DEVELOPMENT OF THE PERFORMANCE OF SLOVAK BUSINESSES

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In the September 2005 issue of this journal a collaborative article on results of the convergence process of the Slovak economy towards its integration into the EU economy[1] was published. The authors of the article made the point that "the business sector ... is increasing in terms of efficiency and strengthening its economic stability. This has been the trend now for several years. The share of profit-making businesses is progressively growing and that of loss-making falling … the turnover period for business assets is decreasing and value added is growing." The author of this article agrees with this thesis and uses this contribution to expand and support it with statistical material. By its concept and content, the article is a follow up of another paper by the same author published in the August and September 2003 issues of this journal under the title "Better Times to Come?".

In order to argue for and evaluate the thesis and, in the end, arrive at adequate conclusions, it is necessary to have reliable and relevant information based on a sufficiently-sized set of businesses. These data were provided to the author by INFIN, spol. s r. o., publisher of "Stredné hodnoty finančných ukazovateľov ekonomických činností" (Mean Values of Financial Indicators for Economic Activities in Slovakia), a respected publication issued for each year[2].

Table 1 Structure of the set by legal form (in %)

Year	Size of set	Legal form					
		State-owned company	Joint-stock company	Limited liability company	Cooperative	Natural person registered in the Companies Register	Other
1999	39 162	0,31	8.31	79.86	3.19	2.23	6.10
2000	43 415	0.29	8.16	80.67	2.82	2.05	6.01
2001	47 004	0.24	7.76	80.66	2.64	1.60	7.10
2002	44 471	0.20	7.14	82.29	2.56	1.30	6.51
2003	44 855	0.12	6.63	82.92	2.20	0.97	7.16
2004	44 672	0.09	6.07	85.04	2.08	0.74	5.98

Note: The column "other" includes entities not listed by legal form, other natural persons and other entities.

Set of analysed businesses

The set of the businesses whose results of operations form the basis for the generalisations includes several thousand ones, and represents between 80% and 90% of the businesses registered in the Companies Register performing double-entry bookkeeping in accordance with the framework chart of accounts for businesses; i.e. it is a statistically significant set. In addition to the statistical data, it is important to know the structure of the set and its developments.

Changes to the selected indicators (e.g. measures of central tendency) of the given set may cause changes both to the factual substance of the indicators and to the structure of the set. In connection with, for example, the different investment demands of manufacturing and service businesses, several indicators (e.g. turnover rate), may be influenced.

The developments in the analysed set of businesses over the period 1999 to 2004 and the changes in its structure in terms of legal form, subject of business, and size are shown in Tables 1, 2 and 3. The length of the analysed period was chosen so as to reliably express the historical trends and, at the same time, to preserve the transparency of the data.

Table 2 Structure of the set by subject of business (in %)

Year	Size of set	Subject of business				
		Manufacturing	Wholesale	Retail	Services	Unclassified
1999	39 162	27.53	27.70	14.09	30.26	0.42
2000	43 415	26.58	27.64	14.35	31.17	0.26
2001	47 004	25.80	26.82	14.02	32.10	1.26
2002	44 471	26.24	24.63	13.69	33.75	1.69
2003	44 855	24.91	23.36	14.26	35.10	2.37
2004	44 672	24.66	22.03	15.42	36.48	1.41

[1] „Analysis of the Convergence of the Slovak Economy to the European Union“, by Ing. Zora Komínková, CSc., Ing. Tibor Lalinský, and Mgr. Martin Šuster, PhD.

[2] This publication was originally published by Bankové zúčtovacie centrum Slovenska a. s. (the Slovak Bank Clearing Centre), and since 2002 it has been published by INFIN s. r. o. For the provision of the businesses data, the author wishes to thank INFIN employees Ing. Marková and Ing. Bakošová.

Table 3 Structure of the set by size (in %)

Year	Size of set	Category		
		Small businesses	Medium-sized businesses	Large businesses
1999	39 162	91.22	3.52	5.26
2000	43 415	91.85	3.22	4.93
2001	47 004	91.83	3.21	4.96
2002	44 471	92.12	3.20	4.68
2003	44 855	92.35	3.05	4.60
2004	44 672	92.55	2.90	4.55

Note: The categories of small businesses, medium-sized businesses and large businesses include, respectively, businesses having assets of up to SKK 50 million, between SKK 50 and 150 million, and more than SKK 150 million.

