

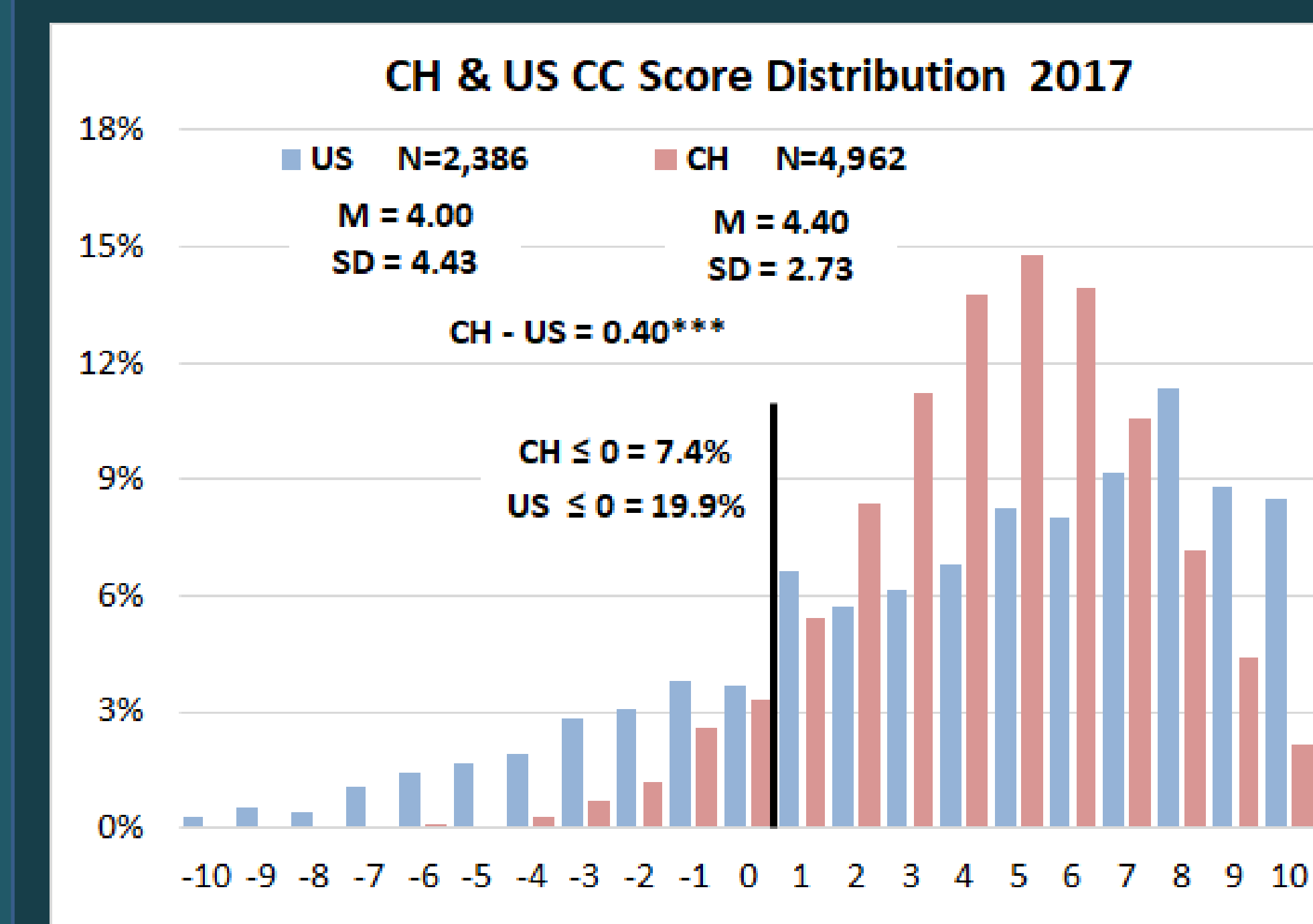
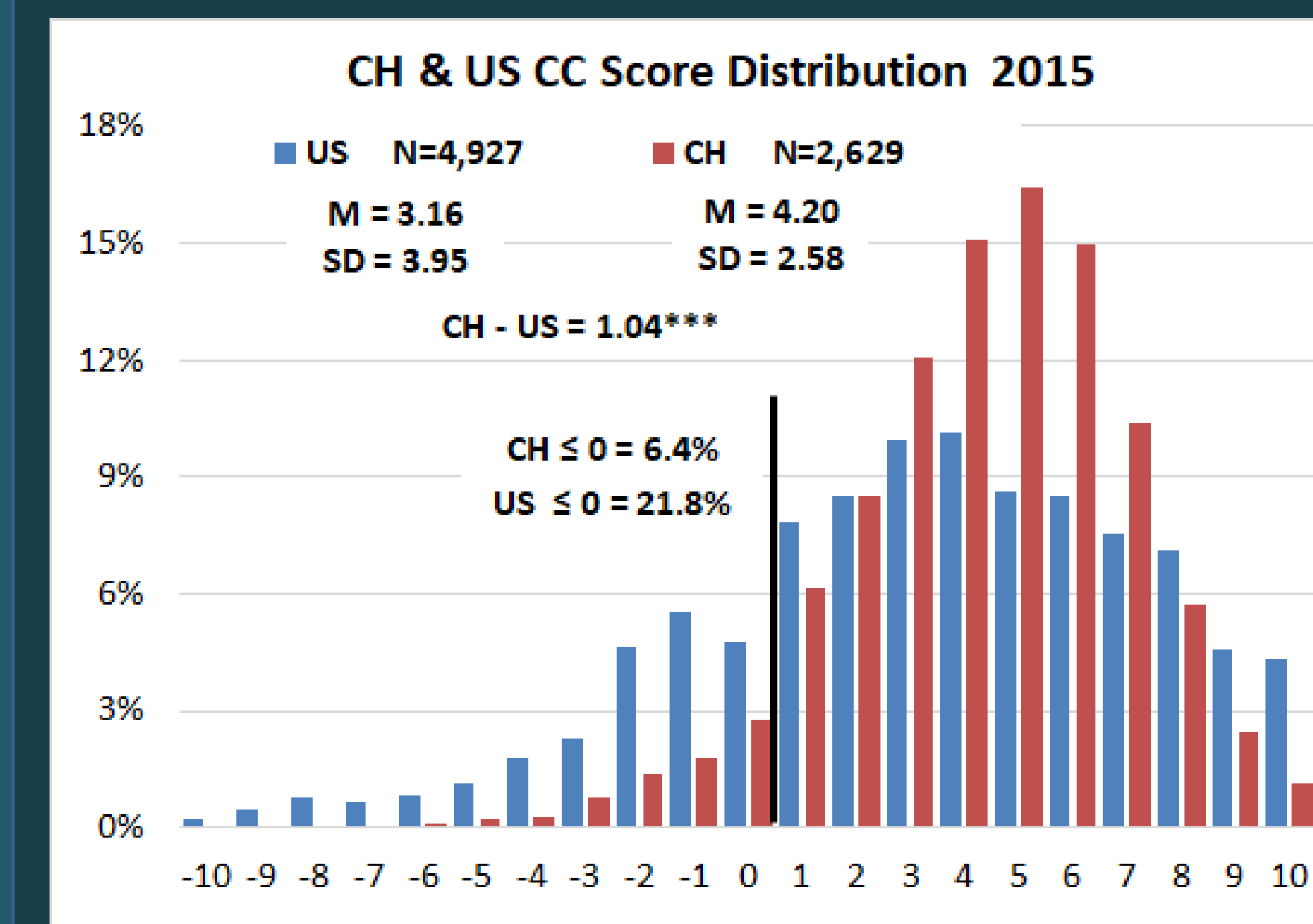
A Scoring System Comparison of Climate Change Acceptance/Knowledge/Concern for Citizens in the United States & China from 2015/2017

Introduction

With mounting scientific evidence regarding the realities of climate change including causes and consequences, the international/global importance of this issue cannot be overstated. Significant research has assessed public climate change views in developed countries including the United States and the European Union. However, much less is known about public climate change views in developing countries.

