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ACCOUNTING STRUCTURE OF THE BALANCE SHEET OF LISTED COMPANIES IN CROATIA

Abstract: The balance sheet is one of the bases of a financial statement. A balance sheet provides information that helps managers and investors evaluate a company's assets and ability to achieve its primary goals of profitability and solvency. The main aim of this research is confirmed that listed companies in Croatia are successfully recovering after the World economic crisis and increasing their assets and their strength. The research was conducted on the financial statements of listed companies on the Zagreb Stock Exchange for 2008, 2012 and 2017. The study shows that the listed companies in Croatia increased their assets, but the structure is traditionally the same, in favour of tangible assets in the researched period.

Keywords: balance sheet, long-term assets, short-term assets, tangible assets, equity.

JEL codes: M41, M21.

STRUKTURA BILANSU SPÓŁEK NOTOWANYCH NA GIEŁDZIE W CHORWACJI

Streszczenie: Bilans jest jednym z podstawowych elementów sprawozdania finansowego. Zawiera informacje, które pomagają menedżerom i inwestorom ocenić aktywa spółki i zdolność do osiągnięcia swoich podstawowych celów w zakresie rentowności i wypłacalności. Głównym celem artykułu jest potwierdzenie tezy, że spółki giełdowe w Chorwacji z powodzeniem wychodzą z kryzysu i zwiększają swoje aktywa i siłę. Badania dotyczyły sprawozdań finansowych spółek notowanych na giełdzie papierów wartościowych w Zagrzebiu, sporządzonych za lata 2008, 2012 i 2017. Wyniki badań wskazują, że badane spółki zwiększyły swój majątek, ale jego struktura jest taka sama, przy czym największy odsetek stanowią środki trwałe.

Słowa kluczowe: bilans, aktywa długoterminowe, aktywa krótkoterminowe, rzeczowe aktywa trwałe, kapitał własny.

Introduction

One of the basic financial statements of each company is the balance sheet. A balance sheet is a systematic overview of a company's assets, equity and liabilities on a specific day. Companies should have a "healthy" balance sheet because it is a confirmation of good financial condition. The balance sheet analysis can detect a potential problem in the company's financial position.

The main aim of this research is confirmed that listed companies in Croatia are successfully recovering after the crisis and increasing their assets from 2008 to 2017.

The research is obtained from the financial reports of listed companies on the Zagreb Stock Exchange for 2008, 2012 and 2017.

1. Conceptual frameworks

The financial statements need to provide information about the financial position, financial performance, and cash flows of a company. A complete set of financial statements includes: (International Accounting Standards [IAS], 1:10): a statement of financial position (balance sheet) at the end of the period, a statement of profit or loss and other comprehensive income for the period, a statement of changes in equity for the period, a statement of cash flows for the period and notes.

Balance sheet "provides a snapshot of the financial condition of the company at a particular moment or that a balance sheet is a list of the company's assets and liabilities at that moment" (Bodie, Kane and Marcus, 2008, p. 651).

The balance sheet structure can be divided into long-term and short-term assets and liabilities, according to the time criterion. We can divide assets into forms of intangible assets, tangible assets, financial assets, receivables and cash. Sources of assets are classified according to the ownership criteria on their own and other sources.

“Balance, this synthesized statement of all incidents that organically link the state of assets with sources of funding, and the successes and failures of the business” (Brkanić, 2002, p.V).

Managers and external users need the “financial position” information to make a business decision (Cummingham, Nikolai and Bazley, 2000, p. 200).

IAS 1 does not prescribe the format of the statement of financial position. The structure of the Croatian balance sheet is prescribed by Rulebook (2016) like is shown in Table 1.

Table 1. Balance Sheet in Croatia

Assets	**Capital, reserve and liabilities**
Called up shares for capital not paid	**Capital and reserve**
Long term assets intangible assets tangible assets financial assets receivables deferred tax assets	**Reservations**
Short term assets stock receivables financial assets cash	**Long term liabilities**
Deferred charges and calculated income	**Short term liabilities**
	Deferred items

Source: Author according to Rulebook.

Balance sheet items are valued according to accounting standards, international or Croatian. Assets must be shown in the balance sheet at their historical cost adjusted for depreciation or at fair value. “Market values of assets and liabilities do not generally equal their book values. Book values are based on historical or original values. Market values measure current values of assets and liabilities” (Brealey, Myers and Marcus, 2007, p. 53).

