

EBIT Criterion: Financial Analysis' Issues

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Abstract—Paper delivers an elaboration of various approaches towards profit composition and its use and interpretation in financial analysis and business valuation. By focusing on the mutually incompatible needs of different stakeholders we try to prove that a comparison of performance indicators based on financial statements derived from the framework of US GAAP, IFRS or Czech national regulation is misleading. On an example of the category of profit called EBIT which is a widely used performance criteria in mainstream Anglo-Saxon text books on corporate finance, financial analysis or business valuation, we explain that whereas the „real EBIT” is based on the cost structure defined by function, the „Czech EBIT” derived from an income statement based on cost structure defined by nature are not compatible in terms of their interpretation. In the end we conclude the main issues users and authors of financial analysis have to face by trying to apply „Czech EBIT” in various mainstream models of financial analysis and business valuation.

Keywords—EBIT, business valuation, Balance Sheet, Income Statement, Budget Income Statement, external and internal users, financial analysis.

I. INTRODUCTION AND LITERATURE REVIEW

FINANCIAL analysis can be used for various purposes, which determine not only the choice of the source of data, but also a method for deriving the analytical criteria. By using the example of the EBIT category of profit this article aims to analyze the use of standard analytical methods, and Anglo-Saxon approaches to financial analysis and valuation of companies and their application in the Czech Republic for the companies that have not listed securities in public capital markets [18] and thus have no obligation to report in accordance with U.S. GAAP or the rules of IFRS. Often happens that the analytical models originally developed for use by analysts interested in the U.S. publicly quoted minority shares are applied in the Czech Republic. Usually this happens without paying attention to the comparability of model inputs taken from the statements of various financial accounting systems. Thereby the explanatory power of the expected results cannot be ensured.

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We are well aware of the fact that a stock analyst investing in standardized instruments in public markets is likely to be interested in other aspects of value creation than an investor investing in private equity market in Central Europe. Furthermore, other information will be of interest from the point of view of an internal revenue service authority. In this article, we are addressing one of the possible bottlenecks of financial analysis, the EBIT, its purpose, method of derivation and the following intended uses of the results and the explanatory power of the results.

In Germany – a country to which Czech Republic is still closer than the U.S. in terms of historical traditions and financial accounting, it is interesting to observe that in financial analysis and business valuation literature one either cannot find the category of EBIT at all [3,10,14,15,16,19,31], or it is only spoken about EBIT in the context of publicly traded shares [5,12,28] or the authors use EBIT as a symbol for the category of profit being used for measuring the production power of assets, abstracting from financing and taxation [2,25]. By the Anglo-Saxon authors EBIT is used as a standardized category in order to compare performance of different companies and to be used in valuation methods for comparable companies (market multiples). A European example of this approach is represented by [1] and the U.S. approach among many others by [6,7,8,9,23,26].

If we look at the Czech publications on this subject, the EBIT category of profit is mentioned, and we emphasize that in various contexts, among others in [13,20,21,30]. This happens despite of the fact that the standard Czech profit and loss statement (further also as income statement) does not include that category of profit. A certain exception is in this context represents [27] by using an own concept of profit for the treatment of conditions relevant in the Czech Republic.

The obvious question is whether the „right EBIT“, as understood in the global standardization of financial reporting and hence the Anglo-Saxon texts in corporate finance and valuation cited above, can be derived from the accounts of Czech companies in a comparable form and quality as from the statements of U.S. companies and therefore is usable in the models created by American authors for the analysis and valuation of U.S. companies (i.e. usually the publicly traded minority shares). We are interested in answer to the question whether a „Czech EBIT“ recorded as profit after tax, to which are added back interest and taxes on corporate income, used for similar purposes in the areas of financial analysis and valuation as its terminological equivalent derived by the rules U.S. GAAP primarily reflects the information needs of owners

and investors.

II. METHODOLOGY OF RESEARCH

Financial accounting as part of the company's information system is able to provide, inter alia, information on evaluation of economic resources, which were invested in the business process. Users of financial information obviously require such data. Both IFRS (in the Framework) and U.S. GAAP (in SFAC 1) have identical objectives [33, 34]. While financial reports cannot meet all information requirements of all users, there are requirements that all users have in common. Because investors are providers of capital, financial reports that meet their information requirements will meet the information requirements of other users that are primarily of current and potential investors [4].

According to national accounting rules accounting has its own specifications, methodology and practice. International accounting standards, whether by regulation in accordance with IFRS or U.S. GAAP, including the ongoing process of convergence between the world's „giants“ in the process of accounting harmonization, are still encompassing incompatible areas such as defining the relevant criteria for the recognition of assets, liabilities, costs, revenues, principles of reporting and presentation of financial statements.

