Financial Performance Measurement with Cash Flow Ratios: A Research and Comparison on Borsa Istanbul (BIST) Main Metal Industry and Accomodation Sector

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Abstract

As soon as people start to earn the money that their labor deserves, they begin to control their cash inflows and outflows. This control is more important for businesses established for profit making. Businesses that want to control their cash flows in a more detailed and neat report form refer to the cash flow statement. Knowing cash flow is vital for businesses. It provides both the control of the cash flow within themselves and the opportunity to compare itself with other businesses that use different accounting methods. The success and sustainability of a business is evaluated by the measurability of its financial performance. Cash flow ratios are used in the analysis of the financial situation of the enterprises. The aim of this study is to give information about cash and cash equivalents and cash flow statement, to examine the items of the cash flow statement and to discuss the purposes of cash flow ratios. In this context, within the scope of the study, the financial statements of 17 enterprises operating in the Main Metal Industry sector whose stocks are traded in Borsa Istanbul (BIST) and 9 enterprises operating in the accommodation sector, covering the 5-year period between 2017-2018-2019-2020-2021, were used. The financial performances of companies were measured and the differences between the sectors were compared.

Keywords: Balance Sheet; Cash Flow Statement; CRITIC; TOPSIS; Financial Performance; Turkish Accounting Standards (TMS 7)

INTRODUCTION

With globalization, financial information should be compatible both nationally and internationally. The implementation of different standards in terms of countries complicates capital movements in the international arena. The reason for this is that the nationally prepared financial statements cannot be understood by foreign investors. Foreign investors, when making investment decisions in a country, prefer countries where there is an environment of trust and where they will not have problems with tax and accounting practices. For this reason, financial statements should be comparable, consistent, transparent, and understandable.

The information in the financial statements needs to be high quality, reliable, understandable, relevant, impartial, comparable, and providing the right basis for the decision makers. It has revealed the necessity of applying the accounting standards and policies applied and known by the whole world. For this purpose, the International Accounting Standards Committee (IASC) was established in 1973. The committee has been preparing IAS (International Accounting Standards) since 1975. For financial information to respond to the needs of global capital markets, it is necessary to harmonize financial accounting and reporting standards.

IASC plays a major role in ensuring compliance with international accounting standards. In this context, the work of IASC is of great importance for the development of international accounting standards. The International Financial Reporting Standards become a common language of accounting among countries and a common language of business in business life.

On the other hand, in order to put an end to different practices regarding accounting and financial reporting in Turkey, the Turkish Accounting Standards Board (TASB), which has administrative and financial autonomy and has a public legal entity, was established with the Law No. 4487 to build and publish accounting standards. While using this authority, TASB adopted the International Financial Reporting Standards and published it as the Turkish Accounting Standards in order to integrate with contemporary world practices and to comply with European Union legislation. The standards published by the Turkish Accounting Standards Board (TASB), are the translations of International

Accounting Standards, International Financial Reporting Standards and interpretations published by the International Accounting Standards Board into Turkish. The Turkish Accounting Standards Board (TASB), on November 2, 2011, was replaced by abolishing; the Public Oversight, Accounting and Auditing Standards Authority was established.

When the reasons of the enterprises business problems are investigated, it is seen that one of the most important problems is the need for cash. Internal and external information users, making some forward-looking decisions by using the financial statements of the enterprises, evaluate the ability of the enterprise to create cash and cash equivalents and provide information about how the cash flow in the enterprise is formed from the information in the cash flow statement. The status of cash and cash equivalents, which are vital for the company, and the status of cash inflows and outflows during the period are monitored with the cash flow statement.

The cash flow statement, which is the most important tool of cash management, whose importance is understood with the increase in financing costs and the enrichment of short-term financial investment areas in the globalizing world order, and its use has become widespread with the latest legal regulations; reporting the cash resources and cash uses of the enterprise for a certain accounting period in accordance with IAS-7 within the framework of international accounting standards (IAS).

It is an indispensable financial statement in terms of providing the necessary information. The information provided by the cash flow statement to the users of the financial statements is indisputable in terms of knowing the cash situation of the business in order to meet its financial responsibilities at any time, the growth of the business, benefiting from new investment opportunities, or understanding the activities of the existing cash business.

The information that accounting science will offer in business management is very important. The information function of accounting is fulfilled through financial statements. According to the Accounting System Implementation General Communiqués, the first of the financial statements that the business management has to prepare are the balance sheet and income statement. However, in today's economic conditions, it is seen that the balance sheet and income statement are sometimes insufficient in presenting the financial status of the enterprises. For this reason, there is a need for other financial

statements that can be used by investors and lenders, especially managers in publicly traded companies, for future planning and decision making. The cash flow statement comes first among the financial statements that can be prepared.

Financial statements are prepared and presented to external users by most companies around the world. Said financial statements show similarities from country to country. On the other hand, they show some changes due to some social, economic and legal reasons and the consideration of the needs of different financial statement users by different countries during the formation of national regulations.

International Financial Reporting Standards (IFRS), prepared under the leadership of international organizations, is one of the important areas for businesses, accountants, academics and the whole public. When the subject is examined in our country, it is seen that the enterprises set the appropriate standards in order to develop in accordance with international standards. These published standards are also used as a guide in the accounting practices of companies. In short, when the financial statements are prepared in accordance with international standards, they will reveal more accurate and reliable results by comparing them with the business standards of different countries.

As a result, with the uniformity desired to be achieved in preparing Financial Reports, the reports of companies will be more open, transparent and suitable for comparison. When companies with international activities and investments make economic decisions; They experience difficulties when comparing financial statements prepared according to accounting systems that vary in the world. For this reason, it has made it necessary to establish global accounting standards that are of high quality in the world, that are applied at a global level and that have the power of sanction and that do not differ internationally.

In the third part, the cash flow ratio analysis calculated by using the financial statements of 17 enterprises operating in the Main Metal Industry sector whose stocks are traded in Borsa Istanbul (BIST) and 9 enterprises operating in the Accommodation sector is interpreted. In the conclusion part, the analyzes made are evaluated.

RESULTS

In this part of the study, the financial performances of 17 enterprises from the Basic Metal Industry sector and 9 from the Accommodation sector, whose stocks are traded in Borsa Istanbul (BIST), are obtained from the financial data of the 5-year period between 2017-2018-2019-2020-2021, and the measured financial performances are revealed. In this part of the study, only the analysis details for 2021 will be shown, and the details for other years are included in the appendices.

2021 CRITIC Method Findings

Stage 1: Creating the Decision Matrix

In the rows of the decision matrix prepared using the CRITIC method, there are alternatives (businesses in BIST), and criteria (financial ratios) in the columns. The decision matrix with a size of (17 x 15) for the Main Metal Industry sector, whose stocks are traded on the Borsa Istanbul (BIST) and (9 x 15) for the Accommodation sector, was prepared using Equation (1). The results are shown in Table 4 and Table 5.

Table 4

Main Metal Industry Sector 2021 CRITIC Method Decision Matrix

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYES	-0,2406	0,1304	-0,2448	0,0000	-0,1708	-1,3309	0,1380	40,5418	9,0031	-1,5377	-0,0430	-0,0412	-9,0857	-0,6300	-0,0755
BRSAN	0,2398	0,3094	0,1781	7,8257	0,1062	0,1974	11,2513	2,9861	122,2323	18,5499	0,2387	0,2387	0,6917	0,4930	0,0622
BURCE	0,1165	0,0668	0,0821	2,0822	0,0455	0,0720	-0,6172	21,0652	17,3272	3,4660	0,0660	0,0660	0,2784	0,1019	1,7671
BURVA	0,0920	0,1278	0,0790	1,8595	0,0578	0,3424	-0,5328	6,6042	55,2677	3,6285	0,0823	0,0823	0,5598	0,2150	0,3288
CELHA	-0,0773	0,1534	-0,0727	-2,8602	-0,0662	-0,3953	2,1614	7,4252	49,1568	-5,0524	-0,0557	-0,0557	-1,2218	-0,7435	-3,1073
CEMAS	2,1749	6,3263	1,6544	0,0000	0,1414	0,3412	1,7339	0,5350	682,2899	0,5501	0,5281	0,5281	6,9131	0,1546	0,2341
CEMTS	0,7646	0,8147	0,6094	508,3329	0,1248	0,5773	0,9014	6,7347	54,1969	0,3684	0,0865	0,0983	7,3355	0,1523	0,0348
CUSAN	-0,1001	0,1338	-0,1104	-5,8897	-0,0592	-0,3704	1,0401	13,0388	27,9933	-0,5103	-0,0528	-0,0447	-1,3859	-0,1615	-2,6288
DMSAS	-0,0841	0,1163	-0,0900	-0,9852	-0,0428	-0,1408	1,1513	17,6275	20,7063	-0,7702	-0,0509	-0,0362	-0,2689	-0,1294	-2,8195
DOKTA	-0,1916	0,0135	-0,1045	-2,8440	-0,0811	-0,1341	3,0910	92,3035	3,9543	-0,9872	-0,1262	-0,1262	-0,2299	-0,3629	-0,5596
ERBOS	0,0380	0,3830	-0,0102	13,8422	0,0143	0,0826	0,8896	6,3350	57,6162	0,0797	-0,0034	0,0121	1,0510	0,0235	0,0078
EREGL	0,2435	0,9877	-0,0133	18,2250	0,0452	0,0941	3,0008	1,8418	198,1745	0,3556	-0,0082	0,0838	0,3104	0,0676	0,0343
ISDMR	0,1206	1,0270	-0,4233	11,8566	0,0186	0,0348	2,9250	2,5815	141,3899	0,1603	-0,1925	0,0284	0,1295	0,0265	0,0697
IZMDC	0,0708	0,3242	0,0640	4,0427	0,0574	0,1296	-0,2050	4,7560	76,7454	-0,5687	0,0411	0,0411	0,6706	0,5559	0,0071
KRDMA	0,5293	0,5585	0,4283	19,1044	0,2327	0,5357	1,5186	1,8635	195,8656	1,3177	0,3438	0,3438	2,2434	0,5096	0,0445
SARKY	-0,2810	0,1035	-0,2449	-5,7378	-0,1688	-1,2684	1,6798	36,3832	10,0321	-1,7501	-0,0760	-0,0699	-1,1367	-0,6722	-0,0323
TUCLK	-0,4203	0,2392	-0,2968	-6,6874	-0,1868	-0,4266	2,1732	3,6507	99,9821	-1,6286	-0,3829	-0,3829	-1,0102	-0,5042	-7,7331
MIN	-0,4203	0,0135	-0,4233	0,0000	-0,1868	-1,3309	-0,6172	0,5350	3,9543	-5,0524	-0,3829	-0,3829	-9,0857	-0,7435	-7,7331
MAX	2,1749	6,3263	1,6544	0,0000	0,2327	0,5773	11,2513	92,3035	682,2899	18,5499	0,5281	0,5281	7,3355	0,5559	1,7671

