (net profit+interest expense+ tax)

EBIT= $11.108+$ 3.926 + $ 5.720

EBIT = $ 20.754

EBITDA is calculated by adding back the non-cash expenses of depreciation and amortization to a firm's operating income (EBIT). It is equal to (net profit+interest expense+ tax+ Depreciation & Amortization)

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EBITDA= EBIT+ Depreciation + Amortization

EBITDA = $ 20.754+ $19.204

EBITDA= $ 39.958

While tax, interest, depreciation and amortization expense of the company is huge EBIT is approximately 2 times and EBITDA is 4 times of net profit. Also margin information are the same, net profit margin is 4,24% whereas EBIT margin is 7,92% and EBITDA margin 15,25%.

Table 6. Comparison of Net Profit-EBIT-EBITDA and comparison of Net Profit-EBIT-EBITDA margin

	Years				
Comparison of Net Profit-EBIT-EBITDA	**1**	**2**	**3**	**4**	**5**
Net Profit	11.108	5.100	9.976	15.586	16.544
EBIT	20.754	11.244	18.640	27.784	31.986
EBITDA	39.958	29.694	36.672	45.774	48.630
Comparison of Net Profit-EBIT-EBITDA Margin	**1**	**2**	**3**	**4**	**5**
Net Profit Margin	4,24%	2,05%	3,70%	5,12%	4,57%
EBIT Margin	7,92%	4,51%	6,91%	9,12%	8,83%
EBITDA Margin	15,25%	11,92%	13,60%	15,02%	13,42%

EBIT and EBITDA information and margin gives analysts to focus on the outcome of operating decisions while excluding the impacts of non-operating decisions like interest expenses, tax rates or large non-cash items like depreciation and amortization. To analyze companies' real profit from its own business it is better to look EBIT, if this is a industrial company because of the huge depreciation and amortization expenses EBITDA information will be more suitable to consider profitability. In this XYZ Company it will be more suitable to give decisions about company's profitability by looking EBIT and also EBITDA measure. In table 7 some performance measures of XYZ company is also given.

Table 7. Performance measures

	Years				
Performance Measures	**1**	**2**	**3**	**4**	**5**
Sales Growth	14,40%	-4,93%	8,25%	13,00%	18,94%
EBIT Growth	50,30%	-45,80%	65,80%	49,10%	15,10%
Net Profit Growth	-21,40%	-54,09%	95,61%	56,26%	6,13%
Return on Equity(ROE)	25,90%	11,73%	20,46%	28,14%	23,32%
Return on Investments (ROI) (Net Profit)	7,66%	3,50%	6,62%	9,40%	9,14%
Return on Investments (ROI) -(EBIT)	14,31%	7,73%	12,37%	16,75%	17,68%

The return on equity (ROE) is the percentage of net income that is available to the owner. It is determined by dividing the net income by owners 'equity to give the return on owners' fund. (Weil and Noi, 2001)

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The Formula is:

Return on Equity = Profit after tax / Average Shareholders' Equity

Return on equity gives the information of how much the shareholders earned from their investment in the company.

Return on Investments [1](ROI or ROA): ROI or ROA relates the profit to the size of the investment used to generate it. (Friedlob and Plewa, 1983) This ratio indicates how profitable a company is relative to its total assets. The return on investments or assets (ROA) ratio illustrates how well management is employing the company's total assets to make a profit. On order to get more efficient information it will be better to consider EBIT to see the real performance of the management. So that the ROI or ROA ratio must be calculated by comparing operating profit (EBIT) to average total assets in order to when comparing similar companies across a single industry, or companies operating in different tax amounts.

The Formula is:

Return on Assets = EBIT / Average Total Assets

Some investment analysts use the net income figure instead of the operating income figure when calculating the ROI ratio. As it seen on the table 7 the difference between the ROI is seen.(In the first calculation net income is divided by average total assets while EBIT is divided by average total assets in the second ROI calculation) Since the EBIT shows the real information how the management is employing the company's total assets, ROI calculated by using EBIT gives more clear information about companies profitability.

