



Session 23

Ratio Type # 2: Efficiency (or Activity) Ratio

How Efficiently Does a Firm Use Its Resources?

Sources of funding:

- Liability
- Equity



To buy **Assets** such as:

- Receivables
- Inventory



Efficient use of these assets results in **higher revenue with lower cost**

Efficiency ratios — also known as **activity ratios** — measure **how effectively a firm utilizes its assets** to generate revenue or sales.

🔍 In this course, we focus on:

- Total Asset Turnover Ratio
- Receivable Turnover Ratio & Days in Receivables
- Fixed Asset Turnover Ratio

Total Asset Turnover ratio

Why Use This Ratio?

This ratio helps us understand how well a company is using **everything it owns (its total assets)** to make **sales or revenue**.

How to Calculate?

Total Asset Turnover =

How to Interpret?

A higher ratio indicates how much **revenue is generated for every ₹1 of assets**.

A higher ratio = firm is using its assets more efficiently.

A lower ratio = less efficient use of assets.

Total Asset Turnover ratio: Practice Question

GenAI Solutions is a pure-play SaaS platform (asset-light model), while InnovateTech is a specialized hardware manufacturer (asset-heavy model). An analysis reveals that both companies have an identical **Total Asset Turnover (TAT) ratio of 1.0**.

- a) Both companies are equally efficient in using their **fixed assets** to generate sales.
- b) Both companies are equally efficient in using their **total investment in assets** to generate sales.
- c) The TAT ratio is irrelevant for comparing companies with different business models.
- d) GenAI Solutions is underperforming, as an asset-light company should have a much higher TAT.

Days in receivables or Days Sales Outstanding (DSO)



? Why Use This Ratio?

🍊 Recall the Lemonade Shop Discussion:

Earlier, we talked about how some students at Riya's stall didn't have cash and promised to pay her later — once they received money from home. Riya assumed they would pay within 30 days. But now she's concerned and asks herself:

🧠 “Am I really getting my receivables back in 30 days... or does it take longer?”

This is where the Days in Receivables ratio helps —
We will see how many days, on average, it actually takes to convert receivables into cash for a business.

Calculate days in receivable (or days sales outstanding) if total revenue is Rs 100 and Account Receivable is Rs 25.

Days in receivable or Days Sales Outstanding (DSO) (How to Calculate?)

TCS Financial Statement	March 31, 202X
Total Revenue	₹100
Account Receivable	₹ 25
Step 1: Account Receivable Turnover <div>Total Revenue = Credit Sales ÷ Account Receivable</div>	<div>= ** ₹100 ÷ ₹ 25</div> <div>4</div> <div>Riya is <u>able to collect its customer payments</u> 4 times a year, meaning it regularly converts what customers owe into cash.</div>
Step 2: Days in Receivable <div>365 ÷ Account Receivable Turnover</div>	<div>= 365 ÷ 4</div> <div>= 91.25 days</div> <div>Riya</div> <div>On average, it takes TCS around 91 days to receive payment from its customers.</div> <div><div>0</div><div>←→1</div><div>←→2</div><div>←→3</div><div>←→4</div><div>~91</div><div>~91</div><div>~91</div><div>~91</div></div>

Days in receivable or DSO: Practice Question

GenAI Solutions and InnovateTech are two companies in the technology sector. The following financial information is available for the year ending March 31, 2021:

GenAI Solutions:

- Total Revenue: ₹85,750
- Accounts Receivable: ₹30,000

InnovateTech:

- Total Revenue: ₹1,00,000
- Accounts Receivable: ₹25,000

Calculate the Days Sales Outstanding (DSO) for both companies?

If both companies offer 60-day credit terms to customers, which company is managing its collections more efficiently?

DSO Calculation Best Practice

For accurate Days Sales Outstanding (DSO) calculation, credit sales should be used instead of total revenue. Why?

- a. Accounts receivable is created only from credit transactions
- b. Including cash sales in the denominator understates collection efficiency
- c. This provides a distorted view of actual payment collection performance
- d. All of above reasons are correct

However, for our class discussion, we will use total revenue for simplicity and consistency with other type of activity ratios.

Fixed Asset Turnover ratio

Why Use This Ratio?

This ratio helps us understand how well a company is using its fixed assets (like buildings, equipment, and machinery) to generate revenue.

How to Calculate?

Fixed Asset Turnover ratio =

? Question to Learners: What Do You Think Is Net Fixed Asset?

