

PRE- AND POST-IPO FINANCIAL PERFORMANCE OF A VENTURE CAPITAL-BACKED QHTL, MAHARASHTRA Authors:

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ABSTRACT

The implications of stock exchange listing have been widely examined, often yielding mixed conclusions about its impact on corporate financial performance. This study analyses the financial effects of listing on Quick Heal Technologies Limited (QHTL), Pune, Maharashtra. This venture capital-backed cybersecurity firm launched its Initial Public Offering (IPO) and was listed on the National Stock Exchange (NSE) and Bombay Stock Exchange (BSE) on February 18, 2016. The primary objective is to assess and compare the company's pre- and post-listing financial performance to understand how public listing influences key financial metrics. The study is based exclusively on secondary data, collected from the company's audited annual reports and financial portals over a 10year period, covering five years each before and after its listing (FY 2011-12 to 2020-21). The analysis centers on core financial indicators such as profitability, liquidity, solvency, operational efficiency, and asset utilization capacity. A paired-sample t-test was used to test the significance of the differences in mean values between the pre- and post-listing periods. The findings reveal that while profitability metrics such as ROE, ROCE, NPM, and OPM exhibited slight variations, none were statistically significant. Liquidity indicators (CR and QR) declined modestly, but again without statistical significance. The company remained debt-free throughout, indicating stable solvency. However, a statistically significant increase in the Total Asset Turnover Ratio (TATR) was observed post-listing, suggesting improved operational efficiency in asset utilization. For venture capitalbacked firms like Quick Heal, listing serves as a strategic move toward long-term scalability and credibility rather than a guaranteed driver of enhanced financial performance.

Key words: Venture Capital Financing, IPO listing, Profitability, liquidity, solvency, Operational efficiency, and Asset utilization.

INTRODUCTION

Venture capital (VC) funding plays a crucial role in fostering early-stage growth for technology companies, providing them with the financial resources and strategic guidance required to scale operations, innovate, and establish market leadership. The QHTL, a prominent Indian solutions provider, exemplifies this growth trajectory, having received significant venture capital investment before its public listing. Initially founded as CAT Computer Services in 1995, the

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company evolved into QHTL, attracting investment from venture capital firms due to its strong market presence and innovative security products. In 2010, Sequoia Capital, a leading global venture capital firm, invested approximately ₹60 crores in QHTL, marking a pivotal milestone in the company's expansion strategy. This funding helped QHTL enhance its R&D capabilities, broaden its product portfolio, and strengthen its market penetration. By 2016, the company successfully transitioned to a publicly listed entity through an initial public offering (IPO) on BSE and NSE, raising around ₹451 crores. Post-listing, the QHTL faced new challenges, including heightened competition, evolving cybersecurity threats, and increased investor scrutiny of its financial performance. Analysing the economic performance of QHTL post-IPO provides insights into how venture capital-backed companies adapt to public market expectations. This study evaluates key financial indicators such as revenue growth, profitability, return on equity (ROE), capital structure, and market valuation to understand the impact of VC funding on long-term financial stability.

LISTING OF QHTL

A Pune-based QHTL, founded in 1995, is a leading provider of cybersecurity solutions in India. The company launched its initial public offering (IPO) in 2016, aiming to raise ₹451 crores, which included a fresh issue of ₹250 crores and an offer for sale of 1,28,50,000 shares by existing investors. Venture capital firm Sequoia Capital, which had invested ₹60 crores in QHTL in 2010, partially exited through this IPO by selling a portion of its stake. The shares were listed on the BSE and NSE at an issue price range of ₹311 to ₹321 per share.

Founded by Kailash Katkar and Sanjay Katkar, QHTL has established itself as a trusted brand in the antivirus and endpoint security software market. The company's product portfolio includes QHTL Antivirus, Seqrite (enterprise security solutions), and GoDeep AI. With a robust R&D centre in Pune, QHTL continuously innovates to counter evolving cybersecurity threats. The QHTL operates through a robust distribution network, with over 25,000 channel partners across India, ensuring deep market penetration. The company also has a global presence across more than 80 countries, serving businesses, government institutions, and individual users. Despite facing increasing competition from global cybersecurity giants, QHTL has maintained its leadership in India's retail cybersecurity market, leveraging its localized threat detection expertise and customer-centric approach.

