

# The Largest Sin Taxes Have Smaller than Average Pass- Through

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Prepared for American Social Science Association Annual Meetings

January 2022

# Introduction

- Tax Incidence (pass-through)
  - Who bears the actual burden of taxes
- Sin Taxes
  - Excise tax on specific goods and services
  - **Tobacco**, alcohol, carbonated drinks
- Gulf Countries
  - 50% to 100% excise taxes
  - Decision made collectively by Gulf Co-operation Council...
  - ...to diversify the economy, generate revenue, and discourage use

# Why is this important?

- Very large tax introduction
  - Represent bold idea
  - But they are rare
  - Usually, taxes are increased in small increments (1% to 25%)
- The prediction that taxes discourage consumption
  - Depends on how much it increases the final price
  - Large tax increases can significantly increase the final price
  - But limited evidence of their actual impact

# Tax Introduction Dates

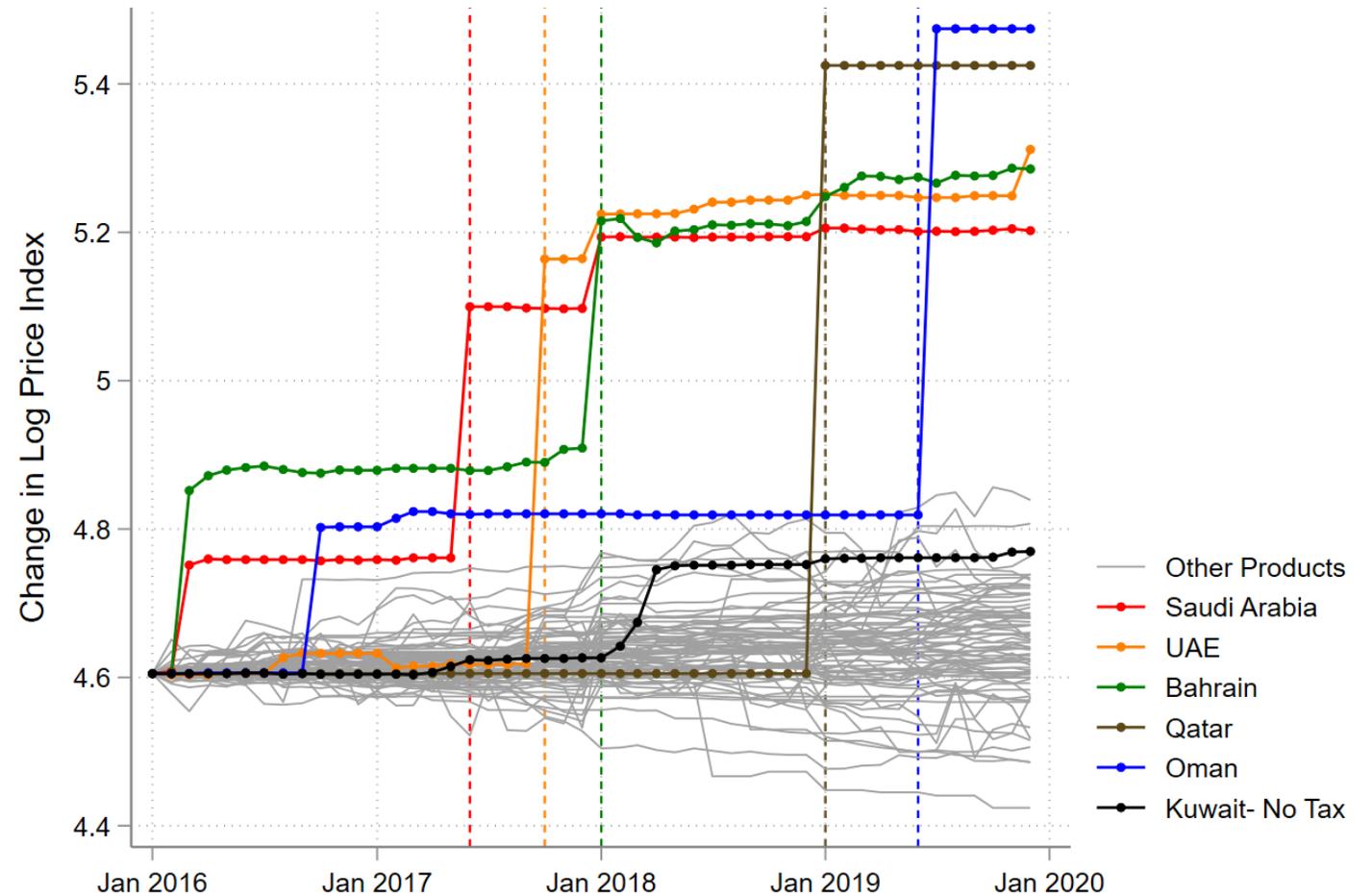
	<b>Saudi Arabia</b>	<b>UAE</b>	<b>Bahrain</b>	<b>Qatar</b>	<b>Oman</b>	<b>Kuwait</b>
<b>Alcohol (100%)</b>	Jun-17	Oct-17	Jan-18	Jan-19	Jun-19	None
<b>Carbonated Drinks (50%)</b>	Jun-17	Oct-17	Jan-18	Jan-19	Jun-19	None
<b>Energy Drinks (100%)</b>	Jun-17	Oct-17	Jan-18	Jan-19	Jun-19	None
<b>Tobacco Products (100%)</b>	Jun-17	Oct-17	Jan-18	Jan-19	Jun-19	None
<b>VAT (5%)</b>	Jan-18	Jan-18	Jan-19	None	None	None
<b>High Import Duty on Tobacco</b>	Mar-16	None	Jan-16	None	Oct-16	None

