

# Examining the Role of Consumer Preferences on U.S. Individuals' Trade Policy Views

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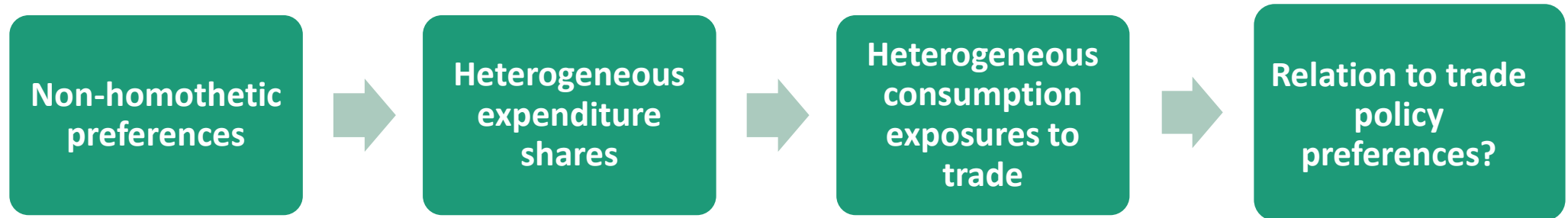
American University

# Research Highlights

- Research question:
  - Are U.S. consumers' exposures to international trade associated with their trade policy views in 2016?
- Hypothesis:
  - Consumers with a higher exposure to imports should be less likely to support additional import restrictions.
- Empirical Findings:
  - A higher expenditure-weighted import penetration ratio is associated with a lower likelihood of support for additional import restrictions;
  - A higher expenditure-weighted applied tariff rate is also associated with a lower likelihood of support for additional import restrictions.

# Motivation

- Consumers' benefits from trade liberalization are often overlooked in the political economy literature
- Canonical trade models assume identical and homothetic preferences, contrary to reality
- Exploring the heterogeneities in consumption patterns using the CE data:



# Data Sources

- Combining the American National Election Studies (ANES) survey with CE PUMD survey using statistical matching

Dataset	Interview or Diary Survey File	Files Used	Relevant Information
FMLI	Interview survey	FMLI161x; 162; 163; 164; 171	CU-level summary expenditures; CU-level income; CU characteristics and weights
MTBI	Interview survey	MTBI161x; 162; 163; 164; 171	Monthly expenditures
FMLD	Diary survey	FMLD161; 162; 163; 164	Summary expenditures; CU-level income; CU characteristics and weights
EXPD	Diary survey	EXPD161; 162; 163; 164	Detailed expenditure

# Why Integrating Data from Both Interview and Diary Surveys?

- Interview survey: Large and recurring expenditures that can be recalled for a period of three months or longer
  - Example: Rent, utilities
- Diary survey: Small, frequently purchased items
  - Example: Most food, clothing
- The [source selection file](#) identifies the survey source for each UCC consumption item
- Integrating data from both surveys provides a comprehensive coverage of consumers' expenditures

# Interview Survey: Months in Scope

Quarter 1 (FMLI161x)					
Oct 2015	Nov 2015	Dec 2015	Jan 2016	Feb 2016	Mar 2016
			0		
			X	1	
			X	X	2

Quarter 2 (FMLI162)					
Jan 2016	Feb 2016	Mar 2016	Apr 2016	May 2016	Jun 2016
X	X	X	3		
	X	X	X	3	
		X	X	X	3

# Interview Survey: Months in Scope

Quarter 5 (FMLI171)					
Oct 2016	Nov 2016	Dec 2016	Jan 2017	Feb 2017	Mar 2017
X	X	X	3		
	X	X		2	
		X			1

# Research Design

- Create an HS-UCC-NAICS concordance (**product-consumption item-industry**), with HS-level trade data and NAICS-level industry data
- Create: 5-quarter FMLI file; 5-quarter MTBI file; 4-quarter FMLD file; 4-quarter EXPD file (“append” in Stata)
- Merge the CE source file into both 5-quarter MTBI and 4-quarter EXPD files
- Combine FMLI and MTBI into an Interview file and FMLD and EXPD into a Diary file. Calculate the expenditure shares by UCC and demographic characteristics for both “I” and “D” surveys separately, in two ways:
  - Expenditure as a share of total expenditure
  - Expenditure as a share of pre-tax income
- Merge the expenditure shares into the concordance. Calculate the expenditure-weighted consumption trade exposure measures



