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**When Certification Programs to Ensure  
Compliance with Foreign Standards Enhance  
Trade: The Case of Brazilian Beef Exports**

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*This presentation does not represent in any way the views of  
ERS/USDA, the USITC or any of its individual Commissioners*



# Objective

- To estimate the costs *vs.* benefits to Brazil's beef export industry of adopting certification (private producer) programs to comply with foreign standards.
- To quantify the cost of measures to eradicate foot and mouth disease (FMD) in Brazil from Agricultural Ministry data.
- To quantify the cost of certification programs to have traceability information from firm-level survey data.
- To quantify the trade impacts of FMD eradication and certification programs.



# Outline

- Brazil's beef sector
- U.S. and global beef exports before and after 2003 BSE bans
- GTAP simulations and modeling of FMD eradication in Brazil
- Quantifying direct effects of removing import restrictions due to FMD
- Impact of BSE bans on Brazilian beef exports under different FMD and certification conditions in Brazil
- Conclusions

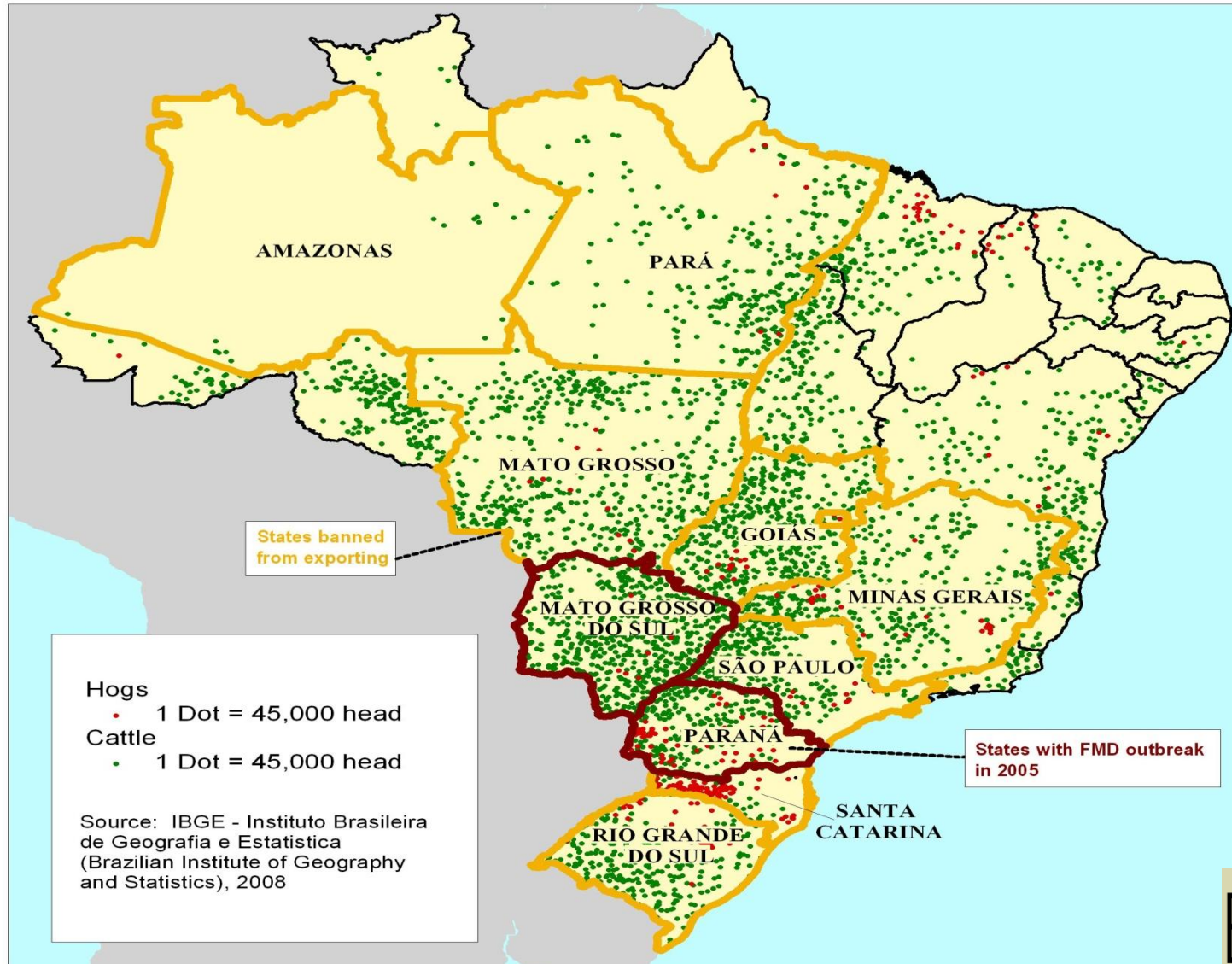


# Brazil is a key player in the global beef market

- Largest commercial herd: 185.2 million head; produces beef from grass-fed cattle.
- World's largest beef exporter (in volume) since 2004; 22% of world market.
- Brazilian beef is exported to virtually every continent: the EU accounts for nearly 60% of Brazil's beef exports; other important markets include the Middle East, Russia, Asia, Chile and the United States (processed beef).
- The second largest consumer market (7.4 million tons) and the fourth largest in per capita consumption.
- Mato Grosso do Sul is Brazil's most important beef producing state.



