

A Study on Firm Performance of Construction Firms Listed in the Hanoi Stock Exchange

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ABSTRACT: Because of the effect of the world economy and national economy, construction firms Listed in the Hanoi Stock Exchange (HNX) are forced to improve firm performance to develop. This paper presents the firm performance of construction firms Listed in the HNX to adopt the evaluation and the measurement three (03) basic financial ratios, including: (i) Fixed asset turnover ratio (FAT), (ii) Total Asset Turnover Ratio (AT) and (iii) Equity turnover (ET). The authors collected secondary data from previous studies, construction firms Listed in the HNX for the period of 2015-2019. The results of the research show that the firm performance of construction firms has many limitations. This study will benefit the construction firms Listed in HNX in the improvement of their performance.

KEYWORDS: Fixed asset turnover ratio (FAT), (ii) Total Asset Turnover Ratio (AT) and (iii) Equity turnoverratio (ET), construction firms, Finance.

JEL CODES: M40, F65, G30

1. INTRODUCTION

The construction industry is a sector that is growing parallel with the process of industrialization and modernization of the country and plays an important role in the national economy. Due to the rapid growth in revenue and profitability, construction firms listed on the Vietnamese stock market have attracted a great deal of attention from investors as well as the cash flow power (Nguyen, 2009).

According to the Ministry of Construction, the production value of the whole Construction industry has a growth rate of 9 - 9.2% in 2019, equivalent to the growth rate of the previous year (9.2%). However, the group of listed construction firms experienced a decline in revenue and profit (NhuXuan, 2020).

The speed and scale of investment of construction enterprises are often large, leading to large capital demand also. Activities of construction enterprises are now increasing in scale, especially there are many projects that are considered important to the economy, thus enterprises require to raise capital from either equity or loans/ debts with a large amount to meet their capital needs. However, the performance of some construction enterprises is still unproductive.

Financial ratios help analysts, enterprise owners, investors and creditors understand the financial health of a enterprise and make it easier for business owners to manage their financial systems. Financial ratios are compared with the ratios of previous periods to evaluate the development trend of an enterprise over time. Financial ratios are also used to compare with ratios of other enterprises in the same industry or with the industry average rate to assess the strengths and weaknesses of the enterprise. In addition, financial indicators are tools to forecast the financial situation of the enterprise in the future.

This study analyzes the performance of construction firms listed in the HNX by evaluating and measuring three (03) basic financial indicators in construction firms listed in the HNX, including: (i) Fixed assets turnover; (ii) Total asset turnover and (iii) Equity turnover.

2. LITERATURE REVIEW

Dang and Pham (2016) stated that the efficiency of business management and operation is measured by how the company's assets are used to generate profits for the company. The asset turnover metric can be used to measure management performance and is expected to have a positive impact on a company's performance.

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Assets turnover is one of the indicators of measuring the performance of enterprises. The assets turnover of enterprises has decreased after equitization (Truong and Ngo, 2016). Assets turnover is one of the targets set and mentioned in the studies by Martani et al. (2009), Yungchih (2010), Vo and Doan (2013).

Nguyen (2019) affirmed, to achieve the optimal financial balance, it is necessary to have a combination of equity and debt, in order that borrowing has to maximize the value of enterprises. Fixed asset turnover (FAT) is one of the factors that plays a major role, affecting the capital structure of a enterprise. Fixed assets turnover (FAT) has a correlation with the ratio of debt to equity (D/E ratio). This shows that Indian consumer goods firms mainly use debt to buy fixed assets and the increase in D/E ratio is also an increase in dividends. The research results also indicate that the low rate of return is due to significantly low FATs compared to profits, possibly because enterprises invest heavily in fixed assets but cannot use them to create expected profit level. In addition, the inverse relationship between FAT and financial leverage shows that firms in metal production industry basically have low total assets, which need a high amount of debt to finance their assets. FATR has a positive relationship with financial leverage in the industry of agricultural production, consumer goods, oil and gas, and transport equipment.

Fixed asset turnover (FAT) and asset turnover are two of the factors mentioned by Phan (2019) when studying factors affecting the capital structure of listed real estate firms on Ho Chi Minh Stock Exchange. The study results show that FAT has a negative impact on capital structure, however, there is not enough scientific evidence on the relationship between asset turnover and capital structure. The author concludes, this study is the basis for managers to have more scientific evidence during the capital structure planning process, in order to help enterprises to reduce risks and improve efficiency in the operation process.

Inheriting previous studies, this study uses a mixed research method to analyze performance of construction firms listed in the HNX THROUGH the evaluation three (3) ratios in the period 2015-2019, including: (i) Fixed asset turnover ratio (FAT), (ii) Total asset Turnover Ratio (AT) and (iii) Equity turnover ratio (ET). The research results could contribute to analyzing the performance situation of enterprises and are meaningful for enterprise managers to make effective business decisions.