Specifically, China and the U.S. share a significant importance regarding potential international climate change mitigation strategies/policies. Thus, a better understanding of Chinese and American views on climate change is of great interest. Surveys were conducted in China and the U.S. in 2015 (N=7,556) and 2017 (N=7,415) to investigate a variety of issues regarding public views on climate change in these two important countries.

We construct a scoring system based on responses to eight survey questions. This process yields an easily understandable metric for comparing acceptance, knowledge, concern and obligation to act regarding basic climate change realities across citizens in China and the U.S. In this poster comparisons are presented across these two countries in 2015 and 2017 as well as within each country across these two years.



Method & Scoring Calculations

- Eight survey questions
 - Score assigned based on response to each question
- Cumulative summation across eight questions (five parts)
 - Possible range from a low of -10 to a high of 10

$$Q2 \times Q3 + Q4 \times Q5 + Q6 + Q7 + Q8 \times Q9 = \text{CC SCORE}$$

$$(2 \times 1) + (2 \times 1) + 2 + 2 + (2 \times 1) = 10$$

$$(-2 \times 1) + (-2 \times 1) + -2 + -2 + (-2 \times 1) = -10$$

2. Do you think climate change is happening?

- No = -2
- Yes = +2
- I am not sure = 0

3. How confident or certain are you of your answer to the previous question?

- Not very confident = 0.25
- Somewhat confident = 0.5
- Confident = 0.75
- Very confident = 1

4. Do you think climate change is PRIMARILY caused by human actions or natural environmental changes?

- Neither, because climate change is not happening = -2
- Primarily natural environmental changes = -1
- Primarily human actions = +2
- I am not sure = 0

5. How confident or certain are you of your answer to the previous question?

- Not very confident = 0.25
- Somewhat confident = 0.5
- Confident = 0.75
- Very confident = 1

6. How concerned are you about climate change?

- Not at all concerned = -2
- Not very concerned = -1
- Somewhat concerned = 0
- Concerned = +1
- Very concerned = +2

7. How much do you agree/disagree with the following statement? Every person has an obligation to contribute to preventing climate change?

- Strongly disagree = -2
- Somewhat disagree = -1
- Neither agree nor disagree = 0
- Somewhat agree = +1
- Strongly Agree = +2

8. To the best of your knowledge, what percentage of climate scientists have concluded that human-caused climate change is happening?

- Less than 10% = -2
- Between 10% and 30% = -1
- Between 30% and 50% = -1
- Between 50% and 70% = 0
- Between 70% and 90% = +1
- More than 90% = +2

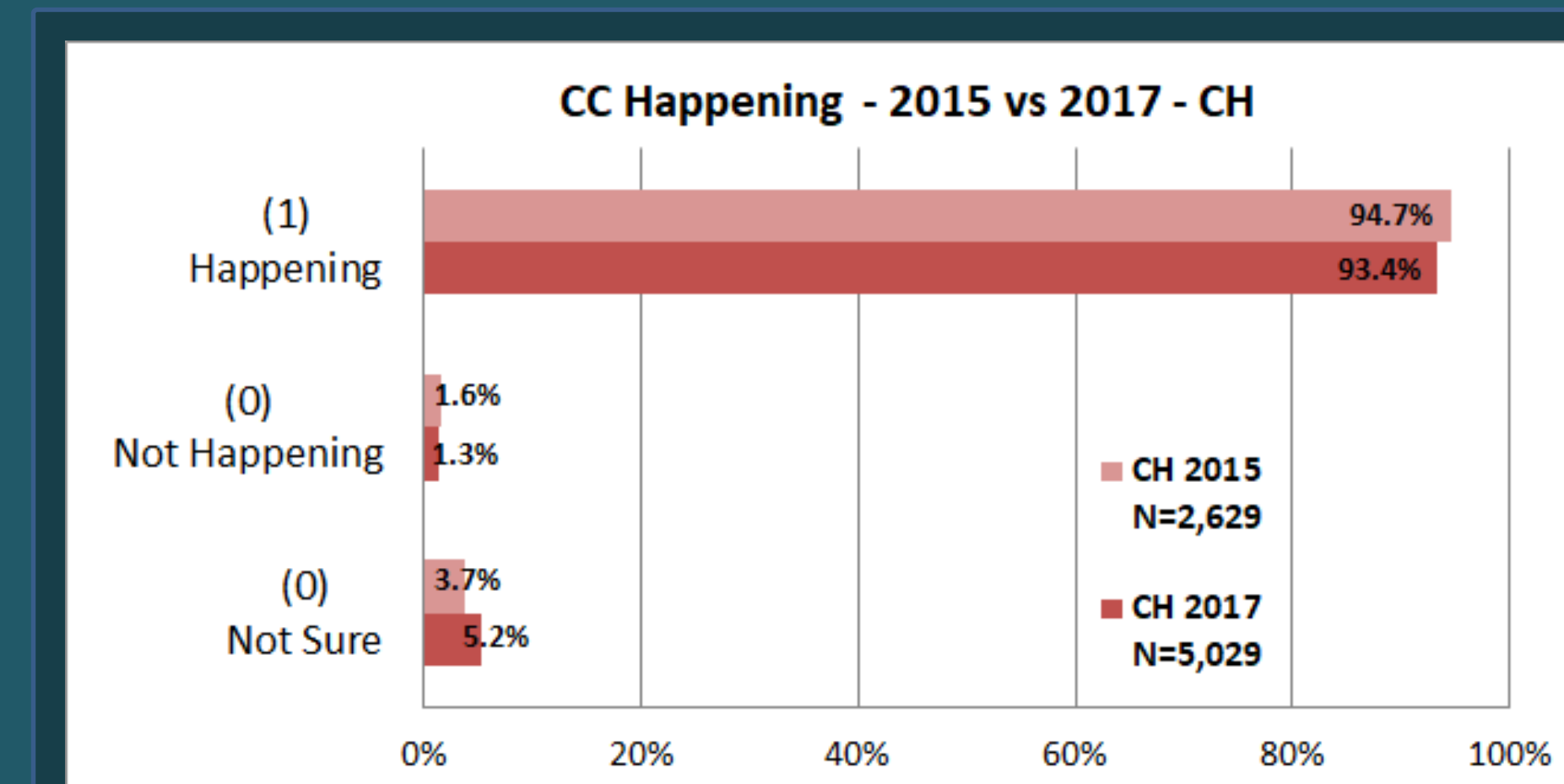
9. How confident or certain are you of your answer to the previous question?

