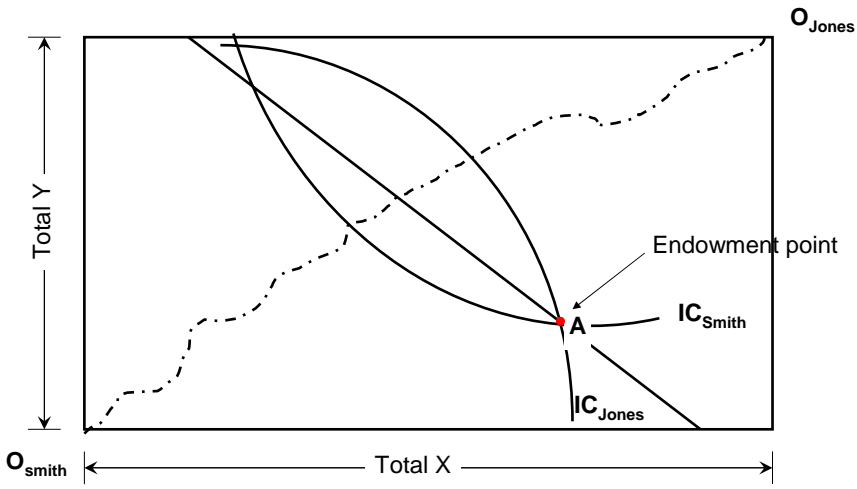
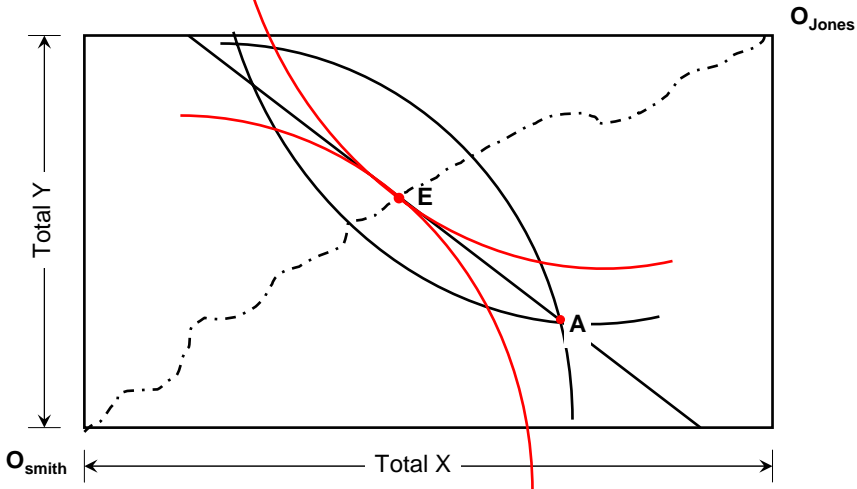


