Jason Henderson Vice President and Branch Executive Federal Reserve Bank of Kansas City – Omaha Branch www.kansascityfed.org/omaha October 20, 2011

# Measuring the Impact of the BRIC Countries on Global Supply and Demand



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### The Dynamics of Global Food Production

## Rising incomes boost the demand for protein and processed food.

### Who Supplies the Food?

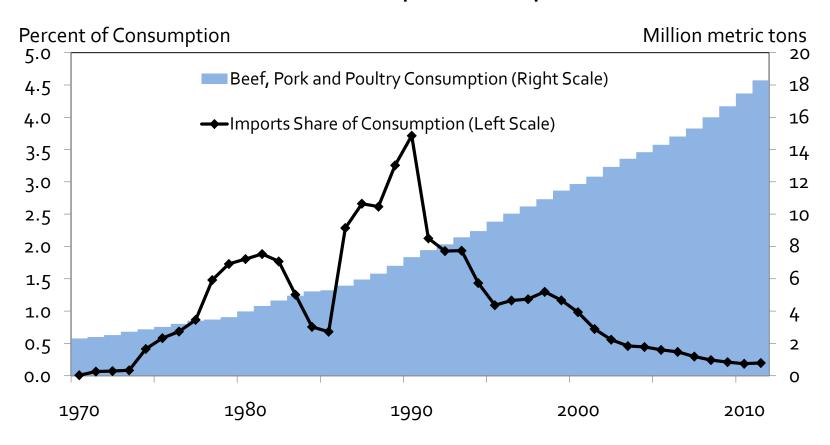
- Stage 1: Import Food to Satisfy Demand
- Stage 2: Expand Protein Production
  - Shrinks Meat Imports
  - Grain Imports Remain High
- Stage 3: Expand Crop Production
- Stage 4: Export Protein and Crops





## After rising between 1970 and 1990, Brazil's meat imports have shrank significantly.

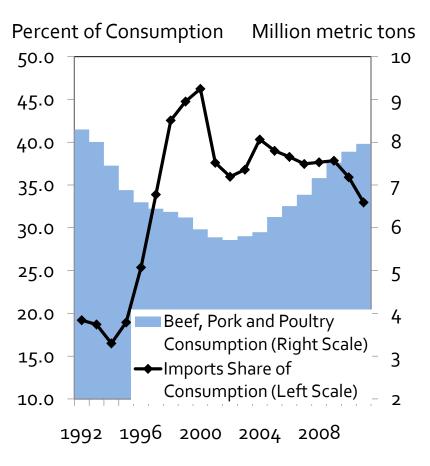
#### **Brazil Meat Consumption and Imports**



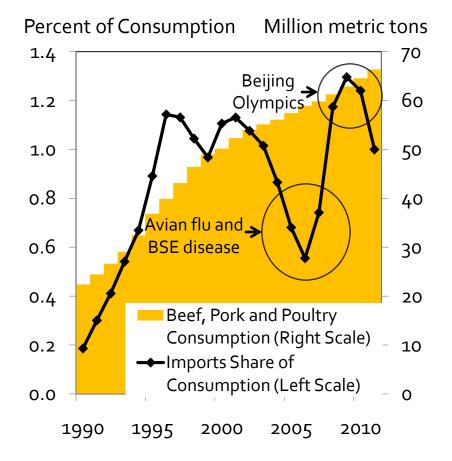


## After rising, import's share of meat consumption in Russia and China is starting to decline.

#### **Russian Meat Consumption and Imports**



#### China's Meat Consumption and Imports

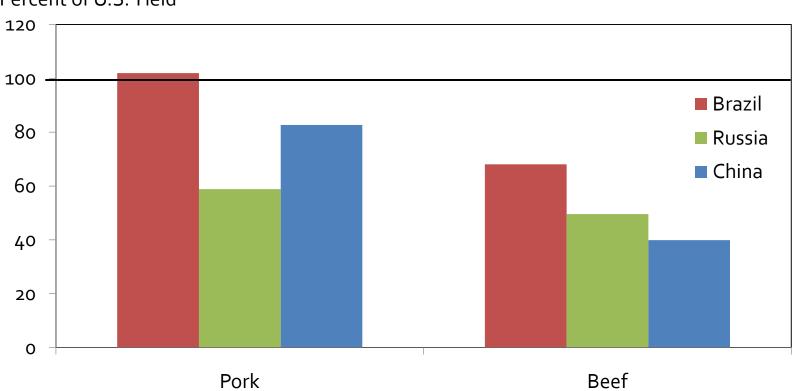




## Can BRIC countries reach U.S. productivity standards?

#### Per Animal Meat Production in BRIC Countries





Calculations based on USDA data



### Conclusions

- Rising incomes will boost BRIC protein consumption.
- How this demand is satisfied will depend on the stage of development?

Brazil – a major agricultural competitor China – enhancing crop and livestock production Russia– building a livestock sector India – economic growth is needed

- While BRIC nations want more proteins and processed foods, the best export opportunities could be feed grains.
- Technology and water will determine the competitiveness of global agricultural systems.



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