Comments on: Cheng and Rajan's `Monetary Trilemma, Dilemma or Something in Between?'

Helen Popper Santa Clara University

- 1. Trilemma: not dead yet
- 2. What is being measured?
- 3. Objectives, N, & endogeneity

1. Trilemma: not dead yet.

"...the report of my death was an exaggeration."

-Mark Twain to U.S. Journalist

1. Trilemma: not dead yet

- -Klein & Shambaugh, AEJ Macro 2015
- -Obstfeld, Ostry, & Qureshi, RE Stat 2017
- -Bekaert & Mehl, JIMF, 2019
- -Ligonnière, JIMF 2018
- -Han & Wei, (some life left) JIE 2018

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- -Cheng & Rajan
 - Regimes matter.
 - Semi-regimes matter.
 - Regimes matter asymmetrically.

(Direction differs from Han & Wei)

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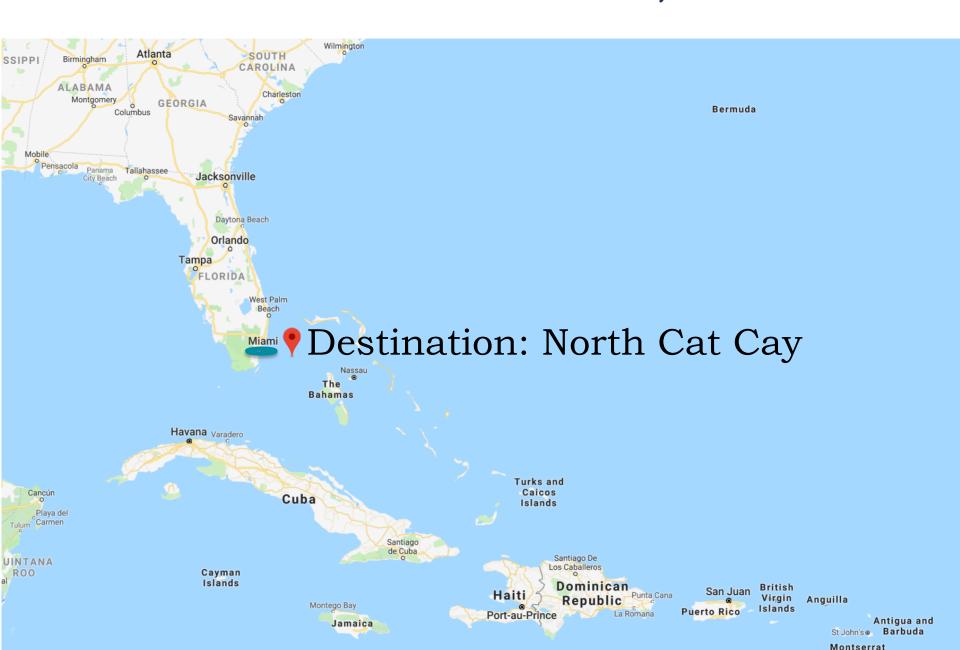
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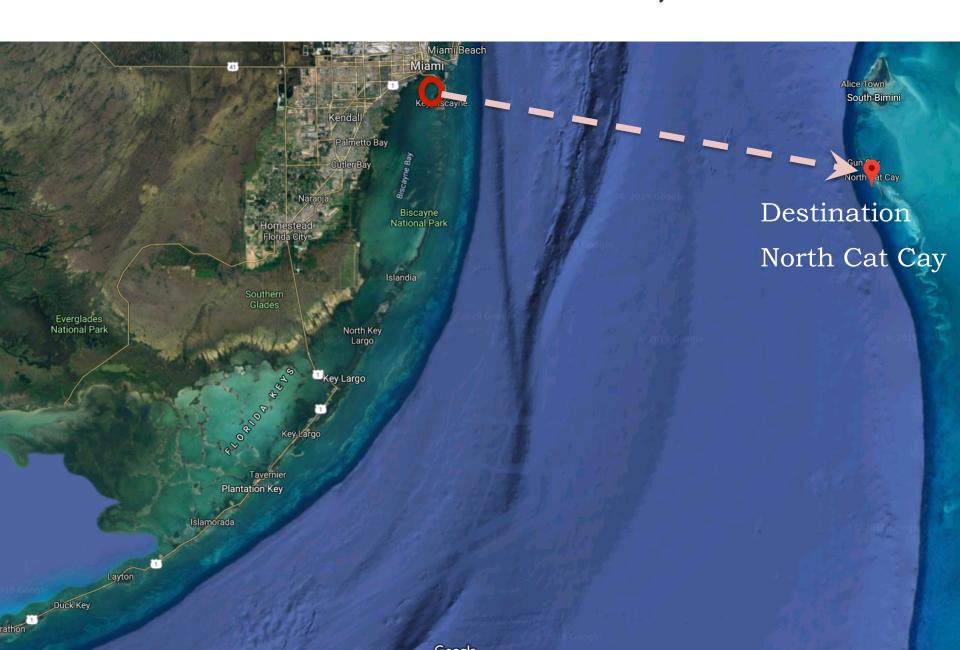
Overall message is important, and the pieces are interesting.

