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Gender differences in judgment and decision-making: can they explain why we have so few female CEOs?

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Risk taking

- It is risky to go for the top position
- Females usually found to be more risk-averse in choices between monetary lotteries in the lab (see review by Charness and Gneezy, 2012)
  - The gap is reported to be largest in whites (Finucane et al., 2000)
- (Single) females usually found to make more risk-averse investment choices (Sunden and Surette's, 1998).

Why differences in risk-taking?

- They could reflect our evolutionary past
- size of parental investment
- hunters vs. gatherers
- Dreber and Hoffman (2007): 2d/4d (a proxy for prenatal testosterone) correlates with financial risk aversion

Why differences in risk-taking?

- Emotions matter in risk-taking
- They may make us deviate from the normative benchmark of expected utility theory (Rottenstreich and Hsee, 2001)
- women tend to experience emotions more strongly
- in some situations men tend to experience anger, while women experience fear (Lerner et al., 2003)
- (Perhaps related to defining a situation as a challenge vs. as a threat, Arch, 1993)

Overconfidence

- Compared to people of your age, are you a better-than-average or a worse-than-average driver?
- What is the length of the Nile? Give a 90% confidence interval.

Let us go big. And real.

Boys will be boys (Krawczyk and Wilamowski, JBDM, 2016)

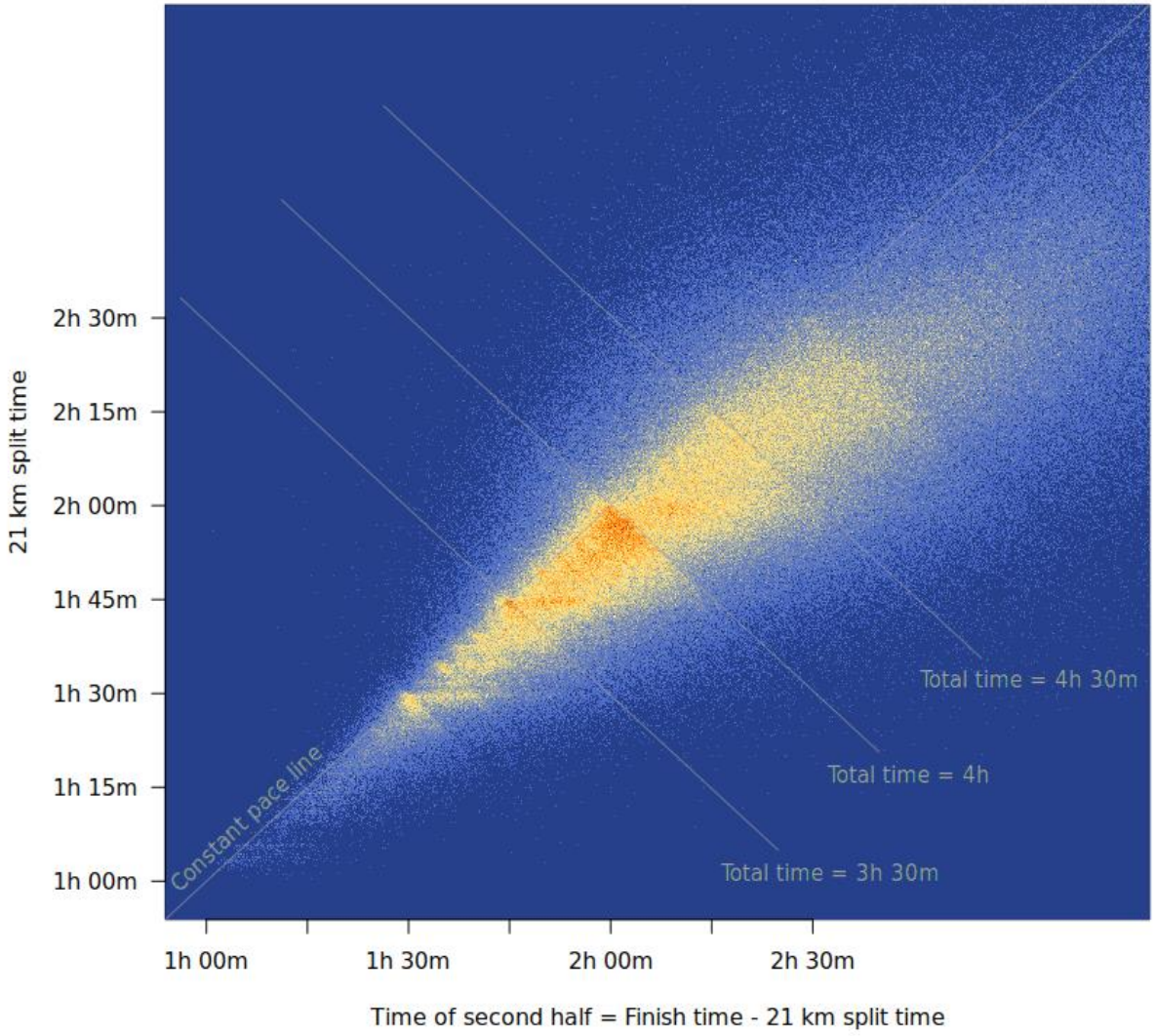
- Participants of the 2012 Warsaw Marathon asked to predict their finishing times
- We looked at the difference between the actual and predicted time in seconds (forecast errors)
- Large, positive values mean you run much slower than you thought you could (possibly because you were overly confident in your prediction)
- It turns out that forecast errors are significantly higher for males compared to females.

