



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

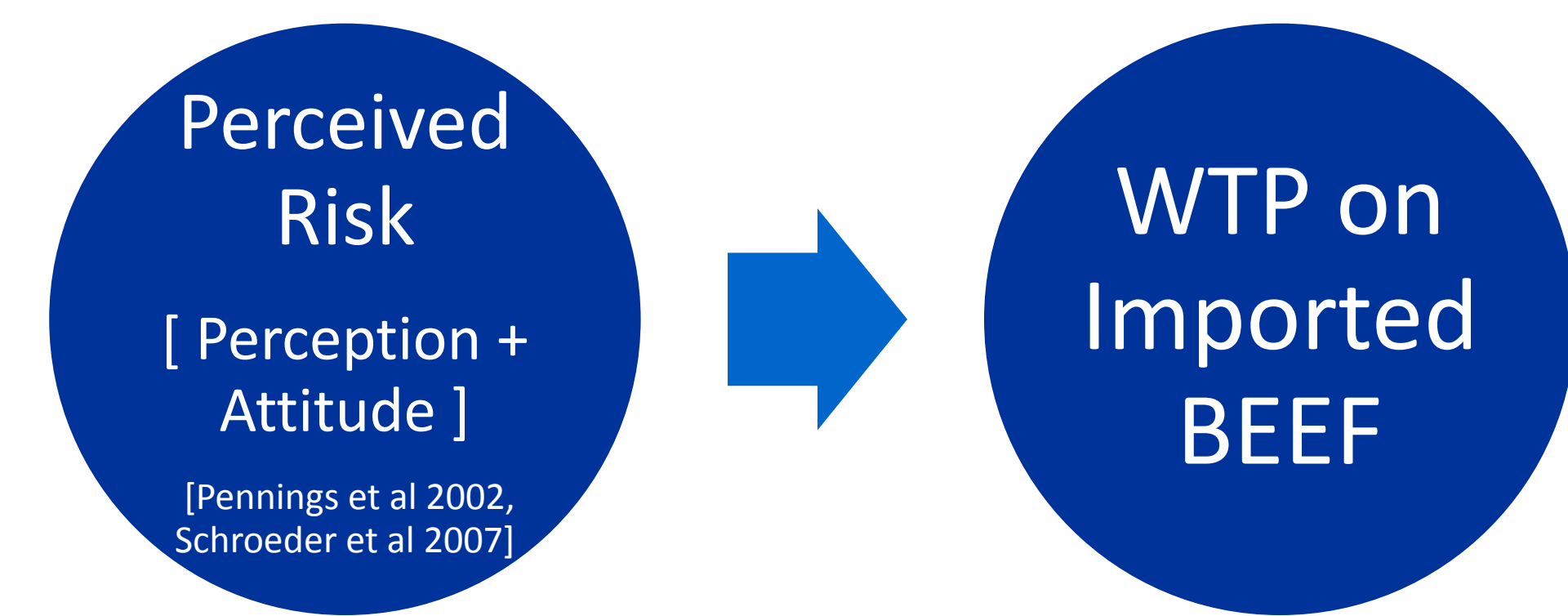
*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

*No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.*

## Introduction

- The U.S. country-of-origin labeling (COOL) provision requires fresh beef be labeled with its origin country.
- Several studies indicated that U.S. consumers were willing to pay less for imported beef, but the underlying reason is less well studied and understood.

## Objective



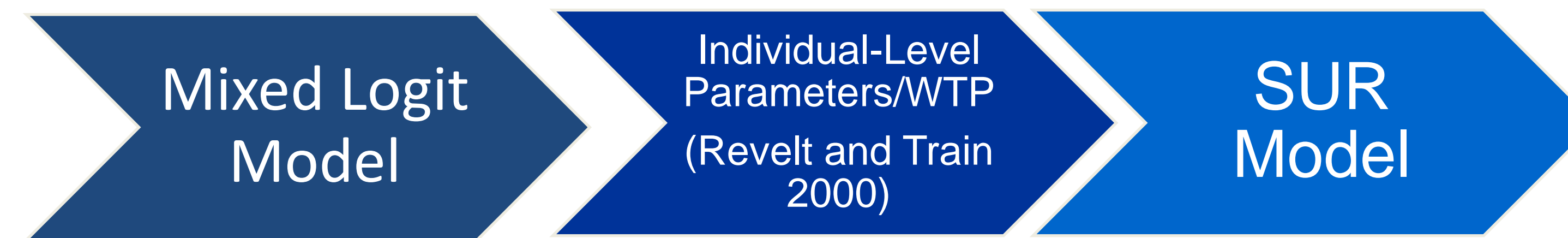
## Choice Experiment

- N= 1079
- 10-14 choices from each individual
- Fractional Factorial Design
- 191 choice sets

