Discussion of “Five Facts About Beliefs And Portfolios”

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2019 Asset Pricing Conference
A Brief History of Expectations

1. How do we measure subjective expectations with surveys?
   • What should we ask about?
   • How should we ask it?
   • Interesting collaborations between psychologists and economists.
A Brief History of Expectations

1. How do we measure subjective expectations with surveys?
2. What explains differences in expectations?
   - Information Processing.
   - Information Acquisition.
   - Life Experiences.
   - Cognitive Biases.
A Brief History of Expectations

1. How do we measure subjective expectations with surveys?
2. What explains differences in expectations?
3. Do expectations affect decision-making?
   • So far, mostly work on expectations vs. stated behavior/intention.
My Reaction as a Millennial

• Focus on high-stakes actual behavior with administrative data.

• Addresses key criticisms with survey data.

• Shows how survey expectations can teach us about real economic agents.
Conceptual Framework

• Focus on $\beta$:

$$EquityShare_{i,t} = \alpha + \beta E_{i,t}[R_{1y}]$$

  • Expected utility.
  • Frictionless optimization.

• Model prediction: $\beta \approx 10$. 
The $\beta$ Continuum

- Survey expectations ✗
  OR
- Frictionless optimization ✗
  OR
- Expected utility ✗

- Survey expectations ✔
  AND
- Frictionless optimization ✔
  AND
- Expected utility ✔
Causal Identification

• Expected stock returns may be correlated to unobservable drivers of equity choices.
• Direction of the bias is ambiguous.
• Example of over-estimation: reverse causality.
  • Higher equity holdings causes more bullish expectations about the stock market.
  • Self-serving biases (e.g., wishful thinking).
  • Survey expectations as ex-post rationalizations?
Experimental Variation

• You can use information-provision experiments to create your “own” exogenous variation in beliefs.

• Growing evidence that information provision has significant and persistent effect on subjective expectations.
  • E.g., Cruces, Perez-Truglia and Tetaz (2013) on relative income; Cavallo, Cruces and Perez-Truglia (2015, 2017) and Armantier et al. (2016) on inflation expectations.
Recipe for Experimentation

- Respondents divided in two groups:
  - Control: they receive no information.
  - Treatment: they receive information.

- Measure if information shocks affect subsequent beliefs.
  - Elicit beliefs before and after the information provision.

- Measure if information shocks affect subsequent behavior.
  - Same baseline regression, but treatment assignment provides the excluded instrument.
• Some recent experiments to measure causal effects of expectations on actual behavior:
  • Misha Galashin (w/ Martin Kanz and I) experimented with clients of a bank and use administrative data to measure effects on spending behavior.
  • Matias Giacobasso (w/ Martin Kanz and I) experimented with firms and use administrative data to measure effects on pricing choices.
  • Nicolas Bottan (and I) experimented with homeowners and use administrative data to measure effects on date and price of home sales.
Quasi-Experimental Variation?

• Different clients invested in different mutual funds.

• Efficient Market hypothesis: by chance, some funds will have higher/lower returns than others.
# Quasi-Experimental Variation?

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<tr>
<th>Name</th>
<th>Morningstar Category</th>
<th>1 Yr</th>
<th>10 Yr</th>
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<td>Fidelity® Growth Strategies Fund</td>
<td>Mid-Cap Growth</td>
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</table>
Quasi-Experimental Variation?

- Does this “random” variation affect the stock market expectations?
  - This is an interesting question *per se*.
- If the answer is yes: use this variation as excluded instrument!
- Bonus: add question about perceived stock market growth over the past year.
  - Will help to nail this mechanism.
Conclusions

• Fascinating piece of research.

• I hope the overall approach becomes the gold standard.
  • Merging survey expectations with administrative data for high-stakes behavior.

• Next step: causal identification.
  • Information-experiments.
  • Quasi-experimental methods.