4. Research setting, methodology and findings

In order to monitor the evolution of reporting on EBIT and EBITDA relevant information in the 2010 and 2015 annual reports of the ISE-50 Industrial companies are were examined. The sample selection starts with the entire population of BIST 50 companies because financial statements have different aspects 8 financial company excluded from the study, 42 industrial firms are included in the study. Since the annual reports of two of these 42companies cannot be obtained, the research was conducted on the annual reports of the remaining 40 companies that published their annual reports in their websites.

The most 5 important data are investigated in the financial highlight sections of the annual reports. These are sales, investments, net income, EBIT and EBITDA measure. After analyzing financial highlight sections of the 40 annual reports disclosure levels and disclosure percentages are given in Table 8.

[1] Total assets or fixed assets can be defined as investment in this ratio.

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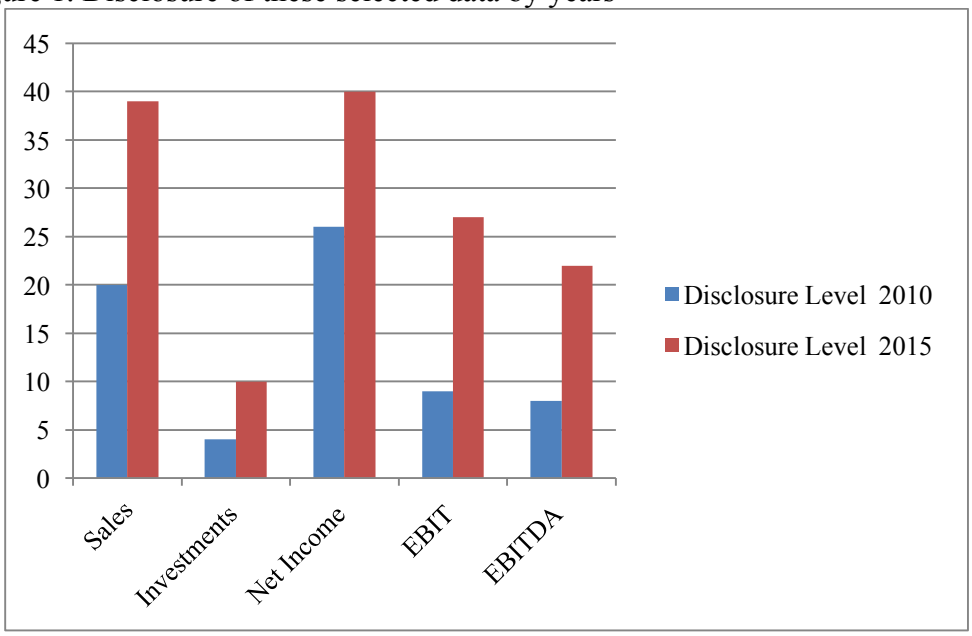
Table 8. Annual reports disclosure levels and disclosure percentages

	Disclosure Level		Percentage	
	2010	**2015**	**2010**	**2015**
Sales	20	39	50%	98%
Investments	4	10	10%	25%
Net Income	26	40	65%	100%
EBIT	9	27	23%	68%
EBITDA	8	22	20%	55%

Compared to 2010 there has been a noticeable improvement in companies' reporting their financial information on a separate highlight section. In 2015 98 percent of companies disclose sales, 25 percent of companies disclose investments, 100 percent of companies disclose net income, 68 percent of companies disclose EBIT and 55 percent of companies disclose EBITDA information. Figure 1 also shows this improvement of disclosure of these selected data by years

Figure 1. Disclosure of these selected data by years



In addition to analyzing disclosure of these data in annual reports is also analyzed whether the company showed this information in graphics and calculated ratios by using these data.

Table 9. Graphics and ratios

	2010	**2015**
Graphics	12	26
Ratios	11	28

While 12 of 40 companies in 2010 and 26 of 40 companies in 2015 are showing these data in graphics, 11 of them in 2010 and 28 of them in 2010 calculated ratios by using these important measures. Figure 2 also represents this information.