# Empirical Strategy

- Replication of Scheve & Slaughter (2001) and Blonigen (2011):
- Contribution to the existing literature:
  - Two variables to capture consumers' exposure to international trade: “weighted import penetration ratio” and “weighted applied tariff rate”
  - Imputing the ANES respondents' consumption patterns by matching them to consumers in the 2016 CE PUMD survey based on common demographic traits
    - **Average expenditure share** as “weight”;
    - Statistical matching using cells
- Logit binary response model:

$$\Pr(\text{Import Limits}_i = 1 | \pi_i) = \pi_i, \text{ and } \pi_i = \frac{1}{1 + e^{-\beta x_i}}$$

# Summary Statistics

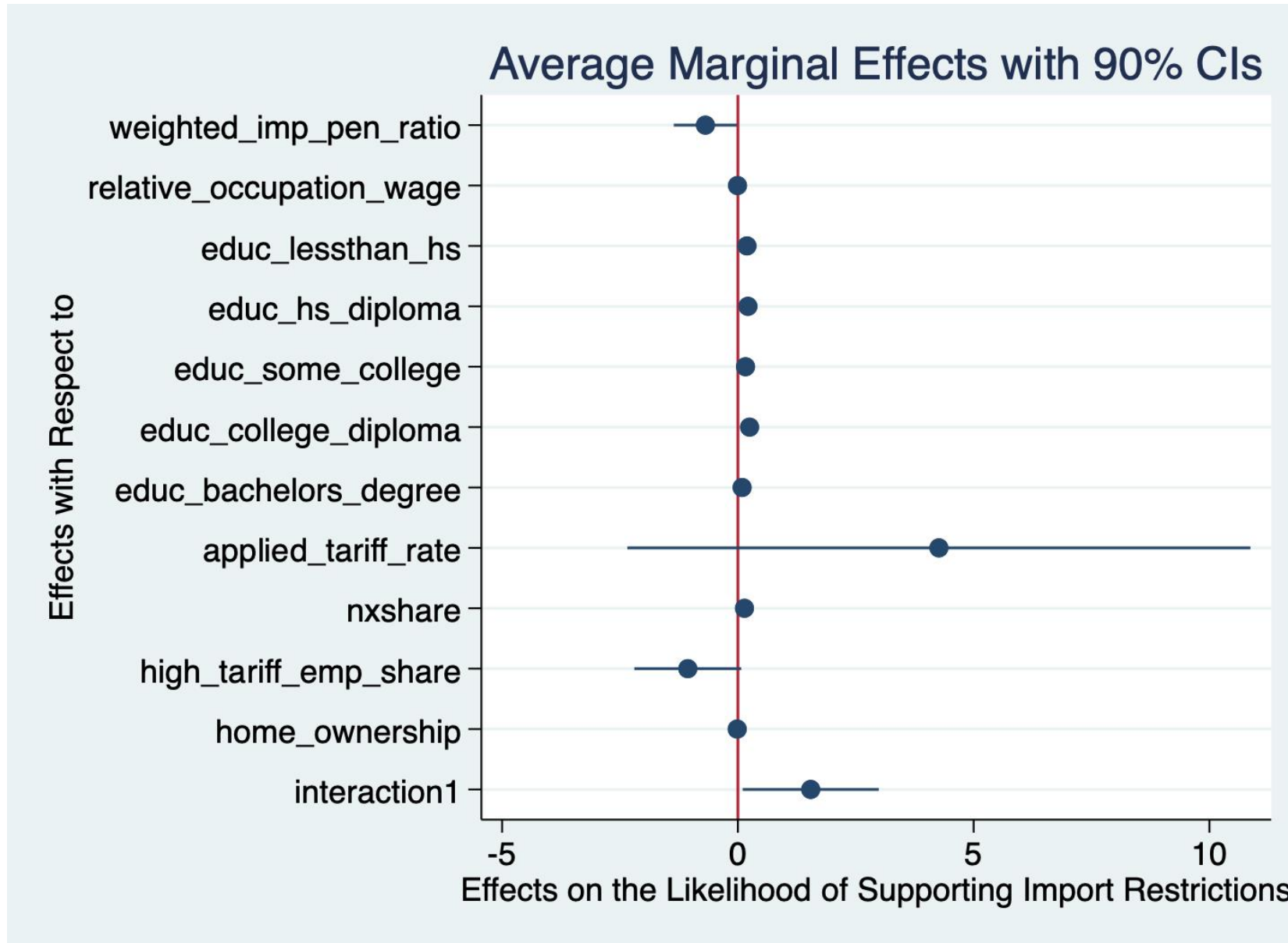
**Table 1: Survey Responses on Whether Individuals Favor or Oppose Limits on Foreign Imports**

	<b>Year 2016</b>		<b>Scheve &amp; Slaughter (2001a)</b>		<b>Blonigen (2011)</b>	
	Frequency	Percentage	Frequency	Percentage	Frequency	Percentage
Oppose ("0")	1039	37.78%	-	32.90%	-	37.90%
Favor ("1")	1711	62.22%	-	67.10%	-	62.10%
<b>Total</b>	<b>2750</b>	<b>100%</b>	<b>1736</b>	<b>100%</b>	<b>5224</b>	<b>100%</b>

