Causal Impacts of Trade Policy Uncertainty on Household Decisions: Evidence from Nationally Representative Surveys in China

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Abstract

This paper estimates the causal impact of trade policy uncertainty on household inflation expectations, actual spending, saving behavior, and labor market decisions, controlling for changes in tariffs. Using a nationally representative survey conducted during a period of heightened trade tensions between China and the U.S., we isolate the effects of policy uncertainty on household decisions by incorporating randomized information treatments about tariff changes and trade policy uncertainty. Our findings suggest that while households adjust their expectations and behavior in response to tariff changes, trade policy uncertainty leads to distinct shifts in expectations and decisions, with households exhibiting heightened concerns about future inflation, reduced spending, and saving behavior, as well as changes in employment decisions, including whether they remain in their current jobs or seek new ones. We will conduct a follow-up round of surveys three months later to examine the potential persistent effects of trade policy uncertainty. By controlling for tariff changes, we are able to disentangle the effects of uncertainty from those of policy changes themselves, offering new insights into how households perceive and respond to trade policy in an environment of uncertainty.

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1 Introduction

Uncertainty is an important source of macroeconomic volatility and has often been modeled as second-moment shocks (Bloom, 2009; Gourio, 2012; Leduc and Liu, 2016; Basu and Bundick, 2017; Fernández-Villaverde and Guerrón-Quintana, 2020; Dietrich et al., 2022). Crashes in levels of production or demand tend to occur in uncertain times, and uncertainty shocks can cause recessions (Bloom et al., 2018). This endogeneity makes separating second-moment shocks from first-moment shocks difficult in practice, which in turn makes isolating the impact of a pure second-moment uncertainty shock challenging.

This paper explores how trade policy uncertainty – newspaper-based indices of policy uncertainty using two mainland Chinese newspapers – affects household expectations of inflation, economic conditions, spending, saving, and labor market decisions in China, while controlling for changes in tariff rates themselves (first moment). Using data from a nationwide survey administered in July 2025, during a period of intense trade tensions between China and the U.S., we examine how households update their expectations and behaviors in response to both specific tariff changes and the uncertainty surrounding those changes.

While previous literature has studied the effects of tariff changes on expectations, much less attention has been given to the role of trade policy uncertainty in shaping economic outlooks. We aim to fill this gap by investigating the extent to which uncertainty about future trade policy – manifested as the potential for tariff increases or decreases – shapes household behavior, over and above the direct effects of known tariff changes. The key contributions of this paper are:

- Estimating the causal effect of trade policy uncertainty on household expectations, actual spending and saving behavior, and labor market decisions, while controlling for the impact of tariff changes. Using randomized information treatments in a nationally representative sample to examine how varying levels of trade policy uncertainty influence household beliefs and decisions.

- Providing novel evidence from China, an emerging market economy with significant exposure to global trade policy shocks, where trade policy uncertainty has the potential to influence household expectations and economic decision-making. Notably, this is the first nationally representative household survey in China, incorporating diverse samples across age, income, and education levels. In contrast to many existing studies that primarily focus on developed countries, this survey allows us to examine trade policy uncertainty's impact across a broader range of households in an emerging market context.

Our paper builds on a few recent studies that explore the causal impact of uncertainty shocks. Ludvigson et al. (2021) propose a novel structural VAR identification strategy to isolate exogenous uncertainty shocks. Baker et al. (2024) use natural disasters, terrorist attacks, and political shocks as instruments for first- and second-moment shocks, identified using stock returns and volatility. Coibion et al. (2024) and Kumar et al. (2023) employ randomized information treatments that provide different types of information about the first and/or second moments of future economic growth to generate exogenous changes in households' and firms' perceived macroeconomic uncertainty. We contribute to this growing literature by disentangling the effects of policy uncertainty from direct changes in tariffs using randomized controlled trials, and by highlighting the distinct ways in which households respond to these different dimensions of trade policy.

2 Survey Design

This study uses data from the Survey of Household Expectations in China, conducted in July 2025. The survey was administered to a nationally representative sample of 6,000 Chinese households, with a focus on understanding how households adjust their inflation, income, spending, saving, and labor market expectations in response to both tariff changes and uncertainty about future trade policies.

