Trade & Int'l Factor Mobility — CAU Kiel
Summersemester/KISS 2001 — Gerald Willmann

# Hand-out week 2

**This week:** 1. Trade and/or Factor Mobility

- 1.2. Factor Price Equalization
  - Theory, Empirics, Implications for Factor Mobility
- 1.3. Integrated Economy Approach
  - Samuelson's Angel, Cone of Diversification, importance of (n-1).
- 1.4. Gains from Trade and Factor Mobility
  - Ordering different regimes
- 1.5. Extensions
  - Factor Mobility in the Presence of Externalities and IRS

**Readings:** Glenn Rayp, "An Empirical Test of the Dixit-Norman Approach to FPE, Using Co-integration Techniques", Weltwirtschaftliches Archiv, 134:3, 1998, pp. 484-512. Just look at the results here.

Paul Krugman, "The integrated-economy approach to int'l trade" from his chapter in the Handbook of International Economics, Vol. 3, edited by Grossman and Rogoff, pages 1245-48.

Kar-Yiu Wong, "On choosing among trade in goods and international capital and labor mobility", Journal of International Economics: 14, 1983, pp. 223-250.

Assaf Razin and Efraim Sadka, "Cross-Border Flows: Labor, Capital, and Finance", to be published by Cambridge University Press, Chpt 1.

**Practice Problems:**

1. As the integrated world economy approach shows, FPE only obtains if the endowment point lies in the cone of diversification.
   a) How do you construct/define this cone?
   b) What goes wrong if the endowment point lies outside the cone?
   c) How can this condition for FPE be generalized to many goods and factors (as long as the number of the former does not exceed the latter)?

2. Consider the EU ante and post its 1992 common market project (which by the way involves free trade within the union as well as free movement of factors). Assume technology was not altered by implementation of the project. Suppose in the integrated market 40% of labor and 60% of capital is used in manufacturing while the remaining 60% of labor and 40% of capital are used in a second sector. Now Southern Europe (as opposed to the North) is populated by 50% of EU workers and owns 30% of EU capital. Could there have been FPE before free movement of factors was permitted in 1992?

3. Wong (JIE, 1983) establishes a series of orderings, eg $T+K \geq T \geq K$.
   a) Give an intuitive reasoning for this example.
   b) Why are the regimes T+K and T+L not equivalent in his model given that they allow for free movement of (n-1) goods/factors?
   c) Are trade and factor mobility complements or substitutes in his model?

**Note:** first quiz at the end of Friday's class!