Advanced Modern Macroeconomics

Trade in Physical Capital Markets

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22 October 2010

- Trade in capital with two agents of different marginal productivity.
- Autarky interest rates are different, savings equals investment.
- With trade, single world interest rate,
- savings, investment not equal within each country
- "Small open" endowment economy illustrates borrowing, lending.
- Less productive agent lends to more productive agent.
- Specialization and Comparative Advantage
  - More productive agent: future consumption
  - Less productive agent: current period consumption.

Building on the Last Chapters

- Small open economy assumes a constant interest rate, an exception.
- General equilibrium trade determines interest rate,
- with trade as in Chapter 4; only different productivities.
- Uses baseline model of Chapters 5, 6.
- Less productive agent as in Example 6.1
- More productive agent as in Question 8, Chapter 5.
- Excess supply, demand, trade triangles: as in Chapter 4.

Learning Objective

- How international capital flows take place.
- Countries with higher capital productivity import capital,
- less productive countries export capital.
- Borrowing capital, without negative connotation:
- a part of international trade based on investment opportunities.

Who Made It Happen

- Capital savings not necessarily equal to capital investment:
- old concept based in the existence of trade in capital.
- Feldstein and Horioka 1980: savings and investment to move together
- Creates a puzzle: addressed in Chapter 14.
- Business cycles internationally, trade using productivity differences:
- Backus, Kehoe, Kydland (1992), Robert Kollmann (1996).

Two Period "Small Open" Endowment Economy

- c_0 consumption in current period, c_1 consumption in next period
- Income endowment y_0 and y_1; r real interest rate.
- β discount factor for future income, $\beta \in (0, 1)$.
- utility:

$$u(c_0, c_1) \equiv \ln c_0 + \beta \ln c_1,$$

- Wealth Constraint W

$$W \equiv y_0 + \frac{y_1}{1+r} = c_0 + \frac{c_1}{1+r}. \quad (1)$$

Example 7.1. Lender

$(y_0, y_1) = (100, 0)\,;\ r = 0.10,\ \beta = 0.98:$

$$W = y_0 + \frac{y_1}{1+r} = 100 + \frac{0}{1+r} = 100.$$

$$c_0 + \frac{c_1}{1+r} = 100; \rightarrow c_0 = 100 - \frac{c_1}{1.1}.$$

$$\underset{c_1}{\text{Max}}\, u = \ln\left(100 - \frac{c_1}{1.1}\right) + 0.98 \ln c_1.$$

$$\frac{\partial u}{\partial c_1} = \frac{-\left(\frac{1}{1.1}\right)}{100 - \frac{c_1}{1.1}} + \frac{0.98}{c_1} = 0,$$

$$c_1 = \frac{(110)\,0.98}{(1+0.98)} = 54.44;\ c_0 = 100 - \frac{54.44}{1.1} = 50.51,$$

$$u = \ln(50.5) + 0.98 \ln(54.4) = 7.84,\ c_1 = \left(\frac{e^{7.8393}}{c_0}\right)^{\frac{1}{0.98}}$$

More Future than Current Consumption

- $c_1 > c_0$ depends on "rate of time preference"
- Defined as ρ where $\beta = \frac{1}{1+\rho}$:
- ρ : consumer discount factor; r : market discount

$$\rho = \frac{1}{\beta} - 1 = \frac{1}{0.98} - 1 = 0.0204.$$

$$0.10 = r > \rho = 0.02$$

- If $r > \rho$, then $c_1 > c_0$

Lending in Example 7.1

- Endowed income greater than equilibrium c_0 : Lender

$$\textit{Lending} : y_0 - c_0 = 100 - 50.509 = 49.49.$$

- Endowment point $(y_0, y_1) = (100, 0)$.
- Lending difference on horizontal axis between
  - endowment point
  - and equilibrium c_0.

Utility Level Curve and Wealth Constraint

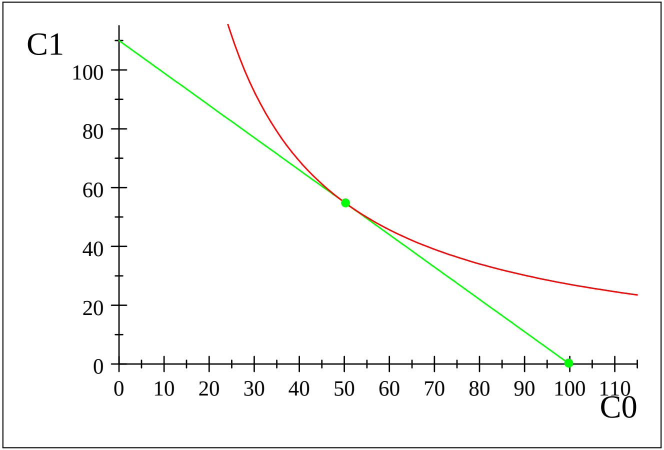

Figure 7.1. Small Open Economy Equilibrium with Lending in Example 7.1.