3. METHODOLOGY

The study uses balance sheet data, data collected by subjects and by time – series. The secondary data collected from the audited financial statements of 14 construction firms listed in HNX in operation by the end of the accounting year 2019 on such reputable website <https://finance.vietstock.vn/>. Thus, this study has 14 firms * 5 years = 70 observed variables, which have been processed and cleaned with Excel.

We choose the Hanoi Stock Exchange (HNX) because HNX is one of the two large stock exchanges in Vietnam. From 2012 up to now, market movements are stable and transaction value increases. The firms listed in the HNX are medium-sized ones, many of which come from equitized state-owned enterprises. The charter capital Standards of firms listed in the HNX before 2011 was from 10 billion VND and after 2011 is from 30 billion VND or above.

Besides, we interviewed experts who are leading lecturers in finance and accounting; financial directors in construction enterprises.

4. RESEARCH RESULTS AND DISCUSSION

4.1. Fixed asset turnover

Table 1: Fixed asset turnover of construction firms listed in the HNX during the period 2015-2019 Unit: Turn

Stock code	2015	2016	2017	2018	2019	Average
C92	10.38	10.52	6.28	5.78	3.51	7.29
CTX	2.01	7.23	15.66	0.54	2.04	5.50
ICG	6.15	1.63	0.54	8.84	4.00	4.23
KDM	5.45	4.97	3.59	1.99	12.95	5.79
MST	43.89	56.52	122.29	995.41	39.50	251.52
SDU	2.68	19.49	1.37	1.68	53.87	15.82
TKC	10.37	20.96	20.22	16.49	9.12	15.43
VC1	28.01	48.41	55.88	44.90	64.16	48.27
VC2	33.55	22.90	38.33	23.44	15.24	26.69
VC3	32.90	16.45	16.55	6.16	4.50	15.31
VC7	11.23	7.74	6.36	7.69	12.73	9.15
VC9	10.77	14.38	14.38	14.38	26.81	16.14
VCG	1.90	2.50	3.52	3.57	3.72	3.04
VE9	0.26	3.07	4.61	26.42	14.72	9.82

Sources: <https://finance.vietstock.vn/> and authors synthesized

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Table 2: Average Fixed asset turnover over the years of construction firms listed in the HNX

Description	2015	2016	2017	2018	2019	Average 2015-2019
Fixed asset turnover (turn)	14.25	16.91	22.11	83.55	18.88	31.14

Sources: <https://finance.vietstock.vn/> and authors synthesized

$$\text{Fixed asset turnover} = \text{Revenue} / \text{Average fixed assets}$$

Fixed asset turnover ratio (FAT) is one of the financial metrics used by analysts to measure a company's performance, measure a company's ability to generate net revenue from fixed asset investments which are property, plant, and equipment.

This indicator assesses the efficiency of the use of fixed assets of the enterprise, this indicator also shows how much that 1 VND of fixed assets involved in production and business process will generate in revenue. The higher this indicator is, the more efficiently the enterprise uses fixed assets and vice versa.

Enterprises buy assets, factories and equipment to increase output productivity. At that time, investors will closely monitor this indicator in the coming years to evaluate whether the new fixed assets contribute to increasing the revenue of the enterprise.

This indicator should be evaluated in different periods of time, because some construction firms have revenue from sales cycles or revenue from sales in projects.

Management board of construction firms can outsource fixed assets for their production and business to reduce dependence on assets and to improve fixed asset turnover rate, while still maintain the stable cash flow and other basic business principles.

Some experts say that, enterprises with strong fixed asset turnover ratio can still lose money because the revenue generated by fixed assets does not show the ability of enterprises to generate solid profits or good cashflows.

Table 1 and Table 2 show that the enterprise with the stock code MST has the largest fixed asset turnover among 14 construction firms listed in the HNX, proving the highest efficiency of this enterprise in using fixed assets. Meanwhile, enterprises with securities codes VCG, ICG, CTX and KDM have Relatively small fixed asset turnover ratios, which proves that these enterprises have not used fixed assets effectively. Therefore, these enterprises need measures to improve fixed assets in order to increase the fixed asset turnover ratio.

Some views say that enterprises with a high fixed asset structure have easier access to capital sources, and business efficiency is also higher than those with a low fixed asset structure (Vo, 2017). On the contrary, there is a view that a high structure of fixed assets forecasted for the ineffective use of short-term capital because it reduces capital invested in inventories, as well as other types of short-term assets (Notta&Vlachvei, 2007).