Price (\$/lb)	\$5.50	\$9.00	\$12.50	\$16.00
Country of Origin	USA	Canada	Australia	
Production Practices	Approved Standards	Natural		
Food Safety Assurance	None	Animal Tested	Traceable	Traceable and Animal Tested
Tenderness	Uncertain	Assured Tenderness		

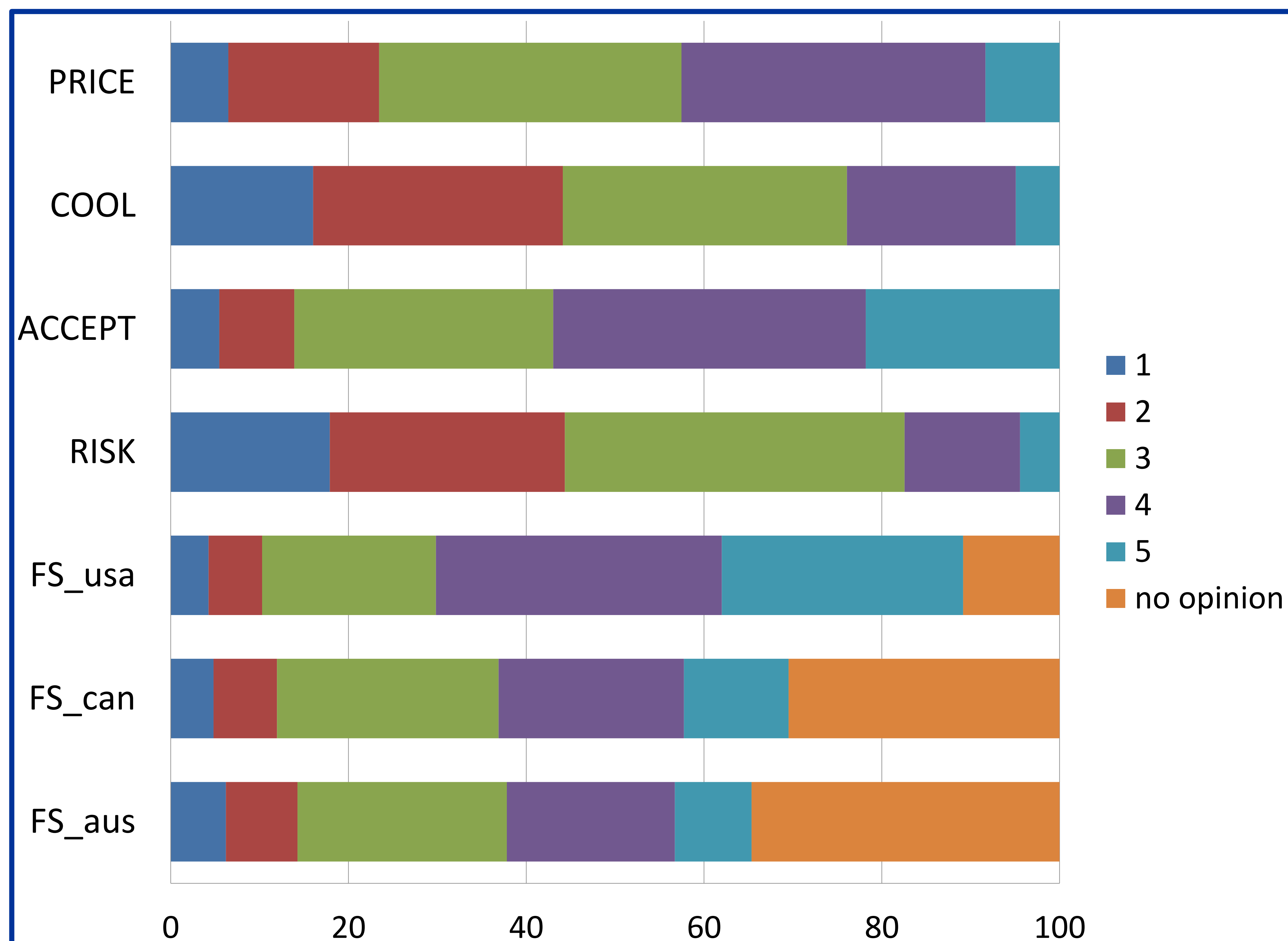
Steak Attribute	A	B	C
Price (\$/lb.)	\$12.50	\$16.00	
Country of Origin	Australia	Canada	I would not purchase any of these products
Production Practice	Approved Standards	Natural	
Tenderness	Uncertain	Assured Tenderness	
Food Safety Assurance	Traceable and Animal Tested	None	
I would choose ...	○	○	○

