

# Discussion of: International Risk Sharing in the Long Run and in the Short Run

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- This paper proposes a simple but natural way of measuring risk sharing at different time horizons
- The most intriguing finding of the paper is that for all couple of countries analyzed

$$\text{corr}(c_{t+k} - c_t, c_{t+k}^* - c_t^*)$$

raises with  $k$ , which is interpreted as countries doing a better job in sharing long run risk.

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- Puzzling because sharing long run risk cannot be achieved with simple bonds (Baxter and Crucini) and not even with more assets with limited enforcement (Kehoe and Perri)

# Outline

- An explicit model of long and short run risk
- Are long run risks really shared?
- Conclusions



# Long and Short Run Risks

$$\begin{aligned}y_t &= z_t + \varepsilon_t, & y_t &= z_t^* + \varepsilon_t^* \\z_t &= z_{t-1} + \eta_t, & z_t^* &= z_{t-1}^* + \eta_t^* \\Corr(\varepsilon, \varepsilon^*) &= Corr(\eta, \eta^*) = 0\end{aligned}$$

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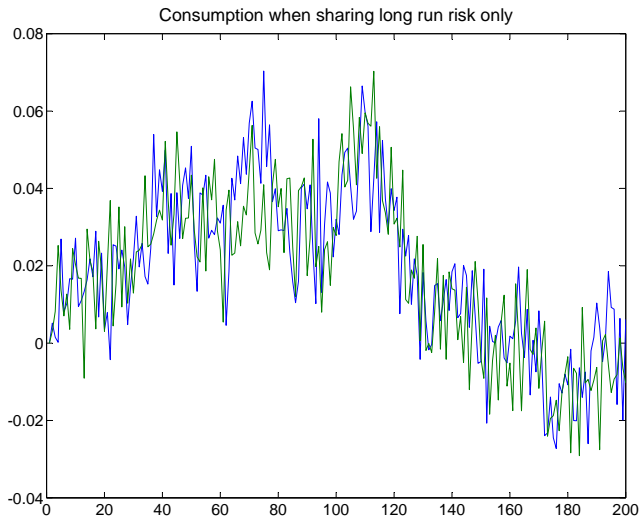
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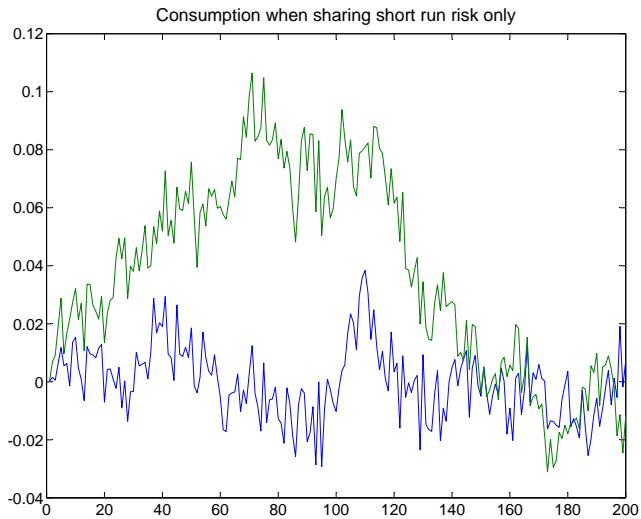
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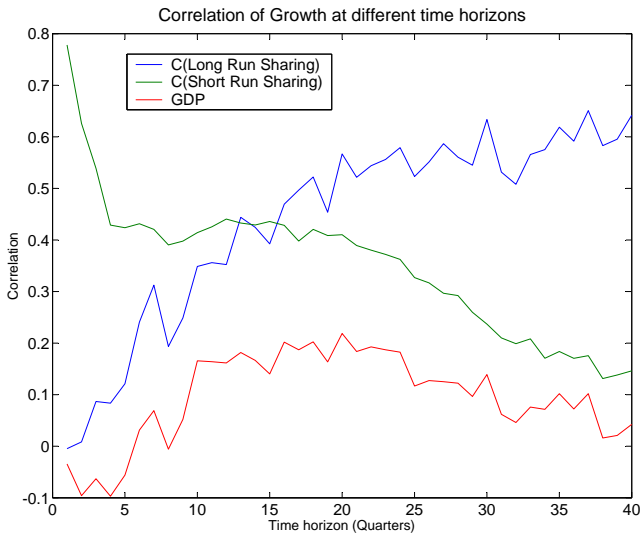
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- Sharing only the short run risk

$$c_t = \frac{\varepsilon_t + \varepsilon_t^*}{2} + z_t, \quad c_t^* = \frac{\varepsilon_t + \varepsilon_t^*}{2} + z_t^*$$







