Chaika T. Yu., Candidate of Economic Sciences,
Associate Professor
National Technical University
«Kharkiv Polytechnic Institute»
Kharkiv, Ukraine

PROFITABILITY RATIOS ON CAPITAL AND INVESTMENT ANALYSIS OF UKRAINIAN HOSPITALITY INDUSTRY (CALCULATED BY OFFICIAL STATISTICAL REPORTING)

Profitability is a characteristic of the ability of a company to generate profits per unit of revenue (income), assets, capital, investments, cash flows, etc. In this study, we focus on return on equity and investment.

Table 1 presents the main most commonly used metrics of return on capital (investment) and methods of their calculation adapted to the Ukrainian financial statements. It should be noted that these calculation methods are not the only possible ones. The practice of financial analysis has a large number of methods for calculating return on capital (investment) ratios differing from each other.

Single isolated values of return on capital (investment) are not able to provide information about the success or failure of the use of capital and investments. As indicated, in particular, T. Zhadan (2016), analytical value have only metrics calculated over time, over a number of years, and (or) in comparison with other

company of particulary industry; with industry average values; with average values throughout the country, or with similar indicators in other countries [1].

Table 1

Basic metrics for return on equity (investment)

Name	The formula and calculation of the Ukrainian financial statements
Return on Equity, *ROE* [2; 3]	$ROE = \frac{Net\ Profit}{Equity} \cdot 100\% = \frac{Line\ Code\ 2350\ (or\ Line\ Code\ 2355)}{код\ 1495} \cdot 100\%$
Return on Investment, *ROI* [4].	$ROI = \frac{Net\ Profit}{Invested\ Capital} = \frac{Net\ Profit}{Equity + Long\ term\ Debt} = \frac{Line\ Code\ 2350\ (or\ Line\ Code\ 2355)}{код\ 1495 + код\ 1595}$, where $Invested\ Capital = Equity + Long\ term\ Debt$
Return on Capital Employd, *ROCE* [5]	$ROCE = \frac{EBIT}{Capital\ Employed} \cdot 100\% = \frac{EBIT}{Equity + Long\ term\ Debt} \cdot 100\% = \frac{Line\ Code\ 2290\ (or\ Line\ Code\ 2295) + Line\ Code\ 2250}{Line\ Code\ 1495 + Line\ Code\ 1595} \cdot 100\%$, where *EBIT* – Earnings before Interest and Taxes.
Return on Total Capital, *ROTC* [6]	$ROTC = \frac{EBIT}{Equity + Long\ term\ Debt + Short\ term\ Debt} \cdot 100\% = \frac{Line\ Code\ 2290\ (or\ Line\ Code\ 2295) + Line\ Code\ 2250}{Line\ Code\ 1495 + Line\ Code\ 1595 + Line\ Code\ 1695} \cdot 100\%$

Unfortunately, the statistical reports of the Ukrainian State Statistics Service [7] don't contain information that is needed to calculate EBIT. Therefore, it isn't possible to calculate the *ROCE* and ROTC ratios from these reports.

Table 2 presents the return on equity (*ROE*) and return on investment (*ROI*) for two Ukrainian hospitality industry's companies; for the hospitality industry total (code I for KVED-2010), and for Ukrainian economy total. The baseline data are taken from the official Statistical digest of the Ukrainian State Statistics Service [7] and from the Issuer's financial reporting database [8].

In 2015–2017, negative equity values were recorded in the Ukrainian hospitality industry. This is an extraordinary situation, which is associated with the presence of substantial unallocated uncovered losses (line code 1420). As a rule, this situation is typical for industries and enterprises that have unprofitable activities over a long time. Among other things, this means a loss of investment attractiveness. In this case, profitability ratios cannot be calculated, we put dashes in the corresponding cells of table 2.

As for negative profit values, statistical departments (including in Ukraine) calculate profitability metrics based on negative profit. Therefore, we will take into account the resulting negative values of profitability too. However, it

should be noted that in this case there are significant difficulties in interpreting the measure of effectiveness. Therefore, in this case, the corresponding profitability ratios will be interpreted as inefficiency scores [9].

