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WORKING CAPITAL MANAGEMENT IN TRANSPORT INDUSTRY COMPANIES LISTED ON WARSAW STOCK EXCHANGE

Abstract

Working capital management in transport companies stems from a variety of factors, the structure of assets being one which should be distinguished. In the transport companies listed on the Warsaw Stock Exchange there is a strong tendency to maintain positive working capital. The method of comparative analysis used in the article is based on purposive sampling cases. The aim of this article is to empirically verify the hypothesis that large transport companies listed on the Warsaw Stock Exchange maintain positive working capital.

Keywords: working capital, working capital management, transport enterprises, transport economics, transport industry

Introduction

An appropriate level of working capital allows maintaining a balance in the company. Management of the working capital amount mainly depends on the size of the company, the cash conversion cycle, the adopted strategy of financing of current assets and the character of the industry, and the company itself. The article describes how the above mentioned factors affect working capital management in transport companies whose character is reflected in the assets as well as in the method of their financing.

The aim of this article is to empirically verify the following hypothesis: large transport companies listed on the Warsaw Stock Exchange maintain positive working capital.

1. Working capital management in companies

Working capital is the reflection of financial stability of the company. Describing the influence that working capital has on the company's activity, especially in the context of its liquidity and stability, requires clarifying the terminology related to it. From the accountancy point of view, working capital (abbreviated WC) is the difference between constant capital and fixed assets. In other words, it is the part of current assets which is financed by the owner's equity and long-term liabilities (Kurowski, 2004, p. 160).

The value of working capital can be determined as positive working capital, negative working capital or a balance level. The zero value of working capital means that fixed assets are financed by constant capital, and current assets are financed by short-term resources. Such a situation is short-lived and usually transient. In the long run, usually there are inclinations towards a positive or negative value of working assets. Negative working capital means that the company has more liabilities than means to cover them. In such a situation, the risk of the necessity to sell fixed assets in order to meet short-term liabilities rises, although it does not ensure the ability to meet liabilities quickly (Łukasik, 2009, p. 99).

The most profitable situation for companies is to maintain positive working capital. In such situation, a part of current assets is financed by fixed assets. Positive net working capital results in avoiding potentially high costs of gaining the capital to finance current activities, which affects the financial stability of the entity (Bień, 2009, p. 87).

Working capital management means maintaining its appropriate level for a given company (Davis, Wiankowska-Ładyka, 1993, p. 21). To be more explicit, working capital management is reduced to synchronization of the pace of liquidating current assets and covering long-term as well as short-term liabilities, so that the company should remain solvent (Krzemińska, 2002, p. 96).

Net working capital should be managed in such a way, so that the capital structure should not affect the company's functioning and development in a negative way (Wojewnik-Filipkowska, 2008, p. 58). Among the most important factors which form the working capital we can distinguish (Michalski, 2013, p. 121): the size of the company, the cash conversion cycle, the strategy of current assets financing, the character of the industry.

The size of the company affects working capital management, as working capital is managed in a different way in large, medium and small enterprises. The main differences appear in: financial possibilities, risk tendency, differences in the owner's equity supply, as well as the possibility to increase it, the access to borrowed capital and capital markets. The differences stemming from possibilities and difficulties in financing small, medium and large enterprises should result in different methods of working capital management. Large companies aim at maintaining positive working capital in the long run, however, it does not mean that there is no possibility of balanced or negative working capital. This may occur due to e.g. investments they undertake (as large companies are prone to more risk-taking) which causes changes in fixed assets and amounts of liabilities (Jerzemowska, 2013, p. 253).

Working capital management depends on the choice of sources of financing of assets (especially current assets) in the company. The strategy of financing of current assets is the resultant of market conditions and individual tendency of the company. There are three strategies of financing of current assets: aggressive, moderate and conservative. The aggressive strategy is preferred in large companies, as it contributes to the highest increase in the wealth value of the owners. The essence of this strategy is short-term financing of a significant amount of constant and a part of variable demand of the company for sources of financing of current assets (Michalski, 2013, p. 121).

Working capital management is also affected by managing the cash conversion cycle through managing of: cash, reserve, receivables, liabilities (Hamrol, 2007, p. 119). Working capital management, with its individual elements which affect it, aims at creating conditions to maintain the lowest working capital possible, while ensuring the company's liquidity. Nevertheless, it does not mean that the above mentioned methods of working capital management are mutually exclusive.

