

Victorian Public Sector Commission & the Australia and New Zealand School of Government present:

# Don't worry, be happy: what economics can (and cannot) tell us about well being'

## Moderator

**Professor Gary Banks, AO**  
Dean and CEO  
ANZSOG

## Speaker

**Professor Justin Wolfers**  
University of Michigan

Please switch off all devices for the duration of the seminar

# Economics and Happiness

Justin Wolfers

University of Michigan and Sydney University (visiting)

Plus Brookings, CEPR, CESifo, IZA, NBER and PIIE)

Drawing on joint research with Betsey Stevenson

*ANZSOG seminar series – Melbourne, February 18 2016.*

# Measuring Subjective Well-being

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## Survey questions

- ▶ Satisfaction ladder:
  - “Here is a ladder representing the ‘ladder of life’. Let's suppose the top of the ladder represents the best possible life for you, and the bottom, the worse possible life for you. On which step of the ladder do you feel you personally stand at the present time? [0-10 steps].”
- ▶ Life satisfaction
  - “All things considered, how satisfied are you with your life as a whole these days?”  
[1=Dissatisfied – 10=Satisfied]
- ▶ Happiness
  - “Taken all together, how would you say things are these days—would you say that you are: very happy, pretty happy, or not too happy?”
- ▶ Daily affect
  - Did you experience the following feelings during a lot of the day yesterday? How about: a) Happiness; b) Enjoyment; c) Anger; d) Sadness; e) Stress; f) Worry

## Survey responses are related to other measures

- ❑ Physical evidence
  - ▶ Smiling, laughing, heart rate measures, sociability, and electrical activity in the brain.
- ❑ Subjective assessments
  - ▶ Evaluations by friends, self-reported health, sleep quality, and personality.
- ❑ Objective circumstances
  - ▶ Life circumstances (unemployment, marriage, divorce)

# Research Question: What is the relationship between happiness & income?

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<b><i>Between country:</i></b> Rich v. poor countries	Statistically insignificant effects interpreted to be zero
<b><i>National time series:</i></b> Country when rich v. poor	No effects (Japan, USA, Europe)
<b><i>International panel:</i></b> Countries with fast v. slow growth	Largely unexamined
Implications	Relative income determines well-being
Policy conclusions	De-emphasize growth

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<b>Implications</b>	Relative income determines well-being	Relative income determines well-being... once “basic needs” are met”
<b>Policy conclusions</b>	De-emphasize growth	Rich countries should de-emphasize growth and raise income tax

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<b>Within country:</b> Rich v. poor people in a country	Big effects	Big effects for income <\$15k - But not for the rich	Strong effects: $\beta^{\text{within}} \approx 0.35$
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Implications	Relative income determines well- being	Relative income determines well- being... once “basic needs” are met”	There’s no paradox (and never was)
Policy conclusions	De-emphasize growth	Rich countries should de-emphasize growth and raise income tax	

# Within-Country Comparisons

“Taken all together, how would you say things are these days?”

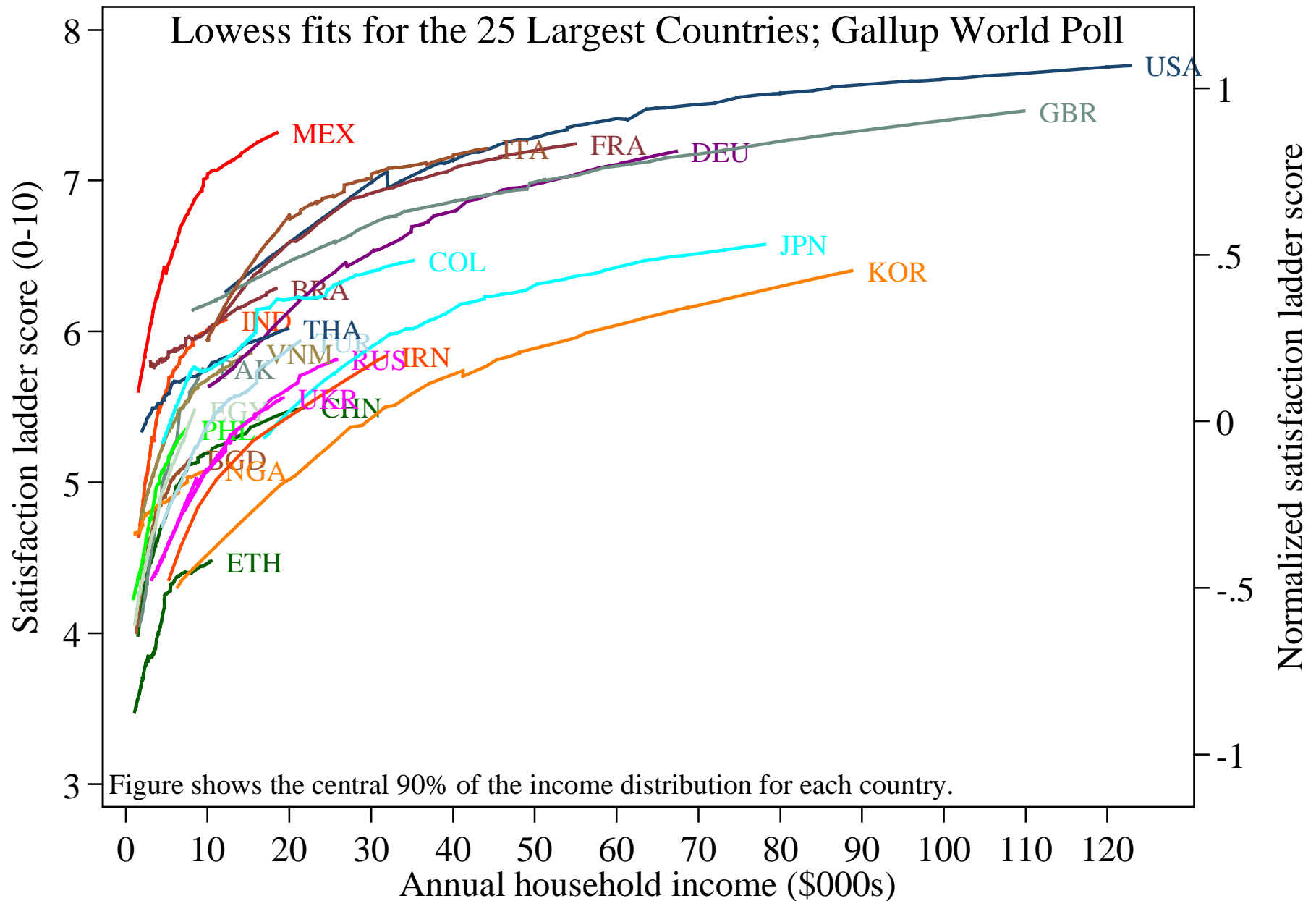
Family income	Very happy	Pretty happy	Not too happy
<\$12,500 (bottom 10%)	21%	53%	26%
\$12,500-\$49,999	25%	61%	13%
\$50,000-\$149,999	40%	54%	6%
≥\$150,000 (top 10%)	53%	45%	2%

Source: U.S. General Social Survey, 2006

*“When we plot average happiness versus income for clusters of people in a given country at a given time, we see that rich people are in fact much happier than poor people. It’s actually an astonishingly large difference. There’s no one single change you can imagine that would make your life improve on the happiness scale as much as to move from the bottom 5 percent on the income scale to the top 5 percent.”*

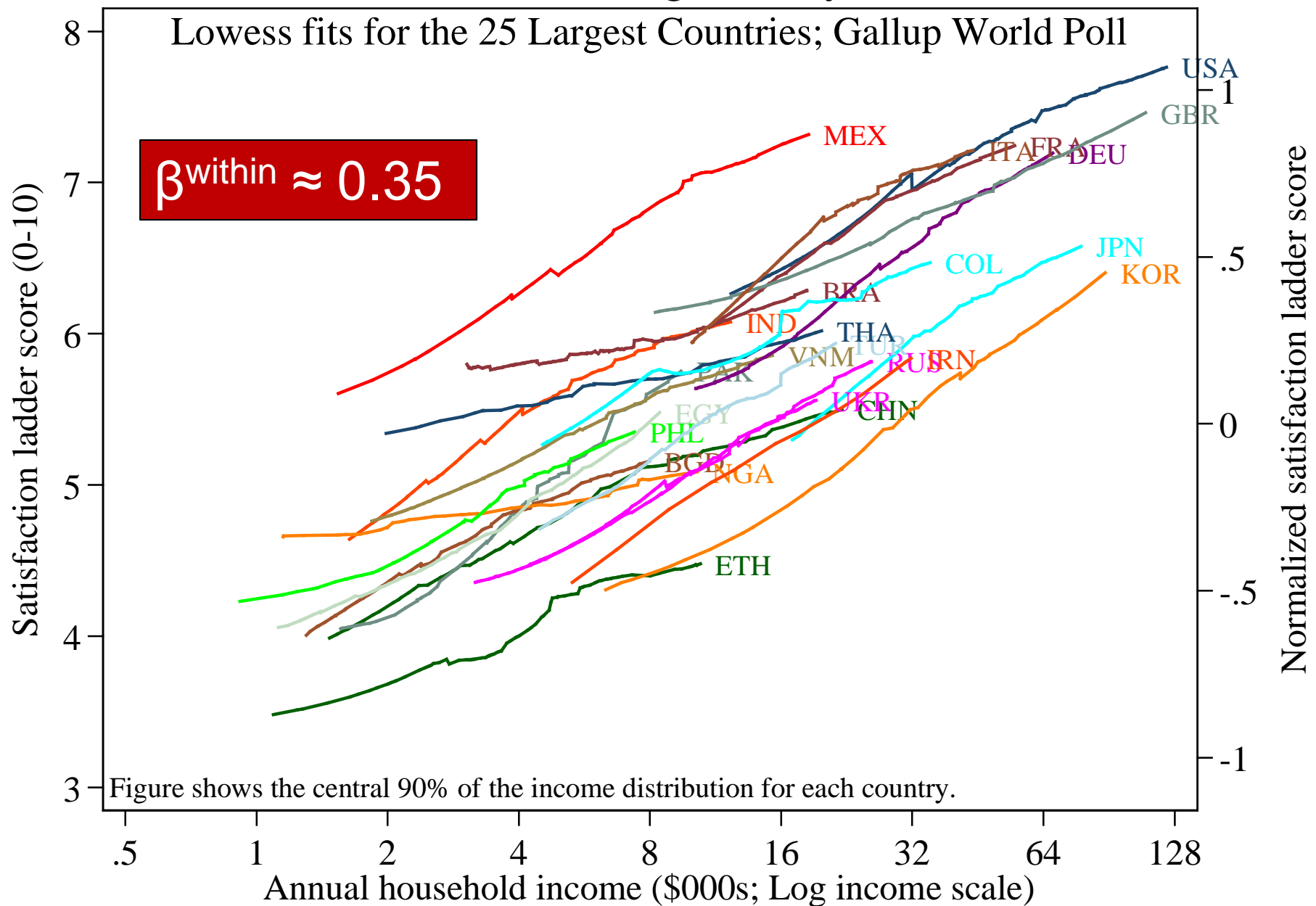
- Robert Frank (2005)

# Satisfaction and Family Income





# Satisfaction and Log(Family Income)



Source: Daniel Sacks, Betsey Stevenson and Justin Wolfers (2010), "Subjective Well-Being, Income, Economic Development and Growth"

# No evidence of satiation

	Panel A: Happiness			Panel B: Life Satisfaction				
Annual Household Income	Very Happy	Fairly Happy	Not Too Happy	Very satisfied	Somewhat satisfied	Somewhat dissatisfied	Very dissatisfied	<i>n</i>
<\$10k	35%	44%	21%	24%	19%	25%	32%	24
\$10k-\$20k	42%	42%	15%	47%	23%	19%	11%	78
\$20k-\$30k	43%	52%	5%	45%	30%	21%	4%	107
\$30k-\$40k	55%	41%	4%	57%	28%	11%	4%	106
\$40k-\$50k	46%	46%	9%	49%	33%	10%	8%	100
\$50k-\$75k	55%	40%	5%	64%	26%	5%	5%	162
\$75k-\$100k	60%	36%	4%	69%	27%	3%	1%	107
\$100k-\$150k	60%	40%	0%	72%	26%	2%	0%	118
\$150k-\$250k	70%	30%	0%	90%	7%	3%	0%	57
\$250k-\$500k	83%	17%	0%	93%	7%	0%	0%	15
>\$500k	100%	0%	0%	100%	0%	0%	0%	8
Whole Sample	53%	41%	6%	60%	26%	10%	5%	1,014

# Outline: Assessing the Happiness-Income link

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## ❑ Within-country comparisons

- ▶ USA
- ▶ All countries

$$\beta_{\text{within}} \approx 0.35$$

## ❑ Between countries:

- ▶ Through time
- ▶ Multiple datasets
- ▶ Both happiness and life satisfaction
- ▶ No evidence of satiation

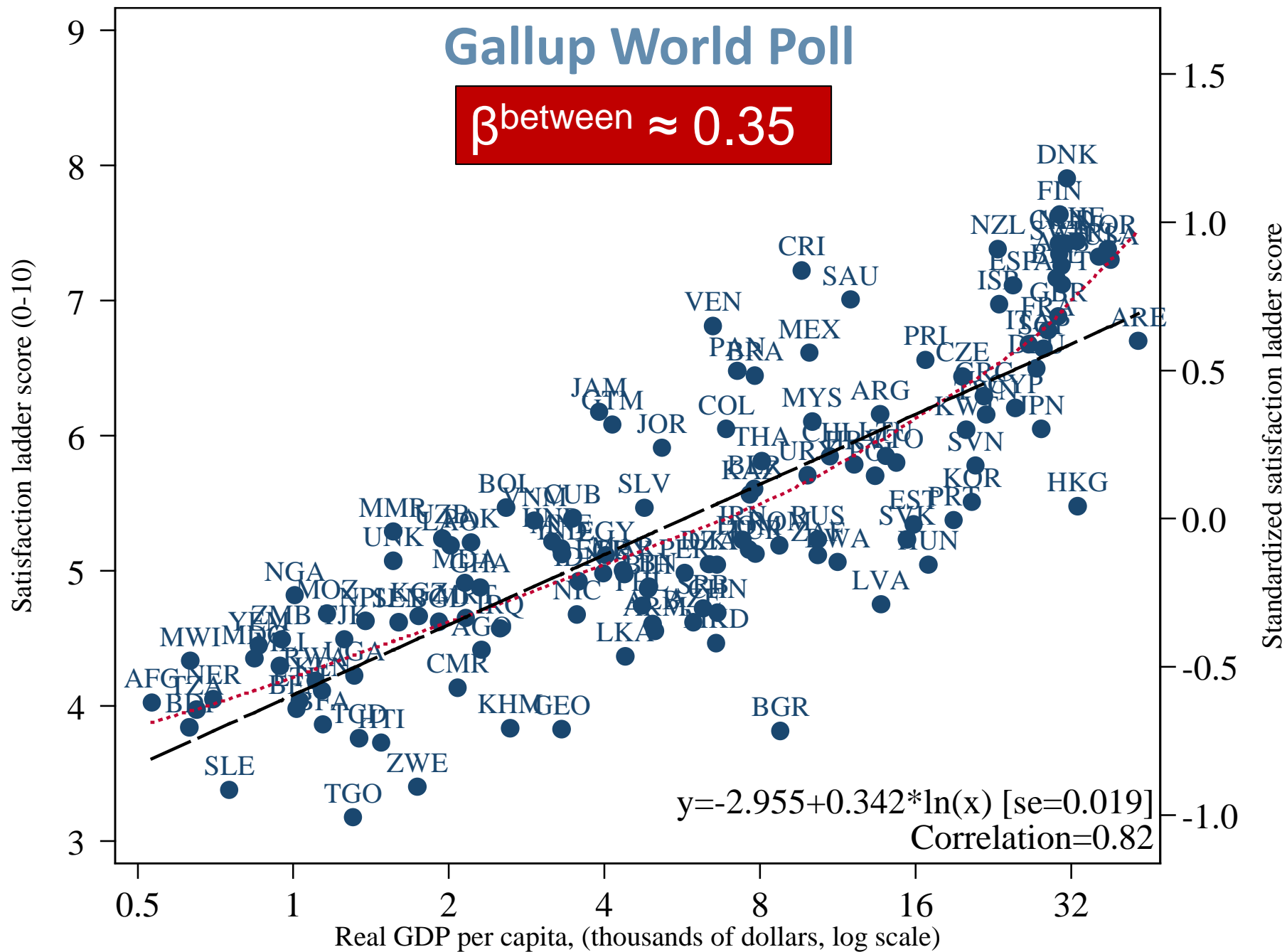
*“the happiness differences between rich and poor countries that one might expect on the basis of the within country differences by economic status are not borne out by the international data.” – Easterlin, (1974)*

