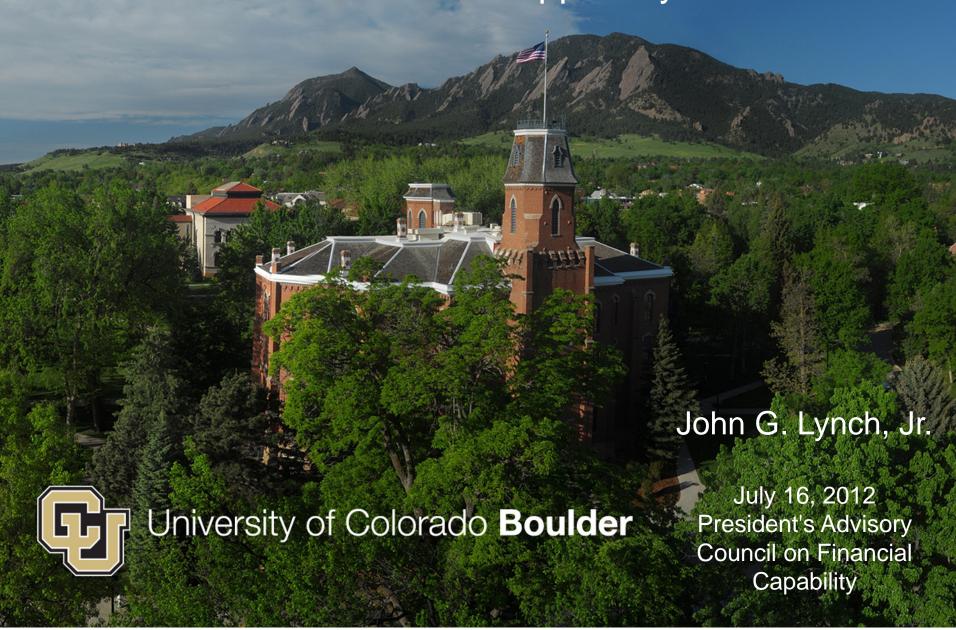
# "Just In Time" Financial Education in the Form of Financial Decision Support Systems



## Thank you

- National Endowment for Financial Education
- Opinions expressed are my own

# A Psychologist's Look at Public Policy Around Consumer Financial Decisions

- Upstream v. Downstream Help
- The Consideration Set as the Key Dependent Variable in Consumer Decisions
- Recommender Systems to Nudge Consumers' Consideration Sets
  - "Just in Time" Financial Education plus Decision Support to make unfamiliar tradeoffs & facilitate shopping

### Problems with Financial Education

- Too far upstream from decisions it is intended to change
- Decays with time... needs to be just in time
- Human inability to map from lesson in one context to another with same deep structure

#### Role of Financial Education in Toolkit

- Financial Literacy is a "better info" remedy
  - What's the half-life?
- "Nudges" & "Just in Time Financial Ed"?
  - Nudge / defaults when consumers homogeneous
  - JIT Financial education + active choice when needs heterogeneous ... but technology can assist
- Illustrate by "mortgage recommender" system

# Consideration Sets, Screening & Comparison

- For a mortgage option to be chosen
  - option must be considered
  - buyer must not consider better-liked option
- Consideration set is more influential than info about details of alternatives
- Can regulation protect consumers by "nudging" them to consider "safe" alternatives and to make consideration of "unsafe" alternatives less likely?

### Recommender System as Nudge

(Lynch, Woodward, Goldstein, DeBruyn, Deggendorf)

- 1 Elicit personal circumstances that affect risks
- 2 Person-specific risk feedback for different types of mortgages in market (JIT Financial Ed)
- 3 Measure consumer's tradeoffs of mortgage features to derive weights of utility function
- 4 Sort database of loans from best to worst wrt person's utility function. Provide contact for top 5 (JIT Financial Ed)
- 5 Shopping advice (JIT Financial Ed)

### Advantages of Recommender Systems

- Change the consideration set
- Built to deal with consumers with heterogeneous preferences
- Reduce the costs of shopping, search, & matching
- Provide "just in time" financial education
  - Not forgotten (like financial ed)
  - Not ignored due to mapping problems
- Promote competition. Screened options
  - more similar in utility than unscreened
  - Translate multidimensional products to 1 dimension

## Thank you

# Backup

# What's Wrong with Disclosure Regime?

- 2nd-order effect on preference given consideration; don't change consideration set
- What's the mistake?
  - a. buying more house than one can afford?
  - b. wrong mortgage for selected house?
- Disclosures solve neither problem
  - too late to derail house choice
  - disclosures provide no alternative mortgage
  - even with disclosures for 2 or more products, too tough to process information (Lynch & Ariely; Woodward)
- Nobody tests effects on choice

# Disclosure to Consumers or Infomediaries

- Honest disclosure to consumers will not overcome confusion in choosing among multidimensional products
- Require disclosure to regulator, and provide decision support tools to help sort options for fit with personal risks & tastes.
  - e.g. medicare.gov for drug plans
  - Baker & Johnson's tools for choosing health insurance
  - Thaler's "smart disclosure"

### Proposed Randomized Experiment

#### Form of Assistance x Timing

	Start of Home Shopping	
Know Before You Owe	Group 1	Group 3
Mortgage Recommender	Group 2	Group 4

#### **Outcomes to Measure**

- Percent fixed v riskier mortgages selected
- Average home price & LTV
- Number of mortgages considered / shopped
- Default rates 1 year later

### Challenges to Recommender Systems

- How to deliver at right point in time?
- How to compel firms to provide complete product information? (Thaler)
- Government or private industry?
  - Billshrink.com, Kayak
- If private industry, will seller self-interest obliterate potential benefits to consumers?