# Last Foot and Mouth Disease (FMD) outbreak and major livestock producing areas

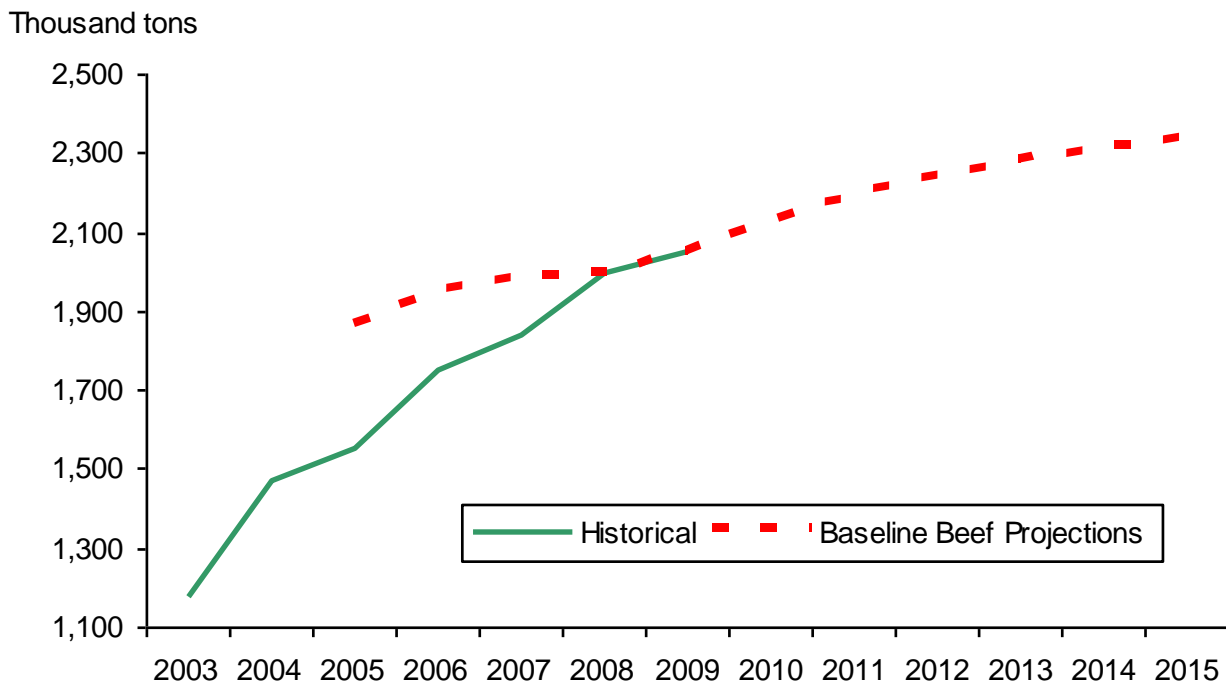


# Overcoming sanitary and trade barriers in key consumer markets is a priority

- Brazil's recent efforts focus on FMD eradication and implementation of certification programs.
- There are marked differences between government eradication and certification programs to comply with foreign private standards.
- The government program to eradicate FMD in Brazil increases producer costs by 14.2%.
- Implementation of certification programs adds 10.9% to costs of production.



# Cost to Brazilian beef sector of lost exports is about \$700 million in 2005-08



Sources: USDA Agricultural Projections to 2015, OCE-2005-1, USDA, Office of the Chief Economist, World Agricultural Outlook Board, February 2006.