## Econometric Method

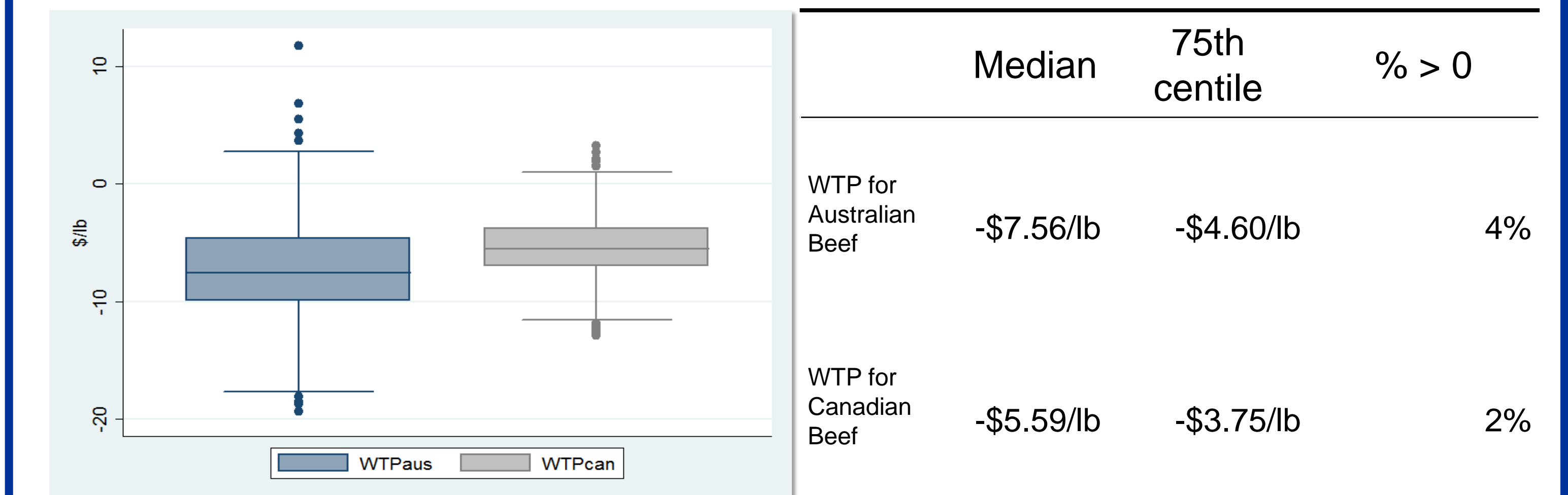


## SUR Regressors

Variable	Corresponding Survey Question
COOL	I purchase meat based on country of origin (1 = strongly disagree ... 5 = strongly agree)
PRICE	I purchase meat based on price (1 = strongly disagree ... 5 = strongly agree)
RISK	When eating beef, I am expose to ... (1 = very little risk ... 5 = a great deal of risk)
ACCEPT	I accept the risk of eating beef (1 = strongly disagree ... 5 = strongly agree)
FS_can	What is your perception of the level of food safety of beef by country of origin? (1 = very low ... 5 = very high)
FS_aus	
FS_usa	



## Individual-Level WTP



## SUR Result

	WTP for Australian Beef	WTP for Canadian Beef
Age	-0.02**	-0.02***
Income	0.00	0.00
Education	0.18***	0.07*
Male	-0.11	0.03
Child	-0.08	0.02
Perceived food safety level on beef by country of origin (FS_aus / FS_can)	Very Low	-1.83***
	Low	-0.55
	Moderate	-0.55**
	High	1.69***
Very High	1.23***	1.05***
Buy based on COOL	-0.45***	-0.19***
Buy based on PRICE	0.34***	0.14*
Beef is RISKY	0.01	0.15*
ACCEPT risk in beef	0.28**	0.12
Constant	-12.10***	-6.48***
R <sup>2</sup> for WTPaus		0.07
R <sup>2</sup> for WTPcan		0.11
Bruesch-Pagan Test Chi(1)		60.32***

\*\*\*, \*\*, \* correspond to significance at 1%, 5%, and 10% level

## Conclusion

- Consumers are willing to pay modestly less for imported beef than domestic beef.
- Perceived safety level is strongly correlated to WTP for beefsteak from both countries.
- WTP for Canadian beef is positively correlated with risk perception: the more one perceived beef is risky, the higher WTP for Canadian beef.
- WTP for Australian beef is negatively correlated with risk aversion: the higher the willingness to accept risk, the higher the WTP for Australian beef.
- Perceived Risk appears to be promising in explaining WTP for risky food.
- Risk Communication, i.e. convincing that beef from Australia and Canada is as safe as domestic beef could increase WTP.

## References

- Pennings, J. M. E., Wansink, B., and Meulenberg, M. T. G. 2002. A note on modeling consumer reactions to a crisis: The case of the mad cow disease. *International Journal of Research in Marketing*, 19(1): 91-100
- Revelt, D. and Train, K. 2000. Customer-specific taste parameters and Mixed Logit: Households' choice of electricity supplier.
- Lim, K. H., Hu, W., Maynard, L. J., and Goddard, E. forthcoming. US Consumers' Preference and Willingness to Pay for Country-of-Origin-Labeled Beef Steak and Food Safety Enhancements. *Canadian Journal of Agricultural Economics*: