

Stock Analysis

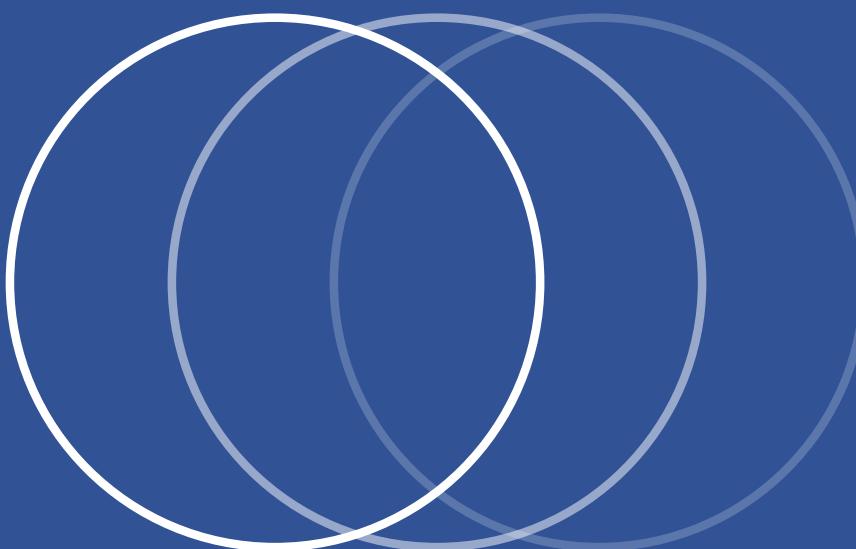
A financial data analysis project

Prepared by
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Matters on the Docket

A brief look at what
we will discuss in this project



- 01** INTRODUCTION AND CASE STUDY

- 02** OBJECTIVE

- 03** DATA ANALYSIS

- 04** INSIGHTS

Case Study

1. Data Source - <https://www.kaggle.com/datasets/rohanrao/nifty50-stock-market-data>
2. This Case Study Contains Datasets of 3 companies
3. Dataset 1 - HDFC Bank
4. Dataset 2 - Oil and Natural Gas Corporation
5. Dataset 3 - Tata Consultancy Services
6. Attributes (Fields): Date, Symbol, Open, High, Low Close, VWAP, Volume, Deliverable Volume
7. Time Period: 04/01/2010 - 30/04/2021

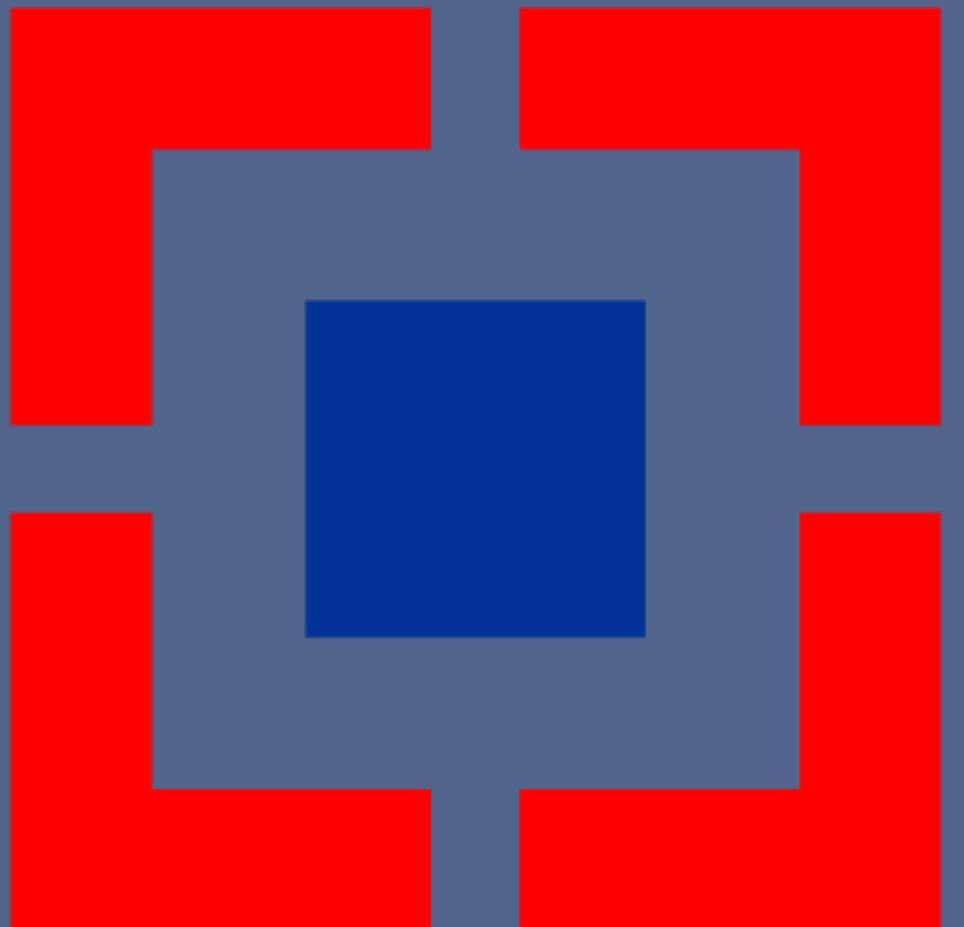


Objective of the Project

Comparing and grading different companies (in this case **HDFC Bank, ONGC, and TCS**) based on their volatility, drawdown percentage, recovery days, strength, CAGR.

