# ECONOMIC VALUE ADDED FROM THE PERSPECTIVE OF ACCOUNTING DATA

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*Abstract:* Enterprise performance is an indicator whose tracking and measurement is gaining in importance, especially in connection with stronger competition in the global economic environment and the need for an enterprise to survive in such an environment, in the best case to be successful. Managers should know not only how to measure the enterprise performance but also how to control it. The theory offers a number of ways of how to assess the enterprise performance as well as how to express it quantitatively. One way is to use the concept EVA or "just" the indicator EVA. Economic Value Added is a recognized and, in practice, increasingly common criterion for enterprise, but various difficulties associated with filling it with the right accounting data in a particular country may be a problem. In the paper, we will briefly deal with the theoretical aspects of the financial performance assessment of the company based on the indicator EVA and will then illustrate one of the possibilities of its practical use in business management. For this purpose, we have used the published accounting data of a real IT enterprise in Slovak Republic, with the fictitious name IT Services, Inc.

*Keywords:* EVA (Economic Value Added), financial performance, financial accounting, legal regulations governing business accounting

JEL classification codes: G, M

# INTRODUCTION

EVA and its think-and-methodological apparatus are currently used by many companies of international importance; these include, for example, Siemens, Coca Cola, Polaroid, Škoda Auto and Model Obaly (in the Czech Republic and Slovak Republic). This approach to measuring and assessing the enterprise performance is so well-known and popular that many modifications to the original concept developed by Stern Stewart & Co often come up with the term and abbreviation EVA. It should be said that EVA is one of the most used indicators of enterprise performance assessment in the context of *value based management*, which has its causes and justification. Economic value added is basically an *economic profit* that an enterprise generates after all costs recorded in the accounting and capital costs are paid. As regards debt financing, Slovak business accounting records only the costs of interest-bearing debt, i.e. the liabilities of a company that require the payment of interest (Accounts 562-Interests and 568-Other Financial Expenses, or 563-Exchange-rate losses).

#### METHODOLOGY

#### Basic EVA constructions in brief

Several constructions (formulas) of EVA are known from the specialized literature. The basic construction mathematically expresses EVA as the net profit from the operating activity of an enterprise reduced by its capital costs:

$$EVA = NOPAT - C \cdot WACC \tag{1}$$

where:

- NOPAT Net Operating Profit After Taxes; profit from the operating activity after payment of income tax in monetary unit;
   C Capital; capital linked to the assets, which
- are used for the realization of operating activity in monetary unit;
- WACC Weighted Average Cost of Capital; weighted average capital costs in % multiplied by 1/100.

This most well-known and used form of the indicator also occurs in the following form:

$$EVA = NOPAT - NOA \cdot WACC \tag{2}$$

where:

NOA - Net Operating Assets; net operating assets means assets used for operating activity in monetary unit

In regard to the business accounting in the Slovak Republic, to quantify EVA as well as the partial indicators from the relations (1) and (2) can be a quite difficult problem. NOPAT is neither the same category as our "profit from the operating activity" and nor the profit from ordinary business activity (Note: calculated as operating activity result plus financial activity result), which is from 2014 financial statement no longer needed to be shown; the same is valid for the extraordinary earnings - disaster damages costs and their compensations. The definition of net operating assets is not a simple task, too. Dividing all business activities into operative and non-operative, is common in the world. Operative activity is considered to be the part of the business activity which serves the basic business purpose. Non-operative is usually considered to be all activities that are not necessary for the exercise of basic business activity, for so called core business. One of the main reasons for such a breakdown of an enterprise business activities, and hence its costs, revenues and, ultimately, the profit, is the varying level of business risk that is associated with these activities. For NOPAT, NOA and WACC, the following relationship should apply:

$$\frac{NOPAT}{NOA} \ge WACC \tag{3},$$

i.e. the return on net operating assets calculated using NOPAT should be higher or at least equal to the weighted average costs of capital (WACC) that represent the aggregate claims of the owners and creditors, the return required by the capital providers. Another EVA construction is the so-called EVA Equity based on the information on return on equity (ROE) and alternative equity costs ( $\mathbf{r}_{o}$ ) This indicator has the following form:

$$EVA = (ROE - r_e) \cdot E \tag{4}$$

where:

r

Е

- ROE Return on Equity; profitability of equity (ownersΤ capital) in % multiplied by 1/ 100, where ROE = net profit/equity;
  - Alternative costs of equity in % multiplied by 1/100;
  - Equity; owners' capital in monetary unit;

