

- RESEARCH ARTICLE -

EVALUATION OF TURKISH FACTORING COMPANY PERFORMANCES USING TOPSIS METHOD

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Abstract

Most of the studies aiming to measure the financial performance of financial sector have handled banks, insurance companies, and pension companies. Factoring industry has been mostly neglected, although this industry is in an ascending trend in the World. The aim of this study is to evaluate the financial performance of Turkish factoring companies for the years between 2017 and 2019. This study also aims to be the first study, which examines all companies in the Turkish factoring industry, and to give an idea about sizes of those companies. For this purpose, TOPSIS method was implemented using equally weighted six criteria. The number of small companies in the best performing ten factoring companies was seven, five and six in 2019, 2018 and 2017 respectively. If the big and small companies are examined separately, it was observed that the number of companies owned by banks is increasing in the best performing ten big factoring companies. Since the number of factoring companies owned by banks is increasing in the best performing ten big factoring companies, small factoring companies should find ways to cooperate with banks if they desire to increase their size of operations.

Keywords: Factoring, Financial Performance, Ratio Analysis, TOPSIS Method, Size.

JEL Codes: G20, G21, G23.

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TÜRK FAKTORİNG ŞİRKETLERİNİN PERFORMANSLARININ TOPSIS METOTLA DEĞERLENDİRİLMESİ²

Öz

Finans sektörünün finansal performansını ölçmeyi amaçlayan çoğu çalışma bankaları, sigorta şirketlerini ve emeklilik şirketlerini ele almışlardır. Her ne kadar dünyada yükselen bir eğilim içinde olsa da faktoring endüstrisi çoğunlukla ihmal edilmiştir. Bu çalışmanın amacı faktoring şirketlerinin performansını 2017 -2019 yılları arası için ölçmektir. Bu çalışma ayrıca Türk faktoring sektöründeki tüm faktoring şirketlerini inceleyen ve bu şirketlerin büyüklükleri hakkında bilgi veren ilk çalışma olmayı amaçlamaktadır. Bu amaçla TOPSIS metodu eşit ağırlıklı altı kistas kullanılarak uygulanmıştır. 2019, 2018 ve 2017 yıllarında, en iyi performans gösteren 10 faktoring firması içindeki küçük firma sayısı sırasıyla yedi, beş ve altı olmuştur. Büyük ve küçük firmalar ayrı ayrı incelenirse, en iyi performans gösteren 10 büyük faktoring firması içinde, bankaların sahibi olduğu faktoring

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²Genişletilmiş Türkçe Özet, çalışmanın sonunda yer almaktadır.

şirketlerin sayısının arttığı gözlenmektedir. Bankaların sahibi olduğu faktoring şirketlerinin en iyi performans gösteren 10 büyük faktoring şirketi içindeki sayıları arttığından dolayı, küçük faktoring şirketlerinin, işlem hacimlerini artırmak istiyorlarsa, bankalarla işbirliği yollarını aramaları gerekmektedir.

Anahtar Kelimeler: *Factoring, Finansal Performans, Oran Analizi, TOPSIS Metot, Büyüklük.*

JEL Kodları: *G20, G21, G23.*

“Bu çalışma Araştırma ve Yayın Etiğine Uygun Olarak Hazırlanmıştır.”

1. INTRODUCTION

Liquidity is a vital issue for all firms. In Turkey, while firms in some industries have less liquidity problems such as airline companies, food companies, hospitals and hotels; firms in some industries need more cash to make day to day activities such as textile and leather companies, heavy manufacturing companies, construction companies. These companies may receive loans from banks or try alternative ways to increase their liquidity.

An alternative way of finding funds is selling account receivables to a third party. This is called as factoring or receivables factoring. While factoring company takes a percentage of the receivable as a commission, the firms which need cash have the opportunity to collect their receivables earlier and operate their businesses. Mostly, Turkish textile and leather exporters use factoring transactions to offset their cash needs. From that perspective, factoring companies help many sectors operate healthily by providing cash they need. The failure of those companies may cause a cash crisis which also may affect investment decisions and some macro-economic indicators.

Although factoring industry is an important industry, most studies gather around the banking, insurance and pension sector performances rather than that industry. What type of factoring companies in Turkey are showing better performances has never been examined. This study is important from three aspects. The first is there are few studies handling Turkish factoring sector performances. The second is the study includes all companies in the sector, so it provides healthier results than the present literature. The third, this study provides insights in terms of size and ownership of Turkish factoring companies.

The rest of the study is structured as follows. Literature review and some information on factoring industry are given as subsections of the introduction part. While Section 2 explains the method, section 3 gives the results. Section 4 is the discussion part. Conclusion of the study is given after section 4.

1.1 Literature Review

As stated above, the number of studies measuring the performance of factoring industry is limited. For that reason, the literature review also includes studies investigating banks and insurance companies using the TOPSIS method.

Demireli (2010) made research on ranking of Turkish state-owned banks for the years 2001 to 2007. Demireli (2010) used ten ratios in the analysis. These ratios are equity/ total assets, total loans/ total assets, non-performing loans/ total loans, long-term assets/ total assets, liquid assets/ total assets, liquid assets/ short term liabilities, net income/ total assets, net income/ equity, net interest income/ total assets and net interest income/ operating income. The author states that the state-owned banks were affected by the domestic and global financial crisis.

Akyüz and Kaya (2013) tried to evaluate the financial performance of non-life and life/pension insurance sector in Turkey between the years 2007 and 2011. The authors used ten ratios which are premiums/equity, equity/total assets, equity/ technical provisions, premium receivables/equity, capital adequacy ratio, technical provisions ratio, current ratio, liquidity ratio, return on equity and return on assets. Akyüz and Kaya (2013) state that, for non-life insurance sector, 2007 was the most successful year and the year 2008 was the worst year.

Oral (2016) evaluated financial performance of privately owned deposit banks in Turkey using TOPSIS method for the years 2012, 2013 and 2014. Oral (2016) used ten ratios as used in many studies. These ratios are equity/ total assets, financial assets/ total assets, total credits and receivables/total assets, pre-tax profit/total assets, liquid assets/total assets, liquid assets/ short term liabilities, term net profit- loss/ total assets, term net profit- loss/total equity, net interest income/total assets and net interest income/total operating income.

Yamaltdinova (2017) made research about the financial performance of Kirghizian banks for the years between 2010 and 2014. The author used 27 ratios related to capital adequacy, balance sheet structure, liquidity, profitability, income- expense structure and some ratios of bank branches to evaluate the performance of 15 banks. In contrast to many studies, Yamaltdinova (2017) gives different weights to ratios regarding the subjective views of some bank specialists.

Özkan (2017) investigated the performances of publicly traded private and state-owned commercial banks in Turkey for the years between 2007 and 2015. Özkan (2017) used ten ratios which are asset growth, return on assets, equity growth, return on equity, equity/ total assets, current assets/ total assets, long-term assets/ total assets, total loans/ total assets, interest income growth and net income growth. The author gives the performance scores of the banks.

Dursun and Bozkır (2018) measured the asset quality of commercial banks in Turkey for the years from 2013 to 2017. Rather than using profitability ratios such as return on assets or return on equity, the authors preferred to use three ratios which are total loans and receivables/ total assets, non-performing loans/ total loans and receivables, financial assets/total assets.

Alsü, Taşdemir and Kallo (2018) examined the financial performance of participation banks in some countries including Saudi Arabia, United Arab Emirates, Kuwait, Qatar, Jordan and Turkey for the years between 2009 and 2015. The authors used ten ratios which are cash and

cash equivalents/deposits, equity/ deposits, cash and cash equivalents/total assets, after tax profit/ equity, after tax profit/total assets, after tax profit/ number of shares, total liabilities/total assets, equity/total assets, investments/deposits and deposits/total assets. The authors state that Saudi Arabian and Qatari banks show better performances than the other banks in the analysis.

