# STANDARDIZATION OF NON GAAP METRICS IN REPORTING AT STARTUPS IN THE INTEREST OF FUTURE INVESTORS

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## **ABSTRACT**

Non-GAAP financial measurements are frequently used in addition to GAAP measures by companies that are about to list in the markets, justifying their lofty valuations and maintaining the much needed hype. Non-GAAP measures are not as clearly defined as GAAP measures, which creates an environment where managers and analysts can take advantage of these data to skew performance reporting and analysis. This creates the perfect scenario for management and institutional investors to play the pump and dump game, trapping innocent investors. The abuse of these tactics is more likely in economies like India with relatively lax legal framework and that lack substantial shareholder litigation, as compared to that of USA—which has clear defined areas even for Non-GAAP variables. The paper summarizes early information about the use of non-GAAP metrics in India based on annual reports for 2 firmyears for 47 firms. Archival data and anecdotes are used for documentation. According to the findings, management typically employ such avaricious strategies in counterpoint to a decline in revenues or profit growth.

Keywords: Non-GAAP, listing gains, startup listing, fancy financial reporting

## **JEL classification:**

G17, K22, M13, M21, G32

## INTRODUCTION

In a bid to improve the financial statements and portray their stories companies, particularly the unlisted ones use non-GAAP measures. Some organizations utilize them to present management's estimate of their core business operations to investors, generally by omitting nonrecurring costs and other sums they consider do not really illustrate ongoing performance, such as major strategic restructurings or expenses that do not account the salary of employees or ESOP component and

has given rise to irrational terms like Non GAAP - Adjusted EBITDA, which clearly do not have a fixed definition and it changes as per the need of the accountant.

Every positive spike in the markets leads to creation of such tools and definitions which paint a rosy picture of the company's financials and future prospects. In the earlier dotcom in the late 90's similar Non GAAP metrics were floated and which eventually got bitten by the dust in the bubble burst that happened in early 2000.

A similar episode is getting repeated in the 2022 era, where companies particularly new age technology startups or unicorns are raising truckloads of cash at humongous valuations in the final rounds towards an IPO and justifying it by usage of new-age metrics, which discount the real economics of the business. As a result there is a frenzy amongst retail investors, which leads to huge erosion of wealth. This listing frenzy and eventual dumping by Institutional Investors at the expense of retail investors can be clearly seen by the pump and dump modus operandi being used globally at emerging economies by the investors of emerged economies. This process systemically weakens growing economies as the participants in domestic markets include retail investors, pension funds, mutual funds and insurance companies who suffer due to the wealth erosion.

If we consider Indian Markets as a narrow market segment, listed technology Unicorn Startups have managed to achieve a wealth erosion of 60% in their Market Cap at the time of their listing and as compared to 30<sup>th</sup> October 2022 i.e. within a period of one year, these companies have lost more than 60% of their share price from their 52 Week High or All-time high price – which coincided with their issue price. This brings the important questions of the various valuation metrics that were used and highlighted to create and maintain the hype.

These can be attributed to non-GAAP metrics like earnings before marketing expenses, cash EPS, and earnings before losses from specified product lines which distorts the real financial health of a company and makes it difficult to make future projections.

While the US S.E.C(Securities and Exchange Commission) incorporated Sarbanes-Oxley Act of 2002 (SOX) to tame such notoriety by eliminating the misleading or unscrupulous use of non-GAAP financial performance indicators while also improving the appropriateness of that content's use – similar measures are yet to be constituted by other exchange regulators like India's SEBI, U.K FRC or Australia's SIC.

There have been various studies which showcase this practice by corporates which is sometimes deemed as borderline ethical or unethical, around which various debates and publications has been done in finance and accounting journals. However, this study differs from prior research in major ways. To start, it compares the financial performance of corporations before and after the listing

using a number of performance metrics and different business characteristics. As the current worldwide slowdown is at the lowest, this presents a rare opportunity to analyze corporate governance reaction and performance; it also evaluates the association between corporate governance and company performance using a recent dataset.

## RESEARCH METHODOLOGY AND SAMPLE

For this, we used a sample data of 47 listed firms in the Indian stock market for the year 2020-2022 to evaluate our study. We reviewed at the business annual reports, earnings releases, earnings call transcripts, analyst reports, and news sources to discover out where the non-GAAP financial metrics were employed in India. Data had to be manually gleaned from annual reports' performance trends, management discussion and analysis section, chairman's speech, directors' report, call transcripts, earnings releases, analyst reports, and news articles in the absence of non-GAAP financial measures being available in databases.