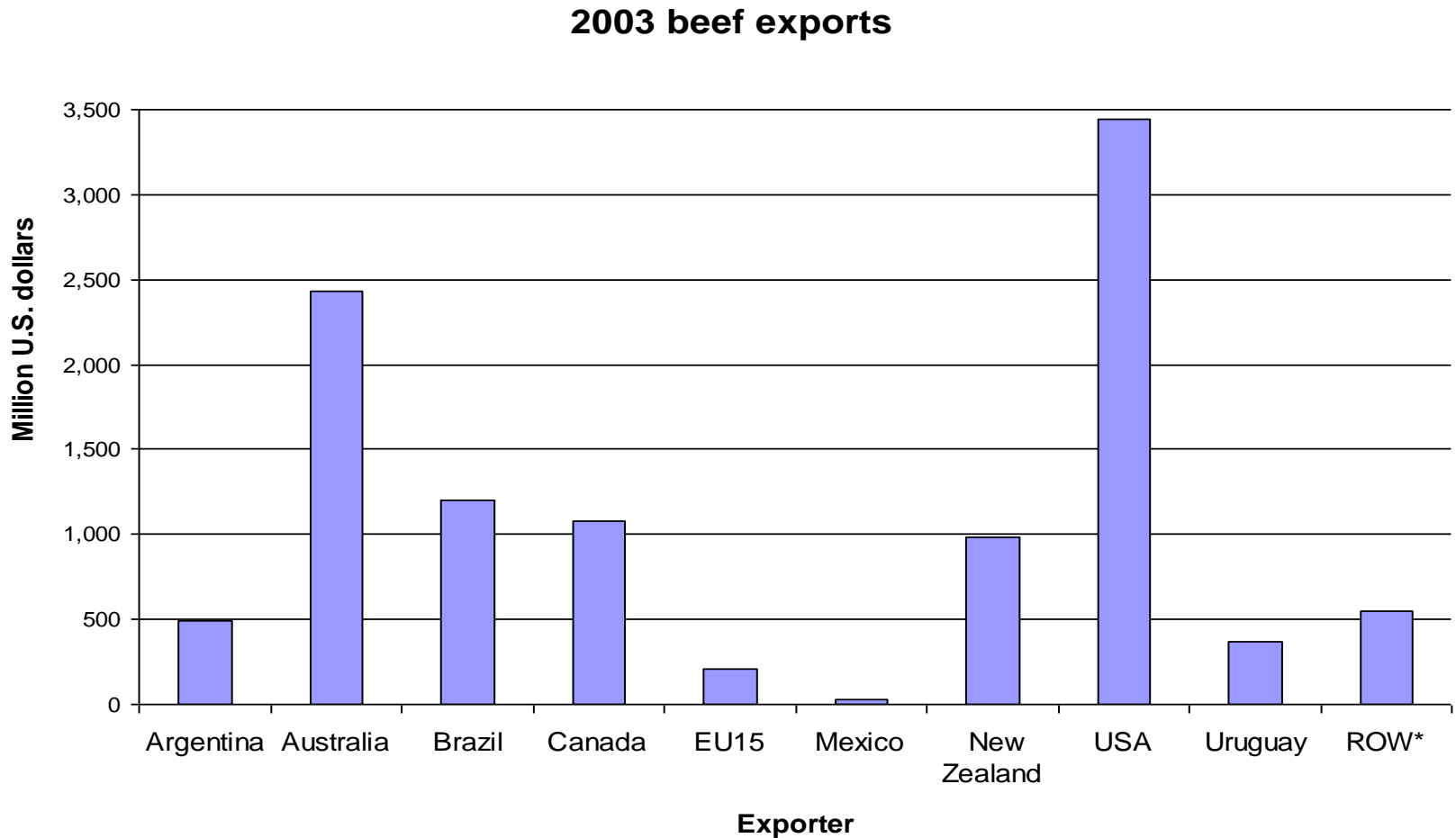
# FMD Situation in Brazil in 2009

*According to OIE. General and targeted surveillance.*



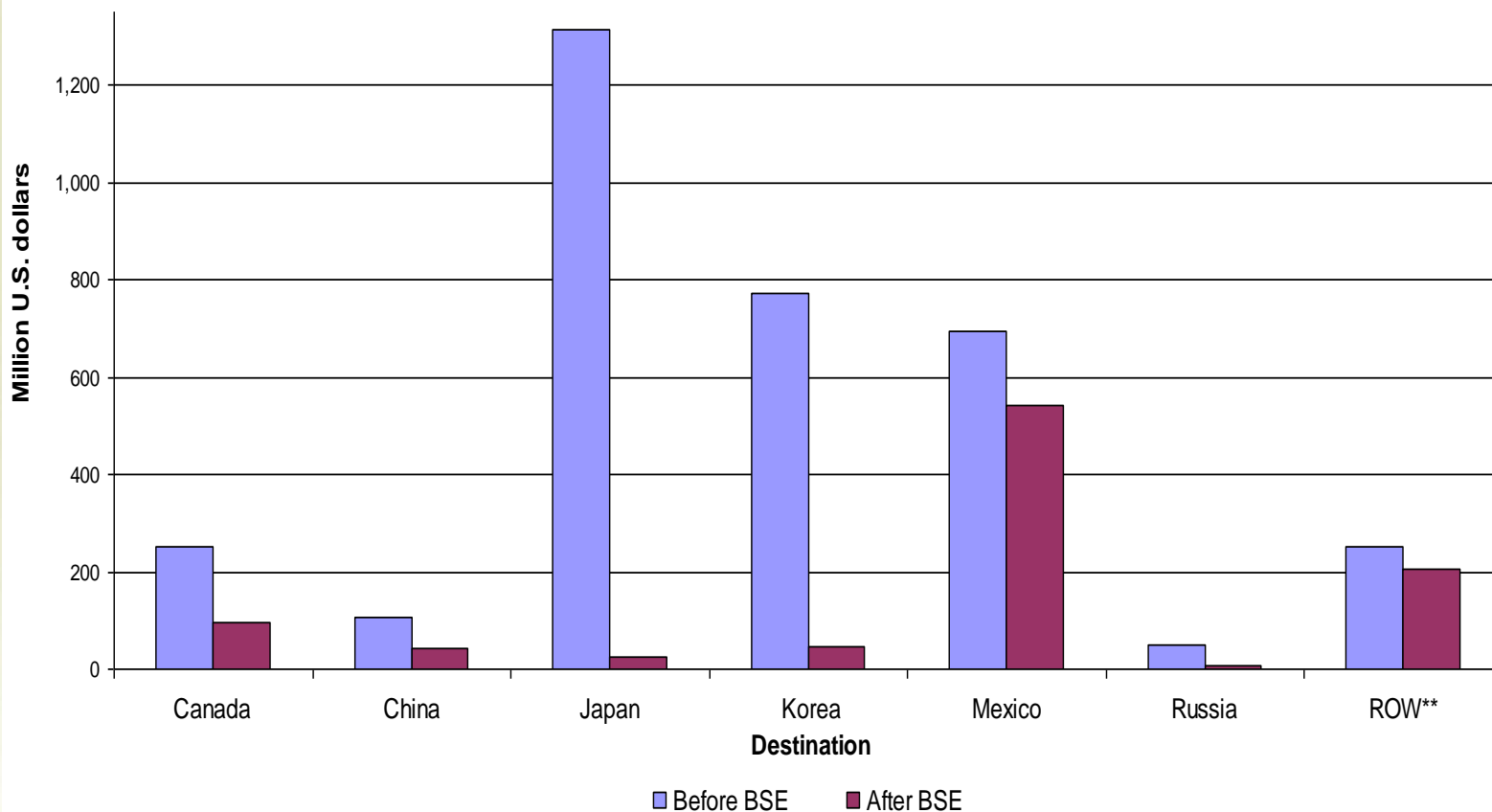


