NYSE Summary Analysis on GPM

BY BRIAN ROBERTSON

DATA SCIENTIST

Comparing the Gross Profit Margins between Financial and Information Technology GICS Sectors for Two Years.

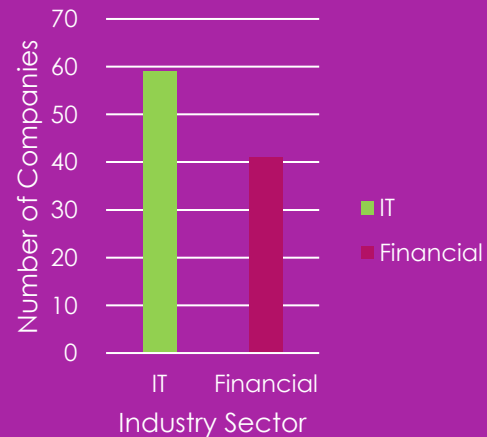## Gross Profit Margin Variance between Sectors based on Years

Legend: Information Technology, Financials

GPM Medians by Sector Per Year

Legend: IT, Financial

Overall Count by Sector

Legend: IT, Financial

- These graphs will focus on the Gross Profit Margin **(GPM)** between the Financial **(Financial)** and Information Technology **(IT)** sectors.

- Showing that for the two years of data, the Financial sector leans towards having a better GPM than the IT.

- The GPM Variance showed greater consistency year to year for IT **(0.04 Y1 & Y2)** compared to Financial **(0.11 Y1, 0.10 Y2)**. We need to review additional years to confirm longer-term consistency rather than a two-year span.

- The other exciting variable was the median GPM for both sectors.

- IT **(0.53 Y1 and 0.55 Y2)** had a higher count (**59 IT, 41 Financial**) of companies, and Financial **(0.71 Y1 and 0.72 Y2)** had a higher median for both years, even with having lower minimums.
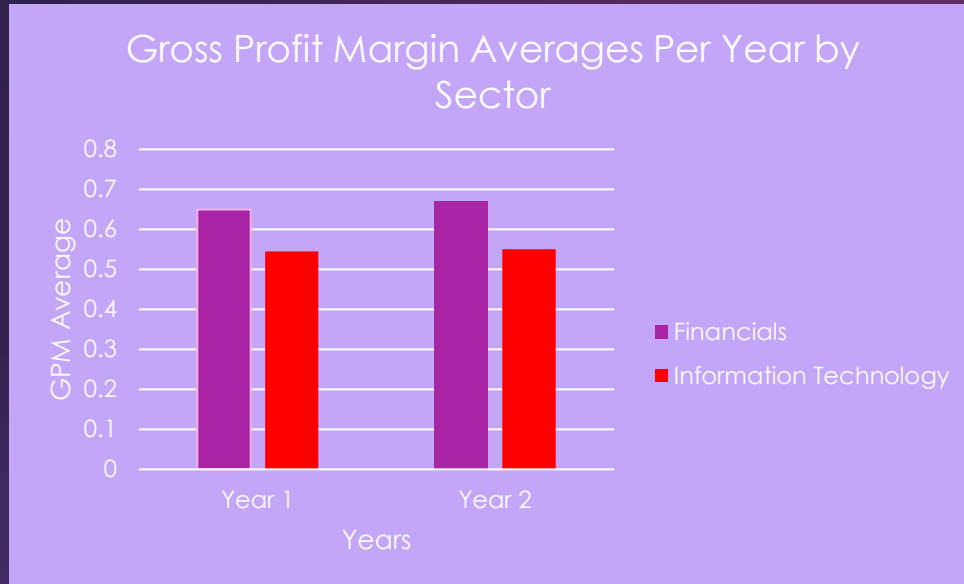 - IT **(0.19 Y1 and 0.16 Y2)**
  - Financial **(0.04 Y1 and 0.10 Y2)**

Reviewing Standard Deviation of the Gross Profit Margins between Financial and Information Technology GICS Sectors for Two Years.

Gross Profit Margin Averages Per Year by Sector

Gross Profit Margin Standard Deviations Per Year

- The Financial sector for both years ended up with higher Averages per year. Thought Averages could have impacts from both segments due to the count **(59 IT, 41 Financial)** and their ranges (**Financial 0.96 Y1, 0.90 Y2) (IT 0.81 Y1, 0.84 Y2**).
- Looking at the Standard Deviation per sector by year yielded good insights.
  - IT (**0.21 Y1 and 0.21 Y2**)
  - Financial (**0.33 Y1 and 0.31 Y2**)
- This showed once again that the count **(59 IT, 41 Financial)** per sector could potentially be impacting this as well. As IT for both years (**0.21 Y1 and 0.21 Y2**) is the same, their overall data is consistently closer to their mean **(IT 0.81 Y1, 0.84 Y2)**.

Standard Error of the GPM and the Range between Financial and Information Technology GICS Sectors for Two Years.

Standard Error By Sector

GPM Range Per Sector by Year
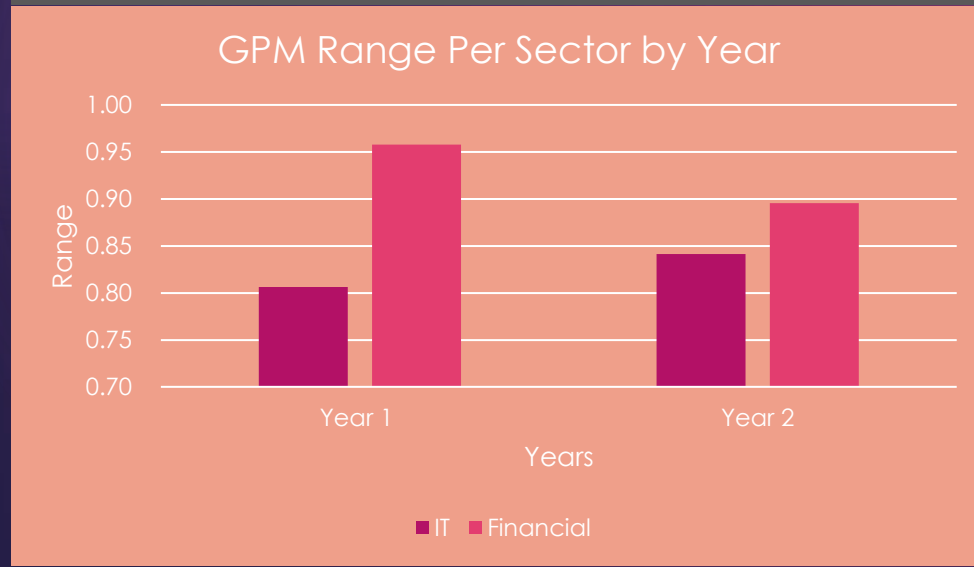
- While IT **(SE 0.03) has** a lower standard error **(SE)** than Financial **(SE 0.05)**.

- The Financial standard deviation (**0.33 Y1**, **0.31 Y2)** is much more spread on their range **(Financial 0.96 Y1, 0.90 Y2) (IT 0.81 Y1, 0.84 Y2)** but with a lower count **(59 IT, 41 Financial)**.

- Overall, the trend seems to lean heavily towards Financial Sector being the stronger of the two though IT is more consistent year to year on their GPM.