

# Discussion of: Financial Integration, Macroeconomic Volatility and Welfare

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IMF Seventh Jacques Polak Annual Research Conference,  
Washington, November 2006

# The Issue

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What can we learn about financial integration and our models about financial integration?

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In EH model  $MRS \simeq C$ , thus more integration leads to higher consumption co-movement (from 0 to 0.73), but not necessarily output co-movement



# Financial Integration and co-movement: evidence

Table 2. Correlations with "World" Macroeconomic Aggregates  
(Medians for each group)

	Full Sample	Period		
	1960–99	BW	Common Shocks	Globalization
<b>Output</b>				
Full sample	0.18 [0.04] ***	0.11 [0.04] **	0.20 [0.06] ***	0.03 [0.06]
Industrial countries	0.52 [0.05] ***	0.19 [0.13]	0.39 [0.12] ***	0.46 [0.11] ***
Developing countries	0.10 [0.03] ***	0.09 [0.04] **	0.18 [0.07] **	-0.01 [0.05]
MFIs	0.12 [0.05] **	0.02 [0.06]	0.18 [0.12]	0.02 [0.09]
LFIs	0.09 [0.04] **	0.09 [0.07]	0.18 [0.10] *	-0.03 [0.10]
<b>Consumption</b>				
Full sample	0.12 [0.04] ***	0.02 [0.05]	0.14 [0.06] **	-0.03 [0.06]
Industrial countries	0.45 [0.06] ***	0.06 [0.08]	0.33 [0.08] ***	0.57 [0.12] ***
Developing countries	0.02 [0.03]	-0.03 [0.06]	-0.02 [0.06]	-0.08 [0.04] *
MFIs	0.04 [0.06]	0.06 [0.09]	-0.03 [0.08]	-0.03 [0.14]
LFIs	0.01 [0.05]	-0.03 [0.10]	0.04 [0.09]	-0.08 [0.07]

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- The EH model (as many others) predicts a strong relation between financial integration and consumption co-movement.
- Support for this implication is limited
- Main problem is the strong link between MRS and consumption (also not supported by pricing data)
- Next: look at the evidence using more sophisticated MRS

# Financial Integration and Volatility

Macro Volatility = Volatility of Underlying Shocks + Amplification

- In EH model (as in many others) shocks do most of the work.
- Small role of financial integration (Volatility of output goes from 0.77% to 0.84%)
- Evidence from financial crises suggest a link between financial integration and shocks itself (in Mexico and Argentina large drops in TFP)

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- Evidence from financial crises suggest a link between financial integration and shocks itself (in Mexico and Argentina large drops in TFP)
- Next: explore models with the volatility of shocks can depend on integration

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- In EH the gains of going from FA to BE are 0.006% of lifetime consumption
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- Shocks to non tradable cannot (by assumption) be shared
- Shocks to tradables are trend stationary ( $AC = 0.7$ )
- Business Cycle Shocks are small (Lucas)

# Is Financial Integration irrelevant?

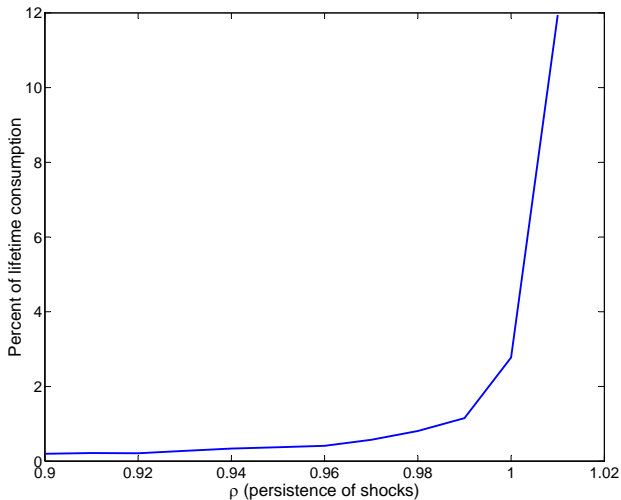
- Not if it affects trend growth (Obstfeld, 1994)
- Not if offers individuals (as opposed to countries) better insurance opportunities (Davis, Nalewaik and Willen, 2001)
- Not if shocks are not trend stationary (Aguiar and Gopinath, 2005)

# Gains from holding a world portfolio

$$\begin{aligned}y_{it} &= \rho y_{it-1} + \varepsilon_{it} \\ u(y_{it}) &= \frac{1}{1-\sigma} (y_{it})^{1-\sigma} \\ \sigma &= 2, \sigma_\varepsilon = 0.02, \beta = 0.99 \\ & 200 \text{ countries, } 200 \text{ periods}\end{aligned}$$

- If  $\rho$  is close to 1 shocks cannot be insured with a simple bond
- Welfare impact of stock market financial integration can be very large!

# Gains from holding a world portfolio v/s a country portfolio



# What next

If gains are so large is then very important to study optimal portfolio diversification (EH, 2005)

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Next: why does not capital flow from poor (and unstable) countries to rich (and stable) countries?