Roy and Das (2018) used TOPSIS analysis to evaluate the financial performance of selected banks in Bangladesh. By calculating the criteria weights through Shannon entropy method, the authors ranked the banks using TOPSIS method. According to composite index they calculated, foreign commercial banks and private commercial banks have been performing better than state-owned commercial banks in Bangladesh during their study period.

Şahin and Başarır (2019) evaluated the financial performance of pension companies in Turkey. The authors assert that although there are some differences between the results of the methods used, the results are consistent in general.

Özçelik and Küçükçakal (2019) analyzed the financial performance of factoring and leasing companies traded in Borsa Istanbul for the years between 2009 and 2016. The authors used six ratios which are earning per share, asset turnover, total debt/ total assets, return on assets, return on equity and current ratio. Özçelik and Küçükçakal (2019) gave the firm scores and rankings in their study.

Sari and Kayral (2019) implemented a two-stage method to measure the financial performance of Turkish banks. The study included ten commercial banks for the years from 2008 to 2018. The authors also implemented a stepwise regression analysis.

Selimler and Taş (2019) evaluated the credit managing performance of financing, factoring and leasing companies in Turkey for the years between 2015 and 2018. The authors determined twelve ratios. They evaluated the performances of three company types in the same pool and determined the ranking of those years.

Guo (2020) evaluated the financial ability of Port listed companies in China using entropy weight Topsis method. The author states that the overall debt paying ability of those firms is good, profitability gap is large and the general level of operation ability is poor. The Port listed companies should improve their cash flow management.

1.2 Factoring Industry

Factoring industry has been an important part of the financial system and growing in the World in terms of volume. While Figure1 provides an international point of view, figure 2 gives an idea about domestic transactions.

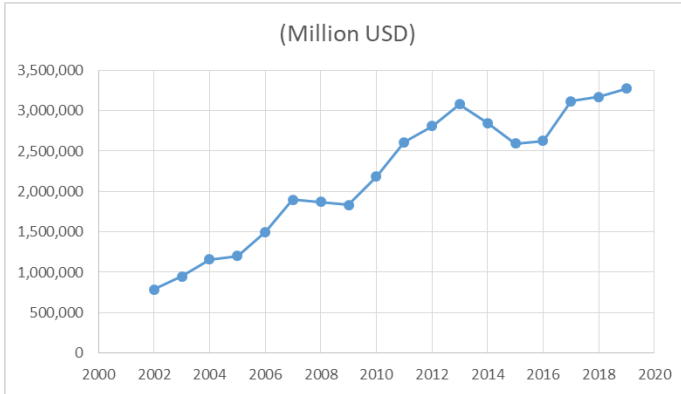


Figure 1: Factoring Volume in the World³

Source: <https://www.fkb.org.tr/Sites/1/upload/files/dunya-factoring-ciro-gelisimi-1930.pdf>

According to Figure 1, factoring industry is continually growing between the years 2002 and 2007. The trivial decrease in 2008 and in 2009 may be explained with the global financial crisis. From 2009 to 2013 there is an increase. In 2019, the industry reaches its top level.

It can be inferred from Figure 1 that the demand for factoring transactions has dramatically increased in the World. In 2019, according to Association of Financial Institutions (AFI), the volume of factoring of transactions reached 3.273.284 million USD. Although most of the cash need is met by banks, factoring industry (receivables discounting) is an important alternative way of finding cash.

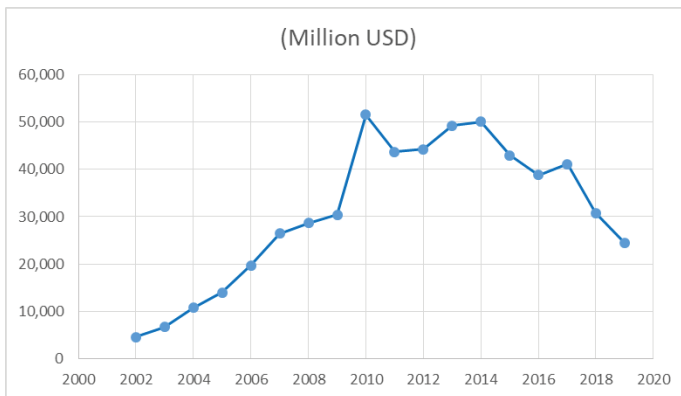


Figure 2: Factoring Volume in Turkey⁴

Source: <https://www.fkb.org.tr/Sites/1/upload/files/dunya-factoring-ciro-gelisimi-1930.pdf>

Factoring industry show similarities between Turkey and the World until the year 2007. After 2007, the demand in Turkey for factoring transactions started to rise and has peaked in 2010,

³ This figure is produced using the data given in the website of AFI (<https://www.fkb.org.tr>).

⁴ This figure is produced using the data given in the website of AFI (<https://www.fkb.org.tr>).

but after that date the demand seems to decrease, especially between 2017 and 2019. The increase between 2009 and 2010 shows that the negative effect of the global financial crisis began to disappear and the decrease after 2014, to some extent may be explained with the decrease in the value of the Turkish currency.

Banking Regulation and Supervision Agency (BRSA) is the organization which supervises banks, factoring companies, leasing companies, financing companies and some other company types operating in finance sector. The company types and the number of the companies under supervision are given in Table 1.

One important issue related to Table 1 is while the number of other organizations increases, the number of factoring companies decreases. This may be linked to Figure 2. The decline in volume may be the reason for the decrease in the number of factoring and leasing companies. It is weird that Turkish factoring sector has a reverse direction flow when compared with the World's data. The decline of volume (in terms of USD) and the decline in the number of factoring companies in Turkey should be investigated carefully since the sector is in an ascending trend in the World.

Table 1: Institutions under Supervision

Organization Type	2013	2014	2015	2016	2017	2018
Banks	49	51	52	52	52	53
<i>Deposit Banks</i>	32	32	32	32	32	32
<i>Participation Banks</i>	4	4	4	5	5	6
<i>Development & Investment Banks</i>	13	13	13	13	13	13
<i>Banks under TMSF</i>	2	2	3	2	2	2
Non-Bank Financial Institution	122	119	107	101	99	94
<i>Leasing Companies</i>	33	30	29	26	25	23
<i>Factoring Companies</i>	76	77	66	61	60	57
<i>Financing Companies</i>	13	12	12	14	14	14
Other Organizations	223	230	246	351	357	371
Asset Management Companies	11	10	13	15	15	20
Independent Auditing Companies	42	39	39	119	125	125
Rating Companies	1	1	1	1	1	1
Valuation Companies	114	123	127	129	130	134
Foreign Bank Offices	47	48	48	47	46	44
Financial Holding Companies	3	3	3	2	0	0
Payment Institutions	0	0	5	25	29	34
Electronic Money Institutions	0	0	4	7	11	14
Other	5	6	6	6	0	0
Total	394	400	405	504	508	519

Source: BRSA, Annual Report (2018:57)

2. METHOD

2.1 Data

As stated in the literature review part, the number of studies about factoring companies is limited. Özçelik and Küçükçakal (2019) handled the performance of seven factoring and leasing companies traded in the stock exchange. Selimler and Taş (2019) also evaluated the performance of three types of companies (financing, factoring and leasing) in the same pool. Although evaluating different types of companies in the same pool gives an idea about their performance, handling those companies in different pools would provide a better comprehension, since the success of a unit is based on the performance of other similar units. For example, comparing the performance of a bank with the performance of an insurance company would provide misleading results. Therefore, this study becomes more important since it evaluates the performance of factoring industry as a whole in the same pool.