Consequently, problems arise in the actual content of items of the statements of financial accounting. If accounting regulation does not define the characteristics of the basic elements of the reported accounts the analysis for different users can become misleading. The reason is that the different valuation models [17] and indicators of financial analysis are based on different assumptions. If we thus apply only to statements of financial accounting in the Czech Republic national arrangements for the analytical procedures and design of indicators commonly used in overseas models, surely we can achieve different results [32], mainly thanks to the conditions and characteristics for the recognition of the balance sheet elements in evaluating the financial position and measuring performance (presented as part of the conceptual framework of IFRS and U.S. GAAP, however not in the Czech legislation). Related limitations of comparability stem subsequently from this position of the data used in financial analysis (creation of assets, liabilities and their implications for income recognition in respect of costs and revenues).

Already in the Balance Sheet we can recall the definition of assets under the Framework, which is considered an asset for balance sheet item whose existence is a result of past events, it is expected that it will bring the company future benefits with reasonable certainty and reliability. Future economic benefits are directly or indirectly linked with cash flows. Where it is unlikely that the cost of the assets of the company will bring economic benefits to the end of the accounting period, the results are reported as a cost. The ownership of the asset is conclusive, but the company must have the right and ability to exploit the benefits of asset.

The main characteristic of a liability include the

commitment of his current existence, which was based on past events, and is expected to reduce the settlement of economic benefits of a reliable value. The definition of equity will find its characterization as a residual interest in the assets of the company after deducting all its liabilities. Equity is also influenced by estimating the value of assets and liabilities.

If, therefore, the conceptual framework dimension of individual financial statement items does not exist, which is the case in the Czech Republic, including a further example of differences in valuation, in identifying and reporting in comparison with the international accounting standards, we wonder what will be the result for use in financial analysis. For instance asset for consumption or sale in selected liabilities of its formation and dissolution affect the profit and hence the value of the input of models for valuation and financial analysis in different ways. Problems occur particularly when reporting leased property (IAS 17), with contracts for construction in the recognition of revenue (IAS 11) by the capitalization of interest in the value of assets (IAS 23), valuing the present value of long-term assets and liabilities (the Framework).

Closely related to the balance sheet is the income statement, which accurately and fairly presents the performance (profitability) of the company in accordance with generally accepted accounting principles of the U.S., IFRS, EU and Czech accounting standards. The income statement is part of the financial reports, the view can be regarded as a fair presentation of the of the results if the content item corresponds to the actual situation and is in accordance with the accounting methods that are imposed on entities under the relevant legislation. Fair view is such that when the accounting method is used in a way that leads to achieving a fair presentation. On what accounting methods are used, it shall inform the entity in the supplement to the financial statements. This definition is part of a legislative definition in the Czech Republic though. It underlines the only consequence of compliance with statutory regulations, when the primary can be considered a tax perspective, which in practice leads to the fact that an entity has a logical effort to respond exclusively to the needs of the tax and not the other potential users of financial accounting statements.

Statements prepared in accordance with Generally Accepted Accounting Principles (U.S. GAAP) respond to different users' needs. Common feature of Income Statement (Statement of Income, Earnings Statement, Statement of Earnings, Profit and Loss Statement, Statement of Operations etc.) prepared in accordance with US GAAP is that they are drafted only in the special breakdown of operating costs derived by its function. Income users are mainly interested in the performance of the company and comparison with the previous period, which allows them to predict future performance, and thus foreseeable financial position of the entity.

U.S. GAAP do not prescribe a standard form of profit, but for reasons of comparability the company is required to observe the appearance of this statement and the structuring of

categories of costs and revenues. Aggregation must not hide important information. An example of an income statement structured by major components:

<p>Revenues of sold outputs (finished products, goods and services)</p> <p>- Costs of sold outputs (finished products, goods and services)</p> <p>= Gross profit/loss (gross margin)</p> <p>- Operating expenses (selling, administrative expenses)</p> <p>= Operating profit/loss</p> <p>+ Gains and losses</p> <p>+ Other revenues and expenses</p> <p>+/- Unusual and infrequent items</p> <p>= Income of continuing activities before taxes (Earnings before tax, i.e. EBT)</p> <p>- Income tax related to continuing activities</p> <p>= Net income of continuing activities after tax (Earnings after tax, i.e. EAT)</p> <p>+/- Results of discontinued activities</p> <p>+/- Profit/loss of operations of a discontinued segment (after tax)</p> <p>+/- Gain/loss of elimination of discontinued segment (after tax)</p> <p>+/- Extraordinary items (after tax)</p> <p>+/- Cumulated influence of changes in accounting rules (after tax)</p> <p>= Net profit/loss for accounting period</p> <p>Earnings per share (EPS)</p>

The relatively detailed structure of the company's profit allows differentiating the influences on profit resulting from the main and secondary activities and unrealized gains and losses but allows also distinguishing the impact of the ongoing, extraordinary and discontinuing operations. This distinction is important, for example, by using different perspectives on measuring results of these activities and defining the rules of commensurability of its costs and revenues.