Although the calculation of EVA in this way seems to be simple, it is not so. In the current practice, it is difficult to determine the value of the parameter  $r_e$ . This parameter needs to be known when calculating WACC in previous relationships. In this case, it is also important that ROE is higher or at least equal to  $r_e$ . The Ministry of Industry and Trade of the Czech Republic uses for the calculation of EVA the relationship (4) after its adapting:

$$EVA = NP - r_e \cdot E \tag{5}$$

where:

 NP - Net Profit in monetary unit (earnings after income tax – EAT – under Czech and Slovak tax law conditions);

# Principles for the conversion of accounting data when calculating EVA Entity

Despite the amount of theoretical and empirical knowledge and the whole range of EVA methodologies, the process of the accounting data conversation to this economic model is ultimately in the hands of financial analysts and managers. Too much simplification seems to be an extreme, but too many adjustments and forced adaptation of models that have arisen in different economic conditions, without respecting domestic conditions are extremes, too. Both Slovak and Czech authors deal with EVA especially in connection with accounting legislation and the economic content of accounting items that may be, and often are, under our conditions different than, for example, in Anglo-Saxon countries. When making the necessary adjustments, care must be taken not to avoid simplicity and "readability" for managers. The following basic adjustments are mentioned:

- adjustment of the balance sheet for those asset items that are not recorded in the balance sheet but are assets required for the realization of the operating activity and generating operating profit,
- adjustment of the balance sheet for such asset items that are recorded in the balance sheet but are not part of the operating activity;
  - Both types of adjustments refer to the calculation of the correct *net operating assets* (NOA), respectively of the *capital* that they are covered with (C).
- adjustment of earnings to *net operating profit* (NOPAT calculation).

Under the conditions of Slovak enterprises, it is necessary to take into account Slovak legislation on business accounting, which is not identical with the Czech or other foreign one. In the following case study we will present in brief our method and procedure of EVA calculation. We have to keep in mind that *universal solution is not possible* because of the close relationship between EVA and accounting (Bartošová, Kicová, 2015).

# Case study: IT Services, Inc.

EVA calculation will be done for a specific enterprise – IT company, Inc., which is engaged in IT solutions and services business activities. This company does not have publicly traded shares, the individual financial statements are prepared according to Slovak accounting regulations and economic results are obligatorily published on its website.

# Data

The data from the financial statements of the company for 4 (Table 1 and Table 2) are the basis for company EVA calculation.

#### Financial and economic situation of the company

Already on the basis of the balance sheet and the profit and loss statement it is possible to outline the financial situation of the company. The financial statements of the company show that in the analysed four-year period:

- the company generated profit each year, even though its development fluctuated,
- the gain of profit was clearly based on the operating activity; in the financial activity, the company was loss-making in each year,
- in none of the analysed years, the company did not record the earnings from extraordinary activities (obligatory shown in statement until 2013) – therefore it has formally approached the structure of recording the profit for operating and financial activity only, as stipulated by the amended accounting regulations,
- the major part of revenues was revenue from selling goods, these had a growing trend, revenue from selling own products and services fluctuated (Bartošová, Kicová, 2015).

Financial situation of the company can be supplemented with growth rate according to the relationships:

\* Growth rate of sales revenue (goods, own products and services):

g(Revenue from Sales of Goods, Own Products and Services)  
$$t/t-1$$

$$=\frac{Revenue \ from \ Sales \ of \ GPS_t - Revenue \ from \ Sales \ of \ GPS_{t-1}}{Revenue \ from \ Sales \ of \ GPS_{t-1}} \cdot 100 \quad [\%]$$
(6)

$$g(Total Revenue)_{t/t-1} = \frac{Total Revenue_t - Total Revenue_{t-1}}{Total Revenue_{t-1}} \cdot 100 \quad [\%] (7)$$