Also shown are their highest volume month, delivery percentage, and 50-day moving average.

HDFC Bank



India's largest private sector bank by assets and world's 10th largest bank by market capitalisation as of April 2021. With a market value of \$122.50 billion, it is the third-largest firm listed on the Indian stock exchanges. It is also India's fifteenth largest employer, with about 150,000 employees.



Public Company

Type



Financial Services

Industry



August 1994

Foundation
(28 years since inception)



Sashidhar Jagdishan

CEO



Mumbai, India

Headquarters



**Credit cards, Consumer banking,
Commercial banking, etc.**

Products

ONGC

ओंग्जीसी



ONGC

India's largest private sector bank by assets and world's 10th largest bank by market capitalisation as of April 2021. With a market value of \$122.50 billion, it is the third-largest firm listed on the Indian stock exchanges. It is also India's fifteenth largest employer, with about 150,000 employees.



Central Public Sector Undertaking

Type



Energy: Oil and gas

Industry



August 1956

Foundation

(66 years since inception)



Rajesh Kumar Srivastava

Chairman



New Delhi, India

Headquarters



Petroleum, Natural gas, LNG, Lubricants, etc.

Products

Tata Consultancy Services



TCS is one of the most valuable IT service brands in the world and the second-largest Indian corporation in terms of market capitalization. TCS was ranked 64th overall in the Forbes "World's Most Innovative Businesses" survey in 2015, making it one of the top IT services companies and a top Indian company. It is ranked eleventh on the Fortune India 500 list as of 2018.



Public Company
Type



Information technology,
Consulting, Outsourcing
Industry



April 1968
Foundation
(54 years ago)