If a company achieves revenues from selling and other income from ancillary activities, it intends to produce and sell in order to achieve earnings or other income. By relating the revenues to expenses representing what the company has given up to deserved income. As we shall see, this approach to the reporting of profit is incompatible with the normal way so far in the country.

In the income statement as regulated in U.S. GAAP, the operating items should be separated from other cost elements of earnings that are not part of major transactions. Total Revenues account for total billed / amount received amounts, Net Revenues is the amount the company actually receives and keeps. For example, the cash discounts and provisioning required to claim a warranty repair are subtracted from Total Revenues. These items reduce earnings, but not costs. There is a requirement for separate reporting of unusual, abnormal or infrequent items under IFRS and the Framework under APB 30 in U.S. GAAP as non-operating items, such as full or partial write-off of stocks, gains / losses on the disposal of an

entity.

Gains and losses representing changes in the valuation of assets and liabilities are generally the result of events over which the entity and its directors do not have control (exchange rate differences, the change in the value of fixed and current assets, etc.). These gains and losses are the result of „internal“ revaluation, have not yet been implemented, this means that sales have not been verified by the customer (assets were not sold or consumed, liabilities were not paid).

Part of these effects occurs directly in the balance sheet in equity changes and partially in the income statement by influencing the earnings of the reporting period. The view of the partial impact on the balance sheet or income statement depends on the assets which were revaluated and additionally whether there is a change in valuation of specific assets for the first time, or if its carrying amount has been adjusted in the past. Gains and losses do not represent expenses for the company, for example, by buying securities, the market price rises or falls, but it is not due to the company, the income statement will only show gain / loss on sale of securities. The results of secondary activities are beyond the control of the company and are shown net (compensated). Again in this case the terminology is different in the Czech Republic, respectively these categories are not applied at all.

By the composition of the income statement the concept of the European Union is basically the same as the global accounting standards. The patterns according to the fourth directive of the European Union originate in a different breakdown of the costs and different formal arrangement.

Criterion for distinguishing four types of income statements is the choice of operating costs, both according to costs by nature, i.e. according to the nature of goods (consumption of materials, labour costs, depreciation, freight, etc.) and costs by function, that is the costs which were sacrificed in relation to a given outcome (cost of production, supply, sales, administration, etc.). Combining these two aspects there are four possible schemes of an income statement: vertical or horizontal form with the breakdown of costs by nature or by function in operating activities.

The income statement with the breakdown of cost by nature considers the criterion operating costs by the nature of the cost. Here the homogeneous costs relate to the accounting period, while operating income relates to realized revenues. This leads to factual discrepancies since the costs of the accounting period relate to the performance (a work in progress, goods, services provided) carried in the period, but revenues relate primarily to the realized revenues regardless of whether they have been made achieved in this or prior periods. In this case net profit determined as the difference between revenues and costs does not have the required explanatory power, because it is based on costs which are not associated with earned revenues. Therefore, either cost or revenue items have to be corrected.

If operating costs are structured by function the knowledge of the calculation structure of operating costs is required.

Revenues are related to the associated costs. This eliminates the problem of factual discrepancies in revenues and costs, as operating income and operating expenses are related to the same volume of activated or achieved performance.

The layout of the income statement according to Czech accounting law is compatible with the IFRS standards. IAS 1 - Presentation of Financial Statements states that the disclosure of revenues and expenses as fundamental components of an income statement gives opportunity to better understand the achieved performance and estimate future results. Because of different activities have different effects on performance, it is required to presents an overview of the standard items that have some influence potential.

By the operating profit, the standard allows similarly as the fourth directive of the European Union to report operating costs structured by nature or by function. Choosing the breakdown of the costs is given by the nature of the company which more accurately shows the components of its performance or according to historical and industry practices. If the company chooses to structure cost by function, compulsorily it is required to disclose the breakdown of costs by nature, because this information is used to predict future cash flows.

The Standard notes that in some jurisdictions the cost structure by nature the substantive consensus between operating income and the corresponding costs is achieved through the appropriate adjustments (corrections), which applies to the Czech Republic as well. The Standard also states that the classification of costs by function provides more information than the classification by nature, but the cost allocation may be more subjective.

Income statement with classification of operating expenses by nature structure (method of cost nature):

Revenues
+ Other operating incomes
+/- Changes in inventories of finished products and unfinished production
+ Works made by company (enterprise) and capitalized
- Raw material and material consumption
- Staff expenses
- Depreciation expenses
- Other operating expenses
= Operating profit
- Financial expenses
+ Income of associated companies/enterprises
= Profit before tax
- Income tax
= Profit after tax
- Minority interest
= Net profit/loss of ordinary activities
= Net profit for accounting period

Income statement with classification of operating expenses by function structure (method of cost function, method of sale costs):

Revenues
- Costs of sales
= Gross profit
+ Other operating incomes
- Distribution (selling) expenses
- Administrative expenses/overheads
- Other operating expenses
= Operating profit
- Financial expenses
+ Profit of associated companies/enterprises
= Income before tax
- Income tax
= Income after tax
- Minority interest
= Net profit/loss of ordinary activities
= Net profit for accounting period

Under the framework of the International accounting standards costs can be reported in the income statement if they are reducing the economic benefits and/or simultaneously lower the assets or increase liabilities. In doing so, the reduction in the economic benefits must be reliably measurable.

