## ECON 8402: International Trade & Payments Fall Semester, Second Session, 2006

JOHN S. CHIPMAN University of Minnesota

*Time and Place:* TTh, 2:00–4:00 p.m., 1275 Heller Hall Office Hours: Wednesdays 12:30–2:00 p.m. & by appointment, 1122 Heller Hall

#### **REFERENCE MATERIALS**

J. S. Chipman, "International Trade," *The New Palgrave. A Dictionary of Economics*, Vol. II. (New York: The Stockton Press, 1987), 922–955. [Copies available at *Printing Services*, 33 Social Sciences Building.]

A. D. Woodland, *International Trade and Resource Allocation*, Amsterdam: North-Holland, 1982. [On reserve at Wilson Library.]

## COURSE OUTLINE<sup>1</sup>

## 1 Review of basic theory

### 1.1 Theory of an open economy facing exogenous world prices

The domestic production-possibility set, the domestic-product function, the Stolper-Samuelson and Rybczynski mappings, Samuelson's reciprocity theorems, the Stolper-Samuelson and Rybczynski mappings, duality between production functions and minimum-unit-cost functions. The shape of the domestic production-possibility set.

- Basic reading: Chipman (A-1987b, Part 1; D-2002-1.1); Woodland (B-1982); Samuelson (A-1953), Lerner (A-1952).
- Supplementary reading: Chipman (A-1966, A-1969, A-1994); McKenzie (A-1955, A-1967a, A-1967b); Kemp & Wegge (A-1969); Inada (A-1971); Ethier (A-1974); Kemp & Wan (A-1976b); Jones (A-1965); Jones & Marjit (A-1985, A-1991); Jones, Marjit, & Mitra (A-1993); Mitra & Jones (A-1999), Neary (A-1985d); Magee (A-1980); Lloyd (A-2000).

<sup>&</sup>lt;sup>1</sup>The prefixes A-, B-, C-, and D- refer to references in the Articles, Books, Collective Works, and Lecture Notes sections in the accompanying list of references. The Lecture Notes will be posted on the web site for this course. Starred sections may have to be skipped owing to time constraints.

## 1.2 World equilibrium with aggregable world preferences

The world production-possibility set; world equilibrium with identical homothetic preferences; the Heckscher-Ohlin theorem and its generalizations; equalization of factor rentals among countries; tests of theories of comparative advantage; intra-industry trade.

- Basic reading: Chipman (A-1987b, §8; A-1985a), Leamer (A-1980); Casas & Choi (A-1984, A-1985); Melvin (A-1968), Inoue (A-1986), Inoue & Wegge (A-1986), Chipman (A-1992b, A-2001a, D-2003-1.2), Davis (A-1995), Bhagwati & Davis (A-1999).
- Supplementary reading: Leontief (A-1953, A-1956); Jones (A-1956); Inada (A-1967); Arrow, Chenery, Minhas, & Solow (A-1961); Lerner (A-1932); Leamer (B-1984), MacDougall (A-1951), Falvey (A-1981), Neary (A-1985b); Grubel & Lloyd (B-1975), Finger (A-1975); Deardorff (A-1980, A-1982), Dixit & Woodland (A-1982).

## 1.3 World equilibrium with preferences aggregable within but not necessarily among countries; Marshallian offer functions; dynamic adjustment and stability

Direct and indirect trade-demand and trade-utility functions; the Marshallian offer function; dynamic adjustment processes and stability of international equilibrium.

- Basic reading: Chipman (A-1987b, §6, §7, pp. 934–7; A-1979a, A-1981, D-2002-1.3a, D-2002-1.3b); Samuelson (B-1947), Arrow (A-1974), Chipman (A-1978b), Mussa (A-1978), Beckmann & Wallace (A-1967), Beckmann & Ryder (A-1969).
- Supplementary reading: Marshall (B-1879, B-1923), Meade (1953), Negishi (A-1962), Chipman (A-1974b, A-1979a, A-1993b), Woodland (A-1980).

## 1.4 \*Gains from trade under constant returns

The theory of gains from trade under constant returns. The role of the compensation principle.

- Basic reading: Samuelson (A-1939), Baldwin (A-1948), Kenen (A-1957), Kemp (A-1962), Samuelson (A-1962), Chipman & Moore (A-1972).
- Supplementary reading: Grandmont & McFadden (A-1972), Otani (A-1972), Kemp & Wan (A-1972).

#### 1.5 Patterns of and gains from trade under increasing returns

External economies of scale and competitive equilibrium; patterns of trade stability of equilibrium under increasing returns; Graham's welfare paradox.

