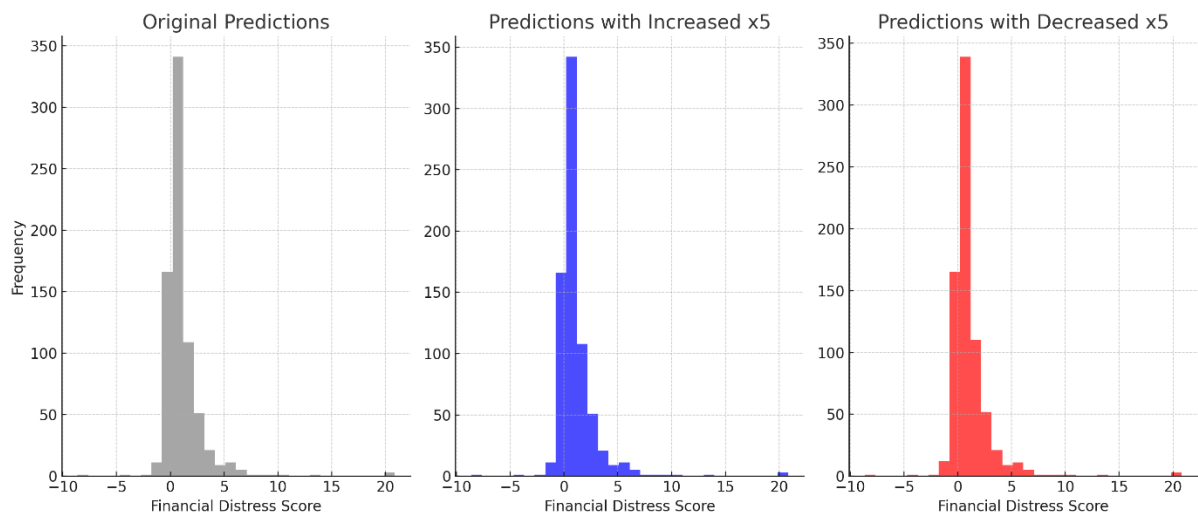


## Forecasting and Scenario Analysis:



1. **Original Predictions:** The grey histogram represents the model's predictions for the future dataset without any alterations, serving as our baseline scenario.
2. **Predictions with Increased x5:** The blue histogram shows predictions after increasing the financial indicator x5 by 10%. This scenario simulates an improvement in the metric represented by x5, which could be related to an aspect of financial health such as cash flow or revenue.
3. **Predictions with Decreased x5:** The red histogram represents predictions after decreasing x5 by 10%, simulating a deterioration in the same financial metric.

## Insights from scenario analysis:

- The shift in the distribution of predictions when altering x5 suggests that this financial indicator has a notable impact on the model's predictions of financial distress.
- An improvement in the metric represented by x5 (increase scenario) could potentially lead to better financial health predictions, as indicated by the shift in the blue histogram.
- Conversely, a deterioration in x5 (decrease scenario) might increase the risk of financial distress, as seen in the red histogram's distribution.

## Recommendations:

- **Focus on Key Financial Indicators:** Businesses should monitor and manage critical financial metrics like x5 closely, as improvements in these areas can positively impact financial health.
- **Strategic Planning:** Incorporate scenario analysis in strategic planning to anticipate potential outcomes of business decisions and market conditions on financial health.