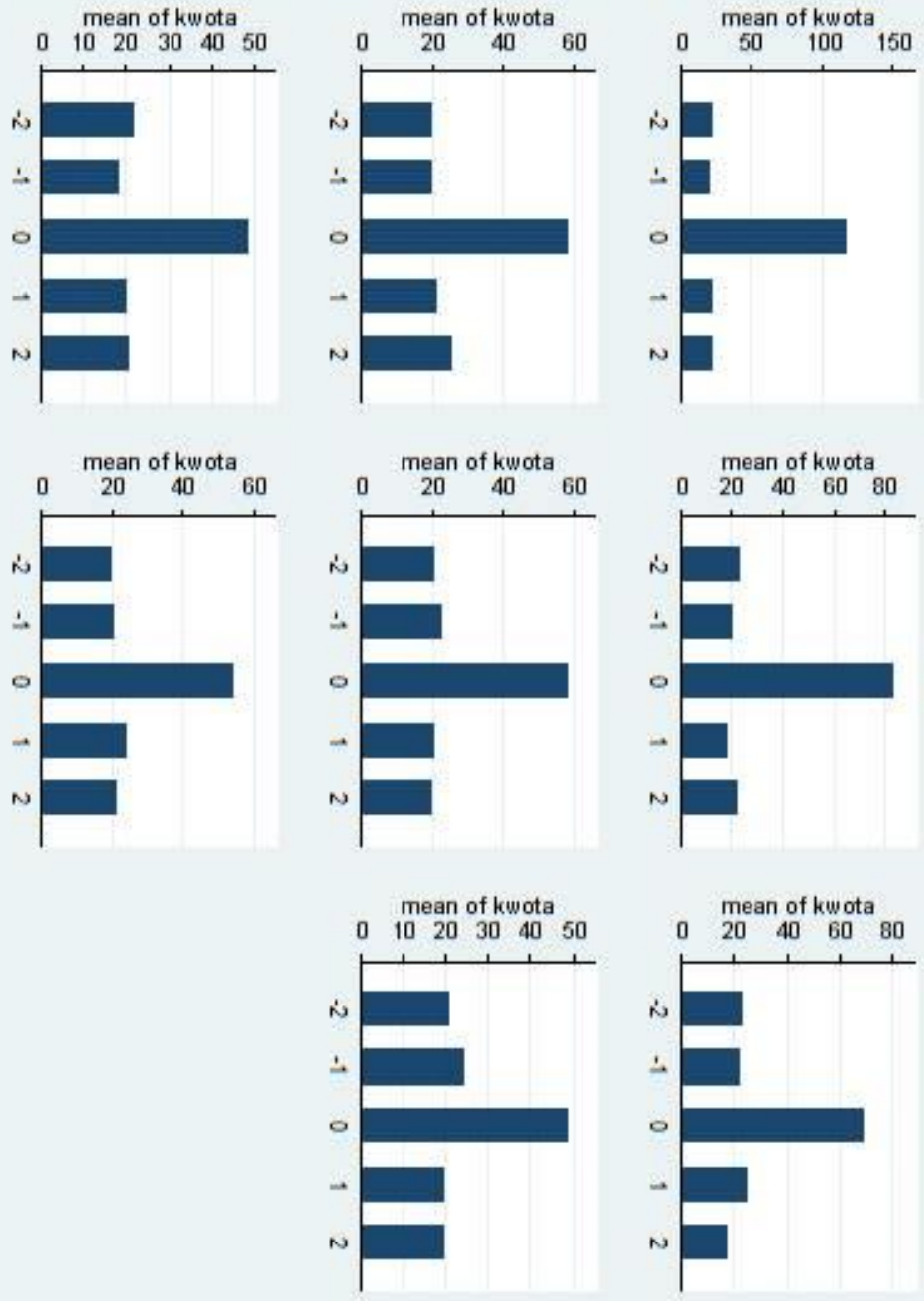
Split times

- If you are overconfident, you probably start too fast
- (and then you have to slow down considerably)
- In particular, consider the following measure: APC=final time-2(time at 21st km)
- High values correspond to relatively slower pace in the latter half
- Correlations with forecast error close to .7(!)
- Thus APC is a good proxy for overconfidence
- Why not look at split times in other marathons?

Data

- Chicago, New York, London
- 1998-2013
- >1million observations
- Age 12-90
- 68 nations (with >100 observations)


2h 30m
2h 15m
2h 00m
1h 45m
1h 30m
1h 15m
1h 00m
21 km split time
Total time = 4h 30m
Total time = 4h
Total time = 3h 30m
Constant pace line
1h 00m
1h 30m
2h 00m
2h 30m
Time of second half = Finish time - 21 km split time