# U.S. was largest beef exporter in 2003



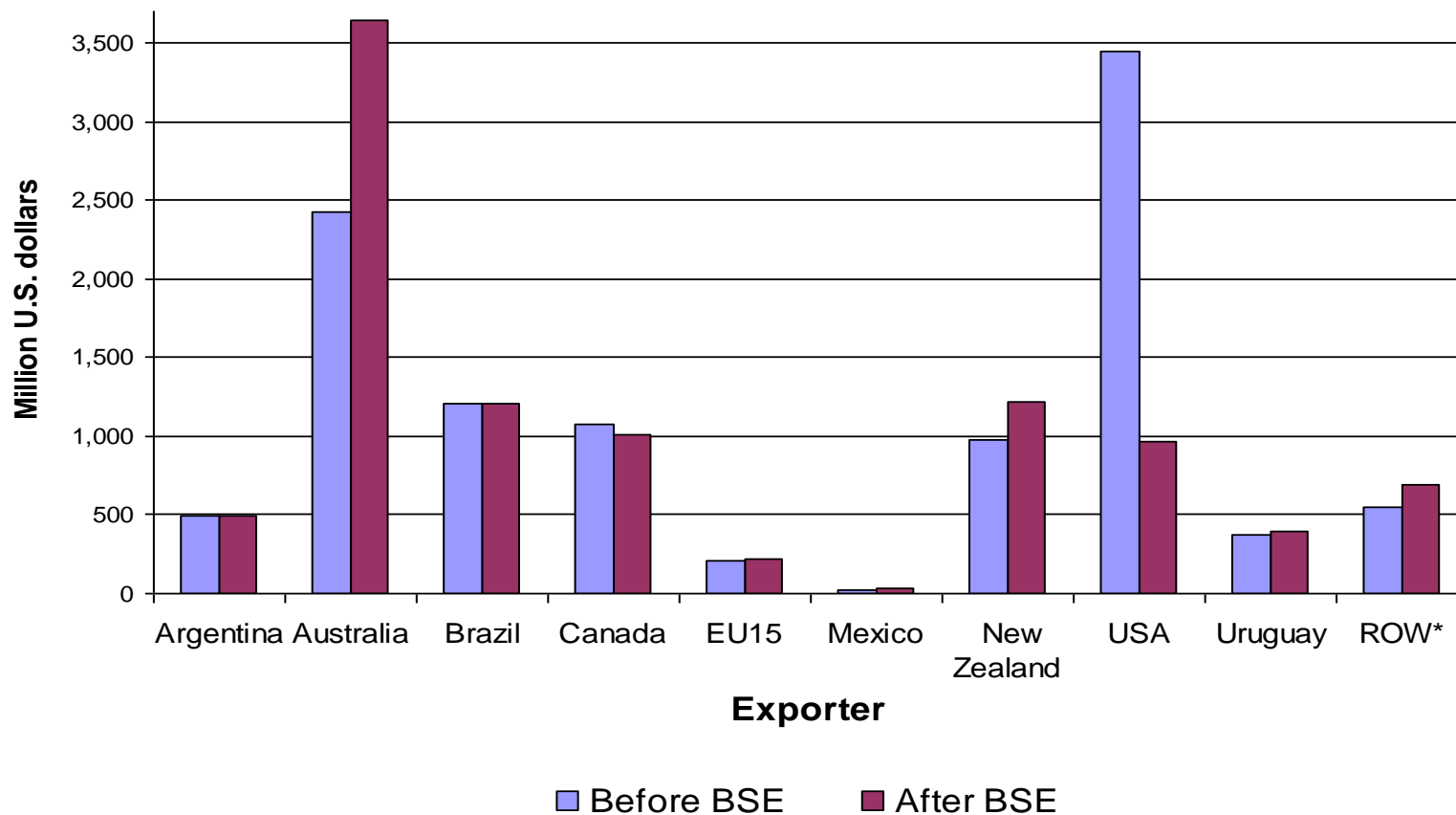
# But several countries banned U.S. beef following discovery of BSE in Dec 2003