If the information derived from the income statement is used to evaluate the return on invested capital. To make comparisons with similar companies possible, various inputs for financial analysis must demonstrate methodical compatibility and cost has to relate to specific revenue items. As mentioned in the preceding text, it is a principle of substantive and temporal comparability of costs and revenues. This principle must be respected, even if the economic benefits will rise up during the next few financial years. Costs are reported in the accounting periods in which consumption takes place or the utilization of economic benefits. The expenditure incurred during the accounting period is also recognized as being a cost but is not connected with the creation of the current or future economic benefits.

In the Czech Republic the requirements of external users of financial information are being satisfied by the disclosure of individual items in the statement of income (loss) per Czech legislation. Accounting methodology applicable in the Czech Republic by Decree No. 500/2002 allows placing items of expense in the profit and loss statement according to nature of cost classification and according to function of the costs. If the company uses the breakdown of costs by function, it is compulsory to include the breakdown of cost by nature in the area of business operations in the notes to the financial statements. It should be noted that this option of costs reporting is voluntary and therefore not often used by Czech companies. The informative capability of financial reporting is limited to just locally applicable mandatory rules and tax regulations.

A. Division of Costs (Expenses) by Nature and Interpretation of Operating Profit

Detection of profit based on breakdown of costs by nature was in the past year in the continental accounting statements

the only legislatively authorized version of the income statement. So far, of course, there is continuity in the reporting methods since the accounting practice has stabilized and we can assume that the majority of Czech companies continue to provide reports exclusively in a cost breakdown by nature.

This approach has increasingly been losing its importance over time. Companies can now report the total profit through by using the cost breakdown by function as well. If this option is chosen though, it is necessary to provide according to the international standard IAS 1 the statements by using the cost breakdown by nature as well. This requirement is not unusual. In Anglo-Saxon area, where the income statement has traditionally been prepared by using the cost breakdown by function, this practice is quite common.

The issues of valuation of own internal operations are essential in measuring the company's profit and are connected with the concept and definition of cost of goods sold and cost of a period.

In connection with the detection and reporting of profit based on cost breakdown by function it must be added that by comparing the sales price and cost of goods sold, it is possible to detect a particular incremental profit from the sale of a good to the overall profit from ordinary activities. This information is not provided in the measurement of profit based on cost breakdown by nature.

It is further not possible to quantify cost of a period in an income statement by using the cost breakdown by nature.

The total amount of expenses in the income statement with cost breakdown by nature reflects costs that are incurred in connection with the transformation process of the period, this means ensuring that activities associated with the creation of output (however, this output does not have to be necessarily sold), sales performance (often created in other periods), administration and management expenses of the company as a whole.

The breakdown of costs by nature in the income statement answers the question, what economic resources in the same period in the entity incurred costs but not which costs are associated with the goods sold in the same period.

In the classification of costs by nature the matching of costs and revenues as a necessary condition for real time measurement of the top profit is achieved by regulating the amount of assets items changes created by their own activities (internal output).

Assets created internally occur in two forms:

- self produced inventory: inventory of unfinished and finished outputs, i.e. products, semi-on services, incomplete inventories including costs incurred in the performance of those services which have not yet been completed and handed over to the customer;
- Activated outputs: services provided by the company's own staff in the acquisition of tangible assets (equipment installation, etc.), implementation of services related to the acquisition of stocks of materials and goods (transportation, etc.).

The information power of the top profit in the income of by cost breakdown by nature is very limited. Change in inventory items or activation of output only provide a formal cost comparability of output produced and sold. These items may affect the profit by the valuation of earnings generated by operations.

The income statement based on a generic cost breakdown by nature does not provide information for finding the causation of cost and profit as a basic premise for management and evaluation of financial performance across the industry, as in statements to U.S. GAAP and the basic models of financial analysis.

B. Division of Costs (Expenses) by Function and Interpretation of Operating Profit

Since January 2003, the option of reporting profits by breaking down cost by function has been legislatively authorized as this tradition in the Anglo-Saxon accounting.

The accounting system used to quantify the assets generated internally on the active accounts (products, finished products, work in progress), similarly to external asset acquisition (purchase of goods, materials, fixed assets, etc.). This means that by double-entry bookkeeping in the financial statements the state of finished goods and work in progress accounts or other account on the asset side of the balance sheet is increasing since these assets are acquired with the use of internal services (acquisition of fixed assets, the acquisition of purchased stocks), while in the financial accounting the active accounts show reduction of stocks of materials, reduction of funds, possibly increasing commitments to suppliers and employees (the consumption of services, payroll accounting, or purchase of sub-deliveries and material supplied by the so-called „Just in Time“).