mean of kwota
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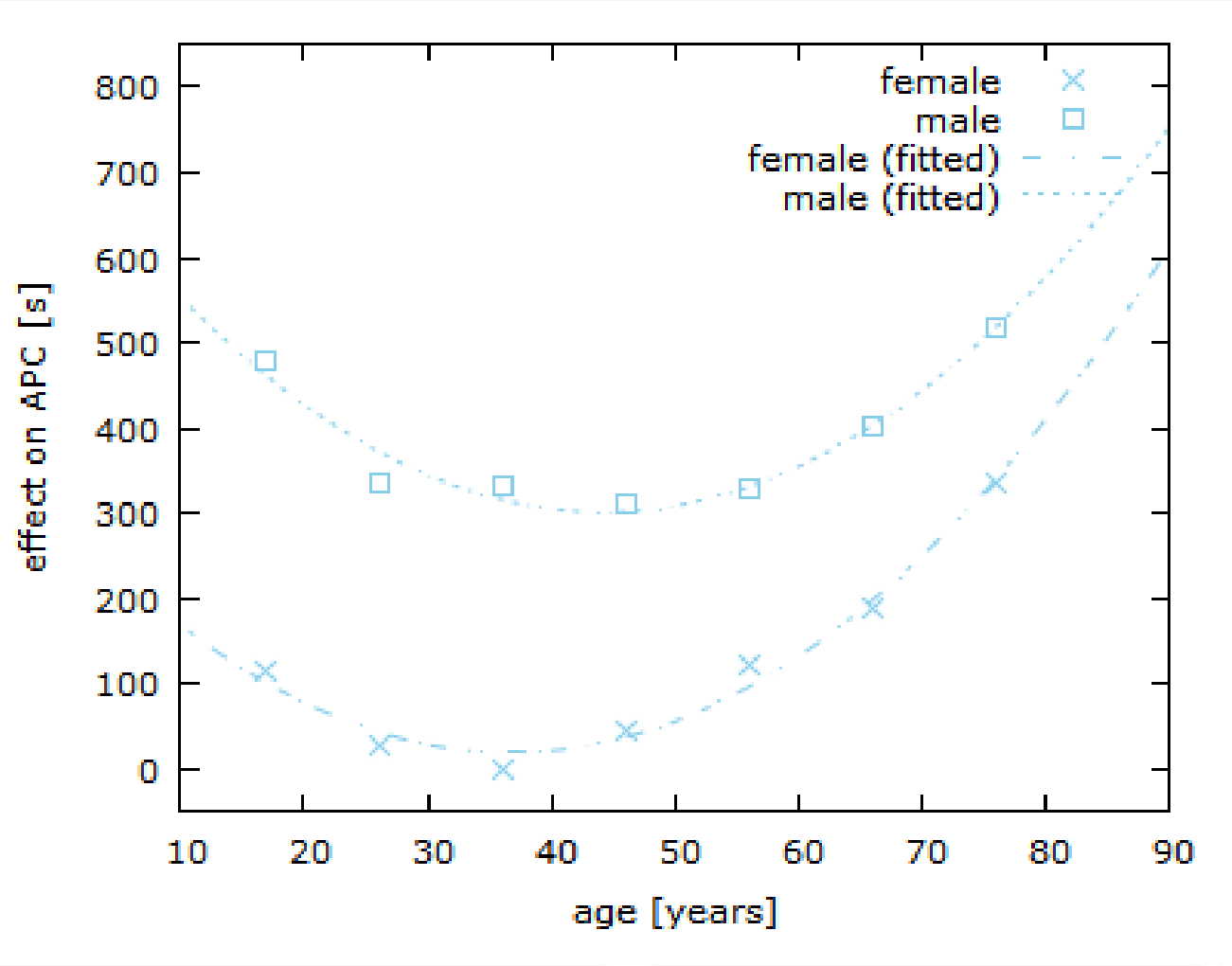
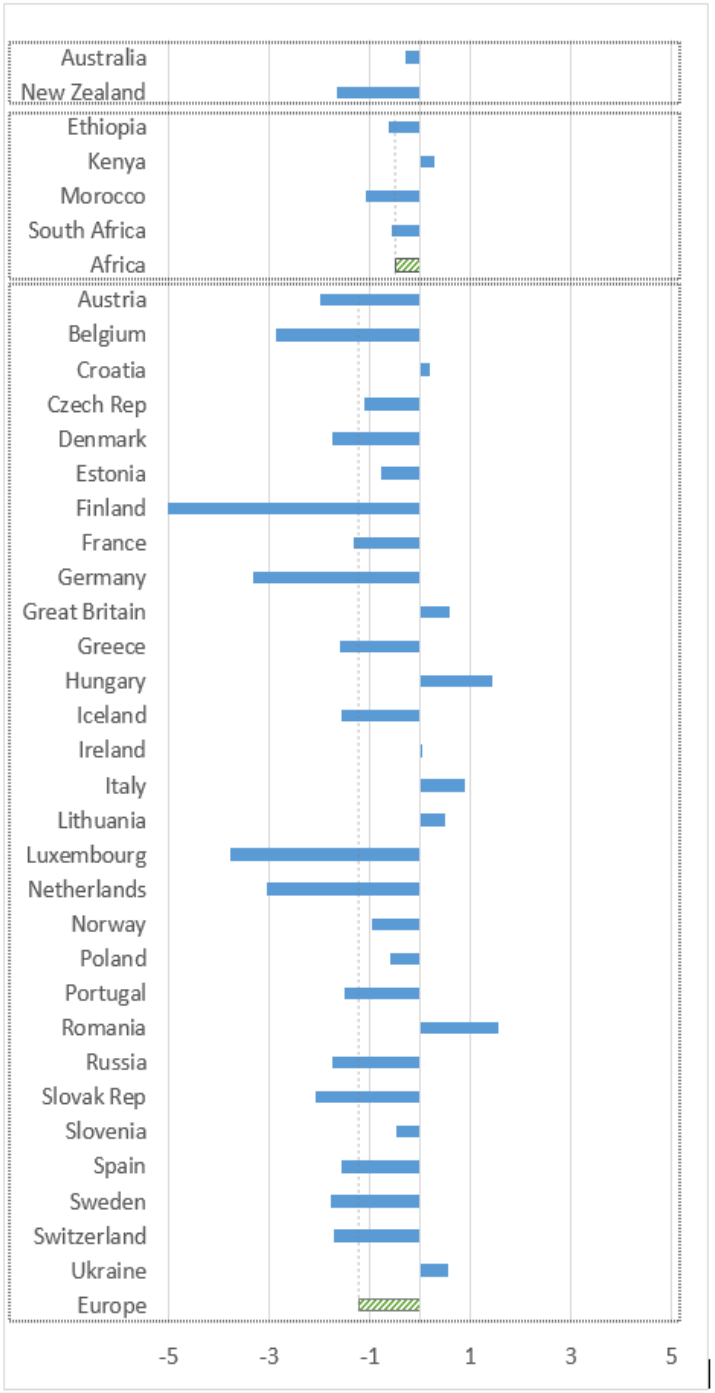
Gender and age effects