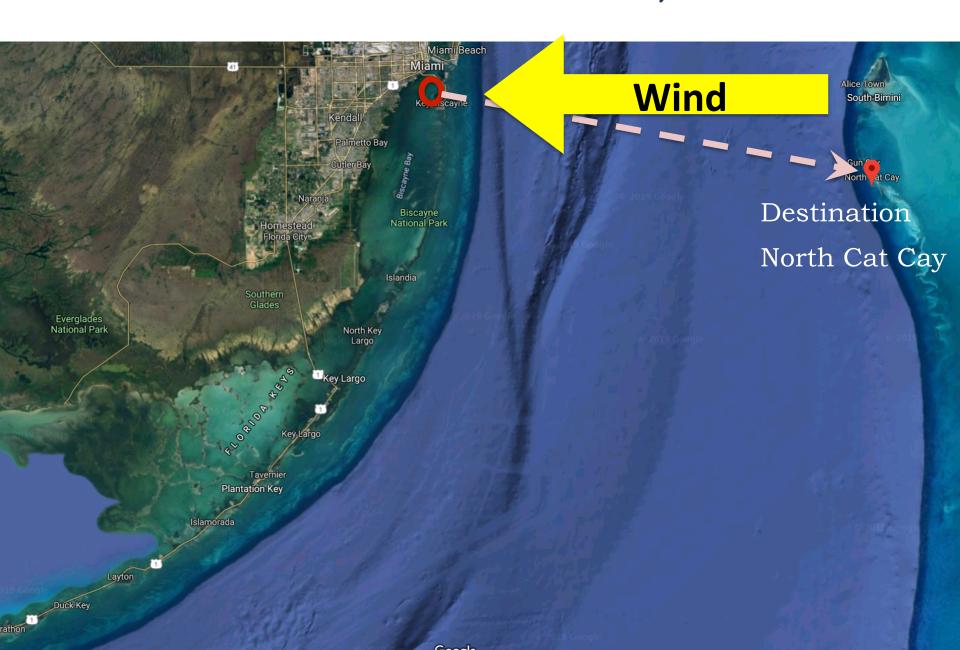
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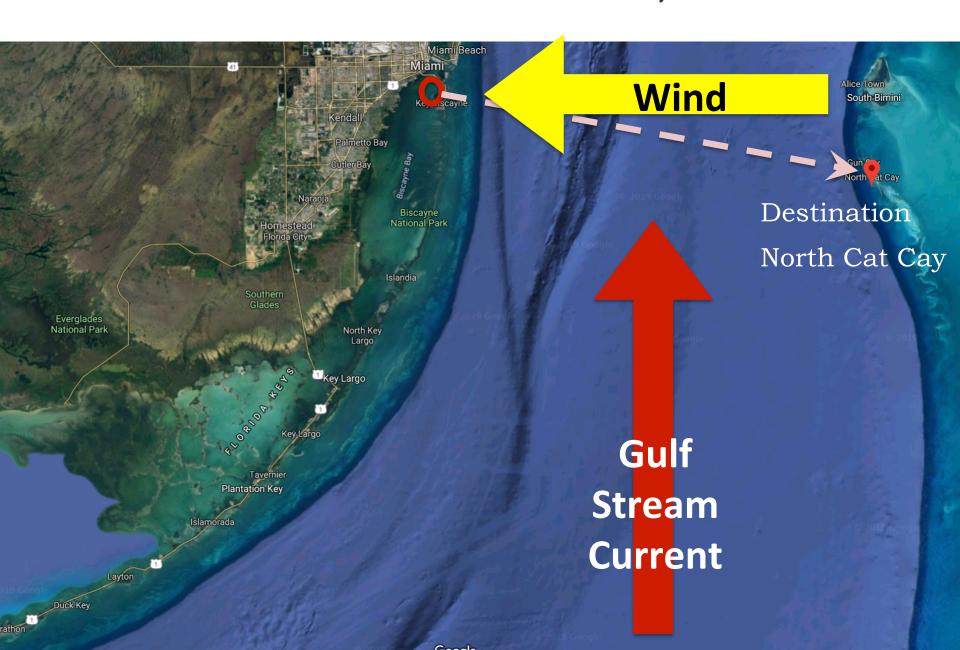
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- 2. What is being measured?
- & this strand of the literature.