Rajesh Gopinathan
CEO

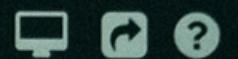


Mumbai, Maharashtra
Headquarters

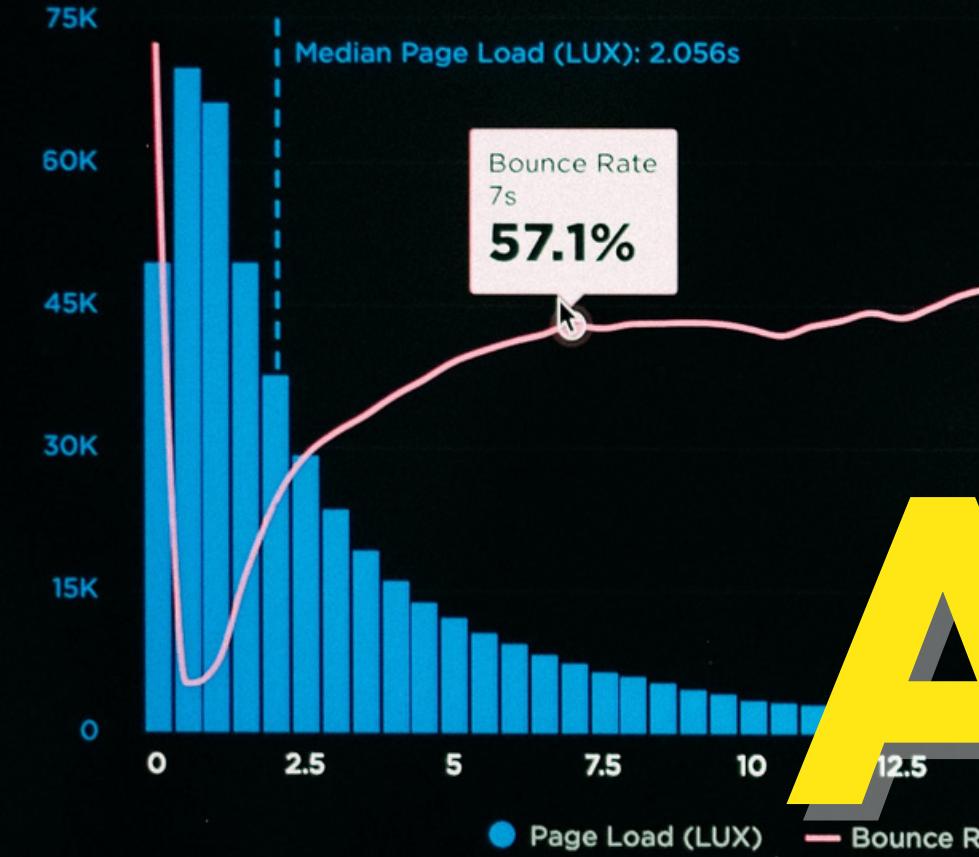


TCS BaNCS, CHROMA, TCS iON, etc.
Products

USERS: LAST 7 DAYS USING MEDIAN ▾

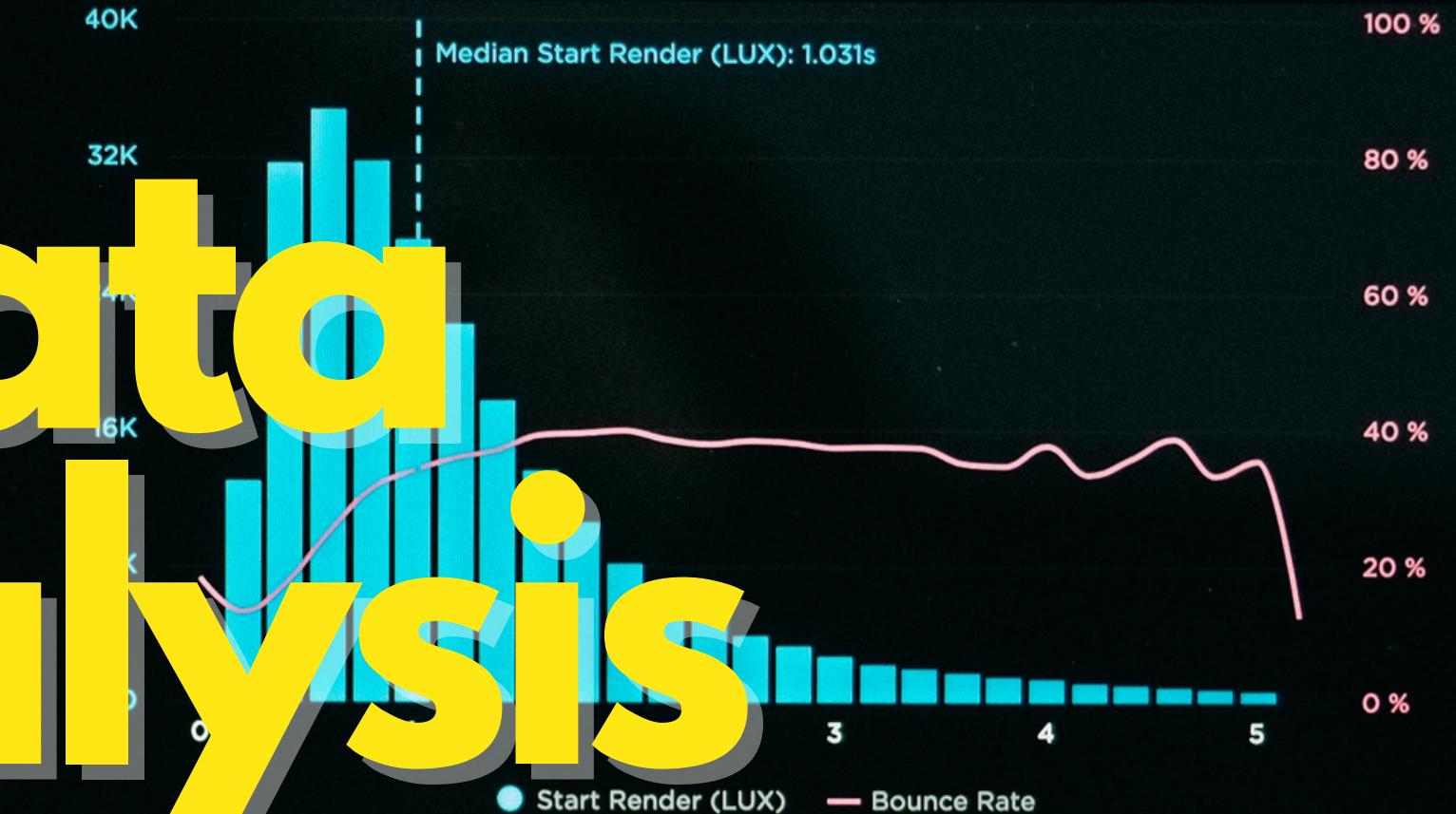


LOAD TIME VS BOUNCE RATE



OPTIONS

START RENDER VS BOUNCE RATE



OPTIONS

Data Analysis

PAGE VIEWS VS ONLOAD

Page Load (LUX)

0.7s

Page Views (LUX)

2.7MpvS

Bounce Rate (LUX)

40.6%

OPTIONS

SESSIONS

Sessions (LUX)

479K

Session Length (LUX)

17min

OPTIONS

PVs Per Session (LUX)