## ❑ National Time Series and International Panels

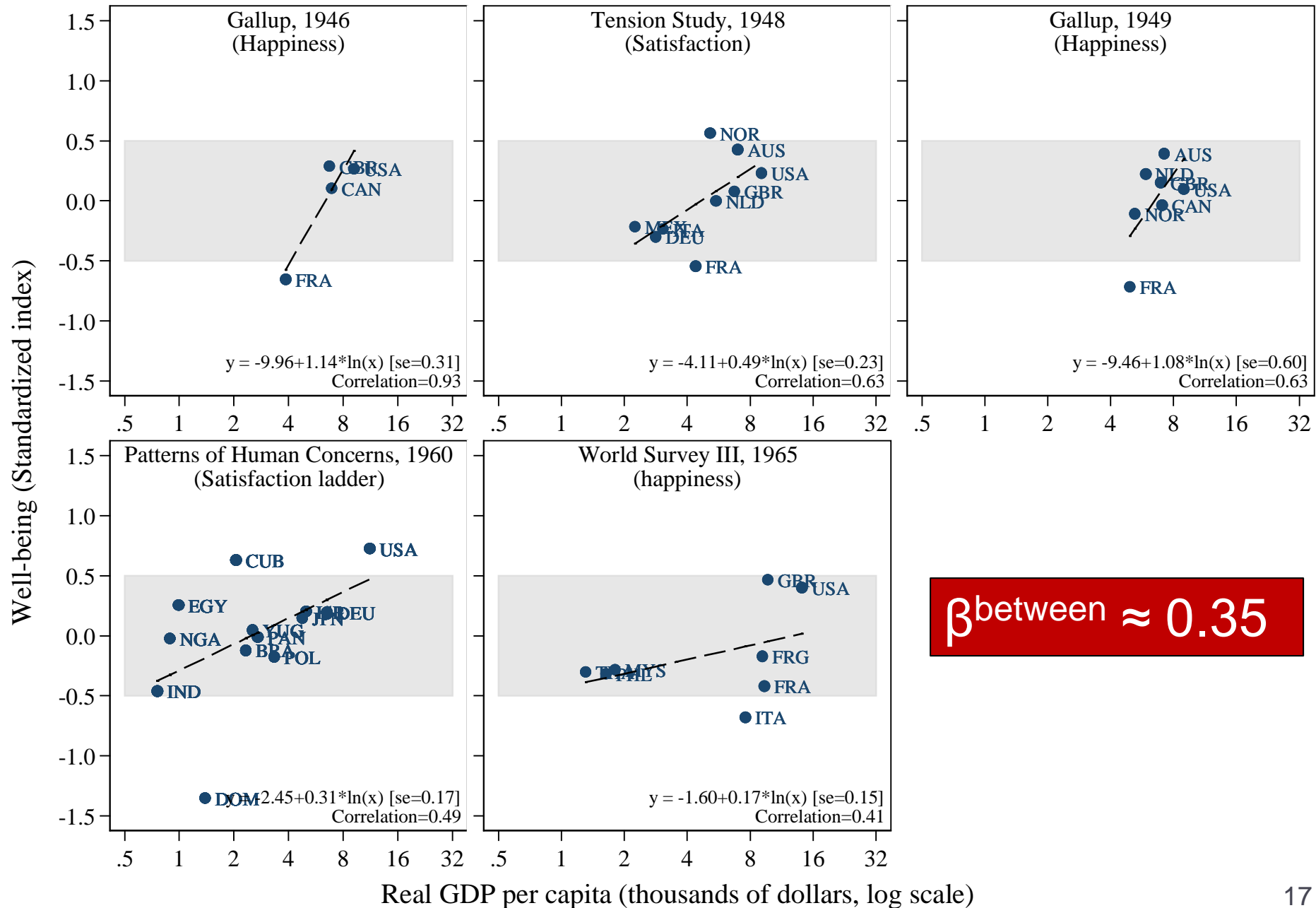
- ▶ Japan
- ▶ USA
- ▶ Europe

## ❑ Other measures of well-being

- ▶ Pain, sadness, smiling, good tasting food to eat, respect

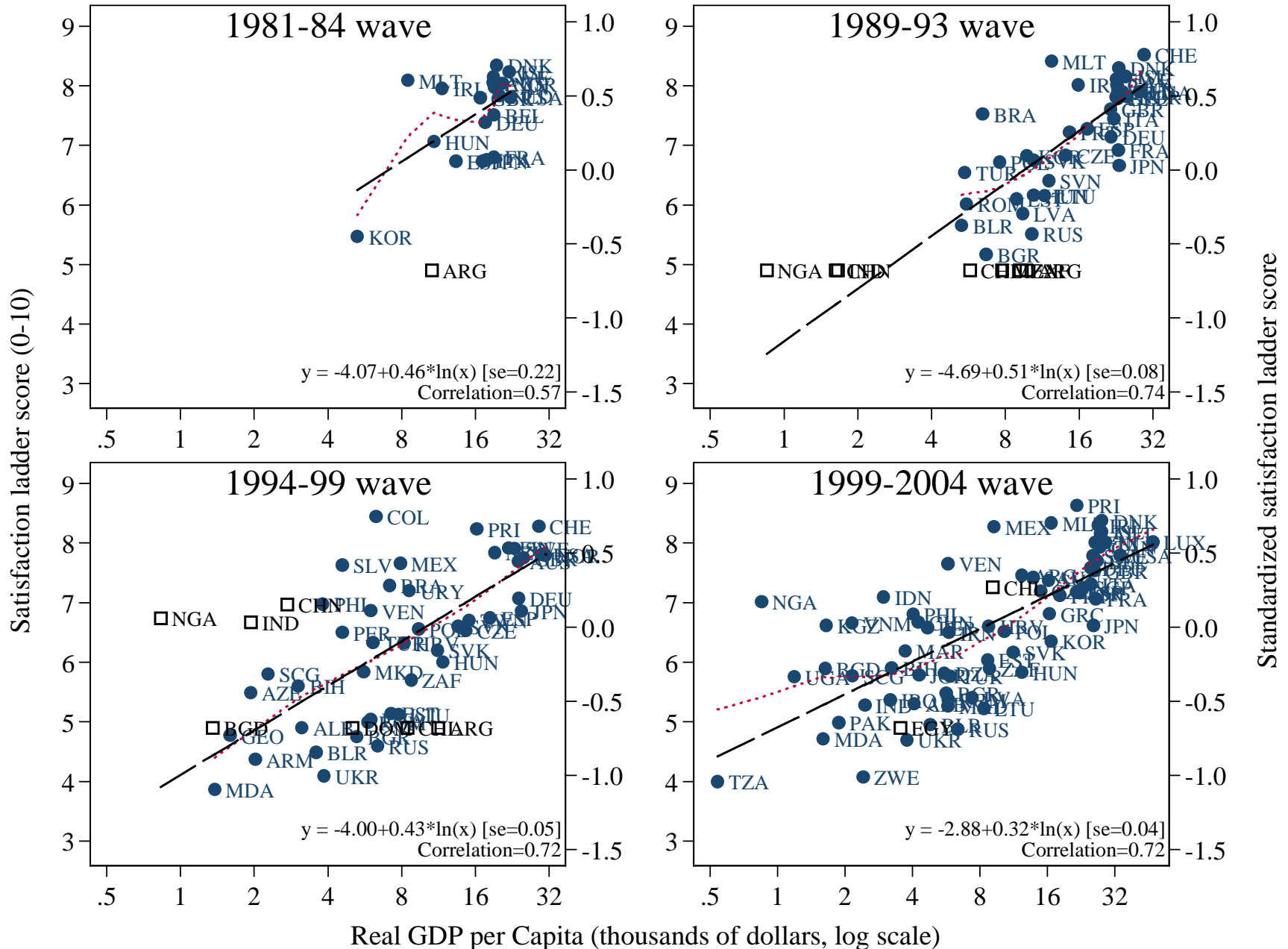


# Early Cross-National Studies of Well-Being and GDP



# World Values Survey

$\beta$  between  $\approx 0.35$

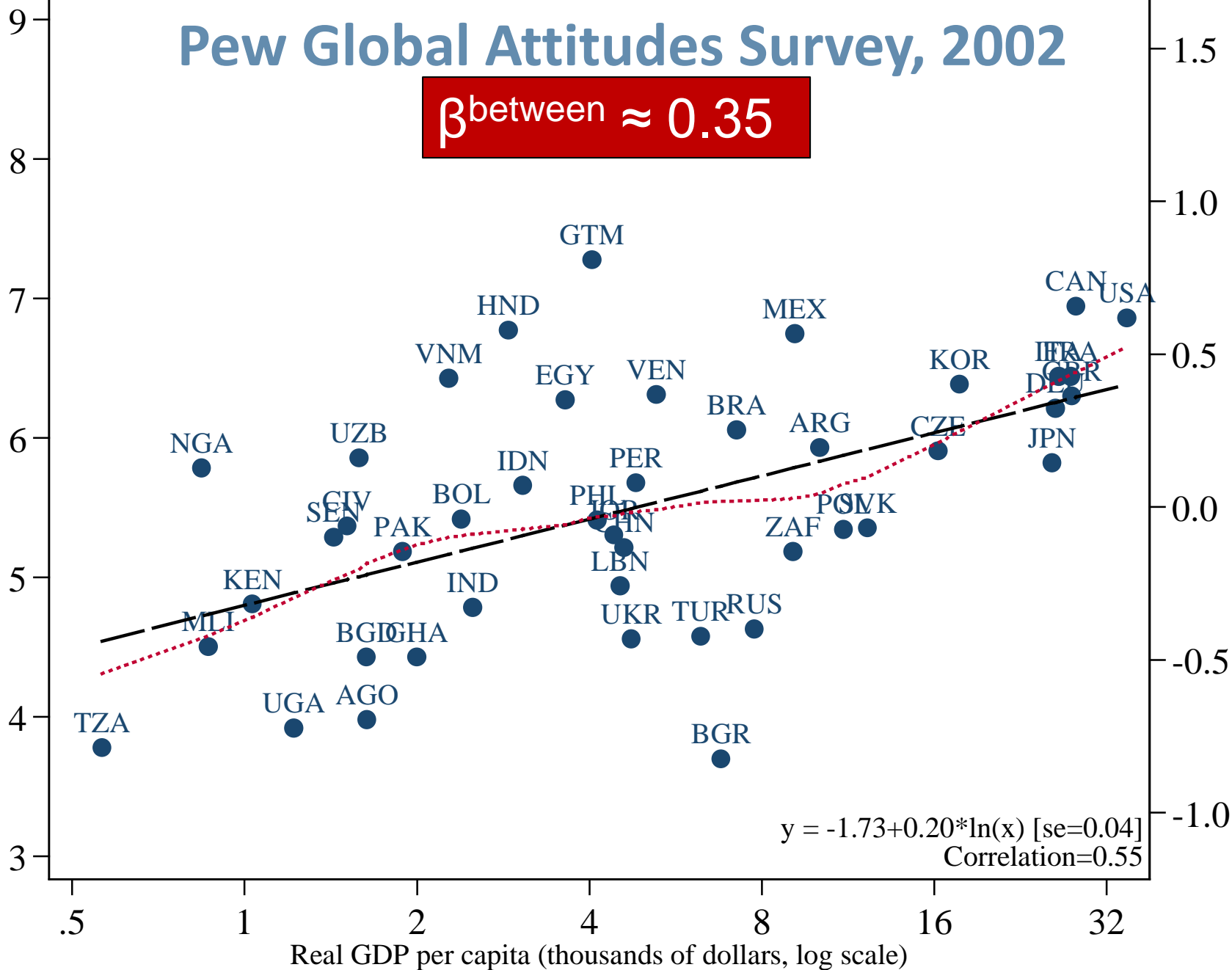


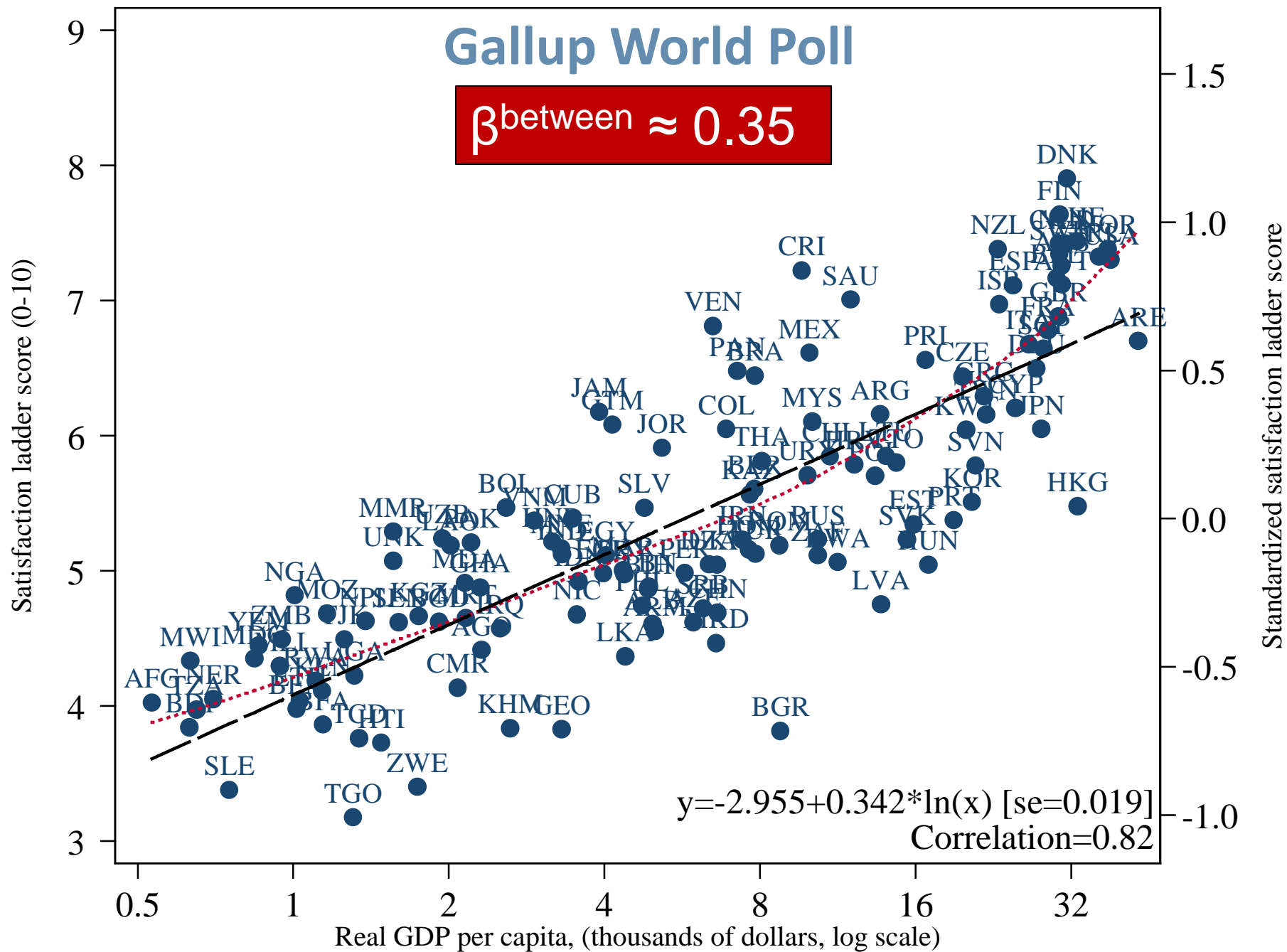
# Pew Global Attitudes Survey, 2002

$\beta$  between  $\approx 0.35$

Satisfaction ladder score (0-10)