LITERATURE REVIEW

Aggarwal, R., Rivoli, P. (1990) examine the presence of fads in the Initial Public Offering (IPO) market, arguing that short-term investor enthusiasm drives IPO overvaluation, leading to subsequent underperformance. Their study finds that IPO stocks initially experience significant price increases but tend to underperform in the long run, supporting the hypothesis that irrational investor behavior and speculative demand contribute to early mispricing. The study further highlights that momentum-driven investors often drive early price surges, but as market sentiment stabilizes, fundamental valuation concerns emerge, resulting in price corrections. (1)

Megginson and Weiss (1991) in their study "Venture Capitalist Certification in Initial Public Offerings" provide empirical support for the certification role of venture capitalists in initial public offerings (IPOs). Their study compares VC-backed IPOs with a control group of non-VC-backed IPOs from 1983 to 1987, matched by industry and offering size. The findings indicate that venture

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capital backing leads to significantly lower initial returns and gross spreads, supporting the hypothesis that VC involvement reduces information asymmetry and enhances investor confidence. The presence of venture capitalists in issuing firms lowers the total costs of going public while maximizing net proceeds for the firm. the study documents that venture capitalists retain a substantial portion of their holdings after the IPO, signaling a long-term commitment to the firm's success. This retention acts as a positive signal to the market, reinforcing the idea that venture capitalists play a crucial role in corporate governance and post-IPO stability. (2)

Jay R. Ritter (1991) examines the under-pricing of Initial Public Offerings (IPOs) and highlights that this phenomenon is largely a short-term market inefficiency rather than a persistent trend. The study, which analyses IPOs issued between 1975 and 1984, finds that while firms experience significant initial price gains on the first trading day, they tend to underperform in the long run, compared to matched firms over three years. This underperformance varies across industries and issuance years, with companies going public during high-volume IPO periods experiencing the most significant declines in stock price performance. The findings suggest that IPO markets are influenced by periods of investor over-optimism, particularly regarding young, high-growth firms. (3)

Lerner (1994) examines the timing strategies of venture capitalists (VCs) in initial public offerings (IPOs) and private financings, focusing on 350 venture-backed biotechnology firms from 1978 to 1992. The study finds that VC-backed firms go public when equity valuations are high and rely on private financings when valuations are lower, highlighting VC's strategic market timing behaviour. Moreover, experienced venture capitalists are exceptionally skilled at taking companies public near market peaks, maximizing returns, and maintaining investor confidence. (4)

Jain and Kini (1994) conducted empirical research entitled "The Post-Issue Operating Performance of IPO Firms," which explores the impact of transitioning from private to public ownership through an initial public offering (IPO). The study reveals a significant decline in operating performance post-IPO. Additionally, it finds a positive relationship between post-IPO performance and equity retention by original entrepreneurs. However, there is no direct association between post-IPO performance and the degree of initial under-pricing. The study also notes declines in the market-to-book ratio, price/earnings ratio, and earnings per share post-issue. (5)

OBJECTIVE OF THE STUDY

• To assess and compare the liquidity, solvency, profitability, operational efficiency, and asset utilization capacity of QHTL before and after listing it on BSE and NSE.

HYPOTHESES OF THE STUDY

H01: There exists no significant change in the Profitability of QHTL post-listing.

H01a: There exists no significant change in the Net Profit Margin (OPM) of QHTL.

H01b: There exists no significant change in the Return on Equity (NPM) of QHTL.

H01c: There exists no significant change in the Return on Capital Employed (ROE) of QHTL.

H01d: There exists no significant change in the Return on Capital Employed (ROCE) of QHTL.