\* Growth rate of total costs:

$$g(Total Costs)_{t/t-I} = \frac{Total Costs_t - Total Costs_{t-I}}{Total Costs_{t-I}} \cdot 100 \quad [\%]$$
(8)

\* Growth rate of earnings from operating activity  $(E_{OA})$ :

$$g(E_{OA})_{t/t-1} = \frac{E_{OA_t} - E_{OA_{t-1}}}{E_{OA_{t-1}}} \cdot 100 \quad [\%]$$
(9)

\* Growth rate of earnings from financial activity  $(E_{EA})$ :

$$g(E_{FA})_{t/t-1} = \frac{E_{FA_t} - E_{FA_t-1}}{E_{FA_t-1}} \cdot 100 \quad [\%]$$
(10)

\* Growth rate of earnings before taxes (EBT):

$$g(EBT)_{t/t-1} = \frac{EBT_t - EBT_{t-1}}{EBT_{t-1}} \cdot 100 \quad [\%]$$
(11)

\* Growth rate of earnings after taxes (EAT):

$$g(EAT)_{t/t-1} = \frac{EAT_t - EAT_{t-1}}{EAT_{t-1}} \quad [\%]$$
(12)

The growth rates of chosen items from profit and loss statement are shown in Table 3. Because of the limited range we will leave out the graphs describing calculated results.

# Calculation of EVA

When calculating EVA, the main problem is that the partial indicators that are used for its calculation do not have a unified method of calculation, even in the country where concepts such as EVA, NOPAT, EBIT and others have arisen. In general, it can be said that the greater the amount of adjustments to the accounting data needs to be done, the less we can do only with the data of the financial statements, and at the same time: with a large number of adjustments, the likelihood of different results distortions is higher. The content definition of partial indicators is largely influenced by the specific features of accounting under the conditions of the national economy. For the purpose of calculating EVA, it is therefore necessary to have very detailed accounting evidence and a lot of other internal information about the accounting entity. In this article, we will follow current Slovak accounting regulations, i.e. the structure and content of accounting items that have been set out by the Ministry of Finance of the Slovak Republic, which regulates accounting procedures for businesses and drawing up of the individual financial statements in double-entry accounting. Economic Value Added will be calculated in

its basic form, using NOPAT, but also using ROE and  $r_e$  (formulas (1) to (4)).

# Net Operating Profit (NOPAT) calculation

NOPAT should contain only those costs and revenues that were part of the enterprise operating activity. Under operating activity, the analysed company should understand its core business activity of providing IT services and solutions. As we only have an abbreviated profit and loss statement available, we will rely on costs and revenues from recorded "operating activity". *The operating activity* is in Slovak accounting formed by the final balances of the cost accounts from the account groups 50 - 55 and the revenue accounts from the account groups 60 - 65, which include the following groups of costs and revenues (Bartošová, 2014):

- 50-Purchases Consumed
- 51-Services
- 52-Labour costs
- 53-Taxes and fees
- 54-Other operating activity costs
- 55-Depreciation/amortization and adjusting entries to tangible and intangible assets
- = Operating Activity Costs
- 60-Revenues from selling own products, services and goods
- 61-Inventory status changes
- 62-Activation
- Note: account group 63 doesn't exist
- 64-Other operating activity revenues
- 65-Accounting other ordinary activity items
- = Operating Activity Revenue

In the case of adjustments to the profit and loss statement, this is the exclusion of those cost and revenue items from recorded "operating activity" that is not related to the operating activity formulated by the authors of EVA concept. Their delimitation from the operating activity requires detailed information about what activities the company considers its main business activity and which costs and revenues recorded in accounting are really connected with them. This is a main idea for quantifying