The survey includes several key sections:

- **Background Information:** Collects demographic, economic, and employment data.
- **Past Prices and Spending:** Measures how recent price changes and income fluctuations have affected household expectations.
- **Expectations for the Future:** Focuses on expectations about inflation, income, spending, unemployment, and job search behavior over the next 12 months.
- **Information Treatments:** Randomly assigns households to one of several groups, each receiving different information about tariff changes or/and trade policy uncertainty.

We implement a randomized control trial (RCT) design, with three treatment groups:

- Group 1 (Control): No information on trade policy changes.
- Group 2 (Tariff Changes): Information on recent tariff changes, including the timing and magnitude of tariff adjustments.

- Group 3 (Policy Uncertainty): Information on the uncertainty surrounding future tariff changes, emphasizing the potential for further tariff increases or decreases.
- Group 4 (Tariff Changes + Uncertainty): Information on both specific tariff changes and the uncertainty surrounding future tariff decisions.

This design allows us to isolate the effects of trade policy uncertainty from the effects of known tariff changes, by comparing the outcomes of households exposed to uncertainty (Group 3 and Group 4) with those exposed only to specific tariff changes (Group 2).

3 Identification of Trade Policy Uncertainty Effects

Our trade policy uncertainty measure is taken from Davis et al. (2025), which quantifies trade policy uncertainty-related concepts from January 2000 onward using two mainland Chinese newspapers: Renmin Daily and Guangming Daily.

Figure 1: Trade Policy Uncertainty in China: January 2000 - June 2025



Note: Figure shows the trade policy uncertainty in China, taken from Davis et al. (2025), which quantifies trade policy uncertainty-related concepts from January 2000 onward using two mainland Chinese newspapers: Renmin Daily and Guangming Daily.

To estimate the causal impact of trade policy uncertainty on household expectations, we control for the direct effects of tariff changes. This is particularly important because the relationship between tariffs and expectations could be confounded by the uncertainty surrounding future tariff decisions. By using a randomized information treatment design, we are able to isolate the effects of uncertainty about future tariffs from the first moment (the actual tariff changes).

In our analysis, we focus on four key outcomes:

- Inflation Expectations: How do households adjust their expectations about future inflation in response to both tariff changes and uncertainty?
- Spending Expectations: How do households modify their expectations for future spending in response to changes in trade policy, both in terms of specific tariff changes and uncertainty about future tariffs?
- Saving Behavior: How do households adjust their saving behavior when faced with uncertainty about future trade policy and tariff changes?
- Labor Market Decisions: How do households' expectations about the future labor market (such as job security or likelihood of seeking new employment) evolve in response to trade policy uncertainty?

By analyzing these four dimensions of household behavior, we aim to disentangle the different ways that tariff changes and trade policy uncertainty impact households, offering a more comprehensive understanding of how uncertainty influences economic decision-making.

We hypothesize that uncertainty about trade policy will lead to higher inflation expectations, reduced spending, increased saving, and cautious labor market behavior, as households become more uncertain about future economic conditions. By controlling for changes in tariffs, we are able to assess whether uncertainty has an independent effect on household expectations and behavior beyond the direct effects of tariff adjustments.

4 Next Steps

The next steps in this research will focus on the following:

4.1 Analysis of First Round of Survey

The first round of the survey, conducted in July 2025, will provide initial insights into how households respond to trade policy uncertainty and tariff changes. We will analyze the data to evaluate how the randomized information treatments (Groups 2, 3, and 4) affect household expectations of inflation, spending, saving, and labor market decisions, compared to the control group (Group 1).

The analysis will include:

- Descriptive statistics to assess the overall trends in household expectations and behaviors across different treatment groups.
- Regression analysis to isolate the causal impact of trade policy uncertainty on household inflation expectations, spending, saving behavior, and labor market decisions, controlling for tariff changes.

- Heterogeneity analysis to explore how different household characteristics (e.g., income, education, rural vs urban residence, personal exposure to trade) affect responses to trade policy uncertainty.

4.2 Follow-up Round of Survey (October 2025)

To study the persistence of the effects of trade policy uncertainty, we will conduct a follow-up survey in October 2025. This round will aim to examine how households' expectations and behaviors evolve over time in response to trade policy uncertainty, and whether the effects persist beyond the immediate impact of information treatment.

Key activities in the follow-up survey include:

- Re-assessing household expectations on inflation, spending, saving, and labor market decisions, including new questions about how their actual decisions have changed in light of the evolving trade policy environment.
- Examining the persistence of effects by comparing responses in the follow-up survey to the baseline results from the first round.
- Analyzing whether trade policy uncertainty leads to long-term changes in household behavior, and identifying which aspects of behavior (spending, saving, labor market decisions) are most affected by persistent uncertainty.

