



DRAGONS SOARING TO SUCCESS

ZODIAC SIGN, EDUCATION, AND WAGES OF IMMIGRANTS FROM CHINESE SOCIETIES IN GERMANY

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Background

- Cultural beliefs, such as superstitions, shape individuals' actions
- Belief in Chinese zodiac signs has a particularly strong effect on behavior of individuals holding these beliefs
- Effect of superstition on labor market outcomes, such as wages, is not researched yet
- Unclear whether origin-country beliefs still affect the actions of immigrants

Research Question

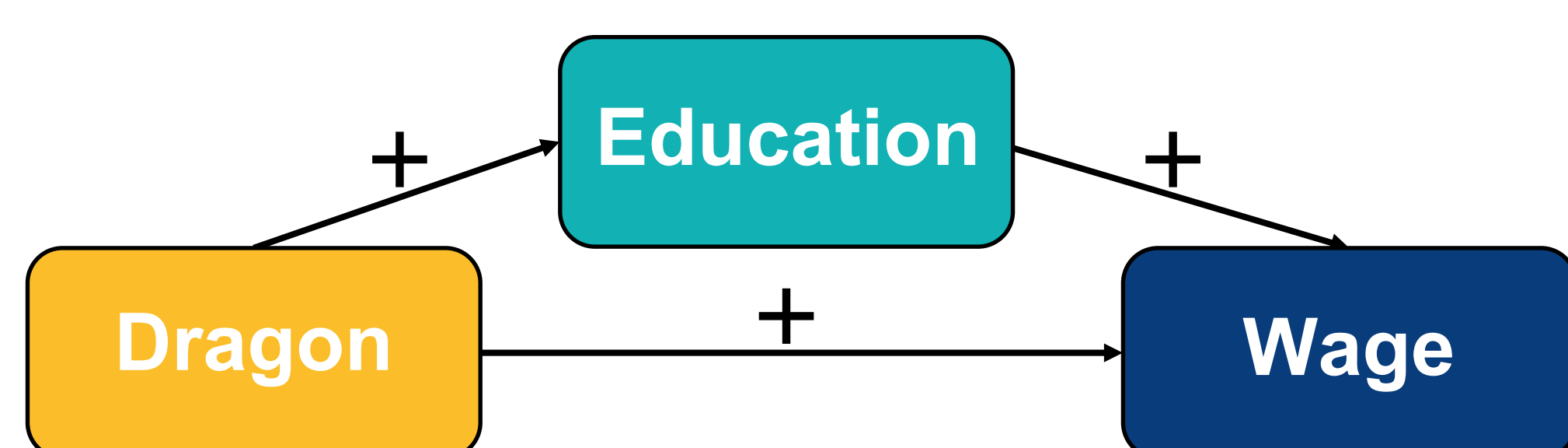
Does the Dragon zodiac sign influence wages of immigrants from Chinese societies in Germany?

Summary

- Dragons have higher wages than non-Dragons
- This wage premium is mediated by educational attainment
- This effect can only be found for immigrants from Chinese societies where belief in zodiac signs is prevalent
- Dragons are special but only if you believe it