Working capital management in transport companies is strongly determined by the character of their operation and the industry in which they operate. Fixed assets play a very important role in the assets of transport companies (Kozłak, 2007, p. 160). Another characteristic feature is a large proportion of the owner's equity in the source structure of financing of transport companies.

2. Analysis of working capital in selected companies listed on Warsaw Stock Exchange

The authors carried out research on the basis of purposive sampling cases. The main criterion was the branch of the company's activity (transport); furthermore, accessibility of the data from at least the last 4 reporting periods was taken into account. This allowed distinguishing 5 companies listed on the Warsaw Stock Exchange:

- PEKAES SA;
- OT LOGISTICS SA;
- PCC INTERMODAL SA;
- Trans Polonia SA;
- PKP Cargo SA.

The range of the companies' offers is broad: from typically transport services, e.g. relocation or storing, to forwarding and logistics and services not related to transport at all. Such a varied offer also determines the structure of assets of specific companies. Due to this fact, it is necessary to present a short description of the selected companies.

PEKAES SA is the controlling entity in the PEKAES SA @Corporate Group, whose main activity are complex forwarding, transport and logistics services on the national and international market. The entity also provides services in retail fuel sales and hotel services. Other companies that constitute this corporate group

conduct the following activities: reloading, storing, rail transport, eco-pea coal production and property renting (*Raport finansowy Pekaes SA*, 2016).

The second company studied is OT Logistics SA, the controlling entity in the corporate group with the same name (previously the Odratrans Group), which consists of several dozen companies with various profiles. OT Logistics is a logistics company, whose main activity is inland navigation transport. Additionally, OT Logistics SA provides services which support ship transport, forwarding, logistics, sand and gravel extraction, fleet lease, property renting and storing. The OT Logistics Group is a transport group with an international scope, concentrated on transport, forwarding and logistics. This corporate group provides services in Poland, Balkan Peninsula countries, Great Britain and the USA. It has been listed on the Warsaw Stock Exchange since 2013. On the 31st of December 2015, the group consisted of 22 companies, alongside the controlling entity (*Raport finansowy OT Logistics SA*, 2016).

PCC Intermodal's activity is organization of national and international transport on the basis of regular, Polish and foreign, rail connections (container trains) between maritime and inland reloading terminals, and car transport synchronized with them. In 2009, the company was the first in the industry to make a successfully debut on the Warsaw Stock Exchange (PCC Intermodal, 2017).

Trans Polonia SA, listed on the Warsaw Stock Exchange since 12 September 2008, is a part of the Trans Polonia Group, an international transport-logistics operator. The Trans Polonia Group provides services in the transport of: liquid fuels, petrol, fuel oil and LPG; liquid chemicals; bitumen mass; liquid food products. The Trans Polonia Group is one of the biggest suppliers of highly expert logistics services in the petrochemical industry in Central Europe. Trans Polonia invests consistently in modern equipment to transport liquid raw materials and fuels, developing a fleet of 500 road tank trucks (Transpolonia.pl, 2017).

Another company studied for this article is the PKP CARGO Group. It is the largest rail cargo transport operator in Poland and the second largest in the European Union (railway stock: 2600 locomotives and almost 67 000 railway cars). The company offers integrated logistic chains which comprise different kinds of transport. The offer also consists of logistic services in the transport of all types of cargo, raw materials and other materials. The financial data of the selected enterprises are shown in the table below.

Table 1. The financial ratios of the selected companies (PLN '000)

Company	Data range	Index	2015	2014	2013	2012	2011
PEKAES SA	A	NCA	230 423	251 209	261 462	166 605	176 839
		CA	219 184	177 658	131 457	187 040	214 914
		Eq	332 147	306 092	284 915	271 163	301 258
		LTL	34 188	45 722	16 366	11 755	12 320
		STL	83 272	77 053	91 638	70 727	78 175
		WC	135 912	100 605	39 819	116 313	136 739
		% WC	30%	23%	10%	33%	35%
		CR	2.6	2.2	1.4	2.41	2.33
		% NCA	51%	59%	67%	47%	45%