- Not very confident = 0.25
- Somewhat confident = 0.5
- Confident = 0.75
- Very confident = 1

Conclusion & Discussion

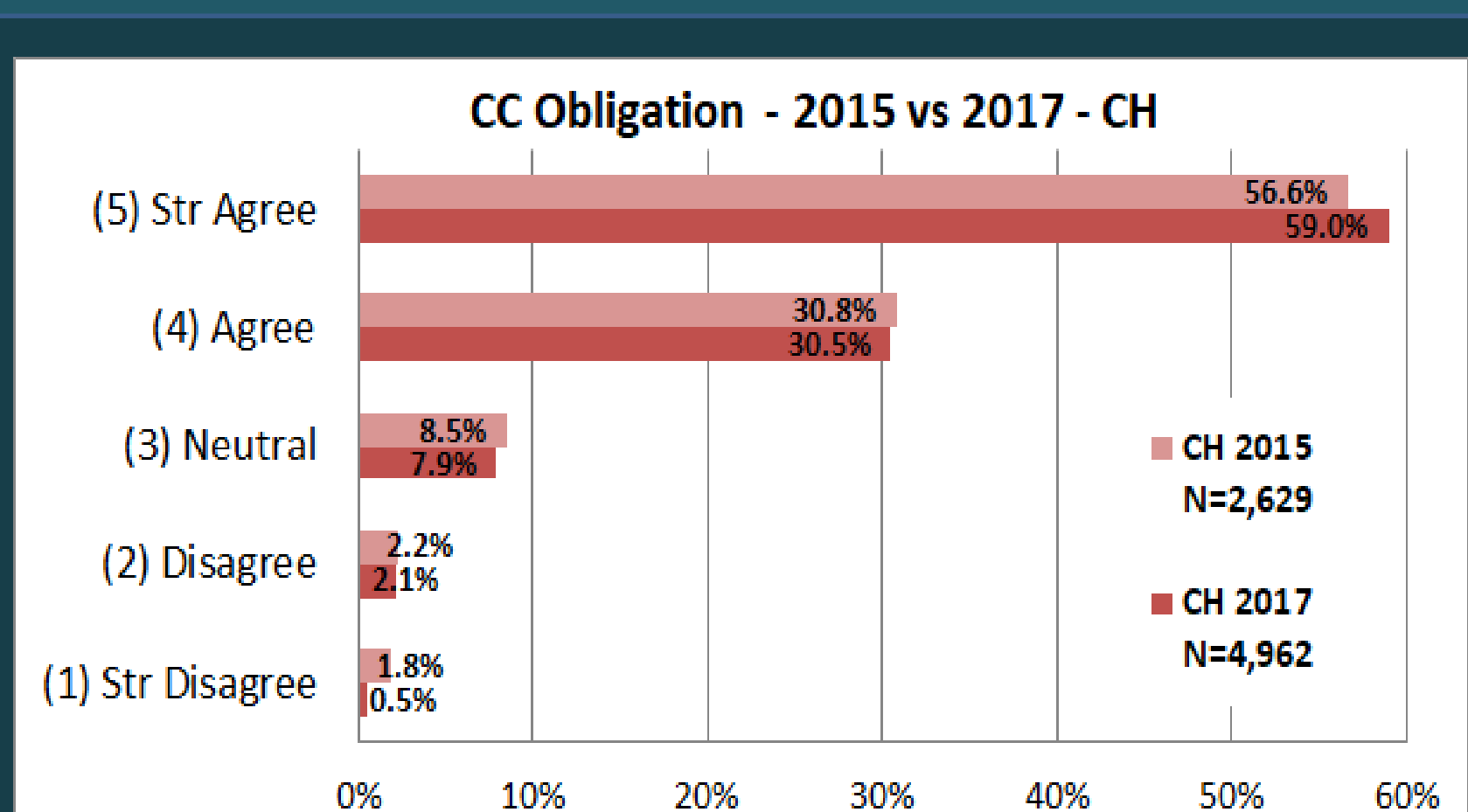
- Chinese are significantly more accepting, knowledgeable, concerned and obliged to act regarding CC compared to Americans.
- There was a narrowing of difference in CC Score between China and the U.S. driven mainly by increased concern and obligation in the U.S.
- Respondents in both countries trust science more than the media as a source of information on climate change. Chinese trust both science and media more than Americans, while overall there is very little trust of media in the U.S.

Please see our next poster titled, *Assessing Public Support for an International Climate Treaty Including Willingness-to-Pay in the United States and China 2015/2017* for results from an extended/continued analysis using the same survey data.



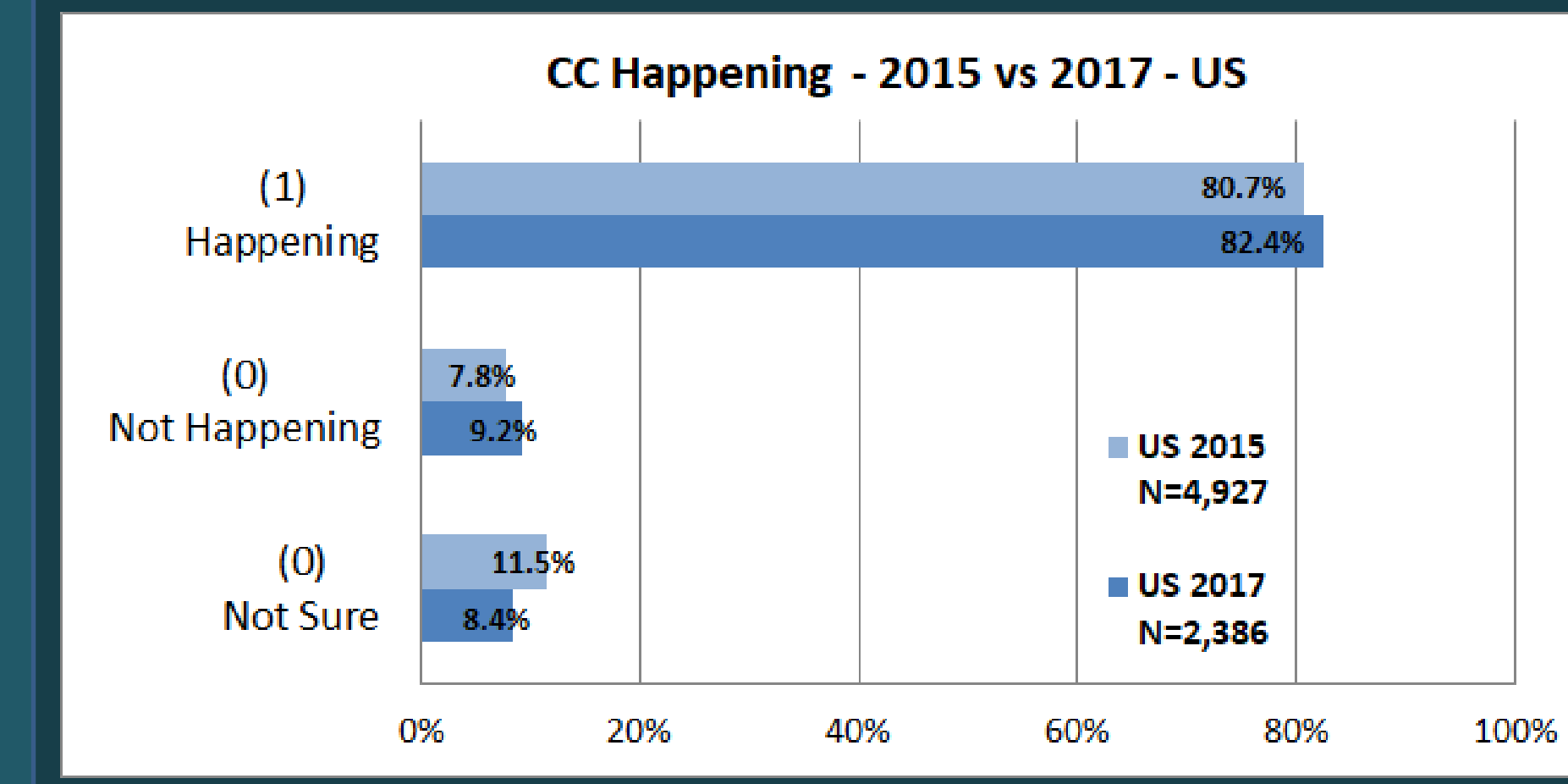
China
 '15 M = 0.947 (0.225)
 '17 M = 0.934 (0.248)
 '17 - '15 = -0.013**