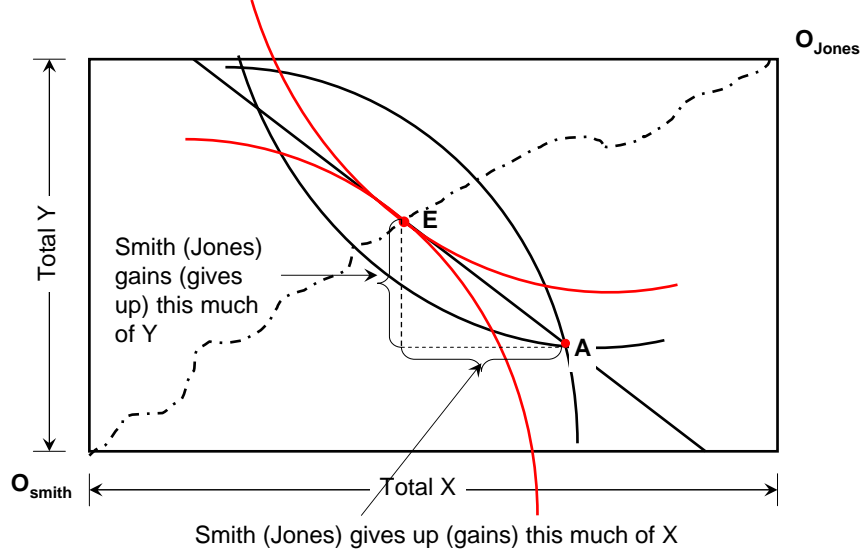
Edgeworth Box



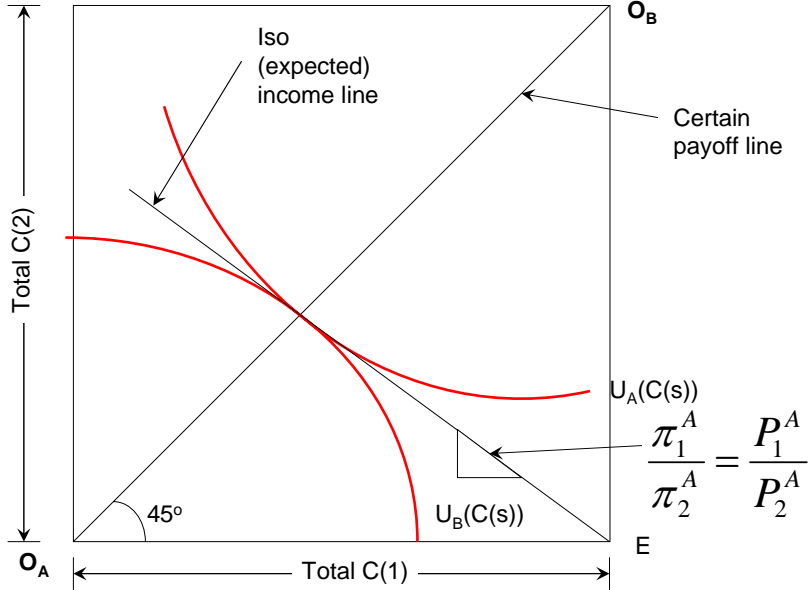
Edgeworth Box

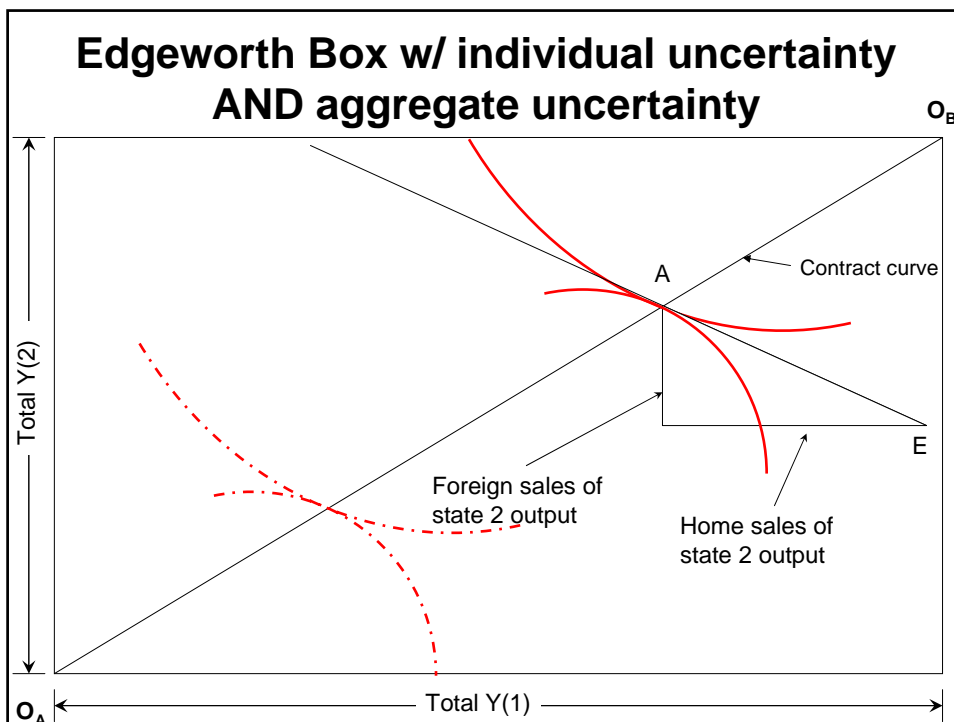
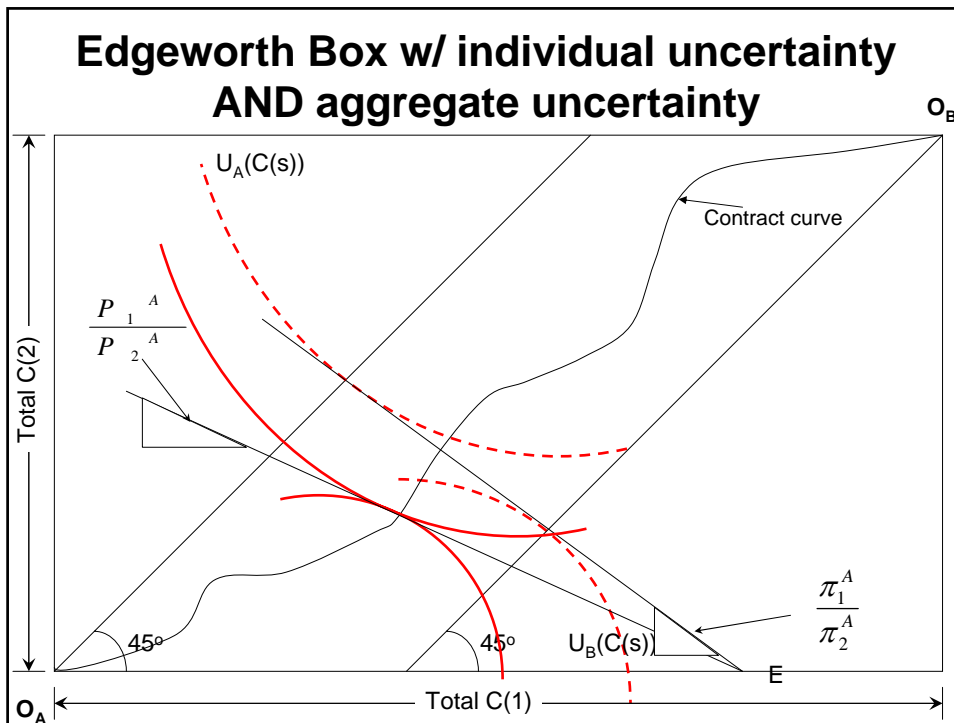


