

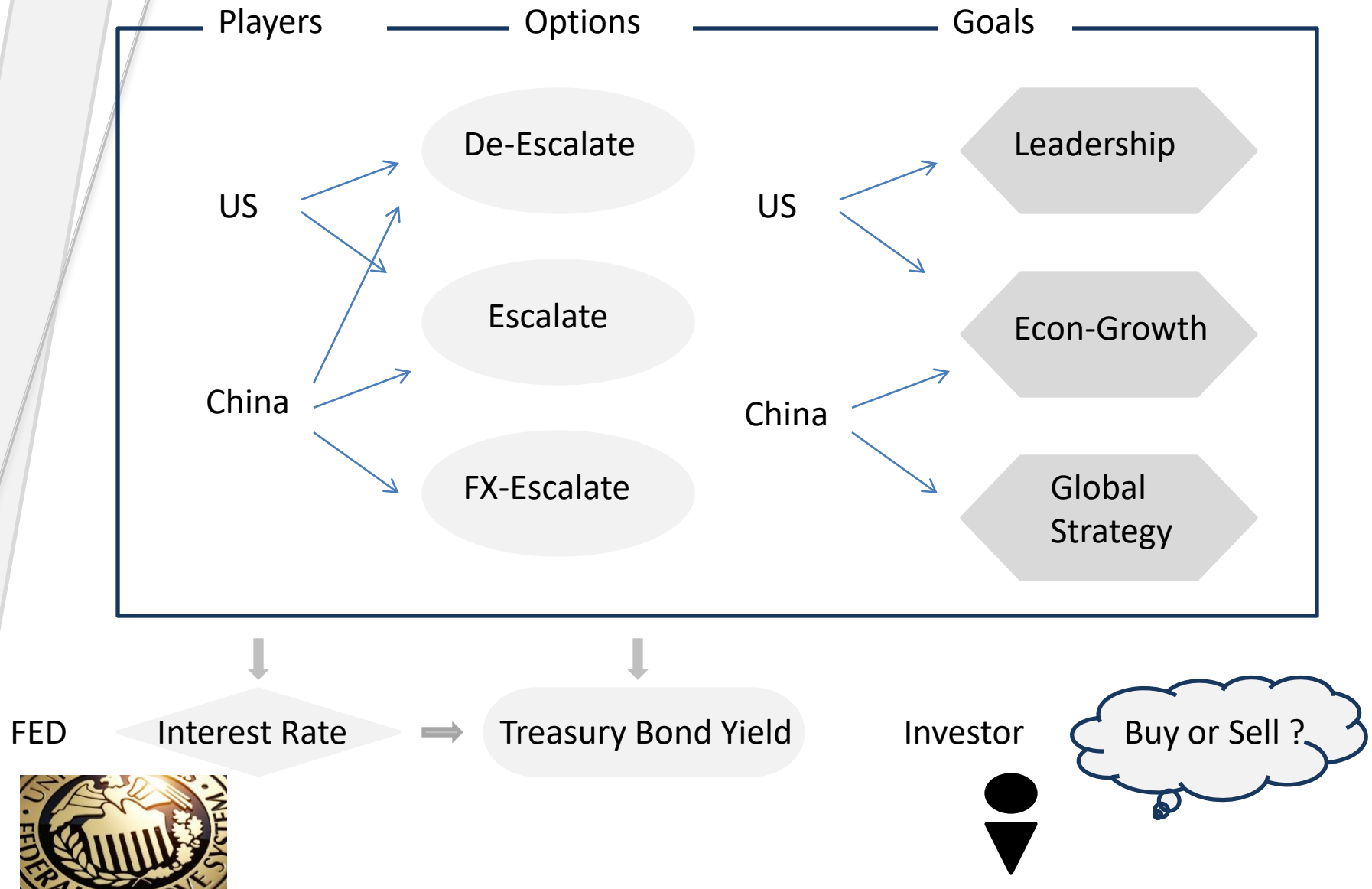


Trade War as a Game

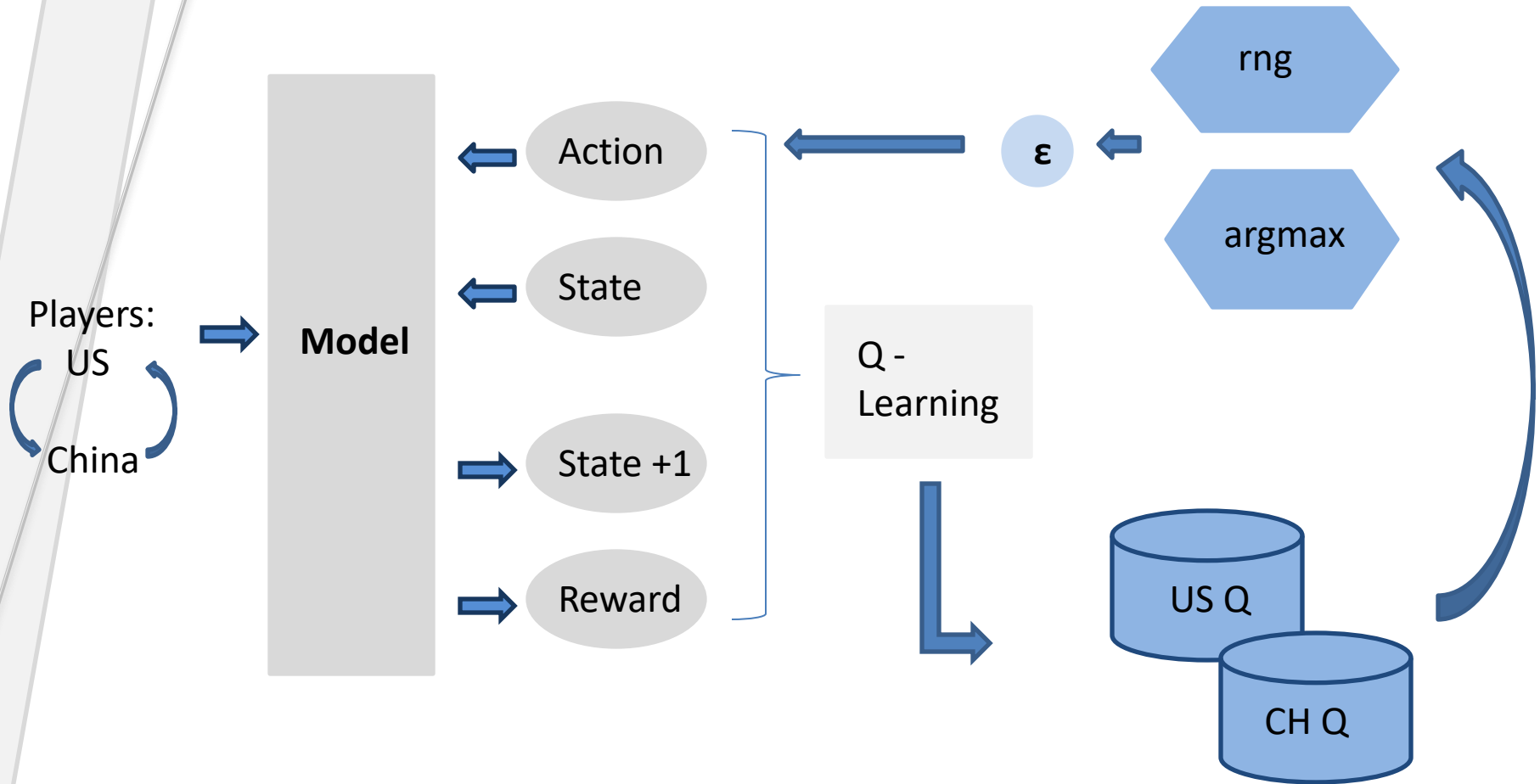
Final Project 3547- Intelligent Agents and Reinforcement Learning