Example 7.2: Interest Rate Increase

- $r = 0.1 \rightarrow r = 0.12$, a 20% increase.

$$\underset{c_1}{\text{Max}} u = \ln\left(30 - \frac{c_1}{1.12}\right) + 0.98 \ln(c_1).$$
$$c_1 = \frac{(112)\,0.98}{(1+0.98)} = 55.43;\ c_0 = 100 - \frac{55.43}{1.12} = 50.51.$$

- c_0 : Substitution effect exactly offsets income effectt

Utility Level and Wealth Constraint

$$u = \ln 50.51 + 0.98 \ln 55.43 = 7.86,\ c_1 = \left(\frac{e^{7.86}}{c_0}\right)^{\frac{1}{0.98}}.$$

$$c_1 = (1+r)(W - c_0), \rightarrow c_1 = (1.12)(100 - c_0).$$

Future Consumption Up, Current Consumption Unchanged

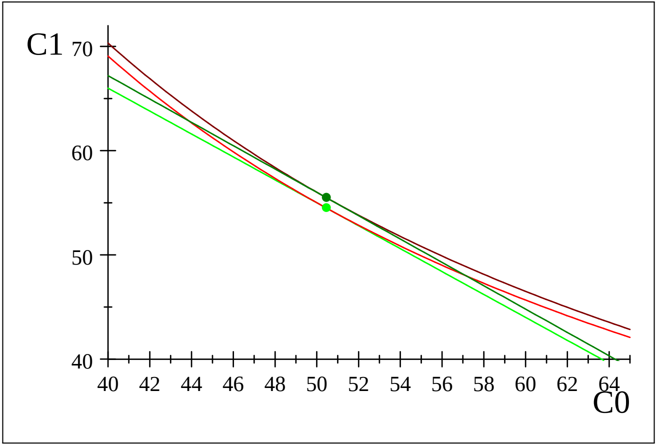

Figure 7.2. Lender Better Off with Interest Rate Increase in Example 7.2.

Consumption Smoothing and Time Preference

$$c_1 = (1+r)\left(\frac{\beta}{1+\beta}\right)W;\ W = c_0 + \frac{c_1}{1+r}, \quad (2)$$

$$\rightarrow c_0 = \frac{W}{1+\beta} \quad (3)$$

- c_0 independent of interest rate here.

$$\beta \equiv \frac{1}{1+\rho}, \rightarrow c_0 = \frac{W}{1+\beta} = \left(\frac{1+\rho}{2+\rho}\right)W, \quad (4)$$

$$c_1 = (1+r)\left(\frac{\beta}{1+\beta}\right)W = \left(\frac{1+r}{2+\rho}\right)W. \quad (5)$$

- If $r = \rho; \rightarrow c_0 = c_1 = \frac{1+\rho}{2+\rho}W$.
- If $r > \rho \rightarrow c_0 = \left(\frac{1+\rho}{2+\rho}\right)W < \left(\frac{1+r}{2+\rho}\right)W = c_1$.
- Consumption growth requires $r > \rho$.

Example 7.3. Borrower

- $(y_0, y_1) = (0, 100)$, $\beta = 0.98$, $r = 0.10$.

$$W = y_0 + \frac{y_1}{1+r} = 0 + \frac{100}{1+0.1} = 90.91,$$
$$c_0 + \frac{c_1}{1.1} = 90.909, \rightarrow c_0 = 90.909 - \frac{c_1}{1.1}.$$

$$\underset{c_1}{\text{Max}}\, u = \ln\left(90.909 - \frac{c_1}{1.1}\right) + 0.98 \ln c_1 .$$
$$c_1 = \frac{(90.91)(1.1)\,0.98}{(1.98)} = 49.49, \; c_0 = 90.91 - \frac{49.49}{1.1} = 45.9.$$
$$\textit{Lending} : y_0 - c_0 = 0 - 45.9 = -45.9.$$
$$u = \ln 45.9 + 0.98 \ln 49.49 = 7.65, \; c_1 = \left(\frac{e^{7.6506}}{c_0}\right)^{\frac{1}{0.98}};$$
$$c_1 = (1+r)(W - c_0) = (1.1)(90.91 - c_0).$$

Borrower's Utility Level and Wealth Constraint

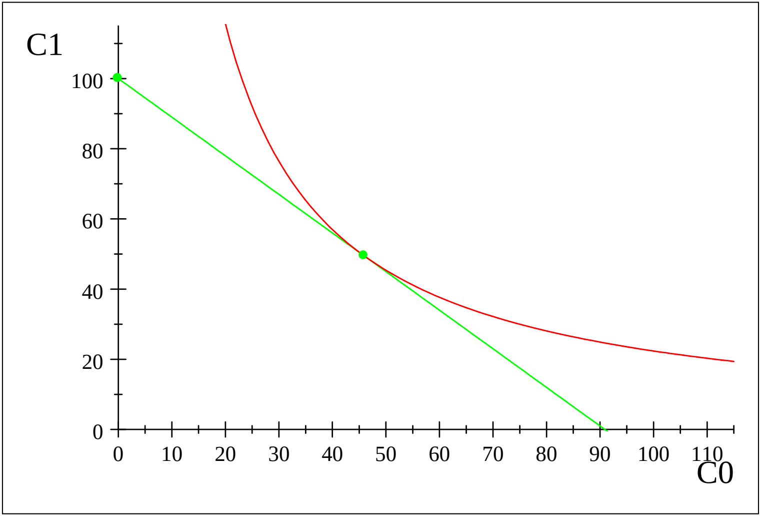

Figure 7.3. Small Open Economy Equilibrium with Borrowing in Example 7.3.