2015
 CH M = 0.947 (0.225)
 US M = 0.807 (0.395)
 CH - US = 0.140***



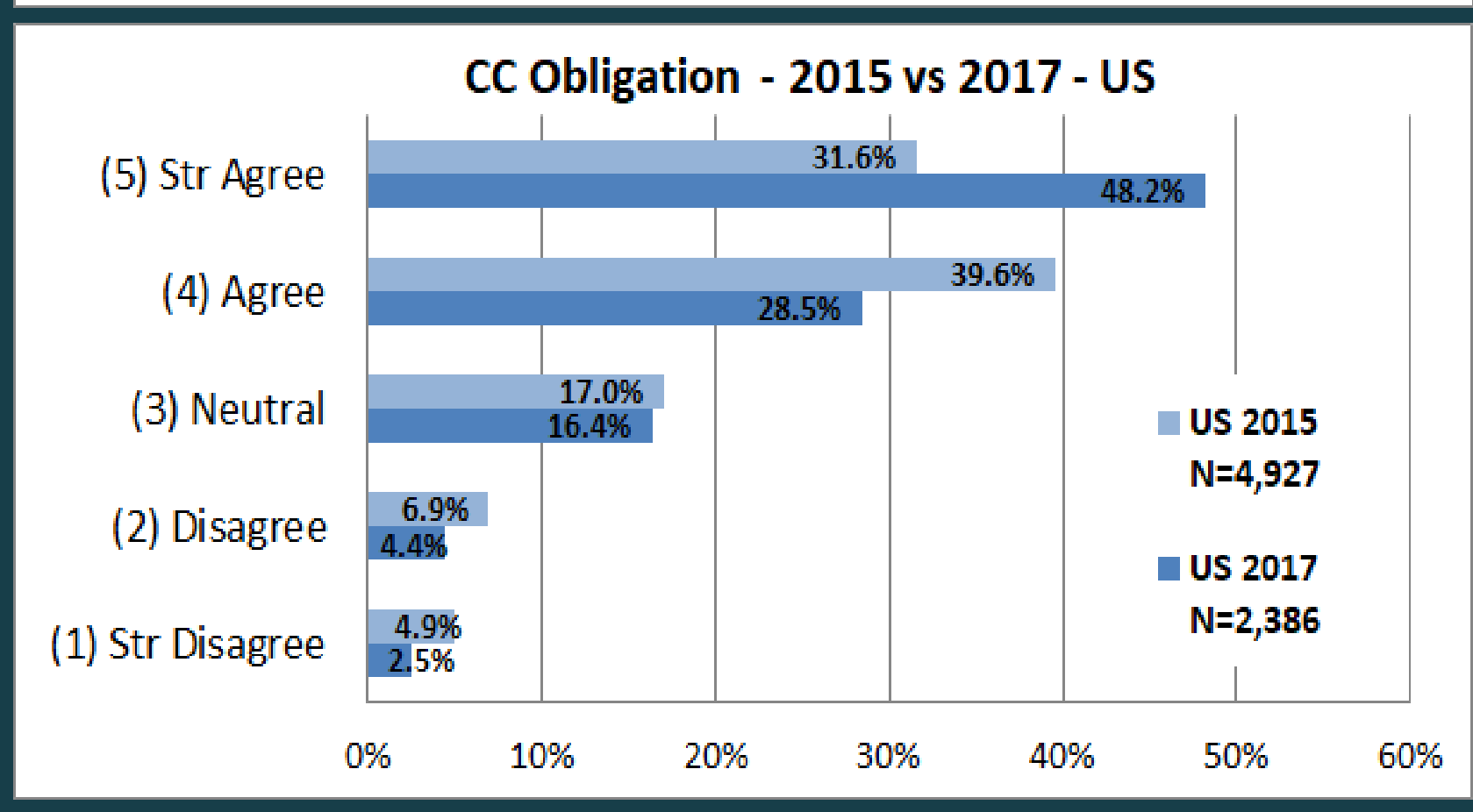
China
 '15 M = 4.38 (0.872)
 '17 M = 4.45 (0.768)
 '17 - '15 = 0.070***

2015
 CH M = 4.38 (0.872)
 US M = 3.86 (1.09)
 CH - US = 0.520***



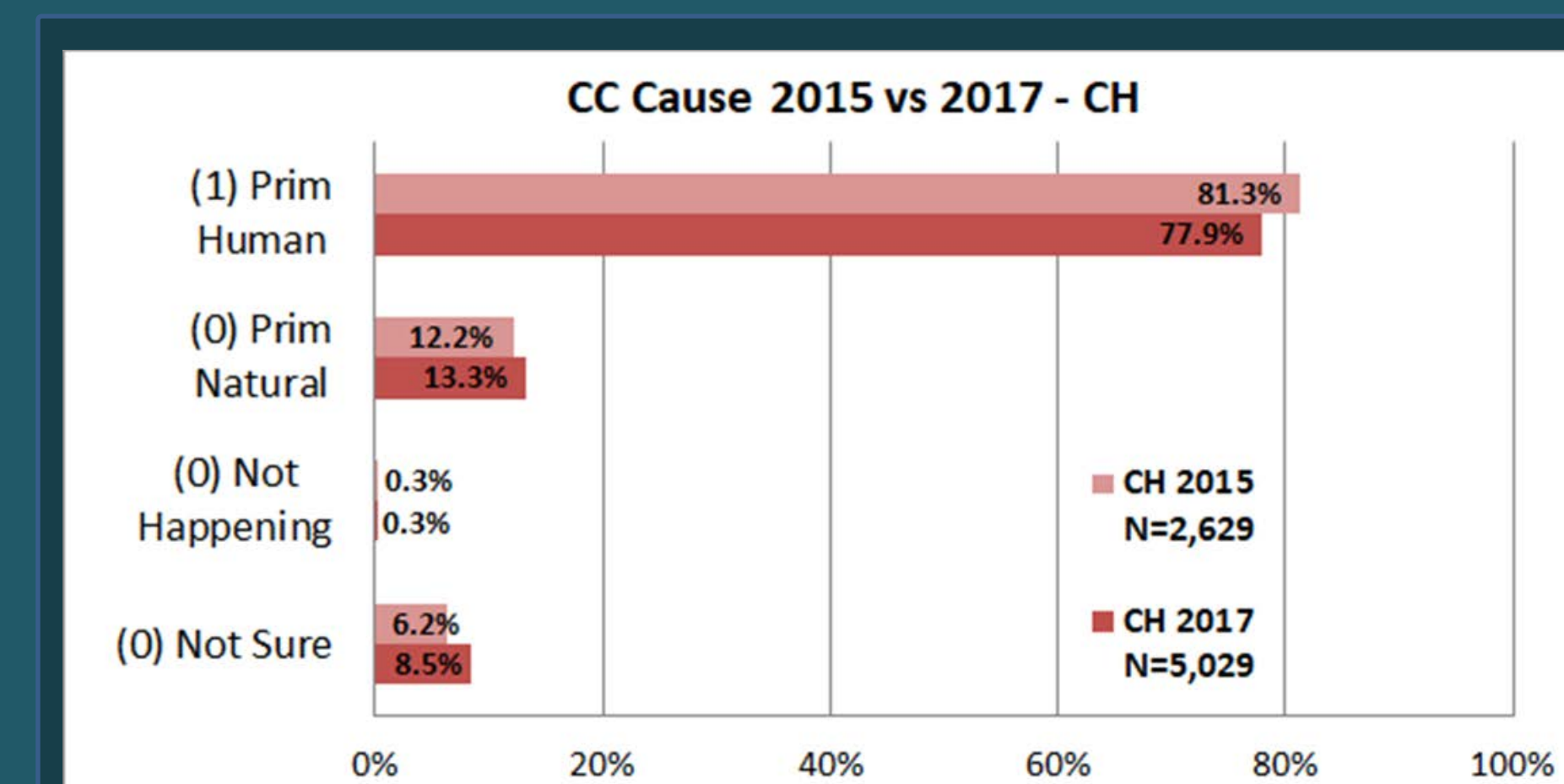
United States
 '15 M = 0.807 (0.395)
 '17 M = 0.824 (0.381)
 '17 - '15 = 0.017*