2pvs

1s

0.8s

0.6s

500K 100%

400K 80%

300K 60%

4 pvs

3.2 pvs

2.4 pvs

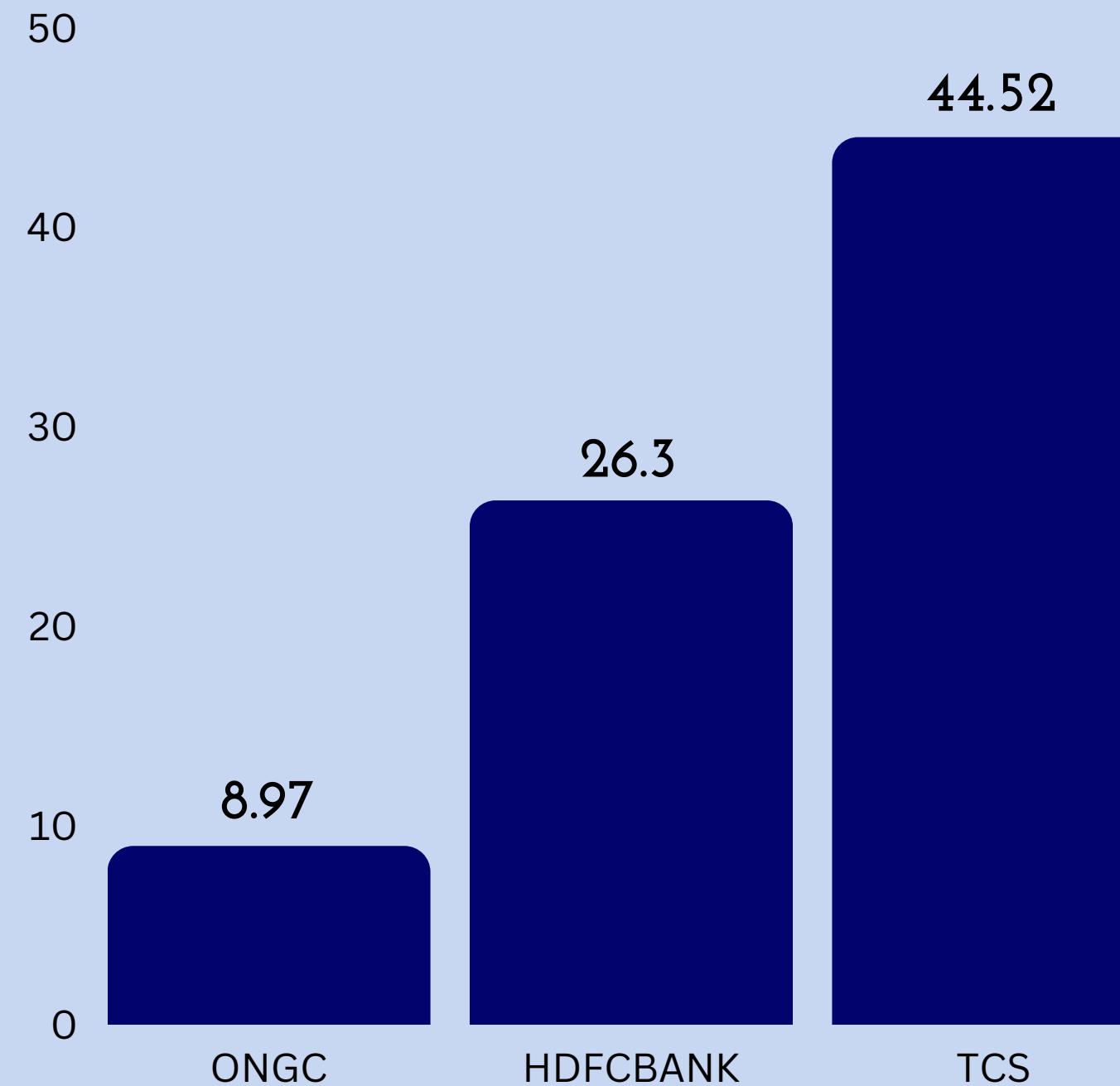
100K 40 min

80K 32 min

60K 24 min

Volatility

Volatility is the rate at which the price of a stock increases or decreases over a particular period (04/01/2010 - 30/04/2021).