Resources that were utilized on the creation of own outputs (the material consumed, labour costs, purchased services, depreciation, etc.) are first shown directly in the balance sheet in stock of work in progress, finished goods, semi-finished products. Creation of these outputs changes the balance sheet structure similar to the acquisition of external assets (goods, materials).

Unlike to the breakdown of the costs by nature, after achieving a sale the reduction of stock-house performance is the first time when costs incurred for a specific output (product, services) are reported on the cost accounts, particularly as the costs of sold output. In contrast, the costs of administration and management, distribution and sale are displayed in the costs as incurred, are thus not capitalized, and therefore are not part of the value of the internally generated output.

As we can observe the structure of income statement based on cost classification by function provides much more information about the generated profit than the income statement based on the breakdown of the costs by nature and is therefore relevant for use in financial analysis.

At first glance it is apparent from the explanatory power of the profit measure respecting the cost by function breakdown

is significantly higher comparing to the other approach by nature of costs. Users are informed of the benefits from sales of goods (works or services), the amount of sales, administrative costs (very often with a further resolution at the expense of research and development).

On the other hand, in case of imprecise costs classification by their function, the measurement of the profit may to some extent hide the true cost structure of manufacturing, selling and administrative expenses.

III. EBIT: INTERNAL USERS' PERSPECTIVE

Two basic approaches used in financial accounting to measuring and reporting income are based on classifying costs by nature and by function. Both of these approaches to quantify the income are not sufficient and satisfying the needs of its management. Opportunity to influence profit by the valuation of generated outputs and by viewing allocation the cost of a period is available in both approaches.

In relation to the management of the company's profit it is necessary to have information not only about what costs were incurred (cost structure by nature), whether such costs were incurred to secure manufacturing, sale or management (cost structure by function), but also information about how the costs varies with the changing amount and structure of output, what is the relationship between costs and revenues, that is, what part of the cost represents the fixed and variable costs.

Managerial accounting as an integral part of the information system not only allows each company to get the budgets, but also to detect and report the profit in its real size.

Budget continues to build on the substantive terms of the development of business process management, specifically manifested in a change of consumption of economic resources (costs) and their assessments (revenues) as well as changes in the way of financing activities.

Master budget constitutes the major enterprise budget which sets the expected future criterion (total profit), changes in cash flows and financial position. The main budget is the Budget Income Statement, the budgeted cash flow and the budgeted balance sheet. The main budget is also the final result of incremental budgets linked to organizational (departmental) and economic (liability) structures at all levels of management control.

The most important part of the budget is the budgeted profit/loss from operating activities linked to the budget revenues derived from the budget (plan) of sales, and some cost estimates. The first budget deals to estimate unit costs of production planned, which uses mainly information on the cost intensity of the production, such as the information subsystem of product planning. The second is the budget cost estimates of direct costs particular type of products under the budgets of some strategically-oriented and service activities, such as subsystem of research and development or own product development, but also the information about external relations tied to a specific type of output, such as licensing agreements to manufacture certain products. As regards the third of the

budget of overhead costs, this is separately monitors and manages the minimum fixed and variable component of overhead costs.

By unlisted business enterprises the content of the budgetary income statement in managerial accounting is not structurally identical to the income statement in financial accounting. The cost structure of the budget income statement of retrograde type breaks the costs down by variable and fixed by using phased breakdown of fixed costs.

This detailed structure of the stratification of fixed costs in the budget income statement responds to the needs of management and quantification of profit in complex structured companies. Information on the margin performance is still very important for assessing the performance of a product but the information on the coverage of fixed costs in a single line is insufficient. Fixed costs should be, following the hierarchical breakdown of activities and services (centres), further distinguished to the performance of fixed costs, fixed costs of the group's performance, fixed cost service, which provides the output and fixed costs of corporate governance.

Budget income statement of main entrepreneurial activity

Revenues of sold outputs (finished products and services)

- variable costs of sold outputs

in it: unit material

unit wages

other unit costs

variable overhead costs

Margin I (margin after covering of variable costs)

- fixed output costs

in it: costs depreciation of output development

depreciation of special instruments

other fixed costs

Margin II (output margin)

- fixed outputs costs

in it: depreciation of long-term property

other fixed costs

Margin III

- fixed centre costs

Margin IV

- fixed company costs

BUDGET profit of main entrepreneurial activity before interests and taxes

Budgeted income statement for the main business activities with stepped fixed costs is recognized for outputs, or group of customers or group for sales segments, distribution channels and the liability centres.

In the budgeted income statement revenues are progressively reduced by the variable costs of sales performance (i.e. the unit cost for example, unit material, labour, other unit costs, or the variable account), the performance of fixed costs (i.e. depreciation costs for the development of performance, amortization of special tools, other fixed costs), the fixed costs of group performance (i.e., the depreciation of intangible and tangible assets, other fixed costs), fixed costs and fixed costs of service of company as a

whole to the level of profit arising from the sale.