U.S. beef exports before and after BSE bans

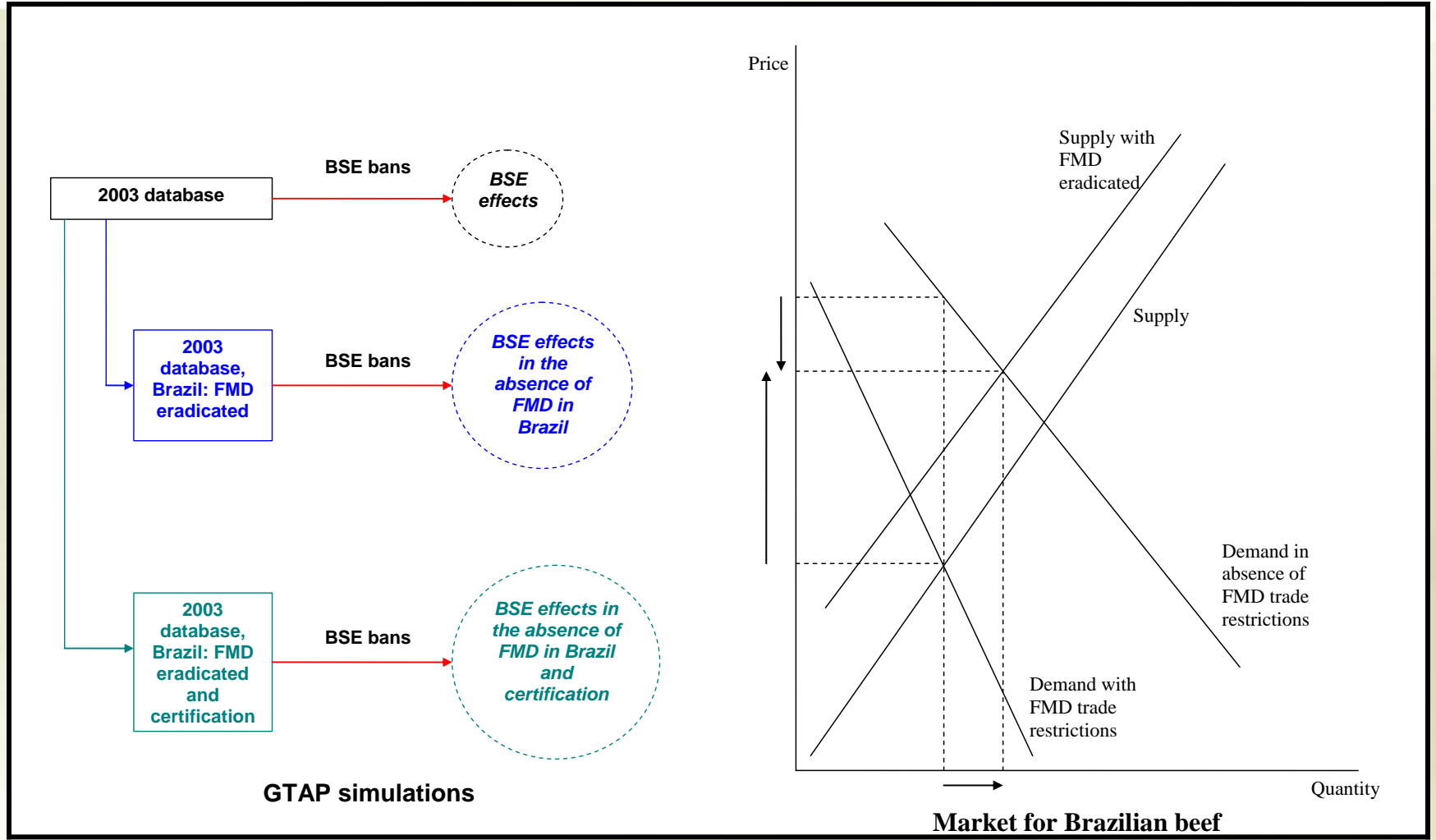


# Brazil was not able to expand its exports to markets