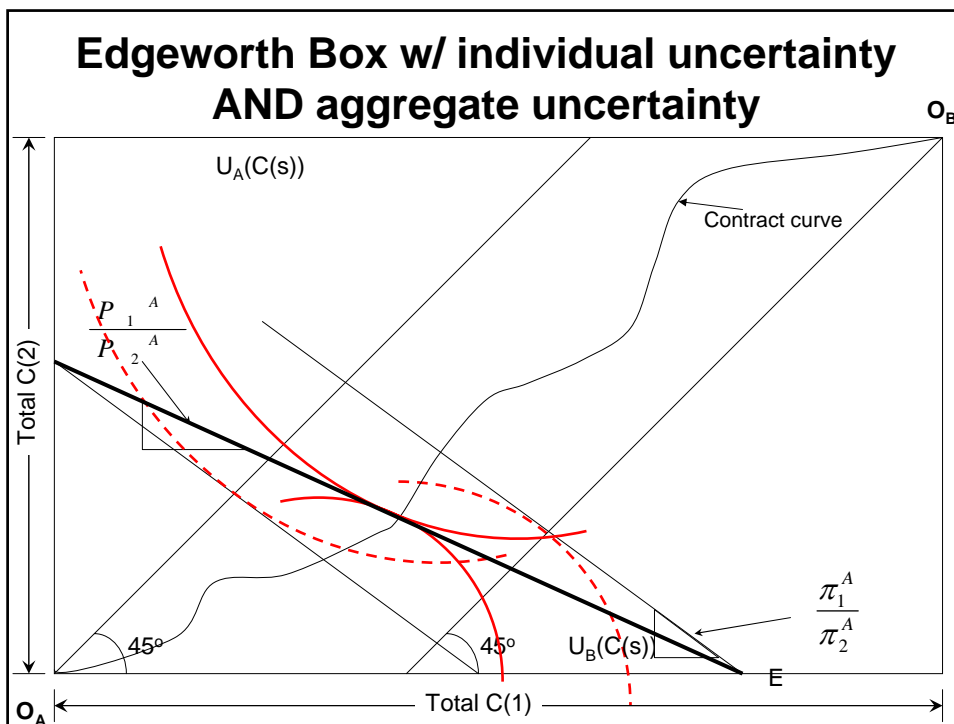
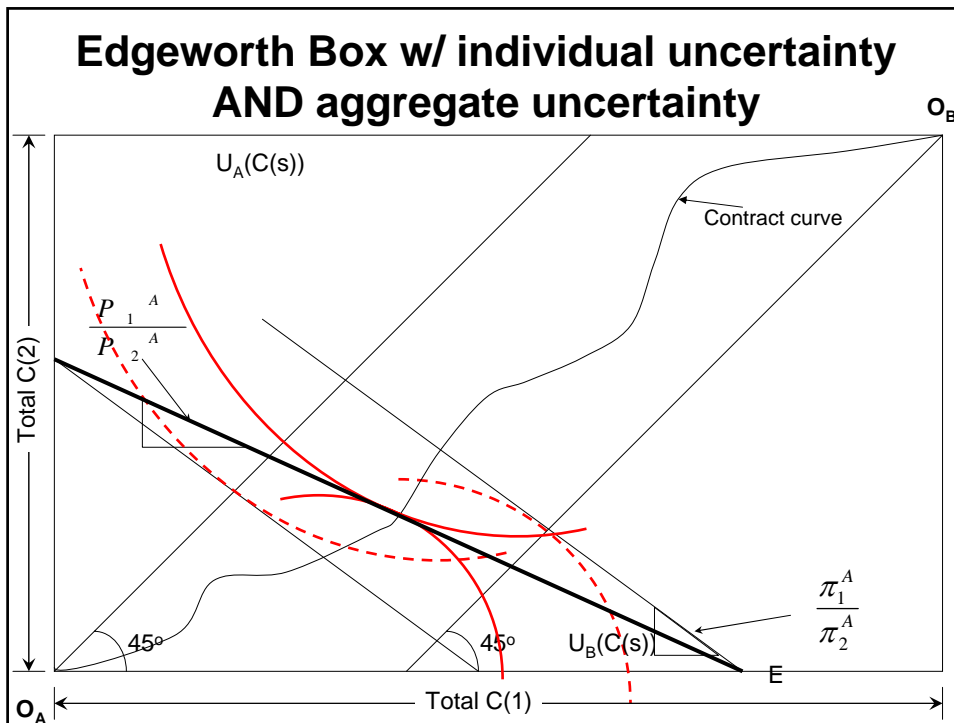
Edgeworth Box