Borrower with Interest Increase

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$(y_0, y_1) = (0, 100)$, $r = 0.12$:

$$W = y_0 + \frac{y_1}{1+r} = 0 + \frac{100}{1.12} = 89.29, \; c_0 + \frac{c_1}{1.12} = 89.29,$$

$$\begin{aligned} \underset{c_1}{\text{Max}}\; u &= \ln\left(89.286 - \frac{c_1}{1.12}\right) + 0.98 \ln c_1 . \\ \frac{\partial u}{\partial c_1} &= \frac{-\left(\frac{1}{1.12}\right)}{89.286 - \frac{c_1}{1.1}} + \frac{0.98}{c_1} = 0, \end{aligned}$$

$$\begin{aligned} c_1 &= \frac{(89.286)(1.12)\,0.98}{(1+0.98)} = 49.495, \\ c_0 &= W - \frac{c_1}{1+r} = 89.286 - \frac{49.495}{1.12} = 45.09. \end{aligned}$$

Equilibrium Lending, Utility Level Curve, Budget Line

$$Lending : y_0 - c_0 = 0 - 45.094 = -45.094$$

$$\begin{aligned} u &= \ln 45.094 + 0.98 \ln 49.495 = 7.326, \\ c_1 &= \left(\frac{e^u}{c_0}\right)^{\frac{1}{0.98}} = \left(\frac{e^{7.6326}}{c_0}\right)^{\frac{1}{0.98}}, \end{aligned} \tag{6}$$

$$\begin{aligned} c_1 &= (1 + r)(W - c_0), \\ c_1 &= (1.12)(89.286 - c_0). \end{aligned} \tag{7}$$

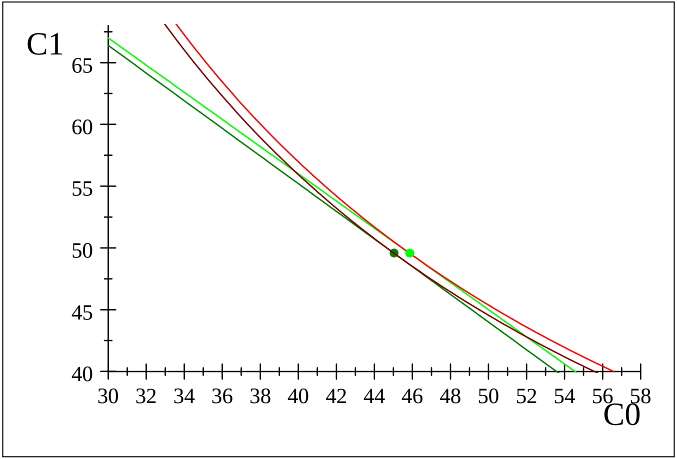

Figure 7.4. Interest Rate Increase with Borrowing in Example 7.4.

$\beta = 0.98,\ y_0 = 100,\ u(c_0, c_1) = \ln c_0^d + \beta \ln c_1^d.$

$$\begin{aligned} agent\ A &: \quad c_{1A}^s = y_{1A} = 12\sqrt{k_{1A}^d}, \\ agent\ B &: \quad c_{1B}^s = y_{1B} = 14\sqrt{k_{1B}^d}, \\ k_{1A}^d + k_{1B}^d &= k_{1A}^s + k_{1B}^s;\ c_{1A} + c_{1B} = y_{1A} + y_{1B}. \end{aligned}$$

$$\begin{aligned} \underset{c_{0A}, c_{1A}, k_{1A}^s}{\text{Max}}\ u &= \ln c_{0A} + \beta \ln c_{1A} \\ c_{0A} &= y_{0A} - k_{1A}^s,\ c_{1A}^d = \Pi_{1A} + k_{1A}^s(1+r). \\ \underset{k_{1A}^s}{\text{Max}}\ u &= \ln\left(y_0 - k_{1A}^s\right) + \beta \ln\left[\Pi_{1A} + (1+r)\, k_{1A}^s\right]. \\ 0 &= \frac{\beta\,(1+r)}{\Pi_{1A} + k_{1A}^s(1+r)} - \left(\frac{1}{y_{0A} - k_{1A}^s}\right). \end{aligned}$$