# Data and Research Design

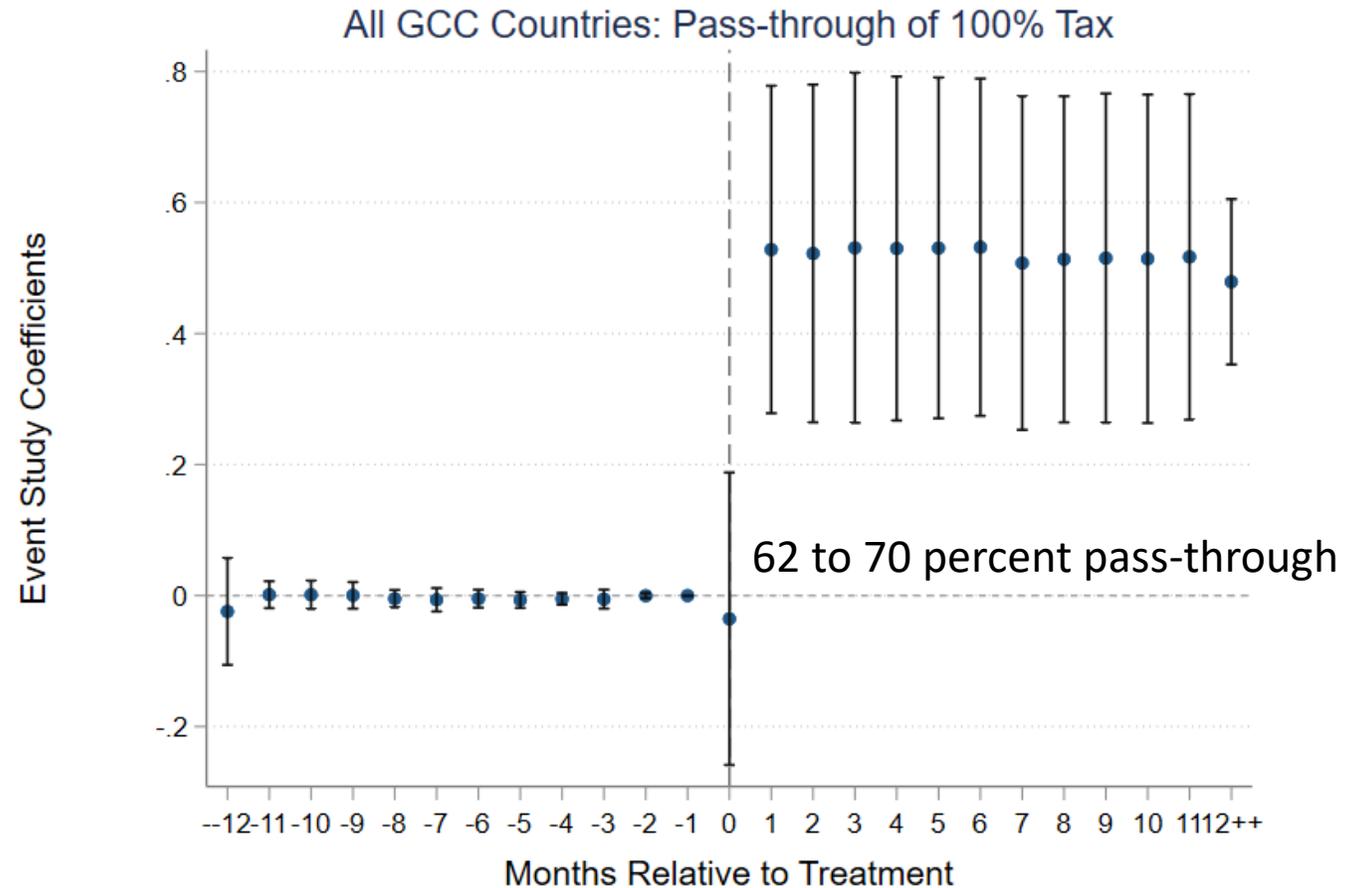
- Monthly data on price index
  - Aggregate 12 categories – today
  - Up to 70 categories – in progress
- Only Tobacco Products – today
  - Other taxed product – in progress
- Difference-in-Differences Event Study
  - Compare prices of tobacco vs. other products within the country
  - Compare prices of tobacco in treated vs control countries

