

# Gender and Income Inequality in United States Tariff Burden

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# Motivation

- ▶ Average U.S. tariffs are low, but some goods are subject to relatively high tariffs:
  - Apparel: 12.8%
  - Canned tuna: 12.3%
- ▶ Consumption patterns vary across different groups of consumers:
  - Income deciles
  - Gender

# Motivation

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Difference in tariffs + difference in consumption patterns

$\stackrel{?}{=} \text{different tariff exposure}$

# Literature

- ▶ Different types of consumer spend on different consumption baskets:  
Henry (2014), Fajgelbaum and Khandelwal (2016)
- ▶ Different groups of consumers may face different average tariff rates:  
Gresser (2002), Moran (2014)
- ▶ Within product tariffs may differ:  
Barbaro (2007), Taylor and Dar (2015), Furman, Russ, and Shambaugh (2017)

# Measuring tariff burden

- ▶ Objective: estimate the effects of tariffs on the purchasing power of households
- ▶ We calculate tariff burden (in USD) as a compensating differential: a change in HH total expenditure that is needed to completely offset an increase in product prices due to tariffs
- ▶ Use Consumer Expenditure Survey data to construct expenditure shares for a large number of product categories and different consumer groups (differentiated by income or gender)

# Example

Varying expenditure shares across income groups

90/10 Ratio	50/10 Ratio
Photo studios (10.77)	Photo studios (6.80)
Watches (8.95)	Footwear repair (5.68)
Domestic services (7.97)	Jewelry (4.66)
Social assistance (0.14)	Higher education (0.15)
Funeral and burial services (0.12)	Social assistance (0.13)
Home health care (0.05)	Home health care (0.01)

# Estimating price changes due to tariffs

... is a key part of this exercise

Two methods for estimating price changes:

1. Exogenous price changes, assuming
  - ▶ 100% pass-through on imports
  - ▶ 0% or 50% pass-through on domestic goods
2. Use a computable general equilibrium (CGE) model called USAGE

# Data

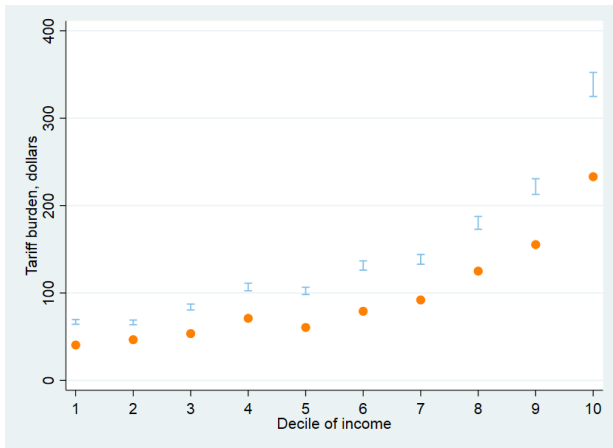
We link HH consumption data, tariff data, and USAGE model data

- ▶ U.S. tariff schedule from USITC's DataWeb
- ▶ Consumption data for 637 items and 40,000 households from the Consumer Expenditure Survey (BLS)

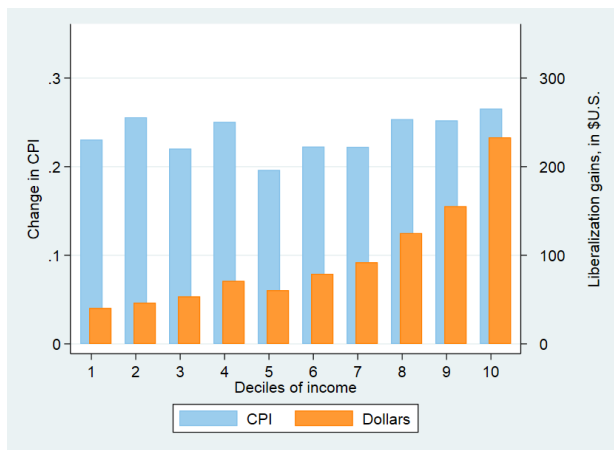


## Results: Tariff burden across income deciles

# Tariff burden across income deciles



# Tariff burden across income deciles



# Tariff burden across income deciles

## Summary

- ▶ Average U.S. HH paid \$96 in tariffs per year in 2015
- ▶ Rich HH pay more tariffs than poor HH (because they spend more)
- ▶ As a share of total HH consumption expenditure, tariffs are 0.25% across income deciles (a flat consumption tax)
- ▶ Therefore, tariffs are a regressive tax on income (concurring with the existing literature)