that banned U.S. beef

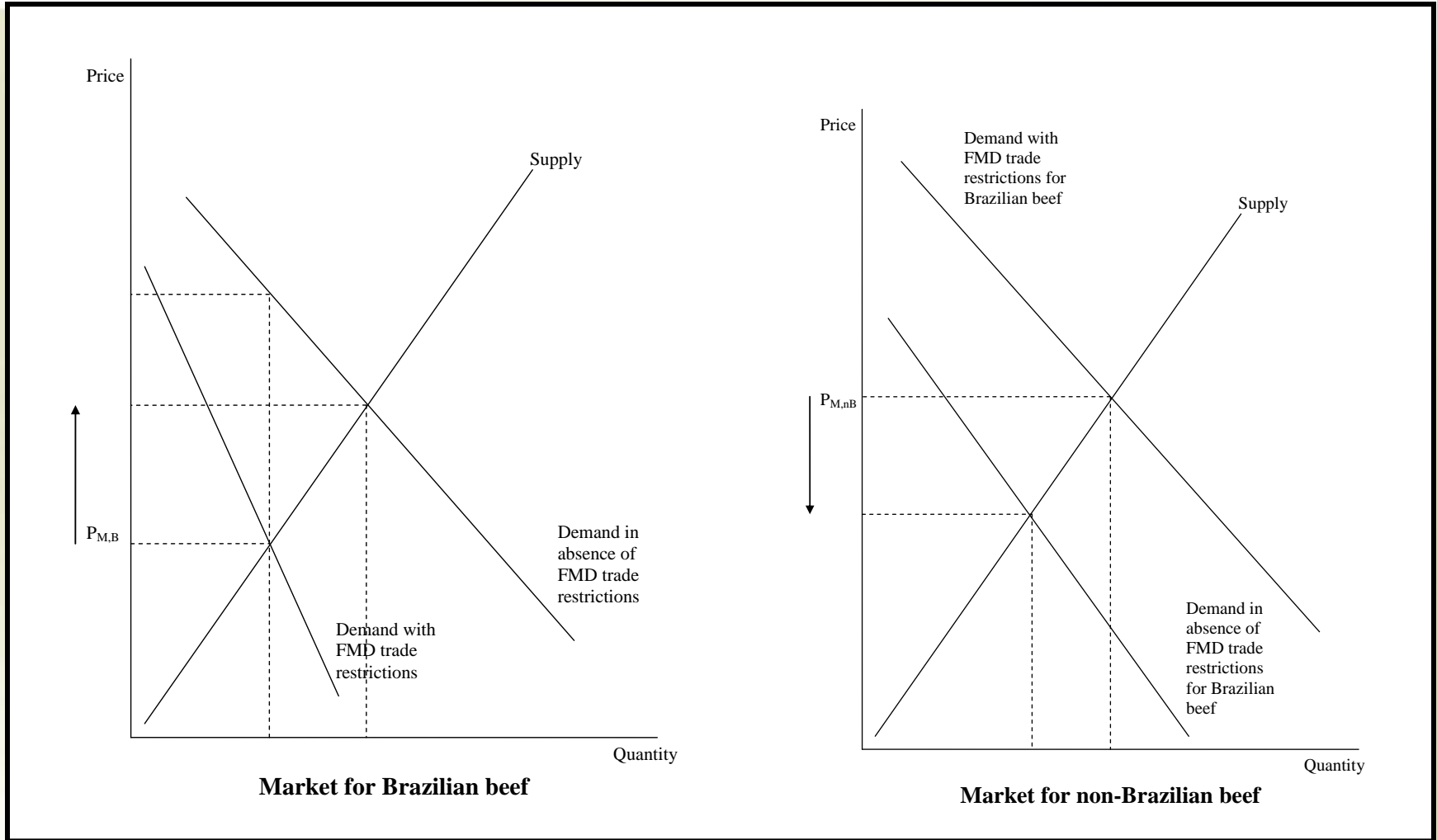
Beef exports before and after BSE bans



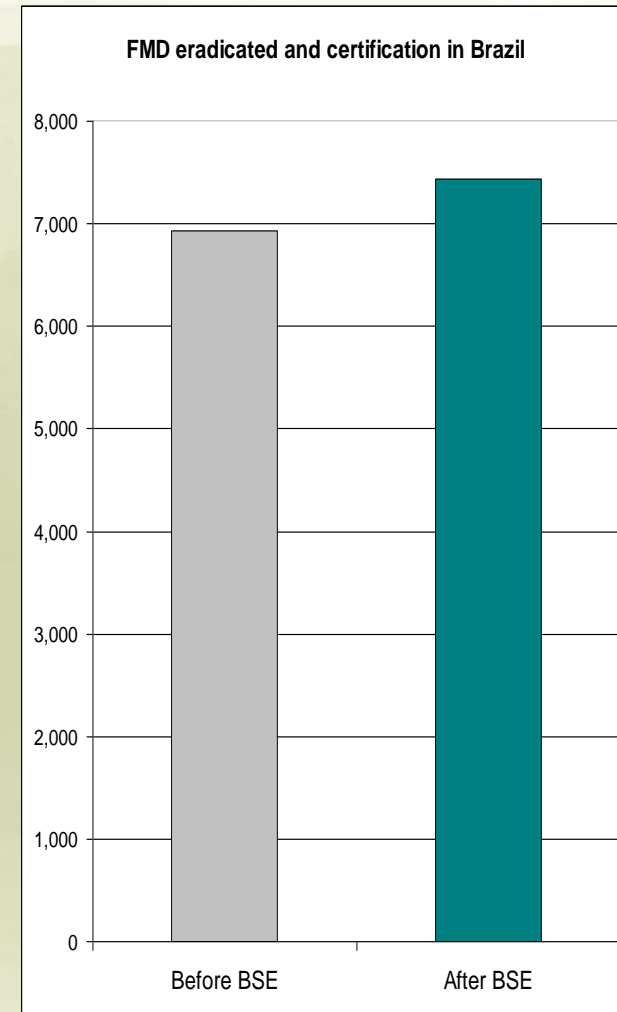