Company	Data range	Index	2015	2014	2013	2012	2011
PEKAES SA	C	NCA	237 578	269 710	272 184	194 317	170 884
		CA	237 301	192 687	163 319	171 583	258 505
		Eq	331 738	310 739	287 044	275 853	309 699
		LTL	52 170	63 781	53 177	12 482	11 671
		STL	90 971	87 877	95 282	77 565	108 019
		WC	146 330	104 810	68 037	94 018	150 486
		% WC	31%	23%	16%	26%	35%
		CR	2.6	2.2	1.7	2.6	2.4
		% NCA	50%	58%	62%	53%	40%
OT LOGISTICS SA	A	NCA	344 681	345 333	247 308	222 003	218 541
		CA	109 389	66 591	53 403	13 253	42 901
		Eq	220 966	206 082	190 376	139 865	137 135
		LTL	184 971	175 795	23 353	78 426	88 197
		STL	46 382	28 171	84 940	14 041	29 718
		WC	61 256	36 544	-33 579	-3 712	6 791
		% WC	13%	9%	-11%	-2%	3%
		CR	2.36	2.36	0.63	0.94	1.44
		% NCA	76%	84%	82%	94%	84%
	C	NCA	488 909	479 524	346 371	323 630	299 403
		CA	226 798	232 166	154 810	130 510	127 757
		Eq	279 850	271 383	249 143	199 201	171 125
		LTL	255 725	258 637	79 283	146 134	145 755
		STL	180 132	181 670	172 755	108 805	110 280
		WC	46 666	50 496	-17 945	21 705	17 477
		% WC	7%	7%	-4%	5%	4%
		CR	1.26	1.28	0.90	1.20	1.16
		% NCA	68%	67%	69%	71%	70%
PCC INTERMODAL SA	A	NCA	270 161	169 502	94 607	85 516	75 400
		CA	46 385	45 463	29 879	24 063	44 213
		Eq	86 478	81 498	74 080	73 625	88 087
		LTL	187 134	101 308	25 949	12 965	6 772
		STL	42 934	32 159	24 457	22 989	24 754
		WC	3 451	13 304	5 422	1 074	19 459
		% WC	1%	6%	4%	1%	16%
		CR	1.08	1.41	1.22	1.05	1.79
		% NCA	85%	79%	76%	78%	63%
	C	NCA	270 239	169 620	94 655	85 516	nd
		CA	46 838	45 556	30 085	24 063	nd
		Eq	86 541	81 531	74 098	73 625	nd
		LTL	187 216	101 421	25 949	12 965	nd
		STL	43 320	32 224	24 693	22 989	nd
		WC	3 518	13 332	5 392	1 074	nd
		% WC	1%	6%	4%	1%	nd
		CR	1.08	1.41	1.22	1.05	nd
		% NCA	85%	79%	76%	78%	nd

Company	Data range	Index	2015	2014	2013	2012	2011
TRANS POLONIA SA	A	NCA	30 865	37 318	28 732	20 332	13 401
		CA	9 763	8 658	13 188	15 794	13 581
		Eq	22 870	21 752	19 493	17 013	10 600
		LTL	10 370	15 272	12 657	8 060	6 328
		STL	7 388	8 952	9 770	11 053	10 054
		WC	2 375	-294	3 418	4 741	3 527
		% WC	6%	-1%	8%	13%	13%
		CR	1.32	0.97	1.35	1.43	1.35
	C	% NCA	76%	81%	69%	56%	50%
		NCA	33 964	38 909	28 732	20 179	13 401
		CA	24 849	20 259	13 188	16 209	13 581
		Eq	24 509	23 374	19 493	17 004	10 600
		LTL	12 113	17 037	12 657	8 060	6 328
		STL	22 191	18 757	9 770	11 324	10 054
		WC	2 658	1 502	3 418	4 885	3 527
		% WC	5%	3%	8%	13%	13%
CR	1.12	1.08	1.35	1.43	1.35		
% NCA	58%	66%	69%	55%	50%		
PKP CARGO SA	A	NCA	4 458 145	4 129 487	3 905 419	3 895 392	nd
		CA	603 171	1 224 649	1 489 252	1 275 897	nd
		Eq	3 072 316	3 256 319	3 362 966	3 038 499	nd
		LTL	1 150 212	1 034 276	1 032 724	1 244 910	nd
		STL	838 788	1 063 541	998 981	887 880	nd
		WC	-235 617	161 108	490 271	388 017	nd
		% WC	-5%	3%	9%	8%	nd
		CR	0.72	1.15	1.49	1.44	nd
	% NCA	88%	77%	72%	75%	nd	
	C	NCA	4 979 501	4 254 465	4 049 895	4 053 981	nd
		CA	1 133 161	1 425 867	1 693 721	1 569 788	nd
		Eq	3 353 866	3 395 293	3 508 894	3 214 672	nd
		LTL	1 586 088	1 165 414	1 166 736	1 383 172	nd
		STL	1 172 708	1 119 625	1 067 986	1 025 925	nd
		WC	-39 547	306 242	625 735	543 863	nd
		% WC	-1%	5%	11%	10%	nd
CR		0.97	1.27	1.59	1.53	nd	
% NCA	81%	75%	71%	72%	nd		

