# Learning and Confirmation Bias: Measuring the Impact of First Impressions and Ambiguous Signals

Julie Agnew, Hazel Bateman, Christine Eckert, Fedor Iskhakov, Jordan Louviere, and Susan Thorp

Abstract

We quantify the widespread and significant economic impact of first impressions and confirmation bias in the financial advice market. We use a theoretical learning model and new experimental data to measure how these biases can evolve over time and change clients' willingness to pay advisers. Our model demonstrates that clients' confirmation bias will reinforce the effect of first impressions. Our results also lend support, in a new financial context, to theoretical models of learning under limited memory where people use unclear signals to confirm and reinforce their current beliefs. We find that almost two thirds of the participants in our experiment make choices that are consistent with a limited memory updating process: they interpret unclear advice to be good advice when it comes from the adviser they prefer. Our results show that models that account for behavioral factors such as confirmation bias may be needed to explain some financial decisions.

**Julie Agnew**
Mason School of Business
William and Mary
Williamsburg, VA, USA

**Hazel Bateman**
UNSW Business School
UNSW Sydney
Sydney, NSW, Australia

**Christine Eckert**
UTS Business School
University of Technology
Sydney, NSW, Australia

**Fedor Iskhakov**
School of Economics
Australian National University
Canberra, ACT, Australia

**Jordan Louviere**
University of South Australia
Adelaide, SA, Australia

**Susan Thorp**
The University of Sydney Business School
The University of Sydney
Sydney, NSW, Australia