H02: There exists no significant change in the liquidity of QHTL post-listing.

H02a: There exists no significant change in the liquidity of QHTL.



H02b: There exists no significant change in the liquidity of QHTL.

- H03: There exists no significant change in the operational efficiency and asset utilization capacity of QHTL post-listing.
 - H03a: There exists no significant change in the Total Asset Turnover Ratio (TATR) of QHTL post-listing.
 - H03b: There exists no significant change in the Return on Assets (ROA) of QHTL post-listing.

RESEARCH METHODOLOGY

The study utilizes secondary data sources, including those from Moneycontrol.com, NSE, and BSE filings, as well as the annual reports of QHTL. The company was listed on the NSE and BSE on February 18, 2016. Financial data has been collected for 10 years (2010-11 to 2019-20), covering a period of -5 and +5 years relative to the listing event.

The study focuses on the following key financial variables: Profitability, Solvency, Liquidity, Operational Efficiency, and Asset Utilization Capacity. A paired sample t-test is used to compare the mean values of financial metrics before and after the listing to analyze the impact of listing on financial performance. This method helps to determine whether there are any statistically significant changes in the financial position of QHTL following its transition to a publicly listed company.

Paired sample statistics										
No. of	Key financial variables				Std. Error					
pair	(pre- and post-listing)	Mean	Ν	σ	Mean					
Pair 1	CR - Pre-listing	5.85	5	2.95	1.32					
	CR- Post-isting	9.21	5	1.52	0.68					
Pair 2	QR-Pre-listing	5.78	5	2.97	1.33					
	QR - Post-Listing	9.12	5	1.52	0.68					
Pair 3	OPM-Pre-listing	42.02	5	13.27	5.93					
	OPM - Post-Listing	45.14	5	16.65	7.45					
Pair 4	NPM - Pre-listing	27.95	5	9.47	4.23					
	NPM - Post-Listing	25.90	5	4.37	1.96					
Pair 5	ROE - Pre-listing	20.94	5	8.82	3.94					
	ROE - Post-Listing	11.09	5	1.96	0.88					
Pair 6	ROCE - Pre-listing	20.91	5	8.79	3.93					
	ROC - Post-Listing	14.34	5	4.49	2.01					
Pair 7	TAT - Pre-listing	63.67	5	11.38	5.09					
	TAT - Post-Listing	39.36	5	1.62	0.72					
Pair 8	Pair 8 ROA - Pre-listing 1		5	8.61	3.85					
	ROA - Post-Listing	10.19	5	1.78	0.80					

Table 1: Descriptive statistics on the profitability, Liquidity, Solvency, and Efficiency

Source: Self-compilation with SPSS

1. Changes in Profitability

The graph below illustrates the pattern of changes in the profitability position of QHTL. Figure 1: Trends in profitability position



Source: Prepared from data extracted from moneycontrol.com, and compiled in Excel.

The profitability metrics of QHTL, as shown in Fig.1, exhibit a distinct pattern across the prelisting and post-listing periods. During the pre-listing phase (2011-12 to 2015-16), all key indicators such as Return on Capital Employed, Return on Equity, Net Profit Margin, and Operating Profit Margin showed a consistent downward trend, reflecting a phase of declining profitability. ROCE dropped sharply from 32.35% in 2011-12 to 10.17% in 2015-16, while ROE decreased from 32.42% to 10.17% during the same span. Similarly, NPM fell from 38.1% to 18.79%, and OPM from 55.44% to 27.8%.

Following the post-listing period (2016-17 to 2020-21), the company demonstrated signs of recovery and growth in profitability, with all key metrics improving year over year. Notably, OPM surged to 73.72% by 2020-21, indicating improved cost control or pricing efficiency. Likewise, ROCE and ROE increased to 32.65% and 19.26% respectively, and NPM reached 32.01%, surpassing pre-listing levels. These trends suggest that listing may have positively influenced the company's operational performance, financial stability, and investor confidence, ultimately boosting profitability in the post-IPO period.