2017
 CH M = 0.934 (0.248)
 US M = 0.824 (0.381)
 CH - US = 0.110***



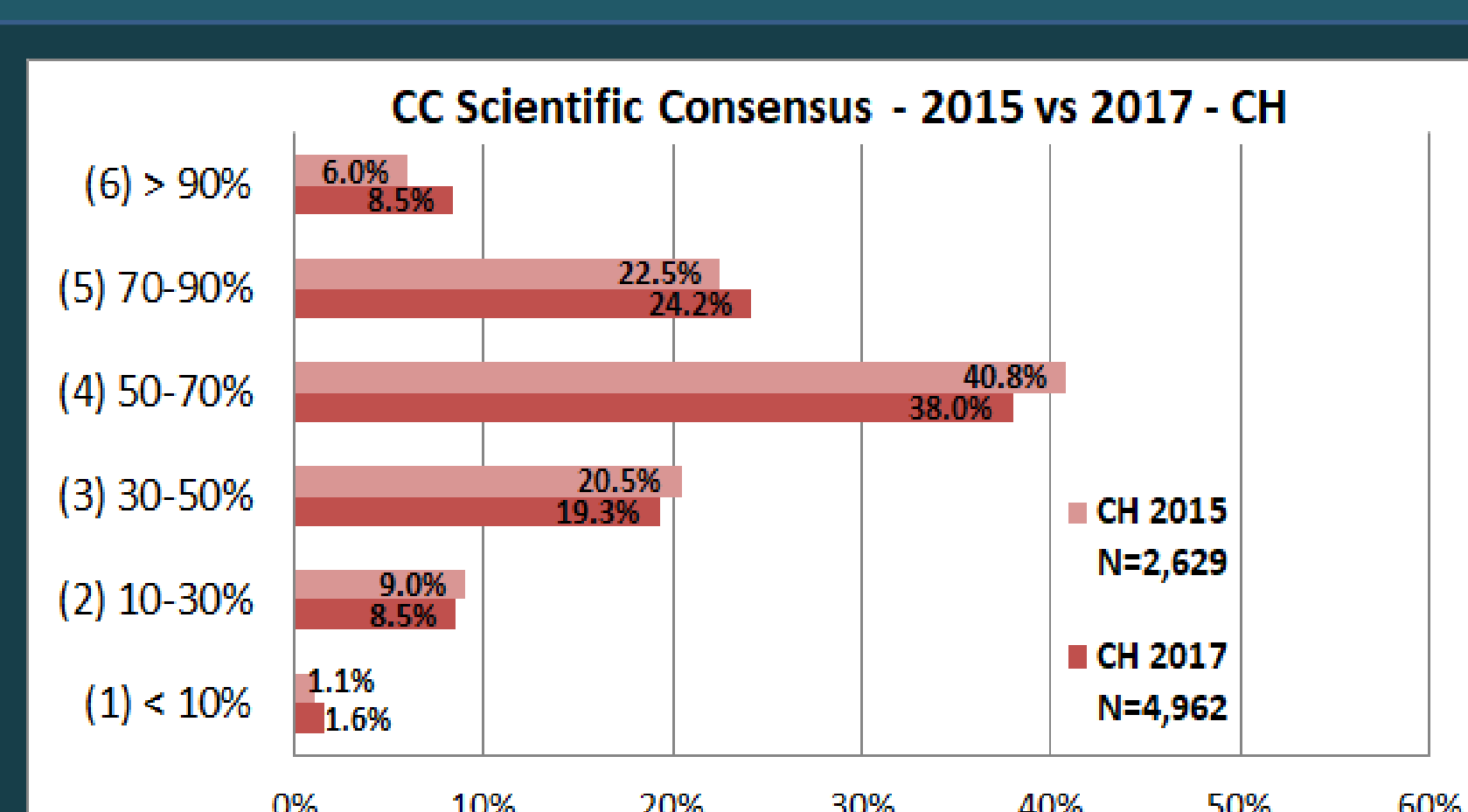
United States
 '15 M = 3.86 (1.09)
 '17 M = 4.15 (1.01)
 '17 - '15 = 0.290***

2017
 CH M = 4.45 (0.768)
 US M = 4.15 (1.01)
 CH - US = 0.300***



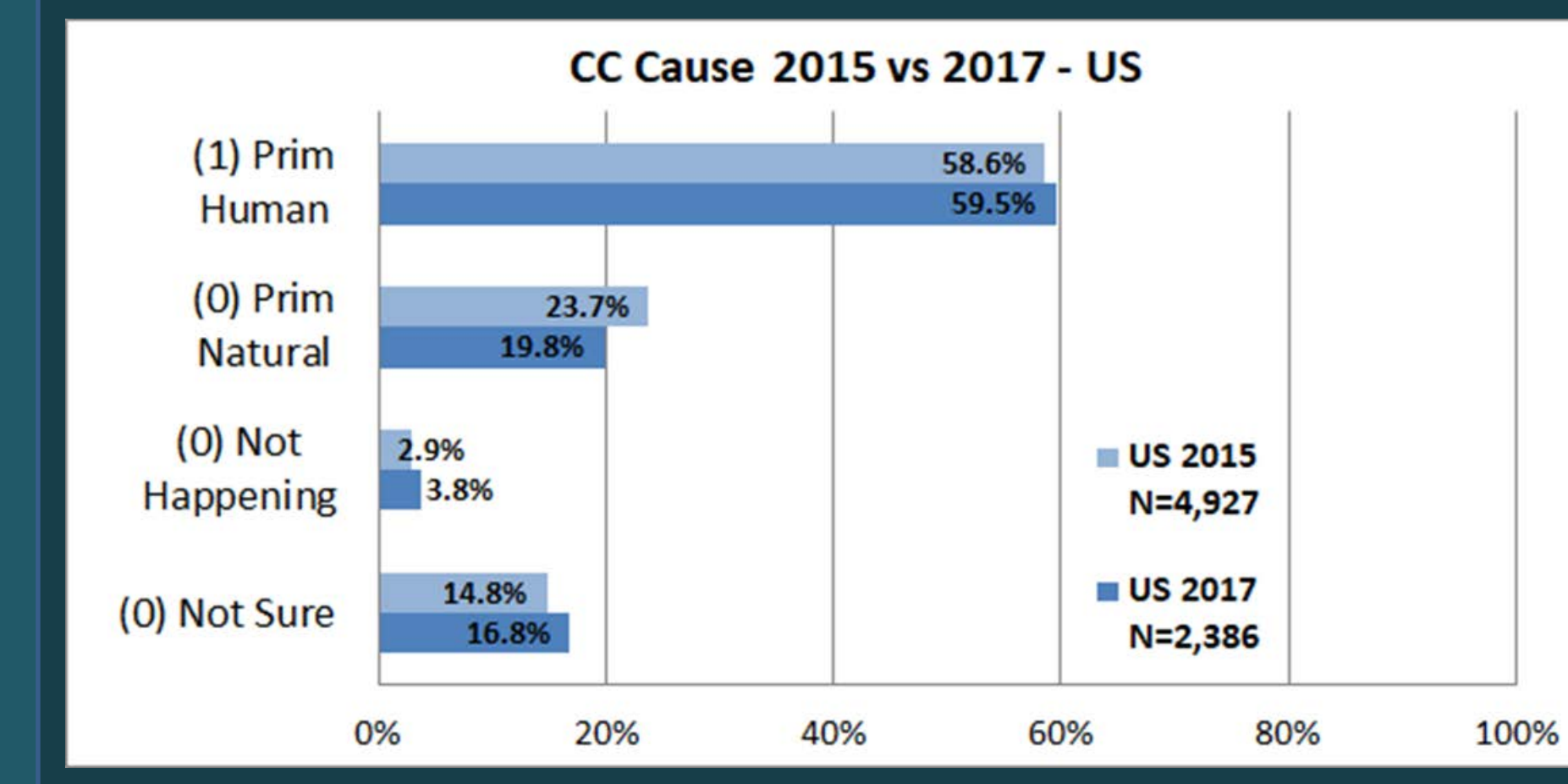
China
 '15 M = 0.813 (0.390)
 '17 M = 0.779 (0.415)
 '17 - '15 = -0.034***

