

# Estimation and Statistical modelling of Financial and Economic decisions from trading and survey data

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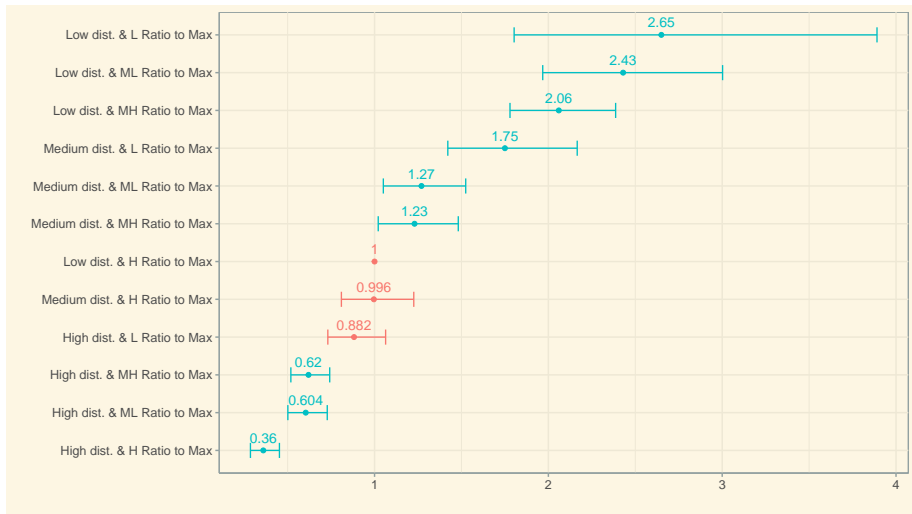
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- Three of the four chapters have been already submitted or are close to submission

# Chapter 1: Dynamic regret and trading decisions

- Investors don't sell at a threshold
- Propensity to sell does not peak at maximum
- Propensity to sell peaks at a short time distance but high price distance from the past maximum (anticipated regret about price + regret about time)
- Innovative and rigorous for the field: survival models applied to finance

# Chapter 1: Dynamic regret and trading decisions

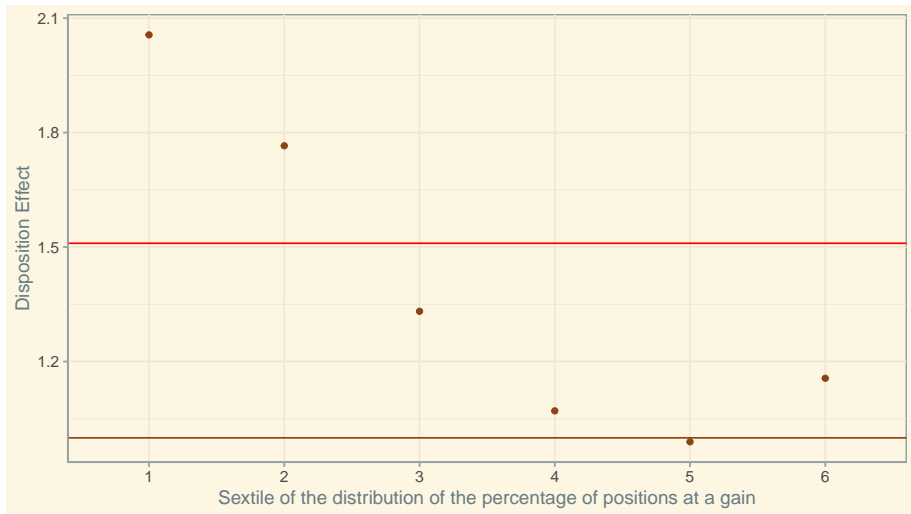




## Chapter 2: Wide framing disposition effect

- The disposition effect changes with portfolio composition
- It is high when few gains are in the portfolio and low when many gains are in the portfolio
- Partial explanation: investors have a preference for realising more than one stock at once
- Innovation: among the first to show that the disposition effect changes within investor and not only between investors

## Chapter 2: Wide framing disposition effect



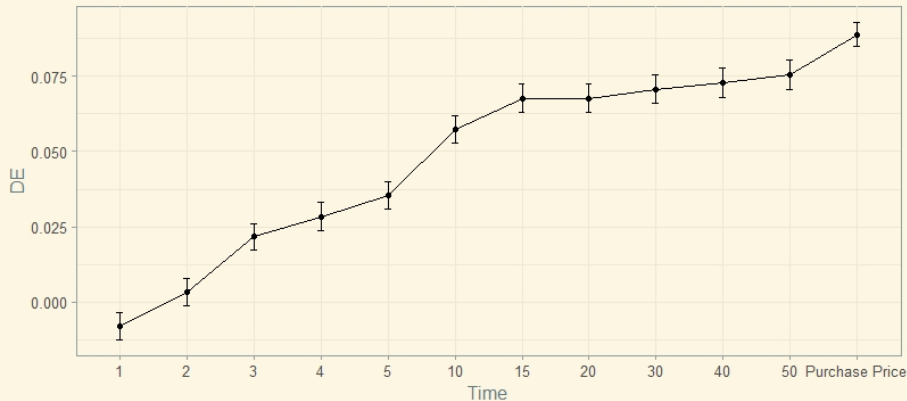
## Chapter 3: Reference point and disposition effect

- We recalculated the disposition effect assuming that the reference point is not the purchase price
- The disposition effect with respect to recent price realisations is lower
- The disposition effect with respect to recent price realisation is lower than the one with respect to the purchase price especially for those traders who trade more and whose trades are shorter (Frequent traders)
- The disposition effect with respect to recent price realisation is higher than the one with respect to the purchase price especially for those traders who trade less and whose trades are longer (Value investors)

# Chapter 3: Reference point and disposition effect

## Disposition Effect using running prices as reference points

A position is classified as a gain if the return with respect to  $n$  days before ( $x$  axis) is positive



Jonckheere-Terpstra test rejected ( $p$ -value 0.001) the NULL hypothesis of equality against the alternative that they are increasing in time.

## Chapter 4: Intertemporal discounting in the world

- For the youngest group, patience does not differ between income levels. However, patience systematically diverges by income group as a function of age. It decreases more with age, the lower the income
- Individuals characteristics associated with patience: male; happiness; optimism; education; employment (worker, student, housewife); risk aversion; atheism
- Country characteristics associated with patience: economic development; life expectancy; individualism
- Simple measure but results consistent with more extravagant measures
- The analysis is robust to several possible statistical models for country heterogeneity

# Chapter 4: Intertemporal discounting in the world