Agent A: Firm, Consumer Equilibrium

$$k_{1A}^{s} = \frac{y_0 \beta}{1+\beta} - \frac{\Pi_{1A}}{(1+\beta)(1+r)}. \tag{8}$$

$$k_{1B}^{s} = \frac{y_0 \beta}{1+\beta} - \frac{\Pi_{1B}}{(1+\beta)(1+r)}. \tag{9}$$

$$\underset{k_{1A}^{d}}{\text{Max}} \Pi_{1A} = 12\sqrt{k_{1A}^{d}} - (1+r)k_{1A}^{d}.$$

$$k_{1A}^{d} = \frac{36}{(1+r)^2};\ \Pi_{1A} = \frac{36}{1+r}.\ c_{1A}^{s} = \frac{72}{1+r}.$$

$$k_{1A}^{s} = \frac{(100)\,0.98}{1+0.98} - \frac{\left(\frac{36}{1+r}\right)}{(1+0.98)(1+r)}.$$

$$c_{1A}^{d} = \Pi_{1A} + k_{1A}^{s}(1+r) = \frac{36\left(1-\frac{1}{1.98}\right)}{1+r} + \frac{(1+r)\,98}{1.98}.$$

Agent B: Firm, Consumer Equilibrium

$$
\begin{aligned}
\underset{k_{1B}^{d}}{\mathrm{Max}} \Pi_{1B} &= 14\sqrt{k_{1B}^{d}} - (1+r) k_{1B}^{d}, && (10) \\
\frac{\partial f\left(k_{1B}^{d}\right)}{\partial k_{1B}^{d}} &= (0.5)\, 14 \left(k_{1B}^{d}\right)^{-0.5} = 1 + r. && (11) \\
k_{1B}^{d} &= \frac{49}{(1+r)^2},\ \Pi_{1B} = \frac{49}{1+r}.\ c_{1B}^{s} = \frac{98}{1+r}. && (12)
\end{aligned}
$$

$$
\begin{aligned}
k_{1B}^{s} &= \frac{49}{1.98}\left(2 - \frac{1}{(1+r)^2}\right)\ c_{1B}^{d} = \Pi_{1B} + k_{1B}^{s}\,(1+r)\,, \\
c_{1B}^{d} &= \frac{49}{1+r} + (1+r)\,\frac{98}{1.98} - \frac{49}{(1.98)\,(1+r)}.
\end{aligned}
$$

$$k_{1A}^{d} = \frac{36}{(1+r)^2},\; k_{1B}^{d} = \frac{49}{(1+r)^2},$$

$$1+r = \frac{6}{\sqrt{k_{1A}^{d}}};\; 1+r = \frac{7}{\sqrt{k_{1B}^{d}}};$$

$$k_{1A}^{s} = \frac{1}{1.98}\left(98 - \frac{36}{(1+r)^2}\right), 1+r = \sqrt{\frac{36}{(1+0.98)\left(\frac{98}{1.98} - k_{1A}^{s}\right)}};$$

$$k_{1B}^{s} = \frac{49}{1.98}\left(2 - \frac{1}{(1+r)^2}\right), 1+r = \sqrt{\frac{49}{(1.98)\left(\frac{98}{1.98} - k_{1B}^{s}\right)}}.$$

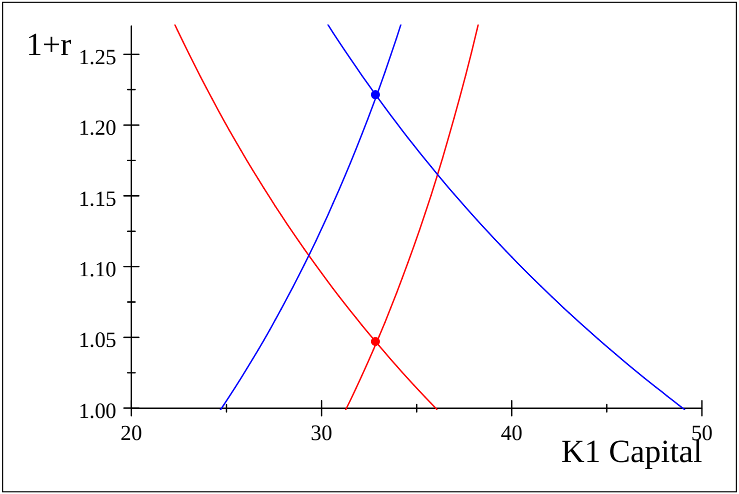

Figure 7.5. Capital Market with No-Trade Autarky in Example 7.5.

Interest Rate and Quantities: Same Investment

$$k_{1B}^{d} = \frac{49}{(1+r)^2} = \frac{98}{1.98} - \frac{\left(\frac{49}{1+r}\right)}{(1.98)(1+r)} = k_{1B}^{s},$$

$$1+r = \sqrt{\frac{49\left(1+\frac{1}{1.98}\right)}{\frac{98}{1.98}}} = 1.2207.$$

$$k_{1A}^{d} = \frac{36}{(1+r)^2} = \frac{36}{(1.0463)^2} = 32.884,$$

$$k_{1B}^{d} = \frac{49}{(1+r)^2} = \frac{49}{(1.2207)^2} = 32.884,$$

$$c_{0A}^{d} = y_0 - k_{1A}^{d} = 100 - 32.884 = 67.116,$$

$$c_{0B}^{d} = y_0 - k_{1B}^{d} = 100 - 32.884 = 67.116.$$

Goods Market

$$\frac{1}{1+r} = \frac{c^s_{1A}}{72};\ c^d_{1A} = \frac{36}{1+r}\left(1-\frac{1}{1.98}\right) + \frac{(1+r)\,98}{1.98},$$