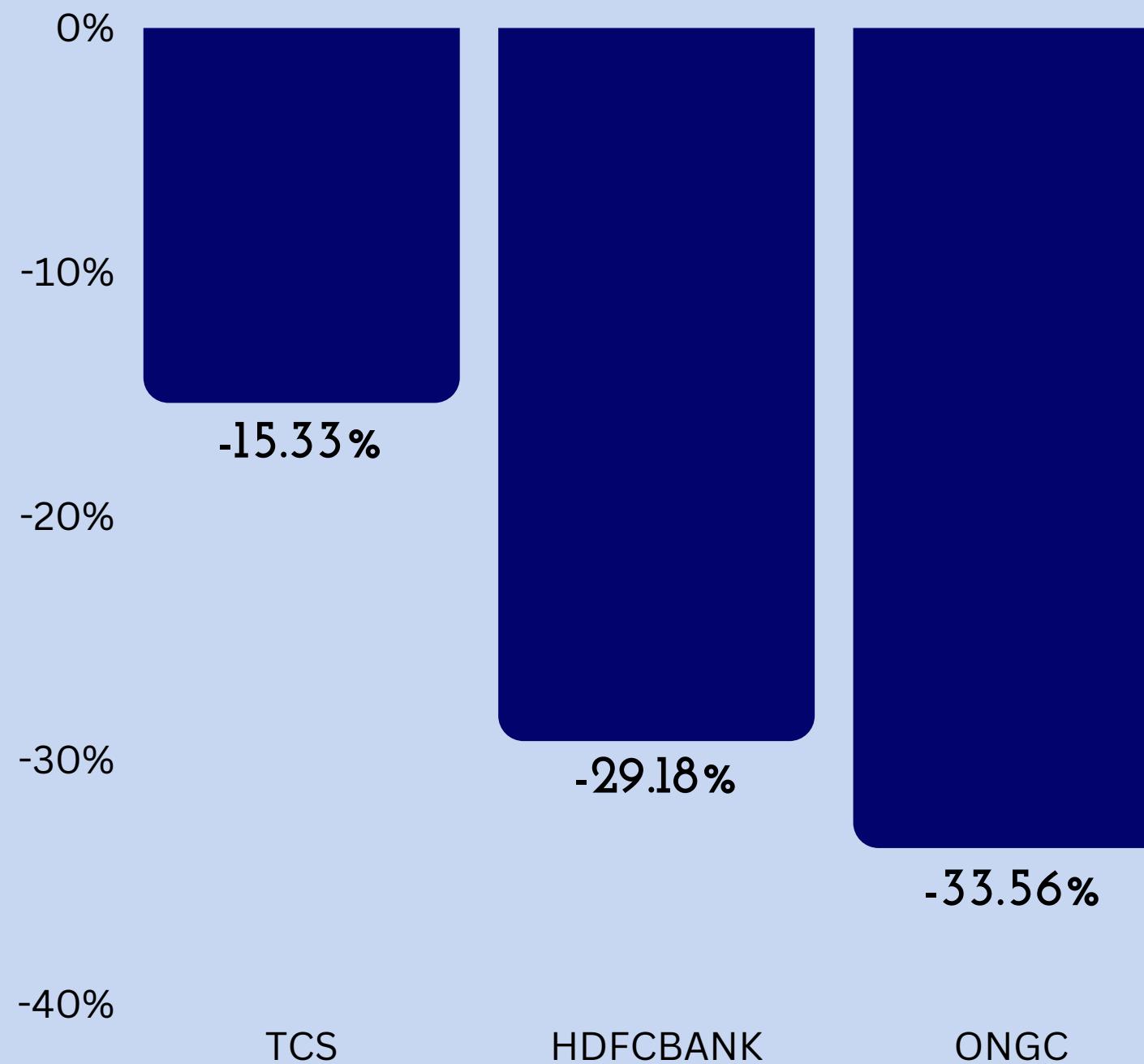
Insights

Volatility - Lower the Better

Result: Of the three stocks, ONGC is the least volatile, while TCS is the most volatile.

Drawdown

Drawdown refers to how much an investment or trading account is down from the peak before it recovers back to the peak.



Time period: 2020-02-20 - 2020-03-31

Insights

Volatility - Lower the Better

Result: Of the three stocks, ONGC is the least volatile, while TCS is the most volatile.