The following demonstrates how this study adds to the scant existing literature. First, we studied at how Non-GAAP impacted corporate performance, governance, and other business firm characteristics. There has been little research as to how Non-GAAP metrics impact performance of the business. The impact of imprecise indicators on corporate governance structure is also being systematically assessed for the first time. This emphasizes how essential risk management is to corporate governance and strategic planning.

Additionally, the study will enhance our understanding of just how unproven variables affect several firm-level characteristics before and after an initial public offering (IPO). Our methodology is also unique in that we empirically investigate the effects of Non-GAAP on the already-existing link between corporate governance and business performance.

# **RESEARCH DESIGN**

In order to evaluate the relationship between corporate governance, corporate performance, stock price fluctuations, and the impact of non-GAAP measurements on them, a sample of data from 47 businesses listed on the Indian stock market from September to October 2022 was collected.

The annual reports were manually compiled to obtain information on corporate governance, such as board structure, autonomy, gender balance, proceedings, audit committee independence, and discussions of the oversight committee. With the use of DataStream, significant financial intelligence, including all of the financial performance metrics for businesses, was compiled.

To compare the effects of Non-GAAP on governance attributes before and after the IPO valuation,

we employed a standard t-test.

The following table defines the Non-GAAP variables included in this study.

Non GAAP Metric	Variable	Definition				
Return on Invested Capital	ROIC	It is a metric that is employed in finance, accounting, and valuation to determine how profitable and valuegenerating a business is in comparison to the capital invested by shareholders and other debt holders.				
Return on Equity	ROE	It is a metric used to determine how profitable a company is in comparison to its equity. ROE can also be viewed as a return on assets less liabilities because shareholder's equity can be computed by adding up all assets and deducting all liabilities.				
Annual Recurring Revenue	ARR	It is used to show how much revenue a company anticipates from repeat customers in the upcoming 12 months. It is equivalent to the value of the underlying contracts that are recurring in nature (subject to renewal on at least an annual basis).				
Month-on-month growth	MoM growth	It is measure of forward momentum, market traction and business direction				
Total Contract Value	TCV	This is used to describe overall revenue that comes from a single contract (or customer), including one-time charges like cancellation fees or onboarding fees. It gauges the value of a contract after it is signed.				
Life Time Value	LTV	The method by which a business determines the value of a client to the firm over the course of the customer's whole lifespan is known as LTV				
Gross Merchandise Value	GMV	It is the total amount of goods sold through a customer platform over a specific time period.				
EBITDA	EBITDA	Earnings before interest, taxes, depreciation and amortization				
Customer Acquisition Cost	CAC	It is the total expense of getting a customer to purchase a good or service and includes all property, equipment, sales and marketing expenses. This calculates how much a company spends to bring in new clients.				
Daily Active Users / Monthly Active Users	DAU/MAU	By quantifying the number of active interactions from visitors during an applicable period of time, DAU/MAU is a measurement metric that is frequently used to gauge the degree of engagement for a specific product or thing.				
Burn Rate	BR	It is used to indicate how quickly a startup business uses its venture money to pay for overhead before starting to see a positive cash flow from operations.				
Churn Rate	CR	It is the speed where the clients leave a business over a predetermined time frame.				

Table 1: Non-GAAP variables considered for the study

# T-TEST ANALYSIS

To decide on the optimal panel data analysis method, we performed the Hausman test and Breusch

as well as Pagan Lagrangian multiplier tests, in conformity with numerous other research findings. The results of both tests were inconsequential, suggesting that pooled OLS is the best estimation method for our data.

The following is the expression of the regression model used to examine how corporate governance affects company performance:

$$CP_{it} = \sigma_1 ROIC_{it} + \sigma_2 ROE_{it} + \sigma_3 ARR_{it} + \sigma_4 MoM_{it} + \sigma_5 TCV_{it} + \sigma_6 LTV_{it} + \sigma_7 GMV_{it} + \sigma_8 EBITDA_{it} + \sigma_9 CAC_{it} + \sigma_{10} MAU_{it} + \sigma_{11} BR_{it} + \sigma_{12} CR_{it} + \sigma_{13} year_{it} + \varepsilon_{it}$$

# RESULTS DESCRIPTIVE ANALYSIS

On all the study's factors, a descriptive analysis was done. In order to assess the multicollinearity, we performed a correlation analysis on each variable included in the model.