A – data from Stand Alone Financial Statements;

C – data from Consolidated Financial Statements;

NCA – non-current assets;

CA – current assets;

Eq – equity;

LTL – long-term liabilities;

STL – short-term liabilities;

WC – working Capital;

%WC – share of working capital in balance sheet total;

CR – current ratio;

%NCA – index of the share of non-current assets in total assets;

nd – no data.

Source: Own elaboration based on financial reports of the companies (*Raport finansowy OT Logistics SA, 2016; Raport finansowy Trans Polonia SA, 2016; Raport finansowy PCC Intermodal SA, 2016; Raport finansowy Pekaes SA, 2016; Raport finansowy PKP Cargo SA, 2016*)

In the studied period, two entities (PEKAES SA, PCC Intermodal SA) presented positive working capital on the controlling level as well as for the corporate group. The remaining three cases had negative working capital only once during the 5 studied years.

Negative working capital was noted in OT Logistics in 2013, in the controlling company as well as on the corporate group level. The reason for the occurrence of a negative working capital was a considerable decrease in long-term liabilities caused by transfer of PLN 59 980 000 from the issued bonds from long-term liabilities to short-term liabilities. In 2014, the company issued debt securities again, with the value of PLN 150 million which caused an increase in long-term liabilities and the return of the working capital to a positive level.

In 2014, Trans Polonia SA, had negative working capital of PLN 294 000 comprising only 1% of the balance sheet total. Negative working capital occurred only on the controlling entity level. In 2014, the company's fixed assets increased by PLN 8.5 million which was caused by an increase in the lease values of the means of transport. In the following year, the value of assets dropped by PLN 6.5 million which was also related to a decrease in the lease level of vehicles.

The biggest negative working capital among all the entities studied was noted in 2015 in PKP Cargo SA, both in terms of value: PLN 235.6 million as well as its proportion in the balance sheet total: 5% (in the entire corporate group PLN 39.5 million and 1%, respectively). The owner's equity dropped by PLN 184 million which was caused mainly by reducing the retained earnings by PLN 229 million. Fixed assets increased mainly as a result of the increase in investments in subsidiaries and associated entities by PLN 471.8 million.

On the corporate group level, fixed assets increased by PLN 725 million mainly due to the increase in tangible fixed assets by PLN 675 million in comparison to the previous reporting period. Constant capital also increased (379 million), mainly due to an increase in long-term liabilities. However, this increase was smaller than the increase of fixed assets what resulted in a negative working capital.

Conclusions

The main aim of the study presented by the authors was to determine how working capital is managed in large companies listed on the Warsaw Stock Exchange. In order to obtain more complete results, the analysis was extended by a study of the liquidity and proportion of fixed assets of the companies. The studies allow concluding the following:

- 1) The authors have forwarded a hypothesis that the transport companies listed on the Warsaw Stock Exchange aim at maintaining a positive working capital. Some of the entities studied for this article maintained a positive working capital all the time and some presented a single departure from the desirable level. The study allows assuming that the hypothesis is correct.

- 2) A considerable proportion of fixed assets in the asset structure of the studied companies is caused mainly by the characteristics of the transport industry.

Fixed assets are composed mainly of tangible fixed assets, which means vehicles and the transport infrastructure.

3) The character of the industry does not unambiguously influence the level of liquidity maintained by the companies analysed for this study. The sample comprises both entities whose liquidity was maintained and entities in which problems with covering current liabilities may occur. In the studied period, PEKAES SA noted current liquidity indicators of the controlling entity on the level of 1.4–2.6, whereas the level for the entire corporate group was 1.7–2.6 (in some periods excess liquidity occurred). The indicators of PKP Cargo show a less stable liquidity situation of the company which is noticeable especially in 2015, when the current liquidity indicator of the controlling company was 0.72.

In the study carried out, the authors took into consideration the financial data of the controlling entities as well as of the entire corporate groups. This allowed observing that negative working capital occurs more often in controlling entities than in corporate groups. For this reason, it can be concluded that the source structure of financing of corporate groups is safer than in the case of controlling entities.

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