# A more general test

- Rather than just looking at consumption correlation at different horizons

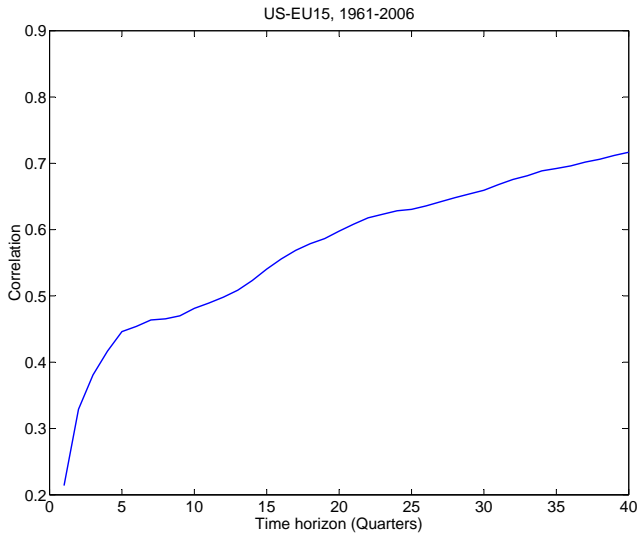


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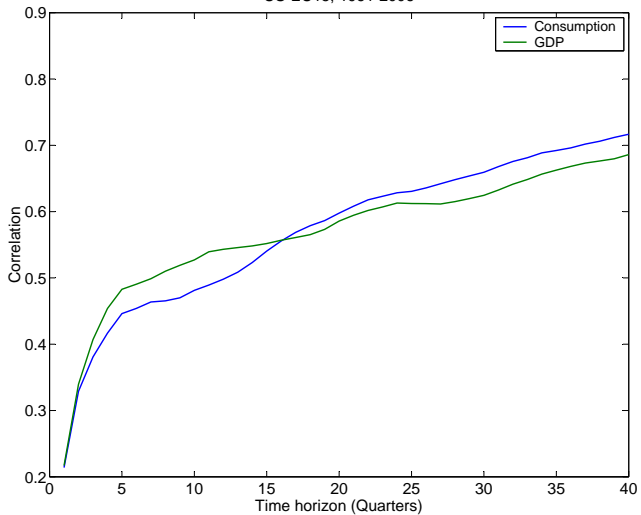
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- Look at **difference** between consumption and output correlation at different horizons

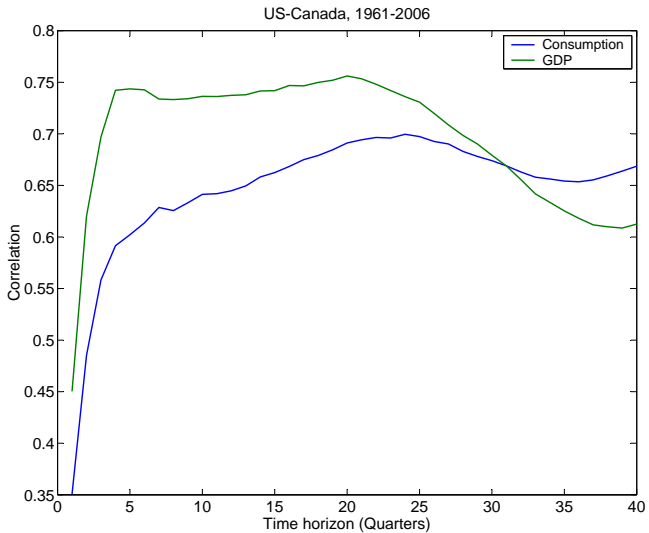
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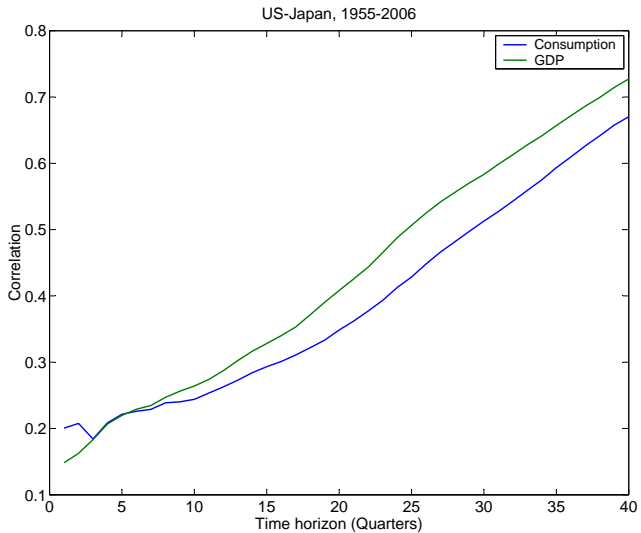
- Rather than just looking at consumption correlation at different horizons
- Look at **difference** between consumption and output correlation at different horizons
- Risk sharing picture changes quite dramatically