Non GAAP Metric	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
(1) ROIC	1.000											
(2) ROE	0.248	1.000										
(3) ARR	0.335	-0.368	1.000									
(4) MoM	-0.441	0.112	0.308	1.000								
growth (5) TCV	0.112	-0.244	0.260	0.583	1.000							
(6) LTV	-0.212	0.081	0.343	0.376	0.271	1.000						
(7) GMV	-0.148	-0.142	0.198	0.143	0.178	0.047	1.000					
(8) EBITDA	0.063	0.004	0.086	0.312	0.249	0.024	0.146	1.000				
(9) CAC	0.109	-0.241	0.094	0.378	0.437	0.268	0.004	0.018	1.000			
(10) MAU	-0.147	-0.224	0.079	0.014	0.036	0.086	0.208	0.104	0.041	1.000		
(11) BR	-0.312	-0.114	0.294	-0.374	-0.114	-0.134	-0.112	-0.026	-0.068	-0.316	1.000	
(12) CR	-0.341	0.085	0.337	0.076	-0.113	0.137	-0.084	-0.038	0.154	-0.082	0.208	1.000
VIF	-	-	2.01	1.680	1.220	1.110	1.310	1.270	1.080	1.240	1.21	1.09
Mean	0.022	-0.005	0.455	0.419	0.352	0.317	0.353	0.388	0.441	0.461	0.806	1.045
Standard	0.376	0.352	0.548	0.544	0.442	0.440	0.525	0.536	0.494	0.670	0.431	0.045
Deviation Min	-0.441	-0.368	0.079	-0.374	-0.114	-0.134	-0.112	-0.038	-0.068	-0.316	0.208	0.045
Max	0.376	0.352	2.010	1.680	1.220	1.110	1.310	1.270	1.080	1.240	1.210	1.090
Obs.	378	354	378	378	378	378	378	378	378	355	378	378

Table 2: Statistic Analysis & Co-relation Matrix

The new age Indian listed tech companies have been considerably underperforming in recent months compared to the prior months, which may also be related to the global economic slowdown. The mean value of the firm performance is almost zero for ROIC and even negative for ROE.

Despite the fluctuations, the outcome is a blatant sign of Indian companies' recent poor performance. There is a significant disparity across firms, as shown by the minimum and maximum values of performance (ROIC: -.441 and.376, ROE: -0.368 and 352, respectively). In order to assess the multicollinearity, we also performed a correlation analysis on each variable included in the model. All independent variables exhibit correlation coefficients that are less than 0.5, as indicated in Table 2. Researchers frequently emphasise that for the multicollinearity problem, values lower than 0.8 rule out the possibility of multicollinearity problems. By using the variance inflating factor (VIF) test, we advanced the investigation even further. All variables combined produced a result of 2.0 or less. These analyses demonstrate that multicollinearity does not exist. Therefore, no evidence of a multicollinearity issue among these variables was discovered.

# **T-TEST ANALYSIS**

The mean value of each variable included in this study is compared before and after the IPO listing using the T-test analysis.

	Before Listing				Afte	r Listing	Mean Difference	T-Test
Variables	Obs	Mean	Std Deviation	Obs	Mean	Std Deviation		Mean (Post) - Mean (Prior)
ROIC	186	0.009174	0.080621	186	0.236674	0.1174785	0.014211	0.2275
ROE	186	0.009174	0.154415	186	0.320574	0.2751512	0.1405615	0.3114
ARR	175	0.21815	0.0795112	179	0.53395	1.1549231	0.070418	0.3158
MoM growth	186	7.51508	1.7415156	186	8.16648	1.0475151	- 0.0015415	0.6514
TCV	186	3.58456	1.080991	186	4.53936	1.70798408	-0.005415	0.9548
LTV	186	1.548512	1.6451421	186	1.693612	1.058409	0.27692	0.1451
GMV	186	5.154152	1.361178	186	5.220852	1.2109809	0.24	0.0667
EBITDA	186	3.154841	0.7745121	186	3.570241	0.1510811	-0.060451	0.4154
CAC	186	5.510215	1.067887	186	6.055315	2.06541841	0.032165	0.5451
DAU/MAU	172	0.158454	0.1566478	181	0.940554	0.5048504	0.004115	0.7821
BR	186	2.154572	2.857413	186	3.069072	0.0215847	0.027106	0.9145
CR	186	0.030844	0.063497	186	0.284944	0.0074	0.0012505	0.2541

Table 3. T-test: Prior and Post IPO listing

There is unmistakable proof that the slowdown has impacted every business attribute, as indicated in Table 3. The t-test it reveals that there is no significant difference between before and post-IPO listing.