Between the particular levels appears gradually layered margin, which is used to cover the appropriate proportion of fixed costs and to generate the planned profit from sales.

It should be borne in mind that regardless of the method used by the breakdown of the costs to prepare the first sub-budgets, first costs and revenues are outlined and then the budgeted income statement. Internal short-term budgets centres do not relate directly to the budget income statement, but to the partial cost and revenue budgets.

Unique other parts of the budgeted income statement [24] generate cost and revenue budgets based on projected sales of fixed assets and financial investments, budgets, costs and revenues resulting from sales of other assets considered, whose possession is not necessary for the conduct of the principal economic activity, this includes the budget cost and expense of interest or other costs and revenues associated with investment and financing corporate activities.

When budgeting profit the income statement fully accepts the breakdown of the costs by function in relation to other aspects of the classification of costs, often referred to the cost of the volume dependence on the output or provided by the performance, possibly by the liability of bearing the costs.

Total profit, whether positive (profit) or negative (loss) is considered for a synthetic criterion budget in the budget income statement.

The actual amount of profit results in managerial accounting [22] from budgeted profits from the sale of the corrected positive and negative results of operations (savings or exceeded pre-established cost) centres of the company structure.

The resulting difference between budgeted and actual profit shall be subject to strict quality management and analysis to capture all the influences on the amount of difference in order to further enhance the quality of the management of the company.

IV. EBIT AND FINANCIAL ANALYSIS

Operating results resulting from the managerial profit and loss account show how much profit the company obtained from its main business (operational) activities, which is the same figure as in the income statement in financial accounting. Operating profit in the managerial budgeting is reported in managerial accounting in amount which is equal to the amount of profit in the profit and loss account in the financial accounting.

EBIT is an appropriate indicator for the measurement of profit from operational activities. This category of profit measures the profit on the sale performance assessment of costs to customers, which is not affected by tax liabilities, financial and investment activities. The so-called internal reproductive (employed) capacity of the company is measured. It is useful to separate the management of EBIT, i.e. the profit from ordinary activities before tax and interest payments on foreign capital from the net income from main business

activities after taxation NOPAT (Net Operating Profit after Taxes). EBIT (Earning before Interests and Taxes) sets us apart from the modification of the criteria EBITDA (Earnings before Interests, Taxes, Depreciation and Amortization), which is the profit from operating activities before tax and debt service and depreciation of tangible and intangible assets.

Assuming that for the period it was decided on how to finance the company, we can adjust the criteria of return on equity ROE (Return on Equity) = $EBIT / \text{equity}$ ratio to determine the viability of the assets of the main economic activity ROA (Return on Assets) = $EBIT / \text{assets}$ main business activities. In quantifying ROA a multiplicative relationship between the indicator (EBIT / revenues from the sale of outputs) and indicators (revenues from the sale of outputs / assets of the main economic activity) applies or respectively, the multiplicative relationship between the indicator (EBIT / amounts of operating costs) and indicators (costs of principal employment / assets of the main economic activity) applies.

The ratio of EBIT to costs from major economic activity, supplemented by the criteria of speed of turnover of assets (liabilities) and turnover time creates a suitable starting point for further disaggregation of the effectiveness criteria in the financial management of the company. It is possible to delegate the responsibility of expenses of centres, but also for the amount of the assets, which are influenced by operations of a specific centre (supply of materials, finished products, semi-finished and unfinished products) to the lowest hierarchical level of management.

By modifying the criteria of profitability of assets representing the ROCE (Return on Capital employed) criterion, involving a total capital employed reduced by interest-bearing loan liabilities, in terms of assets based on the principal business activities (EBIT / (assets operating activities - interest-bearing loan capital)).

In determining the criteria of ROS (Return on Sales), the financial analyst compares the ratio of EBIT / total revenues from sales. The ratio of EBIT and income categories of revenues (revenues) from sales is necessary to realize the risks of improper construction of interpretive criteria for the profitability of the sale primarily in terms of the denominator in response to the activations, which is corrected from the amount of sales of the amount of changes in inventory production.

From the foregoing it is apparent that the category of EBIT is suited for financial analysis primarily in the moment when the profit and loss is analyzed in an income statement with cost structure by function where costs are further strictly distinguished from the financial performance and investment activities. As shown, this is not the usual approach in the Czech financial statements.

Basis for effective financial analysis is the interconnection of specific balance sheet, income statement and cash flow, efficient compilation and interpretation of the criteria and their appropriate use in terms of management of Czech companies.