NOPAT. The Slovak financial statement does not provide data in such a structuring, so we will assume that all costs from recorded operating activity were incurred in a direct connection with the company main (operational) business activities. We know about making a certain distortion because in these costs we include, for example, depreciation of property that did not active operational functions or revenues from unnecessary assets. In terms of leasing, the legislation is different than, for example in the Czech Republic, because in Slovak conditions, the property acquired on the basis of financial lease is shown in the balance sheet (property in assets, accounts payable from lease in liabilities). On the other hand, operating activity is not possible without organizational support with everything that belongs to it, and therefore in our calculations NOPAT will be equal to (Slovak) profit from operating activity. We will not adjust profit from ordinary activity; the ordinary activity of the enterprise were (Note: until 2014) except operating activities, also financial operations; these include for example interest expenses that, as recommended by the expert sources, should be excluded from NOPAT because the debt costs  $r_d$  are already taken into account in the WACC. We will modify profit from operating activity using a tax shield to get a net operating profit that means after income tax payment. The adjustment is simplified because, in practice, profit from operating activity, together with profit from financial activity, in the calculation of the income tax base is adjusted in a relatively difficult way using the tax deductible and imputable items.

# Capital (C)

In EVA calculations, the capital is often substituted with the total amount of liabilities and equity, i.e. all sources covering assets due to simplification, but C from the original model should only be in the amount of NOA, i.e. net operating assets, as it is the capital that covers the operational assets (expressed in net, after adjustment by depreciation and adjusting entries). This principle is not always complied with when calculating EVA, which is confirmed not only by practical experience, even the scientific literature is not consistent in this respect, it is recommended according Zalai *et al.* (2013) "to substitute C with only long-term (own) capital and long-term liabilities the price of which is interest, e. g. without noninterest accounts payable (current liabilities)." According to Kislingerova *et al.* (2010) C can be quantitated as:

Invested capital (C) = Equity +Liabilities – Short-term accounts payable from business

relations (13, 14)

In the paper, we will make two alternative calculations: **1. using C (capital) equal to the sum of total equity and total liabilities; 2. using C equal to NOA;** net operative assets will be calculated as the sum of longterm tangible and intangible assets expressed in net book value (depreciated costs) plus net working capital (current assets minus short-term liabilities); in NOA will not be included the long-term financial assets that the company also shows in the analysed years and which, we assume, is not related to operating activities;

#### Weighted Average Cost of Capital (WACC)

Firstly: since the enterprise has to pay all capital costs, not only those related to NOA, we will base the calculation of the WACC on the total capital C, which consists of owners' equity (E) and liabilities: interest-bearing liabilities and non-interest-bearing liabilities. From the published data, we cannot accurately identify liabilities (debt) that were interest-bearing, so we will assume that the company paid interests on bank loans and long-term liabilities, too. These are in our calculations *interest-bearing liabilities (IBL)*. *Non-interest-bearing liabilities (NIBL)* consist of reserves (in the Slovak accounting – items connected with an anticipated future debt), short-term accounts payable, but also accrual liabilities (Table 4). Secondly: we will make another calculation for C that is identical to NOA (Table 5).

The cost of interest-bearing liabilities  $r_d$  is calculated from accounting records as a proportion of interests (account 562) and interest-bearing liabilities IBL (bank loans and long-term liabilities). Other financial expenses (account 568) will not be used in the income statement as we do not know if they are the cost for capital (Bartošová, 2014).

$$r_d = \frac{Interests}{IBL} \cdot 100 \quad [\%] \tag{15}$$

When estimating the cost of own equity r we can help ourselves with the practice used by some enterprises. We will deduct the costs of own equity from the costs of liabilities on the assumption that it is based on the experience that in standard market economies, the costs of equity is usually at the level of several percentage points (2 to 5) above the debt costs. For comparison purposes only, in the Table 5 we will also show the procedure of the Swiss company Model Group, which calculates the costs of own equity by adding a 3% risk premium to the risk-free interest rate in the country. As the risk-free rate r, we will use the average return on 10-year government bonds (calculated from the monthly values in % p.a.) for the individual years of the analysed period. The weighted average costs of capital (WACC) will be calculated according to the relationship:

$$WACC = r_d \cdot (1-t) \cdot \frac{IBL}{C} + r_e \cdot \frac{E}{C} \quad [\%]$$
(16)