Standardized satisfaction ladder score







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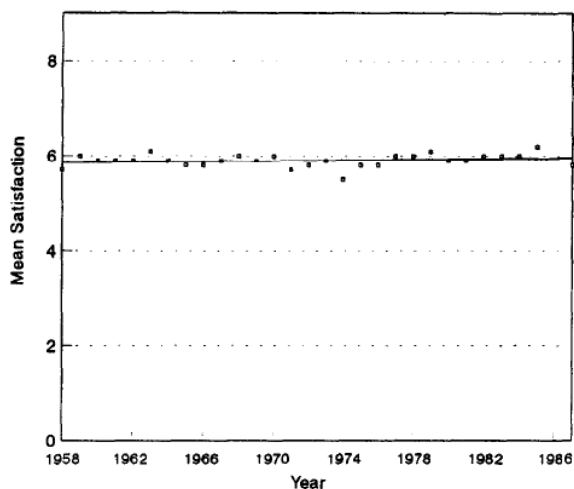
*“income growth in a society does not increase happiness”. - Easterlin (1995)*

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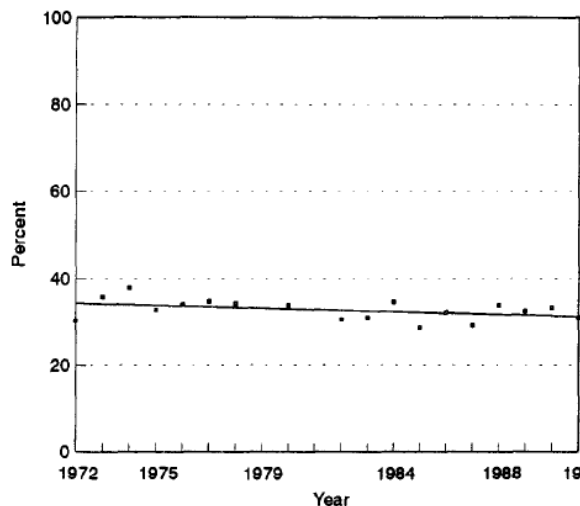
# Time Series: No rise in happiness, despite growth

Japan	U.S.A	Europe
Life in Nation Surveys	General Social Survey	Eurobarometer



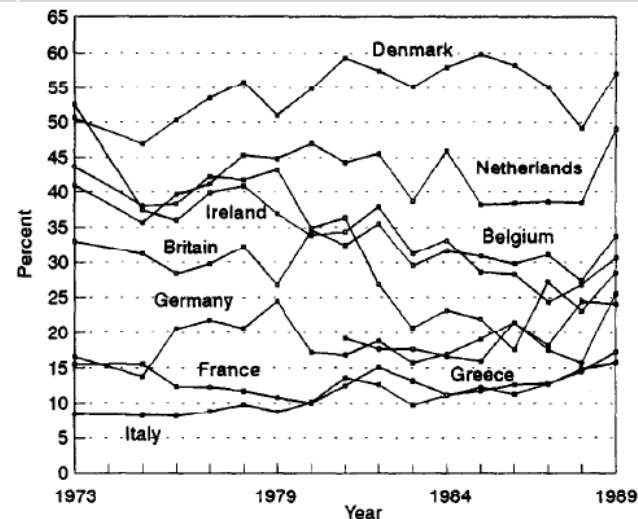
Source and notes: Veenhoven, 1993. An ordinary least squares regression is fitted to the data; the coefficient of mean satisfaction on year is not statistically significant.

Fig. 3. Mean subjective well-being, Japan 1958–1987.



Source and notes: National Opinion Research Center, 1991. The question is, "Taken all together, how would you say things are these days -- would you say that you are very happy, pretty happy or not too happy?" An ordinary least squares regression line is fitted to the data; the time trend is not statistically significant.

Fig. 1. Percent very happy, United States, 1972–1991.

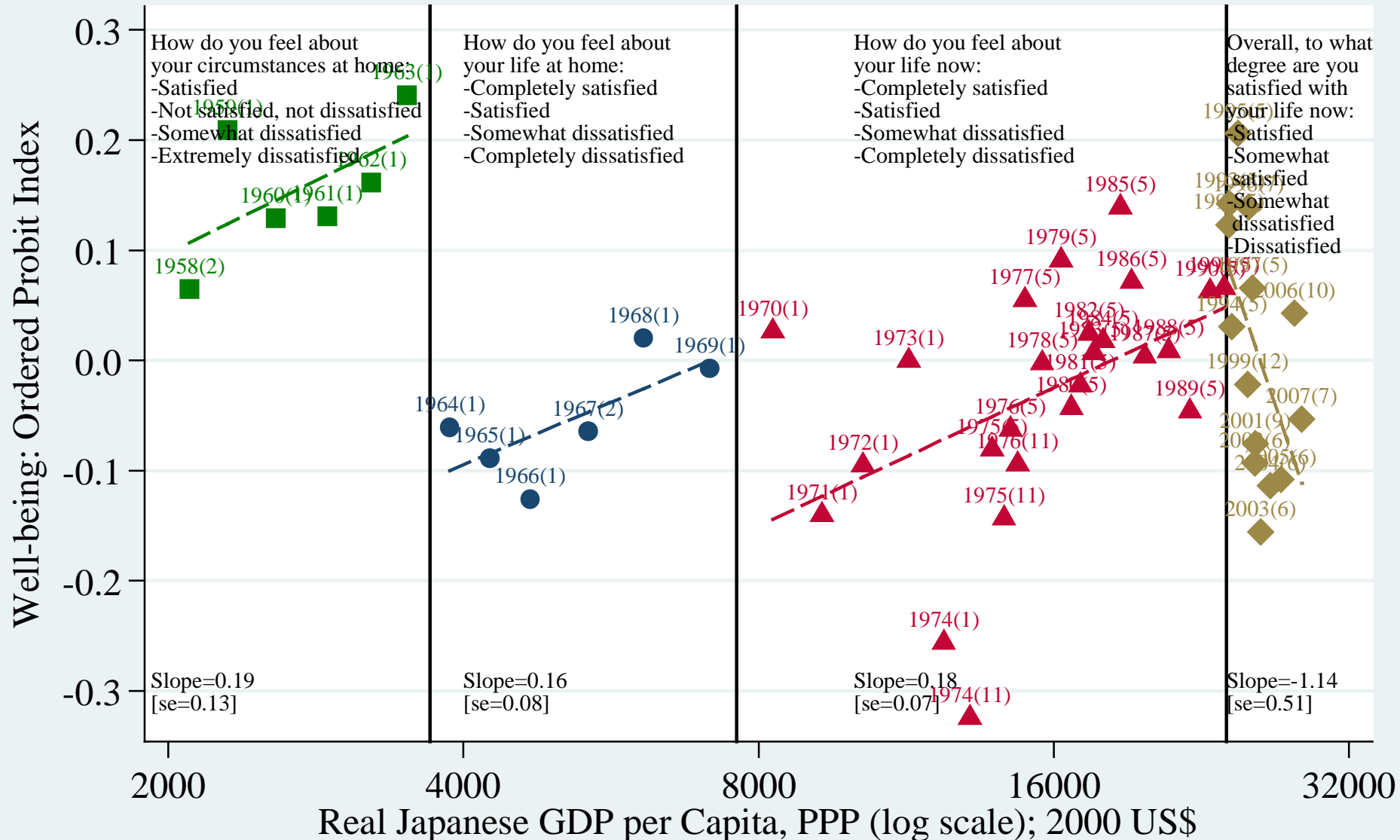


Source and notes: Inglehart et al. 1992. The question asked is, "Generally speaking, how satisfied are you with your life as a whole? Would you say that you are very satisfied, fairly satisfied, not very satisfied, or not at all satisfied?" Ordinary least squares regressions (not shown) yielded time trends that were not significant for five countries, significant and positive for two, and significant and negative for two.

Fig. 2. Percent very satisfied with their lives in general, nine European countries, 1973–1989.

# Evolution of Subjective Well-Being and GDP in Japan

Pattern of responses from four different questions

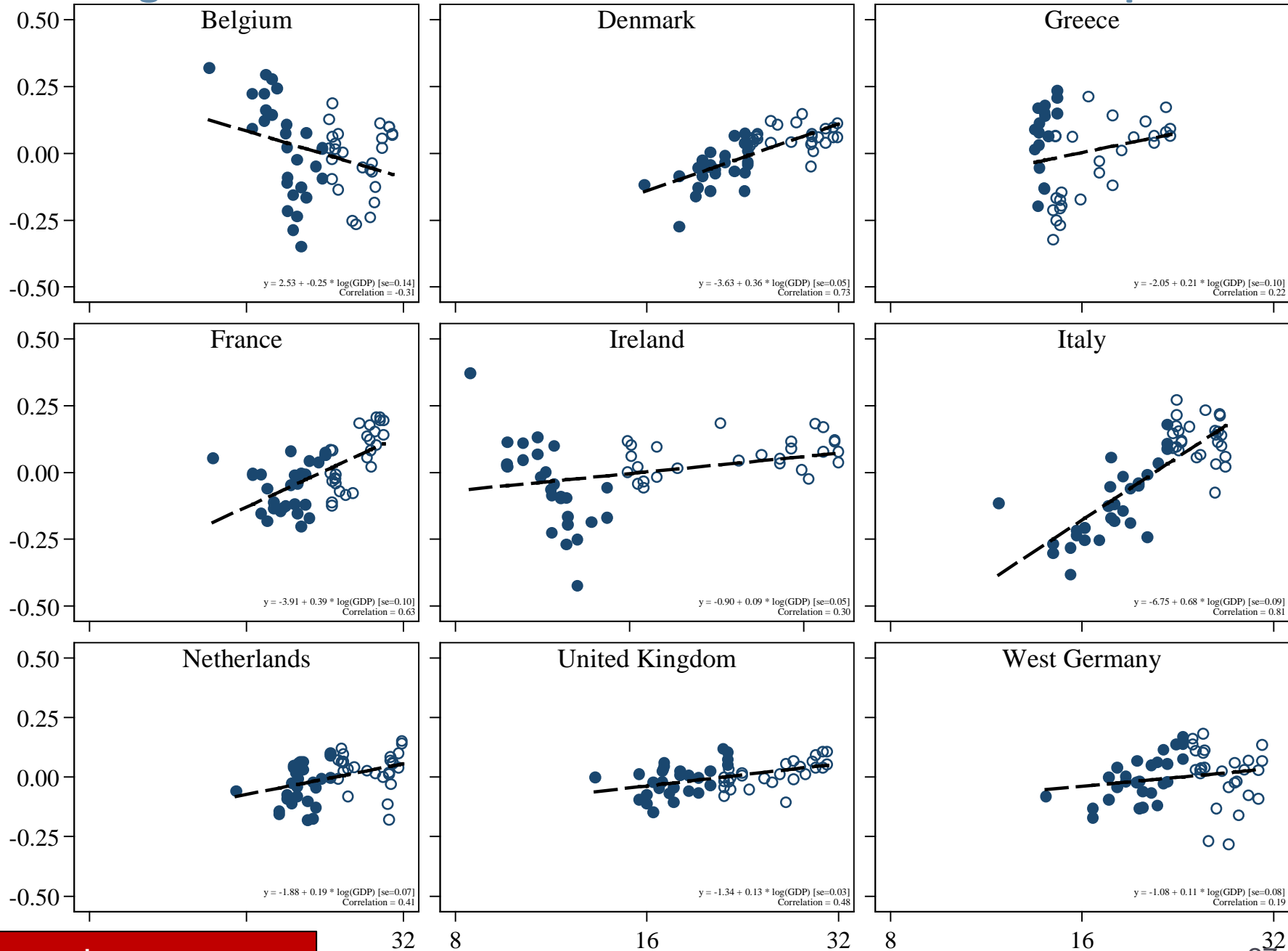


Source: Life-in-nation surveys, 1958-2007.