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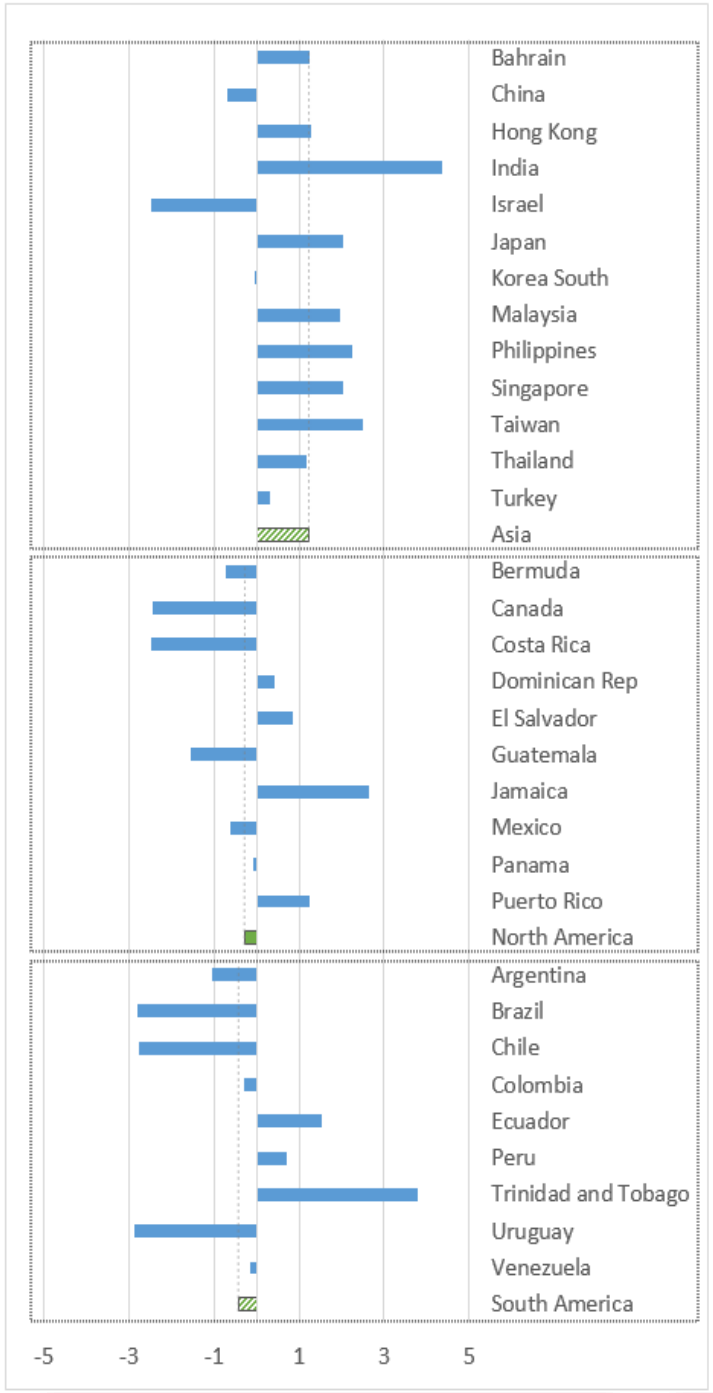