From the view of legal form, the only companies to register dynamic development were limited liability companies. Companies of all other legal forms saw their share diminish. With regard to the structure by subject of business, a decline in the share of manufacturing and wholesale businesses and substantial growth of the share of service businesses was recorded. The share of businesses with fewer long-term tangible assets and inventories was declining.

The share of small businesses was growing slightly and that of medium-sized and large businesses falling. This fact is affecting the development of several indicators shown later.

After familiarising with all aspects of the set of businesses and the development of its structure, a view on the thesis that "the share of profit-making businesses is growing" is taken.

Positional developments of the first profit-making business in the set

In order to express the shares of profitable and loss-making businesses in the set, a straightforward procedure based on identifying the ranking of the first business to show a profit was chosen. The relevant data are given in Table 4.

By applying this simple procedure, the development of the profitability of businesses is clearly demonstrated.

Table 4 Position of the first profitable business

Year	Size of set	Ranking of the first profitable business	Position of the first profitable business of the set as a percentage
1999	39 162	24 572	62.74 %
2000	43 415	27 113	62.45 %
2001	47 004	26 106	55.54 %
2002	44 471	23 088	51.92 %
2003	44 855	23 841	53.15 %
2004	44 672	21 684	48.54 %

Whereas in 1999 almost two thirds of the businesses in the set did not generate a profit (they either suffered a loss or made no profit), in 2004 more than half of them did. At the same time, the development of profitability was quite continuous and convincing. So the thesis we have been seeking to verify has proven to be true.

Profit is an important, own and internal source of financing for a business, one that sends a key signal about its financial situation. Yet it is not the only parameter to be considered when evaluating a business. Any wide-ranging examination of the financial situation of a business takes into account several characteristics, and the results achieved are typically mediated by the financial ratios.

Developments in selected financial ratios

The financial ratios are constructed in a standard way so as to describe the ability of a business to:

– settle its short-term liabilities, by comparing them with liquid assets. This is represented by liquidity indicators;

– use tied-up assets in meeting the profit target. They are assumed to have an appropriate turnover rate/fixation, which is represented by activity indicators;

– function stably in the market. The stability of a business depends to a large extent on the structure of its funds and it is represented by debt indicators;

– utilise consumed and tied-up inputs in the production process. This is represented by profitability indicators, which are considered to be a measure of business performance[3].

In selecting the indicators, a typical set representing the particular aspects of the financial situation of businesses and its contribution to the affirmation of the thesis of the collective author cited in the introduction was chosen. The indicators (their construction is generally known so will not be elaborated on here) and their values for particular years of the analysed period are given in Table 5 (rounded to two decimal points).

In order to characterise the results of operation of an average business, the median was used (Me). It is the middle value of a statistical ranking compiled according to size. This measure is more suitable than a (weighted) arithmetic average due to its greater resistance to extreme values.

The ability of a business to settle its liabilities is represented by the indicators L_2 (second-grade liquidity) and L_3 (third-grade liquidity). The development of the values of these indicators is very favourable, implying that an

[3] In this article we have not applied other, newer criteria of enterprise performance, such as EVA, RONA, CFROI and so on, due to the lack of data required for their construction.

Table 5 Development of selected financial indicators of businesses in the Slovak Republic between 1999 and 2004