$\beta$  time series  $\approx 0.35$

# Change in Life Satisfaction and Economic Growth in Europe

Life Satisfaction, 0-10 Scale

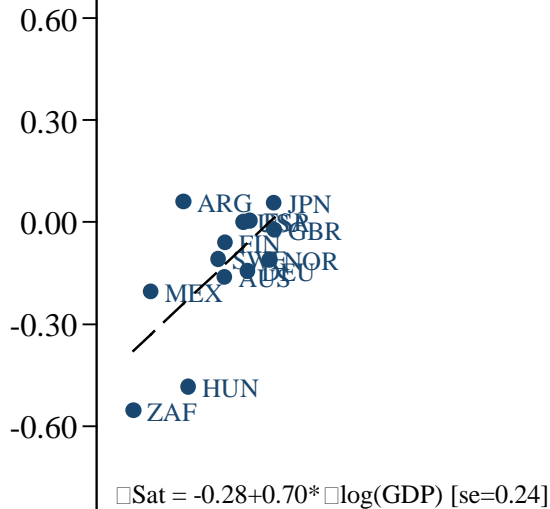


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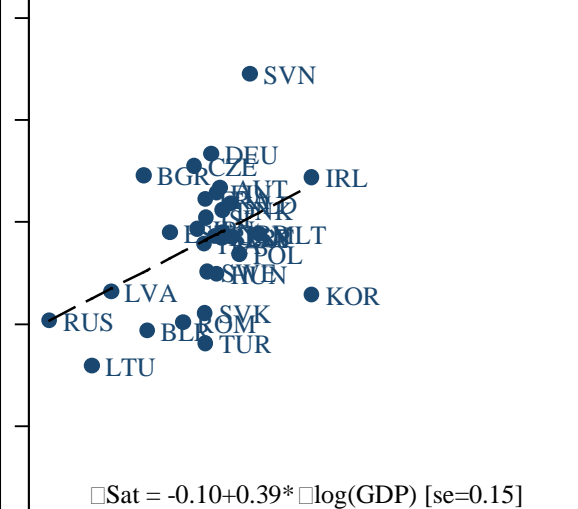
Real GDP per capita (thousands of dollars, log scale)

Cumulative change in life satisfaction (z-scale)

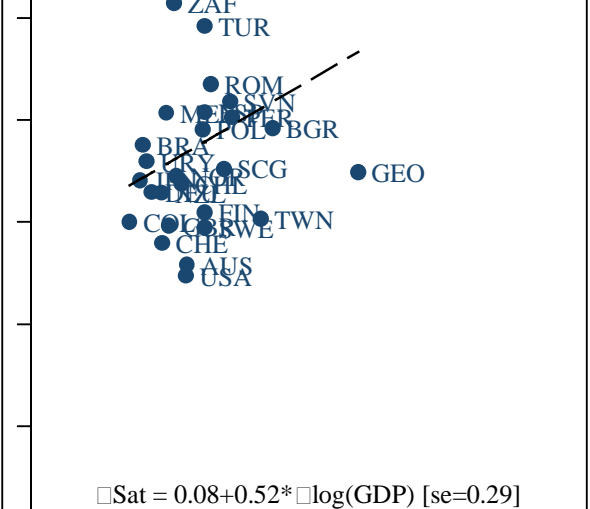
Changes from 1982 to 1996 wave



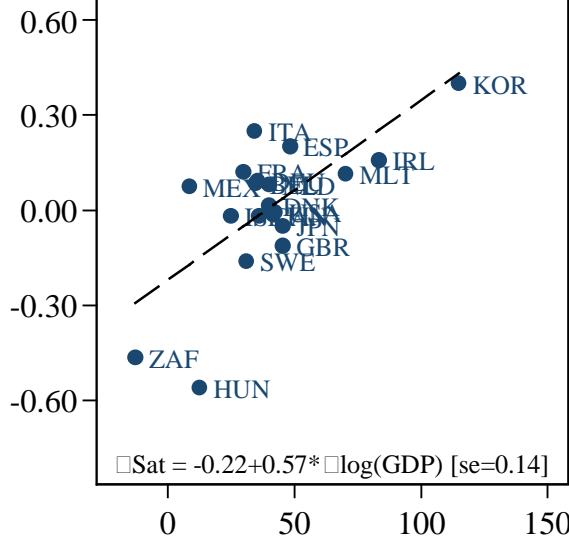
Changes from 1990 to 2000 wave



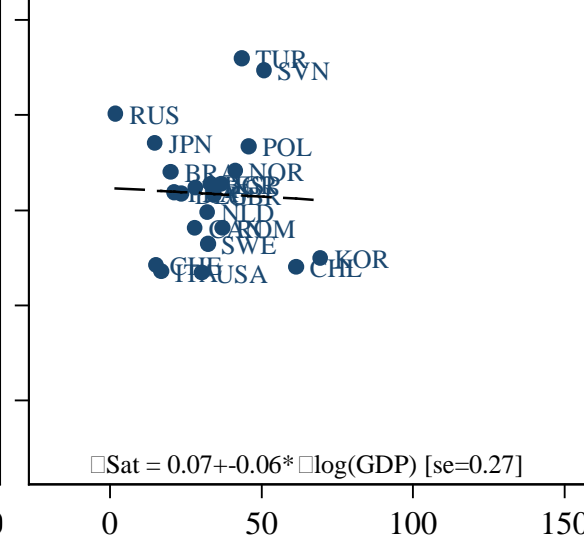
Changes from 1996 to 2005 wave



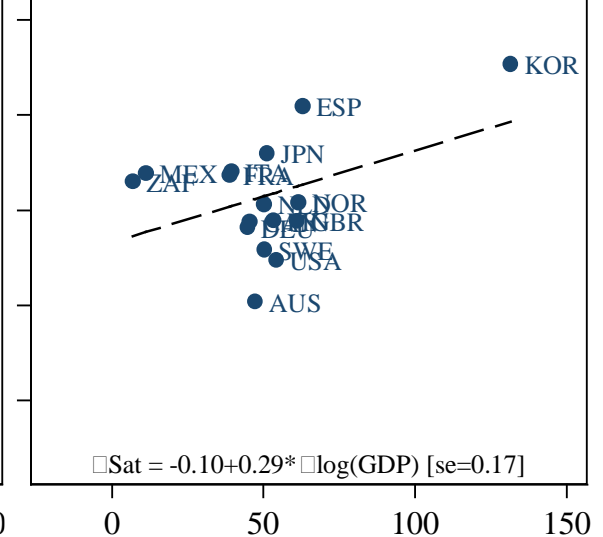
Changes from 1982 to 2000 wave



Changes from 1990 to 2005 wave



Changes from 1982 to 2005 wave



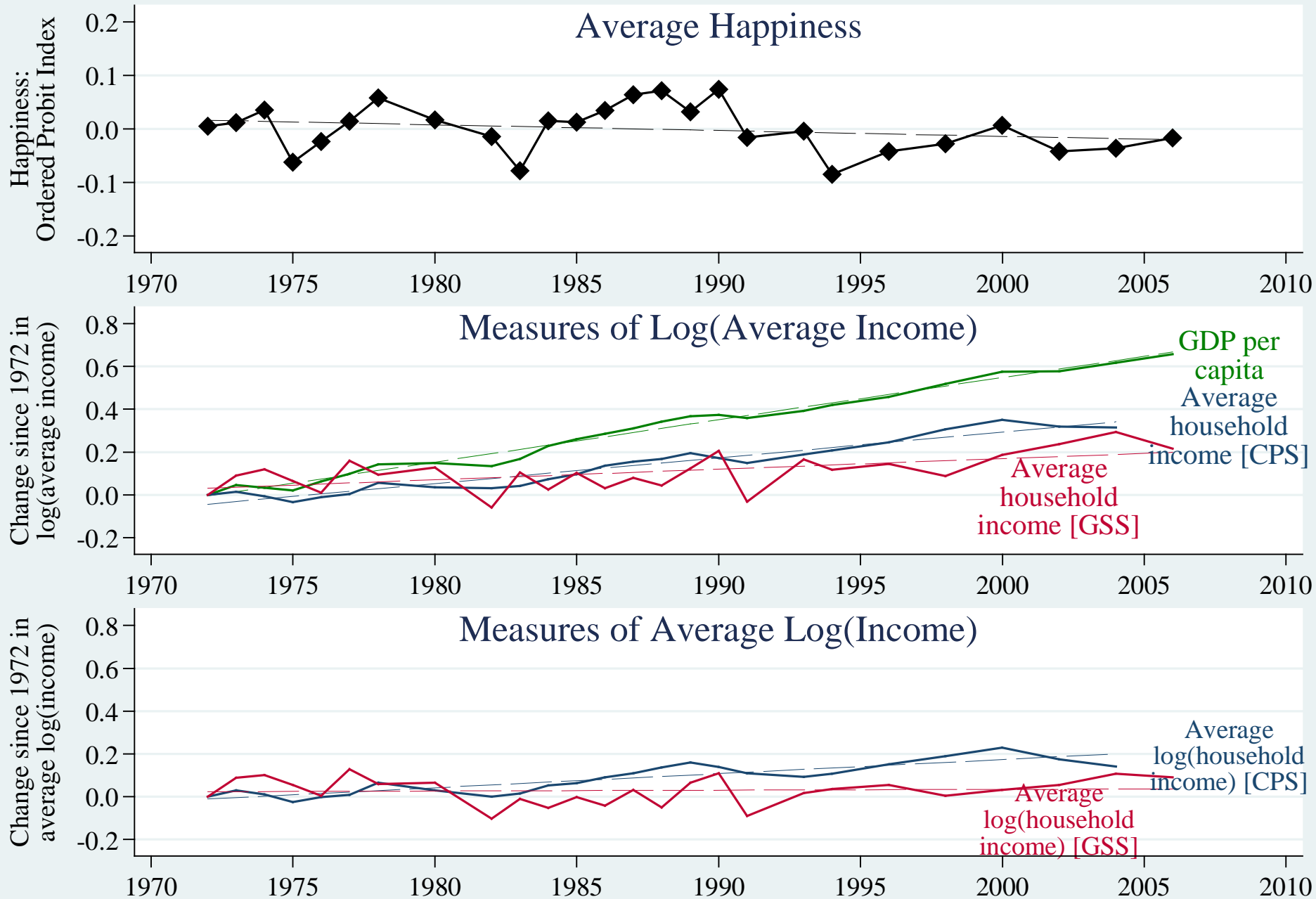
Cumulative change in real GDP per capita (log points)

$\beta_{\text{long diffs}} \approx 0.35$

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# Income and Happiness Trends in the U.S.