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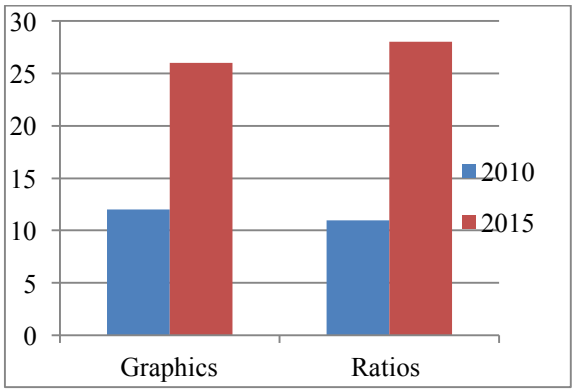
Figure 2. Graphics and ratios information



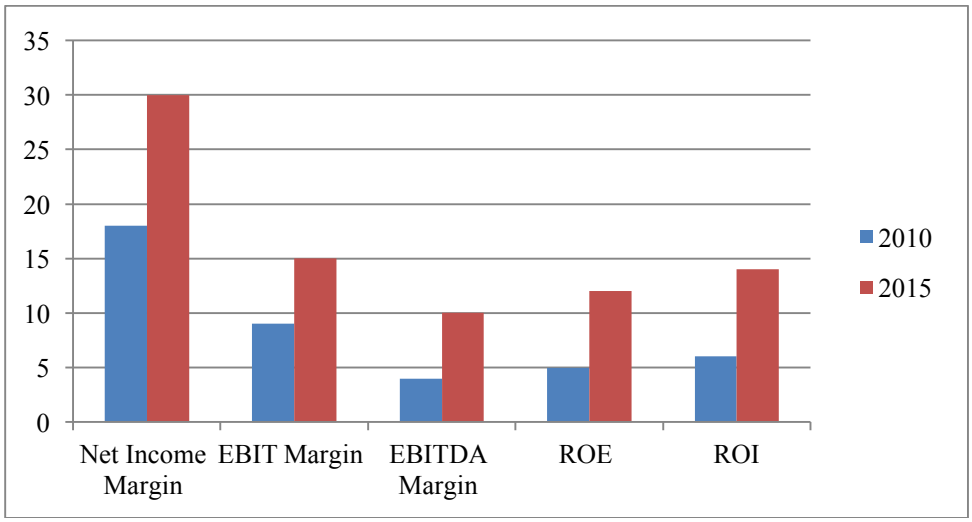
In table 10 disclosure levels and percentages of net income margin, EBIT margin, EBITDA margin, return on equity (ROE), return on investments or assets (ROI) is given by comparing 2010 and 2015.

Table 10. Disclosure levels and percentages of net income margin, EBIT margin, EBITDA margin

	Disclosure Level		**Percentage**	
	2010	**2015**	**2010**	**2015**
Net Income Margin	18	30	45%	75%
EBIT Margin	9	15	23%	38%
EBITDA Margin	4	10	10%	25%
ROE	5	12	13%	30%
ROI (ROA)	6	14	15%	35%

Although EBIT and EBITDA information is very important for industrial companies disclosure level of these margins are too low. According to these findings in annual reports, companies are not disclosing their performance sufficient enough to declare their real performance. They still find enough to declare only their net profit as a measure of performance. Figure 3 also shows evolution of these data in years.

Figure 3. Evolution of EBIT and EBITDA data



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5. Conclusion

Net Profit After Tax is an important data income statement. But, tax depends on state regulations and interest expense is a function of leverage of the company. So the real signal for operating activities for a company is EBIT. Especially for manufacturing companies, since depreciation and amortization can be huge amounts, in financial analysis, it is better to calculate EBIT and EBITDA in order to report the real performance. EBITDA is calculated using the company's income statement. It is a measure of a company's operating performance. Essentially, it's a way to evaluate a company's performance without having to factor in financing decisions, accounting decisions or tax environments. It is not included as a line item, but can be easily derived by using the other line items that must be reported on an income statement**.** By excluding the non-operating effects that changes from one company to other EBIT and EBITDA allows investors to focus on operating profitability as measure of performance. Therefore, when analyzing an industrial firm EBITDA is the best measure for cross-company comparisons in conjunction with other factors such as capital expenditures, changes in working capital requirements, debt payments and net income. The study highlights that the companies' attitude towards disclosing these information is encouraging but still not sufficient. For further studies this research can be done to see the disclosure level of these information in order to compare the improvements by years.

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