- Basic reading: Tinbergen (1945), Chipman (A-1970), Panagariya (A-1981),
  Ethier (A-1982b), Kemp (B-1964), Chipman (D-2000-1.5a, D-2003-1.5b);
  Kemp & Schweinberger (A-1991), Ethier (A-1979, A-1982a).
- Supplementary reading: Sidgwick (1883 or 1887), Nicholson (1903), Graham (A-1923, A-1925), Knight (A-1924, A-1925), Lerner (1932), Viner (1937), Caves (1960), Jones (1968), Melvin (A-1969), Herberg & Kemp (A-1969), Kemp & Negishi (A-1970), Mayer (1974a), Eaton & Panagariya (1979), Panagariya (1980, 1986), Inoue (A-1981), Herberg, Kemp, & Tawada (1982), Markuson & Melvin (1984).

## **1.6** \*Intertemporal trade and comparative advantage

Consideration of a two-country two-period model of production and exchange, in which countries produce a capital good and a consumer good in each period, and trade in period-0 and period-1 consumer goods. Some extensions, including the Laursen-Metzler effect.

Basic reading: Chipman & Inoue (A-2003).

Supplementary reading: Svensson (1984), Obstfeld (A-1982), Svensson & Razin (A-1983), Persson & Svensson (A-1985), Chipman & Tian (A-1992); Laursen & Metzler (A-1950).

## 2 Comparative statics

## 2.1 The transfer problem and international "capital" movements

The effect of inter-country financial transfers on terms of trade and real exchange rates, and on nominal exchange rates under alternative monetary assumptions.

Basic reading: Chipman (A-1987b, §9, pp. 942–6); Mundell (A-1960).

Supplementary reading: Samuelson (A-1952, A-1954), Chipman (A-1974a, A-1980, A-1989, A-1999); Jones (A-1970, A-1975); Balassa (A-1964); Ohlin (A-1928, A-1929), Keynes (A-1929).

## 2.2 The theory of tariffs

The effects of import tariffs and export taxes (or subsidies) on internal and external prices, exchange rates, and welfare; Lerner's symmetry theorem and Keynes's equivalence theorem. Bickerdike's two welfare theorems. Comparison of tariffs and transfers.

Basic reading: Chipman (A-1987b, §10, pp. 947–950; D-2003-2.2), Woodland (B-1982, §§10.4–10.6).

Supplementary reading: Chipman (A-1990, A-1992a, A-1992c, A-1993b). Lerner (A-1936), Metzler (A-1949a, A-1949b), Johnson (A-1950, A-1960), Rao (A-1971).

### 2.3 The theory of quotas

The theory of quantitative restrictions: import and export quotas, "voluntary export restraints," exchange controls.

Basic reading: Chipman (A-1987b, §10, pp. 950–2; D-2001-2.3), Falvey (A-1975).

Supplementary reading: Neary (A-1988).

# 2.4 The relations among tariffs, quotas, capital movements, and exchange rates

The effect on a country's exchange rate of a tariff on imports or a subsidy to exports; Keynes's equivalence theorem. Protection versus foreign aid as a means of improving a country's welfare.

Basic reading: Chipman (A-2006, A-1992c).

Supplementary reading: Haberler (A-1967), Little, Scitovsky, & Scott (B-1970), Kaempfer & Tower (A-1982), Chipman (A-1992a).

#### 2.5 \*The theory of customs unions and free-trade areas

Lipsey's model of three countries, two commodities, and one factor. More general models.

Basic reading: Lipsey (A-1957, A-1960, B-1971), Bhagwati (A-1971), Johnson (A-1974), Kemp & Wan (A-1976a), Chipman (A-1998).

Supplementary reading: Viner (B-1950), Meade (B-1995b), Gehrels (A-1956), Michaely (A-1976), Riezman (A-1979), Lloyd (A-1982), Kennan & Riezman (A-1990), Kirman (A-1973).

## 2.6 \*Strategic theory of tariffs

Johnson's model of tariff wars.

Basic reading: Johnson (A-1950, A-1954), Gorman (A-1958), Chipman (D-2002-2.6).

## 2.7 \*Technological change

Effects of technological change on relative prices and on countries' absolute and relative welfares. Globalization and technological change as competing explanations of trends in relative wages of skilled and unskilled labor.

Basic reading: Chipman (A-1993a, pp. 64–72); Chipman (A-2002-2.7);
Leamer (B-1984, A-1996, A-1998); Lawrence & Slaughter (A-1993), Murphy and Welch (A-1991), Katz and Murphy (A-1992), Borjas, Freeman, & Katz (A-1992), Williamson (A-1997), Berman, Bound, and Machin (A-1998), Krusell, Ohanian, Ríos-Rull, and Violante (A-2000).

Supplementary reading: Findlay & Grubert (A-1959), Johnson (A-1959).

## 2.8 \*International factor mobility

International trade with factor mobility: taxes and restrictions on international factor movements; trade restrictions in the presence of factor mobility.

- Basic reading: Mundell (A-1957), Chipman (A-1971, A-1972), Neary (A-1988), Neary & Ruane (A-1988).
- Supplementary reading: Otani (A-1973), Ethier & Svensson (A-1986), Jones (A-1967, A-1970).