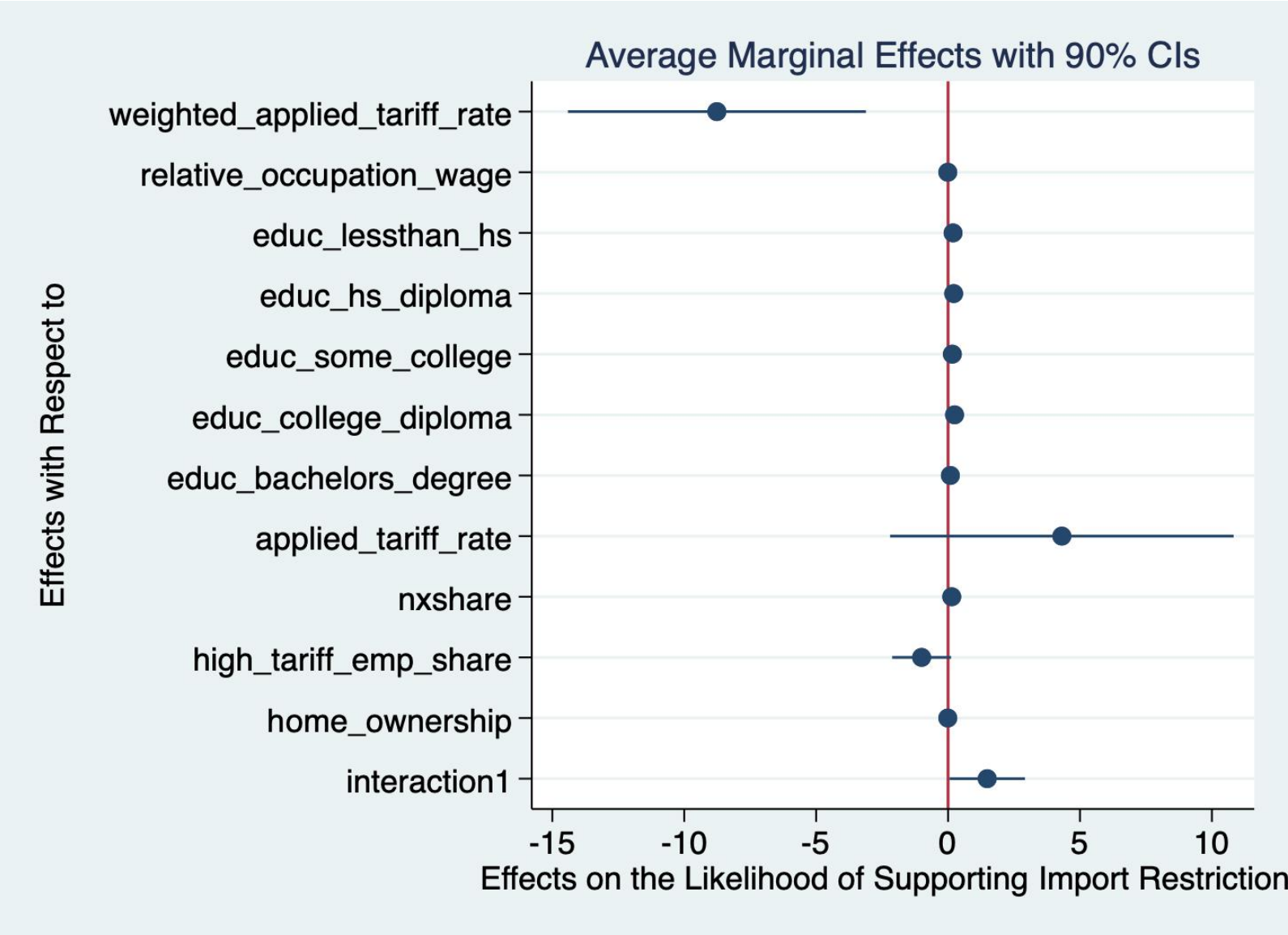
*Notes:* 4270 people responded to the ANES survey in 2016, among which 2750 respondents answered this question in the post-election survey. Scheve and Slaughter (2001a) uses the 1992 ANES survey; the summary statistics are based on 10 imputed datasets with 1736 observations in each dataset.

Blonigen (2011) uses the ANES surveys from 1986, 1988, 1992, 1996, and 1998, with 5224 observations in total.