Table 5

Accommodation Sector 2021 CRITIC Method Decision Matrix

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYCES	1,3140	0,5923	0,2411	8,9482	0,0400	0,0414	14,9649	2,7077	134,7991	1,6258	0,4153	0,4153	0,2952	0,0480	12,8720
AVTUR	4,9275	5,0080	0,7106	396,5211	0,0701	0,0770	1,0433	0,2783	1.311,2988	0,3081	2,8168	2,8168	0,8303	0,0778	0,3143
KSTUR	2,5467	15,4369	1,9792	5,4937	0,0910	0,2241	0,9111	0,3767	968,8500	0,3709	0,3078	0,3078	8,8814	0,0954	0,0788
MAALT	2,3249	10,4609	0,4429	983,7804	0,1477	0,4812	0,8775	0,0158	23.108,5510	0,7488	6,7629	6,7629	0,5471	0,2216	23,9232
MARTI	-0,1312	0,0571	-0,0272	0,8644	-0,0223	-0,0249	-57,7196	3,0588	119,3264	0,9787	-0,4113	-0,4113	-0,0343	-0,1252	-0,4301
MERIT	2,6901	0,0094	0,3222	0,0000	0,0136	0,0137	231,7486	31,2252	11,6893	3,3421	1,1462	1,1462	0,3660	0,0142	1,5349
PKENT	1,1481	0,6223	0,8579	0,0000	0,2103	0,3453	1,8178	3,8088	95,8296	0,7822	0,3092	0,3092	3,3937	0,2787	32,3360
TEKTU	0,0782	0,0049	0,0221	1,3521	0,0089	0,0094	-6,5556	23,3950	15,6016	-0,1851	0,4286	0,4286	0,0309	0,0150	0,0901
ULAS	2,0896	5,3345	0,3598	4,3993	0,0899	0,1220	1,4837	0,0000	0,0000	0,2568	0,0000	0,0000	0,4346	0,1198	0,3862
MIN	-0,1312	0,0049	-0,0272	0,0000	-0,0223	-0,0249	-57,7196	0,0000	0,0000	-0,1851	-0,4113	-0,4113	-0,0343	-0,1252	-0,4301
MAX	4,9275	15,4369	1,9792	983,7804	0,2103	0,4812	231,7486	31,2252	23.108,5510	3,3421	6,7629	6,7629	8,8814	0,2787	32,3360

Stage 2: Creating the Normalized Decision Matrix

Normalized decision matrices were created by using the data obtained in Stage 1 and using the formulas in Equation (2) and Equation (3). Minimum and maximum values were determined for each of the 15 criteria in the study, and standard deviations (σj) of the criteria were calculated in order to calculate the amount of information (cj). The results are shown in Table 6 and Table 7.

Table 6

Main Metal Industry Sector 2021 CRITIC Method Normalized Decision Matrix

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
AYES	0,0693	0,0185	0,0859	0,0130	0,0382	0,0000	0,9364	0,4360	0,9926	0,1489	0,3731	0,3751	0,0000	0,0873	0,8061
BRSAN	0,2544	0,0469	0,2894	0,0282	0,6984	0,8009	0,0000	0,0267	0,8256	1,0000	0,6823	0,6823	0,5954	0,9515	0,8205
BURCE	0,2068	0,0085	0,2432	0,0170	0,5537	0,7352	1,0000	0,2237	0,9803	0,3609	0,4927	0,4927	0,5702	0,6506	1,0000
BURVA	0,1974	0,0181	0,2417	0,0166	0,5830	0,8769	0,9929	0,0661	0,9244	0,3678	0,5107	0,5107	0,5874	0,7376	0,8486
CELHA	0,1322	0,0222	0,1687	0,0074	0,2875	0,4903	0,7659	0,0751	0,9334	0,0000	0,3592	0,3592	0,4789	0,0000	0,4869
CEMAS	1,0000	1,0000	1,0000	0,0130	0,7824	0,8763	0,8019	0,0000	0,0000	0,2374	1,0000	1,0000	0,9743	0,6912	0,8386
CEMTS	0,4566	0,1269	0,4970	1,0000	0,7429	1,0000	0,8720	0,0676	0,9259	0,2297	0,5153	0,5283	1,0000	0,6894	0,8177
CUSAN	0,1234	0,0191	0,1506	0,0015	0,3043	0,5033	0,8604	0,1363	0,9646	0,1924	0,3623	0,3712	0,4689	0,4478	0,5373
DMSAS	0,1296	0,0163	0,1604	0,0111	0,3432	0,6237	0,8510	0,1863	0,9753	0,1814	0,3644	0,3805	0,5369	0,4725	0,5172
DOKTA	0,0882	0,0000	0,1534	0,0075	0,2519	0,6272	0,6876	1,0000	1,0000	0,1722	0,2818	0,2818	0,5393	0,2929	0,7551
ERBOS	0,1766	0,0585	0,1988	0,0399	0,4795	0,7408	0,8730	0,0632	0,9209	0,2174	0,4166	0,4335	0,6173	0,5902	0,8148
EREGL	0,2558	0,1543	0,1973	0,0484	0,5531	0,7468	0,6952	0,0142	0,7137	0,2291	0,4113	0,5123	0,5722	0,6242	0,8176
ISDMR	0,2085	0,1605	0,0000	0,0360	0,4896	0,7157	0,7015	0,0223	0,7974	0,2209	0,2090	0,4515	0,5612	0,5925	0,8213
IZMDC	0,1892	0,0492	0,2345	0,0208	0,5822	0,7654	0,9653	0,0460	0,8927	0,1900	0,4654	0,4654	0,5941	1,0000	0,8147
KRDMA	0,3659	0,0863	0,4099	0,0501	1,0000	0,9782	0,8200	0,0145	0,7171	0,2699	0,7978	0,7978	0,6899	0,9644	0,8187
SARKY	0,0537	0,0143	0,0858	0,0018	0,0431	0,0328	0,8065	0,3906	0,9910	0,1399	0,3369	0,3436	0,4841	0,0548	0,8106
TUCLK	0,0000	0,0358	0,0609	0,0000	0,0000	0,4739	0,7649	0,0340	0,8584	0,1451	0,0000	0,0000	0,4918	0,1842	0,0000

Table 7

Accommodation Sector 2021 CRITIC Method Normalized Decision Matrix

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
AYCES	0,2857	0,0381	0,1337	0,0091	0,2680	0,1311	0,7489	0,0867	0,9942	0,5134	0,1152	0,1152	0,0370	0,4289	0,4060
AVTUR	1,0000	0,3242	0,3677	0,4031	0,3974	0,2013	0,7970	0,0089	0,9433	0,1398	0,4500	0,4500	0,0970	0,5027	0,0227
KSTUR	0,5294	1,0000	1,0000	0,0056	0,4872	0,4920	0,7975	0,0121	0,9581	0,1576	0,1002	0,1002	1,0000	0,5463	0,0155
MAALT	0,4855	0,6776	0,2343	1,0000	0,7307	1,0000	0,7976	0,0005	0,0000	0,2648	1,0000	1,0000	0,0652	0,8587	0,7432
MARTI	0,0000	0,0034	0,0000	0,0009	0,0000	0,0000	1,0000	0,0980	0,9948	0,3299	0,0000	0,0000	0,0000	0,0000	0,0000
MERIT	0,5577	0,0003	0,1741	0,0000	0,1545	0,0764	0,0000	1,0000	0,9995	1,0000	0,2171	0,2171	0,0449	0,3453	0,0600
PKENT	0,2529	0,0400	0,4411	0,0000	1,0000	0,7315	0,7943	0,1220	0,9959	0,2743	0,1004	0,1004	0,3845	1,0000	1,0000
TEKTU	0,0414	0,0000	0,0246	0,0014	0,1344	0,0678	0,8232	0,7492	0,9993	0,0000	0,1171	0,1171	0,0073	0,3472	0,0159
ULAS	0,4390	0,3454	0,1929	0,0045	0,4822	0,2903	0,7955	0,0000	1,0000	0,1253	0,0573	0,0573	0,0526	0,6066	0,0249

Stage 3: Calculation The Distance Correlation of Every Pair of Criteria

Correlation was calculated by using the formula in Equation (4) in order to measure the degree of relationship between the criteria. The results are shown in Table 8 and Table 9.

