

Diploma Work: Order Book Dynamics

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Referee Report

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This diploma work focuses on the order book dynamics. The topic itself is interesting and timely. The thesis is structured as follows. First, the author reviews the existing literature on the topic. He points out that the basic model has been independently rediscovered in the past. A description of main international exchanges appears in the following chapter. The mathematical core is in the model sections, which includes the model with and without the market makers.

Most of the thesis is only a review of the existing results. The added values are the implementation of the models and the fact that the author has surveyed the existing literature. The only original result is Theorem 8 in the section of models with the market makers, which appears at the end of the thesis without a proof. This is a joint work with the thesis advisor, so it is not even clear the contribution of the candidate to the proof of this result. The whole thesis gives an impression that it was written rather hastily.

In conclusion, the thesis can be accepted as satisfactory, but not with the highest grades.

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