The performances of factoring companies may be evaluated regarding on two main criteria. These are non-performing receivables and net profit. If those companies have enough profit and have the ability to collect all receivables in time then this may be accepted as a good performance. So the main ratios for performance evaluation should be about these two criteria. The non-performing receivable is a problem for financial institutions such as banks, factoring and leasing companies. Provided that the amount of non-performing receivables is lower, the performance will be higher. So the first and second ratios given in Table 2 are added into the analysis, and these ratios should be minimized. Non-performing loans were also regarded by Demireli (2010), and Dursun and Bozkır (2018) for the rankings of banks.

Table 2: Ratios used in the Analysis

	Ratio	Weight
R1	Non-performing receivables ⁵ (gross) / Total factoring receivables	16.66%
R2	Non-performing receivables (gross) / Total equity	16.66%
R3	Net income/ Total equity	16.66%
R4	Net income/ Total assets	16.66%
R5	Equity / Total assets	16.66%
R6	Total factoring receivables / Total Assets	16.66%

Profitability is also an important indicator. It is assumed that if the profitability of a firm is high, then performance can be accepted as high. So the third and fourth ratios are added in the analysis to represent profitability of factoring companies. Return on assets and return on equity were preferred by Akyüz and Kaya (2013), Özkan (2017), and Özçelik and Küçükçakal (2019).

After regarding the two main criteria, some other ratios may be considered. Equity to total assets was added as an indicator of performance. If a firm uses its own resources, the bankruptcy probability of that firm will be lower, also the interest expense amount to be paid will be lower. So the fifth ratio is also added into the analysis.

⁵ Factoring receivables under follow up were considered as non-performing receivables.

If the total receivables / total assets are high and the non-performing receivables are low, then it may be interpreted that such a factoring company uses its resources efficiently. So total receivables / total assets ratio was added into the analysis as the sixth criterion.

The data used in this study was taken from the websites of factoring companies since there is no database which provide Turkish factoring companies' financial ratios. The data was taken from the independent audit reports one by one. The study covers the years between 2017 and 2019 since it takes too much time to collect all the data from the reports.

Regarding the literature, company type and the availability of the data, six ratios were chosen to evaluate the financial performance of the factoring companies. Since the number of the studies on factoring companies was limited, the literature of banks and insurance companies was also regarded to determine the ratios. The full list of the ratios used in the analysis is given in the table 2.

2.2 Methodology

In this study, TOPSIS (The Technique for Order Preference by Similarity to Ideal Solution) method was implemented to evaluate the financial performance of companies. TOPSIS method was first proposed by Hwang and Yoon (1981).

The steps of the method can be summarized as follows (Wang, 2017:4068-4069):

- 1) The first step of this method is determining the decision matrix.

$$X = (x_{ij})_{n \times m} \quad (1)$$

- 2) After determining the decision matrix, the matrix should be normalized.

$$r_{ij} = \frac{x_{ij}}{\sqrt{\sum_{k=1}^n x_{kj}^2}} \quad (2)$$

Where r_{ij} is the normalized value, $i=1,2,3,\dots,n$ and $j=1,2,3,\dots,m$.

- 3) As a third step the weighted normalized decision matrix should be calculated.

$$v_{ij} = w_j r_{ij} \quad (3)$$

Where w represents the weight of the j th criterion. The total of the all weights should be equal to 1.

- 4) After calculation of weighted normalized matrix, the fourth step is to find positive and negative ideal solutions.

$$A^* = \{v_1^*, v_2^*, \dots, v_m^*\} \quad (4)$$

$$= \{\max_j v_{ij} | j \in Q_b\}, \{\min_j v_{ij} | j \in Q_c\},$$

$$A^- = \{v_1^-, v_2^-, \dots, v_m^-\} \quad (5)$$

$$= \{\min_j v_{ij} | j \in Q_b\}, \{\max_j v_{ij} | j \in Q_c\},$$

Where Q_b and Q_c are defined as sets of benefit and cost criteria.

- 5) The fifth step is Euclidean distance calculation from both the positive and negative ideal solution.

$$D_i^* = \sqrt{\sum_{j=1}^m (v_{ij} - v_j^*)^2}, i = 1,2,3, \dots n \tag{6}$$

$$D_i^- = \sqrt{\sum_{j=1}^m (v_{ij} - v_j^-)^2}, i = 1,2,3, \dots n \tag{7}$$

6) The sixth step is to calculate the relative closeness all alternatives to the ideal solution.

$$RC_i = \frac{D_i^-}{D_i^- + D_i^*}, i = 1,2,3, \dots n \tag{8}$$

After these six steps, the alternatives are ranked based on the relative closeness.

3. RESULTS

Table 3 and Table 4 show the decision and the normalized matrices of the Turkish factoring industry respectively.

Table 3: Decision Matrix for 2018

	R1	R2	R3	R4	R5	R6
Company 1	0.1991	0.3876	0.3210	0.1345	0.4190	0.8157
Company 2	1.3748	0.4457	0.0391	0.0383	0.9774	0.3169
Company 3	0.0846	0.1850	0.1638	0.0650	0.3966	0.8669
Company 4	0.0926	0.3583	0.0172	0.0034	0.1971	0.7632
Company 5	0.0955	0.3021	0.2019	0.0629	0.3116	0.9853
⋮	⋮	⋮	⋮	⋮	⋮	⋮
Company 52	0.0172	0.1215	0.5146	0.0619	0.1203	0.8522
Company 53	0.0509	0.5372	0.2976	0.0273	0.0917	0.9683
Company 54	0.1444	0.2150	0.0761	0.0468	0.6148	0.9152
Company 55	0.0448	0.1263	0.1257	0.0351	0.2791	0.7863
Company 56	0.0427	0.1181	0.2482	0.0818	0.3294	0.9119

Table 4: Normalized Decision Matrix for 2018

	R1	R2	R3	R4	R5	R6
Company 1	0.0624	0.1016	0.1604	0.2496	0.1157	0.1319
Company 2	0.4310	0.1169	0.0196	0.0710	0.2699	0.0512
Company 3	0.0265	0.0485	0.0818	0.1205	0.1095	0.1401
Company 4	0.0290	0.0939	0.0086	0.0063	0.0545	0.1234
Company 5	0.0300	0.0792	0.1009	0.1168	0.0861	0.1593
⋮	⋮	⋮	⋮	⋮	⋮	⋮
Company 52	0.0054	0.0319	0.2571	0.1149	0.0332	0.1378
Company 53	0.0160	0.1408	0.1487	0.0507	0.0253	0.1565
Company 54	0.0453	0.0564	0.0380	0.0868	0.1698	0.1480
Company 55	0.0141	0.0331	0.0628	0.0651	0.0771	0.1271
Company 56	0.0134	0.0310	0.1240	0.1517	0.0910	0.1474

Table 5 shows the performance scores of Turkish factoring companies. The number of factoring companies in the analysis is 56, but since some firms' data is not reachable, there are 54 companies in 2019 results and 55 companies in 2017 results. Table 5 also include size information. Size is determined by median of the total assets of the related year. If the company has equal or more amount of assets than the median of the related year's assets, then the company is accepted as a big company. If its asset amount is less than the median of the related year's assets then it is accepted as a small company.

