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Evaluation of Receivable Turnover Ratio of Telecommunications Technology Firms in Vietnam

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Abstract

The main purpose of this study is to empirically test the receivable turnover ratio (RTR) of telecommunications technology firms listed on the Vietnam stock market. The authors collected secondary data from previous studies, data from telecommunications technology firms for the period of 2017–2021. In this study, we use the variable receivable turnover ratio (RTR) to measure the financial ratio of telecommunications technology firms based on mixed research methods. We have performed some descriptive analysis, compared with support from the software Stata, to

evaluate and measure the financial ratios of telecommunications technology firms. The results show that there is a big difference in the financial ratios of these firms. The difference in receivable turnover ratio between enterprises with the number of years posted up is 10 years or higher, and the remaining enterprises are not statistically significant. Based on the research results, some recommendations are presented to improve the financial indicators of telecommunications technology firms.

Keywords: Receivable Turnover Ratio (RTR), Telecommunications Technology Firms, Financial Ratio, Accounting, Economics

JEL Codes: M40, M41, F65

1. Introduction

Up to now, there are 22 telecommunications technology firms listed on the Vietnamese stock market. These are the Hanoi Stock Exchange (HNX) and the Ho Chi Minh City Stock Exchange (HSX). These firms are playing an important and positive role in the economic and social development of the country. In particular, in the ongoing Fourth Industrial Revolution, the telecommunications technology industry is increasingly attracting young human resources who are passionate about science and technology and is one of the industries with the largest demand for human resources today. Besides, people's need to use and transmit data is also constantly increasing. By using advanced technology techniques in many different ways, the telecommunications technology industry has changed all aspects of life, realizing the interconnectedness of each person and each country.

The COVID-19 pandemic broke out and affected every aspect of life. To cope with the impact of the COVID-19 pandemic, many firms and organizations have increased the application of information technology in production and business. Therefore, technology bidding packages are expected to be promoted in the coming years. On the other hand, fixed broadband subscriptions and 5G networks will be two factors increasingly used by many firms and individuals. In addition, the increasing demand for digital transformation from customers around the world and in Vietnam will help telecommunications technology firms benefit from software exports. Therefore, telecommunications technology firms must continuously develop with strong financial capacity and affirm their strong financial capacity.

Financial ratios are often used for comparison, allowing business owners to check, evaluate, and measure the relationship between financial factors, reflecting in detail about good and bad issues in the firm to make decisions in business management. This study evaluates and measures a financial indicator called the receivable turnover ratio (RTR). This study is structured in five parts: Part 1 is the introduction; part 2 presents the theoretical basis and research overview; part 3 is the research method; part 4 presents the research results; and part 5 is the discussion and implications.

2. Literature Review

The receivable turnover ratio is an accounting calculation to test how effectively a business collects receivables and customer debt. Based on this index, it is possible to make an objective assessment of the effectiveness of the business when granting credit to customers while also demonstrating the ability to collect short-term debts. Calculating receivable turnover can be done by year, quarter, or month.

The way to calculate the receivable turnover ratio is as follows:

Accounts receivable turnover ratio = net credit sales divided by average accounts receivable.

In there

(i). Net credit sales = Total credit sales during the period subtract the amount of credit sales that customers have paid in cash.

(ii). Average receivables = average of receivables at the beginning and end of the period.

A firm with a lot of receivables is like lending money to customers without getting back the principal and interest. Normally, when providing goods and services to customers, firms must include a clause that requires the customer to pay the value of the goods and services within 30 to 60 days.

Based on the receivable turnover ratio, it is possible to make initial assessments about the ability of that firm to collect debts or the effectiveness of credit extension at the firm at the present time. Based on this coefficient, it is also possible to know the number of times receivables are converted into cash in the firm.

Receivable turnover ratio is one of the factors that negatively affects the profitability ratio (ROA) of an enterprise (Padachi, 2006; Lazaridis & Tryfonidis, 2006)^[6, 4]. The receivable turnover ratio negatively affects corporate profits (Napompech, 2012)^[5]. The receivable turnover ratio has a negative impact on financial risk (Vo, 2020)^[8].

3. Research Methods

This study uses both qualitative research methods and quantitative research methods.