2015
 CH M = 0.813 (0.390)
 US M = 0.586 (0.493)
 CH - US = 0.227***



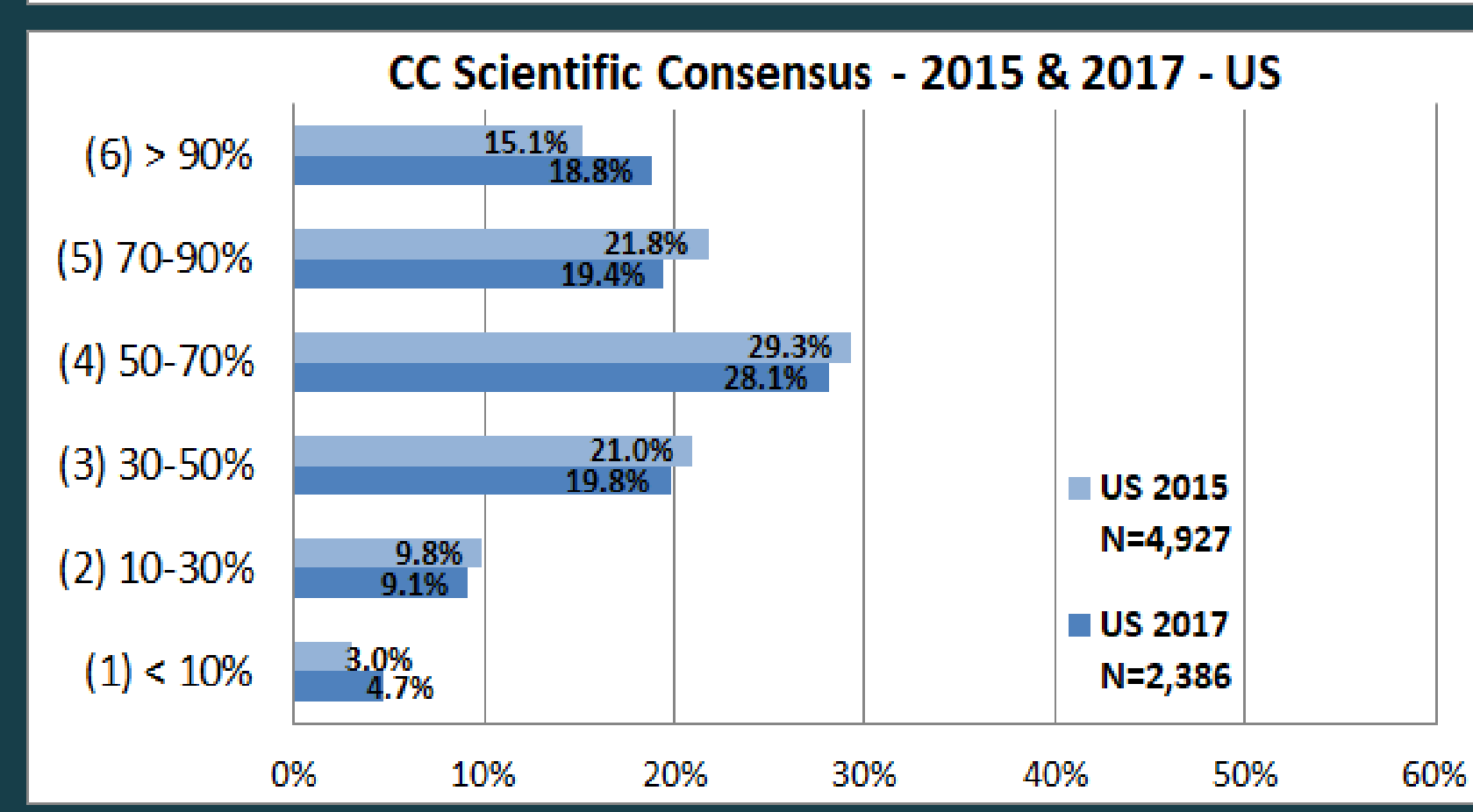
China
 '15 M = 3.93 (1.06)
 '17 M = 4.00 (1.12)
 '17 - '15 = 0.070***