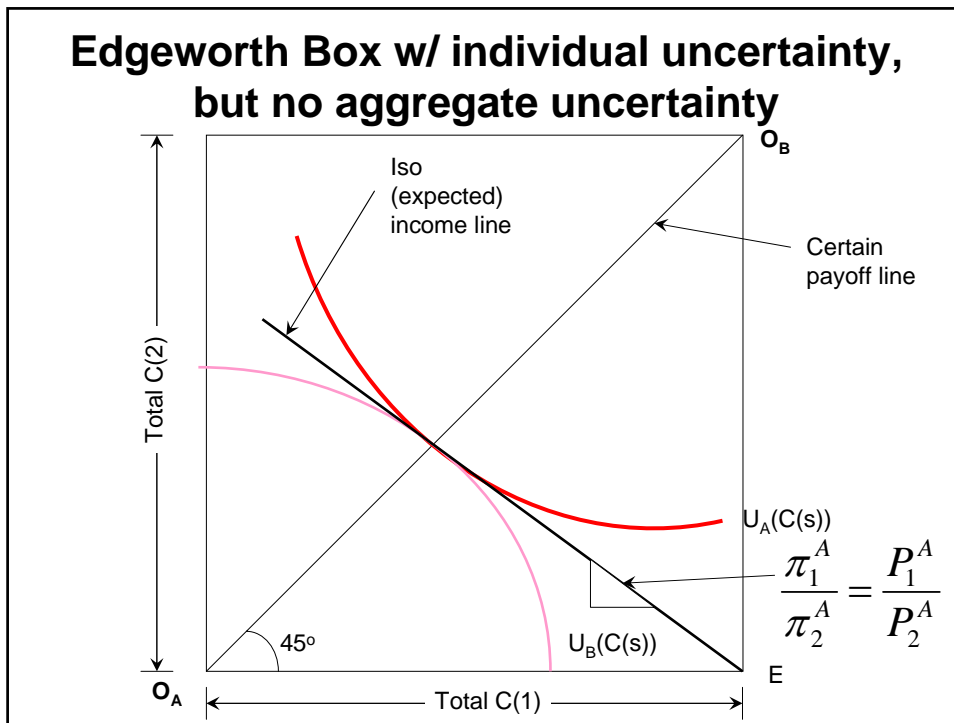
Edgeworth Box w/ individual uncertainty, but no aggregate uncertainty