Some companies use a constant value for WACC that is valid for a certain period, e.g. Škoda Auto and Volkswagen Group use a flat rate of 9%, Coca-Cola uses the rate of 12%, and so on. These data are usually part of the individual methodologies developed at the top level of important companies for the whole group of capitallinked companies (business combination). When calculating the WACC, we will further determine the weights - proportions of the individual capital groups in total capital (C). In the Table 5 weights for NIBL (Noninterest bearing liabilities) are also calculated, but these have zero capital costs and that is why so we do not place them in the formula (16) but it is important to take into account its share. Into the WACC calculation formula, we will substitute r for the upper limit of these costs determined by  $r_d$  As the results of the calculations in the Table 5 show, the company created by its activity in all years of the analysed period value added for the owners: although EVA has a positive value in each year, its development fluctuates. Year-on-year changes are: 1st/ 2nd decline, 2nd/3rd growth and 3rd/4th decline. An increasing trend would be a desired result.

## DISCUSSION

We have calculated the indicator EVA of the company in a number of ways: the highest EVA values were calculated on the basis of NOPAT and C (NOA), which is understandable, because instead of total capital, we fitted in the relationship (2) capital C which is identical with net operating assets - at the same average WACC. The question is whether, and if so, how to adjust WACC if the total amount of equity and liabilities (total capital) is not part of the calculation, but only C (NOA). The calculation of EVA using the equity construction approximates to EVA entity with the total capital used (in Table 5 marked as EVA1 and EVA3). It turned out that the transfer of accounting data into the form of an economic model is difficult not only in "technical" terms, but also in terms of the assessment of the correctness of the economic considerations. Each item (partial indicator) can be quantified on the basis of a number of often different procedures: from difficult adjustments to simplifying to trivial procedures. When calculating the cost of capital, we have chosen a simple methodology, which results in an estimate of the cost of capital, in particular of its own. We had this problem: compared to other years, in the 4<sup>th</sup> year, the cost of interest-bearing liabilities r<sub>d</sub> was quite high (in Table 5 marked with a grey box), the explanation is twofold: first, the company could have a higher share of interest-bearing liabilities than we included in the calculation of the IBL based on the data available; secondly, it is more likely that the company repaid a large portion of bank loans at the end of the 4th year, so that their status on 31<sup>st</sup> December (only € 667) significantly affected the amount of the calculated IBL costs, since the interest costs as a flow rate are by 31 December in cumulative height, IBL as status indicator not. In this case, we calculate  $r_d$  at this point again – using the average IBL status:

$$\frac{IBL (status 1.1.) + IBL (status 31.12.)}{2} = \frac{840258 + 128117}{2} = = cca 484 188 \notin,$$
$$r_d = \frac{interests}{average IBL} = \frac{32820}{484188} = cca 6,78\%.$$
$$r_d = \frac{interests}{average IBL} = \frac{32820}{484188} = cca 6,78\%.$$

We will not count the average statuses of IBL in the other years, in the 1<sup>st</sup> year we would miss the data (initial state). We used these as illustrations. The calculated IBL

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costs will be reflected in both WACC and EVA. With regard to the NOPAT calculation based on Slovak financial statements in subsequent years following the analysed period, it should be noted that from the beginning of the financial statements by 31st December 2014, a new structure of profit in the accounting of businesses in the Slovak Republic is valid, it is made of: profit from operating activity and profit from financial activity, their sum is profit for the accounting period. Extraordinary activity costs and revenues as the accounting items have been cancelled. Such showing of the profit will further strengthen the need to "clean up" the accounting costs and revenues when calculating NOPAT from the impact of accidental occurrences that will be reflected as costs or revenues as these will already form part of the costs and revenues of the operating activity according to the new legislation. As we have already mentioned, the most important factors that affect the creation of value for the owner in the form of EVA are: cost reductions, revenue growth and (accounting) profit growth, operating profit generation, appropriate structure and reasonable amount of assets and their efficient use, furthermore suitable structure of the enterprise and in relation to it, the amount of capital costs, and in particular their relationship to ROE (return on own equity). Already in the initial company analysis it could be assumed that it generates value for its owners - the company is profitable in the long run, its revenues and profit have a growing trend, despite the higher share of liabilities it is able to repay their price, as confirmed by EVA, it has a demanded and perspective subject of business activity. The subject matter of the discussion will therefore not be whether it creates economic value added, but the way of its measurement that the company choses. For the illustration, we have used procedures that are not the most difficult ones but are understandable and usable in the basic orientation. In this context, we will also mention an example from the practice of the OEZ Group, where they have introduced their own simplified indicator PEVA - enterprise EVA: instead of operating profit it uses economic activity profit, the WACC is replaced by a business constant of 6%, and all the liabilities and equity are considered to be the capital. According to the information source, the company

conducted a sensitivity analysis and found that PEVA and EVA had practically the same course.