Table 5: Performance Scores in terms of Factoring Companies

Company	Year	Size	Score	Rank	Year	Size	Score	Rank	Year	Size	Score	Rank
Company 1	2019	SMALL	0.9089	1	2018	SMALL	0.8185	5	2017	SMALL	0.7653	7
Company 2	2019	SMALL	0.7446	40	2018	SMALL	0.5806	48	2017	SMALL	0.3804	55
Company 3	2019	SMALL	0.7449	39	2018	SMALL	0.7567	19	2017	BIG	0.6897	36
Company 4	2019	BIG	0.7228	43	2018	BIG	0.6541	43	2017	BIG	0.6619	45
Company 5	2019	BIG	0.8047	17	2018	BIG	0.7497	21	2017	BIG	0.7196	18
Company 6	2019	BIG	0.8775	3 Bank	2018	BIG	0.8069	7 Bank	2017	BIG	0.7648	8 Bank
Company 7	2019	SMALL	0.7004	47	2018	SMALL	0.4895	53	2017	SMALL	0.6552	47
Company 8					2018	SMALL	0.6249	45	2017	SMALL	0.6731	41
Company 9	2019	SMALL	0.7701	30	2018	SMALL	0.7614	17	2017	SMALL	0.7039	25
Company 10	2019	SMALL	0.7303	41	2018	SMALL	0.4895	54	2017	SMALL	0.5597	51
Company 11	2019	SMALL	0.4661	53	2018	SMALL	0.5338	50	2017	SMALL	0.5738	50
Company 12	2019	SMALL	0.7196	45	2018	SMALL	0.5605	49	2017	SMALL	0.7102	20
Company 13	2019	BIG	0.7688	31	2018	BIG	0.7306	25	2017	BIG	0.6968	30
Company 14	2019	SMALL	0.5440	52	2018	SMALL	0.4958	51	2017	SMALL	0.5965	49
Company 15	2019	BIG	0.7945	20	2018	BIG	0.7513	20	2017	BIG	0.7304	15
Company 16	2019	BIG	0.8166	12 Bank	2018	BIG	0.6949	40 Bank	2017	BIG	0.7027	27 Bank
Company 17	2019	BIG	0.8183	11	2018	BIG	0.7043	35	2017	BIG	0.7742	5
Company 18	2019	SMALL	0.7253	42	2018	SMALL	0.6902	41	2017	SMALL	0.7081	21
Company 19	2019	SMALL	0.7207	44	2018	SMALL	0.6248	46	2017	SMALL	0.7006	29
Company 20	2019	BIG	0.8159	13	2018	BIG	0.7697	14	2017	BIG	0.7315	14
Company 21	2019	BIG	0.7890	21	2018	SMALL	0.7589	18	2017	SMALL	0.6964	31
Company 22	2019	SMALL	0.8193	10	2018	BIG	0.8097	6	2017	BIG	0.7657	6
Company 23	2019	BIG	0.7634	34	2018	BIG	0.7081	31	2017	BIG	0.6886	38
Company 24	2019	BIG	0.6044	50 Bank	2018	BIG	0.4421	55 Bank	2017	BIG	0.6603	46 Bank
Company 25	2019	SMALL	0.7105	46	2018	SMALL	0.4921	52	2017	SMALL	0.4935	53
Company 26	2019	SMALL	0.8131	14	2018	SMALL	0.8059	8	2017	SMALL	0.7258	16
Company 27	2019	BIG	0.7819	23 Bank	2018	BIG	0.7223	28 Bank	2017	BIG	0.7204	17 Bank
Company 28	2019	SMALL	0.7788	26	2018	SMALL	0.7693	16	2017	SMALL	0.7074	22
Company 29	2019	BIG	0.7972	19 Bank	2018	BIG	0.7459	22 Bank	2017	BIG	0.6918	35 Bank
Company 30	2019	BIG	0.6553	49	2018	BIG	0.7697	15	2017	BIG	0.6951	32
Company 31	2019	SMALL	0.8407	7	2018	SMALL	0.8401	3	2017	SMALL	0.8606	2
Company 32	2019	BIG	0.9085	2	2018	BIG	0.8480	2	2017	BIG	0.7882	4
Company 33	2019	SMALL	0.8058	15	2018	SMALL	0.7804	11	2017	SMALL	0.7480	9
Company 34					2018	SMALL	0.3330	56	2017	SMALL	0.4300	54
Company 35	2019	BIG	0.7541	37	2018	BIG	0.6986	39	2017	BIG	0.6927	33
Company 36	2019	SMALL	0.8353	8	2018	SMALL	0.8210	4	2017	SMALL	0.8169	3
Company 37	2019	BIG	0.7613	35	2018	BIG	0.7072	32	2017	BIG	0.7337	12
Company 38	2019	SMALL	0.8207	9	2018	SMALL	0.7697	13	2017	SMALL	0.7145	19
Company 39	2019	SMALL	0.8744	5	2018	SMALL	0.6091	47	2017	SMALL	0.5459	52
Company 40	2019	SMALL	0.7707	29	2018	SMALL	0.7306	26	2017	SMALL	0.6869	39
Company 41	2019	BIG	0.7650	33 Bank	2018	BIG	0.7020	36 Bank	2017	BIG	0.6630	44 Bank
Company 42	2019	SMALL	0.7682	32	2018	SMALL	0.7106	30	2017	SMALL	0.7067	24
Company 43	2019	BIG	0.4101	54 Bank	2018	BIG	0.6391	44 Bank	2017	BIG	0.6188	48 Bank
Company 44	2019	BIG	0.8711	6	2018	BIG	0.8659	1	2017	SMALL	0.8673	1
Company 45	2019	SMALL	0.7818	24	2018	SMALL	0.7248	27	2017	SMALL	0.7028	26
Company 46	2019	BIG	0.7787	27	2018	BIG	0.6987	38	2017	BIG	0.7070	23
Company 47	2019	BIG	0.7609	36 Bank	2018	BIG	0.7065	33 Bank	2017	BIG	0.6641	43 Bank
Company 48	2019	SMALL	0.5703	51	2018	SMALL	0.6591	42				
Company 49	2019	SMALL	0.8773	4	2018	SMALL	0.7969	9	2017	SMALL	0.7441	10
Company 50	2019	BIG	0.7454	38	2018	BIG	0.6999	37	2017	BIG	0.7011	28
Company 51	2019	BIG	0.8023	18 Bank	2018	BIG	0.7432	23 Bank	2017	BIG	0.6792	40 Bank
Company 52	2019	SMALL	0.6763	48	2018	BIG	0.7776	12	2017	BIG	0.6919	34
Company 53	2019	BIG	0.7819	22 Bank	2018	BIG	0.7059	34 Bank	2017	BIG	0.6696	42 Bank
Company 54	2019	SMALL	0.8050	16	2018	SMALL	0.7333	24	2017	SMALL	0.6892	37
Company 55	2019	BIG	0.7784	28	2018	BIG	0.7190	29	2017	BIG	0.7333	13
Company 56	2019	BIG	0.7792	25	2018	BIG	0.7849	10	2017	BIG	0.7431	11

Some of the factoring companies are owned by banks. If a bank has more than 50% of a factoring company's all shares then the factoring company is considered as owned by a bank in this study.