# The Average Marginal Effects of Different Factors on U.S. Individuals' Trade Policy Views



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# Summary of Findings

- Education is the only consistently significant factor associated with the U.S. individuals' views on trade policy;
- Industry of employment variables are not consistently significant across specifications;
- A higher expenditure-weighted import penetration ratio is associated with a lower likelihood of support for additional import restrictions;
- A higher expenditure-weighted applied tariff rate is also associated with a lower likelihood of support for additional import restrictions

# Resources and Tips for using the PUMD Dataset

- [CE Survey PUMD Getting Started Guide](#)
- Stata sample do-files
- “Dictionary”: “ce-pumd-interview-diary-dictionary.xlsx”
- Comparing your results with the [publication tables](#) for reference
- Reaching out to the CE staff! 😊

# Appendix: Summary Statistics on Selected Variables

**Table 2: Descriptive Statistics for the Main Regressors in Baseline Specifications**

Variables	Mean	Standard Deviation	Minimum	Maximum
Import Limits	0.624	0.484	0	1
Relative Occupation Wage	1.158	0.620	0.437	2.741
Education Years	13.862	2.054	0	17
Sectoral Applied Tariff Rate	0.001	0.007	0	0.134
Sectoral Net Export Share	-0.033	0.367	-7.713	0.152
High Tariff Employment Share (C.D. Trade Exposure 1)	0.050	0.030	0.004	0.220
Net Import Employment Share (C.D. Trade Exposure 2)	0.168	0.046	0.073	0.359
Home Ownership	0.624	0.484	0	1
C.D. Trade Exposure 1 x Home Ownership	0.032	0.034	0	0.220
C.D. Trade Exposure 2 x Home Ownership	0.106	0.089	0	0.359
Media Exposure 1	5.611	1.903	0	7
Media Exposure 2	3.897	3.054	0	7

*Notes:* These are descriptive statistics for 2016. All variables, except for Relative Occupation Wage, Sectoral Applied Tariff Rate, Sectoral Net Export Share, and C.D. Trade Exposure Measures, are from the ANES. The observations reported only include respondents who answered the Import Limits question.

# Appendix: Hypothesized Signs for Selected Variables

Variables	Hypothesized Sign
Relative Occupation Wage	Negative
Education Years	Negative
Sectoral Applied Tariff Rate	Positive
Sectoral Net Export Share	Negative
Weighted Import Penetration Ratio	Negative
Weighted Applied Tariff Rate	Negative
Home Ownership	Negative
High Tariff Employment Share (C.D. Trade Exposure 1)	Positive
Net Import Employment Share (C.D. Trade Exposure 2)	Positive
C.D. Trade Exposure 1 x Home Ownership (Interaction 1)	Positive
C.D. Trade Exposure 2 x Home Ownership (Interaction 2)	Positive



# Appendix: Marginal effect

Table 1A: Marginal Effects of the Determinants of Support for Protection with Consumption Trade Exposure Measures

Variables	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 4
Weighted Import Penetration Ratio	-0.689* (0.405)	-0.704* (0.398)		
Weighted Applied Tariff Rate			-8.762** (3.410)	-8.871** (3.405)
Relative Occupation Wage	-0.00881 (0.0217)	-0.00939 (0.0216)	-0.00905 (0.0216)	-0.00960 (0.0216)
Education: Less Than High School	0.193** (0.0772)	0.199** (0.0780)	0.191** (0.0770)	0.197** (0.0778)
Education: Having a High School Diploma	0.213*** (0.0416)	0.217*** (0.0421)	0.213*** (0.0414)	0.217*** (0.0419)
Education: Some College	0.162*** (0.0420)	0.164*** (0.0417)	0.163*** (0.0419)	0.165*** (0.0416)
Education: Having a College Degree	0.248*** (0.0464)	0.251*** (0.0459)	0.247*** (0.0463)	0.250*** (0.0459)
Education: Having a Bachelor's Degree	0.0898*** (0.0314)	0.0933*** (0.0315)	0.0887*** (0.0313)	0.0922*** (0.0314)
Applied Tariff Rate	4.263 (3.989)	4.434 (3.975)	4.314 (3.931)	4.492 (3.920)
Net Export Share	0.140* (0.0725)	0.139* (0.0724)	0.140* (0.0717)	0.140* (0.0716)
High Tariff Employment Share (C.D. Trade Exposure 1)	-1.062 (0.684)		-1.002 (0.674)	
Net Import Employment Share (C.D. Trade Exposure 2)		-1.050** (0.485)		-4.966** (2.365)
Home Ownership	-0.0148 (0.0620)	-0.0775 (0.112)	-0.00920 (0.0619)	-0.0696 (0.111)
C.D. Trade Exposure 1 x Home Ownership (Interaction 1)	1.545* (0.872)		1.484* (0.865)	
C.D. Trade Exposure 2 x Home Ownership (Interaction 2)		0.838 (0.579)		3.945 (2.826)

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Thank you!