	Size of set	Statistical characteristic	Indicator									
Year		Me	L_2	L_3	TAT	TRCP	TPPP	TD/A	CFI	ROE	EBIT	VA/S
1999	39 162	Me	0.86	1.05	0.99	47.60	75.08	80.45	105.25	-1.52	-0.40	11.74
2000	43 415	Me	0.88	1.06	1.00	44.95	66.15	79.78	116.76	-1.45	-0.53	11.83
2001	47 004	Me	0.90	1.07	1.09	42.61	59.17	79.14	45.70	0	0.22	12.20
2002	44 471	Me	0.90	1.09	1.14	41.36	53.83	77.36	33.01	0	0.48	12.90
2003	44 855	Me	0.96	1.14	1.07	42.84	50.50	74.55	38.47	0	0.29	12.63
2004	44 672	Me	1.01	1.21	1.03	41.98	45.79	68.92	22.62	0.86	0.78	13.61
Unit of measurement			coef.	coef.	turnover	day	day	%	year	%	hal.	%

average (median) business was increasingly able to repay its (short-term) liabilities. This is a welcome fact, reinforced by the evidence that the upward trend in the L_2 indicator was even accompanied by a growing share of retail businesses (with a lower outstanding amounts of receivables), and the same trend in the L_3 indicator was paralleled by a dynamic growth in the share of service businesses (with lesser inventories). An average business is able to cover all of its short-term liabilities with short-term assets.

The utilisation (turnover rate) of total assets is represented by the indicators of total assets turnover (TAT), trade receivables collection period (TRCP), and trade payables payment period (TPPP).

The TAT indicator has a traditional construction where we assume that total assets equals on-balance-sheet assets. Although this is not the case under Act No. 431/2002 Coll. on Accountancy (total assets = on-balance-sheet assets + off-balance sheet assets), that insignificant simplification contributes to a factual correspondence in the construction of the indicator for the whole of the analysed period. The development of the turnover rate is worth noting: this indicator had been growing sharply until 2002. In that year the TAT stood at 1.14, meaning that the average business earned SKK 1.14 on every SKK 1 of assets. Over the next two years the turnover rate fell, reflecting the effect of a legislative amendment: since 2003, assets utilised under financial leasing have been included into total assets of businesses; this significant change (increase) in the denominator caused a reduction in the resulting value.

According to the other two indicators there was improved utilisation of assets in the form of short-term trade receivables and also a consolidation of customer-supplier relations. Time periods for collection of receivables and payment of payables were shorter ("evened out"), and the time period for payables was less than four days longer than for the collection of receivables. Taken together, the development of the three indicators points to a growing utilisation of assets.

A key characteristic of the financial situation of a business is the structure of its funds. This is what the stability of the business depends on. In our analysis, it is represented by the indicators of total debt to assets (TD/A) and cash-flow/indebtedness (CFI).

The total indebtedness of the average business fell over the course of the period, and in 2004 it dipped below 70%. In the European (continental) area, this is deemed to be the upper limit for the use of external funds[4].

The average Slovak business has already adapted to this limit, and the highly positive development of indebtedness is indicated by the upper quartile (UQ)[5]. Between 1999 and 2003, the UQ had a value of more than 100, meaning that more than a quarter of the businesses in the set had negative equity. In 2004, the UQ level fell to 98.2% and the share of businesses with negative equity was substantially reduced.

The ability of a business to repay external funds has also improved (shortened periods). This ability is represented by the cash-flow indebtedness indicator, the development of which was paralleled by indebtedness of businesses. The number of years required to repay external resources came down considerably. Indeed, it may be said that the structure of funds of businesses is approaching normality and that the average Slovak business is becoming more stable.

The development of liquidity, activity and debt is reflected in the profitability indicators. Since these synthesize the preceding results and transform them into a simpler form, we consider them to be a summary of business performance. Our selection of profitability indicators was led by efforts to show how external and internal factors affect profitability, which is the subject of the last part of the article.

The development of a business's performance is therefore represented by the indicators return on equity (ROE), return on sales (calculated as earnings before

4 This is applied as a general rule. There are individual cases where economically strong and efficient enterprises with good future prospects may exceed this limit.

5 Quartile values (upper and lower) are not shown for the other indicators.

interest and taxes – EBIT), and ratio of value added to sales (VA/S).

All three indicators showed positive development, and ROE went from being in the red to in the black. The observant reader may see a certain discrepancy between the data given in Tables 4 and 5. The first profitable business in 2001, 2002 and 2003 ranked below the midpoint number of businesses in the set. That would correspond to negative median values. Although the values are in fact negative, they come so far after the decimal point that they may only be rounded to zero. The ROE indicator is developing well, underlain by growing utilisation of equity.