2015
 CH M = 3.93 (1.06)
 US M = 4.02 (1.30)
 CH - US = -0.090***



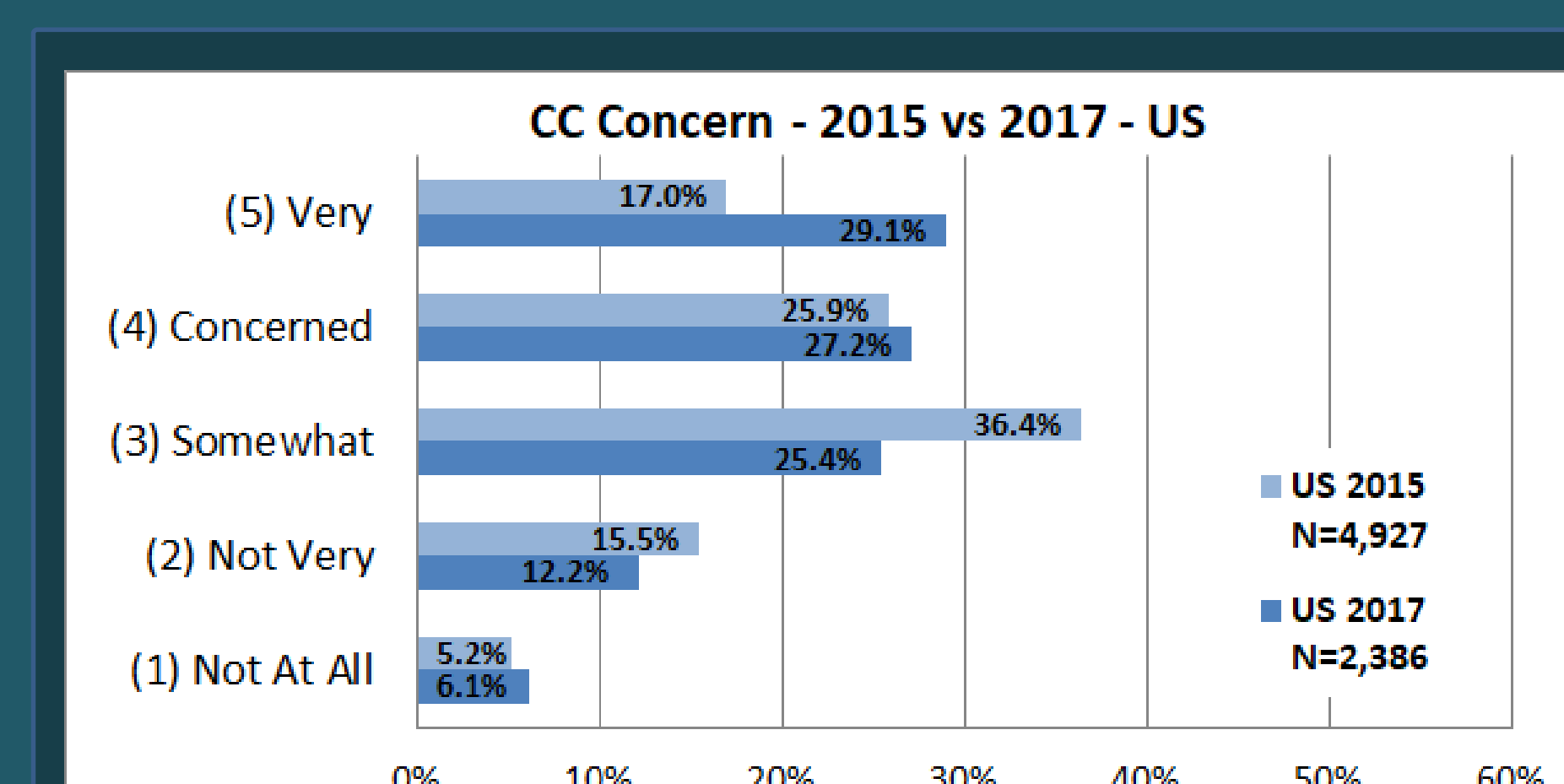
United States
 '15 M = 0.586 (0.493)
 '17 M = 0.595 (0.491)
 '17 - '15 = 0.009

2017
 CH M = 0.779 (0.415)
 US M = 0.595 (0.491)
 CH - US = 0.184***



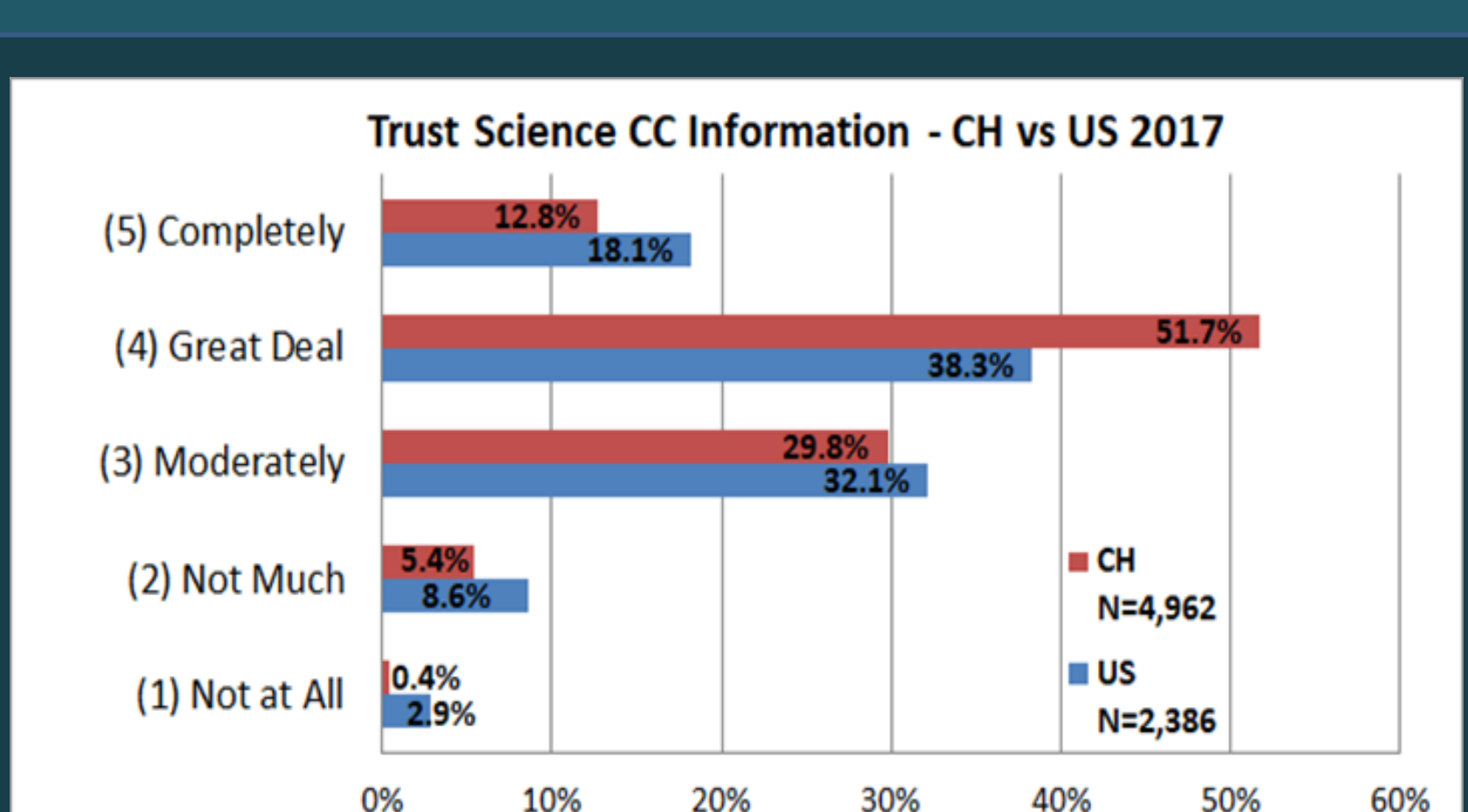
United States
 '15 M = 4.02 (1.30)
 '17 M = 4.05 (1.39)
 '17 - '15 = 0.030