$$0 = \left(36 - \frac{36}{(1+0.98)}\right)\frac{1}{(1+r)^2} - c^d_{1A}\left(\frac{1}{1+r}\right) + \frac{98}{1.98};$$

$$\frac{1}{1+r} = \frac{c^s_{1B}}{98};\ c^d_{1B} = \frac{49}{1+r} + (1+r)\left(\frac{49}{1.98}\right)\left(2-\frac{1}{(1+r)}\right),$$

$$0 = \left(49 - \frac{49}{(1+0.98)}\right)\frac{1}{(1+r)^2} - c^d_{1B}\left(\frac{1}{1+r}\right) + \frac{98}{1.98}.$$

$$\frac{1}{1+r} = \frac{1.98}{2\,(36)\,0.98}\left(c^d_{1A} - \sqrt{\left(c^d_{1A}\right)^2 - 4\,(36)\,\frac{0.98}{(1.98)}\left(\frac{98}{1.98}\right)}\right);$$

$$\frac{1}{1+r} = \frac{1.98}{2\,(49)\,0.98}\left(c^d_{1B} - \sqrt{\left(c^d_{1B}\right)^2 - 4\,(49)\,\frac{0.98}{(1.98)}\left(\frac{98}{1.98}\right)}\right)$$

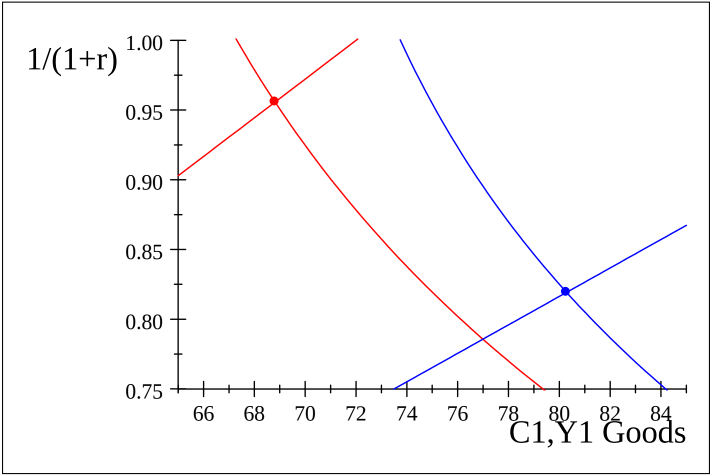

Figure 7.6. Autarky Markets for Future Period Consumption in Example 7.5.

Autarky Utility Levels, Production, Budget Lines

$$
\begin{aligned}
c_{1A}^{s} &= c_{1A}^{d} = 68.8,\ c_{1B}^{s} = c_{1B}^{d} = 80.28. \\
u_A &= \ln c_{0A}^{d} + \beta \ln c_{1A}^{d} = \ln 67.12 + 0.98 \ln 68.8 = 8.35, \\
u_B &= \ln c_{0B}^{d} + \beta \ln c_{1B}^{d} = \ln 67.12 + 0.98 \ln 80.28 = 8.5, \\
c_{1A}^{d} &= \left(\frac{e^{8.35}}{c_{0A}^{d}} \right)^{\frac{1}{0.98}};\ c_{1B}^{d} = \left(\frac{e^{8.5}}{c_{0B}^{d}} \right)^{\frac{1}{0.98}}.
\end{aligned}
$$

$$
\begin{aligned}
c_{1A}^{s} &= 12\sqrt{k_1} = 12\sqrt{100 - c_{0A}}, \\
c_{1B}^{s} &= 14\sqrt{k_1} = 14\sqrt{100 - c_{0B}}. \\
c_{1A}^{d} &= \Pi_{1A} + k_{1A}^{s}\,(1+r) = \frac{36}{1.05} + \left(100 - c_{0A}^{d}\right)(1.05); \\
c_{1A}^{d} &= \Pi_{1B} + k_{1B}^{s}\,(1+r) = \frac{49}{1.22} + \left(100 - c_{0B}^{d}\right)(1.22).
\end{aligned}
$$

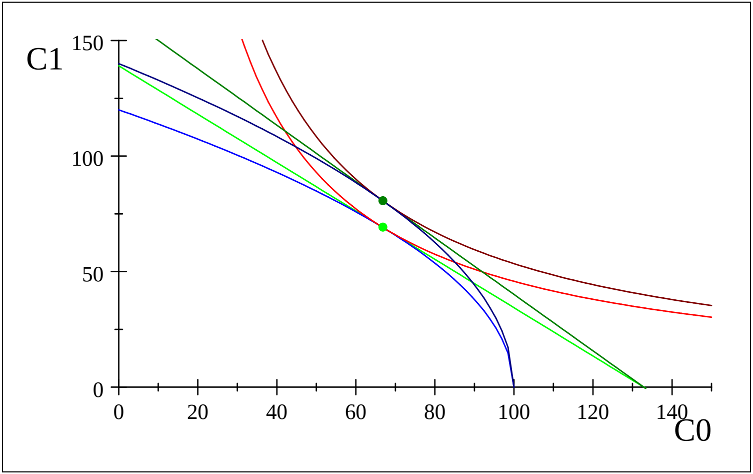

Figure 7.7. General Equilibrium Autarky in Example 7.5.

