# Discussion of: Emerging Market Business Cycles: the Cycle is the Trend

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Goal of the paper:

Understand different features of business cycles in emerging and developing countries

# Discussion

- Are business cycles in emerging markets different?
- The idea of the paper
- Potential problems
- Where is the paper pointing us to...

# Data quality

Here focus on four emerging countries

Argentina (Local knowledge), Korea, Mexico, Turkey (OECD membership)

Contrast with two definitely emerged countries: Australia and Canada

#### A cross section of business cycles in emerging economies



Real GDP, Percentage deviations from HP trend



#### Comparing Business cycles in Emerging and Developed Countries

Real GDP, Percentage deviations from HP trend



• Rather than a crisis approach to emerging markets, we could aim for a business cycle theory approach.

GDP %Standard deviation (1980.1-2004.2, HP filter)

	Emerging					Developed			
Arg	Kor	Mex	Tur	Ave	Au	Ca	Ave	Ratio	
4.49	2.39	2.45	3.73	<mark>3.26</mark>	1.36	1.61	<mark>1.49</mark>	<mark>2.19</mark>	

- Higher volatility in emerging countries
- Volatility ratios are bigger than the pre-war/post-war US

Can we then just explain these features with more volatile TFP shocks?

- First it would not be much progress,
- second there are two additional differences across countries
  - Relative volatility of consumption
  - Cyclical properties of the trade balance

		E	Emergin	Developed				
	Arg	Kor	Mex	Tur	Ave	Au	Ca	Ave
$\sigma(Y)/\sigma(Y)$	1.38	1.23	1.24	1.09	<mark>1.23</mark>	0.69	0.77	<mark>0.73</mark>
Corr(Y, nx)	-0.62	-0.65	-0.72	-0.79	<mark>-0.68</mark>	-0.43	-0.20	<mark>-0.31</mark>

The AG approach

Use a standard, one-good, small open economy model with frictionless access to international markets and two types of productivity shocks

$$y_t = z_t \gamma_t F(k_t, l_t)$$

• Mean reverting shocks

$$z_t = \rho_z z_{t-1} + \varepsilon_t, \qquad 0 < \rho_z < 1$$

Non-stationary shocks (positively correlated growth)

$$\gamma_t = (1 + \rho_g)\gamma_{t-1} - \rho_g\gamma_{t-2} + \eta_t \qquad 0 < \rho_g < 1$$

Can different mixes of these shocks explain the cross section of business cycles, with standard (Cobb Douglas) preferences or quasi-linear preferences (no wealth effect on labor supply)?

# Result 1

With QL preferences stationary shocks produce mildly countercyclical trade balance but not high relative volatility of consumption. Cannot simultaneously account for emerging and developed countries

Result 2

With QL preferences, non stationary shocks produce strongly countercyclical trade balance and high relative volatility of consumption. Key feature: permanent income raises more than current income.

Corollary (AG shock identification)

If the high volatility in the EE mostly comes from non stationary shocks and the low volatility in DE mostly from stationary shocks, QL preferences can deliver the observed patterns

#### Impulse responses to different types of shocks (QL prefs)



Years after shock

Problems

- How about standard preferences and persistent shocks?

#### Impulse response to a growth shock



### Impulse response to a growth shock



Cobb-Douglas preferences imply countercyclical employment!

Problems

- Is the assumption of frictionless international capital markets reasonable?





Growth shocks imply big swings and high absolute levels in foreign asset positions!

Serial correlation of net exports growth

Emerging mkts dataEM modelArgKorMexTurAveMed. (HP)0.310.210.260.100.22-0.2

- Perfect access to credit markets imply on impact borrowing jumps, while in subsequent periods gradually declines, so nx growth is negatively correlated across time
- In the data net export growth is positivelly correlated, suggesting a more gradual access to international markets

Interest Rates, GDP and Net Exports in Argentina

From Neumeyer and Perri, 2004





From Neumeyer and Perri, 2004



Movements in interest rates faced by an emerging economy can also explain high c volatility and strongly countercyclical nx

How about international prices?

Real exchange rate (Price of domestic goods relative to foreign)

EmergingDevelopedArgKorMexTurAvecorr(Y, x)0.380.390.550.530.460.140.070.10

- Real exchange rate much more procyclical in emerging economies
- With non stationary shocks, as the shock hits demand will increase more than supply. If demand is concentrated toward domestic goods appreciations(depreciations) in good (bad) times. Procyclical exchange rates. Non stationary shocks smell good!

# Conclusion

When a recession hits the US americans know it will be over soon

When it happens in Argentina, Argentinians know they will be in it for a while...

This paper shows that these different (rational) expectations can explain some key differences between US and Argentina.

The big issue it is pointing us to is why recessions in the two countries are different objects