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Shihan Sun

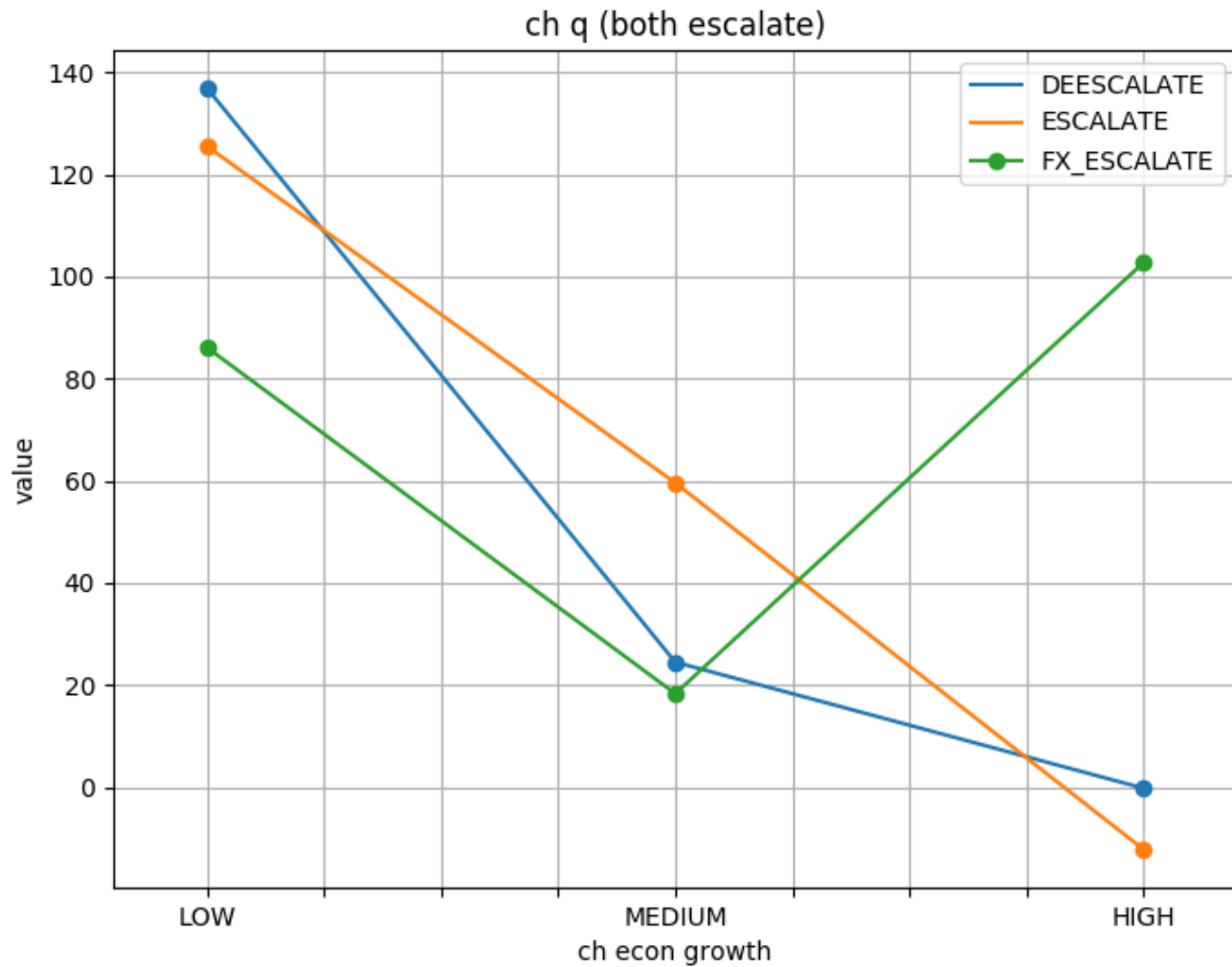
Background



Model 1 – Trade War