Trade: Total Capital Supply, Demand; Interest Rate

$$k^d_{1A} + k^d_{1B} = k^s_{1A} + k^s_{1B}. \tag{13}$$

$$\frac{36+49}{(1+r)^2} = \frac{2y_0\beta}{1+\beta} - \frac{\left(\frac{36+49}{1+r}\right)}{(1+\beta)(1+r)}; \tag{14}$$

$$\Longrightarrow \quad 1+r = \left[\frac{(36+49)(2.98)}{2(98)}\right]^{0.5} = 1.1368, \tag{15}$$

$$k^d = k^d_{1A} + k^d_{1B} = \frac{36+49}{(1+r)^2}, \Rightarrow 1+r = \sqrt{\frac{36+49}{k^d}};$$

$$k^s = k^s_{1A} + k^s_{1B} = \frac{2y_0\beta}{1+\beta} - \frac{(36+49)}{(1+\beta)(1+r)^2},$$

$$\Rightarrow \quad 1+r = \sqrt{\frac{(36+49)}{(1.98)\left(\frac{2(100)0.98}{1.98} - k^s\right)}},$$

Trade: Capital Market

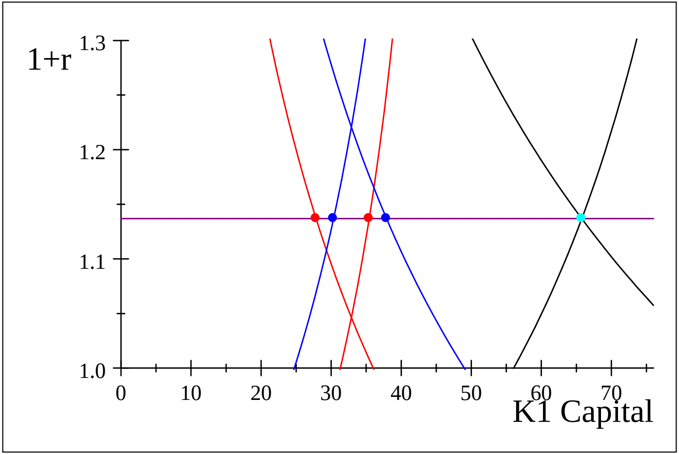

Figure 7.8. Capital Market with Trade in Example 7.6.

Capital Trade Flows

$$k_{1A}^{s} = \frac{100\,(0.98)}{1.98} - \frac{36}{(1.98)\,(1.1368)^2} = 35.426;$$
$$k_{1B}^{s} = \frac{100\,(0.98)}{1.98} - \frac{49}{(1.98)\,(1.1368)^2} = 30.345.$$

$$k_{1A}^{d} = \frac{36}{(1.137)^2} = 27.86;\ k_{1B}^{d} = \frac{49}{(1.137)^2} = 37.92. \qquad (16)$$

$$\textit{Excess Supply}_A : k_{1A}^{s} - k_{1A}^{d} = 35.43 - 27.86 = 7.57,$$
$$\textit{Excess Demand}_B : k_{1B}^{d} - k_{1B}^{s} = 37.92 - 30.345 = 7.57.$$

A Exports Capital to B

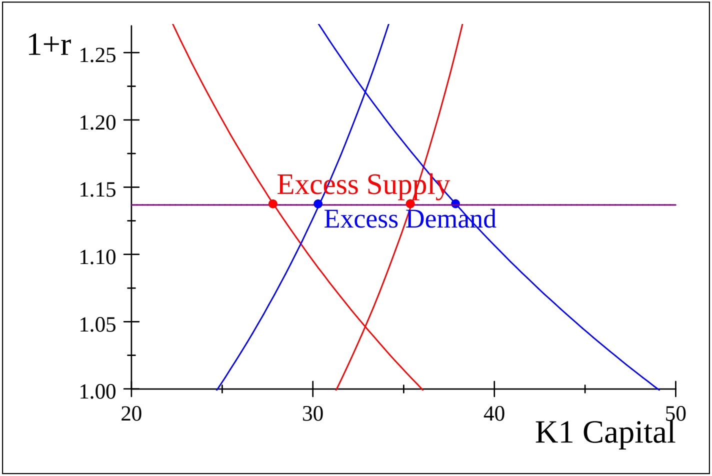

Figure 7.9. Excess Supply and Demand for Capital with Trade in Example 7.5.