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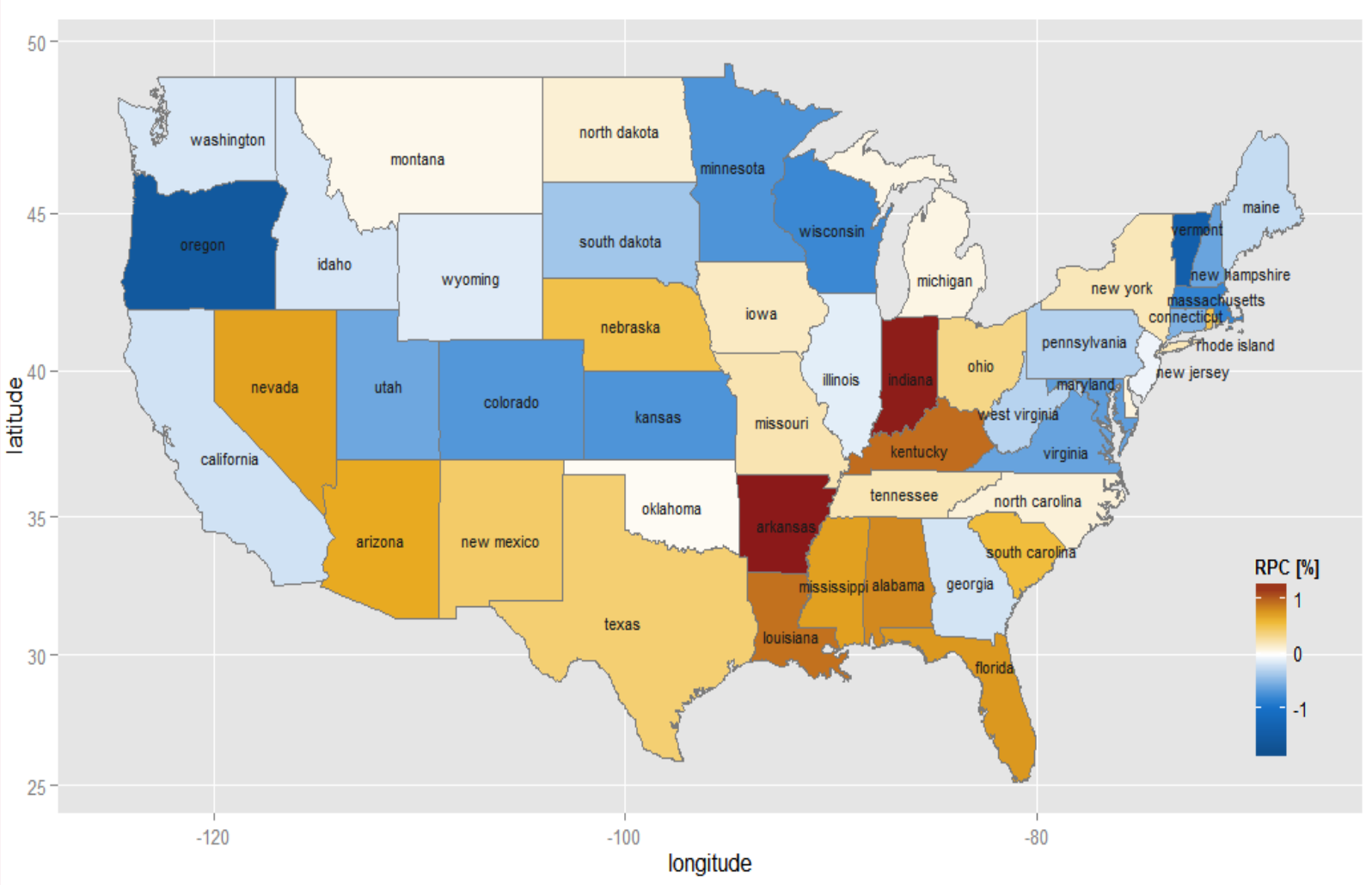
Hofstede dimensions: results