The influence of activity on balance structure was investigated by Bradley, Jarell and Kim in 1984 (Brkanić, 2002, p. 40). Their research has shown that in 54% of cases, variability in the balance sheet structure can be explained by the activity. The assets and business activities are financing by a different share of debt capital to the total resources.

Long and Malitz's research in 1985 (as cited in Brkanić, 2002, p. 41) established the link between debt capital and investment structure and the impact of this investment on liquidity value and yield. They were seeking to confirm the hypothesis that the portion of debt capital in total capital that is negatively linked with some investment in intangible assets. For companies with a high share of investment in long-term tangible assets, the optimal capital structure would be for a larger share of debt capital than companies with predominantly immaterial investments. They confirmed the hypothesis that optimal capital structure is dependent on the investment structure of a company.

In the research Boflek, Stanić and Tokić (2011, p. 87) confirmed that the inadequacy of the balance sheet structure constitutes a significant risk for the continuation of the business.

In the research of an optimal balance sheet structure (Brkanić, 2002) it was compared with 237 of the most significant companies from Europe, USA and Japan and companies in Croatia. In Croatian companies for the year 2000 it included 58,773 companies.

Table 2. Balance Sheet structure of World Companies and in Croatia

	237 world companies			Croatia		
Balance sheet items	**1989**	**1994**	**1998**	**1995**	**1997**	**2000**
Assets	100.00	100.00	100.00	100.00	100.00	100.00
1. Long term assets	52.30	54.50	47.50	72.20	66.30	62.40
1.1. Intangible assets	5.30	6.10	8.40	1.20	1.20	1.50
1.2. Tangible assets	35.70	35.60	33.60	59.30	53.80	50.90
1.3. Financial assets and long-term receivables	11.30	12.80	15.50	11.70	11.30	10.00
3. Short term assets	47.70	45.50	42.50	27.80	33.70	37.60
Capital and liabilities	100.00	100.00	100.00	100.00	100.00	100.00
1. Capital and reserve	33.70	31.30	32.90	65.40	55.80	47.80
2. Long term liabilities	30.40	32.90	32.00	8.70	11.50	16.20
3. Short term liabilities	35.90	36.80	35.10	28.10	32.07	36.00

Source: (Brkanić, 2002, p. 103).

The most important relations of balance sheets of world companies for the year 1998:

- short term assets of 42.50% are financed from 35.90% short term liabilities, rest from capital,
- tangible assets of 33.60% are financed from 32.00%, rest from capital,

- relationship long term assets and short-term assets are 47.50% : 42.50%,
- relationship own capital and liabilities is 32.90% : 67.10%,
- relationship long term liabilities and short-term liabilities is 32.00% : 32.10%.

The most important relations of balance sheets of Croatian companies for the year 2000:

- short term assets of 37.60% are financed from 36.00% short term liabilities, rest from capital,
- tangible assets of 50.90% are financed from 36.00% long term liabilities, rest from capital,
- relationship long term assets and short-term assets are 62.40% : 37.60%,
- relationship own capital and liabilities is 47.80% : 52.20%,
- relationship long term liabilities and short-term liabilities is 16.20% : 36.00%.

In that research there is a visible difference from 1.5-time bigger long-term assets than in the sample of world companies. In Croatian companies, the own capital is almost 50% of total capital and liabilities, and in the world companies only 33.00%.

2. The goals, basis, and hypothesis of the research

The research described in this paper is based on information obtained from the balance sheets of 96 companies listed on the Zagreb Stock Exchange in 2017, 2012 and 2008.

The main purpose of this paper is confirmed in that the companies on the Zagreb Stock Exchange successfully recovered after the crisis and increased their assets and liquidity in the researched years.

The first hypothesis is that the listed companies increased their assets and built a stronger balance sheet structure from year to year.

The second hypothesis is that Croatian companies are traditionally oriented to the ownership of tangible assets, and for that reason, tangible assets have the biggest percentage in the balance sheet structure.

All companies on the Zagreb Stock Exchange ran their accounting according to the International Accounting Standards.

The research included 96 non-financial companies listed on the Zagreb Stock Exchange in 2017, 2012 and 2008. In the research sample, 29% of companies came from the touristic sector, 21% from other than the food production sector and 18% from the food production sector (Figure 1).