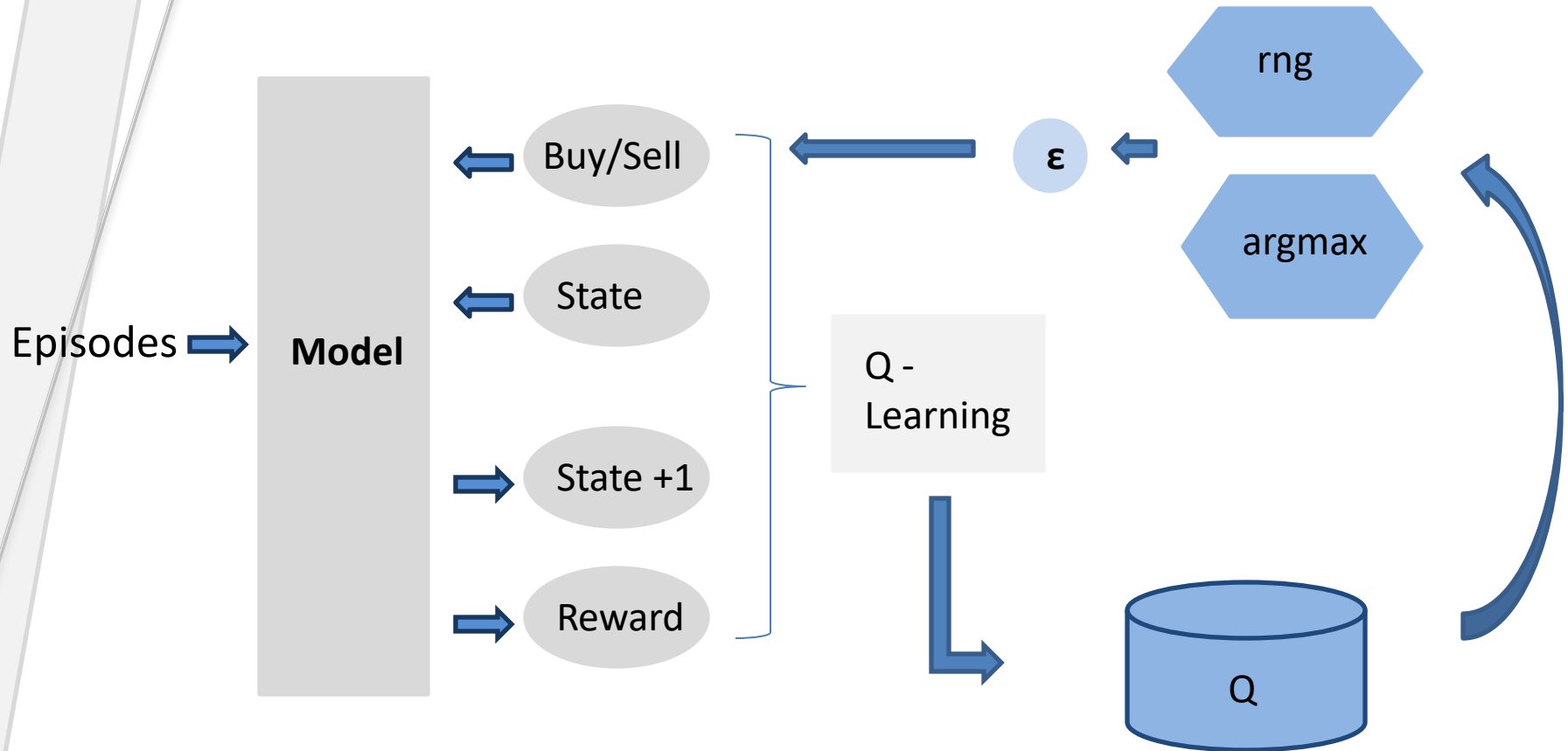
Model 1 – Trade War



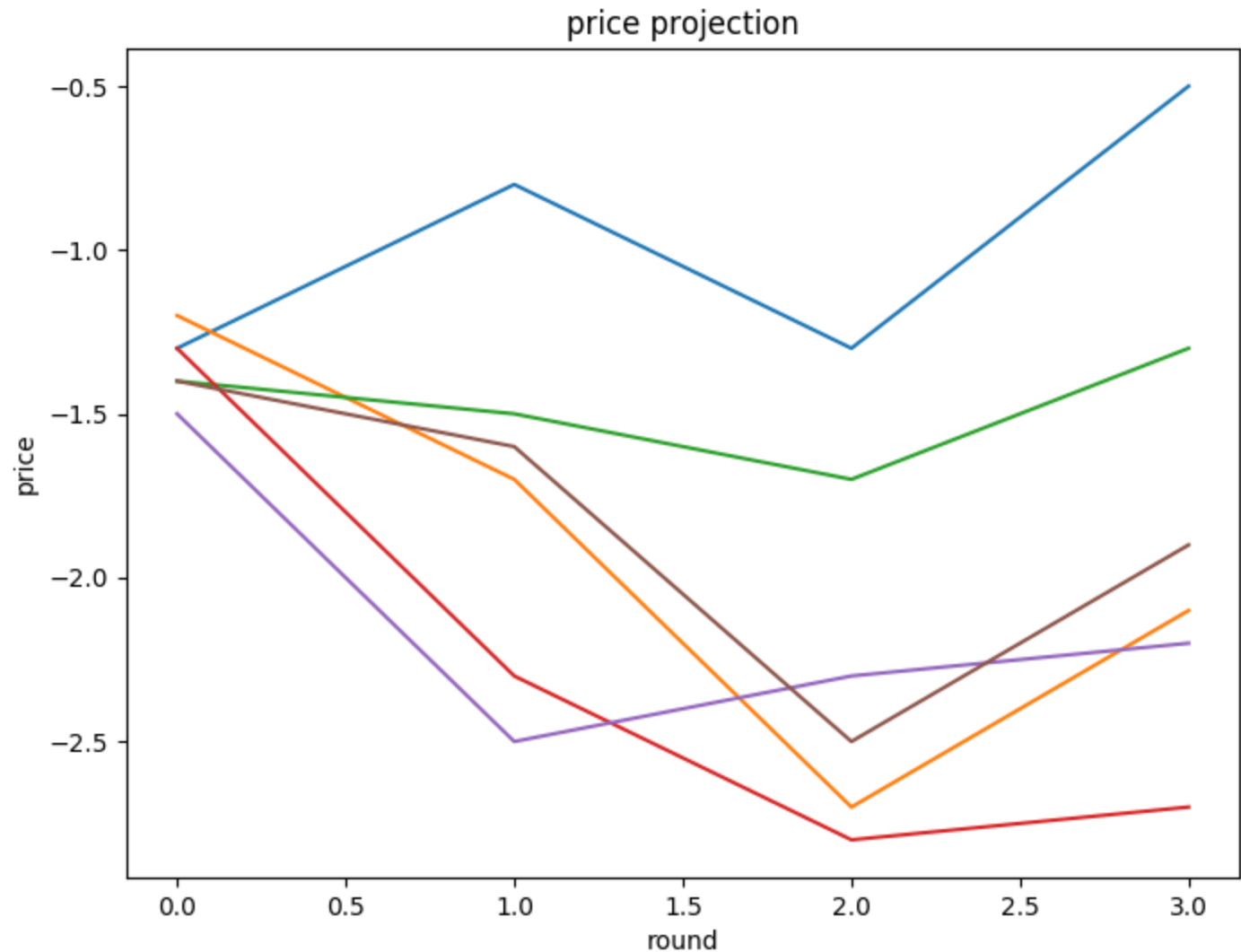
Model 1 – Trade War

ROUND	US_MOVE	CH_MOVE	US_ECON	CH_ECON	US_REWARD	CH_REWARD
0	ESCALATE	ESCALATE	MEDIUM	HIGH		
1	ESCALATE	ESCALATE_FX	LOW	MEDIUM	10	240
2	ESCALATE	DE_ESCALATE	LOW	LOW	70	-10
3	DE_ESCALATE	DE_ESCALATE	HIGH	HIGH	420	980