Table 8

Main Metal Industry Sector 2021 CRITIC Method Correlation Matrix

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A1	1,0000	0,9167	0,9609	0,2708	0,6881	0,5571	-0,0345	-0,3535	-0,8960	0,1473	0,8233	0,8532	0,7391	0,4621	0,3633
A2	0,9167	1,0000	0,8511	0,0240	0,3943	0,3006	-0,0169	-0,2693	-0,9638	-0,0110	0,6312	0,6754	0,5572	0,2105	0,1697
A3	0,9609	0,8511	1,0000	0,2885	0,6565	0,5367	-0,0034	-0,2772	-0,8274	0,1582	0,8570	0,8117	0,7356	0,4377	0,3003
A4	0,2708	0,0240	0,2885	1,0000	0,3085	0,3571	0,0838	-0,1262	0,0715	-0,0100	0,1017	0,1014	0,5295	0,1698	0,1358
B1	0,6881	0,3943	0,6565	0,3085	1,0000	0,8821	-0,1373	-0,4809	-0,4881	0,4328	0,7898	0,8402	0,7160	0,8765	0,5390
B2	0,5571	0,3006	0,5367	0,3571	0,8821	1,0000	-0,1058	-0,4397	-0,3814	0,3539	0,5124	0,5612	0,7931	0,8201	0,2710
B3	-0,0345	-0,0169	-0,0034	0,0838	-0,1373	-0,1058	1,0000	0,0522	0,1242	-0,7436	-0,1333	-0,1719	-0,0659	-0,1759	0,0402
B4	-0,3535	-0,2693	-0,2772	-0,1262	-0,4809	-0,4397	0,0522	1,0000	0,3777	-0,2025	-0,2884	-0,3590	-0,3714	-0,4688	0,0925
B5	-0,8960	-0,9638	-0,8274	0,0715	-0,4881	-0,3814	0,1242	0,3777	1,0000	-0,0848	-0,6678	-0,7201	-0,5502	-0,3197	-0,1293
C1	0,1473	-0,0110	0,1582	-0,0100	0,4328	0,3539	-0,7436	-0,2025	-0,0848	1,0000	0,4037	0,4023	0,1611	0,5799	0,3156
C2	0,8233	0,6312	0,8570	0,1017	0,7898	0,5124	-0,1333	-0,2884	-0,6678	0,4037	1,0000	0,9627	0,5368	0,6072	0,5726
C3	0,8532	0,6754	0,8117	0,1014	0,8402	0,5612	-0,1719	-0,3590	-0,7201	0,4023	0,9627	1,0000	0,5595	0,6531	0,6365
D1	0,7391	0,5572	0,7356	0,5295	0,7160	0,7931	-0,0659	-0,3714	-0,5502	0,1611	0,5368	0,5595	1,0000	0,5567	0,2014
D2	0,4621	0,2105	0,4377	0,1698	0,8765	0,8201	-0,1759	-0,4688	-0,3197	0,5799	0,6072	0,6531	0,5567	1,0000	0,4793
D3	0,3633	0,1697	0,3003	0,1358	0,5390	0,2710	0,0402	0,0925	-0,1293	0,3156	0,5726	0,6365	0,2014	0,4793	1,0000

Table 9

Accommodation Sector 2021 CRITIC Method Correlation Matrix

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A1	1,0000	0,4438	0,4328	0,3952	0,2422	0,1800	-0,3086	-0,1871	-0,1536	0,0851	0,4447	0,4447	0,1777	0,2911	-0,1174
A2	0,4438	1,0000	0,7731	0,4388	0,3782	0,5725	0,2047	-0,5006	-0,4626	-0,3516	0,4115	0,4115	0,6992	0,3621	-0,0249
A3	0,4328	0,7731	1,0000	-0,0196	0,4734	0,4310	0,0455	-0,3523	0,0230	-0,1964	-0,0056	-0,0056	0,9615	0,4107	0,0611
A4	0,3952	0,4388	-0,0196	1,0000	0,3715	0,6547	0,1273	-0,3158	-0,9394	-0,1434	0,9830	0,9830	-0,1756	0,4192	0,3812
B1	0,2422	0,3782	0,4734	0,3715	1,0000	0,8872	0,1635	-0,4614	-0,3945	-0,2498	0,3692	0,3692	0,3844	0,9705	0,8027
B2	0,1800	0,5725	0,4310	0,6547	0,8872	1,0000	0,1796	-0,4448	-0,7387	-0,2229	0,6458	0,6458	0,3598	0,8721	0,7672
B3	-0,3086	0,2047	0,0455	0,1273	0,1635	0,1796	1,0000	-0,7349	-0,1045	-0,8403	-0,0380	-0,0380	0,1061	0,0441	0,1035
B4	-0,1871	-0,5006	-0,3523	-0,3158	-0,4614	-0,4448	-0,7349	1,0000	0,2578	0,5265	-0,1769	-0,1769	-0,2838	-0,3346	-0,2647
B5	-0,1536	-0,4626	0,0230	-0,9394	-0,3945	-0,7387	-0,1045	0,2578	1,0000	0,0792	-0,9271	-0,9271	0,1103	-0,4425	-0,4709
C1	0,0851	-0,3516	-0,1964	-0,1434	-0,2498	-0,2229	-0,8403	0,5265	0,0792	1,0000	-0,0241	-0,0241	-0,2092	-0,2083	0,0391
C2	0,4447	0,4115	-0,0056	0,9830	0,3692	0,6458	-0,0380	-0,1769	-0,9271	-0,0241	1,0000	1,0000	-0,1705	0,4464	0,3916
C3	0,4447	0,4115	-0,0056	0,9830	0,3692	0,6458	-0,0380	-0,1769	-0,9271	-0,0241	1,0000	1,0000	-0,1705	0,4464	0,3916
D1	0,1777	0,6992	0,9615	-0,1756	0,3844	0,3598	0,1061	-0,2838	0,1103	-0,2092	-0,1705	-0,1705	1,0000	0,3018	0,0411
D2	0,2911	0,3621	0,4107	0,4192	0,9705	0,8721	0,0441	-0,3346	-0,4425	-0,2083	0,4464	0,4464	0,3018	1,0000	0,7819
D3	-0,1174	-0,0249	0,0611	0,3812	0,8027	0,7672	0,1035	-0,2647	-0,4709	0,0391	0,3916	0,3916	0,0411	0,7819	1,0000

Stage 4: Computation The Information Content (Cj Value)

The Cj value, which shows the amount of information for each criterion, was calculated with the help of Equation (5) and using standard deviation values. The results are shown in Table 10 and Table 11.

Table 10

Main Metal Industry Sector 2021 CRITIC Method Cj Value

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A1	0,0000	0,0833	0,0391	0,7292	0,3119	0,4429	1,0345	1,3535	1,8960	0,8527	0,1767	0,1468	0,2609	0,5379	0,6367
A2	0,0833	0,0000	0,1489	0,9760	0,6057	0,6994	1,0169	1,2693	1,9638	1,0110	0,3688	0,3246	0,4428	0,7895	0,8303
A3	0,0391	0,1489	0,0000	0,7115	0,3435	0,4633	1,0034	1,2772	1,8274	0,8418	0,1430	0,1883	0,2644	0,5623	0,6997
A4	0,7292	0,9760	0,7115	0,0000	0,6915	0,6429	0,9162	1,1262	0,9285	1,0100	0,8983	0,8986	0,4705	0,8302	0,8642
B1	0,3119	0,6057	0,3435	0,6915	0,0000	0,1179	1,1373	1,4809	1,4881	0,5672	0,2102	0,1598	0,2840	0,1235	0,4610
B2	0,4429	0,6994	0,4633	0,6429	0,1179	0,0000	1,1058	1,4397	1,3814	0,6461	0,4876	0,4388	0,2069	0,1799	0,7290
B3	1,0345	1,0169	1,0034	0,9162	1,1373	1,1058	0,0000	0,9478	0,8758	1,7436	1,1333	1,1719	1,0659	1,1759	0,9598
B4	1,3535	1,2693	1,2772	1,1262	1,4809	1,4397	0,9478	0,0000	0,6223	1,2025	1,2884	1,3590	1,3714	1,4688	0,9075
B5	1,8960	1,9638	1,8274	0,9285	1,4881	1,3814	0,8758	0,6223	0,0000	1,0848	1,6678	1,7201	1,5502	1,3197	1,1293
C1	0,8527	1,0110	0,8418	1,0100	0,5672	0,6461	1,7436	1,2025	1,0848	0,0000	0,5963	0,5977	0,8389	0,4201	0,6844
C2	0,1767	0,3688	0,1430	0,8983	0,2102	0,4876	1,1333	1,2884	1,6678	0,5963	0,0000	0,0373	0,4632	0,3928	0,4274
C3	0,1468	0,3246	0,1883	0,8986	0,1598	0,4388	1,1719	1,3590	1,7201	0,5977	0,0373	0,0000	0,4405	0,3469	0,3635
D1	0,2609	0,4428	0,2644	0,4705	0,2840	0,2069	1,0659	1,3714	1,5502	0,8389	0,4632	0,4405	0,0000	0,4433	0,7986
D2	0,5379	0,7895	0,5623	0,8302	0,1235	0,1799	1,1759	1,4688	1,3197	0,4201	0,3928	0,3469	0,4433	0,0000	0,5207
D3	0,6367	0,8303	0,6997	0,8642	0,4610	0,7290	0,9598	0,9075	1,1293	0,6844	0,4274	0,3635	0,7986	0,5207	0,0000

Table 11

Accommodation Sector 2021 CRITIC Method Cj Value

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A1	0,0000	0,5562	0,5672	0,6048	0,7578	0,8200	1,3086	1,1871	1,1536	0,9149	0,5553	0,5553	0,8223	0,7089	1,1174
A2	0,5562	0,0000	0,2269	0,5612	0,6218	0,4275	0,7953	1,5006	1,4626	1,3516	0,5885	0,5885	0,3008	0,6379	1,0249
A3	0,5672	0,2269	0,0000	1,0196	0,5266	0,5690	0,9545	1,3523	0,9770	1,1964	1,0056	1,0056	0,0385	0,5893	0,9389
A4	0,6048	0,5612	1,0196	0,0000	0,6285	0,3453	0,8727	1,3158	1,9394	1,1434	0,0170	0,0170	1,1756	0,5808	0,6188
B1	0,7578	0,6218	0,5266	0,6285	0,0000	0,1128	0,8365	1,4614	1,3945	1,2498	0,6308	0,6308	0,6156	0,0295	0,1973
B2	0,8200	0,4275	0,5690	0,3453	0,1128	0,0000	0,8204	1,4448	1,7387	1,2229	0,3542	0,3542	0,6402	0,1279	0,2328
B3	1,3086	0,7953	0,9545	0,8727	0,8365	0,8204	0,0000	1,7349	1,1045	1,8403	1,0380	1,0380	0,8939	0,9559	0,8965
B4	1,1871	1,5006	1,3523	1,3158	1,4614	1,4448	1,7349	0,0000	0,7422	0,4735	1,1769	1,1769	1,2838	1,3346	1,2647
B5	1,1536	1,4626	0,9770	1,9394	1,3945	1,7387	1,1045	0,7422	0,0000	0,9208	1,9271	1,9271	0,8897	1,4425	1,4709
C1	0,9149	1,3516	1,1964	1,1434	1,2498	1,2229	1,8403	0,4735	0,9208	0,0000	1,0241	1,0241	1,2092	1,2083	0,9609
C2	0,5553	0,5885	1,0056	0,0170	0,6308	0,3542	1,0380	1,1769	1,9271	1,0241	0,0000	0,0000	1,1705	0,5536	0,6084
C3	0,5553	0,5885	1,0056	0,0170	0,6308	0,3542	1,0380	1,1769	1,9271	1,0241	0,0000	0,0000	1,1705	0,5536	0,6084
D1	0,8223	0,3008	0,0385	1,1756	0,6156	0,6402	0,8939	1,2838	0,8897	1,2092	1,1705	1,1705	0,0000	0,6982	0,9589
D2	0,7089	0,6379	0,5893	0,5808	0,0295	0,1279	0,9559	1,3346	1,4425	1,2083	0,5536	0,5536	0,6982	0,0000	0,2181
D3	1,1174	1,0249	0,9389	0,6188	0,1973	0,2328	0,8965	1,2647	1,4709	0,9609	0,6084	0,6084	0,9589	0,2181	0,0000

Stage 5: Determination The Objective Weight

In order to obtain criterion weights (Wj), the formula in Equation (6) was calculated by dividing the information amount (Cj) values of the criteria by the sum of the information amount values (Cj) of the criteria. The results are shown in Table 12 and Table 13.

Table 12

Main Metal Industry Sector 2021 CRITIC Method Weight of The Criteria

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
2021	0,0490	0,0627	0,0494	0,0705	0,0565	0,0643	0,0872	0,1086	0,1164	0,0642	0,0475	0,0450	0,0479	0,0729	0,0580

Table 13

Accomodation Sector 2021 CRITIC Method Weight of The Criteria

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
2021	0,0588	0,0638	0,0556	0,0620	0,0509	0,0526	0,0711	0,1088	0,1050	0,0780	0,0556	0,0556	0,0646	0,0474	0,0701

As can be seen in Table 12, as a result of the weighting made with the CRITIC method, the criterion with the highest weight for the Basic Metal Industry sector was B5 with a value of 0.1164. The criterion with the lowest weight was the C3 criterion with 0.0450.

For the accommodation sector in Table 13, the criterion with the highest weight was B4 with a value of 0.1088. The criterion with the lowest weight was the D3 criterion with 0.0474.

2021 TOPSIS Method Findings

Stage 1: Creating the Decision Matrix

In the rows of the decision matrix prepared using the TOPSIS method, there are alternatives (businesses in BIST), and criteria (financial ratios) in the columns. The decision matrix with a size of (17 x 15) for the Basic Metal Industry sector, whose stocks are traded on the Borsa Istanbul (BIST) and (9 x 15) for the Accommodation sector, was prepared using Equation (7). The results are shown in Table 15 and Table 16.

The fixed weights of the criteria used in the 2021 TOPSIS Method are shown in Table 14.

Table 14

2021 TOPSIS Method Fixed Weight of The Criteria

	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
Fixed Weight	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667	0,0667

Table 15

Main Metal Industry Sector 2021 TOPSIS Method Decision Matrix (For Fixed and Variable Weights)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYES	-0,2406	0,1304	-0,2448	0,0000	-0,1708	-1,3309	0,1380	40,5418	9,0031	-1,5377	-0,0430	-0,0412	-9,0857	-0,6300	-0,0755
BRSAN	0,2398	0,3094	0,1781	7,8257	0,1062	0,1974	11,2513	2,9861	122,2323	18,5499	0,2387	0,2387	0,6917	0,4930	0,0622
BURCE	0,1165	0,0668	0,0821	2,0822	0,0455	0,0720	-0,6172	21,0652	17,3272	3,4660	0,0660	0,0660	0,2784	0,1019	1,7671
BURVA	0,0920	0,1278	0,0790	1,8595	0,0578	0,3424	-0,5328	6,6042	55,2677	3,6285	0,0823	0,0823	0,5598	0,2150	0,3288
CELHA	-0,0773	0,1534	-0,0727	-2,8602	-0,0662	-0,3953	2,1614	7,4252	49,1568	-5,0524	-0,0557	-0,0557	-1,2218	-0,7435	-3,1073
CEMAS	2,1749	6,3263	1,6544	0,0000	0,1414	0,3412	1,7339	0,5350	682,2899	0,5501	0,5281	0,5281	6,9131	0,1546	0,2341
CEMTS	0,7646	0,8147	0,6094	508,3329	0,1248	0,5773	0,9014	6,7347	54,1969	0,3684	0,0865	0,0983	7,3355	0,1523	0,0348
CUSAN	-0,1001	0,1338	-0,1104	-5,8897	-0,0592	-0,3704	1,0401	13,0388	27,9933	-0,5103	-0,0528	-0,0447	-1,3859	-0,1615	-2,6288
DMSAS	-0,0841	0,1163	-0,0900	-0,9852	-0,0428	-0,1408	1,1513	17,6275	20,7063	-0,7702	-0,0509	-0,0362	-0,2689	-0,1294	-2,8195
DOKTA	-0,1916	0,0135	-0,1045	-2,8440	-0,0811	-0,1341	3,0910	92,3035	3,9543	-0,9872	-0,1262	-0,1262	-0,2299	-0,3629	-0,5596
ERBOS	0,0380	0,3830	-0,0102	13,8422	0,0143	0,0826	0,8896	6,3350	57,6162	0,0797	-0,0034	0,0121	1,0510	0,0235	0,0078
EREGL	0,2435	0,9877	-0,0133	18,2250	0,0452	0,0941	3,0008	1,8418	198,1745	0,3556	-0,0082	0,0838	0,3104	0,0676	0,0343
ISDMR	0,1206	1,0270	-0,4233	11,8566	0,0186	0,0348	2,9250	2,5815	141,3899	0,1603	-0,1925	0,0284	0,1295	0,0265	0,0697
IZMDC	0,0708	0,3242	0,0640	4,0427	0,0574	0,1296	-0,2050	4,7560	76,7454	-0,5687	0,0411	0,0411	0,6706	0,5559	0,0071
KRDMA	0,5293	0,5585	0,4283	19,1044	0,2327	0,5357	1,5186	1,8635	195,8656	1,3177	0,3438	0,3438	2,2434	0,5096	0,0445
SARKY	-0,2810	0,1035	-0,2449	-5,7378	-0,1688	-1,2684	1,6798	36,3832	10,0321	-1,7501	-0,0760	-0,0699	-1,1367	-0,6722	-0,0323
TUCLK	-0,4203	0,2392	-0,2968	-6,6874	-0,1868	-0,4266	2,1732	3,6507	99,9821	-1,6286	-0,3829	-0,3829	-1,0102	-0,5042	-7,7331

Table 16

Accommodation Sector 2021 TOPSIS Method Decision Matrix (For Fixed and Variable Weights)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYCES	1,3140	0,5923	0,2411	8,9482	0,0400	0,0414	14,9649	2,7077	134,7991	1,6258	0,4153	0,4153	0,2952	0,0480	12,8720
AVTUR	4,9275	5,0080	0,7106	396,5211	0,0701	0,0770	1,0433	0,2783	1.311,2988	0,3081	2,8168	2,8168	0,8303	0,0778	0,3143
KSTUR	2,5467	15,4369	1,9792	5,4937	0,0910	0,2241	0,9111	0,3767	968,8500	0,3709	0,3078	0,3078	8,8814	0,0954	0,0788
MAALT	2,3249	10,4609	0,4429	983,7804	0,1477	0,4812	0,8775	0,0158	23.108,5510	0,7488	6,7629	6,7629	0,5471	0,2216	23,9232
MARTI	-0,1312	0,0571	-0,0272	0,8644	-0,0223	-0,0249	-57,7196	3,0588	119,3264	0,9787	-0,4113	-0,4113	-0,0343	-0,1252	-0,4301
MERIT	2,6901	0,0094	0,3222	0,0000	0,0136	0,0137	231,7486	31,2252	11,6893	3,3421	1,1462	1,1462	0,3660	0,0142	1,5349
PKENT	1,1481	0,6223	0,8579	0,0000	0,2103	0,3453	1,8178	3,8088	95,8296	0,7822	0,3092	0,3092	3,3937	0,2787	32,3360
TEKTU	0,0782	0,0049	0,0221	1,3521	0,0089	0,0094	-6,5556	23,3950	15,6016	-0,1851	0,4286	0,4286	0,0309	0,0150	0,0901
ULAS	2,0896	5,3345	0,3598	4,3993	0,0899	0,1220	1,4837	0,0000	0,0000	0,2568	0,0000	0,0000	0,4346	0,1198	0,3862

Stage 2: Creating the Normalized Decision Matrix (R)

Normalized decision matrices were created by using the data obtained in Stage 1 and using the formulas in Equation (8). The results are shown in Table 16 and Table 17.

Table 17

Main Metal Industry Sector 2021 TOPSIS Method Normalized Decision Matrix (R) (For Fixed and Variable Weights)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYES	-0,0972	0,0198	-0,1262	0,0000	-0,3632	-0,6059	0,0104	0,3604	0,0116	-0,0762	-0,0518	-0,0507	-0,6464	-0,3798	-0,0080
BRSAN	0,0969	0,0469	0,0918	0,0154	0,2258	0,0899	0,8482	0,0265	0,1568	0,9191	0,2873	0,2938	0,0492	0,2972	0,0066
BURCE	0,0470	0,0101	0,0423	0,0041	0,0967	0,0328	-0,0465	0,1873	0,0222	0,1717	0,0794	0,0812	0,0198	0,0614	0,1884
BURVA	0,0372	0,0194	0,0407	0,0036	0,1228	0,1559	-0,0402	0,0587	0,0709	0,1798	0,0991	0,1013	0,0398	0,1296	0,0351
CELHA	-0,0312	0,0232	-0,0375	-0,0056	-0,1408	-0,1799	0,1629	0,0660	0,0631	-0,2503	-0,0671	-0,0686	-0,0869	-0,4482	-0,3314
CEMAS	0,8786	0,9588	0,8527	0,0000	0,3007	0,1553	0,1307	0,0048	0,8754	0,0273	0,6357	0,6500	0,4918	0,0932	0,0250
CEMTS	0,3089	0,1235	0,3141	0,9976	0,2655	0,2628	0,0680	0,0599	0,0695	0,0183	0,1042	0,1210	0,5219	0,0918	0,0037
CUSAN	-0,0404	0,0203	-0,0569	-0,0116	-0,1258	-0,1686	0,0784	0,1159	0,0359	-0,0253	-0,0636	-0,0550	-0,0986	-0,0974	-0,2803
DMSAS	-0,0340	0,0176	-0,0464	-0,0019	-0,0911	-0,0641	0,0868	0,1567	0,0266	-0,0382	-0,0613	-0,0446	-0,0191	-0,0780	-0,3007
DOKTA	-0,0774	0,0020	-0,0539	-0,0056	-0,1725	-0,0611	0,2330	0,8205	0,0051	-0,0489	-0,1519	-0,1553	-0,0164	-0,2187	-0,0597
ERBOS	0,0154	0,0580	-0,0053	0,0272	0,0305	0,0376	0,0671	0,0563	0,0739	0,0039	-0,0040	0,0148	0,0748	0,0142	0,0008
EREGL	0,0984	0,1497	-0,0069	0,0358	0,0961	0,0428	0,2262	0,0164	0,2543	0,0176	-0,0099	0,1031	0,0221	0,0408	0,0037
ISDMR	0,0487	0,1556	-0,2181	0,0233	0,0395	0,0159	0,2205	0,0229	0,1814	0,0079	-0,2317	0,0350	0,0092	0,0160	0,0074
IZMDC	0,0286	0,0491	0,0330	0,0079	0,1221	0,0590	-0,0155	0,0423	0,0985	-0,0282	0,0495	0,0506	0,0477	0,3352	0,0008
KRDMA	0,2138	0,0847	0,2207	0,0375	0,4948	0,2439	0,1145	0,0166	0,2513	0,0653	0,4139	0,4232	0,1596	0,3072	0,0047
SARKY	-0,1135	0,0157	-0,1262	-0,0113	-0,3588	-0,5774	0,1266	0,3234	0,0129	-0,0867	-0,0914	-0,0860	-0,0809	-0,4053	-0,0034
TUCLK	-0,1698	0,0363	-0,1530	-0,0131	-0,3973	-0,1942	0,1638	0,0325	0,1283	-0,0807	-0,4609	-0,4713	-0,0719	-0,3039	-0,8247

Table 18

Accomodation Sector 2021 TOPSIS Method Normalized Decision Matrix (R) (For Fixed and Variable Weights)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYCES	0,1843	0,0295	0,1015	0,0084	0,1336	0,0636	0,0625	0,0687	0,0058	0,4030	0,0557	0,0557	0,0308	0,1148	0,3045
AVTUR	0,6911	0,2498	0,2990	0,3738	0,2341	0,1181	0,0044	0,0071	0,0566	0,0764	0,3774	0,3774	0,0867	0,1862	0,0074
KSTUR	0,3572	0,7699	0,8329	0,0052	0,3039	0,3440	0,0038	0,0096	0,0418	0,0919	0,0412	0,0412	0,9270	0,2283	0,0019
MAALT	0,3261	0,5217	0,1864	0,9275	0,4931	0,7386	0,0037	0,0004	0,9975	0,1856	0,9062	0,9062	0,0571	0,5302	0,5660
MARTI	-0,0184	0,0028	-0,0114	0,0008	-0,0746	-0,0383	-0,2411	0,0776	0,0052	0,2426	-0,0551	-0,0551	-0,0036	-0,2997	-0,0102
MERIT	0,3773	0,0005	0,1356	0,0000	0,0455	0,0211	0,9680	0,7922	0,0005	0,8284	0,1536	0,1536	0,0382	0,0340	0,0363
PKENT	0,1610	0,0310	0,3610	0,0000	0,7023	0,5300	0,0076	0,0966	0,0041	0,1939	0,0414	0,0414	0,3542	0,6668	0,7651
TEKTU	0,0110	0,0002	0,0093	0,0013	0,0299	0,0144	-0,0274	0,5935	0,0007	-0,0459	0,0574	0,0574	0,0032	0,0359	0,0021
ULAS	0,2931	0,2661	0,1514	0,0041	0,3000	0,1873	0,0062	0,0000	0,0000	0,0637	0,0000	0,0000	0,0454	0,2866	0,0091

Stage 3: The Weighted Normalized Decision Matrix (V)

The Weighted Standard Decision Matrix (V) was calculated with the formulas in Equation (9) and Equation (10), taking into account both constant and variable weights calculated by the CRITIC method. The results are shown in Table 19, Table 20, Table 21 and Table 22.