Table 2

Return on Equity (*ROE*) and Return on Investment (*ROI*)

	2012	**2013**	**2014**	**2015**	**2016**	**2017**
Return on Equity, *ROE*						
PJSC «Kharkivtourist»	0,54	0,03 ⊕	-1,34 ⊕	1,52 ⊕	0,95	2,42
PJSC «Ternipil-Hotel»	9,54 ⊕	0,72 ⊕	-9,74 ⊕	2,91 ⊕	5,77 ⊕	9,63 ⊕
Ukrainian hospitality industry, total	-7,94	-10,28	-199,22	–	–	–
Ukrainian economy, total	1,84	-1,17	-39,85	-16,32	1,21	6,86
Return on Investment, *ROI*						
PJSC «Kharkivtourist»	0,54	0,03 ⊕	-1,33 ⊕	1,52 ⊕	0,94 ⊕	2,35
PJSC «Ternipil-Hotel»	9,54 ⊕	0,72 ⊕	-9,74 ⊕	2,91 ⊕	5,74 ⊕	9,58 ⊕
Ukrainian hospitality industry, total	-4,28	-6,01	-46,11	–	–	–
Ukrainian economy, total	1,20	-0,76	-20,77	-9,44	0,72	4,03

As we see (table 2), the entire period of 2012–2017, *ROE* and *ROI* of Ukrainian hospitality industry were negative or not determined at all due to negative equity capital. The PJSC «Kharkivtourist» and PJSC «Ternopil-Hotel» indicators significantly exceed the industry average values, which can be seen without additional graphical analysis.

Figure 1 demonstrates that borrowed capital is a serious damper for the loss-making economy of Ukraine as a whole. Thus, in the most unfavorable 2014, on the Ukrainian economy as a whole $ROE = -39{,}85\%$, and the Return on Investment shows, although negative, but still somewhat better result: $ROI = -20{,}77\%$. The same loss cushion was the borrowed capital of PJSC «Kharkivtourist» in 2014.

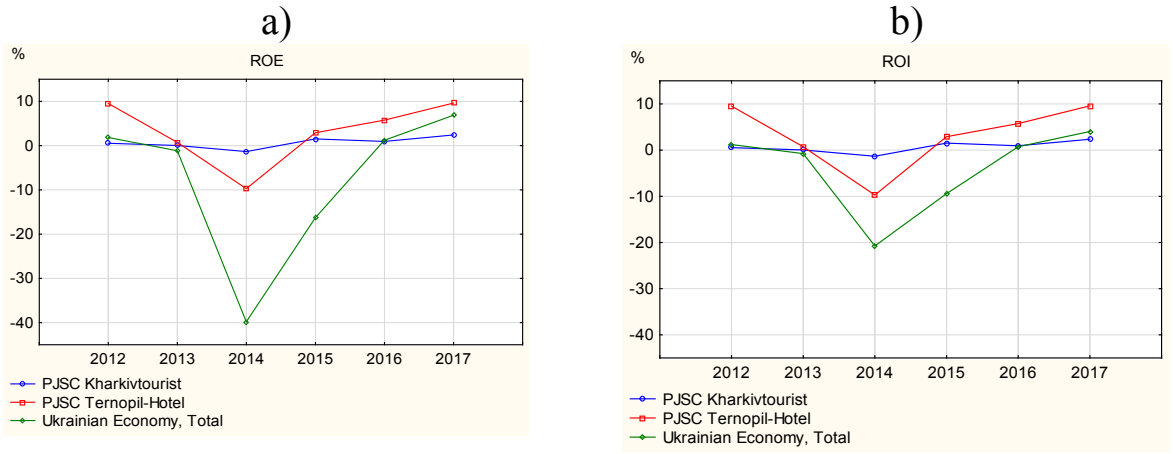

Fig. 1. Dynamics of a) *ROE* and b) *ROI*

When a company makes a profit and at the same time uses long-term debts, it is obvious that its return on investment will be lower than the return on equity calculated for the same profit value. It is important to compare *ROE* and *ROI* with similar indicators of competitors, industry average values, and averages for the economy as a whole.

In table 2, a "+" sign indicates a situation when the company's *ROE* or *ROI* exceeds the corresponding metric for the economy of Ukraine as a whole. If the *ROE* and (or) *ROI* of a company is greater than the industry averages or the country's economy as a whole, then such a company can be considered successful given the existing exogenous influencing factors.

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