Table 6: Performance Scores in Terms of Ranking

Year	Size	Score	Rank	Year	Size	Score	Rank	Year	Size	Score	Rank			
C1	2019	SMALL	0.9089	1	C44	2018	BIG	0.8659	1	C44	2017	SMALL	0.8673	1
C32	2019	BIG	0.9085	2	C32	2018	BIG	0.8480	2	C31	2017	SMALL	0.8606	2
C6	2019	BIG	0.8775	3	C31	2018	SMALL	0.8401	3	C36	2017	SMALL	0.8169	3
C49	2019	SMALL	0.8773	4	C36	2018	SMALL	0.8210	4	C32	2017	BIG	0.7882	4
C39	2019	SMALL	0.8744	5	C1	2018	SMALL	0.8185	5	C17	2017	BIG	0.7742	5
C44	2019	BIG	0.8711	6	C22	2018	BIG	0.8097	6	C22	2017	BIG	0.7657	6
C31	2019	SMALL	0.8407	7	C6	2018	BIG	0.8069	7	C1	2017	SMALL	0.7653	7
C36	2019	SMALL	0.8353	8	C26	2018	SMALL	0.8059	8	C6	2017	BIG	0.7648	8
C38	2019	SMALL	0.8207	9	C49	2018	SMALL	0.7969	9	C33	2017	SMALL	0.7480	9
C22	2019	SMALL	0.8193	10	C56	2018	BIG	0.7849	10	C49	2017	SMALL	0.7441	10
C17	2019	BIG	0.8183	11	C33	2018	SMALL	0.7804	11	C56	2017	BIG	0.7431	11
C16	2019	BIG	0.8166	12	C52	2018	BIG	0.7776	12	C37	2017	BIG	0.7337	12
C20	2019	BIG	0.8159	13	C38	2018	SMALL	0.7697	13	C55	2017	BIG	0.7333	13
C26	2019	SMALL	0.8131	14	C20	2018	BIG	0.7697	14	C20	2017	BIG	0.7315	14
C33	2019	SMALL	0.8058	15	C30	2018	BIG	0.7697	15	C15	2017	BIG	0.7304	15
C54	2019	SMALL	0.8050	16	C28	2018	SMALL	0.7693	16	C26	2017	SMALL	0.7258	16
C5	2019	BIG	0.8047	17	C9	2018	SMALL	0.7614	17	C27	2017	BIG	0.7204	17
C51	2019	BIG	0.8023	18	C21	2018	SMALL	0.7589	18	C5	2017	BIG	0.7196	18
C29	2019	BIG	0.7972	19	C3	2018	SMALL	0.7567	19	C38	2017	SMALL	0.7145	19
C15	2019	BIG	0.7945	20	C15	2018	BIG	0.7513	20	C12	2017	SMALL	0.7102	20
C21	2019	BIG	0.7890	21	C5	2018	BIG	0.7497	21	C18	2017	SMALL	0.7081	21
C53	2019	BIG	0.7819	22	C29	2018	BIG	0.7459	22	C28	2017	SMALL	0.7074	22
C27	2019	BIG	0.7819	23	C51	2018	BIG	0.7432	23	C46	2017	BIG	0.7070	23
C45	2019	SMALL	0.7818	24	C54	2018	SMALL	0.7333	24	C42	2017	SMALL	0.7067	24
C56	2019	BIG	0.7792	25	C13	2018	BIG	0.7306	25	C9	2017	SMALL	0.7039	25
C28	2019	SMALL	0.7788	26	C40	2018	SMALL	0.7306	26	C45	2017	SMALL	0.7028	26
C46	2019	BIG	0.7787	27	C45	2018	SMALL	0.7248	27	C16	2017	BIG	0.7027	27
C55	2019	BIG	0.7784	28	C27	2018	BIG	0.7223	28	C50	2017	BIG	0.7011	28
C40	2019	SMALL	0.7707	29	C55	2018	BIG	0.7190	29	C19	2017	SMALL	0.7006	29
C9	2019	SMALL	0.7701	30	C42	2018	SMALL	0.7106	30	C13	2017	BIG	0.6968	30
C13	2019	BIG	0.7688	31	C23	2018	BIG	0.7081	31	C21	2017	SMALL	0.6964	31
C42	2019	SMALL	0.7682	32	C37	2018	BIG	0.7072	32	C30	2017	BIG	0.6951	32
C41	2019	BIG	0.7650	33	C47	2018	BIG	0.7065	33	C35	2017	BIG	0.6927	33
C23	2019	BIG	0.7634	34	C53	2018	BIG	0.7059	34	C52	2017	BIG	0.6919	34
C37	2019	BIG	0.7613	35	C17	2018	BIG	0.7043	35	C29	2017	BIG	0.6918	35
C47	2019	BIG	0.7609	36	C41	2018	BIG	0.7020	36	C3	2017	BIG	0.6897	36
C35	2019	BIG	0.7541	37	C50	2018	BIG	0.6999	37	C54	2017	SMALL	0.6892	37
C50	2019	BIG	0.7454	38	C46	2018	BIG	0.6987	38	C23	2017	BIG	0.6886	38
C3	2019	SMALL	0.7449	39	C35	2018	BIG	0.6986	39	C40	2017	SMALL	0.6869	39
C2	2019	SMALL	0.7446	40	C16	2018	BIG	0.6949	40	C51	2017	BIG	0.6792	40
C10	2019	SMALL	0.7303	41	C18	2018	SMALL	0.6902	41	C8	2017	SMALL	0.6731	41
C18	2019	SMALL	0.7253	42	C48	2018	SMALL	0.6591	42	C53	2017	BIG	0.6696	42
C4	2019	BIG	0.7228	43	C4	2018	BIG	0.6541	43	C47	2017	BIG	0.6641	43
C19	2019	SMALL	0.7207	44	C43	2018	BIG	0.6391	44	C41	2017	BIG	0.6630	44
C12	2019	SMALL	0.7196	45	C8	2018	SMALL	0.6249	45	C4	2017	BIG	0.6619	45
C25	2019	SMALL	0.7105	46	C19	2018	SMALL	0.6248	46	C24	2017	BIG	0.6603	46
C7	2019	SMALL	0.7004	47	C39	2018	SMALL	0.6091	47	C7	2017	SMALL	0.6552	47
C52	2019	SMALL	0.6763	48	C2	2018	SMALL	0.5806	48	C43	2017	BIG	0.6188	48
C30	2019	BIG	0.6553	49	C12	2018	SMALL	0.5605	49	C14	2017	SMALL	0.5965	49
C24	2019	BIG	0.6044	50	C11	2018	SMALL	0.5338	50	C11	2017	SMALL	0.5738	50
C48	2019	SMALL	0.5703	51	C14	2018	SMALL	0.4958	51	C10	2017	SMALL	0.5597	51
C14	2019	SMALL	0.5440	52	C25	2018	SMALL	0.4921	52	C39	2017	SMALL	0.5459	52
C11	2019	SMALL	0.4661	53	C7	2018	SMALL	0.4895	53	C25	2017	SMALL	0.4935	53
C43	2019	BIG	0.4101	54	C10	2018	SMALL	0.4895	54	C34	2017	SMALL	0.4300	54
C8					C24	2018	BIG	0.4421	55	C2	2017	SMALL	0.3804	55
C34					C34	2018	SMALL	0.3330	56	C48				

When the results are examined it can be observed that company 1 is rising. Company 1 is in the 7th place in 2017, 5th place in 2018 and 1st place in 2019. Company 32 has stability at its

top position. Company 32 is in the 4th place in 2017 and 2nd place in 2018 and 2019. Company 6 is owned by a bank and was in 8th place in 2017, 7th place in 2018 and third place in 2019. An interesting point that should be regarded is small companies can show performances as good as their big competitors. The best performing three factoring firms in 2017 are small companies. Since the factoring transactions may be carried out in a small office and with a limited number of employees, the cost structure of small factoring companies gives them a competitive advantage. The worst performing seven companies in 2017 are also small.