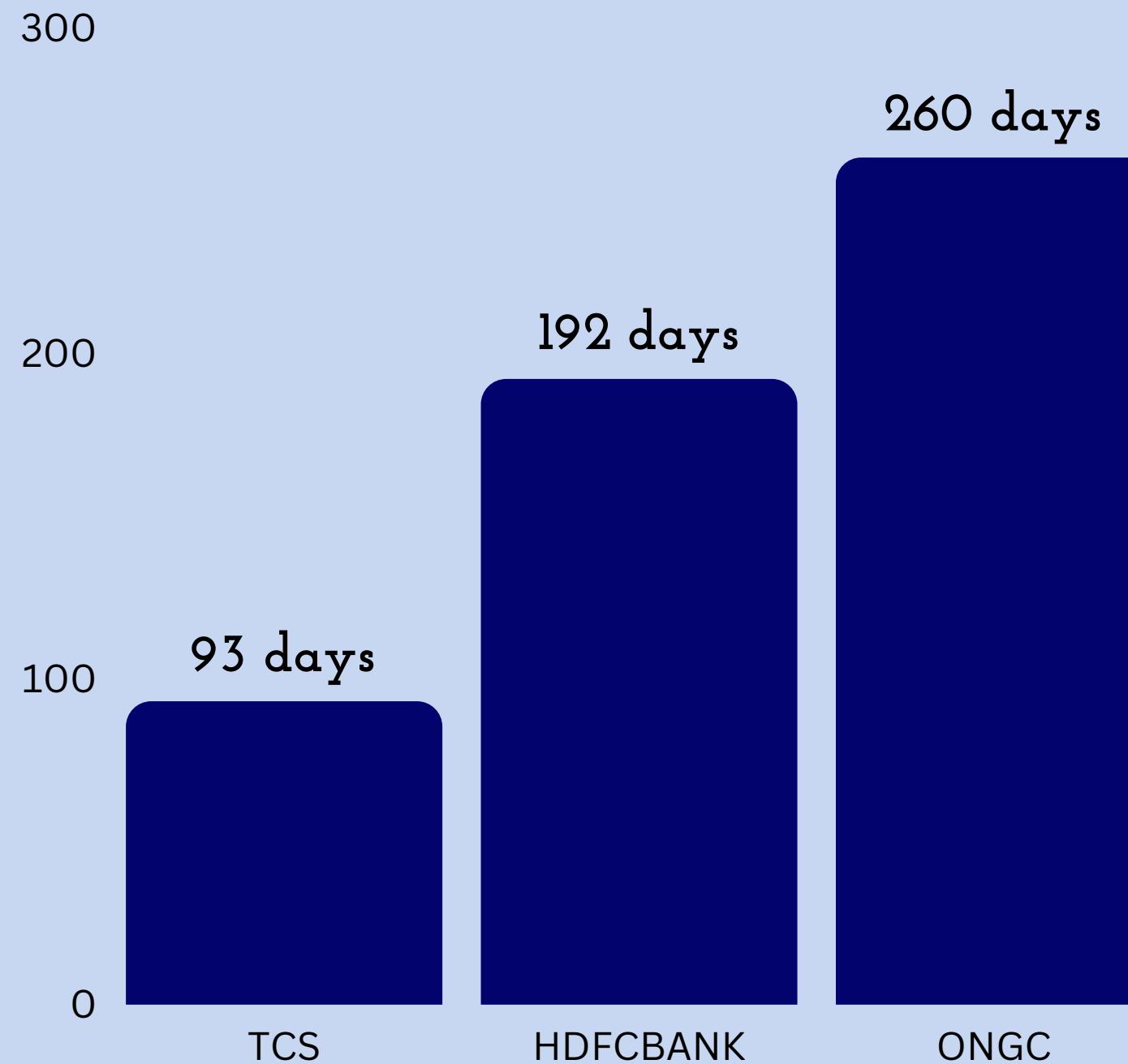






Recovery Days

Recovery days refer to the number of days it took the stock to close higher than the previous day's close price following a decline in COVID.



Insights

Volatility - Lower the Better

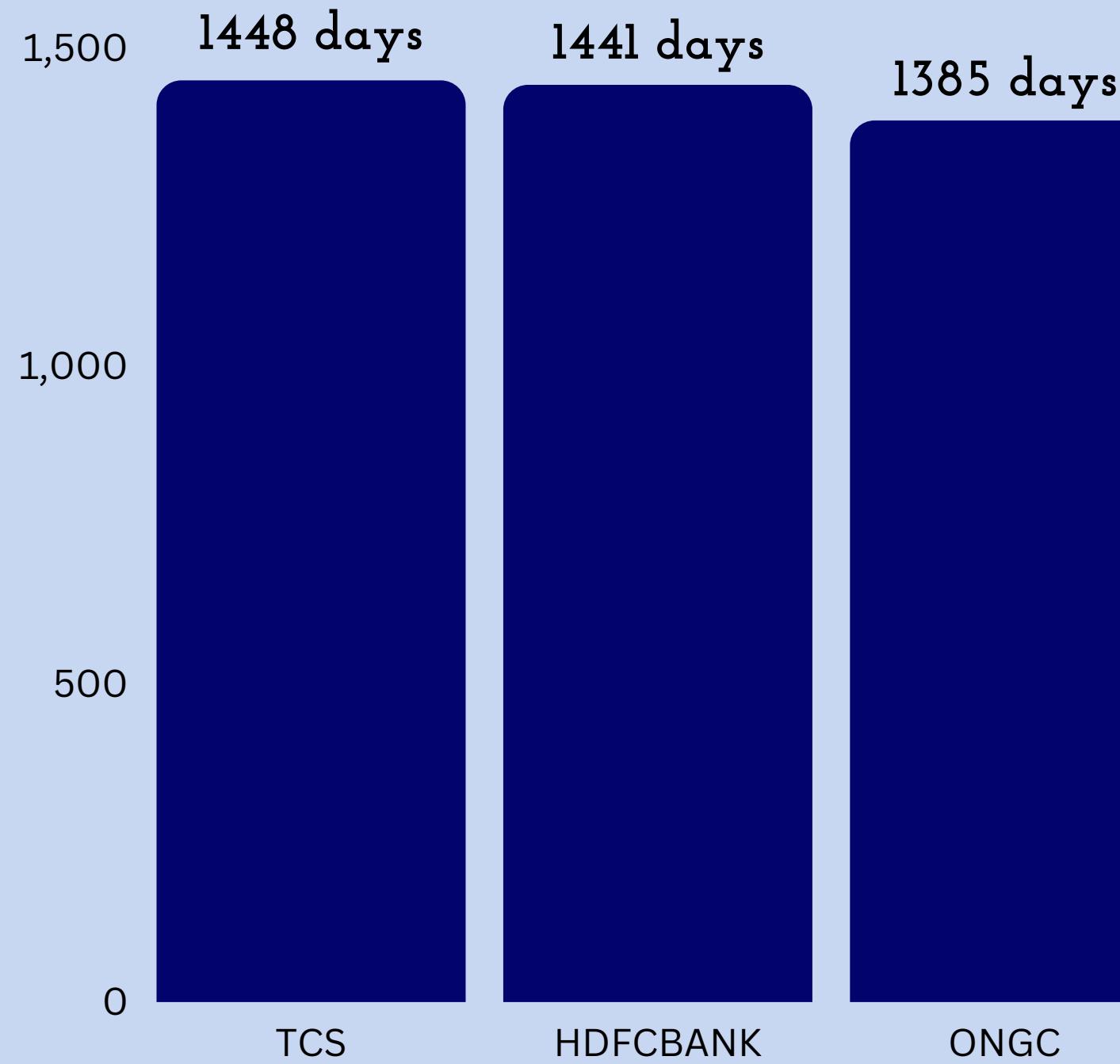
Result: Of the three stocks, ONGC is the least volatile, while TCS is the most volatile.







