

## AGRICULTURAL TRADE THEORY -- AGE 644

### OBJECTIVES

- (1) To provide students with a background in trade theory and trade policy analysis that contains the major threads of the existing literature.
- (2) To teach the application of open economy models to policy analysis.

### GRADING

- (1) Two exams
  - midterm -- 100 points
  - final -- 200 points
- (2) Will be some homeworks involving the use of the material. These will emphasize the application of the theory to practical policy analysis.

### COURSE OUTLINE

- (I) Evolution of Global Agricultural Markets
  - (A) Colonial Trade
    - (1) Pattern
    - (2) Institutional Structure
  - (B) Europe before World War I
    - (1) Institutional Structure
    - (2) Changing Philosophy of Trade
    - (3) Rise of Liberalism
    - (4) Decline of Liberalism
      - (McCalla, 1969)
      - (Webb and Blandford, 1984)
      - (Paarlberg 1996:1-15)
      - (Tangermann, 1982: 1-6)
  - (C) World War I and its Aftermath
    - (1) War Controls
      - (Paarlberg, 1996: 26-29)
      - (Tangermann, 1982: 6-9)
    - (2) Post War Problems
      - (McCalla, 1969)
      - (Webb and Blandford, 1984)
      - (Rasmussen)
      - (Tontz)

- (D) Depression and War
  - (1) Europe
    - (Tangermann, 1982: 9-13)
    - (Paarlberg, 1996: 29-44, 49-56)
  - (2) United States
    - (Rasmussen)
    - (Tontz)
  - (3) Canada and Australia
    - (National Center for Economic Alternatives: 1-10)
    - (Bray, Paarlberg, and Holland: 1-6)
    - (GAO, Ch. 3 and 4).
  
- (E) Post-War Surpluses
  - (1) Central Issues
  - (2) International Institutions
    - (Tontz: 24-28)
    - (McCalla and Josling: Ch 12)
  - (3) National Policies
    - (Tangermann, 1982: 13-18)
    - (Paarlberg, 1993)
    - (ABARE: 98-136)
  
- (F) World Food Crisis
  - (1) Why did it happen?
  - (2) What happened?
    - (O'Brien)
  
- (G) World Awash in Grain
  - (1) Why?
  - (2) What happened?
    - (Paarlberg, Webb, Dunmore, and Deaton)
  
- (H) Food Crisis Revisited and Abandoned?
  
- (II) Pure Theory of Trade
  - (A) The Exchange Model and some Basic Concepts
    - (1) The Gains from Trade -- (C&J 1973:11-18)
      - (C,F&J 1996:13-21,26-27,49-50)
    - (2) Free Trade Equilibrium, Offer Curves and their Elasticity
      - (C&J 1973: 18-24, 38-40)
      - (C,F&J 1996: 21-22,32-34, 56-58)
    - (3) The Pattern of Trade and Comparative Advantage
      - (C&J 1973: 25-29)
  - (B) Trade with Variable Production
    - (1) The Transformation Curve
      - (Krauss and Johnson: 63-65)
      - (C&J 1973: 104-107)
      - (C,F&J 1996:35-38)

- (2) The Efficiency of Pure Competition
  - (C&J 1973:107-111)
- (3) Gains from Trade and the Trade Triangle again
  - (C&J 1973: 111-115)
  - (C,F&J 1996:38-43,46-48)
- (C) Ricardian Model
  - (1) The Ricardian Transformation Curve
    - (C&J 1973:120-123)
    - (C,F&J 1996:83-87)
  - (2) Pattern and Gains from Trade
    - (C&J 1973: 123-128)
    - (C,F&J 1996:87-91)
  - (3) Factor prices in the Ricardian Model
    - (C&J 1973:130-134)
    - (C,F&J 1996: 91-95)
  - (4) Global Gains from Trade
    - (C&J 1973: 134-136)
- (D) Heckscher-Ohlin Model
  - (1) Assumptions
    - (C&J 1973: 138-139)
    - (C,F&J 1996:127-128)
  - (2) Transformation Curve - fixed and flexible coefficients
    - (C&J 1973: 139-144, 164-168)
    - (C,F&J 1996: 128-135)
  - (3) The Four Propositions
    - (a) Pattern of Trade
      - (C&J 1973: 144-148)
      - (C,F&J 1996: 128-130, 140-144)
    - (b) Stolper-Samuelson
      - (C&J 1973: 153)
      - (C,F&J 1996:139-140)
    - (c) Rybczynski
      - (C&J 1973: 153-155)
    - (d) Factor Price Equalization
      - (C&J 1973: 144-152)
      - (C,F&J 1996: 138-139)
  - (4) Consequences of relaxing assumptions

- (E) Ricardo-Viner Model
  - (1) Assumptions
  - (2) The Four Propositions Altered
    - (C,F&J 1996:109-119)
  
- (F) Stability
  - (1) Stable vs Unstable Equilibria
    - (C&J 1973: 35-38)
    - (C,F&J 1996: 78-80)
  
  - (2) Marshall-Lerner Condition
    - (C&J 1973: 40-43)
  
- (G) Tariffs
  - (1) Tariff effects on a small country
    - (C&J 1973: 230-235)
    - (C,F&J 1996: 219-221)
  
  - (2) Large country tariff
    - (a) Terms of Trade
      - (C&J 1973: 235-236)
      - (C,F&J 1996:221-226)
  
    - (b) Optimum Tariff, Revenue Maximizing Tariff
      - (C&J 1973: 237-241, 250-254)
      - (C,F&J 1996: 228-230, 235-241)
  
  - (3) Tariffs vs domestic policy
    - (C&J 1973: 254-262)
    - (C,F&J 1996: 241-244)
  