Price Index of Tobacco  
(Connected lines) vs. Other Products (Gray Smooth lines)

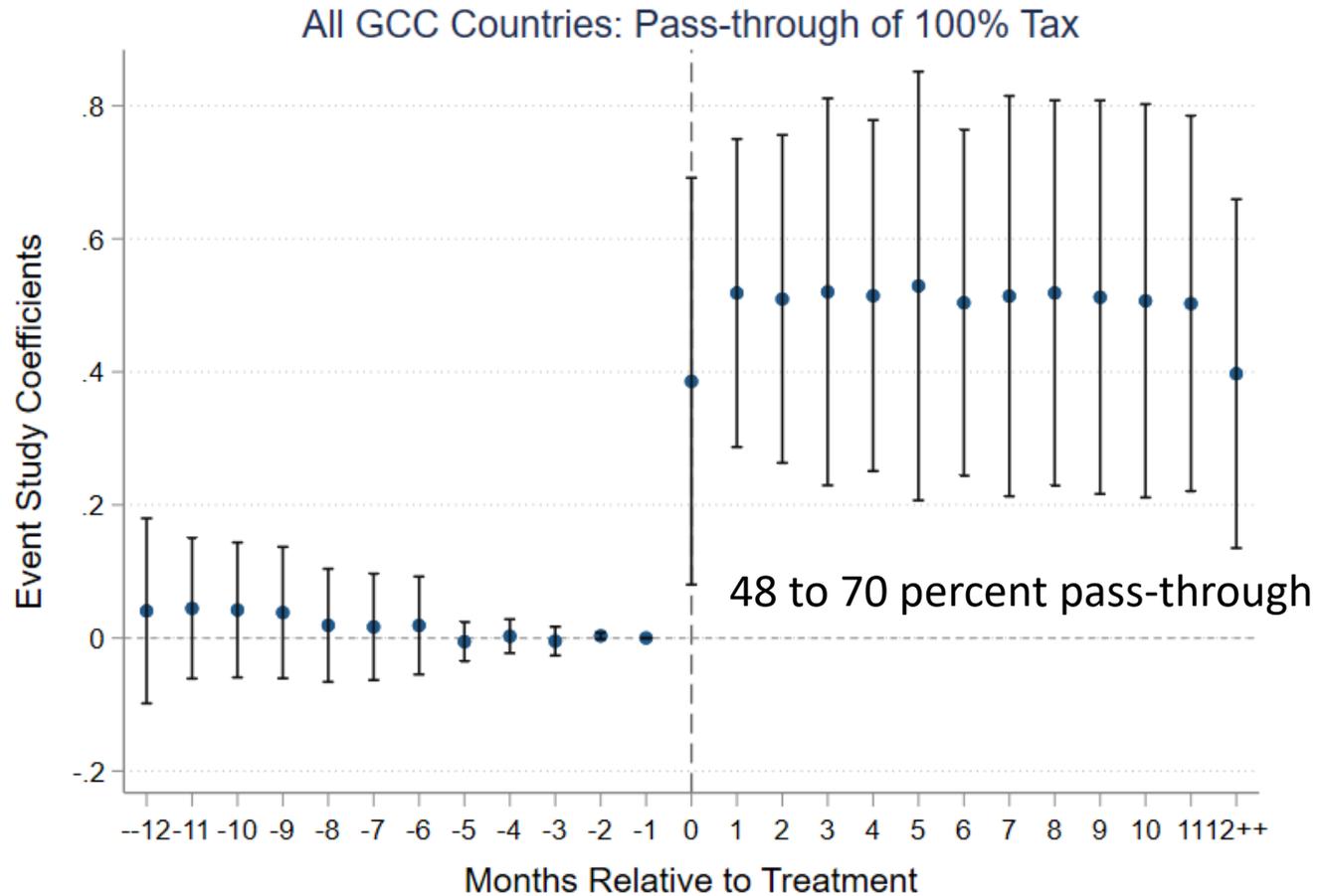
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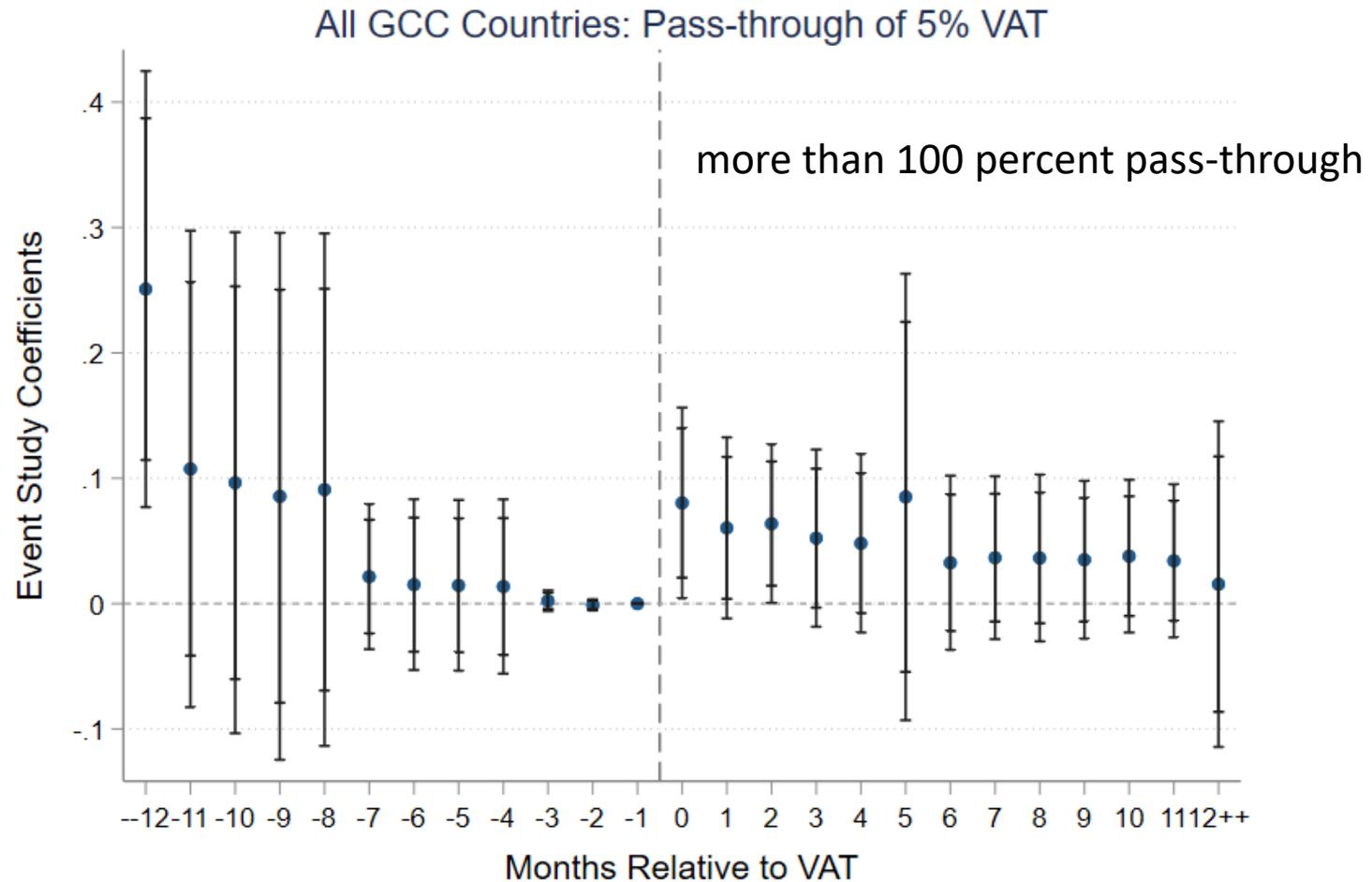
# Using Data on All Products, All Countries: 100% Tobacco Tax



# Using data on Tobacco Products Only, All Countries: 100% Tobacco Tax



# Using Data on Tobacco Products Only, All Countries – 5% VAT



# Conclusion

- Very preliminary research
- Consistent with previous literature
  - 5% VAT has more than 100% pass-through
- But large tax increases
  - That hasn't been studied yet
  - Only show at most 70% pass-through