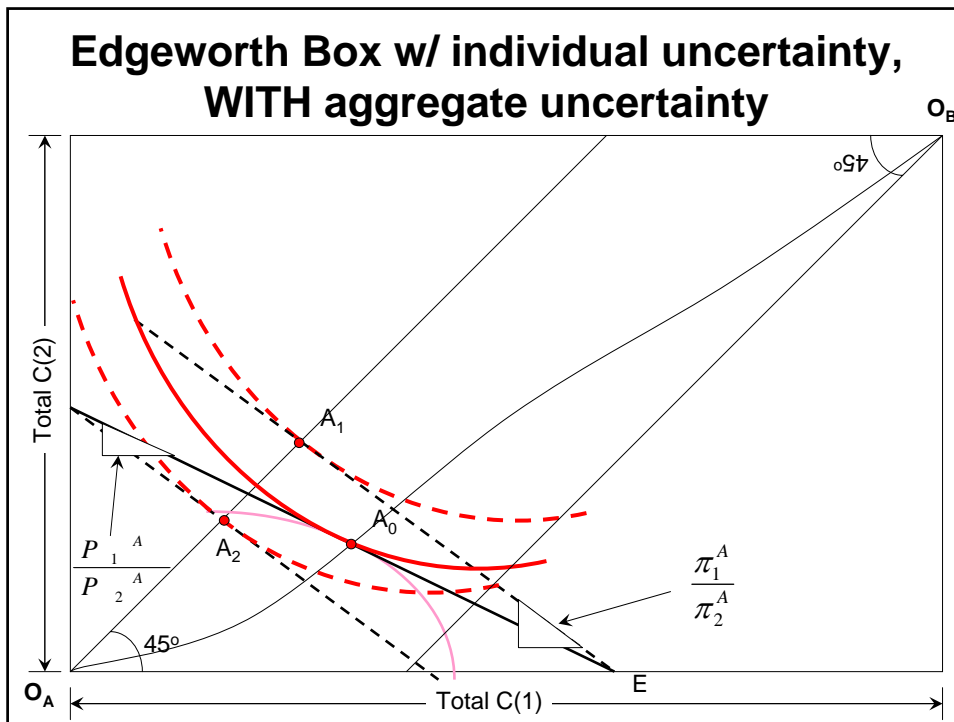




Edgeworth Box w/ individual uncertainty, but no aggregate uncertainty



Edgeworth Box w/ individual uncertainty, WITH aggregate uncertainty



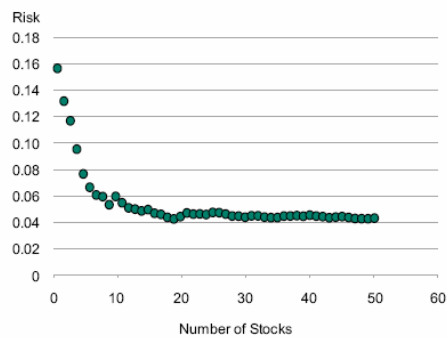
International portfolio diversification

- Allows us to minimize consumption risk, i.e., to smooth consumption across time and states

Gains from portfolio diversification

FIGURE 1

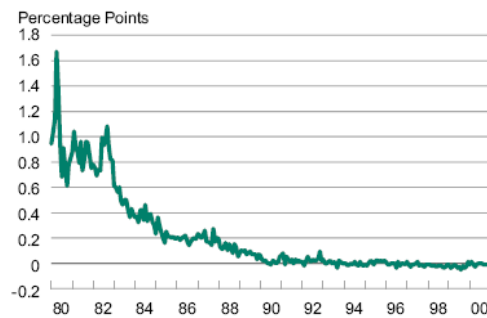
Portfolio Diversification and Risk
1995-1999



More financial globalization ... at least among DCs

FIGURE 2

Onshore-Offshore Interest Differential



The home equity bias

- International portfolio diversification
Theory predicts that people should hold a substantial fraction of their stock portfolio abroad
- Empirical evidence is far from consistent with the theoretical prediction