Table 7: Performances Scores in Terms of Size and Ranking

Year	Size	Score	Rank	Year	Size	Score	Rank	Year	Size	Score	Rank
C32	2019 BIG	0.9085	2	C44	2018 BIG	0.8659	1	C32	2017 BIG	0.7882	4
C6	2019 BIG	0.8775	3 Bank	C32	2018 BIG	0.8480	2	C17	2017 BIG	0.7742	5
C44	2019 BIG	0.8711	6	C22	2018 BIG	0.8097	6	C22	2017 BIG	0.7657	6
C17	2019 BIG	0.8183	11	C6	2018 BIG	0.8069	7 Bank	C6	2017 BIG	0.7648	8 Bank
C16	2019 BIG	0.8166	12 Bank	C56	2018 BIG	0.7849	10	C56	2017 BIG	0.7431	11
C20	2019 BIG	0.8159	13	C52	2018 BIG	0.7776	12	C37	2017 BIG	0.7337	12
C5	2019 BIG	0.8047	17	C20	2018 BIG	0.7697	14	C55	2017 BIG	0.7333	13
C51	2019 BIG	0.8023	18 Bank	C30	2018 BIG	0.7697	15	C20	2017 BIG	0.7315	14
C29	2019 BIG	0.7972	19 Bank	C15	2018 BIG	0.7513	20	C15	2017 BIG	0.7304	15
C15	2019 BIG	0.7945	20	C5	2018 BIG	0.7497	21	C27	2017 BIG	0.7204	17 Bank
C21	2019 BIG	0.7890	21	C29	2018 BIG	0.7459	22 Bank	C5	2017 BIG	0.7196	18
C53	2019 BIG	0.7819	22 Bank	C51	2018 BIG	0.7432	23 Bank	C46	2017 BIG	0.7070	23
C27	2019 BIG	0.7819	23 Bank	C13	2018 BIG	0.7306	25	C16	2017 BIG	0.7027	27 Bank
C56	2019 BIG	0.7792	25	C27	2018 BIG	0.7223	28 Bank	C50	2017 BIG	0.7011	28
C46	2019 BIG	0.7787	27	C55	2018 BIG	0.7190	29	C13	2017 BIG	0.6968	30
C55	2019 BIG	0.7784	28	C23	2018 BIG	0.7081	31	C30	2017 BIG	0.6951	32
C13	2019 BIG	0.7688	31	C37	2018 BIG	0.7072	32	C35	2017 BIG	0.6927	33
C41	2019 BIG	0.7650	33 Bank	C47	2018 BIG	0.7065	33 Bank	C52	2017 BIG	0.6919	34
C23	2019 BIG	0.7634	34	C53	2018 BIG	0.7059	34 Bank	C29	2017 BIG	0.6918	35 Bank
C37	2019 BIG	0.7613	35	C17	2018 BIG	0.7043	35	C3	2017 BIG	0.6897	36
C47	2019 BIG	0.7609	36 Bank	C41	2018 BIG	0.7020	36 Bank	C23	2017 BIG	0.6886	38
C35	2019 BIG	0.7541	37	C50	2018 BIG	0.6999	37	C51	2017 BIG	0.6792	40 Bank
C50	2019 BIG	0.7454	38	C46	2018 BIG	0.6987	38	C53	2017 BIG	0.6696	42 Bank
C4	2019 BIG	0.7228	43	C35	2018 BIG	0.6986	39	C47	2017 BIG	0.6641	43 Bank
C30	2019 BIG	0.6553	49	C16	2018 BIG	0.6949	40 Bank	C41	2017 BIG	0.6630	44 Bank
C24	2019 BIG	0.6044	50 Bank	C4	2018 BIG	0.6541	43	C4	2017 BIG	0.6619	45
C43	2019 BIG	0.4101	54 Bank	C43	2018 BIG	0.6391	44 Bank	C24	2017 BIG	0.6603	46 Bank
C1	2019 SMALL	0.9089	1	C24	2018 BIG	0.4421	55 Bank	C43	2017 BIG	0.6188	48 Bank
C49	2019 SMALL	0.8773	4	C31	2018 SMALL	0.8401	3	C44	2017 SMALL	0.8673	1
C39	2019 SMALL	0.8744	5	C36	2018 SMALL	0.8210	4	C31	2017 SMALL	0.8606	2
C31	2019 SMALL	0.8407	7	C1	2018 SMALL	0.8185	5	C36	2017 SMALL	0.8169	3
C36	2019 SMALL	0.8353	8	C26	2018 SMALL	0.8059	8	C1	2017 SMALL	0.7653	7
C38	2019 SMALL	0.8207	9	C49	2018 SMALL	0.7969	9	C33	2017 SMALL	0.7480	9
C22	2019 SMALL	0.8193	10	C33	2018 SMALL	0.7804	11	C49	2017 SMALL	0.7441	10
C26	2019 SMALL	0.8131	14	C38	2018 SMALL	0.7697	13	C26	2017 SMALL	0.7258	16
C33	2019 SMALL	0.8058	15	C28	2018 SMALL	0.7693	16	C38	2017 SMALL	0.7145	19
C54	2019 SMALL	0.8050	16	C9	2018 SMALL	0.7614	17	C12	2017 SMALL	0.7102	20
C45	2019 SMALL	0.7818	24	C21	2018 SMALL	0.7589	18	C18	2017 SMALL	0.7081	21
C28	2019 SMALL	0.7788	26	C3	2018 SMALL	0.7567	19	C28	2017 SMALL	0.7074	22
C40	2019 SMALL	0.7707	29	C54	2018 SMALL	0.7333	24	C42	2017 SMALL	0.7067	24
C9	2019 SMALL	0.7701	30	C40	2018 SMALL	0.7306	26	C9	2017 SMALL	0.7039	25
C42	2019 SMALL	0.7682	32	C45	2018 SMALL	0.7248	27	C45	2017 SMALL	0.7028	26
C3	2019 SMALL	0.7449	39	C42	2018 SMALL	0.7106	30	C19	2017 SMALL	0.7006	29
C2	2019 SMALL	0.7446	40	C18	2018 SMALL	0.6902	41	C21	2017 SMALL	0.6964	31
C10	2019 SMALL	0.7303	41	C48	2018 SMALL	0.6591	42	C54	2017 SMALL	0.6892	37
C18	2019 SMALL	0.7253	42	C8	2018 SMALL	0.6249	45	C40	2017 SMALL	0.6869	39
C19	2019 SMALL	0.7207	44	C19	2018 SMALL	0.6248	46	C8	2017 SMALL	0.6731	41
C12	2019 SMALL	0.7196	45	C39	2018 SMALL	0.6091	47	C7	2017 SMALL	0.6552	47
C25	2019 SMALL	0.7105	46	C2	2018 SMALL	0.5806	48	C14	2017 SMALL	0.5965	49
C7	2019 SMALL	0.7004	47	C12	2018 SMALL	0.5605	49	C11	2017 SMALL	0.5738	50
C52	2019 SMALL	0.6763	48	C11	2018 SMALL	0.5338	50	C10	2017 SMALL	0.5597	51
C48	2019 SMALL	0.5703	51	C14	2018 SMALL	0.4958	51	C39	2017 SMALL	0.5459	52
C14	2019 SMALL	0.5440	52	C25	2018 SMALL	0.4921	52	C25	2017 SMALL	0.4935	53
C11	2019 SMALL	0.4661	53	C7	2018 SMALL	0.4895	53	C34	2017 SMALL	0.4300	54
C8				C10	2018 SMALL	0.4895	54	C2	2017 SMALL	0.3804	55
C34				C34	2018 SMALL	0.3330	56	C48			

If the results are examined after listing the companies in terms of size and ranking, it is seen that the number of factoring companies owned by banks in the best performing ten big companies is increasing. Since banks have more complex analyses and better information systems, they can analyze potential customers from different perspectives and give healthier information to the factoring company they have. Thus, the factoring company owned by a bank have two main advantages over the other factoring companies, having a greater potential company pool and having better information about potential companies.