Qualitative research method: We use techniques of synthesis, analysis, comparison, and contrast to evaluate the receivable turnover ratio (RTR) of telecommunications technology firms listed on the stock market in Vietnam. In addition to collecting previous research projects, we interviewed experts who are leading lecturers in finance and accounting, such as the chief financial officer at telecommunications technology firms. Qualitative research methods guide and refine the research results of previous studies. From there, this research inherits and applies.

The quantitative research method is based on panel data compiled for 5 years, from 2017 to 2021. Based on reputable websites such as <http://cafef.vn>, <https://financevietstock.vn>, cophieu68.com.vn, and a global data service company, we collect data on a firm's financial indicator, RTR.

The research sample is 22 telecommunications technology enterprises listed on the Vietnam stock market (cophieu68.vn)^[9], with a 5-year financial ratio. We collected 110 observations. We then evaluated and analyzed with the support of Stata 13 software.

4. Results

4.1 General

Table 1 shows the financial ratio when considering each telecommunications technology firm separately in each year. In addition to firms with good financial indexes, there are still firms with limited financial indexes (see Table 1).

Table 1: Financial indicators of telecommunications technology firms listed on the Vietnamese stock market in the period 2017-2021

Stock code	Year	RTR (times)	Stock code	Year	RTR (times)
ADC	2021	6.06	SMT	2021	3.09
ADC	2020	17.98	SMT	2020	8.49
ADC	2019	15.85	SMT	2019	2.63
ADC	2018	15.63	SMT	2018	6.36
ADC	2017	12.69	SMT	2017	4.31
CKV	2021	9.03	SRA	2021	0.38
CKV	2020	7.82	SRA	2020	0.95
CKV	2019	4.48	SRA	2019	3.78
CKV	2018	4.27	SRA	2018	3.87
CKV	2017	2.87	SRA	2017	1.23
CMG	2021	0.96	ST8	2021	5.96
CMG	2020	4.14	ST8	2020	6.27
CMG	2019	3.89	ST8	2019	17.66
CMG	2018	4.24	ST8	2018	17.69
CMG	2017	4.86	ST8	2017	23.49
ELC	2021	1.18	SVT	2021	1.82
ELC	2020	1.25	SVT	2020	1.94
ELC	2019	1.05	SVT	2019	3.15
ELC	2018	0.86	SVT	2018	0.91
ELC	2017	1.29	SVT	2017	2.02
FPT	2021	5.06	TST	2021	0.63
FPT	2020	4.58	TST	2020	0.61
FPT	2019	4.08	TST	2019	0.52
FPT	2018	3.55	TST	2018	0.73
FPT	2017	6.68	TST	2017	1.17
ITD	2021	0.23	TTZ	2021	0.25
ITD	2020	2.01	TTZ	2020	0.01
ITD	2019	1.64	TTZ	2019	0.21
ITD	2018	2.10	TTZ	2018	3.30
ITD	2017	2.03	TTZ	2017	0.98
KST	2021	2.18	UNI	2021	2.17
KST	2020	1.99	UNI	2020	1.85
KST	2019	1.45	UNI	2019	0.21
KST	2018	2.13	UNI	2018	0.20
KST	2017	2.69	UNI	2017	0.38
ONE	2021	2.17	VAT	2021	1.08
ONE	2020	2.26	VAT	2020	1.01
ONE	2019	2.81	VAT	2019	0.02
ONE	2018	2.02	VAT	2018	0.96
ONE	2017	1.75	VAT	2017	1.08
POT	2021	1.54	VIE	2021	1.83
POT	2020	1.94	VIE	2020	1.53
POT	2019	1.54	VIE	2019	3.31
POT	2018	2.35	VIE	2018	1.87
POT	2017	1.51	VIE	2017	1.73
SAM	2021	0.90	VLA	2021	3.17
SAM	2020	1.20	VLA	2020	3.31
SAM	2019	1.90	VLA	2019	4.37
SAM	2018	1.91	VLA	2018	3.61
SAM	2017	1.78	VLA	2017	4.10
SGT	2021	0.52	VTC	2021	1.18
SGT	2020	0.52	VTC	2020	1.65
SGT	2019	1.37	VTC	2019	1.68
SGT	2018	0.99	VTC	2018	1.54
SGT	2017	1.28	VTC	2017	1.42