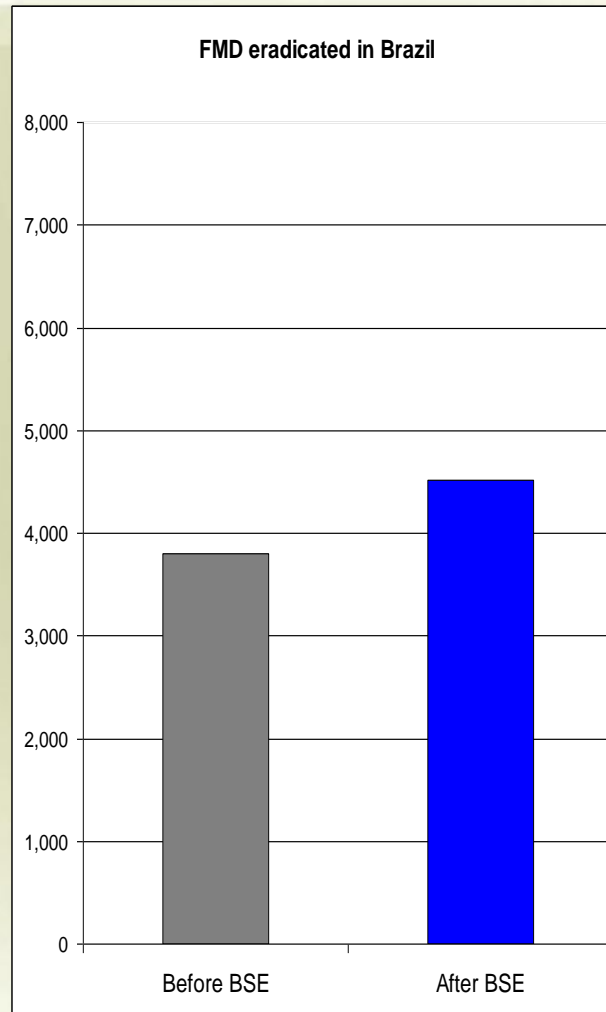
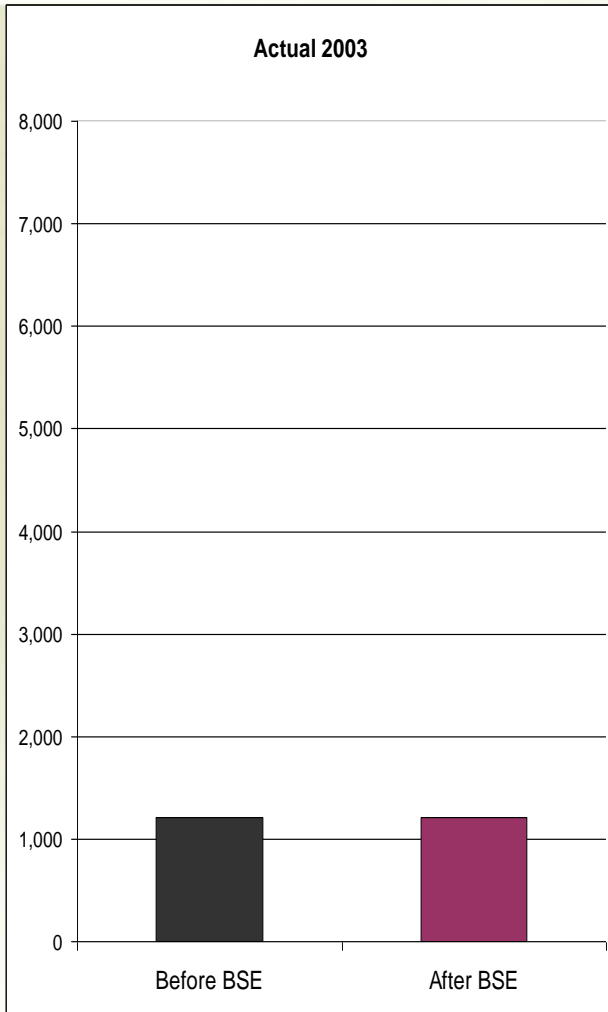
# GTAP simulations and modeling FMD eradication in Brazil