Table 19

Main Metal Industry Sector 2021 TOPSIS Method Fixed Weighted Standard Decision Matrix (V)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYES	-0,0065	0,0013	-0,0084	0,0000	-0,0242	-0,0404	0,0007	0,0240	0,0008	-0,0051	-0,0035	-0,0034	-0,0431	-0,0253	-0,0005
BRSAN	0,0065	0,0031	0,0061	0,0010	0,0151	0,0060	0,0565	0,0018	0,0105	0,0613	0,0192	0,0196	0,0033	0,0198	0,0004
BURCE	0,0031	0,0007	0,0028	0,0003	0,0064	0,0022	-0,0031	0,0125	0,0015	0,0114	0,0053	0,0054	0,0013	0,0041	0,0126
BURVA	0,0025	0,0013	0,0027	0,0002	0,0082	0,0104	-0,0027	0,0039	0,0047	0,0120	0,0066	0,0068	0,0027	0,0086	0,0023
CELHA	-0,0021	0,0015	-0,0025	-0,0004	-0,0094	-0,0120	0,0109	0,0044	0,0042	-0,0167	-0,0045	-0,0046	-0,0058	-0,0299	-0,0221
CEMAS	0,0586	0,0639	0,0568	0,0000	0,0200	0,0104	0,0087	0,0003	0,0584	0,0018	0,0424	0,0433	0,0328	0,0062	0,0017
CEMTS	0,0206	0,0082	0,0209	0,0665	0,0177	0,0175	0,0045	0,0040	0,0046	0,0012	0,0069	0,0081	0,0348	0,0061	0,0002
CUSAN	-0,0027	0,0014	-0,0038	-0,0008	-0,0084	-0,0112	0,0052	0,0077	0,0024	-0,0017	-0,0042	-0,0037	-0,0066	-0,0065	-0,0187
DMSAS	-0,0023	0,0012	-0,0031	-0,0001	-0,0061	-0,0043	0,0058	0,0104	0,0018	-0,0025	-0,0041	-0,0030	-0,0013	-0,0052	-0,0200
DOKTA	-0,0052	0,0001	-0,0036	-0,0004	-0,0115	-0,0041	0,0155	0,0547	0,0003	-0,0033	-0,0101	-0,0104	-0,0011	-0,0146	-0,0040
ERBOS	0,0010	0,0039	-0,0004	0,0018	0,0020	0,0025	0,0045	0,0038	0,0049	0,0003	-0,0003	0,0010	0,0050	0,0009	0,0001
EREGL	0,0066	0,0100	-0,0005	0,0024	0,0064	0,0029	0,0151	0,0011	0,0170	0,0012	-0,0007	0,0069	0,0015	0,0027	0,0002
ISDMR	0,0032	0,0104	-0,0145	0,0016	0,0026	0,0011	0,0147	0,0015	0,0121	0,0005	-0,0154	0,0023	0,0006	0,0011	0,0005
IZMDC	0,0019	0,0033	0,0022	0,0005	0,0081	0,0039	-0,0010	0,0028	0,0066	-0,0019	0,0033	0,0034	0,0032	0,0223	0,0001
KRDMA	0,0143	0,0056	0,0147	0,0025	0,0330	0,0163	0,0076	0,0011	0,0168	0,0044	0,0276	0,0282	0,0106	0,0205	0,0003
SARKY	-0,0076	0,0010	-0,0084	-0,0008	-0,0239	-0,0385	0,0084	0,0216	0,0009	-0,0058	-0,0061	-0,0057	-0,0054	-0,0270	-0,0002
TUCLK	-0,0113	0,0024	-0,0102	-0,0009	-0,0265	-0,0129	0,0109	0,0022	0,0086	-0,0054	-0,0307	-0,0314	-0,0048	-0,0203	-0,0550

Table 20

Main Metal Industry Sector 2021 TOPSIS Method Variable Weighted Standard Decision Matrix (V)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYES	-0,0048	0,0012	-0,0062	0,0000	-0,0205	-0,0389	0,0009	0,0391	0,0013	-0,0049	-0,0025	-0,0023	-0,0310	-0,0277	-0,0005
BRSAN	0,0047	0,0029	0,0045	0,0011	0,0128	0,0058	0,0739	0,0029	0,0183	0,0590	0,0136	0,0132	0,0024	0,0217	0,0004
BURCE	0,0023	0,0006	0,0021	0,0003	0,0055	0,0021	-0,0041	0,0203	0,0026	0,0110	0,0038	0,0037	0,0009	0,0045	0,0109
BURVA	0,0018	0,0012	0,0020	0,0003	0,0069	0,0100	-0,0035	0,0064	0,0083	0,0115	0,0047	0,0046	0,0019	0,0094	0,0020
CELHA	-0,0015	0,0015	-0,0019	-0,0004	-0,0080	-0,0116	0,0142	0,0072	0,0073	-0,0161	-0,0032	-0,0031	-0,0042	-0,0327	-0,0192
CEMAS	0,0431	0,0601	0,0421	0,0000	0,0170	0,0100	0,0114	0,0005	0,1019	0,0018	0,0302	0,0292	0,0236	0,0068	0,0014
CEMTS	0,0151	0,0077	0,0155	0,0703	0,0150	0,0169	0,0059	0,0065	0,0081	0,0012	0,0049	0,0054	0,0250	0,0067	0,0002
CUSAN	-0,0020	0,0013	-0,0028	-0,0008	-0,0071	-0,0108	0,0068	0,0126	0,0042	-0,0016	-0,0030	-0,0025	-0,0047	-0,0071	-0,0163
DMSAS	-0,0017	0,0011	-0,0023	-0,0001	-0,0051	-0,0041	0,0076	0,0170	0,0031	-0,0025	-0,0029	-0,0020	-0,0009	-0,0057	-0,0174
DOKTA	-0,0038	0,0001	-0,0027	-0,0004	-0,0098	-0,0039	0,0203	0,0891	0,0006	-0,0031	-0,0072	-0,0070	-0,0008	-0,0159	-0,0035
ERBOS	0,0008	0,0036	-0,0003	0,0019	0,0017	0,0024	0,0058	0,0061	0,0086	0,0003	-0,0002	0,0007	0,0036	0,0010	0,0000
EREGL	0,0048	0,0094	-0,0003	0,0025	0,0054	0,0028	0,0197	0,0018	0,0296	0,0011	-0,0005	0,0046	0,0011	0,0030	0,0002
ISDMR	0,0024	0,0098	-0,0108	0,0016	0,0022	0,0010	0,0192	0,0025	0,0211	0,0005	-0,0110	0,0016	0,0004	0,0012	0,0004
IZMDC	0,0014	0,0031	0,0016	0,0006	0,0069	0,0038	-0,0013	0,0046	0,0115	-0,0018	0,0024	0,0023	0,0023	0,0244	0,0000
KRDMA	0,0105	0,0053	0,0109	0,0026	0,0280	0,0157	0,0100	0,0018	0,0293	0,0042	0,0197	0,0190	0,0076	0,0224	0,0003
SARKY	-0,0056	0,0010	-0,0062	-0,0008	-0,0203	-0,0371	0,0110	0,0351	0,0015	-0,0056	-0,0043	-0,0039	-0,0039	-0,0295	-0,0002
TUCLK	-0,0083	0,0023	-0,0076	-0,0009	-0,0225	-0,0125	0,0143	0,0035	0,0149	-0,0052	-0,0219	-0,0212	-0,0034	-0,0222	-0,0478

Table 21

Accommodation Sector 2021 TOPSIS Method Fixed Weighted Standard Decision Matrix (V)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYCES	0,0123	0,0020	0,0068	0,0006	0,0089	0,0042	0,0042	0,0046	0,0004	0,0269	0,0037	0,0037	0,0021	0,0077	0,0203
AVTUR	0,0461	0,0167	0,0199	0,0249	0,0156	0,0079	0,0003	0,0005	0,0038	0,0051	0,0252	0,0252	0,0058	0,0124	0,0005
KSTUR	0,0238	0,0513	0,0555	0,0003	0,0203	0,0229	0,0003	0,0006	0,0028	0,0061	0,0027	0,0027	0,0618	0,0152	0,0001
MAALT	0,0217	0,0348	0,0124	0,0618	0,0329	0,0492	0,0002	0,0000	0,0665	0,0124	0,0604	0,0604	0,0038	0,0353	0,0377
MARTI	-0,0012	0,0002	-0,0008	0,0001	-0,0050	-0,0026	-0,0161	0,0052	0,0003	0,0162	-0,0037	-0,0037	-0,0002	-0,0200	-0,0007
MERIT	0,0252	0,0000	0,0090	0,0000	0,0030	0,0014	0,0645	0,0528	0,0000	0,0552	0,0102	0,0102	0,0025	0,0023	0,0024
PKENT	0,0107	0,0021	0,0241	0,0000	0,0468	0,0353	0,0005	0,0064	0,0003	0,0129	0,0028	0,0028	0,0236	0,0445	0,0510
TEKTU	0,0007	0,0000	0,0006	0,0001	0,0020	0,0010	-0,0018	0,0396	0,0000	-0,0031	0,0038	0,0038	0,0002	0,0024	0,0001
ULAS	0,0195	0,0177	0,0101	0,0003	0,0200	0,0125	0,0004	0,0000	0,0000	0,0042	0,0000	0,0000	0,0030	0,0191	0,0006

Table 22

Accommodation Sector 2021 TOPSIS Method Variable Weighted Standard Decision Matrix (V)

Company Code	CRITERIA / FINANCIAL RATIOS														
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
AYCES	0,0108	0,0019	0,0056	0,0005	0,0068	0,0033	0,0044	0,0075	0,0006	0,0314	0,0031	0,0031	0,0020	0,0054	0,0214
AVTUR	0,0407	0,0159	0,0166	0,0232	0,0119	0,0062	0,0003	0,0008	0,0059	0,0060	0,0210	0,0210	0,0056	0,0088	0,0005
KSTUR	0,0210	0,0491	0,0463	0,0003	0,0155	0,0181	0,0003	0,0010	0,0044	0,0072	0,0023	0,0023	0,0599	0,0108	0,0001
MAALT	0,0192	0,0333	0,0104	0,0575	0,0251	0,0389	0,0003	0,0000	0,1047	0,0145	0,0504	0,0504	0,0037	0,0251	0,0397
MARTI	-0,0011	0,0002	-0,0006	0,0001	-0,0038	-0,0020	-0,0171	0,0084	0,0005	0,0189	-0,0031	-0,0031	-0,0002	-0,0142	-0,0007
MERIT	0,0222	0,0000	0,0075	0,0000	0,0023	0,0011	0,0688	0,0862	0,0001	0,0646	0,0085	0,0085	0,0025	0,0016	0,0025
PKENT	0,0095	0,0020	0,0201	0,0000	0,0358	0,0279	0,0005	0,0105	0,0004	0,0151	0,0023	0,0023	0,0229	0,0316	0,0536
TEKTU	0,0006	0,0000	0,0005	0,0001	0,0015	0,0008	-0,0019	0,0646	0,0001	-0,0036	0,0032	0,0032	0,0002	0,0017	0,0001
ULAS	0,0172	0,0170	0,0084	0,0003	0,0153	0,0099	0,0004	0,0000	0,0000	0,0050	0,0000	0,0000	0,0029	0,0136	0,0006

Stage 4: Determination The Positive Ideal (A*) and Negative Ideal (A -) Solutions

At this stage, the values in the V matrix and the Ideal (A*) solution set were created using Equation (11) and the Negative Ideal (A-) solution set was created using Equation (12).

For the Ideal (A*) solution set, the largest values in the V matrix columns were selected, and for the Negative Ideal (A-) solution set, the smallest values in the V matrix columns were selected. The results are shown in Table 23, Table 24, Table 25 and Table 26 according to fixed and variable weights.

Table 23

Main Metal Industry Sector 2021 TOPSIS Method Determination The Positive Ideal (A) and Negative Ideal (A -) Solutions*
(For Fixed Weights)

	CRITERIA / FINANCIAL RATIOS														
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A*	0,0586	0,0639	0,0568	0,0665	0,0330	0,0175	0,0565	0,0547	0,0584	0,0613	0,0424	0,0433	0,0348	0,0223	0,0126
A-	-0,0113	0,0001	-0,0145	-0,0009	-0,0265	-0,0404	-0,0031	0,0003	0,0003	-0,0167	-0,0307	-0,0314	-0,0431	-0,0299	-0,0550

Table 24

Main Metal Industry Sector 2021 TOPSIS Method Determination The Positive Ideal (A) and Negative Ideal (A -) Solutions*
(For Variable Weights)

	CRITERIA / FINANCIAL RATIOS														
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A*	0,0431	0,0601	0,0421	0,0703	0,0280	0,0169	0,0739	0,0891	0,1019	0,0590	0,0302	0,0292	0,0250	0,0244	0,0109
A-	-0,0083	0,0001	-0,0108	-0,0009	-0,0225	-0,0389	-0,0041	0,0005	0,0006	-0,0161	-0,0219	-0,0212	-0,0310	-0,0327	-0,0478

Table 25

Accommodation Sector 2021 TOPSIS Method Determination The Positive Ideal (A) and Negative Ideal (A -) Solutions*
(For Fixed Weights)

	CRITERIA / FINANCIAL RATIOS														
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A*	0.0461	0.0513	0.0555	0.0618	0.0468	0.0492	0.0645	0.0528	0.0665	0.0552	0.0604	0.0604	0.0618	0.0445	0.0510
A-	-0,0012	0,0000	-0,0008	0,0000	-0,0050	-0,0026	-0,0161	0,0000	0,0000	-0,0031	-0,0037	-0,0037	-0,0002	-0,0200	-0,0007

Table 26

Accommodation Sector 2021 TOPSIS Method Determination The Positive Ideal (A) and Negative Ideal (A -) Solutions*

(For Variable Weights)

	CRITERIA / FINANCIAL RATIOS														
	MAX	MAX	MAX	MAX	MAX	MAX	MIN	MAX	MIN	MAX	MAX	MAX	MAX	MAX	MAX
	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	D1	D2	D3
A*	0,0407	0,0491	0,0463	0,0575	0,0358	0,0389	0,0688	0,0862	0,1047	0,0646	0,0504	0,0504	0,0599	0,0316	0,0536
A-	-0,0011	0,0000	-0,0006	0,0000	-0,0038	-0,0020	-0,0171	0,0000	0,0000	-0,0036	-0,0031	-0,0031	-0,0002	-0,0142	-0,0007

Stage 5: Determination of Distance Measurement Between Alternatives

In this method, Ideal discrimination (Si*) and Negative Ideal discrimination (Si-) measures were calculated with the help of Equation (13) and Equation (14) in order to find the deviations of the values from the Ideal (A*) solution set and the Negative Ideal (A-) solution set. The results are shown in Table 27, Table 28, Table 29 and Table 30.

Table 27

Main Metal Industry Sector 2021 TOPSIS Method Determination of Distance Measurement Between Alternatives (For Fixed Weights)

Company Code	Si +	Si -
AYES	0,2192	0,0728
BRSAN	0,1452	0,1648
BURCE	0,1750	0,1212
BURVA	0,1743	0,1218
CELHA	0,2048	0,0738
CEMAS	0,1175	0,2094
CEMTS	0,1441	0,1612
CUSAN	0,1956	0,0799
DMSAS	0,1921	0,0861
DOKTA	0,1910	0,1032
ERBOS	0,1804	0,1080
EREGL	0,1694	0,1139
ISDMR	0,1834	0,1047
IZMDC	0,1788	0,1190
KRDMA	0,1505	0,1567
SARKY	0,2090	0,0804
TUCLK	0,2298	0,0523

Table 28

Main Metal Industry Sector 2021 TOPSIS Method Determination of Distance Measurement Between Alternatives (For Variable Weights)

Company Code	Si +	Si -
AYES	0,2204	0,0684
BRSAN	0,1640	0,1566
BURCE	0,1943	0,1049
BURVA	0,1953	0,1053
CELHA	0,2156	0,0610
CEMAS	0,1434	0,1898
CEMTS	0,1721	0,1407
CUSAN	0,2071	0,0683
DMSAS	0,2038	0,0742
DOKTA	0,1920	0,1169
ERBOS	0,1972	0,0924
EREGL	0,1816	0,1016
ISDMR	0,1918	0,0936
IZMDC	0,1973	0,1053
KRDMA	0,1739	0,1342
SARKY	0,2140	0,0721
TUCLK	0,2262	0,0475

Table 29

Accommodation Sector 2021 TOPSIS Method Determination of Distance Measurement Between Alternatives (For Fixed Weights)

Company Code	Si +	Si -
AYCES	0,1913	0,0559
AVTUR	0,1704	0,0848
KSTUR	0,1706	0,1151
MAALT	0,1237	0,1660
MARTI	0,2253	0,0199
MERIT	0,1742	0,1202
PKENT	0,1709	0,1137
TEKTU	0,2069	0,0495
ULAS	0,1939	0,0600

Table 30

Accommodation Sector 2021 TOPSIS Method Determination of Distance Measurement Between Alternatives (For Variable Weights)

Company Code	Si +	Si -
AYCES	0,2048	0,0550
AVTUR	0,1949	0,0728
KSTUR	0,1942	0,1031
MAALT	0,1419	0,1672
MARTI	0,2316	0,0240
MERIT	0,1771	0,1437
PKENT	0,1924	0,0971
TEKTU	0,2119	0,0691
ULAS	0,2136	0,0489

Stage 6: Rank The Preference Order

The relative closeness to the ideal solution (C*i) was calculated using the formulas in Equation (15) and Equation (16), and their importance levels were determined by sorting. The results are shown in Table 31, Table 32, Table 33 and Table 34.