V. CONCLUSION

It can be concluded that the attempt to „fit“ the Anglo-Saxon market- and performance oriented parameters and analysis on the Czech statements of financial accounting by private Czech companies for the measurement of corporate performance should be treated with care since the Czech statement were never constructed for performance measurement. As shown, goals and information needs [29] of different user groups vary. Internal users of financial analysis require different input parameters with a different composition than external users of financial analysis. Information needs of the tax authorities are incompatible with the needs of both external and internal users as well. Consequently, the resulting intersection of these mutually incompatible approaches to methodically „defected“ financial analysis and ultimately to the interpretation of results that is disproportionate to originally anticipated purpose. These methodological shortcomings may in turn translate into business process management based on improperly conducted analysis where the comparison of various performance criteria are not, and cannot be comparable.

Companies with international presence, especially if the parent company comes from the U.S., has three accounting systems in place, depending on to whom and for what purpose the outcomes are provided and what is the intended use. If we ignore this fact and use the system for reporting purpose other than it was intended to serve (Czech standard „tax“ accounts), one cannot avoid the fact that not only the assumptions are incorrect (because the inputs are not methodologically comparable), but there are errors in the results that cannot be a solid foundation for business management and decision making [11].

A typical example, which was elaborated in detail in our text, is the category of profit called EBIT. It was shown that EBIT as understood in the international environment is impossible to be derived from a usual Czech income statement. The „Czech EBIT“ is therefore not usable in a variety of Anglo-Saxon financial-analysis and valuation models [17]. What is the list of errors and inaccuracies, which are we doing when we derive „Czech EBIT“ by adding income taxes and interest paid back to the Czech profit of the period? Following arguments are based on the issues analyzed in the article and cannot, unfortunately, be considered a full list:

- it is not always possible to identify so-called non-operational transactions, the performance often reflects random factors in measurements of actual performance which may largely distort the explanatory power of profitable indicators, if these are credited with gains generated on the main operating activities of the company, since the operating and non-operating profits usually relate to different risk involvement to be achieved.
- in an income statement where costs are reported by nature, unlike to the version where costs are reported by function, it is impossible to distinguish

the cost related to the output and the cost related to the accounting period.

- the explanatory power of operating results by product mix performance is limited, when costs are reported by nature since the changes in inventories of own production (semi finished and finished products) provide just a formal comparability of costs of outputs with revenues from sales, rather this is a specific technique ensuring compliance costs and revenues,
- the cost structure with breakdown of costs by nature is not comparable to those that show EBIT in the division of costs by function, and therefore any comparison is methodologically flawed, it is not possible to achieve quantitative comparability of indicators, since „right EBIT“ derived from net sales (after deducting the amounts of claims, cash discounts, warranty repairs, etc.) and further deducting the corresponding cost structure by function to the „Czech EBIT“ derived from an income statement where the total output is measured, regardless of whether the company succeeded in the market in the form of realized net sales, and corresponding cost structure by nature which was incurred in one accounting period ,
- the use of American models to test the financial health (especially bankruptcy models), using input data derived from traditional Czech financial statements, again, leads to „mixing“ investor-oriented strict market perspective on the financial performance and financial health with a view primarily oriented to the needs of tax regulation and local accounting rules, the result is again the impossibility of taking the coefficients in the models for the financial health of the financial analysis in the Czech Republic,
- the situation is analogous by models for valuation of businesses in the Czech Republic, mainly based on comparable companies whose market capitalization is known, here certain financial parameters are being compared (the value of the entity or the equity level is derived by multiplying the categories of income), and again because of the incomparable purpose of the category of profit, and its different derivation, ceteris paribus, the different levels in quantitative measures come into effect, the problems of the various markets in which these companies are being valued will not be further elaborated,
- from the foregoing we can conclude that, ceteris paribus, one cannot use the „Czech EBIT“ for the derivation of operating free cash flow as an input parameter in the discounted cash flow models (DCF).