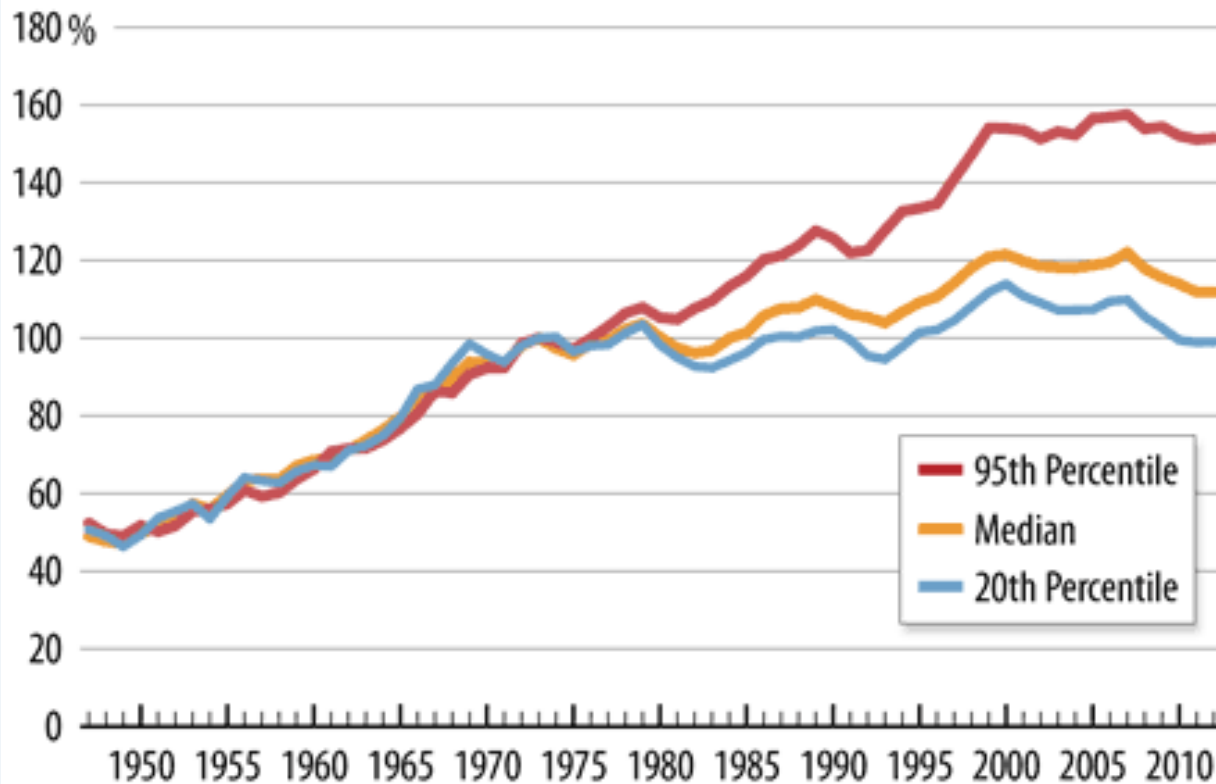


# Income gains since 1973

Figure 1

## Income Gains Widely Shared in Early Postwar Decades — But Not Since Then

Real family income between 1947 and 2012, as a percent of 1973 level

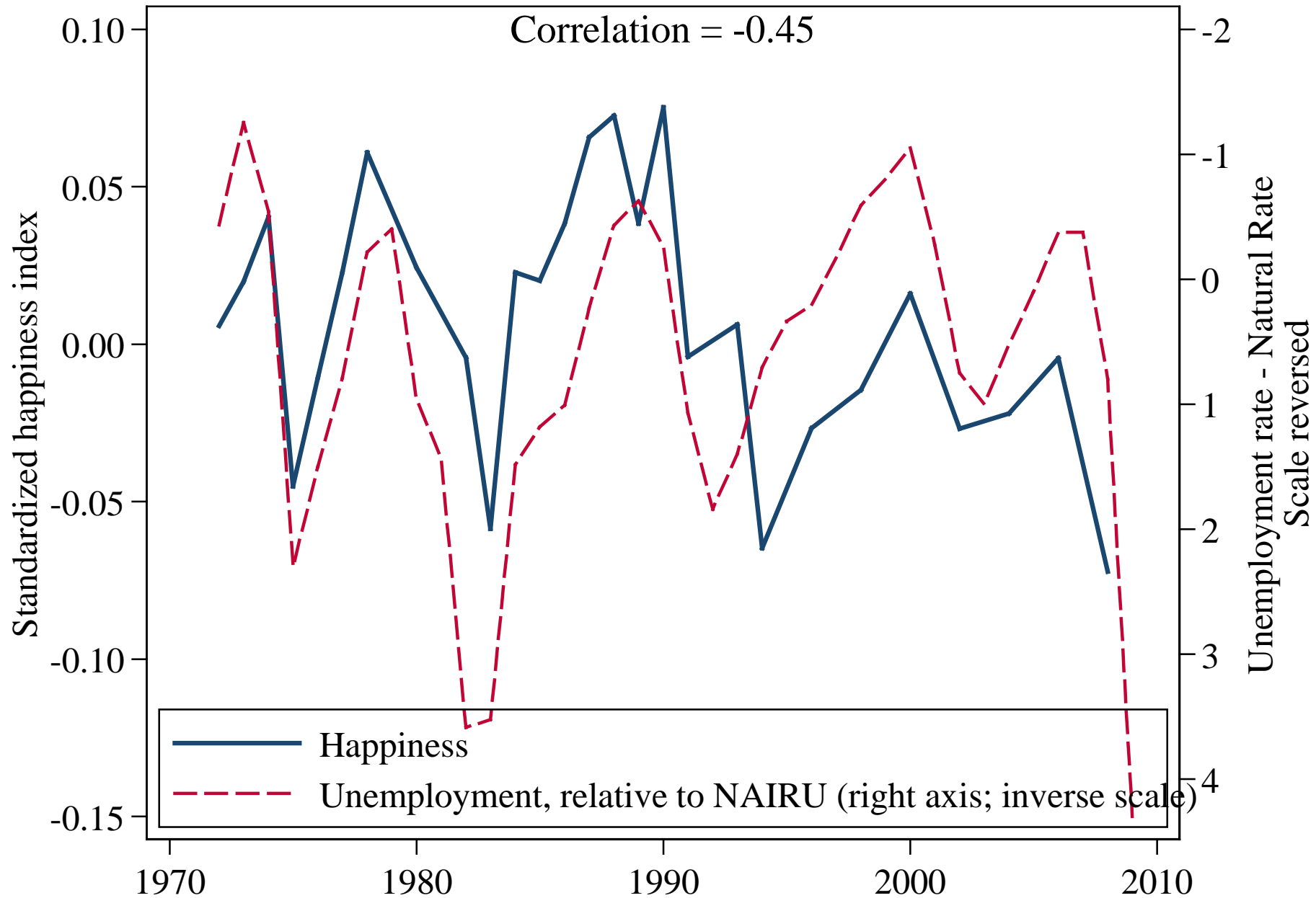


Source: CBPP calculations from U.S. Census Bureau data

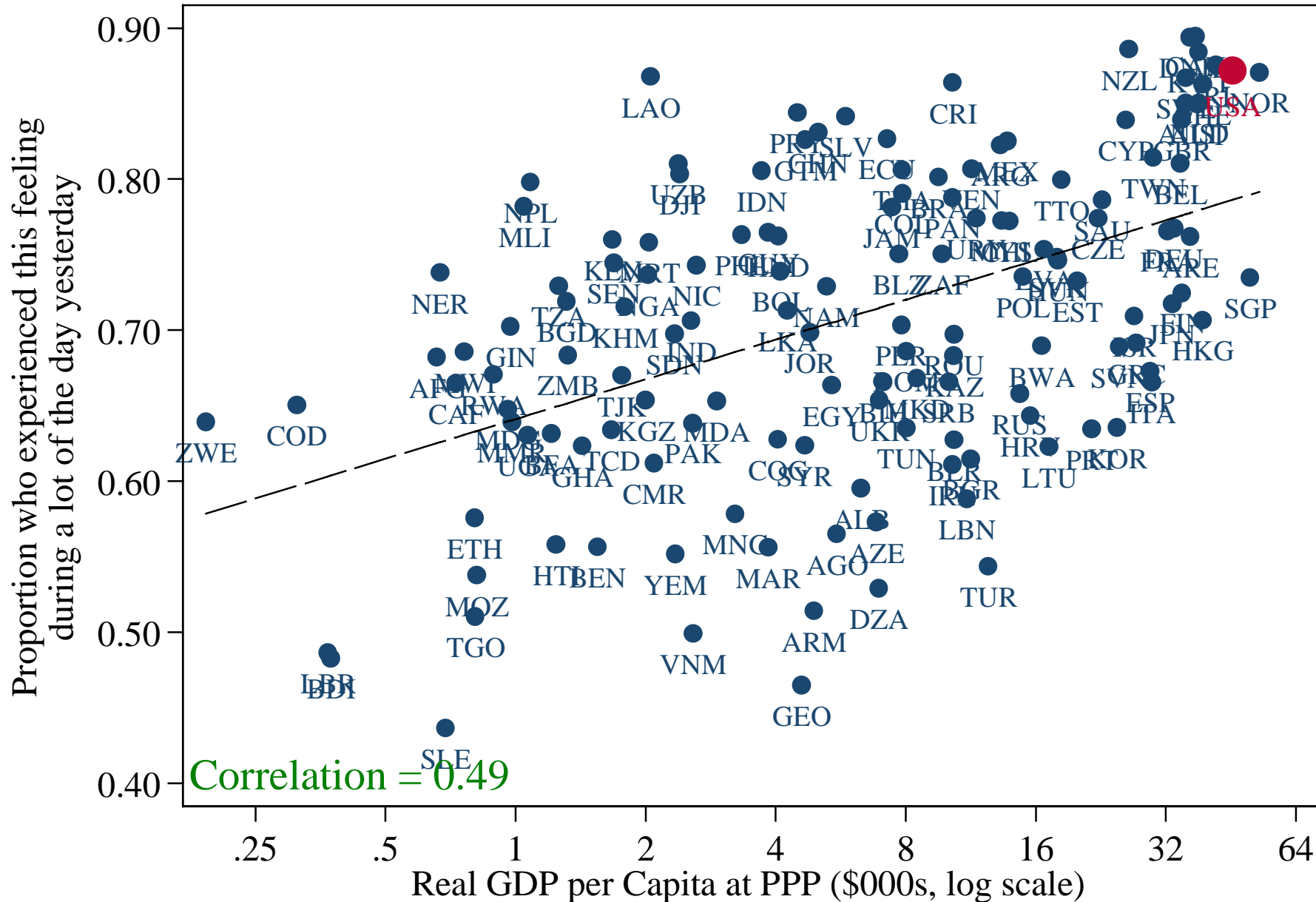
Center on Budget and Policy Priorities | [cbpp.org](http://cbpp.org)



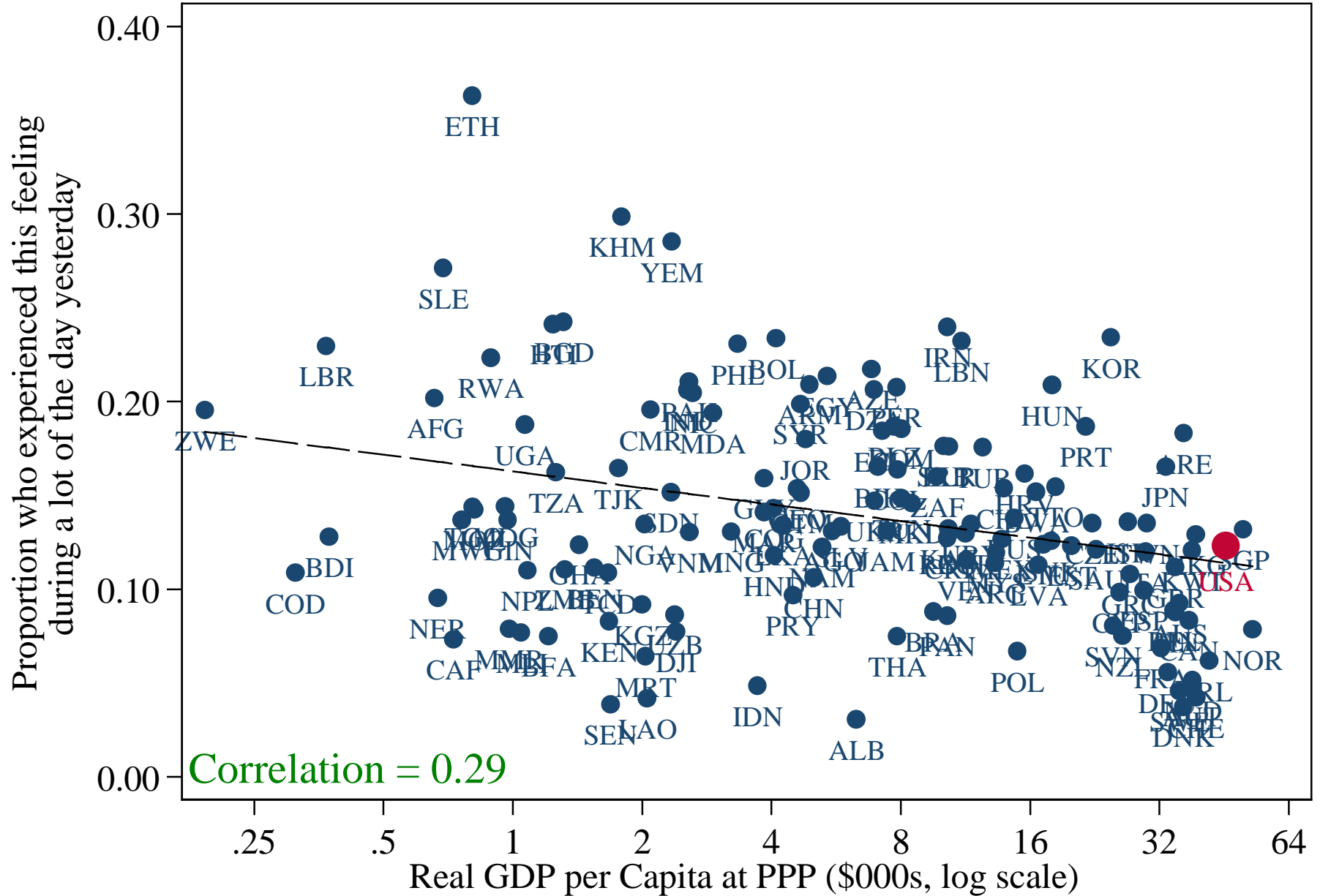
# Business Cycle and Happiness, U.S.



