

Summary of From Man vs. Machine to Man + Machine: The art and AI of stock analyses

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1) What are the research questions ?

- Whether AI outperforms humans in stock analysis and if human-AI collaboration enhances prediction accuracy?

2) Why are the research questions interesting?

- AI is prompting humans to reconsider their roles amid fears it may replace them.
 - Existent studies focus on “Man vs Machine”, but ignore “Man + Machine”.
 - Investors increasingly heed AI advice about stock picks and portfolios.
- How skilled analyst could tap into higher potential with enhancement from AI?

3) What is the paper’s contribution?

- Literature on competition to human posed by robots and AI.
 - Prior: AI innovations disrupt many high-skill jobs.
 - This study: humans’ advantage, synergies between humans and machines.
- Literature on the impact of big data and AI in the financial industry
 - Prior: compare human asset managers with robot advisors...
 - This study: internal mechanism of the AI we constructed ourselves.
- Literature on building and assessing ML performance in financial applications.
 - Prior: predicting asset prices, robo-advising, forecasting earnings...
 - This study: human relative advantage, the complementary value of AI.

4) What hypotheses are tested in the paper?

- Hypotheses
 - AI analyst is able to beat human analysts.
 - Human analysts retain their advantage in some circumstances.
 - Synergy between analyst and AI beyond human or AI only.
- The logic of hypotheses
 - AI advantage: superior ability to process information, immunity from biases.
 - AI’s limitation in analyzing unfamiliar and rapidly evolving situations

5) Dependent and independent variables

- Target variable: earnings, prices(less managerial discretion)

6) What difficulties arise in drawing inferences from the empirical work?

- Table7: Positive coefficients suggest that as variables increase, residual errors grow, possibly indicating reduced synergy effects.

7) Describe at least one publishable and feasible extension of this research.

- Perhaps there are differences in the “Man vs Machine” approach when predicting bank risk, making lending decisions...
- “Man vs Machine” and labor market such as equity; market efficiency.