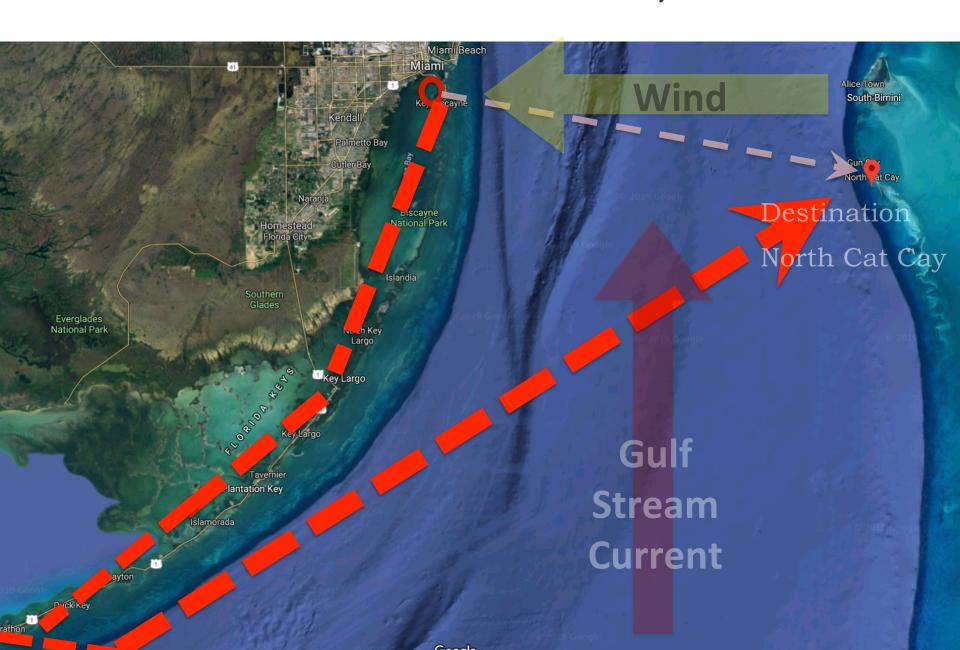


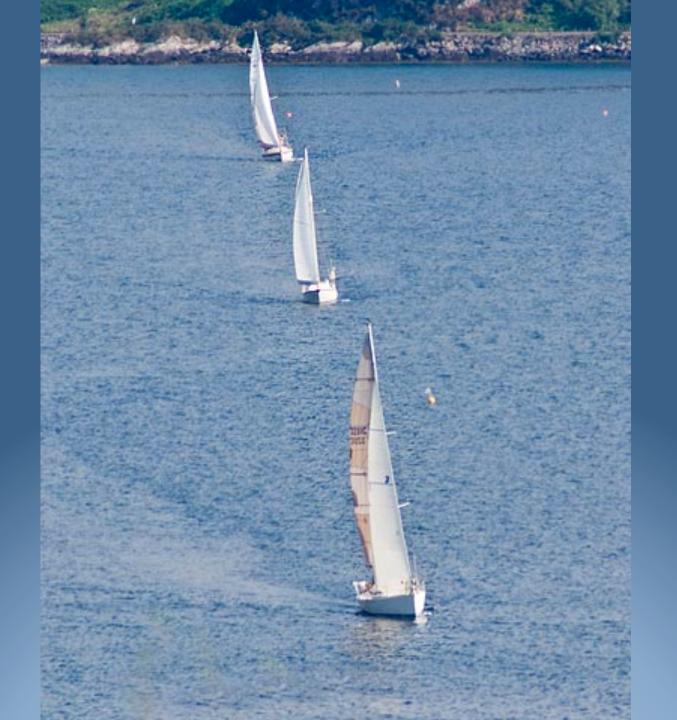








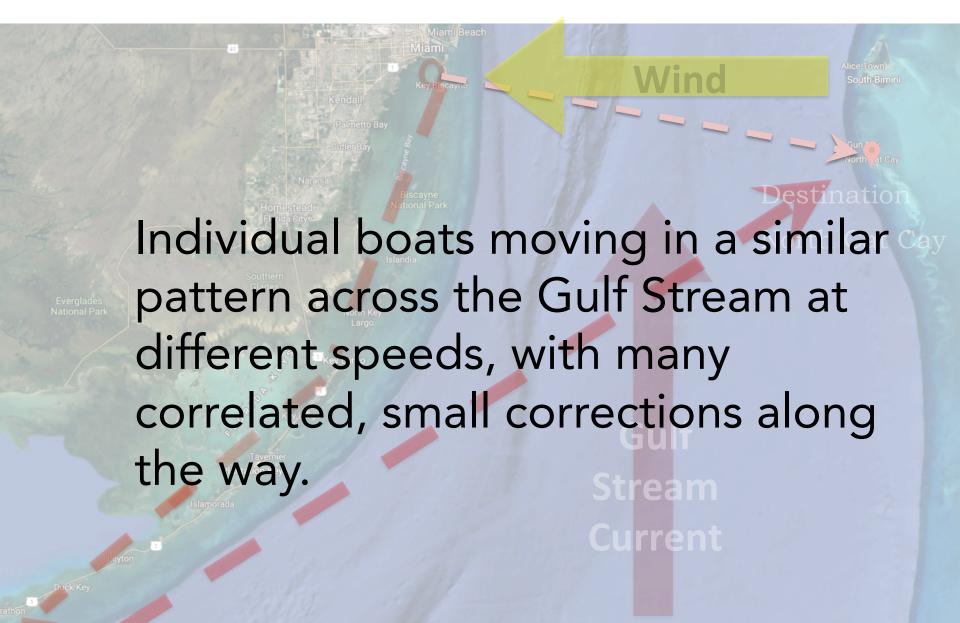




Review the Context Sailing

- 1. The Great Bahama Bank, with Cat Cay, is a popular destination.
- 2. Boats, small and large, share headwinds & currents.
- 3. Big boats are faster than small ones, other structural differences.

Review the Context



1. Calculate $\Delta R_{i,t}$ and $\Delta R_{B,t}$.

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3. Interpret $\beta > 0$.

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 and $\Delta R_{B,t}$.

2. Estimate

$$\Delta R_{i,t} = \alpha + \beta \Delta R_{B,t} + u_{i,t}$$

3. Interpret

$$\beta > 0$$
.

β reflects related destinations, and common headwinds & currents.

$$\beta > 0$$

Was the captain of the little boat (or any boat) constrained by the actions of the Big Boat?
 (No.)

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 (No.)
- 2. Could the captain choose the destination? (Yes.)

$\beta > 0$

- Was the captain of the little boat (or any boat) constrained by the actions of the Big Boat?
 (No.)
- 2. Could the captain choose the destination? (Yes.)
- 3. Can the captain respond individually to changing conditions? (Yes)

$\beta > 0$

- Was the captain of the little boat (or any boat) constrained by the actions of the Big Boat?
 (No.)
- 2. Could the captain choose the destination? (Yes.)
- 3. Can the captain respond individually to changing conditions?
- 4. So, did the captain have an independent policy?(Yes.)



Review the Context Monetary Policy

- 1. A stable inflation rate is a popular objective.
- 2. Economies share headwinds & currents.
- 3. Some monetary authorities move faster than others; and there are other structural differences.

1. Calculate

$$\Delta R_{i,t}$$
 and $\Delta R_{B,t}$.

2. Estimate

$$\Delta R_{i,t} = \alpha + \beta \Delta R_{B,t} + u_{i,t}$$

3. Interpret

$$\beta > 0$$
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β reflects related objectives, and common headwinds & currents.

$$\beta > 0$$

1. Is the monetary authority constrained by the actions of the base?

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- 2. Can the monetary authority choose the objective?

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- 3. Can the monetary authority respond individually to changing conditions?
- 4. Does the monetary authority have its own sovereign policy?

$$\beta > 0$$

- 1. Is the monetary authority constrained by the actions of the base?
- 2. Can the monetary authority choose the objective?
- 3. Can the monetary authority respond individually to changing conditions?
- 4. Does the monetary authority have its own sovereign policy?

Does β measure monetary sovereignty? (No.)

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UK after the sterling crisis
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 But, β says it fell.

• HKMA vs. New Zealand's 90s inflation target Sovereignty glaringly different, But, β says roughly the same.

Other approaches

Identify in a full model or an empirical system.

Dedola, Rivolta, & Stracca, Journal of International Economics 2017 Davis & Presno, Journal of Monetary Economics 2017 Dees & Galesi, Working Paper, 2018

- Include an objective function. (More on that...)
 Han & Wei, Journal of International Economics 2018
 (& Cheng and Rajan)
- Focus on policy effectiveness.
 Georgiadis & Mehl, Journal of International Economics 2016
- Use the trilemma to measure sovereignty.
 Popper, Mandilaras, & Bird, European Economic Review 2014

Popper comments on 'Trilemma, Dilemma, or...'

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Popper comments on 'Trilemma, Dilemma, or. . .'

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- 2. What is being measured?
- 3. Central bank objective function
 - -N
 - Endogenous regime choice

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Including one is a step in the right direction, but

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Macroeconomics is all about simultaneity.

A single equation estimate is misleading. Use a model or empirical system or both. (Parsley & Popper, *JIMF* 2014)

- Central bank objective function
- -N
- Endogenous regime choice

Table 2. Two by Two Classification of Exchange Rate and Capital Control Regimes (First-difference)

		PEG				
•		Yes		No		
		Coef. (s.e.)	N [R ²]	Coef. (s.e.)	N [R ²]	
CAPITAL CONTROLS	Yes	0.31*** (0.09)	426 [0.05]	0.09 (0.07)	956 [0.00]	
	No	0.94*** (0.08)	277 [0.42]	0.48*** (0.11)	353 [0.10]	

^{***} Significantly different from 0 at the 99% level. ** At 95% level. * At 90% level.

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		PEG				
		Yes		N	No	
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		-	PEG		
-		Yes		N	0
		Coef. (s.e.)	N ● T [R ²]	Coef. (s.e.)	N • T [R ²]
CAPITAL CONTROLS	Yes	0.31*** (0.09)	426 N≈ 3 [0.05]	1? _{0.09} (0.07)	956 N≈24 5 [0.00]
	No	0.94*** (0.08)	277 N= [0.42]	? 0.48*** (0.11)	353 N≈8? [0.10]

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Small-N cells

- Say something about individual countries.
- How does what we know about them, as economists rather than statisticians, jive with this?

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Standard errors: Off the shelf clustering?

Converges at \sqrt{N}

(not \sqrt{NT} , Villacorta Gonzales, 2014)

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- Central bank objective function
- Inferences: \sqrt{N} vs. $\sqrt{N7}$
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- Central bank objective function
- Inferences: \sqrt{N} vs. \sqrt{N}
- Endogenous regime choice
- Choices to peg or control capital are related to objectives, conditions, & base country fundamentals.
- So, observed β differences conflate sovereignty and the choice landscape.

Conclusion

This paper—not dead yet & more

- Regimes matter.
- Semi-regimes matter.
- Regimes matter asymmetrically.

Challenges in the literature

- Correlation isn't sovereignty.
- Small N,
 - Opportunity to examine individual countries
 - Off-the-shelf clustering is challenging.
- Regime choice is endogenous.