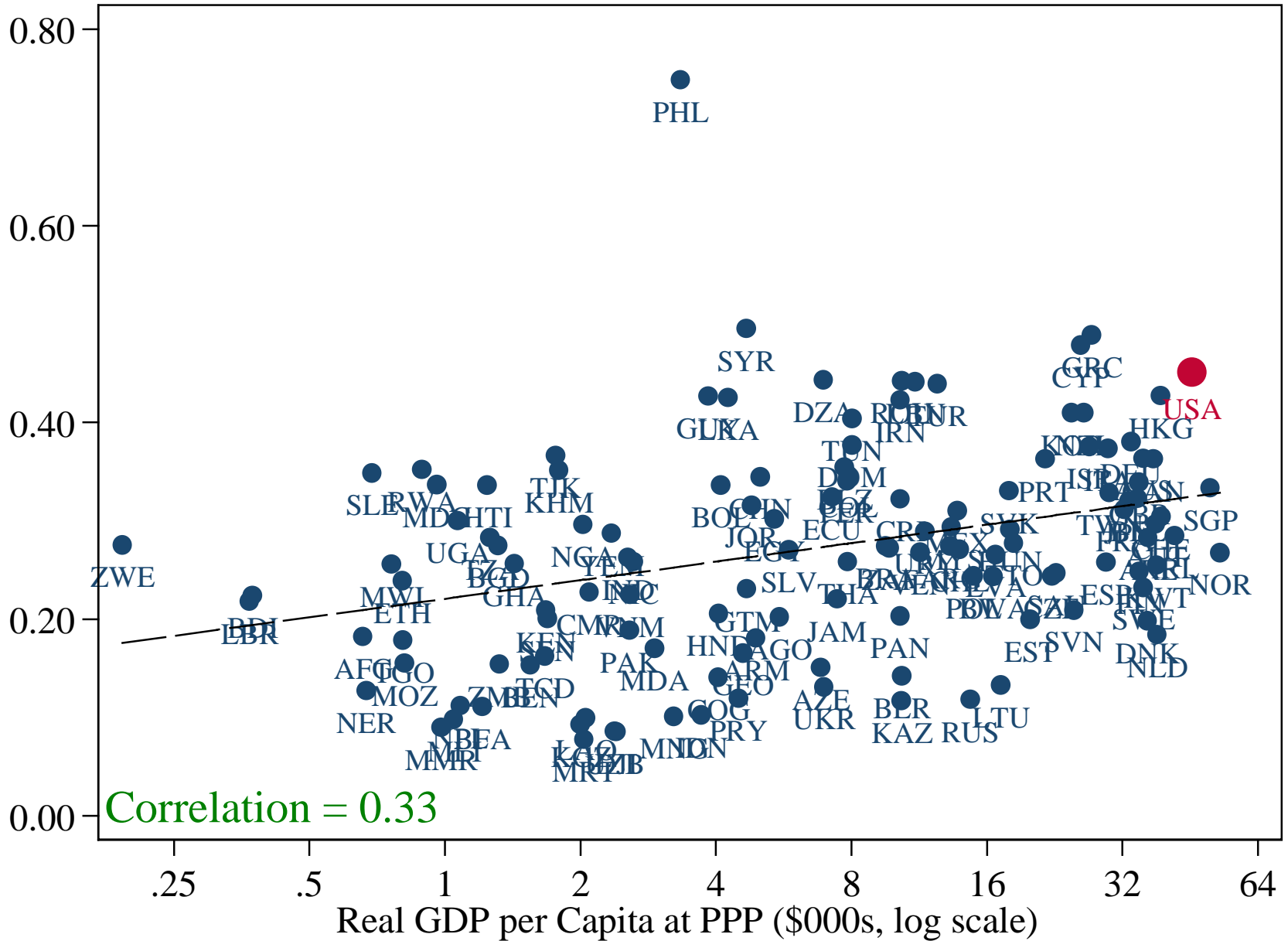
# Enjoyment



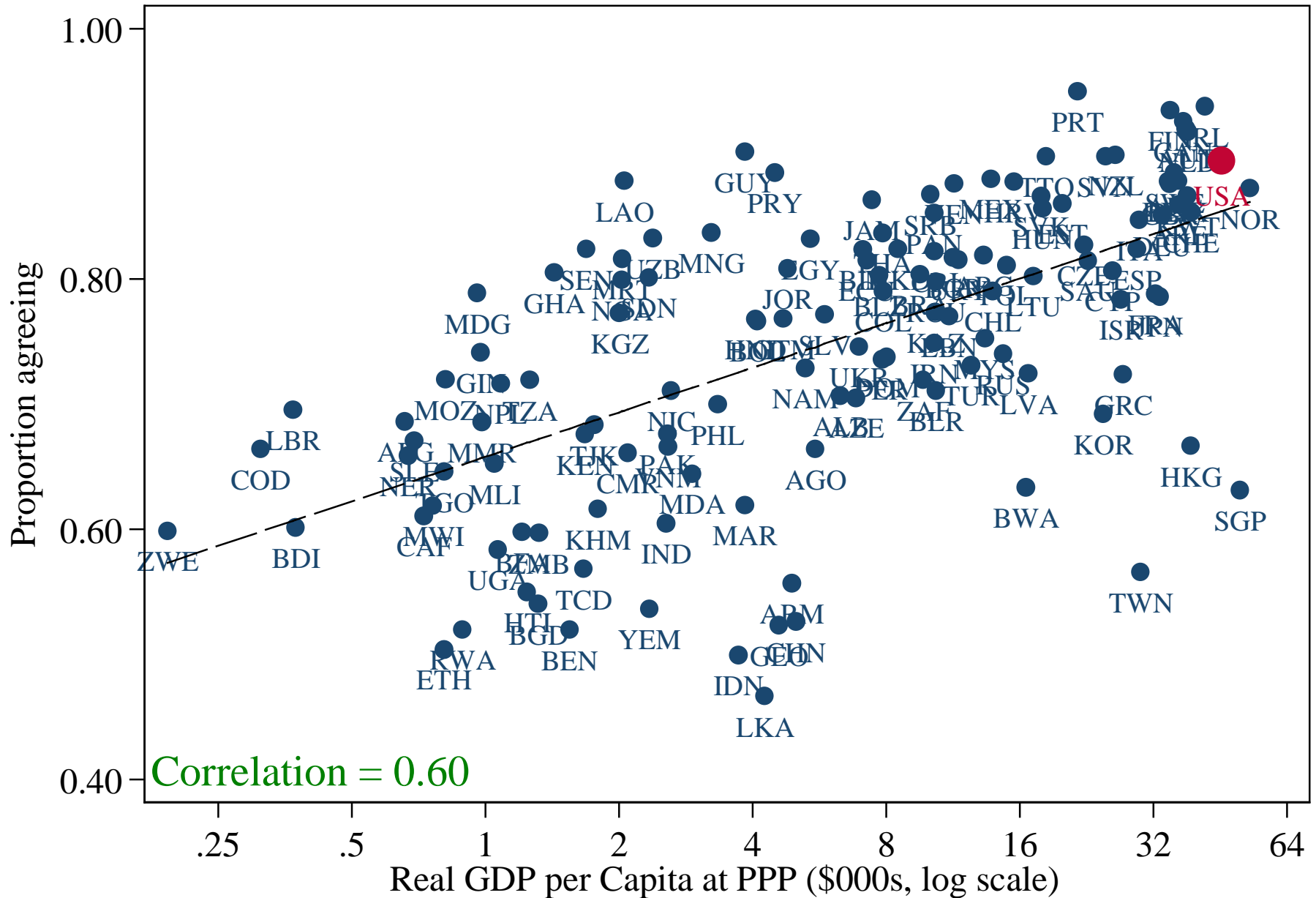
# Depression



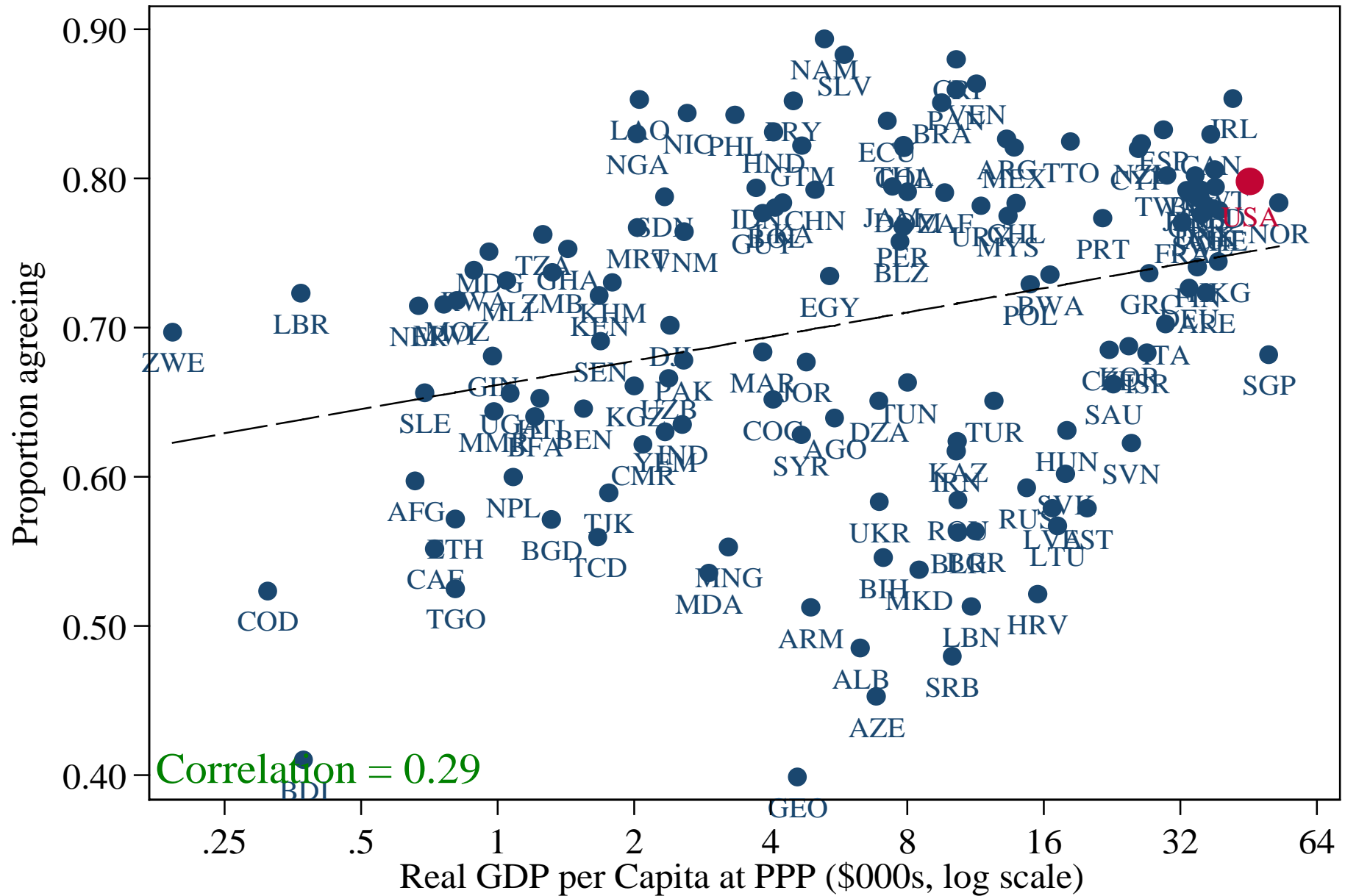
# Stress



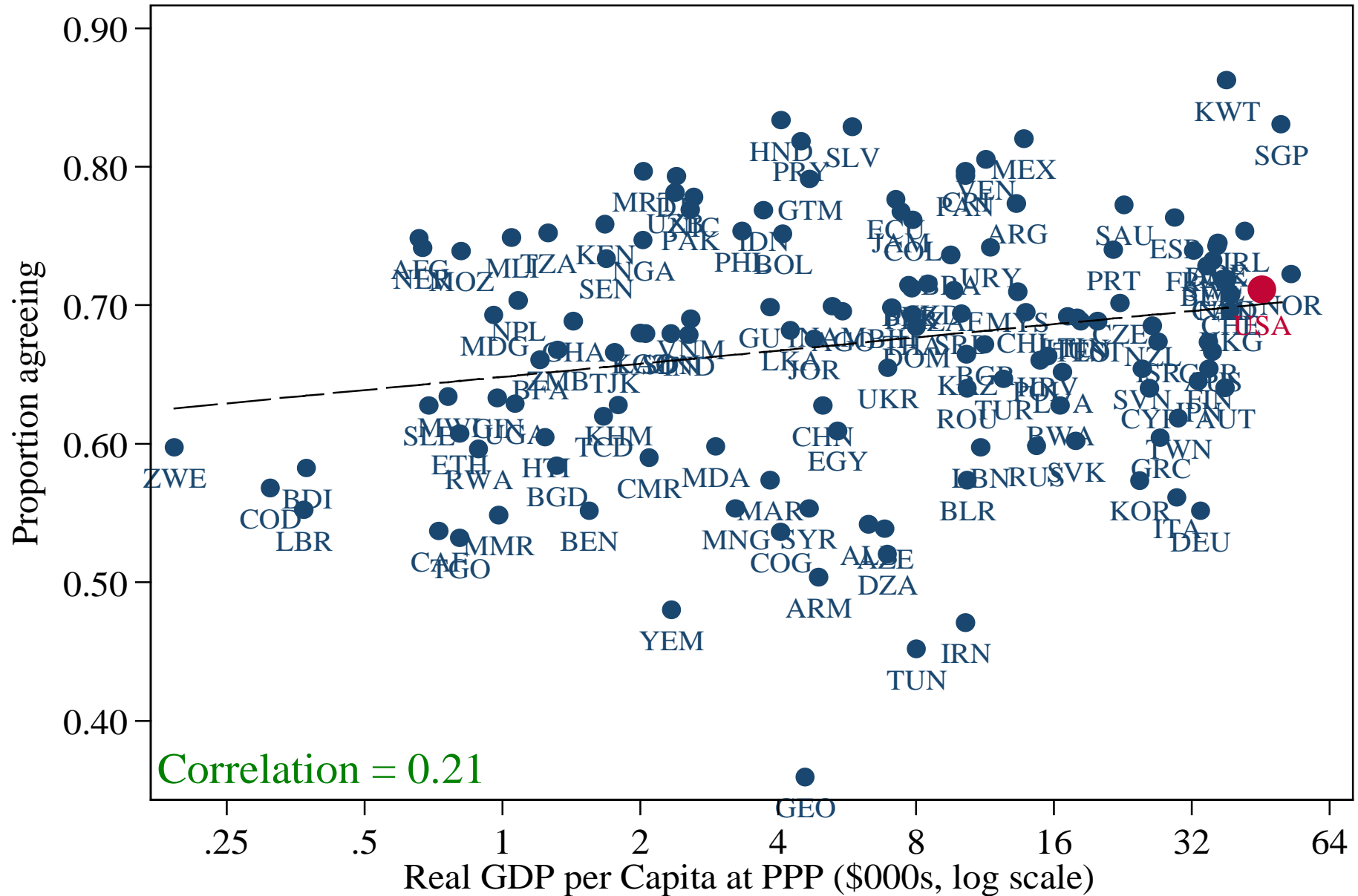
# Did you have good tasting food to eat yesterday?



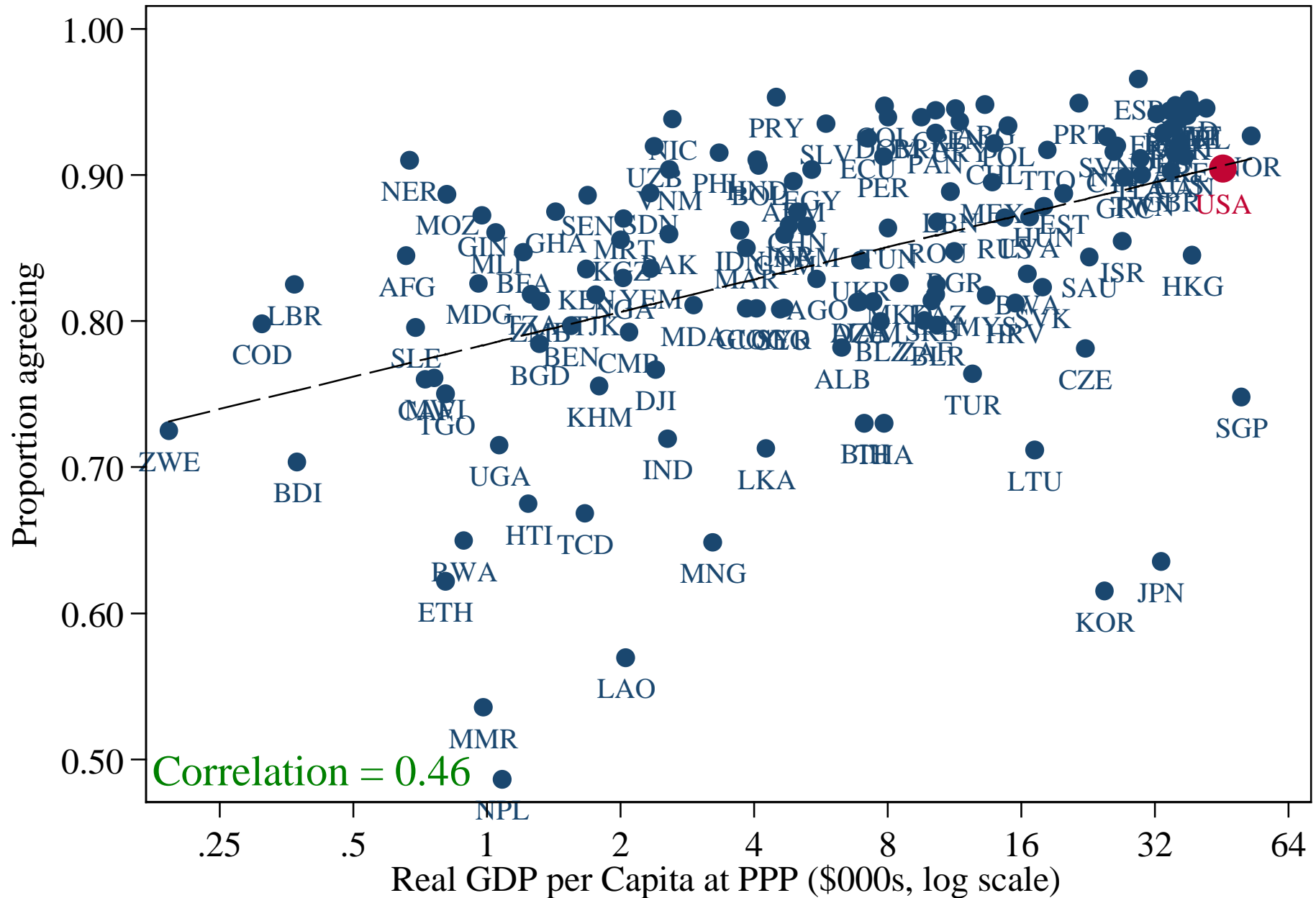
# Did you smile or laugh a lot yesterday?