			Paired di	fferences					
					95% co	nfidence			
				Std.	interva	al of the			
			σ	Error	diffe	rence			p-
		Mean		Mean	Lower	Upper	t	df	value
Pair-	Pre-Listing OPM	3.126	26.87	12.02	-36.49	30.24	-0.26	4	0.81
1	Post Listing OPM	3.120	20.87	12.02	-30.49	50.24	-0.20	4	0.81
Pair-	Pre-Listing NPM	- 2.05	13.20	5.90	-14.34	18.43	.347	4	0.75
2	Post Listing NPM	- 2.03	15.20	5.90	-14.34	16.45	.347	4	0.75
	Pre-Listing ROE	9.85	10.62	4.75	-3.33	23.04	2.08	4	0.11



Pair-	Post Listing ROE								
3	I USI LISHIIG KOL								
Pair-	Pre-Listing ROCE Post Listing ROCE	6 57	13.21	5.91	-9.83	22.98	1 11	4	0.33
4	Post Listing ROCE	- 0.57	13.21	5.91	-9.05	22.98	1.11	4	0.55
	Table	$2 \cdot \mathbf{R}_{esu}$	lts of paire	d sample t	test of pr	ofitability			

Table 2: Results of paired sample t-test of profitability

Source: Self-Compilation with SPSS

Table 2 compares pre-listing Operating Profit Margin (OPM), Net Profit Margin (NPM), Return on Equity (ROE), and Return on Capital Employed (ROCE) with their post-listing counterparts as follows:

A. *Operating Profit Margin (OPM)*: Pair-1 of the table compares pre-listing OPM with post-listing OPM. The paired differences between the two periods show a mean difference of -3.126 with a standard deviation of 26.87 and a standard error of 12.02. The 95% Confidence Interval for the difference ranges from -36.49 to 30.24. The negative mean suggests a slight decline in OPM post-listing. However, the p-value of 0.81 is well above the 0.05 significance level, indicating that the change is statistically insignificant. Thus, H01a is accepted, suggesting that there exists no significant change in the profitability of QHTL post-listing in terms of OPM.

B. *Net Profit Margin (NPM):* Pair-2 of the table compares pre-listing NPM with post-listing NPM. The mean difference between the two is 2.05, with a standard deviation of 13.20 and a standard error of 5.90. The 95% Confidence Interval ranges from -14.34 to 18.43. This indicates a minor increase in NPM after the listing. However, the p-value of 0.75 suggests the change is statistically insignificant, as it is well above 0.05. Hence, H01b is accepted, indicating no significant difference in the net profitability of QHTL post-listing.

C. *Return on Equity (ROE):* Pair-3 examines Pre-Listing ROE against Post-Listing ROE. The data show a mean difference of 9.85 with a standard deviation of 10.62 and standard error of 4.75. The confidence interval ranges from -3.33 to 23.04. Although the mean suggests an increase in shareholder return, the p-value of 0.11 is greater than 0.05, indicating that the increase is not statistically significant. Thus, H01c is accepted, which implies no significant change in the ROE of QHTL post-listing.

D. *Return on Capital Employed (ROCE):* Pair-4 of the table compares Pre-Listing ROCE with Post-Listing ROCE. The mean difference is 6.57, with a standard deviation of 13.21 and standard error of 5.91. The 95% Confidence Interval ranges from -9.83 to 22.98. Though there is an increase in capital efficiency, the p-value of 0.33 is higher than the 0.05 threshold, showing that the change is not statistically significant. Therefore, H01d is accepted, suggesting that there is no significant difference in the ROCE of QHTL post-listing.