In 2017 there were two companies owned by banks in the best big ten. 2019 results show that there are 4 factoring companies owned by banks among the top big ten companies.

Table 8: Performances of Factoring Companies Owned by Banks

Company	2019 Score	Rank in 2019	2018 Score	Rank in 2018	2017 Score	Rank in 2017
C6	0.8775	3	0.8069	7	0.7648	8
C16	0.8166	12	0.6949	40	0.7027	27
C24	0.6044	50	0.4421	55	0.6603	46
C27	0.7819	23	0.7223	28	0.7204	17
C29	0.7972	19	0.7459	22	0.6918	35
C41	0.7650	33	0.7020	36	0.6630	44
C43	0.4101	54	0.6391	44	0.6188	48
C47	0.7609	36	0.7065	33	0.6641	43
C51	0.8023	18	0.7432	23	0.6792	40
C53	0.7819	22	0.7059	34	0.6696	42

The factoring companies owned by banks are rising in the ranking table. Table 8 gives an idea about that issue. Eight of the ten factoring companies owned by banks have higher scores than they had in 2017. Also seven of the ten companies have better places in 2019 when compared with 2017.

4. DISCUSSION

In the literature, the studies on factoring companies are limited and they mostly include a few factoring firms in the analyses. Comparing a few factoring companies with leasing or financing companies gives little information about the factoring sector and gives no idea about what kind of factoring companies are successful and what kind of strategies should be adopted by the management of those companies.

The lack of a database containing all factoring companies' information explains the reason why the sector has not been analyzed as a whole. Although there is a database providing sector information on the website of the Banking Regulation and Supervision Agency, it lacks to provide company specific data.

After obtaining the data from independent audit reports one by one and analyzing the companies based on the data collected, it was observed that most of the factoring companies owned by banks are increasing in the ranking table. One possible reason for this rise may be that the factoring companies owned by banks can have more reliable information about the

credibility of their existing and potential customers. Another possible reason may be the prestige of banks which attract customers.

Although the rise of factoring companies owned by banks pushes the other factoring companies to the lower places in the ranking table, some small factoring companies keep their places in the top ten. Company 1, company 49, company 31 and company 36 were small companies and they were in the top ten during the study period.

Scale or size of operations may be a factor which makes a factoring company more successful. The existence of small companies in the top ten shows that in their optimum scale, small firms have the opportunity to be the best performing firm in the factoring sector. But big factoring firms become the competitors of the factoring companies owned by banks. The strategy, in this case, could be cooperation with a bank. With this way, factoring companies can increase their number of customers and keep their non-performing receivables at a more acceptable level.

CONCLUSION

In this study financial performance of Turkish factoring companies was investigated since the number of studies on this industry is limited. While some of the studies handled and evaluated different company types in the same pool (Özçelik and Küçükçakal, 2019; Selimler and Taş, 2019), some of them regarded only a small number of companies. This study shows much distinction from two aspects. Firstly, it evaluates only the factoring companies in the same pool. Secondly, the performance of the whole factoring industry was evaluated.

For that purpose TOPSIS method was used. Since there was no consensus in the literature on which ratios should be used for factoring company performance evaluation, regarding the literature, company type and the available data, six ratios were chosen. Most of the ratios were about non-performing receivables and profitability since these are the main criteria in determining the factoring company performance. Two more ratios were also included in the analysis.

The companies are categorized as small if the total asset of a company is smaller than the median of the related year. If a company's total assets are equal to or more than the median of the related year it is considered as a big factoring company. Mean was not regarded in the determination of size since the standard deviation of total assets was very high.

One important issue which should be taken into account is while the factoring industry in the World is in an ascending trend in terms of volume, the Turkish factoring industry does not show the same pattern. Although this issue may be explained with the increase in the value of USD to some extent, there must be also another reason for this pattern. One of the underlying reasons for this pattern may be that companies find factoring commissions expensive and they prefer receiving loans from banks. Another important issue is the numbers of factoring and leasing companies are decreasing as seen in table 1, while the numbers of other organizations are increasing.

According to analysis results, small factoring companies are as good as their big competitors. Among the best performing ten factoring companies, there are 6, 5 and 7 small companies in

2017, 2018 and 2019 respectively. On their small scale, they show good performances. But if they grow, they become the rivals of the factoring companies owned by banks which are rising in the ranking table. Table 7 and Table 8 provide insight into the rise of factoring companies owned by banks.

Under these circumstances, one strategy that the small factoring companies may adopt is working at their existing scale and try to minimize their non-performing receivables. This will make small companies stay at high places in the ranking table. Another strategy is to grow and increase the size of operations. Cooperation with a bank would bring sustainable growth for small factoring companies. For example, issuing some new shares to a bank would increase the capital, and as a result of cooperation, using the customer list of that bank would enable the factoring company to increase its volume and its profitability.

Due to the difficulties in obtaining data, this study examined the performance of factoring companies for three years. A study covering a longer period could provide interesting results since factoring industry in Turkey is still an unexamined industry as a whole.

TÜRK FAKTORİNG ŞİRKETLERİNİN PERFORMANSLARININ TOPSIS METOTLA DEĞERLENDİRİLMESİ

1. GİRİŞ

Likidite tüm firmalar için hayati bir öneme sahiptir. Müşterilerinden nakit tahsilat yapan bazı gıda şirketleri, hastaneler, oteller ve benzeri firmalar nakde daha az gereksinim duyarken, tekstil, deri, ağır sanayi kuruluşları ve inşaat şirketleri diğerlerine göre daha fazla nakit ihtiyacı duymaktadırlar. Bu firmalar bankalardan kredi kullanma yolunu tercih edebilecekleri gibi alternatif yollara da başvurabilirler.

Alacakları üçüncü bir tarafa satış işlemi faktoring olarak adlandırılmaktadır. Faktoring firmaları alacağın belli bir yüzdesini komisyon olarak alırken, nakit ihtiyacı olan firmalar da bu yolla alacaklarını erken tahsil edip acil nakit ihtiyaçlarını karşılama olanağını elde ederler. Bu bakımdan faktoring endüstrisi önemli bir endüstridir.

Factoring sektörü her ne kadar nakit tahsilatında önemli bir noktada bulunsa da, çoğu akademik çalışma bankalara, sigorta şirketlerine ve emeklilik şirketlerine odaklanmıştır. Hangi tip faktoring şirketlerinin iyi performans gösterdiği hemen hemen hiç incelenmemiştir. Bazı çalışmalar sadece birkaç faktoring şirketini finansal kiralama şirketleriyle karşılaştırmıştır. Bu tarz çalışmalar sektörün durumu hakkında biraz bilgi verse de, farklı firma tiplerini aynı havuzda değerlendirmek yanıltıcı sonuçlar da doğurabilmektedir. Örneğin, bir bankanın bir sigorta şirketiyle kıyaslanması birçok açıdan doğru değildir. Bu bağlamda bu çalışma sadece faktoring şirketlerini ele alması ve tüm sektörü analiz etmesi bakımından faktoring sektörüne ve bu alandaki akademik çalışmalara önemli katkı sağlayacaktır.