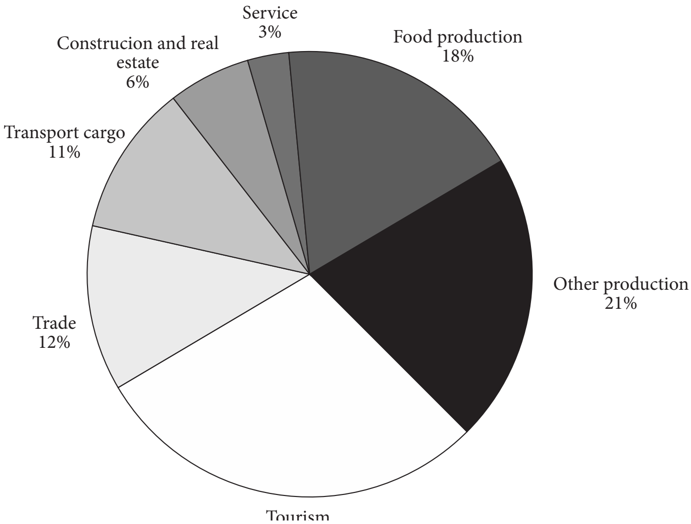

Figure 1. Activities of the listed companies (in %)

Source: Own elaboration.

3. Results and discussion

The balance sheet, like one of the main sources of information, gives managers and investors valuable information about a company's health.

The fundamental analysis, such as vertical and horizontal analyses, can give the basic information of a company's position in assets, equity and liabilities.

The horizontal analysis in Table 3 shows that assets increased by 7.06% from 2017 to 2012, and almost the same, for 7.75% from 2017 to 2008. Long- term assets increased by 13.71% from 2017 to 2012, and by 20.74% from 2017 to 2008. Also, long term resources (equity and liabilities) are more significant than short term liabilities. According to this fact, we can confirm the first hypothesis.

When we compare the structure of Croatian companies in the Brkanić (2002) research and the structure of listed companies, the structure is almost the same (Table 4). The most important relations of balance sheets of Croatian companies for 2017:

– short term assets of 31.34% are financed from 26.52% short term liabilities, the rest from capital,

Table 3. The horizontal analysis (in %)

	Long term assets	Short term asset	Total assets	Capital and reser	Long term liabilit	Short term liabilit	Total passive
2017 /2012	113.71	94.54	107.06	105.81	124.24	98.41	107.06
2017 /2008	120.74	89.48	107.75	94.89	169.02	108.59	107.75
2012 /2008	106.18	94.64	100.65	89.68	136.04	110.34	100.65

Source: Own elaboration.

- tangible assets of 50.55% are financed from 20.25% long term liabilities, the rest from capital,
- relationship long term assets and short-term assets are 68.66% : 31.34%,
- relationship long term assets and long-term resources are 68.66% : 73.48%,
- relationship own capital and liabilities is 53.23% : 46.77%,
- relationship long term liabilities and short-term liabilities is 20.25% : 26.52%.

We can confirm the second hypothesis that Croatian companies are traditionally oriented to long term assets. Croatian companies prefer tangible assets which consist of more than a half of total assets.

In Figure 2 it is confirmed that Croatian companies invest much more in tangible assets than in other forms of long-term assets. In 2017, tangi-

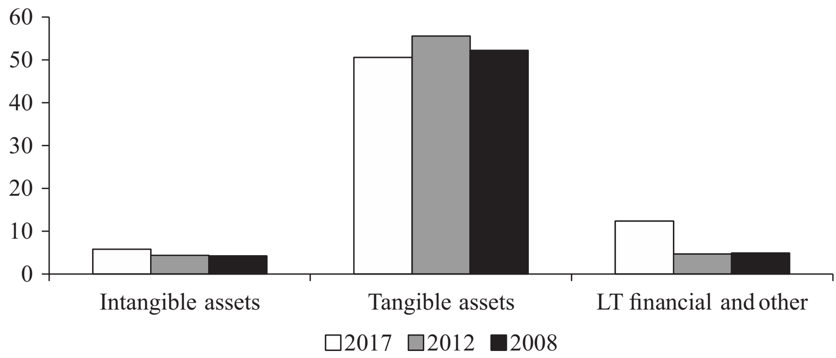

Figure 2. Structure of long-term assets (in %)

Source: Own elaboration.