2. Changes in Liquidity:

The graph below illustrates the trend in the Liquidity Position of QHTL across the pre-listing and post-listing periods:







Source: Prepared from data extracted from moneycontrol.com, and compiled in Excel

			Paireo	d differences					
					95% co	onfidence			
				Std.	interv	al of the			
			σ	Error	diff	erence			p-
		Mean		Mean	Lower	Upper	t	df	value
Pair-	Pre-Listing CR	3.36	3.83	1.71	-8.11	1.39	-1.96	4	0.121
1	Post Listing QR	-5.50	5.85	1./1	-0.11	1.39	-1.90	4	0.121
Pair-	Pre-Listing CR								
2	Post Listing QR	-3.34	3.85	1.72	-8.12	1.44	-1.94	4	0.124
2		_							

Table 3: Results of paired sample t-test of Liquidity

Source: Self-Compilation with SPSS

A. Current Ratio (CR): Pair-1 of the table compares the pre-listing Current Ratio (CR) with the Post-Listing CR. The paired differences show a mean difference of -3.36 with a standard deviation of 3.83 and standard error of 1.71. The 95% Confidence Interval for the difference ranges from -8.11 to 1.39. The negative mean indicates a decline in liquidity post-listing. However, the p-value of 0.121 is greater than 0.05, implying that this difference is not statistically significant. Thus, H03a is accepted, indicating that there exists no significant change in the liquidity of QHTL post-listing in terms of the Current Ratio.

B. Quick Ratio (QR): Pair-2 compares the pre-listing Quick Ratio (QR) with the Post-Listing QR. The mean difference is -3.34, with a standard deviation of 3.85 and a standard error of 1.72. The 95% Confidence Interval spans from -8.12 to 1.44. This again shows a decrease in short-term liquidity after listing. However, the p-value of 0.124 is also above 0.05, confirming that the observed change is statistically insignificant. Therefore, we accept H03b, suggesting that QHTL's Quick Ratio did not undergo a significant change post-listing.



3. Changes in Solvency:

In analysing the solvency position of QHTL, it was observed that the company maintained a debt-free capital structure consistently throughout both the pre-listing and post-listing periods. The Debt-to-Equity Ratio (DER) remained effectively zero, indicating that the company did not rely on external long-term borrowings to finance its operations or growth, either before or after its Initial Public Offering (IPO).

As a result, no significant variation could be detected in solvency metrics across the two periods. This stability implies a strong and conservative financial policy, reflecting the company's commitment to internal financing and retained earnings as primary sources of capital.

Therefore, the solvency position of QHTL remained unchanged and robust throughout the transition to a publicly listed entity. This debt-free status enhances the company's financial resilience and lowers financial risk, making it an attractive proposition for risk-averse investors and long-term stakeholders.

4. Changes in Operational Efficiency and Asset Utilization Capacity:



Figure 4: Trends in Operational Efficiency and Asset Utilization Capacity

Source: Prepared from data extracted from moneycontrol.com, and compiled in Excel



	and Asset Utilization Capacity									
			Paired d	ifferences						
					95% co	onfidence				
				Std.	interv	al of the				
			σ	Error	diffe	erence	_		p-	
		Mean		Mean	Lower	Upper	t	df	value	
Pair-	Pre-Listing TAT	- 24.31	11.59	5.18	9.91	38.70	4.69	4	0.001	
1	Post Listing TAT	- 24.31	11.39	5.10	9.91	30.70	4.09	4	0.001	
Pair-	Pre-Listing ROA	- 8.22	10.22	4.57	-4.47	20.91	1.79	4	0.147	
2	Post Listing ROA	0.22	10.22	+. 37	-4.47	20.91	1.79	4	0.147	
a	0.100 11.1	d anag								

Table 5: Results of Paired Sample t-test on Operational Efficiency and Asset Utilization Capacity

Source: Self-Compilation with SPSS

A. *Total Asset Turnover Ratio (TAT):* Pair-1 of the table compares the Pre-Listing Total Asset Turnover Ratio (TAT) with the Post-Listing TAT. The mean difference is 24.31, with a standard deviation of 11.59 and a standard error of 5.18. The 95% Confidence Interval for the difference ranges from 9.91 to 38.70. The positive mean difference indicates a significant increase in asset utilization after the listing. The t-value of 4.69 and a p-value of 0.001, which is well below the 0.05 threshold, suggest that this increase is statistically significant.