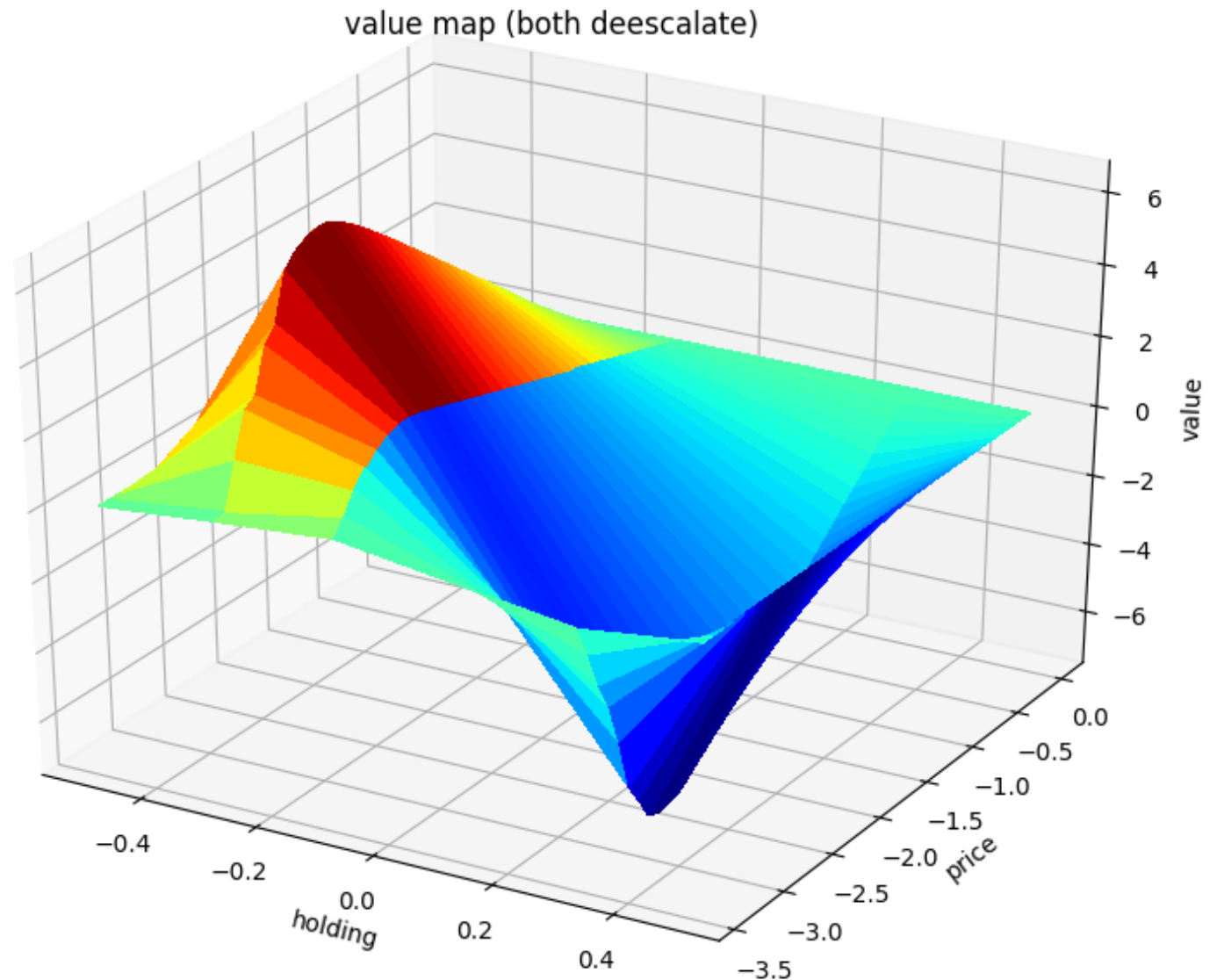
Model 2 – Buy/Sell T-Bond



Model 2 – Buy/Sell T-Bond



Model 2 – Buy/Sell T-Bond



Reference

- <https://github.com/ShangtongZhang/reinforcement-learning-an-introduction>
- <https://www.forbes.com/sites/michaelfoster/2019/11/09/a-surprising-way-to-play-the-trade-war-for-69-dividends/#3f306b254021>



Thank you !

**Please don't take this demo as investment advice.
Good luck !**