## Results: Tariff burden across genders

# Let's talk about apparel...

## Variation in tariff rates

- ▶ Apparel products are responsible for 75% of the total tariff burden on U.S. HH in 2015
- ▶ Apparel is differentiated by gender:  
95% of apparel tariff burden is from gendered apparel
- ▶ Average applied tariff rate on women's apparel is higher than on men's:  
in 2015, these rates were 14.9% and 12.0%
- ▶ Household expenditure share on women's apparel is nearly twice of that of men's:  
0.7% of total on men's apparel, 1.2% on women's

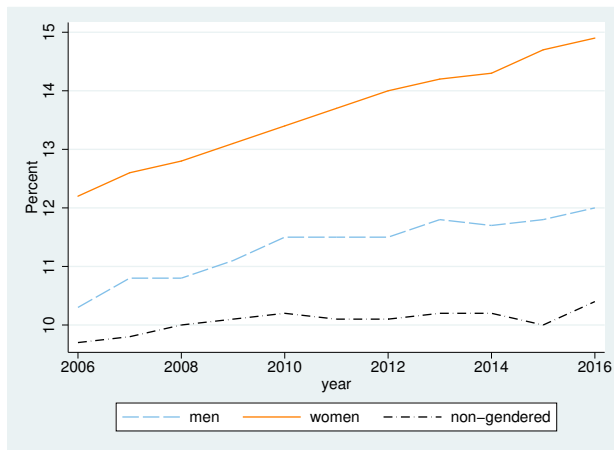
# Variation in statutory tariff rates

Selected HTS subheadings

	Men's	Women's	Non-gendered
Cotton suits	13.5%	9.4%	
Cotton underpants	7.4%	8.5%	
Jackets and blazers	22%	37.1c/kg + 16.8%	
Wool gloves			31.3c/kg + 7%
Wool scarves			9.6%
Wool suits (knitted)	33.8c/kg + 10%	13.6%	
Wool suits (not knitted)	7.5%	14%	

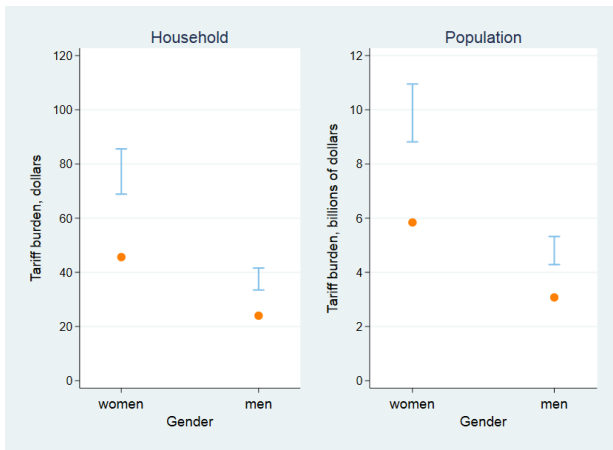
# Variation in applied tariff rates

Average applied tariffs, by gender





# Tariff burden on apparel purchases in 2015, by gender



## Summary of results

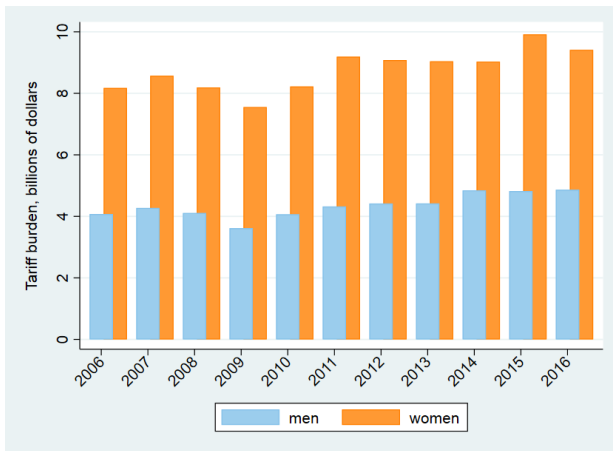
- ▶ The burden of women's apparel tariff is **twice** the men's in 2015, regardless of how prices changes were estimated
- ▶ The gap is \$2.8 bil if using price changes estimated by the CGE model
- ▶ The gap is \$5.1 bil if assuming pass-through rates of 1 for imported goods and 0.25 for domestic goods

## Changes over time

Between 2006 and 2016:

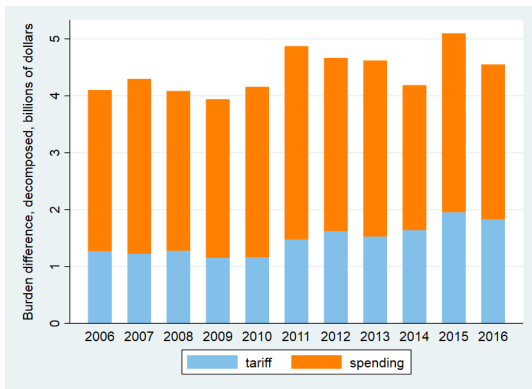
- ▶ Households increased spending on apparel and average applied tariffs went up
- ▶ Over the time period, average applied tariff rate on women's apparel was consistently higher than on men's and women spent more on apparel

# Population tariff burden on men's and women's apparel



# Breaking down the gender gap

## Tariff and spending differences

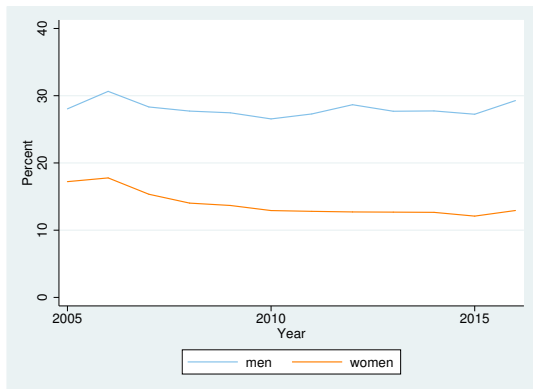


## Why the increase in apparel tariff burden gender gap?

- ▶ Spending is going up for both men's and women's apparel at roughly the same rate
- ▶ Average applied tariff rate on women's apparel is growing faster than on men's
- ▶ Gender gap in tariff burden increased 11% due to growth in average applied tariff rate on women's apparel

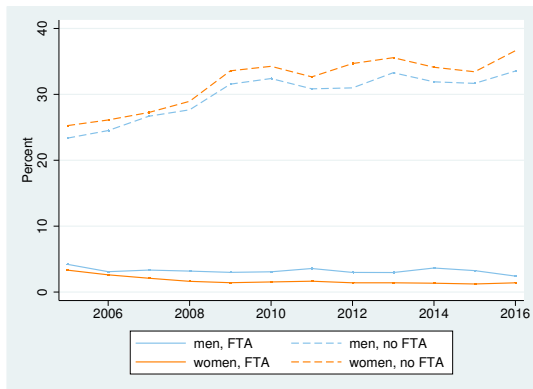
# Breaking down the gender gap

Share of imports from FTA countries



# Breaking down the gender gap

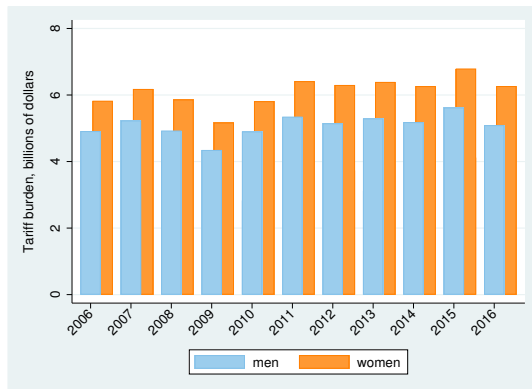
Average tariffs on apparel from FTA and non-FTA countries





# Breaking down the gender gap

Population tariff burden on non-FTA sourced apparel



## Summary of results

- ▶ A greater share of men's apparel comes from non-FTA countries
  - 33-46% of women's apparel came from China in 2005-16
  - 17-26% of men's apparel came from China in 2005-16
  - 7-12% of men's apparel came from Mexico in 2005-16  
(very little of women's)
- ▶ Controlling for FTA vs non-FTA sources, there is only a small difference between men's and women's applied tariffs
- ▶ Tariff burden on women's apparel from non-FTA countries is higher than on men's

# Conclusions

- ▶ Tariffs are a flat consumption tax (and, therefore, a regressive tax on income)
- ▶ Tariff burden on apparel (75% of the total tariff burden on U.S. households) is twice as high for women's than for men's apparel. Gender gap is growing.
- ▶ Gender gap in apparel is explained by differences in spending, sourcing of imports, and slightly higher applied tariffs on women's apparel from non-FTA countries.