# Quantifying direct effects of removing import restrictions due to FMD



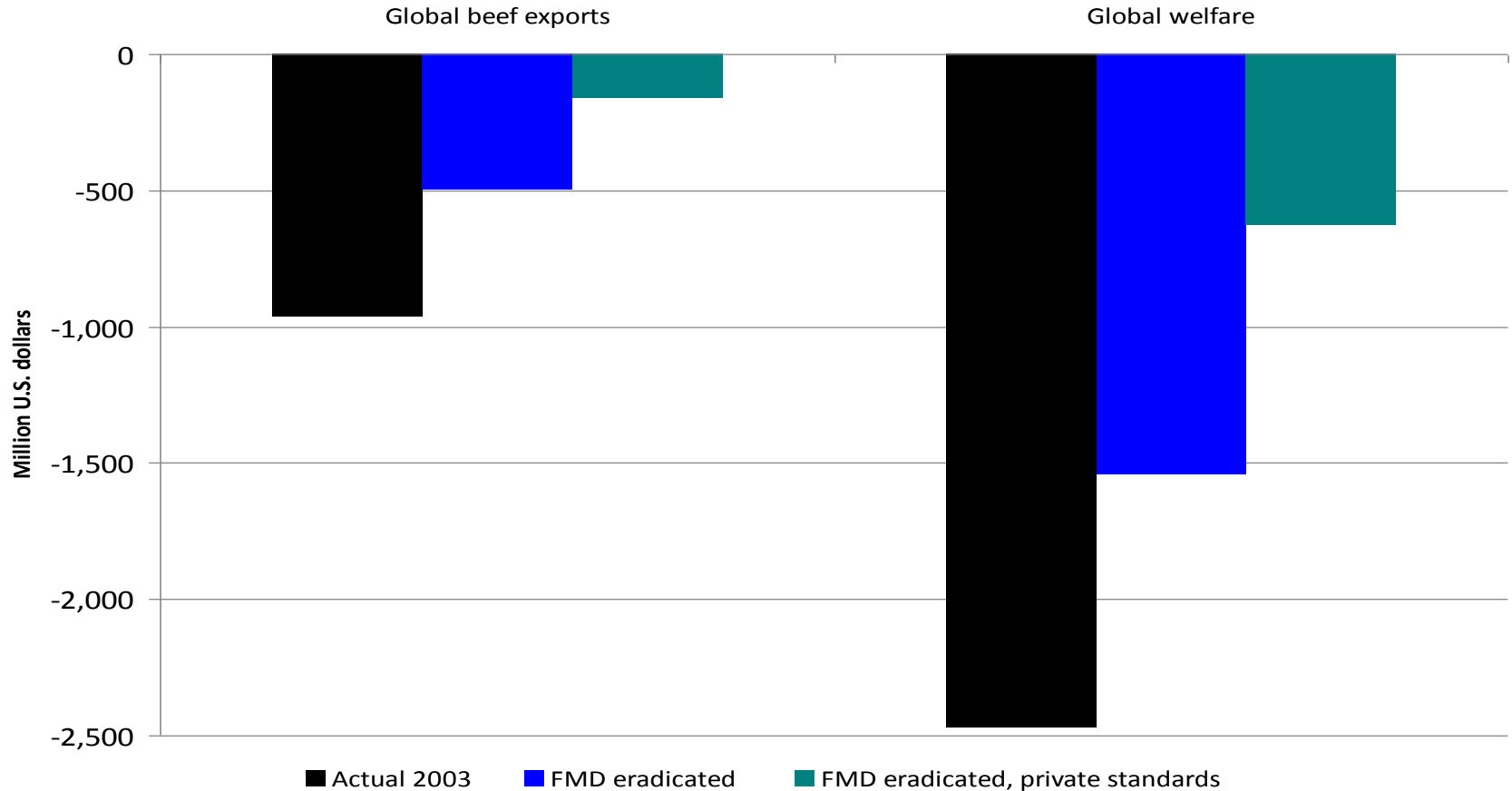
# FMD eradication and certification would have allowed expansion of Brazilian exports when BSE was discovered in the United States



Simulations with GTAP model

# FMD eradication and implementation of certification programs in Brazil would have dampened impacts of BSE on world beef markets

Change in global beef trade and welfare due to BSE bans under different FMD conditions in Brazil



Simulations with GTAP model



# Conclusions

- Despite costly FMD eradication and certification programs to ensure compliance with foreign standards, Brazilian beef exports would expand and global consumers would be better off.
- If Brazil can sell beef in Pacific and North American markets, Australian and New Zealand exports would decline.
- Substitution possibilities in the Pacific beef market, both between grass-fed and grain-fed beef and between chilled and frozen beef, could marginally affect U.S. exports.





**Thank you!**

