

“Challenges for Financial Decision Making at Older Ages”

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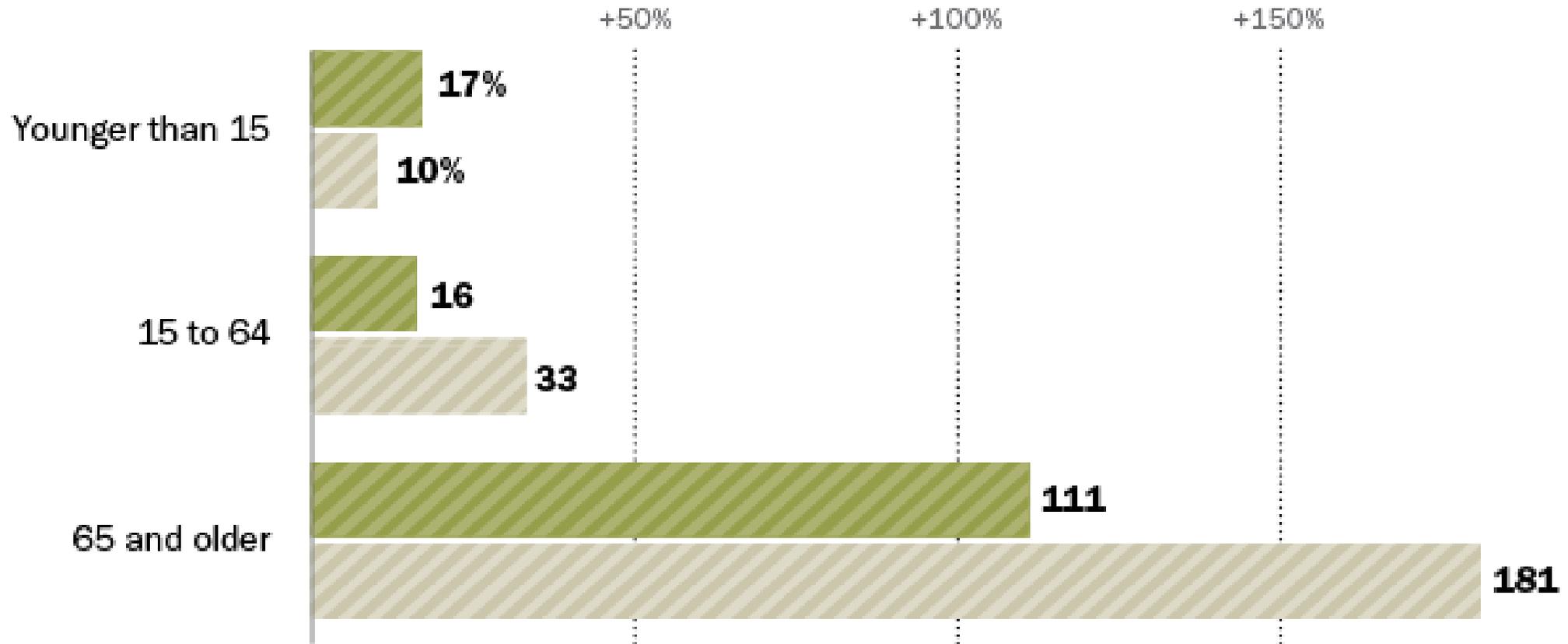
The Joy of Increased Longevity

- Public Health Advances in the 20th Century
 - Immunizations
 - Motor-Vehicle Safety
 - Heart Disease and Stroke Prevention and Treatment
- Life expectancy at birth in US now 78.8 years.
 - 65-year old man → 17 more
 - 65-year old woman → 20 more
- Work, volunteer, or free caregiving
 - 80% of adults ages 65 to 74
 - 60% of adults ages 75+



Estimated percent change in population, 2010 to 2050, by age, in the world and the U.S.

United States World

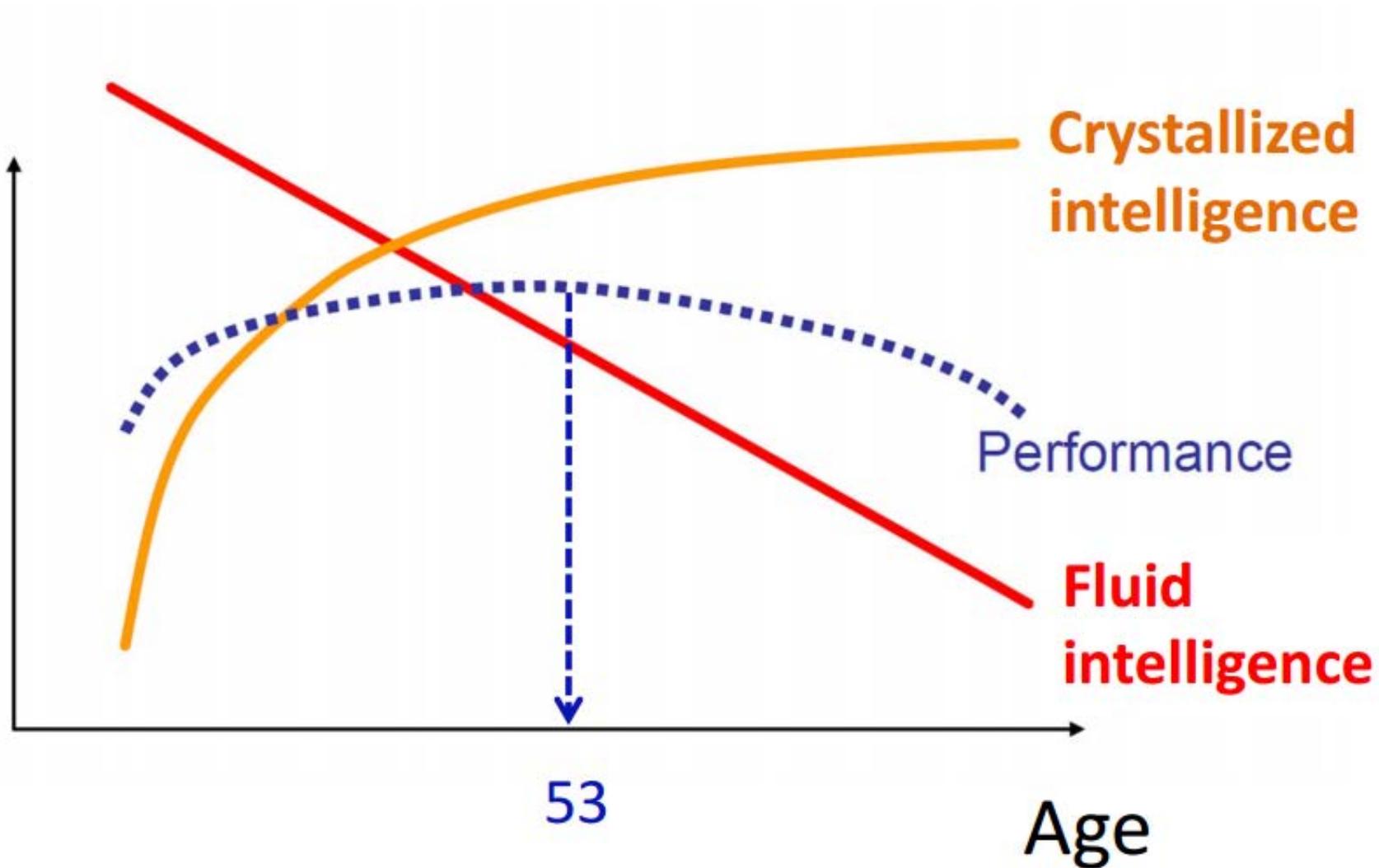


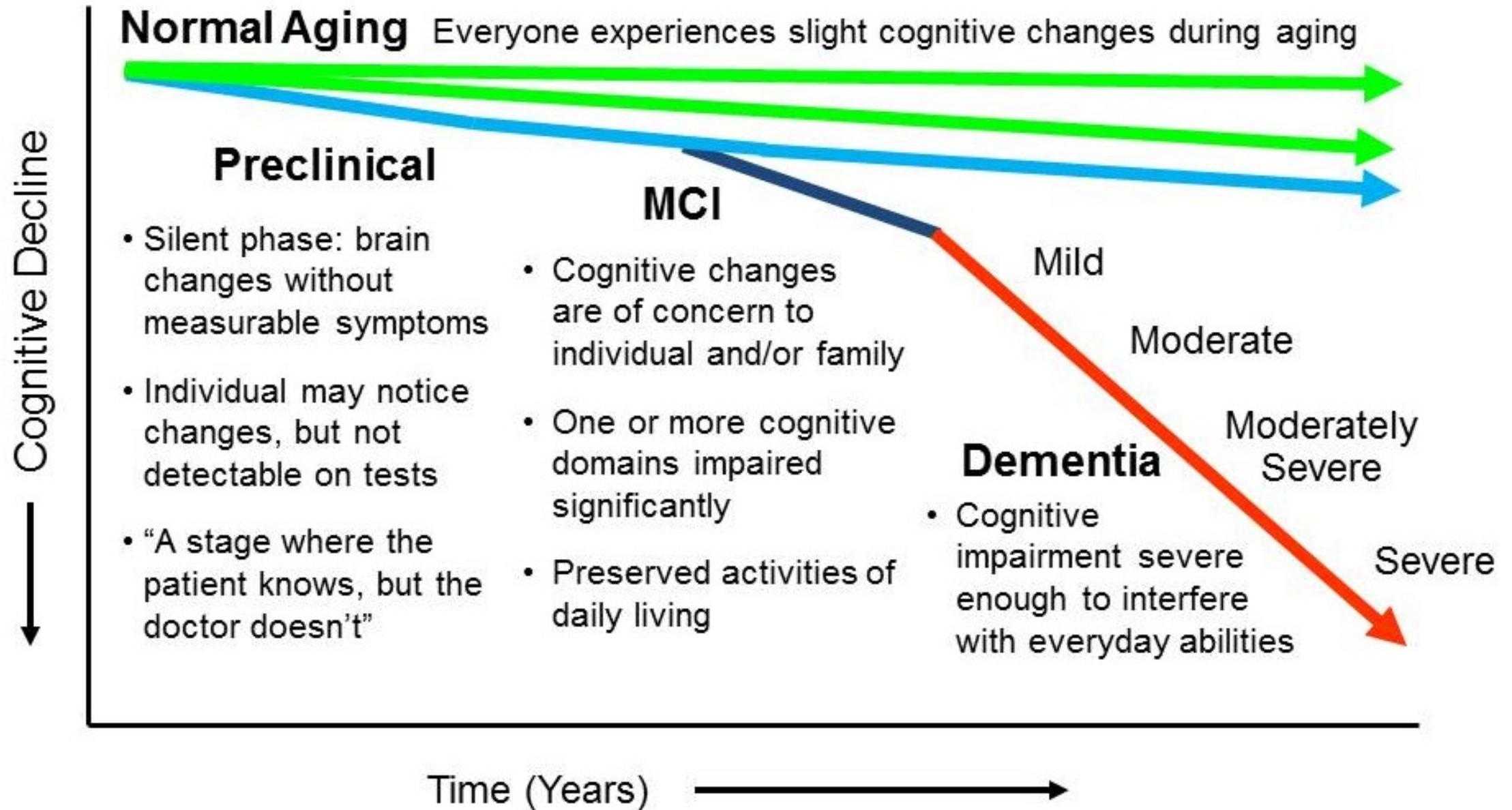
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

Aging and Financial Decision Making

- Bankruptcy filings among age 65+ fastest growing demographic
Pottlow (2012)
- Suboptimal credit behavior increases past age 53
Agarwal et al. (2010)
- Older investors exhibit less investment skill
Korniotis and Kumar (2011)
- Financial literacy scores decline with age
Finke, Howe, Huston (2011)

Cognitive function





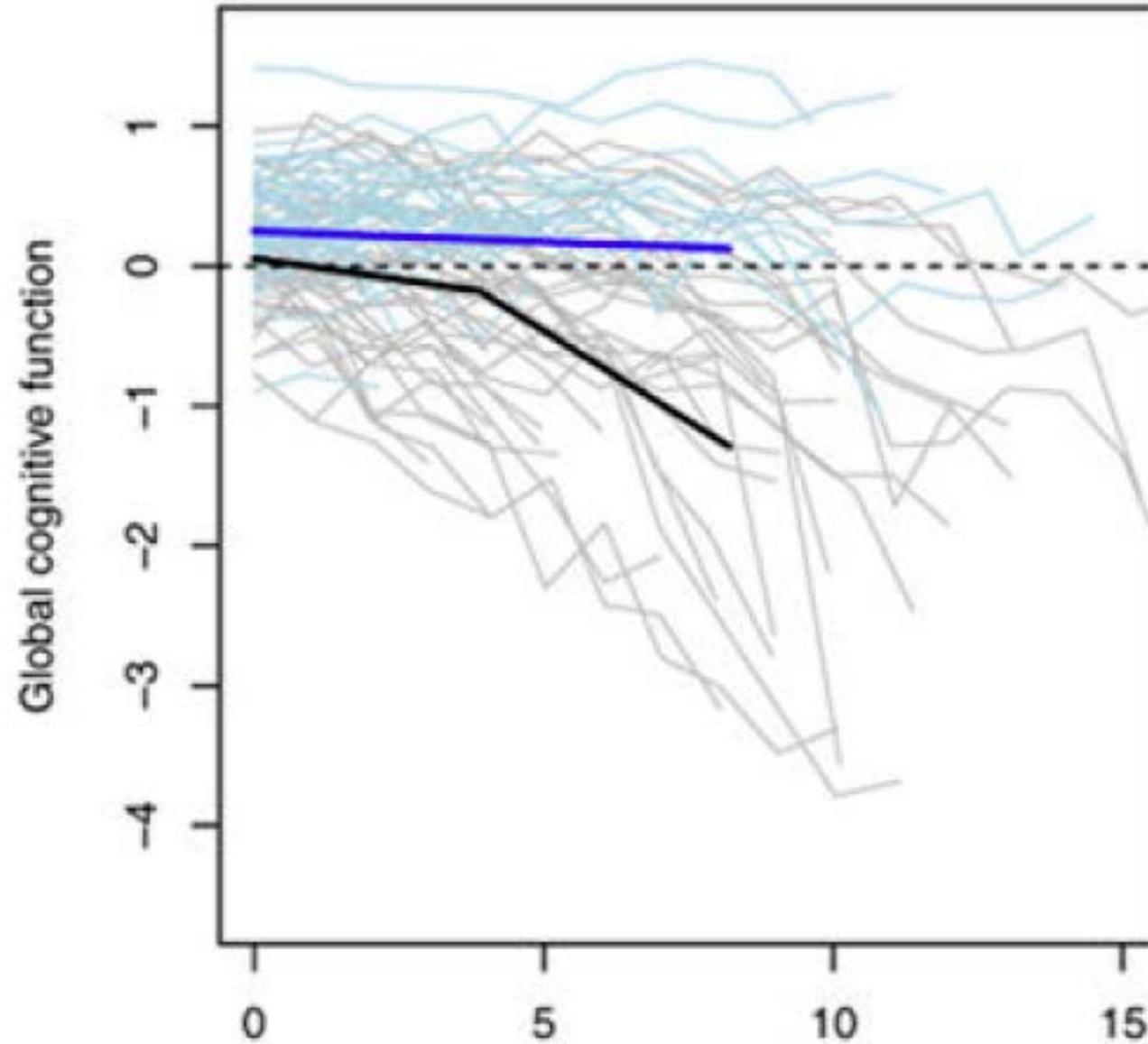
Rush Memory and Aging Project

- Began in 1997
- Participants age 60 and older
 - (Mean Age = 82)
- From Chicago metro area
- Yearly interviews and clinical evaluations
- Demographics
- Cognition

Decision Making Assessment

- Began in 2010
 - Health literacy
 - Financial literacy
 - Confidence in financial literacy
 - Risk preferences
 - Fraud victimization
 - Scam susceptibility
- 787 participants w/o dementia
 - 93 (12%) report recent fraud victimization

Cognitive Trajectories in Rush MAP



Financial Literacy Questions

- Numeracy

- If the chance of getting a disease is 10 percent, how many people out of 1,000 would be expected to get the disease? 100, 10, 90, 900

- Knowledge

- True or False. To make money in the stock market, you have to buy and sell stocks often.

Gamble et al. (2015)

- Individual decline in cognition predicts declines in financial literacy, both numeracy and knowledge
 - Decreases in episodic memory, visuospatial ability → numeracy
 - Decreases in semantic memory → financial knowledge
- Individual decline in cognition associated with drop in self-confidence
 - However, no loss in confidence in managing own finances!

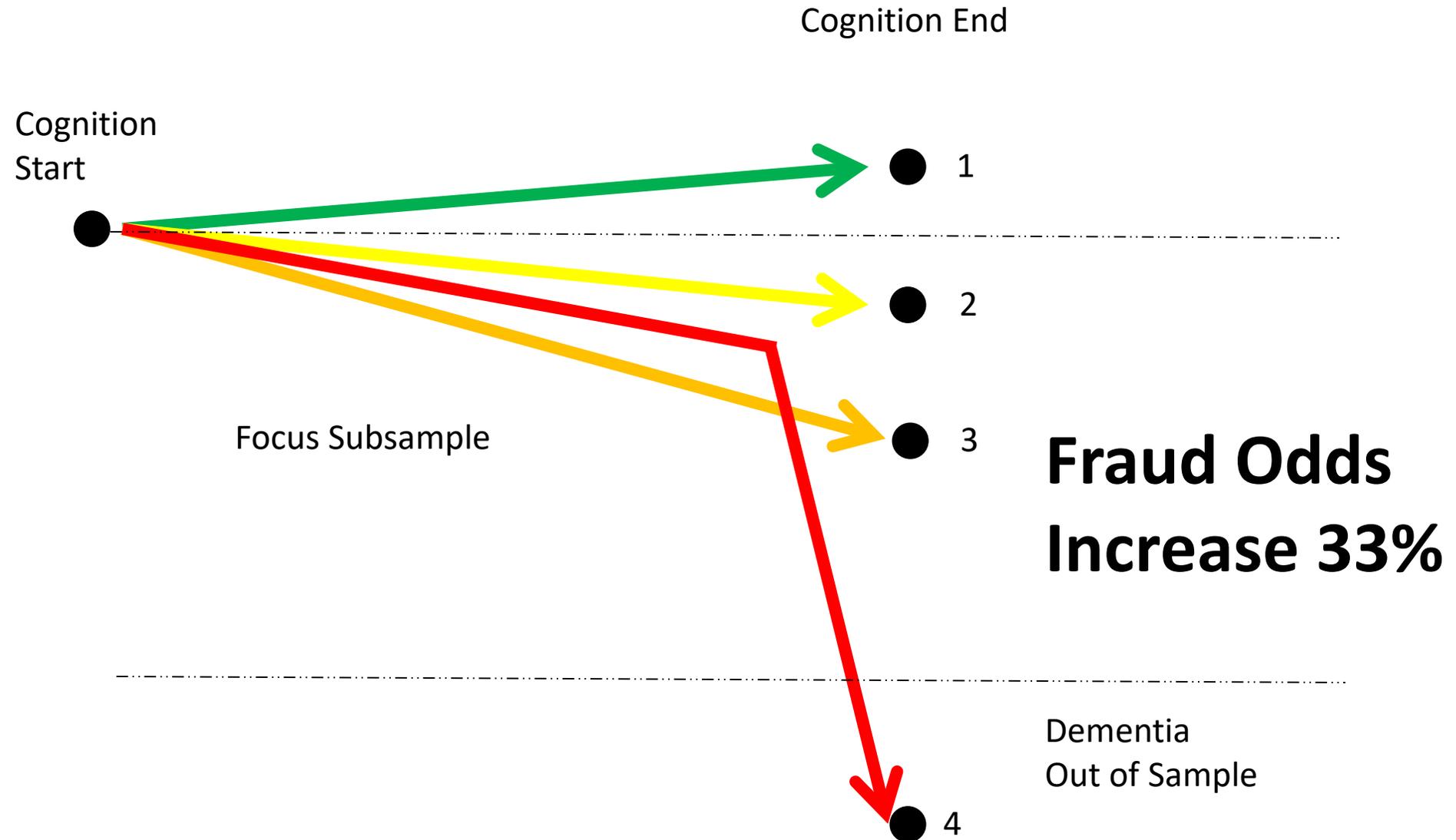
Implication: Can indirectly test for impairment to financial decision making

- More likely to get help with financial decisions
 - Still many not getting help

Elder Financial Fraud

- 2011 MetLife Institute Study of published fraud reports
 - about \$3 Billion in US
 - Underreporting problem
- 2015 True Link report
 - over \$36 billion
 - Surveys of seniors and caregivers
- Numerous scams that target seniors
 - Fraudulent investment schemes
 - Sweepstakes and lottery scams
 - Grandparent scams