REFERENCES

- [1] N. Antill, and K. Lee, *Company Valuation under IFRS*, Hampshire: Harriman House Publishing, 2005.
- [2] W. Ballwieser, *Unternehmensbewertung: Prozeß, Methoden und Probleme. 2nd Edition*, Stuttgart: Schäffer-Poeschel Verlag, 2007.
- [3] S. Behringer, *Unternehmensbewertung der Mittel- und Kleinbetriebe. 3rd Edition*, Berlin: Erich Schmidt Verlag, 2004.
- [4] C.G. Bonaci, D. Matis, and J. Strouhal, Crisis of Fair Value Measurement? Some Defense of the Best of All Bad Measurement Bases, *WSEAS Transactions on Business and Economics*, 2010, Vol. 7, No. 2, pp. 114-125.
- [5] K. Born, *Unternehmensanalyse und Unternehmensbewertung. 2nd Edition*, Stuttgart: Schäffer-Poeschel Verlag, 2003.
- [6] E.F. Brigham, and M.C. Ehrhardt, *Financial Management. 11th Edition*. Mason: Thomson, 2005.
- [7] A. Damodaran, *Principles of Corporate Finance*, New Jersey: John Wiley & Sons, 2001.
- [8] A. Damodaran, *Investment valuation: Tools and Techniques for Determining the Value of Any Asset. 2nd Edition*, New York: John Wiley & Sons, Inc., 2002.
- [9] A. Damodaran, *Strategic Risk Taking*, New Jersey: John Wiley & Sons, 2008.
- [10] J. Drukarczyk, *Unternehmensbewertung. 5th Edition*, München: Vahlen, 2007.
- [11] S. Encheva, and S. Tumin, Decision Processes in Public Organizations, *WSEAS Transactions on Business and Economics*, Vol. 6, No. 9, 2009, pp. 481-490.
- [12] D. Ernst, S. Schneider, and B. Thielen, *Unternehmensbewertung erstellen und verstehen*, München: Vahlen Verlag, 2003.
- [13] R. Grünwald, and J. Holečková, *Finanční analýza*, Prague: Oeconomica, 2004.
- [14] T. Hering, *Unternehmensbewertung. 2nd Edition*, München/Wien: Oldenbourg, 2006.
- [15] T. Hering, *Investitionstheorie. 3rd Edition*, München/Wien: Oldenbourg, 2008.
- [16] T. Hering, and M. Olbrich, *Unternehmensnachfolge*, München/Wien: Oldenbourg, 2003.
- [17] Hui-Chih Hung, Jung-Kyung Kim, and C.C.L. Calugcug, Dynamical Pricing Strategy for One-Manufacturer and Two-Retailer Supply Chain Model, *International Journal of Mathematical Models and Methods in Applied Sciences*, Vol. 4, No. 3, 2010, pp. 195-202.
- [18] S.A. Ionescu, C.S. Murgoci, C.M. Gheorghe, and E. Ionescu, Towards Profitability on the Financial Markets: A Discriminant Analysis Approach, *WSEAS Transactions on Business and Economics*, Vol. 6, No. 3, 2009, pp. 99-111.
- [19] L. Kaefer, *Unternehmensbewertung in kleinen und mittleren Unternehmen*, Saarbrücken: VDM Verlag Dr. Müller, 2007.
- [20] E. Kislíngarová, *Oceňování podniku. 2nd Edition*, Prague: C.H. Beck, 2001.
- [21] E. Kislíngarová, *Manažerské finance*, Prague: C.H. Beck, 2004.
- [22] B. Knapová, *Účelové členění nákladů a informace podle segmentů pro kvantifikaci vrcholového kritéria ekonomického subjektu*, Prague: Oeconomica, 2006.
- [23] T. Koller, M. Goedhart, and D. Wessels, *Valuation. Measuring and Managing the Value of Companies. 4th Edition*, New Jersey: Wiley and Sons, 2005.
- [24] B. Král et al., *Manažerské účetnictví. 2nd Edition*, Prague: Management Press, 2008.
- [25] L. Kruschwitz, and C. Löffler, *Discounted Cash Flow: A Theory of the Valuation of Firms*, Chichester: John Wiley and Sons, 2006.
- [26] M. Mard, J. Hitchner, and S. Hyden, *Valuation for Financial Reporting. Fair Value Measurement and Reporting, Intangible Assets, Goodwill and Impairment. 2nd Edition*, John Wiley & Sons: New Jersey, 2007.
- [27] M. Mařík et al., *Metody oceňování podniku. 2nd Edition*, Prague: Ekopress, 2007.
- [28] M.J. Matschke, and G. Brösel, *Unternehmensbewertung. 3rd Edition*, Wiesbaden: Gabler, 2007.
- [29] A-M. Mocanu, D. Litan, S. Olaru, and A. Munteanu, Information Systems in the Knowledge Based Economy, *WSEAS Transactions on Business and Economics*, Vol. 7, No. 1, 2010, pp. 11-21.
- [30] I. Neumaierová, and I. Neumaier, *Výkonnost a tržní hodnota firmy*, Prague: Grada, 2002.
- [31] L. Perridon, and M. Steiner, *Finanzwirtschaft der Unternehmung. 14th Edition*, München: Vahlen Verlag, 2007.
- [32] J. Strouhal, Reporting Frameworks for Financial Instruments in Czech: Czech Accounting Practices versus IFRS, *WSEAS Transactions on Business and Economics*, Vol. 6, No. 7, 2009, pp. 352-361.
- [33] J. Strouhal, L. Müllerová, Z. Cardová, and M. Paseková, National and International Financial Reporting Rules: Testing the Compatibility of Czech Reporting from SMEs Perspective, *WSEAS Transactions on Business and Economics*, Vol. 6, No. 12, 2009, pp. 620-629.
- [34] J. Strouhal, C.G. Bonaci, A. Deaconu, L. Müllerová, and M. Paseková, SMEs Stakeholders' Needs on Valuation and Financial Reporting, *International Advances in Economic Research*, Vol. 16, No. 4, 2010, pp. 425-426.

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