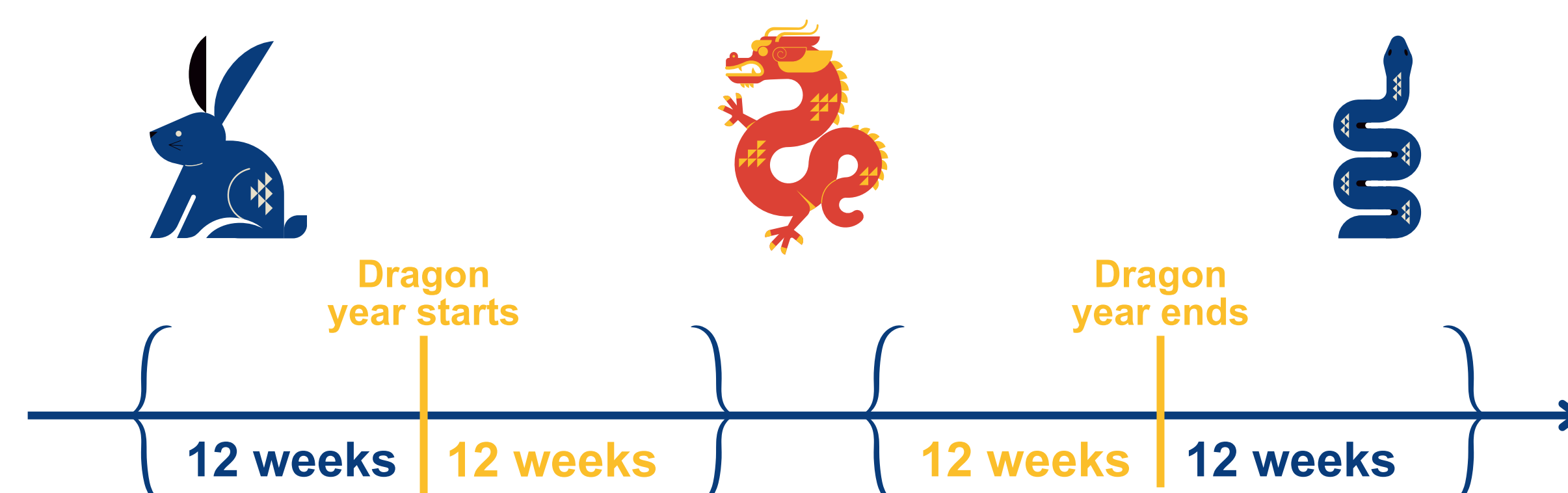
Theory

- Superstitions are cultural beliefs without a scientific basis, such as astrology
- Belief in Chinese zodiac signs influences behavior of individuals holding these beliefs
- Dragon is the most auspicious zodiac sign and Dragons are assumed to be more intelligent and ambitious
- Dragons might have higher wages due to parental investments and socialization
- **H1: The Dragon zodiac sign increases wages of immigrants from Chinese societies**
- Dragon children have higher educational attainment due to parental investments
- **H2: The wage premium of Dragons is mediated by educational attainment**
- Dragons might be more self confident due to socialization
- **H3: The Dragon zodiac increases wages net of educational differences.**