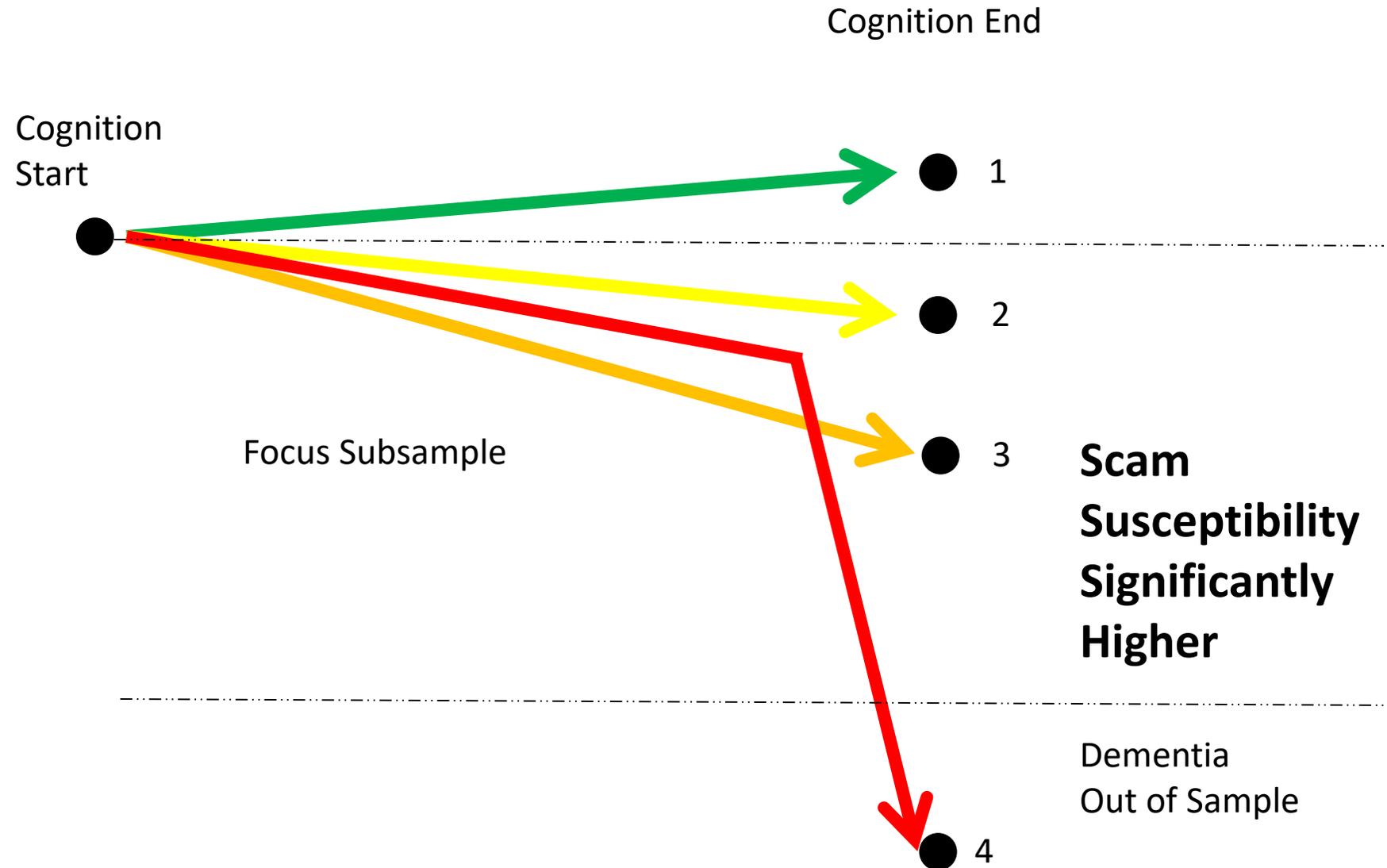
Gamble et al. (2014) Results



What is the Reason?

- (Supply Side) Do fraud perpetrators seek out those with impaired cognition?
 - Cannot test with our data
- (Demand Side) Do those with impaired cognition become more susceptible to scamming?
 - Yes

Gamble et al. (2014) Results



Implications for Doctors and Families

- Can indirectly test for risk for financial fraud by observing cognitive decline
- Motivates earlier financial intervention

Gamble et al. (2014) Results

- High overconfidence increases odds of fraud victimization by 26%
 - No significant effect of low financial literacy alone
 - No significant effect of high confidence alone
- Policy Suggestions: Decrease fraud risk by...
 - Increasing financial literacy
 - Increasing self awareness of lack of financial literacy

Measuring Risk Taking

- Example: Suppose that the chances were 50-50 that the investment opportunity would double your annual income and 50-50 that it would cut it by 1/10 or 10%? Would you take the risk?

Gamble et al. (2014) Results

- Percent taking 10%-of-income risk increases by 17 percentage points after fraud victimization
- No change for non-victims
- Compared to similar (propensity-matched) non-victims increase is 22 percentage points after victimization
- Policy Relevance: Fraud victims at risk for repeated victimization
 - Recovery Scam

Key Outstanding Questions

- What is the prevalence and cost of poor financial decision making?
- How are people preparing for their financial future now?
- How should people be preparing for their financial future now?
 - financial education?
 - third-party support?
- What should be the market response?
- What should be the regulatory response?