Trade: Goods Market

$$
\begin{aligned}
c_1^d &= c_{1A}^d + c_{1B}^d = \frac{36+49}{1+r}\left(1-\frac{1}{1.98}\right) + (1+r)\,2\frac{98}{1.98},\\
0 &= (36+49)\left(\frac{0.98}{1.98}\right)\frac{1}{(1+r)^2} - c_1^d\left(\frac{1}{1+r}\right) + 2\frac{98}{1.98};\\
c_1^s &= c_{1A}^s + c_{1B}^s = \frac{72+98}{1+r};\ \frac{1}{1+r} = \frac{c_1^s}{72+98}.\\
\frac{1}{1+r} &= \frac{c_1^d - \sqrt{\left(c_1^d\right)^2 - 4\,(36+49)\left(\frac{0.98}{1.98}\right)2\left(\frac{98}{1.98}\right)}}{2\,(36+49)\left(\frac{0.98}{1.98}\right)}
\end{aligned}
$$

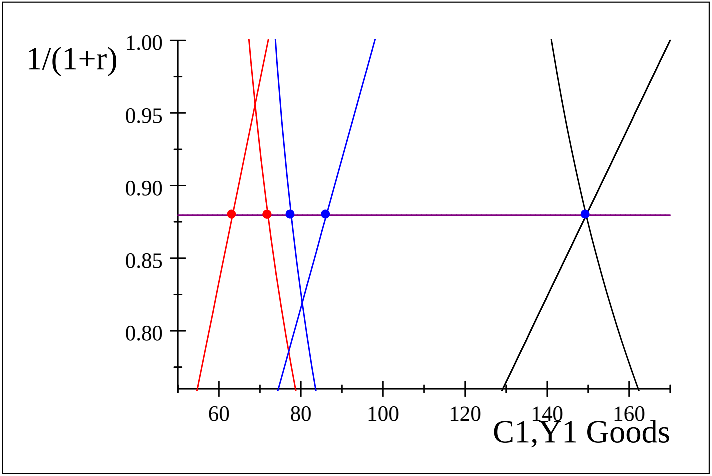

Figure 7.10. Equilibrium in the Market for Future Period Consumption in Example 7.5.

Goods Trade Flows

$$
\begin{aligned}
c_{1A}^{s} &= \frac{72}{1.137} = 63.34,\ c_{1B}^{s} = \frac{98}{1.137} = 86.21. \\
c_{1A}^{d} &= \Pi_{1A} + (1.137)\, k_{1A}^{s} = \frac{36}{1.137} + 35.4\,(1.137) = 71.94, \\
c_{1B}^{d} &= \Pi_{1B} + k_{1B}^{s}(1+r) = \frac{49}{1.137} + 30.345\,(1.137) = 77.6.
\end{aligned}
$$

$$
\begin{aligned}
\textit{Excess Demand}_{A} &: c_{1A}^{d} - c_{1A}^{s} = 71.94 - 63.34 = 8.6, \\
\textit{Excess Supply}_{B} &: c_{1B}^{s} - c_{1B}^{d} = 86.21 - 77.6 = 8.6.
\end{aligned}
$$

B Exports Goods to A

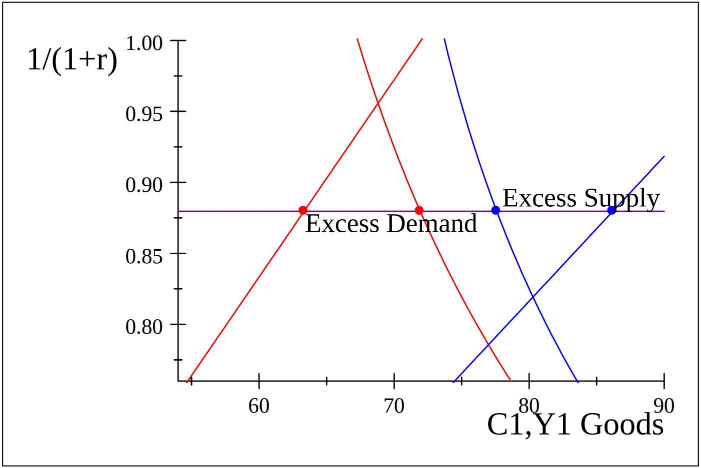

Figure 7.11. Excess Supply and Demand for Future Period Consumption in Example 7.6.

Trade: Utility, Production, Budget Lines

$$
\begin{aligned}
u_A &= \ln(100 - 35.426) + 0.98 \ln 71.94 = 8.358, \\
u_B &= \ln(100 - 30.345) + 0.98 \ln 77.6 = 8.51, \\
c_{1A}^d &= \left(\frac{e^{8.358}}{c_{0A}^d}\right)^{\frac{1}{0.98}};\ c_{1B}^d = \left(\frac{e^{8.51}}{c_{0B}^d}\right)^{\frac{1}{0.98}}.
\end{aligned}
$$

$$
\begin{aligned}
c_{1A}^d &= \Pi_{1A} + k_{1A}^s (1+r) = \frac{36}{1.137} + 1.137\left(100 - c_{0A}^d\right), \\
c_{1B}^d &= \Pi_{1B} + k_{1B}^s (1+r) = \frac{49}{1.1368} + 1.137\left(100 - c_{0B}^d\right); \\
c_{1A}^s &= 12\sqrt{100 - c_{0A}},\ c_{1B}^s = 14\sqrt{100 - c_{0B}}.
\end{aligned}
$$