2017
 CH M = 4.00 (1.12)
 US M = 4.05 (1.39)
 CH - US = -0.050

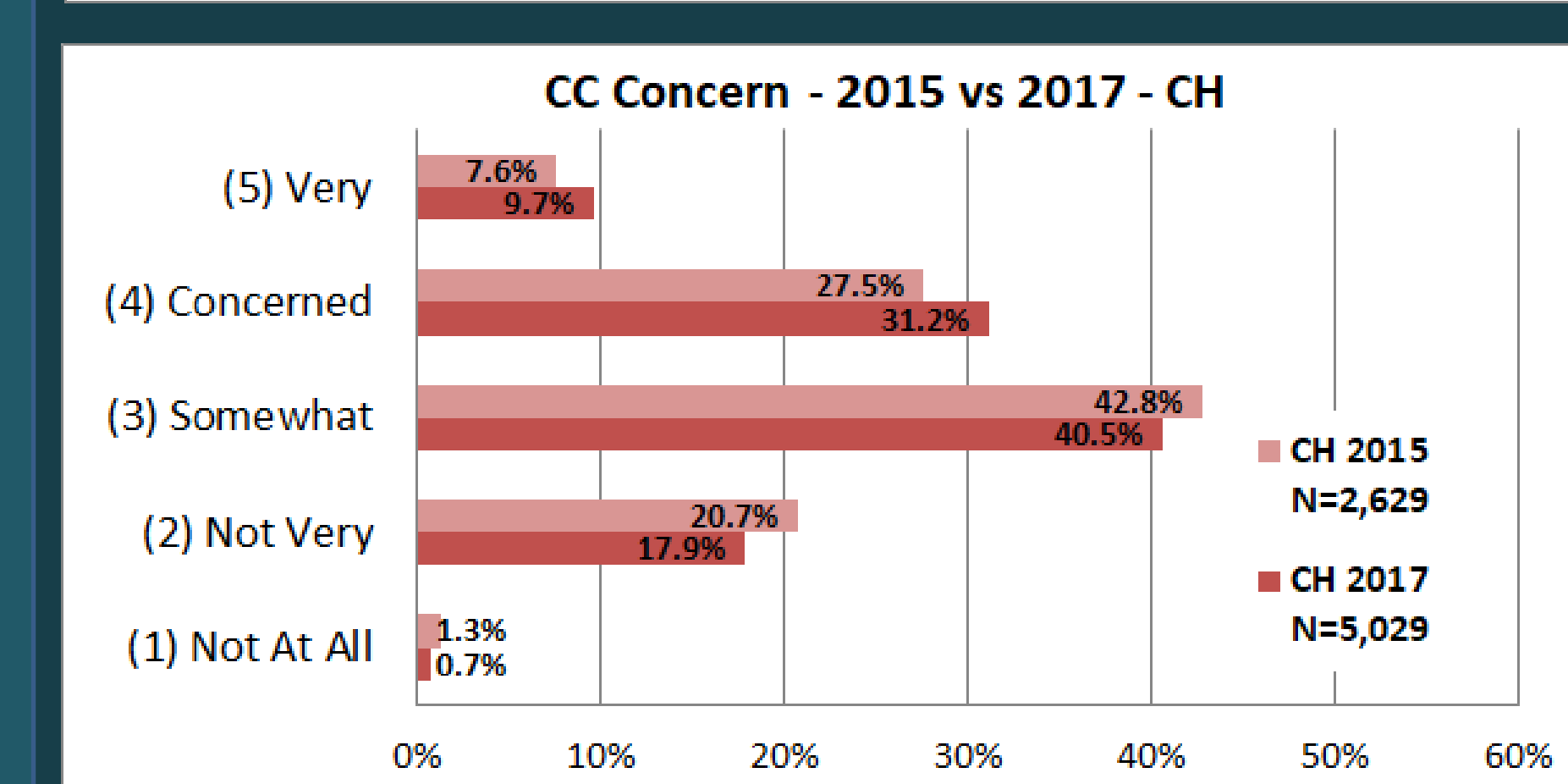


China
 '15 M = 3.19 (0.897)
 '17 M = 3.31 (0.900)
 '17 - '15 = 0.120***

2015
 CH M = 3.19 (0.897)
 US M = 3.34 (1.09)
 CH - US = -0.150***

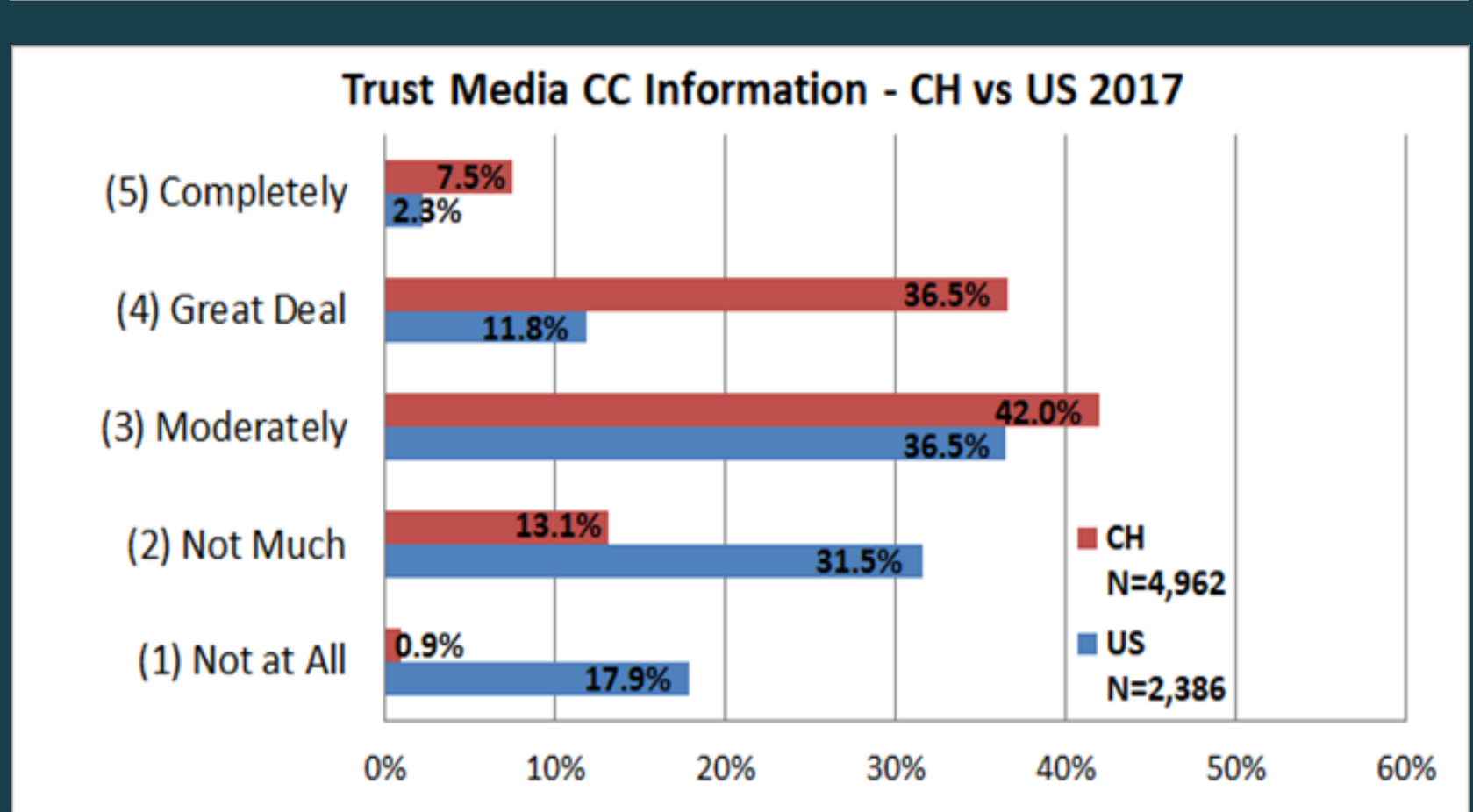


Science
 CH M = 3.71 (0.770)
 US M = 3.60 (0.974)
 CH - US = 0.108***



United States
 '15 M = 3.34 (1.09)
 '17 M = 3.61 (1.20)
 '17 - '15 = 0.270***

2017
 CH M = 3.31 (0.900)
 US M = 3.61 (1.20)
 CH - US = -0.300***



Media
 CH M = 3.37 (0.835)
 US M = 2.49 (0.990)
 CH - US = 0.876***