  - (4) Effective Protection
    - (C&J 1973: 263-264)
    - (C,F&J 1996: 232-233)
  
- (II) Partial Equilibrium
  - (A) Transition from General Equilibrium
    - (1) From Offer Curves to Excess Supply and Excess Demand Curves
    - (2) Basic assumptions of Partial Equilibrium
    - (3) Gains and losses
    - (4) Free Trade equilibrium
      - (P,W,M,S: 6-8)
  
  - (B) Policies followed by exporters
    - (1) Export subsidies
      - (a) Uniform
        - (P,W,M,S:8-11)
        - (Houck)
        - (Chambers and Paarlberg)
  
      - (b) Targeted

- (Sharples)
- (Abbott, Paarlberg, and Sharples)
- (2) Embargoes
  - (a) Uniform
  - (b) Targeted
    - (USDA/ERS Embargoes, Surplus Disposal & U.S. Agriculture: Ch. 8)
- (3) Domestic policies
  - (a) Price supports
  - (b) Stocks
  - (c) Surplus disposal
    - (P,W,M,S: 14-32)
- (C) Importer policies
  - (1) Tariffs
    - (P,W,M,S:36-40)
    - (Bale and Lutz)
  - (2) Quotas and Voluntary Export Restrictions
    - (Allen, Dodge, and Schmitz)
  - (3) Variable Levies
    - (Sampson and Yeats)
  - (4) Tariff-Rate Quotas
    - (Abbott and Paarlberg, 1998)
    - (Boughner, de Gorter, and Sheldon)
    - (Bureau and Tangermann)
    - (Skully)
    - (Choi and Sumner)
    - (Barichello)
    - (Abbott and Morse)
  - (5) SPS barriers
    - (Roberts, Josing, and Orden pp. 25 - 37)
    - (Paarlberg and Lee, 1998)
    - (Paarlberg and Lee, 2001)
    - (Petry, Paarlberg, and Lee)
- (III) Special Topics
  - (A) Imperfect Competition
    - (1) Patterns of Trade
      - (Grossman pp. 1-19)
    - (2) Monopoly and Trade
      - (C&J 1973: 207-210)

- (3) Dumping
  - (C&J 1973: 210-215)
- (4) Oligopoly
  - (a) general
    - (Richardson)
    - (Krishna & Thursby)
  - (b) Agriculture
    - (Carter and Schmitz)
    - (McCalla, 1966)
    - (Alaouze, Watson, and Sturgess)
    - (Karp and McCalla)
    - (Paarlberg and Abbott, 1986)
    - (Gallagher)
- (B) Customs Unions
  - (1) Trade Creation
    - (C&J 1973: 293-296)
  - (2) Trade Diversion
    - (C&J 1973: 296-298)
  - (3) Third Country Impacts
    - (C&J 1973:298-300, 309-313)
- (C) Macro and Exchange Rates
  - (1) Macroeconomic open economy models
    - (a) Keynesian
      - (Heller)
    - (b) Neo-classical
  - (2) Exchange Rate Determination
    - (Frankel)
  - (3) Exchange rates as viewed from agriculture
    - (Longmire and Morey)
  - (4) Trade adjustment and the J-Curve
    - (Carter and Pick)
- (D) Modeling - An overview of approaches
  - (1) Non-spatial "Commodity" model approaches
    - (Roningen)
  - (2) Spatial Equilibrium
    - (Schmitz and Bawden)

- (3) Armington Models
  - (Armington)
  
- (4) Computable General Equilibrium
  - (Hertel)
  
- (E) Trade Elasticity Measurement  
The Great Debate over Elasticity
  - (a) "True" measure
    - (Bredahl, Meyers, and Collins)
  
  - (b) How to estimate
    - (1) Analytical methods
    - (2) Mapping
      - (Holland and Sharples)
  
    - (3) Econometric techniques
      - (Binkley and McKinzie)

## TEXTS

### Basic

Baldwin, Robert E. and J. David Richardson. *International Trade and Finance: Readings*. Boston, MA: Little, Brown & Co. 1986.

Caves, Richard E. and Ronald W. Jones. *World Trade and Payments*. Boston, MA: Little, Brown & Co. 1973.

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Grubel, Herbert G. *International Economics*. Homewood, IL: Richard D. Irwin, 1977.

Krugman, Paul R. and Maurice Obstfeld. *International Economics: Theory and Policy*. New York: Harper Collins, 1991.

### Advanced -- for the gutsy

Dixit, A.K. and V. Norman. *Theory of International Trade*. Welwyn, UK: Cambridge University Press, 1980.

Takayama, A. *International Trade - An Approach to the Theory*. New York: Holt, Rhinehard & Winston, Inc. 1972.

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Bray, C.E., P.L. Paarlberg, and F.D. Holland. *The Implications of Establishing a U.S. Wheat Board*. Foreign Agricultural Economics Report No. 163. Economics and Statistics Service, U.S. Department of Agriculture. April 1981.

Bredahl, M.E., W.H. Meyers, and K.J. Collins. "The Elasticity of Foreign Demand for U.S. Agricultural Products: The Importance of the Price Transmission Elasticity," *AJAE*. 61(1979): 58-63.

Bureau, J-C. and S. Tangermann. "Tariff Rate Quotas in the EU," *Agricultural and Resource Economics Review*. 29(2000): 70-80.

Carter, C.A. and D.H. Pick. "The J-Curve Effect and the U.S. Agricultural Trade Balance," *AJAE*. 71(1989): 712-720.

Carter, C.A. and A. Schmitz. "Import Tariffs and Price Formation in the World Wheat Market," *AJAE*. 61(1979): 517-522.

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