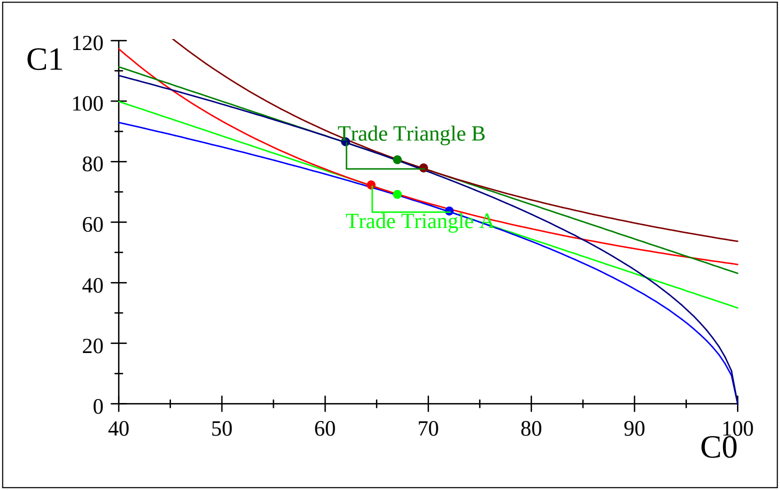

Figure 7.12. General Equilibrium Trade in Example 7.6.

Five Related Applications: Small Open Economies

- Small open economies strictly never exist.
  - Small (Brazil, Thailand, Greece) can effect world interest rate
  - "Contagion" effects, one problem spills over to region, world.
- Better view perhaps: small countries as representive of region.
  - "emerging markets", "transition countries", "developing countries".
- Risk rises, falls together in regions: affects "given" world interest rates
  - can make small open economies assumption unrealistic.
- General equilibrium: regions affect world interest rate.

Fostering Capital Market Trade

- European Union: builds infrastructure new EU members|.
  - New suburban, underground city train systems
  - highways across Eastern Europe.
- Financial development: laws for private banking systems to emerge.
  - Eastern Europe: restructuring state-owned banks
  - remove bad government loans off banks's books.
  - banking privatization laws enacted.
  - Combo of restructuring, privatization: ex-Soviet controlled region.
- Engendering democracy, stable political structures
  - more difficult, outside events, regime changes important
  - Unclear: best way for neighboring countries to help this.
  - Typically: broad array of events for freedom to emerge
  - of trade in three realms: political, social, economic.

Keynes, his Revision, and the Marshall Plan

- Keynes wrote against WWI war reparation payments
  - from Germany to the Allies
  - in 1919 *The Economic Consequences of the Peace,*
  - Keynes suggests "a reconstruction loan from America to Europe"
  - "British Empire should waive the whole of their claims to reparation payments from Germany and its allies. And the whole of the German reparation should be dramatically reduced to about 25% of that implied by the Treaty of Versailles that ended WWI. "I should limit my Revision of the Treaty to this simple stroke of the pen." (p.173, *Revision*).
- His concern: high reparations weaken German economy.
  - Rather: make loans, grants, rebuild Europe, "keep the peace".
- Reparation Commission largely ignored such advice
  - Germany experienced a country-wide bank run,
  - Hitler into power, reparations ignored, WWII broke out.

Marshall Plan: War and Peace

- Truman Doctrine: US spent $9 billion 1945-47, $13 billion 1947-51.
  - called Marshall Plan
  - Turkey and Greece early recipients
  - UK, France, Germany got largest amounts
  - Russia refused aid, keep Poland from Marshall Plan.
  - Led to alignment over next 40 years:
    - Soviet bloc, Eastern Europe cut off from "West",
    - West rebuilt, prospered: Turkey, Greece key components.
- WWI aftermath: demanding repayment from Germany,
  - start of WWII by bankrupt Germany,
- WWII aftermath: granting aid to nations at war,
  - New international Western trade block.
- Illustrates how lending capital internationally
  - means of investment,
  - restores well-functioning international markets, peace.
  - Key economic lesson from two world wars
  - opposite policies enacted after each: War and Peace

Soros, the Soviet Union and China

- George Soros "looked around for a worthy cause",
  - founded Open Society Fund
  - "make open societies viable, open up closed societies"
  - targeted Soviet closed society system, Eastern Europe.
  - "most glorious demonstration of the open society principle was the treatment of the defeated countries after the Second World War and the Marshall Plan in particular." (1990, pp. 140-141)
- Soros funded projects throughout Eastern Europe,
- Open Society Institute, Central European University,
- provide "seed" capital across regions, including Africa now.
- Soros targets China similarly:
  - bring China within world economic markets, now in WTO.
  - Russian Federation still awaits WTO admittance.

War versus Globalization

- Historically, a King in Britain expands by battle.
  - used up military expenditures
  - loss of capital, home production, market structures.
- Modern wars in Africa over natural resources
  - huge similar waste of physical and human capital.
- Gains from trade can dwarf any gains from war.
- Trade agreements instead of war: GATT, now WTO; FTAs
- Globalization is expansion of trade in place of war.
  - nations left out denied rising capital accumulation,
  - without wealth of globalization.
  - Exclusion world capital markets can give rise to war:
  - modern war with terrorism an apt example?