# CONCLUSION

The use of EVA in the enterprise practice is multiple: EVA can be used as a tool for:

- enterprise performance measurement and management,
- enterprise valuation and acquisition
- investment projects assessment,
- managing and motivating employees.

Multiple use of the EVA concept is an indisputable advantage as well as the relative simplicity of calculation compared to other value indicators based on economic profit. In our country, EVA is better known from theoretical sources; in practice, we can rarely meet with its introduction into the company management system, that means that it does not apply as a **management concept**, but it is used more as an **indicator of financial and economic analysis.** These facts are still considered to be its shortcomings:

- It is based on accounting data which, in particular according to the authors' original concept, need to be adjusted from an accounting form to an economic model in a difficult way; a complete set of adjustments is not known, it is the business secret of Stern Stewart & Co.,
- the problem is the calculation of the cost of capital, especially the own equity, which is just like the calculation of EVA always an estimate,
- the enterprises are often assessed on the basis of annual EVA changes (± EVA), not on the basis of current value of future EVAs:

 $\left(\sum_{t=1}^{\infty} \frac{EVA_{t}}{\left(1 + WACC\right)^{t}}\right)$  – in this case EVA takes

into account only the consequences of business activity and managerial decisions in one (particular) period, it does not include in the assessment the expected earnings in future periods, • the model is not adjusted for the inflation impact.

Just like all models, EVA also brings simplifications, on the other hand it also enables to extend the ratings and conclusions from the financial and economic analysis including the owner and information on how they have managed to capitalize their capital (instead of another possible investment of their money).

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# Economic value added from the perspective of accounting data

# Attachments

# Table 1 Balance sheet

Accounting item [€]	Analysed years				
	1st	2nd	3rd	4th	
Total Assets	18 081 894	21 050 078	16 038 550	31 060 143	
Non-circulating assets	1 835 033	1 518 703	1 378 091	1 726 212	
Intangible assets	556 117	456 904	369 645	650 530	
Tangible (fixed) assets	536 401	319 284	189 516	256 752	
Long-term financial investments	742 515	742 515	818 930	818 930	
Circulating assets	16 158 584	19 336 479	14 505 285	28 851 996	
Inventory	870 345	1 281 656	789 208	2 091 727	
Long-term receivables	106 833	94 078	96 542	46 407	
Short-term receivables	13 731 055	16 210 475	11 987 251	25 379 324	
Marketable securities	0	0	0	0	
Financial accounts	1 450 351	1 750 270	1 632 284	1 334 538	
- Cash and cash equivalents	45 015	38 237	41 801	41 818	
- Money on bank accounts	1 405 336	1 712 033	1 590 483	1 292 720	
Accrued assets	88 277	194 896	155 174	481 935	
Accrued costs	37 454	124 021	128 895	438 795	
Accrued receipts	50 823	70 875	26 279	43 140	
TOTAL OWNERCS EQUITY AND LIABILITIES	18 081 894	21 050 078	16 038 550	31 060 143	
Ownerces equity	6 768 765 5 052 264		4 157 991	4 666 531	
Basic (registered) capital	388 464	422 700	422 700	422 700	
Capital funds	9 958	9 958	9 958	9 958	
Funds created from profit	84 493	84 540	84 540	84 540	
Earnings retained	2 596 762	2 683 133	1 194 092	2 290 794	
Current period earnings after taxes	3 689 088	1 851 933	2 446 701	1 858 539	
Liabilities	11 229 966	15 812 313	11 775 151	26 344 464	
Reserves (Note: in SR they are connected with future debt)	374 723	295 824	608 691	748 167	
Long-term liabilities	157 783	85 839	73 448	127 450	
Short-term liabilities	9 622 997	14 381 739	10 326 202	25 468 180	
Bank loans	1 074 463 1 048 911		766 810	667	
Accrual liabilities	83 163	185 501	105 408	49 148	
Accrued expenses	7 202	136 979	6 238	7 026	
Accrued revenues	75 961	48 522	99 170	42 122	

Source: own processing according to Individual Balance Sheet IT Services, Inc.