Number of days the stock price closed above its previous day close price (Strength).



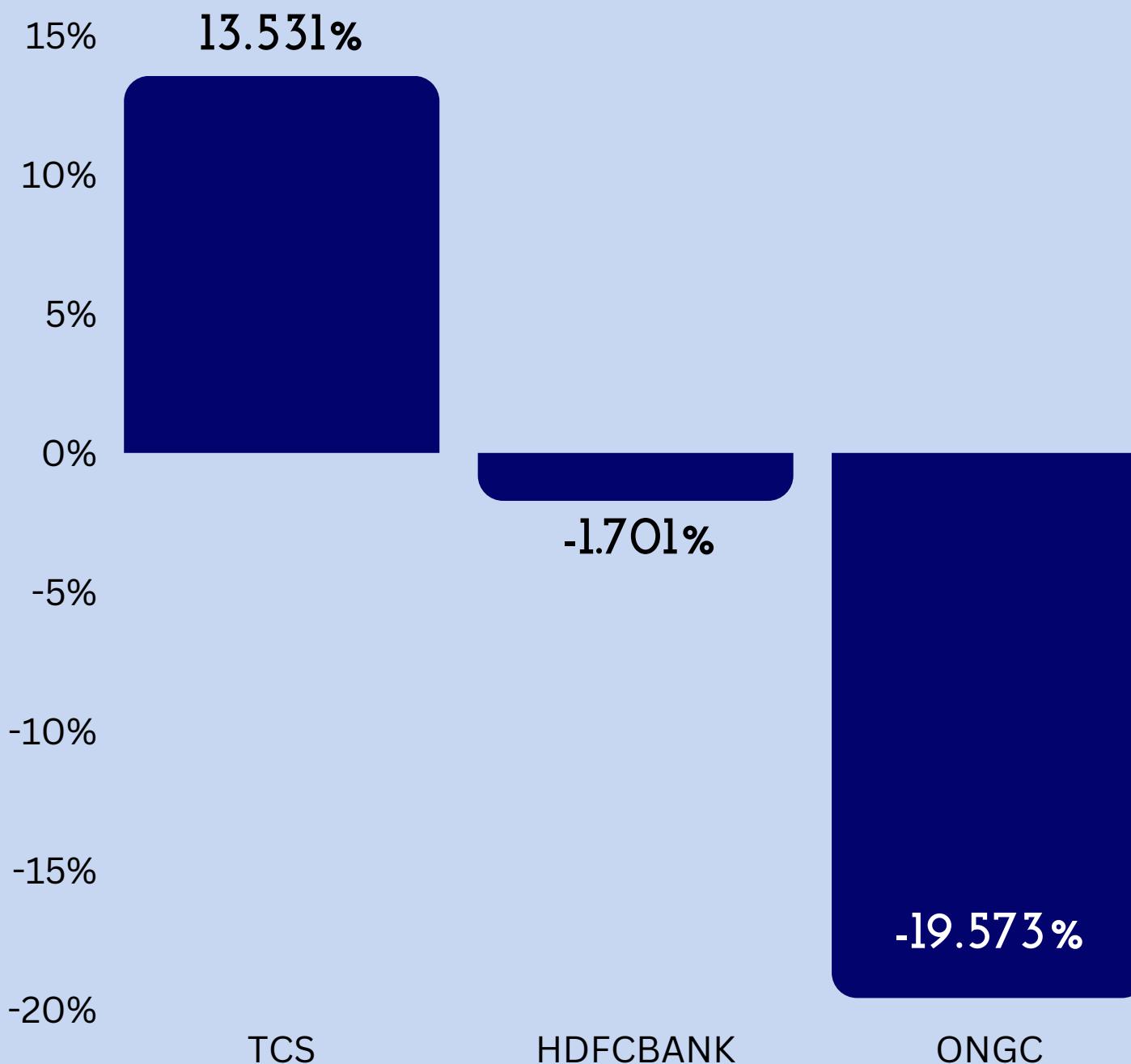
Insights

Volatility - Lower the Better

Result: Of the three stocks, ONGC is the least volatile, while TCS is the most volatile.

Compound Annual Growth Rate

Compound annual growth rate, or CAGR, is the average yearly growth rate of an investment over a specified period of time, longer than one year (04-01-2010 - 30-04-2021)



Insights

Volatility - Lower the Better

Result: Of the three stocks, ONGC is the least volatile, while TCS is the most volatile.