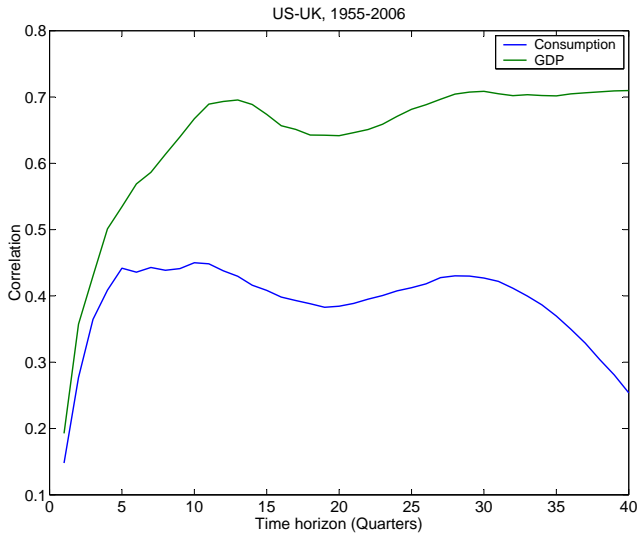


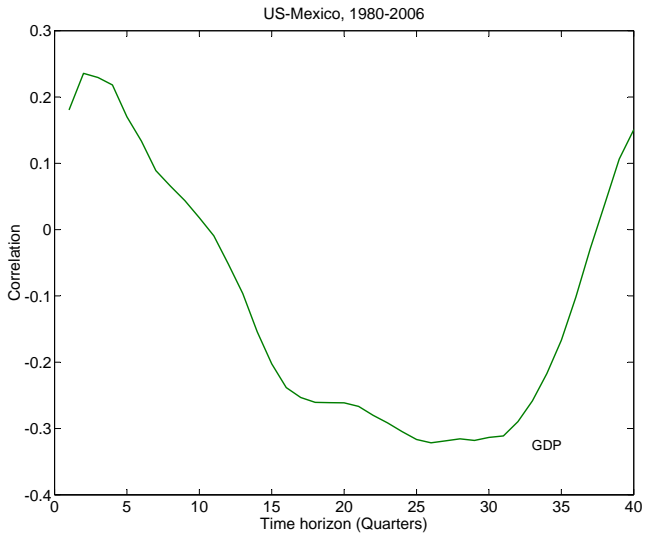
US-EU15, 1961-2006



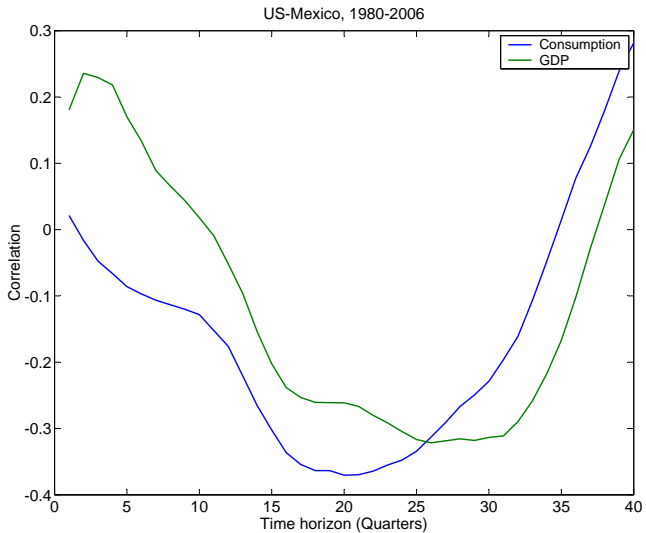




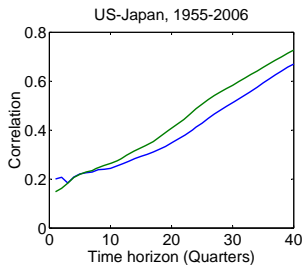
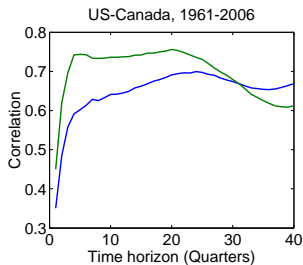
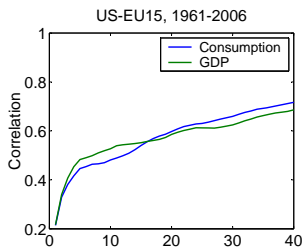
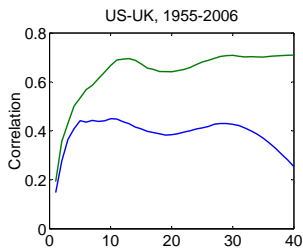








# US v/s developed countries



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- Maybe the way countries share risk (deep shocks) shows up in income not in consumption:
- Demand spillovers, Technology Transfers, Price Effects, Common components (Colacito, 06)
- Still a lot of risk to be shared (especially with developed countries)

# Conclusions

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- This paper forcefully argues that we should look at co-movement at different frequencies and propose a simple way of doing so
- Make us really think about long run risk (which are the one which matter the most) and how they are shared