4.2. Total asset turnover

Table 3: Asset turnover of construction firms listed in the HNX during the period 2015-2019 Unit: Turn

Stock code	2015	2016	2017	2018	2019	Average
C92	1.16	1.12	0.62	0.53	0.27	0.74
CTX	0.15	0.13	0.23	0.06	0.41	0.20
ICG	0.35	0.06	0.03	0.78	0.31	0.31
KDM	0.82	0.76	0.48	0.17	0.52	0.55
MST	0.74	0.68	0.41	0.46	0.11	0.48
SDU	0.07	0.52	0.04	0.02	0.08	0.15
TKC	1.06	1.44	1.59	1.27	0.76	1.22
VC1	0.61	0.81	0.77	0.59	0.70	0.70
VC2	0.86	0.50	0.88	0.60	0.61	0.69
VC3	0.77	0.47	0.56	0.36	0.35	0.50
VC7	0.84	0.54	0.44	0.32	0.28	0.48
VC9	0.52	0.63	0.69	0.85	0.71	0.68
VCG	0.37	0.39	0.49	0.47	0.48	0.44
VE9	0.17	0.46	0.35	0.35	0.20	0.31

Sources: <https://finance.vietstock.vn/> and authors synthesized

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Table 4: Average asset turnover over the years of construction firms listed in the HNX

Description	2015	2016	2017	2018	2019	Average 2015-2019
Asset turnover(turn)	0.61	0.61	0.54	0.49	0.41	0.53

Sources: <https://finance.vietstock.vn/> and authors synthesized

$$\text{Total asset turnover ratio} = \text{Revenue} / \text{Average assets}$$

Total asset turnover ratio is used to evaluate the efficiency of using assets of the enterprise. This ratio shows how much of revenue is generated per 1 VND.

The higher the total asset turnover ratio, the more efficient the use of enterprises' assets in production and business activities is.

To accurately conclude on the efficiency of assets using of a firm, it is necessary to compare the enterprise's asset turnover ratio with the industry's average asset turnover ratio.

Table 3 and Table 4 show that enterprises with stock codes TKC, C92, VC1, VC2, VC9, KDM have the best total asset turnover ratios among 14 construction firms listed in HNX and have the greater ratios than the average ratios of these 14 firms. It proves that these enterprises have effectively used their assets. The remaining 8 enterprises, whose total asset turnover ratio is smaller than the average ratio of the 14 listed construction firms, have not been used effectively their assets. Therefore, it is necessary to improve this ratio by increasing sales.

4.3. Equity turnover

Table 5: Equity turnover of construction firms listed in the HNX during the period 2015-2019 Unit: turn

Stock code	2015	2016	2017	2018	2019	Average
C92	5.44	5.87	3.02	2.46	1.40	3.64
CTX	0.61	0.51	0.84	0.19	1.21	0.67
ICG	0.50	0.08	0.05	1.32	0.39	0.47
KDM	1.21	1.02	0.54	0.19	0.64	0.72
MST	0.91	0.77	0.46	0.59	0.17	0.58
SDU	0.23	1.59	0.11	0.07	0.25	0.45
TKC	3.40	6.21	9.27	7.57	3.53	6.00
VC1	1.52	2.32	2.60	2.10	2.79	2.27
VC2	4.87	3.71	7.17	4.48	4.14	4.87
VC3	3.94	2.05	1.71	0.81	0.81	1.86
VC7	3.29	2.32	1.49	0.66	0.51	1.65
VC9	3.98	4.40	5.52	7.39	5.99	5.46
VCG	1.27	1.19	1.45	1.24	1.22	1.27
VE9	0.53	0.73	0.57	0.49	0.27	0.52

Sources: <https://finance.vietstock.vn/> and authors synthesized

Table 6: Average equity turnover over the years of construction firms listed in the HNX

Description	2015	2016	2017	2018	2019	Average 2015-2019
Equity turnover (turn)	2.20	2.34	2.49	2.11	1.67	2.16

Sources: <https://finance.vietstock.vn/> and authors synthesized

$$\text{Equity turnover} = \text{Net Revenue} / \text{Average Equity}$$

This indicator measures the relationship between net revenue and the average equity of the enterprise;

This indicator shows how much revenue can be generated from 1 dong of equity.

Experts say that, the higher the equity turnover is, the higher the efficiency of the enterprise's use of equity is and vice versa.

Table 5 and Table 6 show that: Enterprises with stock codes TKC, VC9 have the largest rate of Equity Turnover among 14 construction firms listed in HNX. This proves that these 2 enterprises are more productive at using equity than the rest enterprises. Enterprises with securities codes SDU and ICG have the smallest equity turnover ratio among 14 construction enterprises listed in the HNX, proving that these two enterprises have the lowest equity efficiency. Enterprises with the equity turnover ratio less than

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1 need to seek for Solutions to improve this indicator by increasing net Revenue. In order to increase net revenue, enterprises should first diversify Products, Diversify the sales method and sales policy, etc.

5. CONCLUSION

Total asset turnover has a positive impact on the enterprise's performance. This is in line with the fact that when the efficiency of asset using and management is improved, performance as well as enterprise value will increase (Dang and Pham, 2016).

Construction firms listed in the HNX need to review and re-examine the procurement, management and use of machines, lines and equipment to increase the efficiency of their investment in fixed assets.

Analysis of performance ratios to assess the management and use of assets of the enterprise is essential. Enterprises can rely on this financial information to make timely adjustment plans as well as important decisions for their units to increase performance. However, when conducting the analysis, it is necessary to put the enterprise in relationship with competitors to have an objective and accurate judgment.

The results of the assessment of financial indicators help the managers and directors of construction firms listed in HNX to make appropriate business decisions to improve their performance.

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