Therefore, H04a is rejected, indicating that, there exists a significant change in the operational efficiency and asset utilization capacity of QHTL post-listing in terms of TAT.

B. *Return on Assets (ROA):* Pair-2 of the table compares the Pre-Listing ROA with the Post-Listing ROA. The mean difference is 8.22, with a standard deviation of 10.22 and a standard error of 4.57. The 95% Confidence Interval spans from -4.47 to 20.91. While the average ROA increased post-listing, the p-value of 0.147 exceeds the 0.05 significance level, indicating the difference is not statistically significant.

Thus, H04b is accepted, implying that there is no significant change in the operational efficiency and asset utilization capacity of QHTL in terms of ROA post-listing.

QHTL experienced a significant improvement in Total Asset Turnover Ratio (TAT) post-listing, but no statistically significant change in Return on Assets (ROA). This suggests improved efficiency in asset usage but not necessarily in generating returns from those assets.

Hypo. No.	Statement	Status
H01	There exists no significant change in the profitability of QHTL between pre-listing and post-listing	Accepted
H01a	There exists no significant change in the OPM of QHTL post-listing.	Accepted
H01b	There exists no significant change in the NPM of QHTL post-listing.	Accepted
H01c	There exists no significant change in the ROE of QHTL post-listing.	Accepted

 Table 6: Summary of Hypotheses



H01d	There exists no significant change in the ROCE of QHTL post-listing.	Accepted
H02	There exists no significant change in the liquidity of QHTL between pre-listing and post-listing.	Accepted
H02a	There exists no significant change in the liquidity of QHTL post-listing	Accepted
H02b	There exists no significant change in the liquidity of QHTL post-listing	Accepted
H03	There exists no significant change in the operational efficiency and asset utilization capacity of QHTL post-listing.	Rejected
Н03а	There exists no significant change in the operational efficiency and asset utilization capacity of QHTL in terms of TATR post-listing.	Rejected
H03b	There exists no significant change in the Asset Utilization Capacity of QHTL in terms of ROA post-listing.	Accepted

FINDINGS AND CONCLUSIONS:

The objective of this study was to evaluate the difference in the financial performance of QHTL before and after its Initial Public Offering. Based on the analysis, the financial outcomes post-listing showed mixed results, with the impact varying across key financial metrics, as outlined below:

- The analysis reveals that profitability metrics such as ROE and ROCE showed improvement in the post-listing period, but these changes were not statistically significant. While Net Profit Margin (NPM) indicated a slight rise, Operating Profit Margin (OPM) slightly declined. However, all these variations were insignificant at the 5% level, indicating that listing had a limited or negligible impact on profitability. Thus, profitability remained largely stable post-IPO.
- In terms of solvency, as measured by the Debt-to-Equity Ratio (DER) (not detailed above but typically included in such studies), no significant conclusions could be drawn from the available data. The solvency position appears unchanged, suggesting that the IPO did not considerably affect the capital structure.
- The study of Current Ratio (CR) and Quick Ratio (QR) showed a decline in liquidity levels post-listing, though these changes were also statistically insignificant. This implies that the company's short-term financial health remained relatively stable, and the listing did not lead to a significant shift in liquidity.
- The results indicate a significant increase in the Total Asset Turnover Ratio (TATR), suggesting improved asset utilization post-listing. However, Return on Assets (ROA), while showing an upward trend, did not reflect a statistically significant change. Thus, it can be concluded that asset efficiency improved, but overall operational efficiency remained unchanged in terms of return generation.

The IPO of QHTL produced diverse financial outcomes. While profitability and liquidity remained statistically unaffected, there was a notable enhancement in asset utilization capacity. The results



suggest that listing did not drastically alter the company's core financial fundamentals but may have facilitated greater operational scale and resource mobilization. This underscores that going public serves more as a platform for long-term strategic positioning rather than immediate financial transformation.

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