Table 4. Balance sheet structure in Croatia (in %)

	Croatia			Croatia – Zagreb Stock Exchange		
Balance sheet items	**1995**	**1997**	**2000**	**2008**	**2012**	**2017**
Assets	100.00	100.00	100.00	100.00	100.00	100.00
1. **Long term assets**	**72.20**	**66.30**	**62.40**	**61.27**	**64.64**	**68.66**
1.1. Intangible Assets	1.20	1.20	1.50	4.23	4.40	5.75
1.2. Tangible assets	59.30	53.80	50.90	52.17	55.55	50.55
1.3. Financial assets and long-term receivables	11.70	11.30	10.00	4.87	4.69	12.36
3. **Short term assets**	**27.80**	**33.70**	**37.60**	**38.73**	**35.36**	**31.34**
Capital and liabilities	100.00	100.00	100.00	100.00	100.00	100.00
1.Capital and reserve	65.40	55.80	47.80	60.44	53.86	53.23
2. Long term liabilities	8.70	11.50	16.20	12.91	17.45	20.25
3. **Short term liabilities**	**28.10**	**32.07**	**36.00**	**26.65**	**28.69**	**26.52**

Source: Own elaboration.

ble assets consisted of 50.55% of total assets, in 2012, 55.55% and in 2008, 52.17%. The good thing is increasing investment in intangible assets (5.75% of the total assets) and financial assets (12.36% of the total assets). The increase of financial assets can be the fact of transfer receivables in financial assets due to the inability to collect the claim.

Figure 3 shows the structure of short-term assets for all of the three-researched years. In 2017, short term assets were 31.13%, in 2012, 35.29%

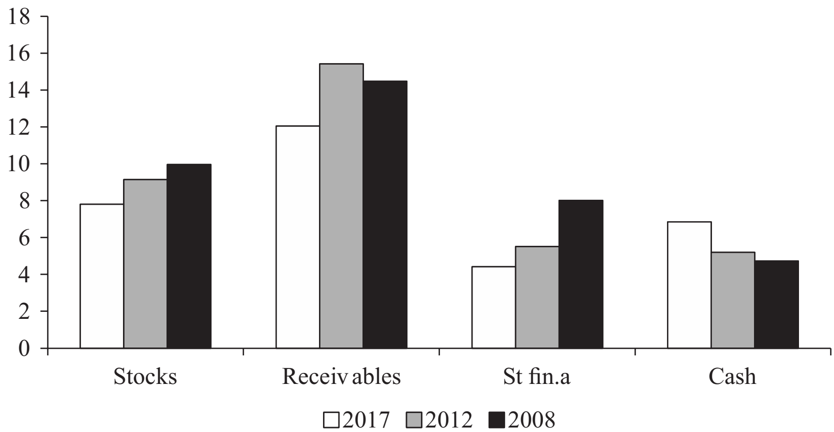

Figure 3. Structure of short-term assets (in %)

Source: Own elaboration.

and in 2008, 37.20%. From 31.13% short-term assets in 2017, the biggest percentage of 12.04% went on receivables, 7.81% on stocks, 6.85% on cash and 4.42% on financial assets.

From this research, it is visible that the listed companies have in their structure 2/3 of long-term assets. The same structure is between the long-term recourse of assets (equity and liabilities) and short-term liabilities.

Conclusions

The Croatian economy is slowly recovering from the financial crises, which is confirmed by increasing the credit rating from S&P.

We can conclude that both hypotheses are confirmed. The horizontal analyses show the increasing value of the total assets of listed companies in Croatia and that half of the total assets are tangible assets. The total assets increased by 7.75%, long-term assets increased by 20.74%, but long-term liabilities increased to 69.02% from 2017 to 2008. The tangible asset with more than 50% of total assets would be a good point without bank mortgages.

In all of the three researched years, the structure in the balance sheets is similar. In total assets are increasing the long-term assets, and in the total passive side increase the long-term liabilities. In 2017, the year of recovery of the Croatian economy, the most significant relationships are:

- long term assets 68.66%: short-term assets 31.34%,
- long term assets 68.66%: long-term resources 73.48%,
- own capital 53.23%: liabilities 46.77%,
- long term liabilities 20.25%: short-term liabilities 26.52%.

This research is a basis for further analyses of balance sheet structure, especially balance sheet structure according to the activities. It will be crucial to research the structure of balance sheet companies in tourism. Tourism is a significant sector for the Croatian economy. In further research it needs to seen what is the reason why that in a crisis and after a crisis, tangible assets are more than 50% of total assets, if this is the reason for low real estate prices, weak demand, and the inability to obtain credit. Especially, needs to investigate the influence the pre-bankruptcy settlement on balance sheet structure.

The structure of the balance sheet is full of information on a company's strength, liquidity or indebtedness and the main resources of information for managers and investors. A healthy balance sheet structure ensures a stable and successful business in the future.

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