Specification	(8)	(9)	(10)	(11)
Power Distance	0.0586**	---	0.0371*	---
Individualism	---	0.0043	---	0.0079
Masculinity	0.0454***	0.044***	0.0443***	0.0423***
Uncert.Avoid.	-0.0634***	-0.0187	-0.0365**	-0.004
L-T Orient.	---	---	-0.0125	-0.0207
Indulgence	-0.0199	-0.0034	---	---

United States of Confidence



Differences in social preferences?

- If I take a top position, somebody else does not get it
- A standard economic assumption is that everyone cares about her or his payoff only
- But experiments show it is not true
  - Dictator game
  - Ultimatum game
  - Trust game
- Overall, very little evidence that females are generally less selfish
- They seem to respond relatively strongly to social clues, relatively less to monetary incentives (cost of giving)

Differences in willingness to compete

- Suppose you were make additions, as many as you can, for three minutes. 34+21=?, 84+19=? …
- You can choose between two methods of payment:
  - You get 50 cents for each correct calculation
  - You get 2 euro for each correct calculation *if you are the best in a group of four*
- Which one would you prefer and why?

Gender gap in competitions

- In situations like the one just described, men are typically found to be more likely to choose competition than women (see papers by Niederle and Vesterlund)
  - There is some evidence that women chiefly dislike competing against men. Some rationale for same-sex schools (Booth and Nolen, 2012, JEBO)
  - ``Women don't ask'' by Babcock and Laschever
- Men also tend to do relatively well when actually competing under winner-takes-all as compared to their performance under piece-rate (see papers by Gneezy and Rustichini)

Why are women less willing to compete?

- Probably nature matters
  - Sutter and Rutzler (2010): gender gap in competitiveness already in three-year olds
  - Chen, Katuscak and Ozdenoren (2009): menstrual cycle affects auction bidding behavior
- Nurture matters
  - Maasai vs. Khasi (Gneezy, Leonard and List, 2006; see also ``The Why axis'')
  - Women risk more backlash for starting competitive negotiations (Bowles, Babcock, and Lei Lai, 2007)

Summary

- It takes self-confidence, self-love, willingness to take risk, willingness to compete and good performance when competing to reach a top position
- ON AVERAGE women are less confident, more risk-averse, more competition-averse, and perform relatively poorly under competition
- Conclusion: the fraction of women in top positions may be low even if hiring/promotion process treats both genders completely equally
- Corollaries: male overconfidence may also lead to epic failures; it cannot help explain gender wage gap