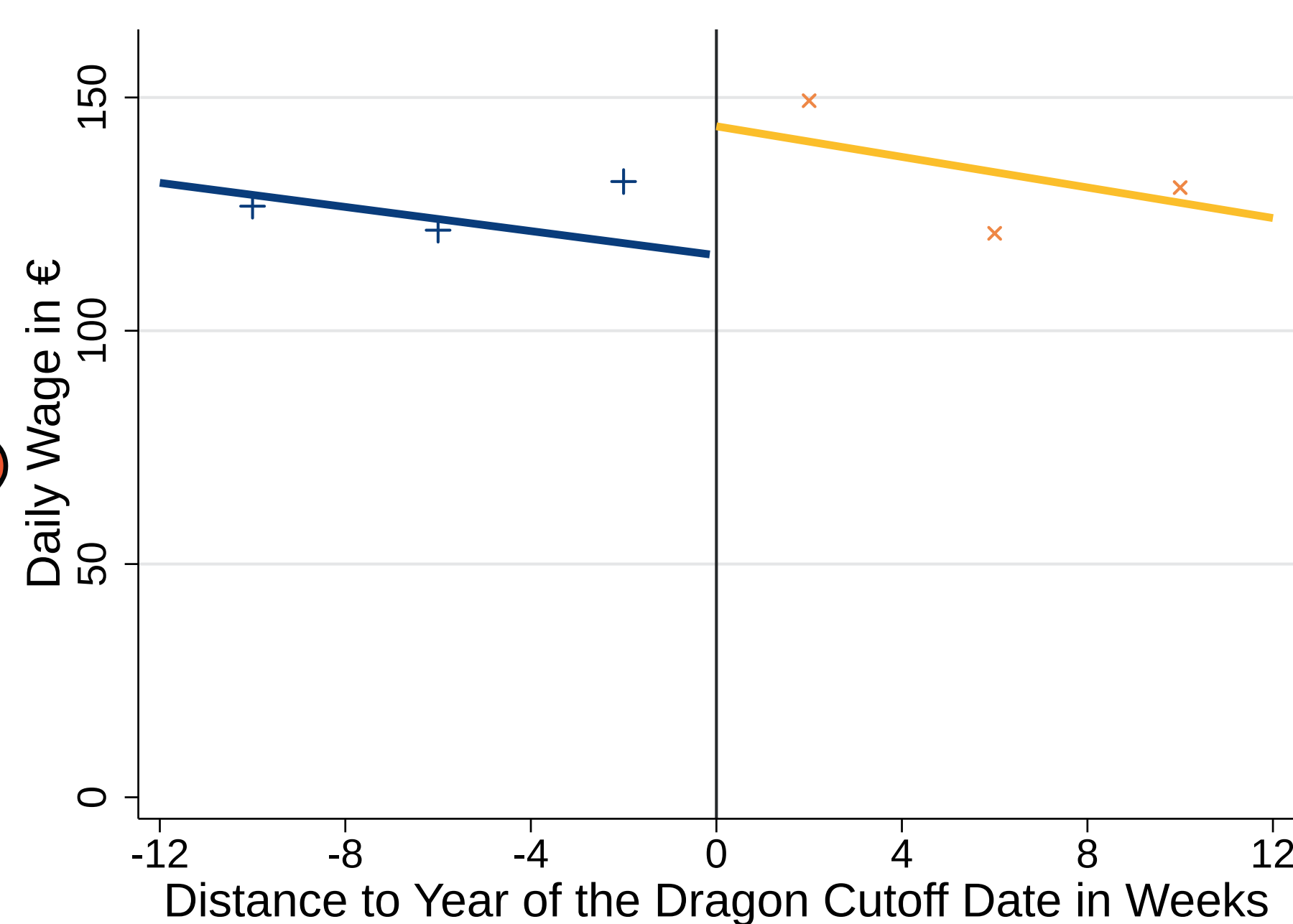


Regression discontinuity design

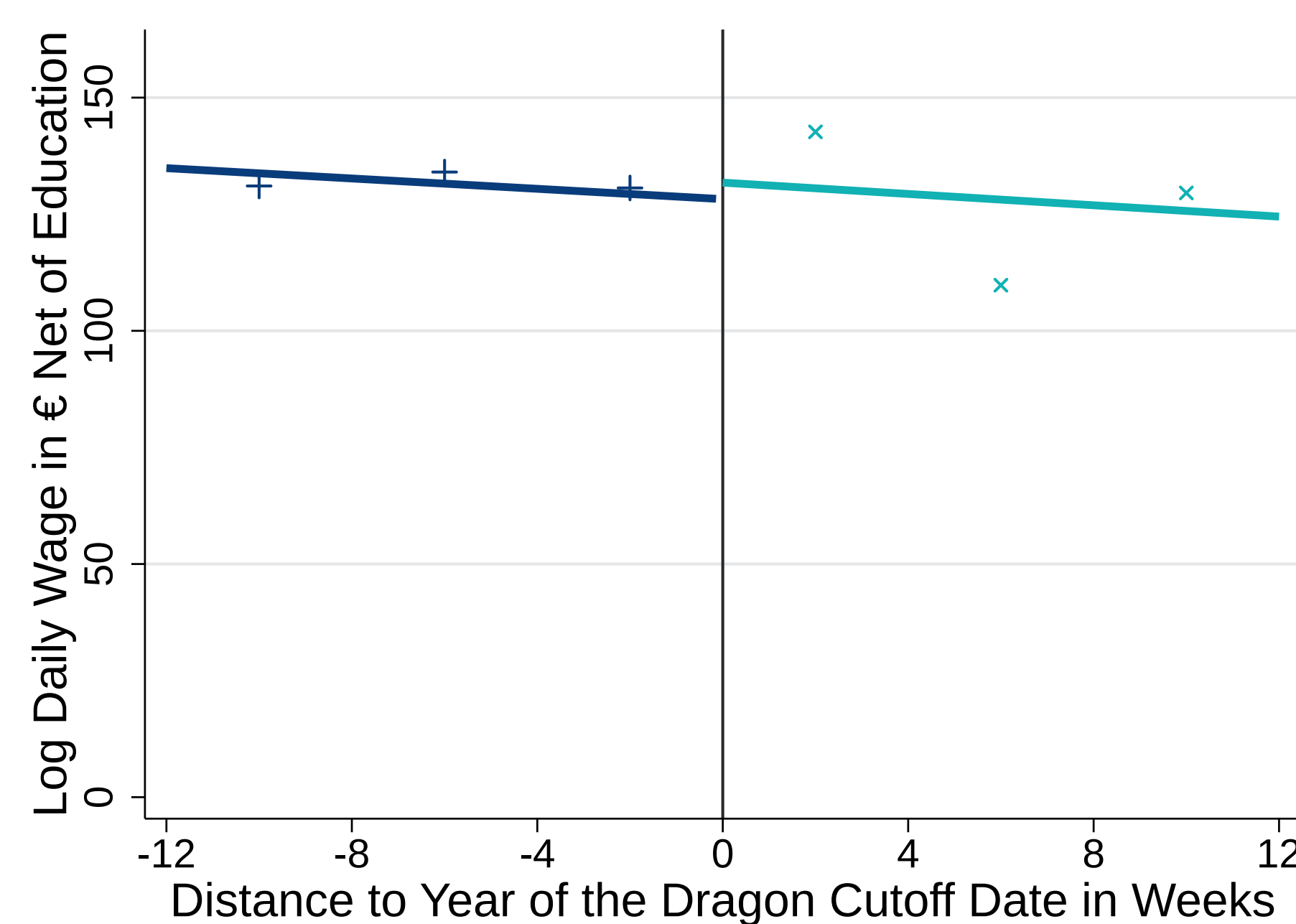
- Estimating the causal effect of culture on behavior is challenging
- Zodiac sign is assigned at the date of birth and random around Chinese New Year
- Regression discontinuity design
 - Focus on individuals born 12 weeks around Chinese New Year of the Dragon and comparing **Dragons** to **non-Dragons**
 - Control variables are not associated with Dragon zodiac sign, supporting randomness



Result



- Dragon immigrants from Chinese societies have statistically significantly higher wages than non-Dragon immigrants, supporting **H1**



- Dragon wage premium is statistically significantly mediated by education, supporting **H2**
- No evidence for **H3** because Dragon wage premium is not statistically significant net of education

Data and Robustness

- **Data**
 - 2 percent random sample drawn from the Integrated Employment Biographies
 - Linked to date of birth data to calculate distance to Chinese New Year in days
 - Focus on immigrants from Hong Kong, Macau, Mainland China, Taiwan, and Singapore
 - 125 full-time employees and 525 individual-level observations from 1993 to 2021
- **Robustness**
 - Placebo treatments do not affect wages
 - Results are robust to cutoff dates of 8, 9, 10 and 11 weeks
 - The Dragon zodiac sign does not increase wages of Germans
 - Superstition only affects the behavior of individuals believing in it

Conclusion

- Dragon zodiac sign increases wages of immigrants from Chinese societies
- Wage premium is mediated by education
 - Importance of parental expectations and investments for Dragon wage premium
- No wage premium net of education
 - No evidence for socialization effects (such as increased confidence)
- **Dragons are special, but only if you(r parents) believe in it**
- **Treat every child like a Dragon**