Weightage and Final Score

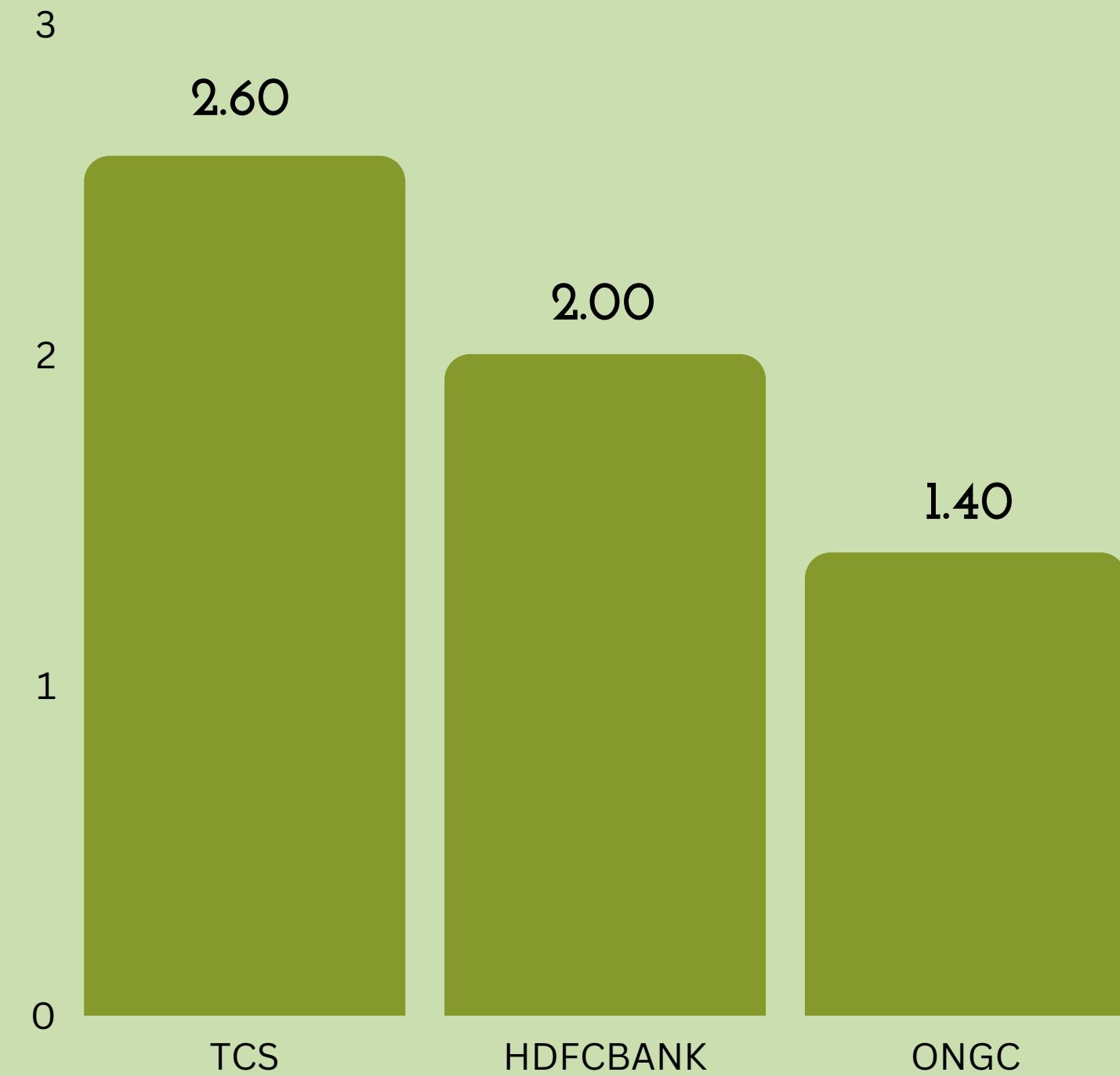
Weights given to each parameter



Individual score of each company based on these parameters

| Symbol | Volatility | Drawdown | Recovery | Strength | CAGR |
|----------|------------|----------|----------|----------|------|
| HDFCBANK | 2 | 2 | 2 | 2 | 2 |
| ONGC | 3 | 1 | 1 | 1 | 1 |
| TCS | 1 | 3 | 3 | 3 | 3 |

Final Score



Additional parameters

Month with the Highest Volume

| Ranking | Symbol | Year | Month | Max Volume |
|---------|----------|------|----------|--------------|
| 1 | ONGC | 2020 | March | 17,85,93,486 |
| 2 | HDFCBANK | 2017 | February | 10,05,64,990 |
| 3 | TCS | 2018 | March | 4,40,33,577 |

Percentage delivery

| Ranking | Symbol | Average Percentage Deliverable |
|---------|----------|--------------------------------|
| 1 | HDFCBANK | 58.62% |
| 2 | TCS | 57.36% |
| 3 | ONGC | 54.62% |

From the period: 04/01/2010 - 30/04/2021



THANK
YOU



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