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?**
   - Can synergy between human and AI outperform in stock analysis?
2. **Why are the research questions interesting?**
   - Chess grandmaster Garry Kasparov, who was beaten by Deep Blue, pioneered the concept of Man + Machine matches, in which a chess player equipped with AI assistance.
   - The sentiment of existent studies mostly involves a theme of 'Man versus Machine', but the primary goal for humans to design and develop AI in the first place is for human workers to tap into higher potential with enhancement from AI technology.
3. **What is the paper' s contribution?**
   - the literature on threat to human workers posed by new technology
     - Existing literature: human beings are often rendered passive or reactive, dealing with disruptions and looking for new opportunities defined by the AI landscape.
     - Extension connect the contest of 'Man versus Machine' to a potential equilibrium of 'Man plus Machine'.
   - the literature on impact of big data and AI in the financial industry
     - Existing literature：using market-level proxies.
     - Extension：explore the internal mechanism of the AI process constructed, and aim to identify their relative advantages to, as well as synergies with humans.
   - the literature on building and assessing the performance of machine learning models in financial applications
     - Existing literature：predict asset prices, manage portfolios, forecast earnings and compare against human.
     - Extension：explore the complementary value humans can offer in the age of AI .
4. **What hypotheses are tested in the paper?**
   - Human analysts perform better for smaller and more illiquid firms and those with asset-light business models.
   - AI analysts perform better for firms with frequent corporate events and large market cap.
   - The synergy between humans and machines outperform human or AI alone.

   a) Do these hypotheses follow from and answer the research questions?

- Yes, they are comparing performance of man, machine and man+machine on stock analysis.

b) Do these hypotheses follow from theory? Explain logic of the hypotheses.

- Yes, they are consistenet with the common knowledge. Human with institutional knowledge and industry experience is better at dealing with higher information asymmetry, while AI enjoys advantage in its capacity to process large volume of information.

5. **Sample: comment on the appropriateness of the sample selection procedures.**

   - The information set fed into AI is abundant.

6. **Dependent and independent variables: comment on the appropriateness of variable definition and measurement.**

   - Target price is chosen for analyst forecasts, avoiding managerial discretion.

7. **Regression/prediction model specification: comment on the appropriateness of the regress/predict model specification.**

   - a uniform prediction model for every stock at a given time is applied, while the model is allowed to be time-varying.

8. **What difficulties arise in drawing inferences from the empirical work?**

   - It is assumed that human analysts did not use AI when forecasting stock price.

9. **Describe at least one publishable and feasible extension of this research.**

   - The analysis of this literature only considers 'man + machine' as inputting analyst forecasts to AI model, it is more important to consider the integration of human and machine intelligence.