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Table 2Profit and loss statement

Accounting item $[\epsilon]$	Analysed years				
	1st	2nd	3rd	4 <i>th</i>	
TOTAL COSTS					
Costs of goods sold	20 955 239	24 446 941	28 894 501	30 188 471	
Material, energy and other	571 965	592 088	566 582	689 169	
non-warehousing delivery costs					
Services	6 975 681	6 106 522	9 399 676	9 311 174	
Personal costs	8 769 857	8 050 902	9 174 099	9 542 216	
Taxes and fees	18 731	16 478	14 923	21 010	
Depreciation and amortization	493 338	403 663	278 369	245 437	
(of tangible and intangible assets)					
Depreciated cost of sold long-term asset	ts	600		17 573	
Adjusting entries to accounts receivable	138 077	13 820	21 334	-4 141	
Other "operating activity" costs	132 579	110 657	236 518	78 673	
Total "operating activity" costs	38 055 467	39 741 671	48 586 002	50 089 582	
Sold securities and shares costs		34 000			
Interest costs	74 645	103 753	54 073	32 820	
Exchange rate losses	85 401	21 878	11 549	12 386	
Other financial costs	41 237	30 625	19 099	31 110	
Adjusting entries to financial assets					
Total financial costs	201 283	190 256	84 721	76 316	
Extraordinary costs ð	0	-	-	-	
TOTAL COSTS	38 256 750	39 931 927	48 670 723	50 165 898	
TOTAL REVENUE					
Revenue from selling goods	26 373 955	28 670 255	37 845 502	36 509 653	
Revenue from selling own	16 551 284	13 274 260	13 498 069	15 838 824	
products and services					
Total revenue from sales of	42 925 239	41 944 515	51 343 571	52 348 477	
goods, own products and services					
"Activation" of material, services,	-131 942	121 000	305 280	133 854	
tangible and intangible assets					
Revenue from selling tangible and	25 353	37 621	42 635	71 627	
intangible assets and material					
Other "operating activity" revenues	73 206	85 955	91 186	105 174	
Total "operating activity" revenue	42 891 856	42 189 091	51 782 672	52 659 132	
Revenue from seeling securities					
Revenue from financial assets	12 006				
Revenue interests	3 305	6 0 5 8	3 225	3 005	
Exchange rate profits	46 090	18 787	12 524	1 104	
Other financial activity revenues			1		
Total financial revenue	61 401	24 846	15 749	4 109	
Extraordinary revenue	0	-	-	-	
TOTAL REVENUE	42 953 257	42 213 937	51 798 421	52 663 241	
"Operating activity" earnings	4 836 389	2 447 420	3 196 670	2 569 550	
Financial activity earnings	-139 882	-165 410	-68 972	-72 207	
Extraordinary activity earnings	0	-	-	-	
Earnings before taxes	4 696 507	2 282 010	3 127 698	2 497 343	
Earnings after taxes	3 689 088	1 851 933	2 446 701	1 858 539	
only till the year 2013					

Source: own processing according to Profit and Loss statement IT Services, Inc.

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# Economic value added from the perspective of accounting data

Growth rate [%]	Analysed years			
	2nd/1st	3rd/2nd	4th/ 3rd	
Sales revenue (goods, own products and services)	-2,28	22,40	1,96	
Total revenue	-1,72	22,70	1,67	
Total costs	4,38	21,88	3,07	
Earnings from operating activity (E <sub>OA</sub> )	-49,29	30,61	-19,62	
Earnings from financial activity $(E_{FA})$	18,25	-58,30	4,69	
Earnings before taxes (EBT)	-51,41	37,06	-20,15	
Earnings after taxes (EAT)	-49,80	32,12	-24,04	