4.3 Additional Analyses

Beyond the first and second rounds of the survey, we plan to:

- Explore how trade policy uncertainty influences the economic outlook of households over a longer time horizon, examining whether these effects extend beyond the three-month window.
- Examine the impact of repeated exposure to uncertainty on household expectations and decision-making.
- Use machine learning tools to analyze open-ended survey responses that elicit the main concerns households have about both the Chinese and U.S. economies in response to the trade war.

These analyses will help deepen our understanding of the short-term and potentially persistent effects of trade policy uncertainty on household expectations and economic behavior.

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A Appendix: Survey Questionnaire

This survey is conducted by Renmin University of China. We aim to understand your views and expectations regarding price changes in China, spending, saving behavior, and labor market decisions to support better research and policy development. The survey takes approximately 8 minutes. Your responses will be kept strictly confidential. Thank you for your support and participation!

Section A: Background Information

1. What is your gender?
A. Male B. Female

2. What is your age? _____

3. What is your educational background?
A. Middle school or below B. High school C. University or above

4. Where have you lived in the past 12 months?
A. Town or city B. Village

5. Do you currently have a paid job?
A. Yes (Go to Q6) B. No (Go to Q15)

6. What is your monthly personal income?
A. Less than 2,000 RMB B. 2,000–4,999 RMB C. 5,000–9,999 RMB D. 10,000 RMB or more

7. What is the size of your organization?
A. 10 or fewer people B. 11–100 people C. 101–500 people D. More than 500 people

8. Which of the following best describes your employer?
A. State-owned (or state-controlled) enterprise
B. Private (or privately-controlled) enterprise
C. Hong Kong, Macau, or Taiwan-controlled enterprise
D. Foreign-funded (or foreign-controlled) enterprise
E. Self-employed or small business
F. Government or public institution
G. Social organization or non-profit organization

9. Which of the following best describes your job responsibilities?
A. Responsible for hiring/firing decisions
B. Responsible for capital expenditure decisions
C. Responsible for wage/salary decisions
D. Responsible for marketing or sales decisions
E. None of the above

10. Are you responsible for pricing decisions at your organization?
A. Yes B. No (Go to Q13)

11. How often do you make pricing decisions?
A. Daily or almost daily B. Weekly C. Monthly D. Quarterly E. Semi-annually F. Every 1–3 years G. Rarely adjust prices H. Adjust prices irregularly

12. When setting prices, how important are the following factors? (Rate each from 0 = Not important, 1 = Important, 2 = Very important)
A. Competitors' prices: _____
B. Raw material/input costs: _____
C. Demand for product/service: _____
D. Labor costs: _____
E. Forecast of future demand: _____
F. Current economic environment: _____
G. Forecast of future conditions: _____
H. Financial costs: _____

13. Do you manage other people at your current job?
A. Yes (Go to Q14) B. No (Go to Section B)

14. How many people do you manage?
A. 1–10 people B. 11–50 people C. More than 50 people

15. Are you currently looking for a job?
A. Yes B. No

16. What industry did your most recent job belong to?
(Choose the one best describing your main role)
A. State-owned (or state-controlled) enterprise
B. Private (or privately-controlled) enterprise
C. Hong Kong, Macau, or Taiwan-controlled enterprise
D. Foreign-funded (or foreign-controlled) enterprise
E. Self-employed or small business
F. Government or public institution
G. Social organization or non-profit organization

Section B: Views on Past Prices and Spending

17. What is your primary source of economic news? (Select all that apply)
    A. Newspapers or online news
    B. TV or radio
    C. Official statistics
    D. Friends and family
    E. Social media (WeChat, Xiaohongshu, etc.)
    F. Other sources

18. Which of the following assets do you currently hold? (Select all that apply)
    A. Stocks (incl. mutual funds)
    B. Bank savings
    C. Bonds
    D. Real estate (excluding primary residence)
    E. None of the above

19. Do you have any of the following debts? (Select all that apply)
    A. Car loan B. Mortgage C. Credit card or Huabei D. Other (please specify) E. No debt

Section C: Expectations for the Future

20. In the next 12 months, do you expect your monthly spending to:
    A. Increase (Go to Q21) B. Stay the same (Go to Q23) C. Decrease (Go to Q22)