Source: <https://finance.vietstock.vn/>; <http://cafef.vn>^[9], a global data services company, and compiled by the authors

Next, the RTR ratio is synthesized and analyzed specifically according to Table 2 and Table 3 as follows:

Table 2: Average RTR ratio over the years of telecommunications technology firms listed on the Vietnam stock market

Description	2017	2018	2019	2020	2021	Average 2017-2021
RTR (times)	3.70	3.69	3.53	3.31	2.47	3.34

Source: <https://finance.vietstock.vn/>; <http://cafef.vn> ^[9], a global data services company, and compiled by the authors

Table 3: Average RTR ratio over the years (2017-2021) of each telecommunications technology firm listed on the Vietnamese stock market (unit: times)

S. No	RTR<0		0<RTR<1.0		1.0<RTR<2.0		RTR>2.0	
	Stock code	RTR	Stock code	RTR	Stock code	RTR	Stock code	RTR
1			TST	0.73	ELC	1.13	SRA	2.04
2			VAT	0.83	VTC	1.49	VIE	2.05
3			SGT	0.94	SAM	1.54	KST	2.09
4			TTZ	0.95	ITD	1.60	ONE	2.20
5			UNI	0.96	POT	1.78	CMG	3.62
6					SVT	1.97	VLA	3.71
7							FPT	4.79
8							SMT	4.98
9							CKV	5.69
10							ADC	13.64
11							ST8	14.22

Source: <https://finance.vietstock.vn/>; <http://cafef.vn> ^[9], a global data services company, and compiled by the authors

The higher the receivables turnover ratio, the more effective the firm's ability to collect receivables and debts is. A high index also shows that the firm's cash flow increases after customers pay debts. The firm does not have a lot of bad debt and can ensure the release of its credit limit later.

A high receivables turnover ratio can also give an initial assessment of whether this firm's operations are largely cash-based. Firms are also very cautious before granting credit to customers. This will help firms prevent bad debt risks. However, it can cause firms to lose potential customers and bring them profits.

A low receivable turnover ratio proves that the firm's ability to collect debt is low and its credit policy is ineffective. As the bad debt situation of firms increased, their ability to control cash flow became difficult. Customers are unable to pay debts, so it is difficult to carry out future sales and exchange transactions.

If a firm has a low payables turnover ratio, it should consider amending its credit policy to ensure the ability to collect receivables and customer debts.

Tables 2 and 3 show that the average RTR of the telecommunications technology industry over the years also has significant fluctuations, with a decreasing trend. Specifically: In 2017, RTR reached 3.70 times; in 2018, RTR decreased slightly to 3.69 times and continued to decrease in 2019 with 3.53 times; decreased slightly to 3.31 times in 2020; and decreased further in 2021 with 2.47 times.

Results Table 3 shows that, among the 22 telecommunications technology firms listed on the Vietnam stock market, 11 firms were assessed as having the ability to effectively collect receivables and debts.

4.2 Descriptive statistics

Next, Table 4 shows: There is 1 financial index, described by 110 observations (obs); Basic indicators such as the mean, maximum value (max), minimum value (min), and standard deviation (sd) of each index have been determined, and the basic indicators reflect the financial index status of telecommunications technology firms listed on the Vietnamese stock market.

Table 4: General descriptive statistics and detailed descriptive statistics

General descriptive statistics					
Variable	Obs	Mean	Std. Dev.	Min	Max
RTR	110	3.315868	4.152859	.0137542	23.48975
Detailed descriptive statistics					
Stats	RTR				
N	110				
Sum	364.7455				
Range	23.476				
Variance	17.24624				
Cv	1.25242				
Skewness	2.802508				
Kurtosis	11.11039				
p50	1.922973				

Sources: Authors synthesized and Stata Software 13

According to financial experts and interviewees, the listing time of a firm on the stock market is one of the factors used to evaluate the financial situation of the firm in general and its financial indicators in particular. The listing period to compare and evaluate the financial indicators of firms is usually a 5-year cycle. In addition, on July 28, 2000, the Ho Chi Minh City Stock Exchange officially went into operation and conducted the first trading session, marking a historical turning point in the Vietnamese stock market. Therefore, we chose to divide the sample by listing a period of 10 years or more.

Next, compare the financial indicators of firms listed for 10 years or more with those of the remaining firms.

