Opponent's Report on Dissertation Thesis

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Title of the Thesis:	Asset Pricing and Portfolio Selection via Machine Learning
Type of Defense:	**DEFENSE**
Date of Pre-Defense	October 30, 2024
Opponent**:**	Rodrigo Hizmeri Ph.D. (University of Liverpool Management School)

Address the following questions in your report, please:

a) Can you recognize an original contribution of the author?
b) Is the thesis based on relevant references?
c) Is the thesis defendable at your home institution or another respected institution where you gave lectures?
d) Do the results of the thesis allow their publication in a respected economic journal?
e) Are there any additional major comments on what should be improved?
f) What is your overall assessment of the thesis? (a) I recommend the thesis for defense without substantial changes, (b) the thesis can be defended after revision indicated in my comments, (c) not-defendable in this form.

(Note: The report should be at least 2 pages long.)

Date:	April 24, 2025
Opponent's Signature:	
Opponent's Affiliation:	Rodrigo Hizmeri Ph.D. (University of Liverpool Management School)

Chapter 2

I appreciate the author's efforts in addressing the comments. This chapter provides an original contribution to the literature. While I believe no more changes should be necessary before the defense, I would suggest that for publication purposes the introduction should be refined a bit more. The cited papers, for instance, Ang et al. (2006), Bollerslev et al. (2020) or Langlois (2020) do not directly measure tail-rik events. Considering all negative return states is not the same as a tail-risk event, meaning that semivariance-related measures are not direct proxies for tail events.

The reponses also mentioned that left-tail risk may be sample-specific or diminished in certain periods. From my personal view, Tail-risk as such may not be priced directly. Rather, what makes tail-risk priced is the economic perception of tail-risk. The latter cannot be directly captured using historical data.

I completely understand that this is beyond the scope of this chapter, making it an interesting topic for future research as the author has also pointed out. For this direction, you may want to consult Ait-Sahalia and Lo (2000, Nonparametric risk management and implied risk aversion. Journal of Econometrics, 94(1-2):9–51.) for early contributions on the tole of taking economic valuation into account for computing risk measures. This framework could potentially be extended to account for quantile preferences in a utility-based approach or the estimation of an SDF that is augmented to consider these preferences.

This paper is already under review at the International Journal of Forecasting, and I am sure that the outcome will be positive.

Chapter 3

I also appreciate the author's efforts and time in implementing the suggested robustness exercises. I am happy with the responses and new results.

This chapter has also very good chances for publication in a respected economic journal.

Assessment

I recommend the thesis to be defended as is.