EBIT was following the same trend. From 2001, each koruna in revenue brought a positive and increasing share (gross) of profit, whereas for the first two years it returned a loss.

The third indicator, the ratio of value added to sales, is directly related to the thesis that we wish to verify. The development of the indicator backs up the cited authors when they say that "…value added is growing". But what does that mean? We will base the answer on the content of the indicator. It may be calculated on the basis of Income Statement data and its content is expressed by the equation[6]:

value added = sales margin + production – production consumption

The indicator thus represents the efficiency of business operations and its development. The growth in the ratio of value added to sales reflects an increase in efficiency based on a number of factors: improved quality in the production standards of businesses, increasing technological discipline, the manufacture of more sophisticated products, and so on. It is undoubtedly desirable that the ratio of value added to sales (income) increase, which was a welcome reality in the case of average Slovak businesses over the whole of the analysed period.

A range of factors affect the growth of business performance and the good financial position of businesses. When analysing their effect, factors may be divided according to their ability to affect the business performance. Some of them may be directly and significantly influenced by business management – these are internal (subjective) factors. Others cannot be influenced by the management, since they affect businesses from outside and are therefore external (objective) factors. Let us in the final part of the analysis focus on their effect.

[6] Elaborated in the monograph by Zalai, K. et al: Finančno-ekonomická analýza podniku (Financial-Economic Analysis of an Enterprise); published by SPRINT Bratislava 2002 (fourth edition).

External and internal ROE factors

Our knowledge of the external and internal factors is based on the following elaboration of the expanded Du Pont equation:

$$ROE = \frac{NE}{E} = \underbrace{\frac{EBIT}{S}}_{internal} \times \overbrace{\frac{EBT}{EBIT} \times \frac{NE}{EBT}}^{external} \times \underbrace{\frac{S}{TA} \times \frac{TA}{E}}_{factors}$$

where:
NE = net earnings
E = equity
S = sales
TA = total assets

The internal factors include gross profit margin (NE/S), total asset turnover (S/TA) and financial leverage (TA/E). By means of these factors and their positive development, the management may bring about the required profit margin. In the previous section we put forward numeric data and a commentary on them. We mentioned the positive development of return on sales, total asset turnover and indebtedness. The development of total asset turnover was influenced (distorted) by a change in the reporting of assets. The TD/A indicator and the TA/E financial leverage indicator used in the reduction are substitute indicators and make a practically identical statement about the structure of funds.

External factors include the interest reduction of profit representing the price of external funds (EBT/EBIT), and the tax reduction from profit (NE/EBT) representing the tax burden on business income. Both factors fall within the competence of the decision-making institutions – the National Bank of Slovakia and the Government of the Slovak Republic – and business managements are unable to influence them. We will now use figures to see what conditions the state authorities are creating in order to increase business profit margins[7].

Table 6 Development of the tax and credit burden on the average Slovak business (in %)

Year	Size of set	Interest reduction of profit EBT/EBIT	Tax reduction of profit NE/EBT
2001	47 004	55.81	46.96
2002	44 471	54.89	34.09
2003	44 855	78.99	77.17
2004	44 672	77.17	68.71

[7] In calculating the indicator values, the following procedure was applied: the values of NE, EBT and EBIT were calculated for each enterprise of the set and the cumulative values were used for the set as a whole. The relations NE/EBIT and NE/EBT were calculated from the cumulative figures. Data were only available for the last four years of the analysed period. Even so, it was possible to present the substantial change in the macroeconomic determinants acting on enterprises.

The turning point came in 2003. In this year, there was a significant reduction in the price of external funds and in the interest burden. The growth in the share of businesses' available income also reflects the reduction in income tax. It may even be said that the development of external factors has made a positive contribution to the development of business performance and is supporting its improvement.

Summary

The facts presented here suggest that the financial situation of Slovak businesses has been consolidating and their performance growing. The interconnection between the macro- and micro levels and the strong results of the Slovak economy has been supported by the business sector has become reality. Considering that these trends have now been visible for several years, it may be said that "better times are to come".