Listing time (YPU): The dummy variable is 1 if the enterprise has a listing time of 10 years or more, and otherwise it is zero (0).

Table 5 shows that there are 64 firms with registered years of operation of 10 years or more.

Firms with 10 years of registration or more have a higher RTR than other firms. The difference between RTR between firms listed for 10 years or more and the remaining firms is not statistically significant (p-value = 0.5478 > 0.05, difference value = 0.4854416) (Bryman & Cramer, 2001; Kohler & Kreuter, 2005; Torres-Reyna, 2007; Ditzen, 2018) [1, 3, 7, 2].

Table 5: Compare the RTR index between firms with a listing time of 10 years or more and the remaining firms.

Ttest RTR by (YPU)

Two-sample t test with equal variances

Group	Obs	Mean	Std. Err.	Std. Dev.	[95% Conf. Intervals]	
0	46	3.03343	.5121843	3.473803	2.001838	4.065022
1	64	3.518871	.5744442	4.595554	2.370936	4.666807
Combined	110	3.315868	.3959596	4.152859	2.531089	4.100647
Diff		-.4854416	.8050934		-2.081276	1.110393
diff = mean (0) – mean (1) t = -0.6030						
Ho: diff = 0 degrees of freedom = 108						
Ha: diff < 0 Ha: diff != 0 Ha: diff > 0						
Pr (T < t) = 0.2739 Pr (T > t) = 0.5478 Pr (T > t) = 0.7261						

Sources: Authors synthesized and Stata Software 13

5. Discussion and implications

Financial ratios help managers check the company's financial status, use it to compare with firms in the same industry, or compare with the industry average to evaluate the company's strengths and weaknesses. In addition, it is also a tool to predict the financial future of the company in the future.

The main business lines of telecommunications technology firms listed on the Vietnam stock market include trading in electronic products, information technology, equipment and supplies, computer software production, software services and software outsourcing, system integration services and information technology services, computer manufacturing, assembly, distribution, telecommunications infrastructure services, and a number of other businesses. Most telecommunications technology firms always maintain a portfolio spanning many member companies. Based on important financial indicators such as equity, assets, profit before tax, profit after tax, profit ratio on revenue, return on assets, profitability ratio on equity, revenue growth rate, receivable turnover, etc., it can be affirmed that the financial capacity of telecommunications technology firms listed on the Vietnamese stock market still has some shortcomings, limitations, financial risks, and business performance that is still low compared to other firms in the industry.

For the information technology and telecommunications industries, the COVID-19 epidemic creates challenges but also brings opportunities. Firms in this industry have been quick to grasp and develop sustainably. The COVID-19 epidemic has accelerated the wave of digital transformation and technology investment in many firms and organizations. At the same time, creating sustainable development opportunities for pioneering technology firms providing digital transformation solutions, platforms, services, and products. Information technology firms benefit from the digital transformation trend in Vietnam and around the world, and with it, the increase in technology investment packages. That is one of the advantages for these firms to improve financial indicators, including RTR.

Interviewed experts said that when analyzing receivable turnover ratios, in addition to comparing between years and firms in the same industry, firms need to carefully consider each receivable to develop currently; the debts are overdue, and there are measures to handle them. In addition, when analyzing the receivables turnover ratio, it is necessary to mention: (i) the sales method of the firm: Normally, in retail firms that sell goods with immediate cash collection, the proportion of receivables accounts for a low proportion; on the contrary, in wholesale enterprises, the proportion of customer receivables accounts for a large proportion due to the deferred payment sales policy of these enterprises. (ii)

The firm's sales credit policy, expressed through the credit term and allowed credit level for each customer. For firms with long credit terms and high credit balances for customers, receivables account for a large proportion. Because sales credit is a method of stimulating consumption, consideration and assessment of the reasonableness of this indicator should be placed in relation to the firm's sales revenue. (iii) Ability to manage debt and the customer's ability to pay. This is also one of the factors affecting the value of this indicator. If customer receivables account for a large proportion but the cause does not stem from the above two cases, the higher this proportion represents a poor use of capital. Firms need to find out the causes to take timely corrective measures, such as reducing the outstanding debt balance for late-paying customers, stopping the provision of goods and services, selling debt to debt management companies, and asking for legal intervention.

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