21. By how much do you expect your spending to increase? _____ %

22. By how much do you expect your spending to decrease? _____ %

23. In the next 3 months, which of the following do you plan to purchase? (Select all that apply)
    A. Home/apartment
    B. Car
    C. Appliances or furniture
    D. Travel/vacation
    E. Luxury goods
    F. Other expensive items
    G. None of the above

24. What do you expect will happen to the overall price level in the next 12 months?
A. Rise (Go to Q24.1) B. Stay the same (Go to Q25) C. Fall (Go to Q24.2)

24.1 By how much do you expect prices to rise? _____ %

24.2 By how much do you expect prices to fall? _____ %

25. How do you expect China's unemployment rate to change over the next 12 months?
A. Increase (Go to Q26) B. Stay the same (Go to Q28) C. Decrease (Go to Q27)

26. By how many percentage points will unemployment increase? _____ %

27. By how many percentage points will unemployment decrease? _____ %

28. Please estimate the minimum and maximum tariffs the U.S. might impose on Chinese goods in the next 3 months.
Minimum tariff: _____ % Maximum tariff: _____ %
What is the probability that tariffs exceed the average of these values? _____ %

Section D: Information Treatments

Group 1 (Control): No additional information provided.

Group 2 (Tariff Changes Only):

On April 10 of this year, U.S. President Trump imposed an additional 125% tariff on various Chinese goods on top of the existing 20% tariffs, raising the total tariff rate to approximately 145%. Just over a month later, on May 12, negotiations led to a partial rollback: only a 34% ad valorem tariff was retained, of which 24% was suspended for 90 days, leaving a 10% tariff in effect initially.

Group 3 (Tariff Uncertainty Only):

The latest announcement by U.S. President Trump introduced significant uncertainty into future trade policy. Tariffs on Chinese goods may increase or decrease in the next three months, depending on negotiation outcomes. The Trade Policy Uncertainty Index—based on coverage in *People's Daily* and *Guangming Daily*—more than doubled in April 2025 relative to February.

Group 4 (Tariff Changes + Uncertainty):

On April 10, U.S. President Trump imposed a 125% additional tariff on Chinese goods, raising the total to 145%. By May 12, only a 34% tariff was retained after negotiations, with 24% temporarily suspended. However, trade policy remains uncertain—future tariffs may rise or fall depending on progress in talks. The Trade Policy Uncertainty Index doubled in April compared to February.

Section E: Follow-up Questions

29. What do you think is the most significant impact of the trade war on China's economy?

30. What do you think is the most significant impact of the trade war on the U.S. economy?

31. Has the U.S.-China trade war significantly affected your personal life?
A. Yes B. No

32. In the next 12 months, do you expect:
A. Inflation (Answer Q32.1) B. Deflation (Answer Q32.2) C. Neither

32.1 Expected inflation rate: _____ %

32.2 Expected deflation rate: _____ %

33. Again, please estimate the minimum and maximum tariffs the U.S. might impose on Chinese goods in the next 3 months.
A. Minimum: _____ % B. Maximum: _____ %
What is the probability that tariffs will exceed the average of your min and max? _____ %

34. In the next 12 months, what do you expect will happen to the unemployment rate?
A. Increase B. Stay the same (Skip to Q37) C. Decrease (Skip to Q36)

35. If increase: by how many percentage points? _____ %

36. If decrease: by how many percentage points? _____ %

37. In the next 12 months, do you expect your average monthly spending to:
    A. Increase B. Stay the same (Skip to Q40) C. Decrease (Go to Q39)

38. If increase: by how much? _____ %

39. If decrease: by how much? _____ %

40. In the next 12 months, do you expect your income to:
    A. Increase B. Stay the same (Go to Q43) C. Decrease (Go to Q42)

41. If increase: by how much? _____ %

42. If decrease: by how much? _____ %

43. In the next 3 months, which of the following do you plan to purchase? (Select all that apply)
    A. Home/apartment
    B. Car
    C. Household appliances or furniture
    D. Travel/vacation
    E. Luxury goods (e.g., jewelry, watches)
    F. Other large items not listed
    G. None of the above

44. Assume you receive 10,000 RMB for saving or investment. After repaying debt, how would you allocate the remaining amount?
    Checking account: _____ RMB
    Savings account: _____ RMB
    Stocks or mutual funds: _____ RMB
    Bonds: _____ RMB
    Repay debt with the remainder

We sincerely thank you for your time and cooperation.