 Table 3

 Growth rates of chosen items from profit and loss statement

Source: own processing

Table 4 Interest-bearing liabilities and non-interest-bearing liabilities

Liabilities [€]	Analysed years				
	1st	2nd	3rd	4 <i>th</i>	
Bank loans	1 074 463	1 048 911	766 810	667	
Long-term liabilities	157 783	85 839	73448	127 450	
Total interest-bearing liabilities	1 232 246	1 134 750	840 258	128 117	
Reserves	374 723	295 824	608 691	748 167	
Short-term liabilities	9 622 997	14 381 739	10 326 202	25 468 180	
Accrual assets	83 163	185 501	105 408	49 148	
Non-interest-bearing liabilities	10 080 883	14 863 064	11 040 301	26 265 495	
Total liabilities(including accrual assets)	11 313 129	15 997 814	11 880 559	26 393 612	

Source: own processing

#### Viera Bartosova

Accounting item [€]	Unit	Analysed years				
		1st	2nd	3rd	4 <i>t</i> h	
Slovak operating profit	[€]	4 836 389	2 447 420	3 196 670	2 569 550	
(1-t)	decimals	0,81	0,81	0,81	0,77	
NOPAT(Slovak	[€]	3 917 475	1 982 410	2 589 303	1 978554	
operating profit.(1 t))						
EAT	[€]	3 689 088	1 851 933	2 446 701	1 858 539	
C (capital)	[€]	18 081 894	21 050 078	16 038 550	31 060 143	
- E-equity	[€]	6 768 765	5 052 264	4 157 991	4 666 531	
- IBL	[€]	1 232 246	1 134 750	840 258	128 117	
- NBL	[€]	10 080 883	14 863 064	11 040 301	26 265 495	
Interests	[€]	74 645	103 753	54 073	32 820	
Equity-share	decimals	0,3743	0,2400	0,2592	0,1502	
IBL-share	decimals	0,0682	0,0539	0,0524	0,0042	
NBL-share	decimals	0,5575	0,7061	0,6884	0,8456	
Intangible assets	[€]	556 117	456 904	369 645	650 530	
Tangible (fixed) assets	[€]	536 401	319 284	189 516	256 752	
Circulating assets	[€]	16 158 584	19 336 479	14 505 285	28 851 996	
Short-term liabilities	[€]	9 622 997	14 381 739	10 326 202	25 468 180	
Net working capital	[€]	6 535 587	4 954 740	4 179 083	3 383 816	
(Circulating assets –						
C (NOA) (Intangible	[€]	7 628 105	5 730 928	4 738 244	4 291 098	
assets+Tangible fixed	[9]	1 020 100	5 1 50 7 20	1750211	1291090	
assets+Net working capital)	50.43					
$r_d$ (calculated according relationship (15))	[%]	6,06	9,14	6,44	25,61	
$r_{f}$ (risk free interest rate)	[%]	3,87	4,45	4,55	3,19	
$r_e$ - approach: 2-5 percentage points above $r_d$	[%]	<8,06- <b>11,06</b> >	<11,14- <b>14,14</b> >	<8,44- <b>11,44</b> >	<27,61- <b>30,61</b> >	
r <sub>e</sub> approach Model Group: 3 percentage points above r.	[%]	6,87	7,45	7,55	6,19	
WACC according relationship (16)	[%]	4,47	3,79	3,24	4,68	
WACC in decimals C	[€]	808 261	797 798	519 649	1 453 615	
WACC in decimals C	[€]	340 976	217 202	153 519	200 823	
(C expressed as NOA)	L -1					
ROE (EAT/Equity)	[%]	54,5	36,7	58,8	39,8	
(ROE - r)	decimals	0,4344	0,2256	0,4736	0,0919	
<b>EVA</b> (using NOPAT and C according relationship (1))	[€]	3 109 214	1 184 612	2 069 654	524 939	
<b>EVA</b> (using NOPAT and NOA according relationship (2))	[€]	3 576 499	1 765 208	2 435 784	1 777 731	
<b>EVA</b> (using ROE and $r_c$ according relationship (4))	[€]	2 940 352	1 139 791	1 969 225	428 854	

 Table 5

 Partial indicators and the calculation of EVA

Source: own processing

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