# Would you like to have more days just like yesterday?

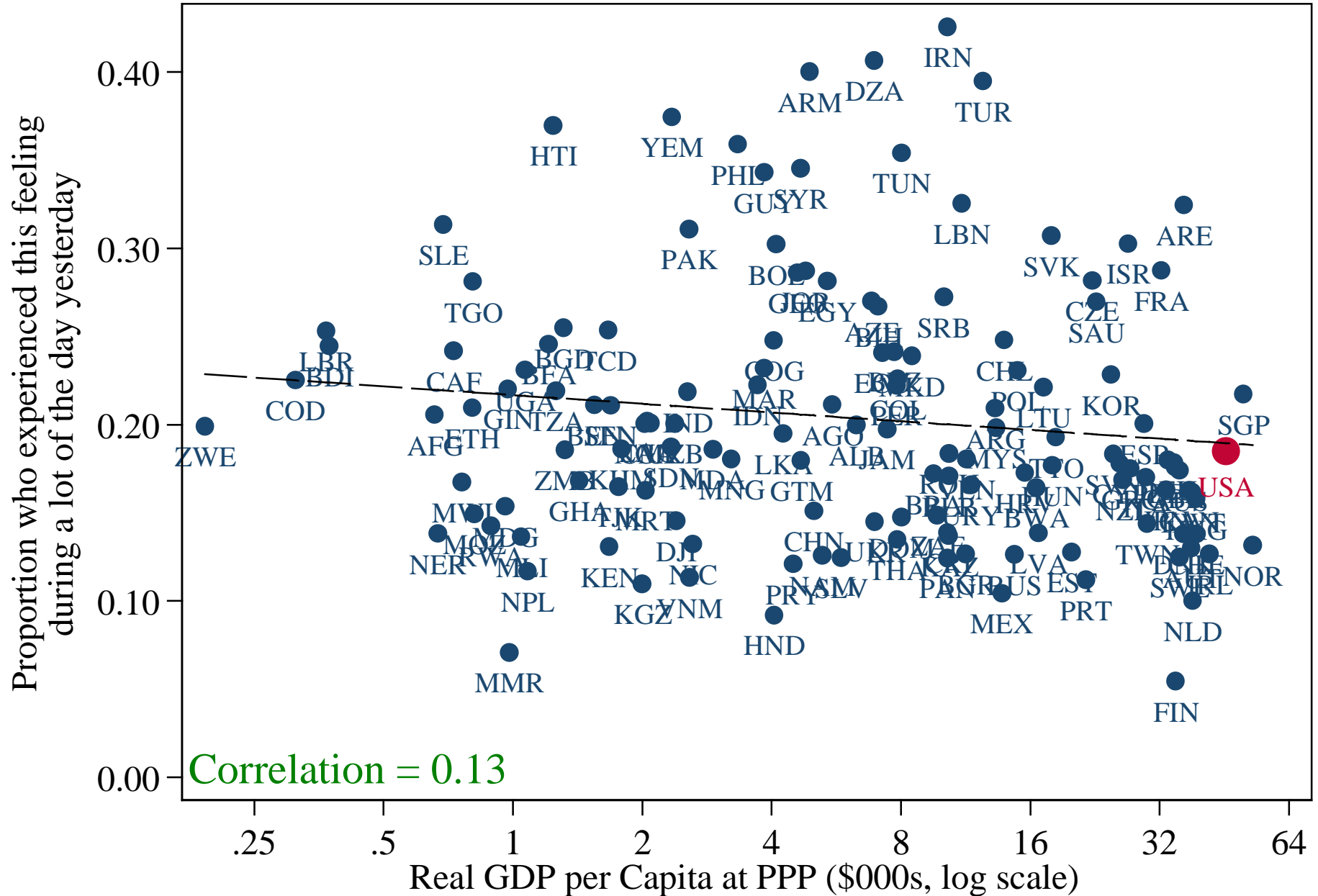


# Were you treated with respect all day yesterday?

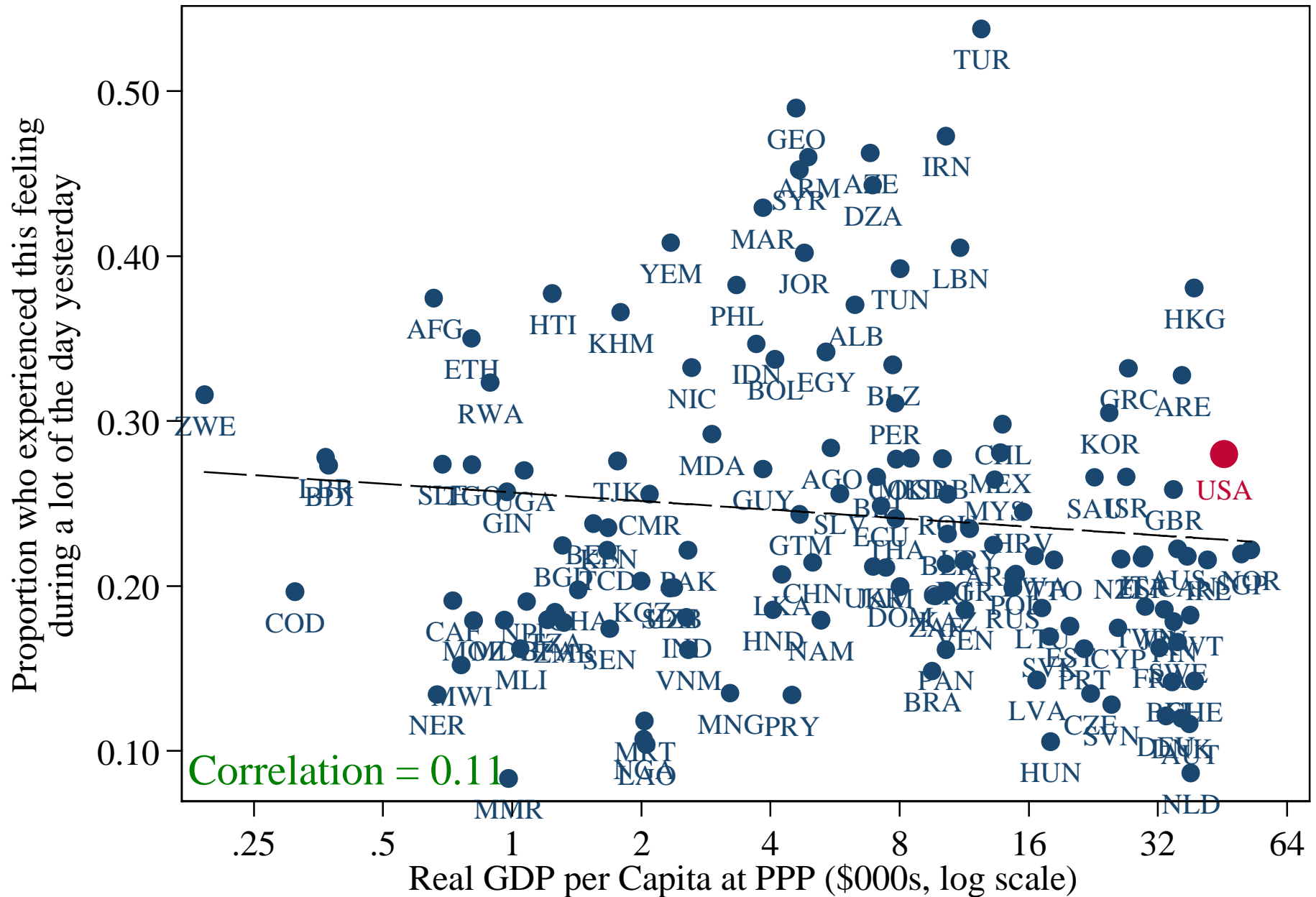




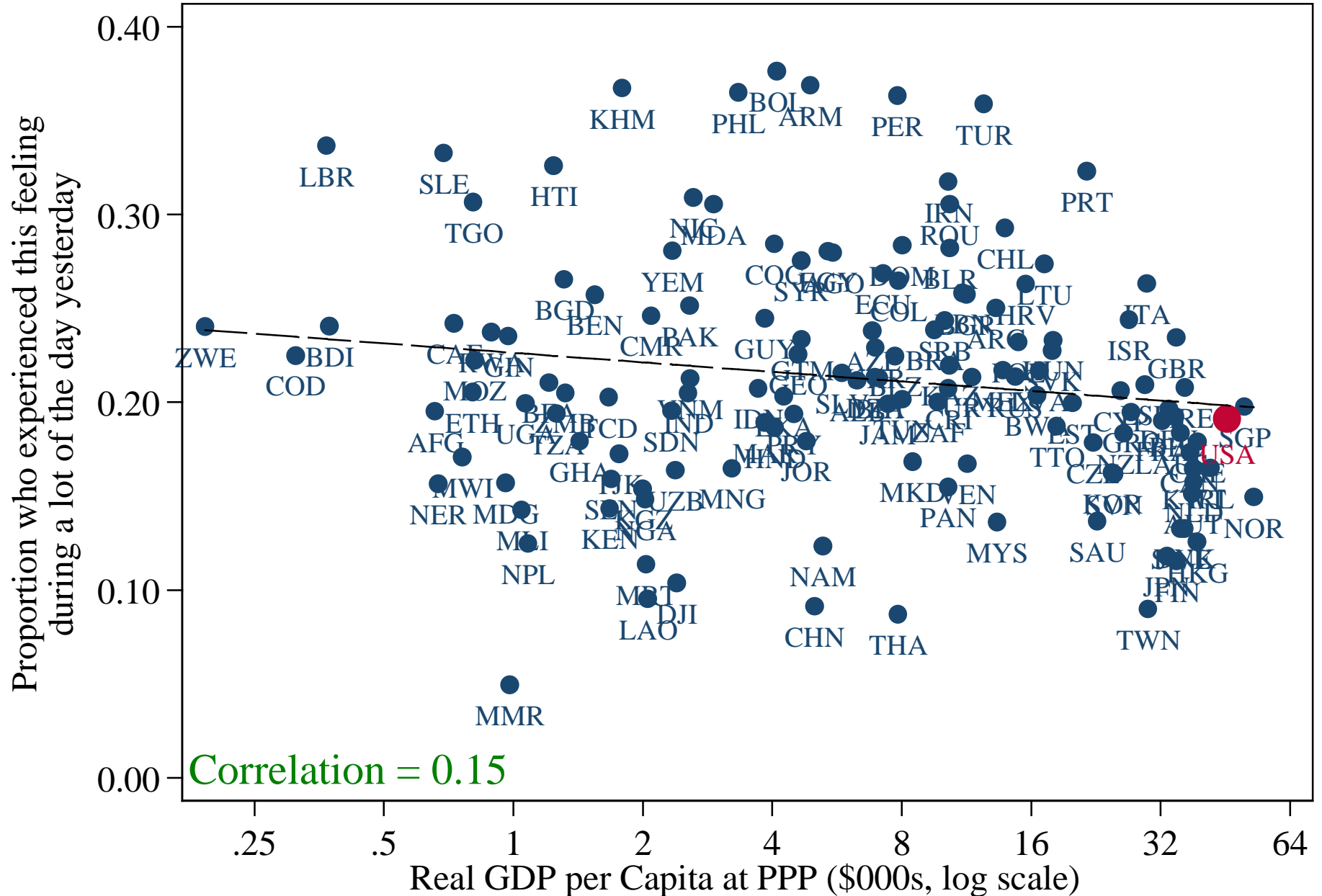
# Anger



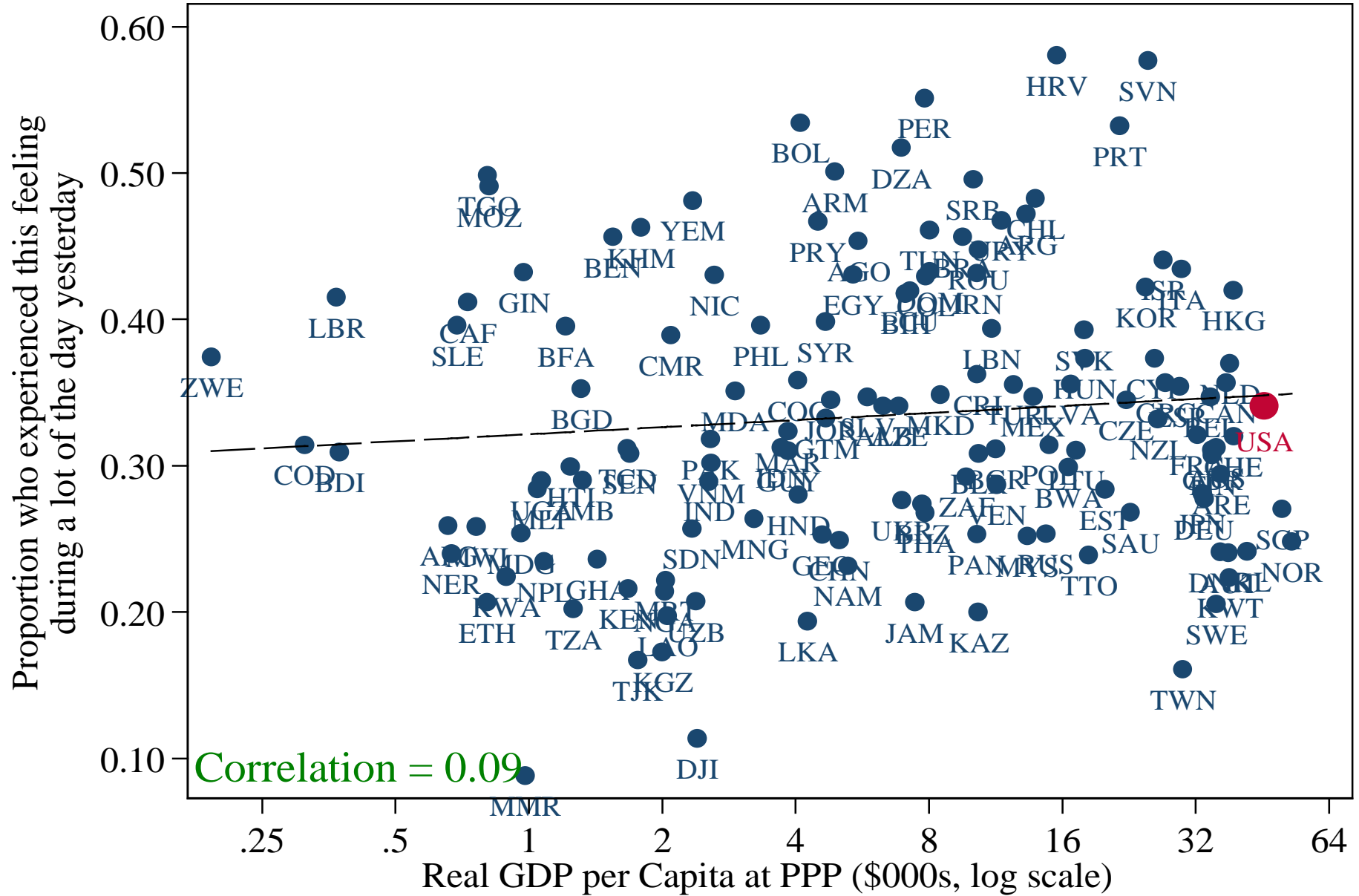
# Boredom



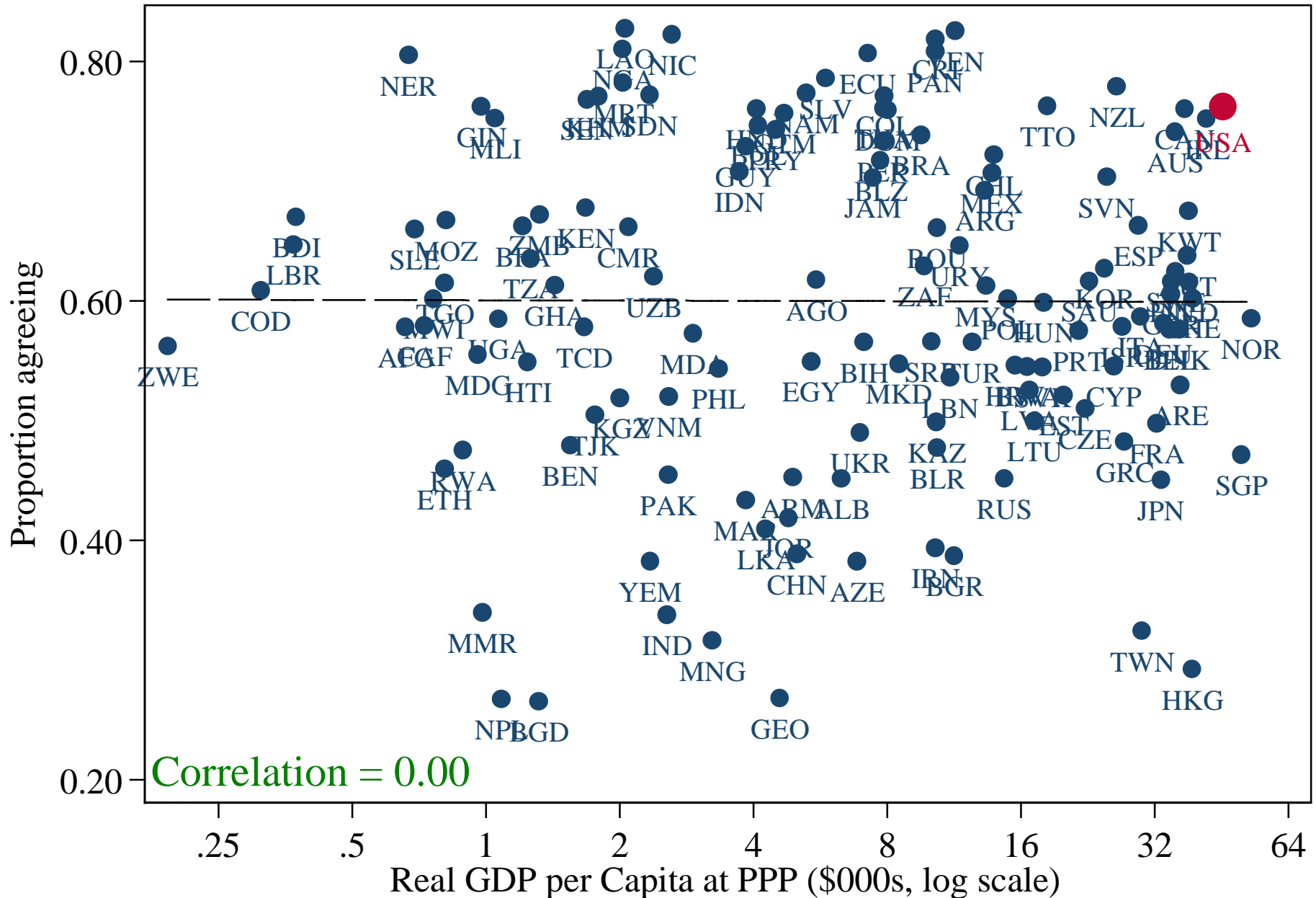
# Sadness



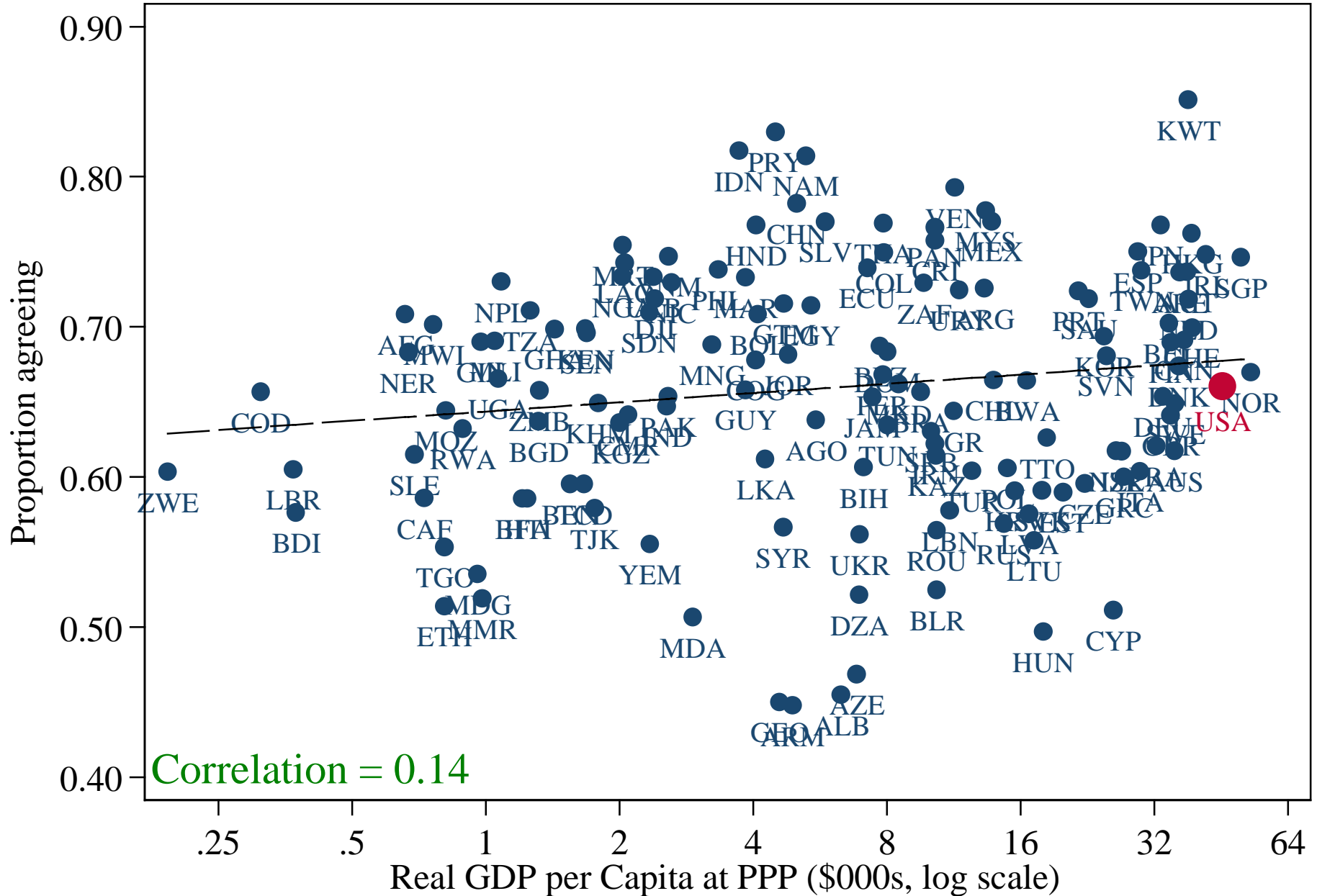
# Worry



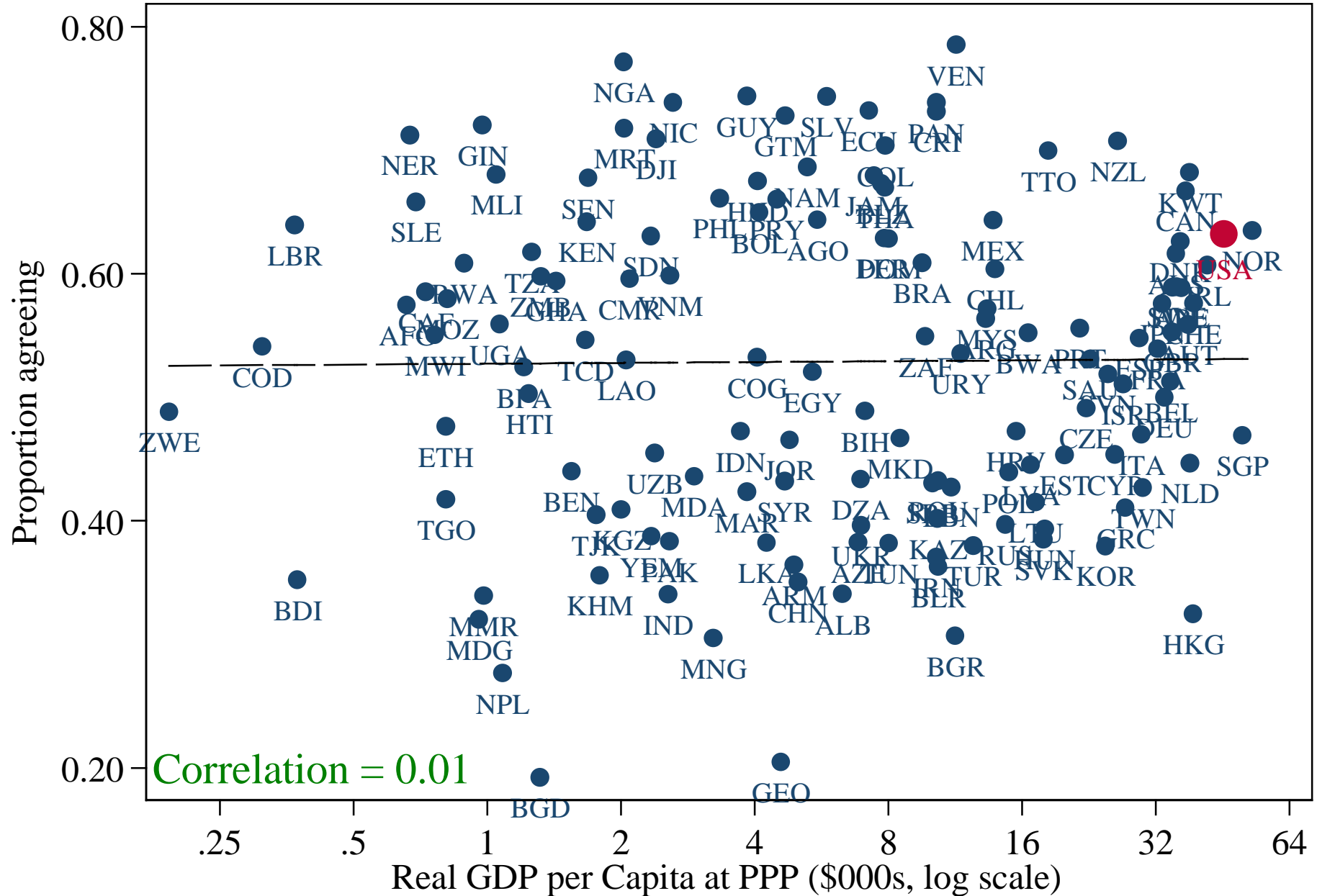
# Were you proud of something you did yesterday?



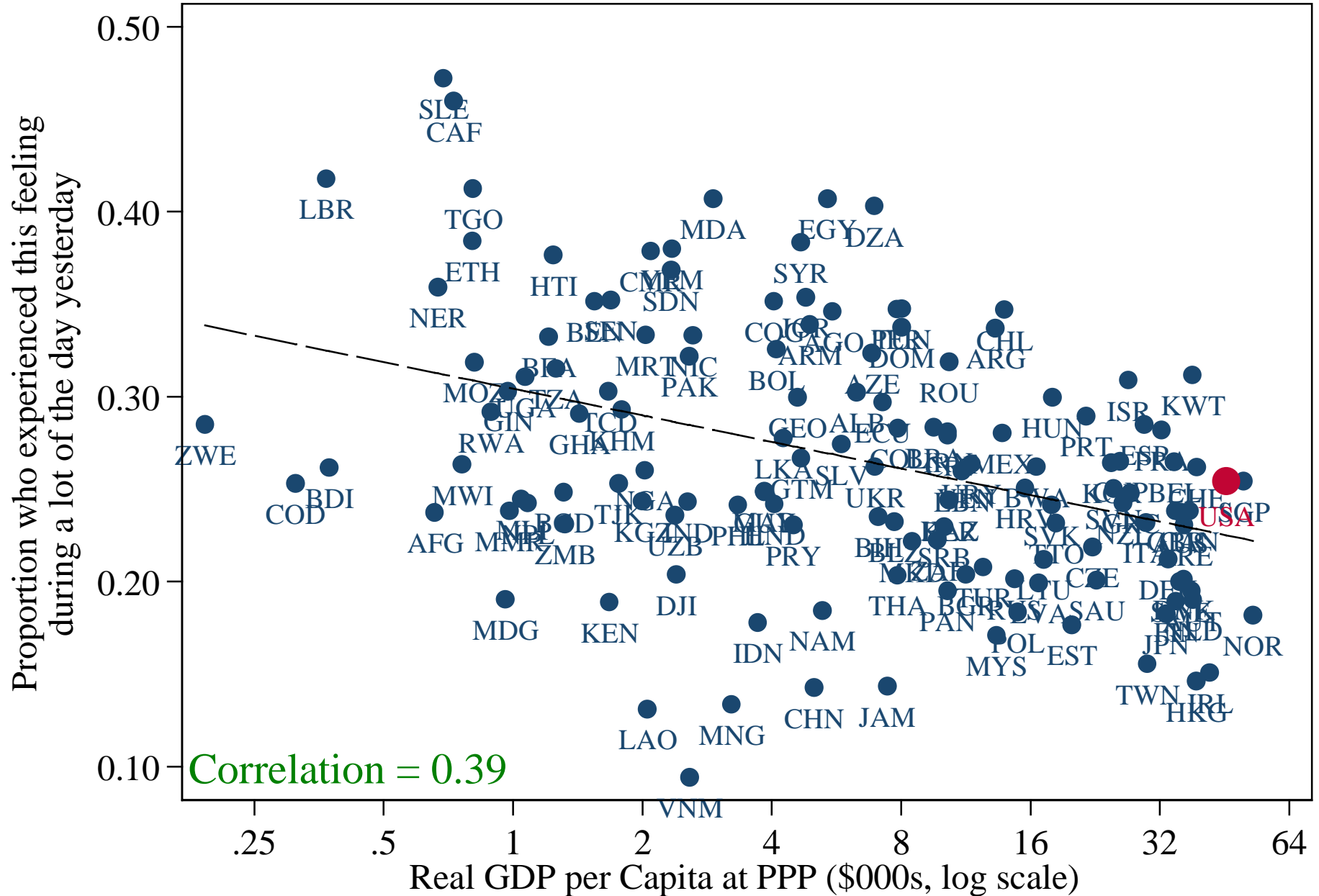
# Did you feel well rested yesterday?



# Did you learn or do something interesting yesterday?



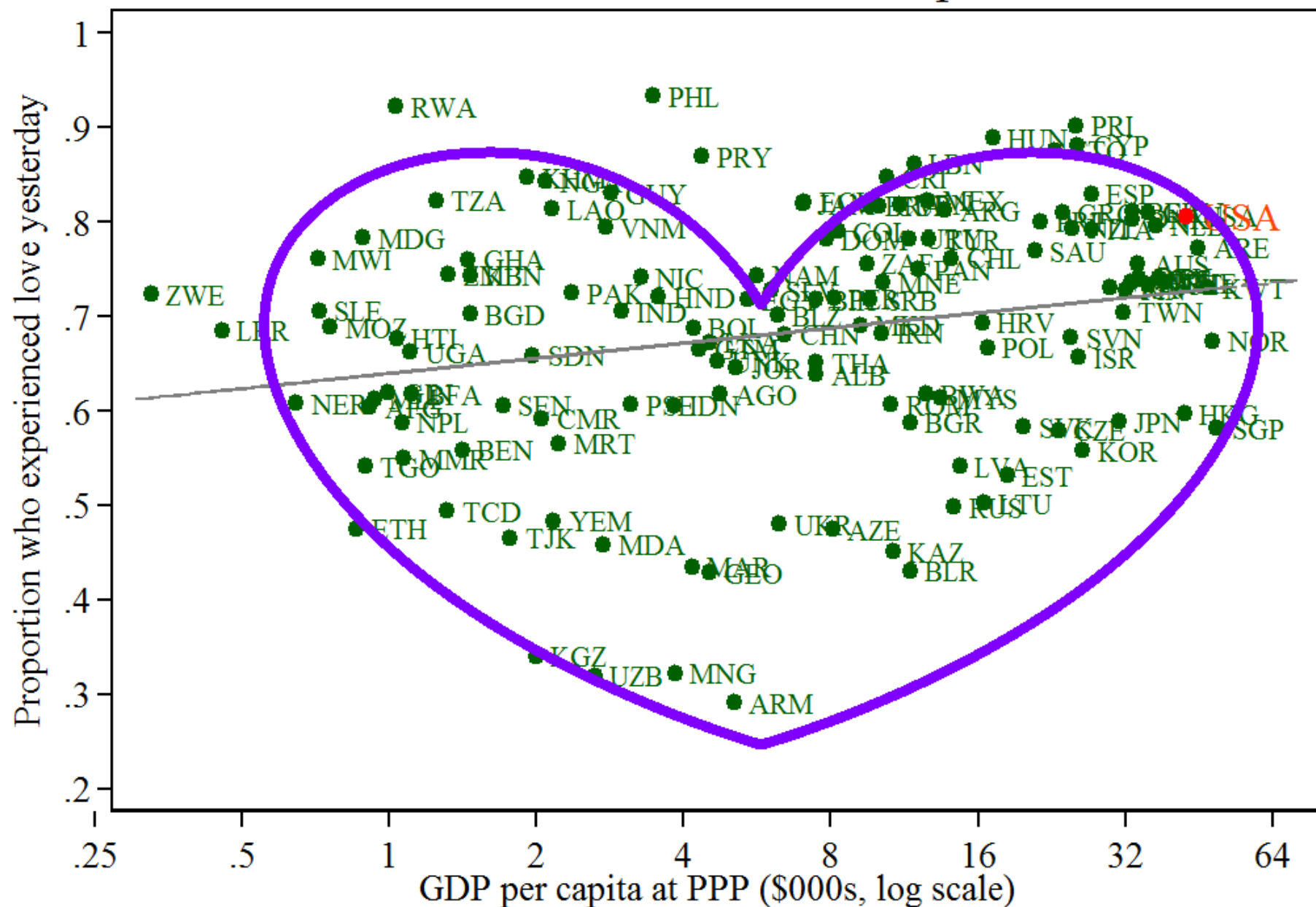
# Physical Pain







# Love and Economic Development





Victorian Public Sector Commission & the Australia and New Zealand School of Government present:

# Don't worry, be happy: what economics can (and cannot) tell us about well being'

## Moderator

**Professor Gary Banks, AO**  
Dean and CEO  
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## Speaker

**Professor Justin Wolfers**  
University of Michigan

Please switch off all devices for the duration of the seminar

## Upcoming Applied Learning Seminars

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Knowing what's valuable: managing service delivery in a  
turbulent and complex world

Speaker: Professor Mark Moore

Melbourne

3 March

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Applied Learning  
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[appliedlearning@anzsog.edu.au](mailto:appliedlearning@anzsog.edu.au)

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Leading Ethical Organisations Course leaders: Dr Michael Macaulay	Melbourne	23-24 May

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