How to Interpret?

This ratio tells us how many rupees of revenue the company earns for every ₹1 of fixed asset.

Example:
If the ratio is 2, that means for every ₹1 invested in fixed assets, the company earns ₹2 in revenue.

Fixed Asset Turnover ratio: Practice Question

GenAI Solutions and InnovateTech are two companies operating in different sectors. The following information is available for the financial year 2022-23:

	GenAI Solutions	InnovateTech
Total Revenue	₹66,700	₹10,000
Gross Fixed Assets	₹15,000	₹10,000
Accumulated Depreciation	₹5,000	₹8,000

Compute Fixed Asset Turnover (FAT) ratio for both companies



Session 24

1. FAT: Practice Question

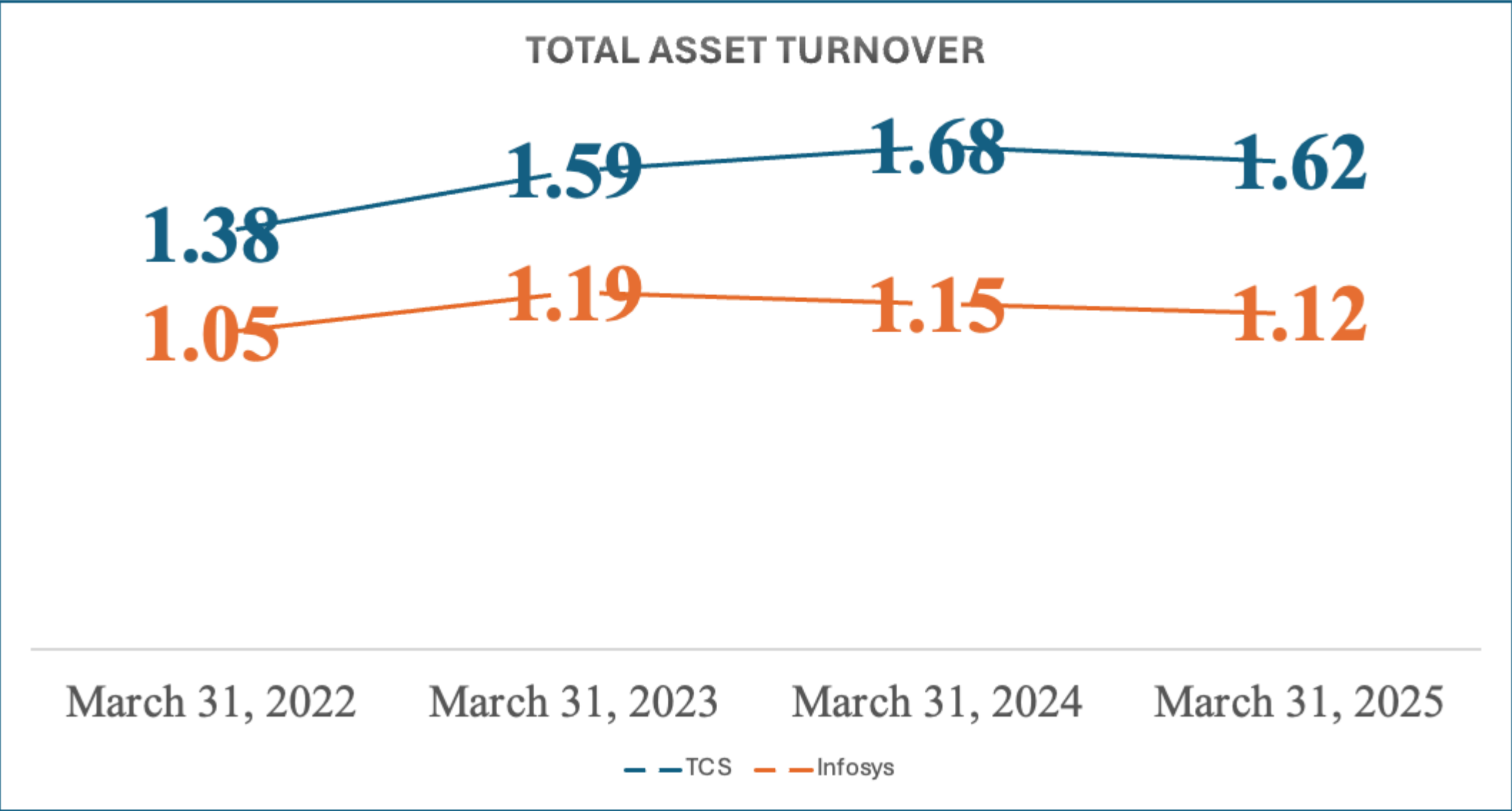
2. Excel:

Total Asset Turnover (Calculation & Graph)

RTO & DSO (Calculation & Graph)

3. Analysis

Total Asset Turnover Ratio: Cross-Sectional Analysis



Could you help me frame these questions:

1. Based on Total Asset Turnover Ratio, which company is more efficient. justify.
2. What could be reason behind better efficiency over past 4 years?
 - a. For every 1% asset growth of TCS, the revenue improved by 2.53%. Whereas for every 1% asset growth of Infosys, the revenue improved by 1.30%.
 - b) For every 1% asset growth of TCS, the revenue improved by 1.53%. Whereas for every 1% asset growth of Infosys, the revenue improved by 1.30%.
 - c) For every 1% asset growth of TCS, the revenue improved by 0.53%. Whereas for every 1% asset growth of Infosys, the revenue improved by

	March 31, 2025	March 31, 2024	March 31, 2023	March 31, 2022
Revenue	₹ 259,286	₹ 245,315	₹ 228,907	₹ 19,450
Assets	₹ 159,629	₹ 146,449	₹ 143,651	₹ 14,450

	March 31, 2025	March 31, 2024	March 31, 2023	March 31, 2022
Revenue or Income	₹ 166,590	₹ 158,381	₹ 149,468	₹ 12,450
Assets	₹ 148,903	₹ 137,814	₹ 125,816	₹ 11,450

RTO & DSO: Cross-Sectional Analysis

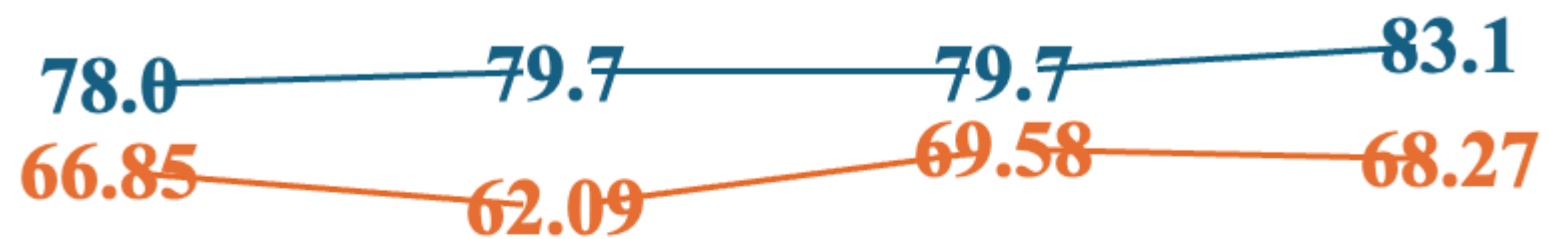
Receivable Turnover Ratio

	March 31, 2025	March 31, 2024	March 31, 2023	March 31, 2022
TCS	4.39	4.58	4.58	4.68
INFOSYS	5.35	5.25	5.88	5.46

Q1. The **Receivables Turnover Ratio (RTO)** of both TCS and Infosys decreased from 2022 to 2025. What does this indicate about their collection efficiency?

- a) Improved efficiency, since a decrease in RTO means the number of collection cycles increased.
- b) Improved efficiency, since a decrease in RTO means the number of collection cycles decreased.
- c) Poor efficiency, since a decrease in RTO means the number of collection cycles increased.
- d) Poor efficiency, since a decrease in RTO means the number of collection cycles decreased.

DAYS IN RECEIVABLE (DSO)



March 31, 2022 March 31, 2023 March 31, 2024 March 31, 2025

— TCS: Days in Receivables — Infosys: Days in Receivables

Q2. The **Days Sales Outstanding (DSO)** of both TCS and Infosys increased from 2022 to 2025. What does this indicate about their collection efficiency?

- a) Improved efficiency, since an increase in DSO means receivables are collected faster.
- b) Improved efficiency, since an increase in DSO means receivables are collected slower.
- c) Poor efficiency, since an increase in DSO means receivables are collected faster.
- d) Poor efficiency, since an increase in DSO means receivables are collected slower.