Table 31

*Main Metal Industry Sector 2021 TOPSIS Method Relative Closeness to Fixed Weighted Ideal Solution (C*i)*

Company Code	C Value	Row Number
CEMAS	0,6406	1
BRSAN	0,5316	2
CEMTS	0,5281	3
KRDMA	0,5101	4
BURVA	0,4113	5
BURCE	0,4091	6
EREGL	0,4021	7
IZMDC	0,3996	8
ERBOS	0,3745	9
ISDMR	0,3634	10
DOKTA	0,3508	11
DMSAS	0,3095	12
CUSAN	0,2902	13
SARKY	0,2778	14
CELHA	0,2648	15
AYES	0,2493	16
TUCLK	0,1853	17

Table 32

*Main Metal Industry Sector 2021 TOPSIS Method Relative Closeness to Variable Weighted Ideal Solution (C*i)*

Company Code	C Value	Row Number
CEMAS	0,5697	1
BRSAN	0,4885	2
CEMTS	0,4498	3
KRDMA	0,4355	4
DOKTA	0,3784	5
EREGL	0,3588	6
BURCE	0,3506	7
BURVA	0,3504	8
IZMDC	0,3480	9
ISDMR	0,3280	10
ERBOS	0,3191	11
DMSAS	0,2670	12
SARKY	0,2520	13
CUSAN	0,2480	14
AYES	0,2370	15
CELHA	0,2206	16
TUCLK	0,1734	17

Table 33

*Accomodation Sector 2021 TOPSIS Method Relative Closeness to Fixed Weighted Ideal Solution (C*i)*

Company Code	C Value	Row Number
MAALT	0,5730	1
MERIT	0,4083	2
KSTUR	0,4029	3
PKENT	0,3995	4
AVTUR	0,3323	5
ULAS	0,2364	6
AYCES	0,2261	7
TEKTU	0,1930	8
MARTI	0,0812	9

Table 34

*Accomodation Sector 2021 TOPSIS Method Relative Closeness to Variable Weighted Ideal Solution (C*i)*

Company Code	C Value	Row Number
MAALT	0,5409	1
MERIT	0,4479	2
KSTUR	0,3467	3
PKENT	0,3353	4
AVTUR	0,2719	5
TEKTU	0,2459	6
AYCES	0,2117	7
ULAS	0,1864	8
MARTI	0,0940	9

DISCUSSION

After it is understood that the cash flow statement, the importance of which has not been understood for many years in our country, is a necessity and indispensable in a competitive economic environment, accounting standards regulations are handled as a whole. The Turkish Commercial Code and related legislation have started to be made in our country and have been made compulsory for businesses of certain sizes.

The economic crises experienced in recent years have further increased the importance of cash management and liquidity control. Today, cash management has a very important role in the survival of businesses. The survival of businesses depends on their ability to create and maintain the money they need as well as being profitable. The most common reasons for businesses to suffer economic losses are that they cannot produce the cash they need despite being profitable enough and they have to sell their non-cash assets below their value. Businesses that have cash problems or inefficient practices in cash management may face the risk of failure and bankruptcy.

The cash flow statement is basically a table that shows the cash resources of the business and how these resources are used. Cash flow statement is a financial statement that classifies cash flows from operating, investing and financing activities in the financial period and aims to provide information about changes in cash and cash equivalents to financial statement users such as investors, credit institutions, shareholders and managers. According to the General Communique on Accounting System Practices, which has been in force in our country since 1994, the cash flow statement is considered within the scope of additional financial statements and must be prepared by businesses exceeding a certain size. For this reason, it is thought that the importance of this table for standard companies is not sufficiently understood.

CONCLUSION

In this study the companies included in the analysis in the Accommodation and Main Metal Industry sectors in the study, according to the Cash Flow performances used in the analysis, are listed in Table 31, Table 32, Table 33 and Table 34. Companies datas are based on the years 2017-2018-2019-2020 and 2021.

As a result of the analysis made by giving a fixed weight in the measurement of financial performance of accommodation companies, the most important indicator is the Cash Turnover Effectiveness Ratio (B4), and the least influential indicator is the Shareholders' Cash Return Leverage Ratio (D2). In the study, the companies included in the analysis in the accommodation sector were also ranked according to their performance, and it was determined that the most successful accommodation company in terms of overall performance was Marmaris Altınyunus Turistik Tesisler A.Ş.

As a result of the analysis made by giving variable weight in the measurement of the financial performance of the accommodation companies, the most important indicator is the Cash Turnover Effectiveness Ratio (B4), and the least influential indicator is the Shareholders' Cash Return Leverage Ratio (D2). In the study, the companies included in the analysis in the accommodation sector were also ranked according to their performance, and it was determined that the most successful accommodation company in terms of overall performance again was Marmaris Altınyunus Turistik Tesisler A.Ş.

As a result of the analysis made by giving a fixed weight in the measurement of the financial performances of Main Metal Industry companies, the most important indicator is the Cash Balance Efficiency Ratio (B5), the least affecting indicator is the Cash Flow Margin Leverage Ratio (C3) indicator. In the study, the companies included in the analysis in the basic metal industry sector were ranked according to their performance, and the most successful basic metal industry company in terms of overall performance was Çemaş Döküm Sanayi A.Ş. has been determined.

As a result of the analysis made by giving a variable weight in the measurement of the financial performances of Main Metal Industry companies, the most important indicator is the Cash Balance Efficiency Ratio (B5), the least affecting indicator is the Cash Flow Margin Leverage Ratio (C3) indicator. In the study, the companies included in the analysis in the basic metal industry sector were ranked according to their performance, and the most successful basic metal industry company in terms of overall performance again was Çemaş Döküm Sanayi A.Ş. has been determined.

As can be seen, the use of fixed weight and variable weight values in the analysis did not make any difference in the performance results.

In the analysis consisting of cash flow rates criteria, Cash Balance (B5), Cash Turnover (B4) and Cash Reinvestment Ratio (B3) criteria are among the top 5 in both the Main Metal Industry and the Accomodation Sector.

Acommodation Sector

Serial Number	Criteria	Ratio
1	**B4**	0,1088
2	**B5**	0,1050
3	**C1**	0,0780
4	**B3**	0,0711
5	**D3**	0,0701
6	**D1**	0,0646
7	**A2**	0,0638
8	**A4**	0,0620
9	**A1**	0,0588
10	**C2**	0,0556
11	**C3**	0,0556
12	**A3**	0,0556
13	**B2**	0,0526
14	**B1**	0,0509
15	**D2**	0,0474

Main Metal Industry Sector

Serial Number	Criteria	Ratio
1	**B5**	0,1164
2	**B4**	0,1086
3	**B3**	0,0872
4	**D2**	0,0729
5	**A4**	0,0705
6	**B2**	0,0643
7	**C1**	0,0642
8	**A2**	0,0627
9	**D3**	0,0580
10	**B1**	0,0565
11	**A3**	0,0494
12	**A1**	0,0490
13	**D1**	0,0479
14	**C2**	0,0475
15	**C3**	0,0450

In the Main Metal Industry sector, the criteria with the highest importance are Cash Balance (B5) and Cash Turnover (B4), and the criteria with the lowest degree of importance are Cash Flow Margin (C3). In the accommodation sector, the criteria with the highest importance are Cash Balance (B5) and Cash Turnover (B4), and the criteria with the lowest importance are Shareholders' Cash Return Ratio (D2).

In line with these results, it can be said that Cash Balance and Cash Turnover have a high contribution to the financial performance in both sectors.

The Cash Flow Margin (C3) criterion, which shows the power of converting sales into cash, is at the bottom of the ranking of success rates according to performances in the Main Metal Sector, and is higher in the Accommodation sector. The reason for this can be explained as the payback period of resource inputs in the accommodation sector is shorter than in the basic metal industry sector.

Another big difference is seen in the Shareholders' Cash Return (D2), which shows the percentage of cash flows obtained by operating activity through equity. It is bottom of the ranking of success rates according to performance in the Accommodation sector and is among the top 5 for Main Metal Industry Sector. The reason for this difference can be explained as follows; The experience of accommodation businesses differs depending on their needs due to the season they operate. However, since the activities continue in every period of the year in the basic metal industry sector, in case all the cash required for operational activities is provided from equity, all of the profit to be obtained there will still belong to the shareholders.

Another big difference is seen in the Earnings/Profit Quality Ratio(C1). This value, which is very important for the accommodation sector and is among the top 5 in the ranking of success rates according to performances, is in the lower ranks for the Main Metal Industry sector. The difference between this ratio, which shows the cash collectability of the net profit and the percentage of the net profit turning into cash, between the two sectors may be that the Basic Metal Industry sector sales in longer terms than the accommodation sector and the collection may be made in the long term, the Main Metal Industry sector can also use the profits it earns in commercial goods instead of turning it into cash. Therefore, it can be explained that while it is important to turn the profit into cash in the accommodation sector, it is more important to transform the profit into commercial goods instead of cash in the basic metal industry.

It is clear that cash flow data is very important in predicting bankruptcy and financial distress. Ratios based on cash flow are very useful tools in evaluating a company's financial strength, sustainability, and performance.

In addition, the order of importance of the ratios used in cash flow analysis in the measurement of financial performance differs according to the characteristics of the sector in which it operates. Therefore, considering the ratios selected according to the characteristics of the relevant sector in the financial situation performance measurement will be effective in making the right decisions.

The results obtained in the study can support business partners, managers, investors and financial information users in their decisions in order to determine the adequacy of the financial situation of companies operating in the basic metal industry and accommodation sector.

In the literature, there are many studies on financial performance measurement. However, no study was found in which the CRITIC and TOPSIS models were used together and the two different sectors were compared. Therefore, this study can contribute to the literature.

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