# **ROBUSTNESS TEST**

We divided the sample into two subsamples based on the year in order to assess the influence of Non-GAAP indicators and determine whether corporate governance has an asymmetrical impact on financial leverage. Panel OLS regressions of company performance for the subsamples are shown in Table 4 below.

	Panel A (F	ROIC)	Panel B (ROE)			
Independent Variables	(1)	(2)	(1)	(2)		
	0.046**	0.044*	0.026**	0.026**		
ARR	(1.98)	(1.99)	(2.14)	(2.15)		
	.207	0.201	0.831	0.823		
MoM growth	(1.14)	(1.15)	(0.17)	(0.18)		
G	0.137	0.122	, ,	0.523		
TCV	(1.35)	(1.41)	0.553	(0.52)		
	0.014**	0.009**	0.076*	0.063*		
LTV	(1.35)	(1.41)	0.542	(0.52)		
	0.014**	0.010**	0.068**	0.055*		
GMV	(-2.31)	(-2.42)	(-1.67)	(-1.75)		
	0.954	0.916	0.992	0.886		
<b>EBITDA</b>	(-0.56)	(-0.49)	(-0.58)	(-0.52)		
	0.506	0.554	0.5	0.534		
CAC	0.874	0.872	0.111	0.111		
	(0.14)	(0.14)	(1.46)	(1.47)		
DAU/MAU	0.006***	0.006***	0.063**	0.061**		
	0.86	0.865	0.105	0.106		
BR	(0.11)	(0.10)	(1.49)	(1.48)		
	0.00*	0.00*	0.00*	0.00*		
CR	(6.13)	(6.31)	(4.46)	(4.40)		
	0.578	0.602	0.365	0.362		
Industry	(0.43)	(0.42)	(-0.76)	(-0.76)		
	0.846	0.902	0.096*	0.1		
Constant	(-0.11)	(-0.10)	(-1.46)	(-1.45)		
Year	No	yes	No	yes		
2020	-	(-1.38)	-	(-1.09)		
F-Statistic	8.112	7.746	5.013	4.625		
R-Squared	0.224	0.228	0.148	0.15		
Obs.	354	354	354	354		

Standardzeta coefficients; t statistics in parenthesis. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4: Panel OLS Regressions of Company Performance: Year Sub-Samples

The results of panel OLS regressions show that average recurring revenue does not significantly affect company performance during this slowdown period as it did in the prior year, indicating that

more month-to-month growth and total contract value help the firms to combat the negative effects of absurd variables.

It has been demonstrated that higher income opens up additional avenues for businesses to interact with the outside world and the creditors who are crucial to their survival during a recession. It's interesting to note that during the slowdown, gross merchandise value appeared to be significantly improving company performance, whereas in the previous year, it had an inverse relationship with firm performance across both metrics. This is due to the more diverse mix, expectations, knowledge, and backgrounds of its counterpart, which served as a strategic resource for the business during the crisis and led to higher performance.

## **SUMMARY**

This study confirms that Indian corporations use non-GAAP measurements. The following are our main conclusions:

- i. The most popular non-GAAP metric used by businesses and analysts is EBITDA.
- ii. Companies often appear to adopt, abolish, or amend non-GAAP measures, depending on the situation. We discover that the adjustments are frequently characterized by a decrease in profits or loss, a decline in the growth rate of turnover or earnings, and a loss in the current year as opposed to a profit in the prior year. It's possible that non-GAAP measurements are employed to draw attention away from subpar financial performance.
- iii. Analyst-reported non-GAAP metrics and company-reported metrics frequently diverge. Based on their understanding of the business, the company's revenue and spending structure, and other factors, analysts compute these metrics. We also discovered that there was frequently a significant difference between company and analyst figures.
- iv. These figures are mostly released to bolster investor confidence, which have norelation whatsoever with the actual functioning of the company and mostly such are done because there is an impending OFS (offer for sale) by management or any other key institutional investor.

# LIMITATIONS OF THE STUDY

The short sample size of the study is a small flaw. We ought to work with a big sampling in our subsequent version and investigate at the use of non-GAAP metrics in specific industries.

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