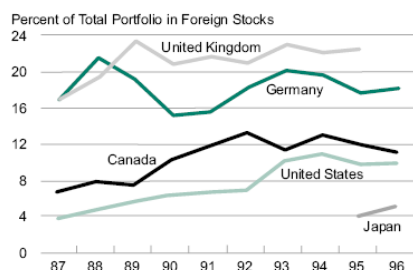
The home equity bias

- French and Poterba (1991) – as of 1989, the share of foreign equities in total equity is 4% in U.S., 2% in Japan, 18% in the U.K.
- Tesar and Werner (1994) – more than 96% of U.S. wealth was invested in U.S. equity in 1991; total U.S. stock market held by Germany, Canada, Japan, and the U.K. was below 12% in 1991
- Baxter and Jermann (1997) – in 1991, over 95% of equities held by U.S. investors were those of U.S. corporations

The home equity bias

FIGURE 3

Home Equity Bias 1987-1996*



*From Linda Tesar and Ingrid Werner, "The Internationalization of Securities Markets since the 1987 Crash," *Brookings-Wharton Papers on Financial Services*, Washington, DC, Brookings Institution, 1998, reprinted with permission.

What about fluctuations in C and Y?

- Theory predicts $\text{corr}(C^i, C^{ROW}) = 1$, and also that $\text{corr}(C^i, C^{ROW}) > \text{corr}(Y^i, Y^{ROW})$.
- But again, empirical findings are not consistent with the prediction.

TABLE

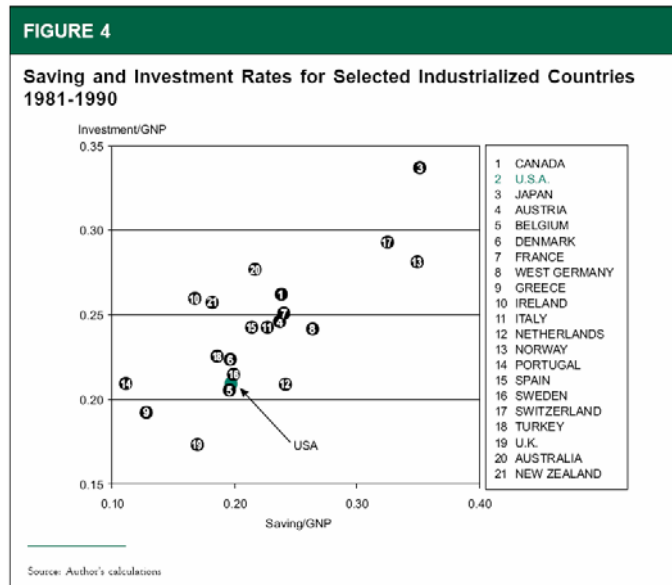
International Consumption and Output Correlations 1973-1992

Country	Consumption Correlation ^a	Output Correlation ^a
Canada	0.56	0.70
France	0.45	0.60
Germany	0.63	0.70
Italy	0.27	0.51
Japan	0.38	0.46
United Kingdom	0.63	0.62
United States	0.52	0.68
OECD average ^{b,c}	0.43	0.52
Developing country average ^b	-0.10	0.05

Feldstein-Horioka paradox

- Theory predicts $corr(S^i, I^i) = 0$
- Countries should export excess saving (than needed for domestic investment) and import deficit saving (to finance domestic investment)
- Savings should flow wherever the rate of returns is high
- But again, empirically unsupported

Feldstein-Horioka paradox



Does that mean there are unexploited gains from international risk-sharing?

- No for DCs.
- Maybe yes for LDCs.

Factors that may contribute to unsupportive empirical findings

- Financial markets are not complete
 - Existence of non-tradable goods
 - Transaction costs
- Bottom line: The benefits of undertaking further measures to reduce risk may not outweigh the costs

DCs

- The gains from international risk are minimal
- The business cycles of these economies are already synchronizing with the world economy → not so much heterogeneity
- The marginal gain from more financial development may be small

LDCs

- The gains from international risk can be substantial
- The business cycles of these economies are NOT synchronizing much with the world economy
 - much heterogeneity can mean more potential gains from smoothing country-specific shocks
 - $Var(Y)$ tends to be much higher for LDCs
- The marginal gain from more financial development may be substantial due to lower levels of financial development