2. YÖNTEM

Çalışmanın ana problemi Türkiye'deki faktoring şirketlerinin performans, büyüklük ve sahiplik açısından incelenmesi olarak belirlenmiştir. Bu incelemenin yapılabilmesi için birçok farklı analiz uygulanabilmektedir. Burada temel sorun verilerin elde edilmesinde mevcut bir veri tabanının bulunmamasıdır. Her ne kadar Bankacılık Düzenleme ve Denetleme Kurulu'nun internet sitesinde faktoring sektörünün bilanço, kar -zarar tablosu ve sektöre ait bazı oranlar bulunsada, firma bazında bilgiye ulaşılamamıştır. Ancak firmaların resmi denetim raporlarından gerekli olan bilgi alınabilmektedir. Verilerin tek tek, firma bazında elde edilmesi kısa süreli verilerle yapılabilecek ya da yıllık kullanılabilen bir analiz gerektirmektedir.

TOPSIS (The Technique for Order Preference by Similarity to Ideal Solution), eldeki verilerle uygulanabilecek uygun bir analizdir. Bu sayede firmaların belli başlı kıstaslar kullanılarak performanslarına göre sıralanması ve bu performans sıralarında değişimle sektörün durumunun yorumlanabilmesi mümkün hale gelmektedir.

Önce ana kıstaslar belirlenmiştir. Literatürde faktoring şirketi analizleri sınırlı olduğu için çalışmada kullanılan kıstaslar yazar tarafından belirlenmiştir. Faktoring sektörünün performansının belirlenmesinde iki ana kıstas belirlenmiştir. Bunlar karlılığın fazla olması ve takipteki alacakların az olmasıdır. Bu iki ana kıstas dayalı toplam dört kıstas belirlenmiş ve ayrıca analizi daha kapsamlı hale getirebilecek iki kıstas daha eklenmiştir. Kıstaslara ilişkin veriler bağımsız denetim raporlarından alınarak hesaplanmıştır.

Toplanan veriler ışığında karar matrisi oluşturulmuş, daha sonra sırasıyla normalize matris ve ağırlıklandırılmış normalize matris hesaplanmıştır. Üç yılın performans skorları hesaplanmış ve karşılaştırmada kolaylık olması açısından tek tabloda sunulmuştur. Ayrıca firmaların büyüklüklerinin belirlenmesi için, sektördeki tüm firmaların toplam varlıklarının ilgili yıldaki medyanı hesaplanmış, medyana eşit ya da medyandan yüksek bir varlığa sahip olan firma büyük firma olarak nitelenirken, medyandan küçük varlığa sahip olan firma küçük firma olarak adlandırılmıştır.

3. BULGULAR

Tüm performans skorları bir tablo halinde firma bazında ve performans bazında sunulmuştur. En iyi performans gösteren 10 firma incelendiğinde küçük firmaların bu 10 firma içindeki sayılarının 2019, 2018 ve 2017 için sırasıyla 7, 5 ve 6 olduğu görülmektedir. Bu bağlamda oransal olarak küçük firmaların da iyi performanslar gösterebildiği, karlarını maksimum yapıp ve takipteki alacaklarını minimum düzeyde tutabildiği gözlenmiştir. Faktoring şirketleri büyük ve küçük şirketler olarak ayrı ayrı incelendiğinde ise, bankaların sahibi olduğu faktoring şirketlerinin sayısının en iyi performans gösteren 10 büyük faktoring şirketleri arasında arttığı gözlenmektedir. Bankaların sahibi olduğu faktoring şirketlerinin skorları ve sıralamadaki yeri ayrı bir tabloyla verilmiştir. Bu tablo da incelendiğinde, bankaların sahibi olduğu on faktoring şirketinden sekizinin 2019 yılı skorunun 2017 yılı skorundan daha iyi olduğu ve yedi tanesinin 2019 yılı sırasının 2017 sırasından daha yukarıda olduğu gözlenmiştir.

4. TARTIŞMA

Literatürde faktoring şirketleri üzerine az sayıda çalışma bulunmaktadır. Bu çalışmaların çoğu birkaç faktoring şirketini leasing ve finansman şirketleriyle karşılaştırmıştır. Bu tarz karşılaştırmalar faktoring sektörü hakkında çok az bilgi sağlamakta, ne tür faktoring şirketlerinin başarılı olduğu ya da faktoring yönetiminin nasıl bir stratejiye sahip olması gerektiği hakkında ise hiç bilgi vermemektedir. Faktoring sektörünün bir bütün olarak ele alınmama nedeni mevcut veri tabanlarının şirket bazında veri içermemesidir.

SONUÇ

Bu çalışmada Türkiye'deki faktoring şirketlerinin performansları incelenmiştir. Denetim raporlarından tek tek alınan veriler ve yapılan analiz sonucunda bankaların sahip olduğu faktoring şirketlerinin sıralamada yükselmekte olduğu görülmektedir. Bazı küçük faktoring şirketlerinin ise bankalara rağmen üst sıralardaki yerlerini korudukları gözlenmiştir. Küçük faktoring şirketlerinin sıralamada üst sıralarda yer alabilmesi ve büyük faktoring şirketleri arasında bankaların sahibi olduğu faktoring şirketlerinin yükselişte olması, faktoring sektöründe başarıya giden yolun firma için uygun ölçek seçiminden geçtiği düşünülmektedir. Söz gelimi, faktoring şirketleri küçük bir ölçekte çalıştıklarında, tanıdıkları belli başlı firmalarla çalışmakta ve bu ölçekte takipteki alacaklarını düşük tutup, karlılıklarını artırabilme olanağı elde etmektedirler. Fakat bu firmalar, işlem hacimlerini artırıp daha büyük ölçekte çalışmaya başladıklarında, bankaların sahibi olduğu faktoring şirketleriyle bir rekabete girmek durumunda kalmaktadırlar. Her şeye rağmen, bu rekabette üst sıralarda olan firmalar bulunsa da, bankaların sahibi olduğu şirketlerin gittikçe sıralamada daha yukarılara ulaştığı görülmektedir. Bu durumda küçük firmaların izleyebilecekleri bir yol, mevcut ölçeklerinde devam ederek, göreceli olarak daha iyi karlılık oranları elde etmek ve takipteki alacaklarını olabilecek en düşük düzeyde tutmaktır. Bu onları buldukları ölçeğe göre, en iyi performanslar arasında koyabilir. Diğer bir yol ise, bir bankayla işbirliğine giderek, bankanın sağlayabileceği avantajları kullanarak sürdürülebilir bir büyümeyle işlem hacimlerini artırıp üst sıralara tırmanmaktır. Ayrıca faktoring şirketlerinin sayılarının azalma nedeni de incelenmelidir. Bunun için uzun bir periyodu içeren kapsamlı verileri sağlayan bir veri tabanı oluşturulmalıdır.

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KATKI ORANI / CONTRIBUTION RATE	AÇIKLAMA/ EXPLANATION	KATKIDA BULUNANLAR/ CONTRIBUTORS
Fikir veya Kavram / Idea or Notion	Araştırma hipotezini veya fikrini oluşturmak / Form the research hypothesis or idea	Alper OVA
Tasarım / Design	Yöntemi, ölçeği ve deseni tasarlamak / Designing method, scale and pattern	Alper OVA
Veri Toplama ve İşleme / Data Collecting and Processing	Verileri toplamak, düzenlenmek ve raporlamak / Collecting, organizing and reporting data	Alper OVA
Tartışma ve Yorum / Discussion and Interpretation	Bulguların değerlendirilmesinde ve sonuçlandırılmasında sorumluluk almak / Taking responsibility in evaluating and finalizing the findings	Alper OVA
Literatür Taraması / Literature Review	Çalışma için gerekli literatürü taramak / Review the literature required for the study	Alper OVA