

MONETARY POLICY SPILLOVERS IN THE NEW NORMAL*

Comments:
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Unconventional Monetary Policy: Real and Financial Linkages

*The views expressed in this presentation are those of the presenter and do not necessarily represent those of the IMF, its Executive Board or its Management.



TRILEMMA OR DILEMMA?

- Aizenman, Chinn, Ito (ACI) examine sensitivity of emerging market and developing (EMDC) financial conditions to developments in US, Japan, Eurozone (EZ), and China
- Basic question: is the exchange rate regime irrelevant (dilemma) or does it affect the sensitivity of the periphery countries to the core?
- Two-step approach:
 - Estimate sensitivity of EMDCs to center economies
 - Explain estimated sensitivity by real and financial linkages—as well as exchange rate regime

FIRST STAGE: METHODOLOGY

- Dependent variables:
 - Short-term policy rate; stock market price; sovereign bond spread; change in REER;
- Independent variables
 - Corresponding variable of the center countries
 - Global factors: real (world interest rates; oil prices; commodity prices), financial (VIX, TED)
 - Domestic: industrial production index
- Sample: 100 EMDCs, 3-year panels, 1986-2012

FIRST STAGE: RESULTS

- Movements of the financial variables in the center matter for all four financial variables, contributing the most explanatory power of all the RHS variables
- Policy interest rate the most affected in LDCs, but also term spreads and real exchange rate
- Increasing importance in recent panels of center interest rates
- Growing importance of other global financial conditions in recent panels
- Stock markets in developed economies highly influenced by those in center economies (how much cross-listing?)

SECOND STAGE: METHODOLOGY

- Dependent variables:

- Estimated center country coefficients $\hat{\gamma}_{it}^c$, $c = US, euro, Japan$

- Independent variables

- Openness: exchange rate stability, capital account openness, reserves
- Macro: inflation, CA, public debt/deficit
- Link: trade and financial linkages, trade competition with center
- Institutional: financial development (credit, stock market capitalization) , legal (law and order, bureaucratic quality, anti-corruption)

SECOND STAGE: RESULTS

- For LDC and EMG, at least some evidence that sensitivity of policy interest rate to center country interest rate depends on:
 - Exchange rate regime
 - Financial openness
 - Financial development
- Hence: key result–trilemma, not dilemma (c.f., Helene Rey)

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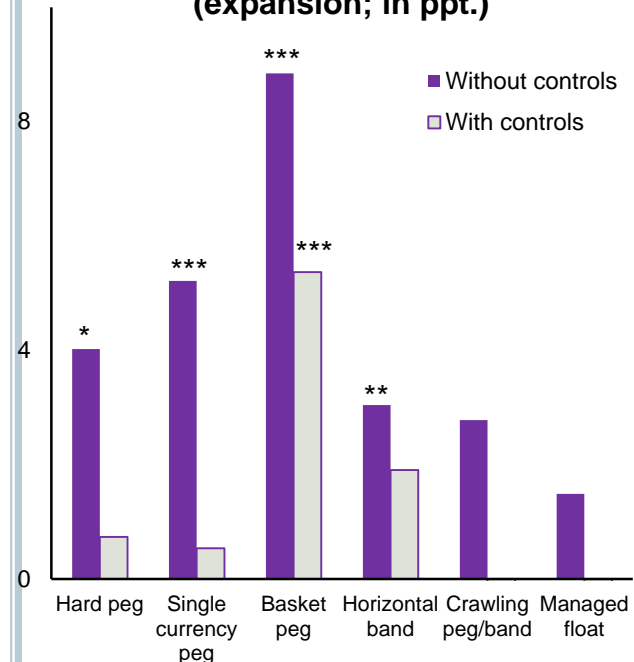
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- Hence: key result–trilemma, not dilemma (c.f., Helene Rey)

COMMENTARY

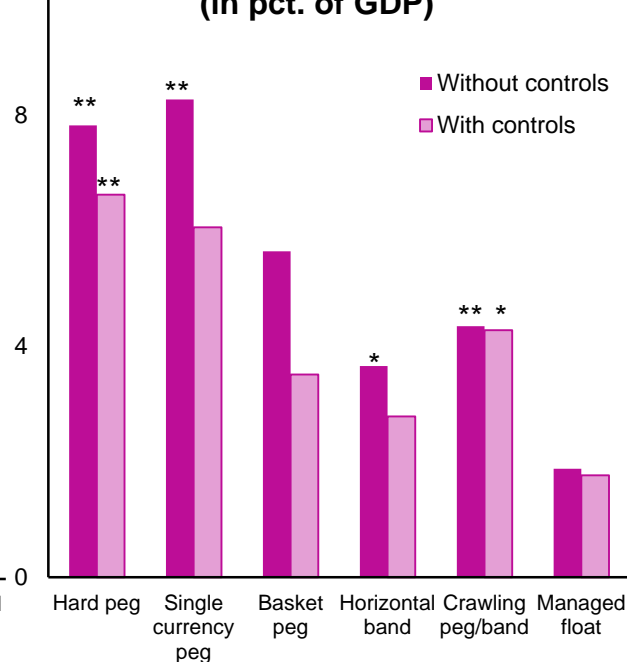
- Very nice paper, carefully done (though perhaps econometrically better to do in one step)
- Important result...but is this a false dichotomy with Rey?
- Two interpretations of Rey:
 1. Literal—exchange rate regime does not matter
 2. Even countries that are willing to allow exchange rate movement cannot be independent of center (US) country monetary cycle without imposing capital controls
- This paper (and other evidence) rejects (1)
- What to do about (2)?

FLOATS LIMIT CREDIT GROWTH, FX BORROWING AND OVERVALUATION

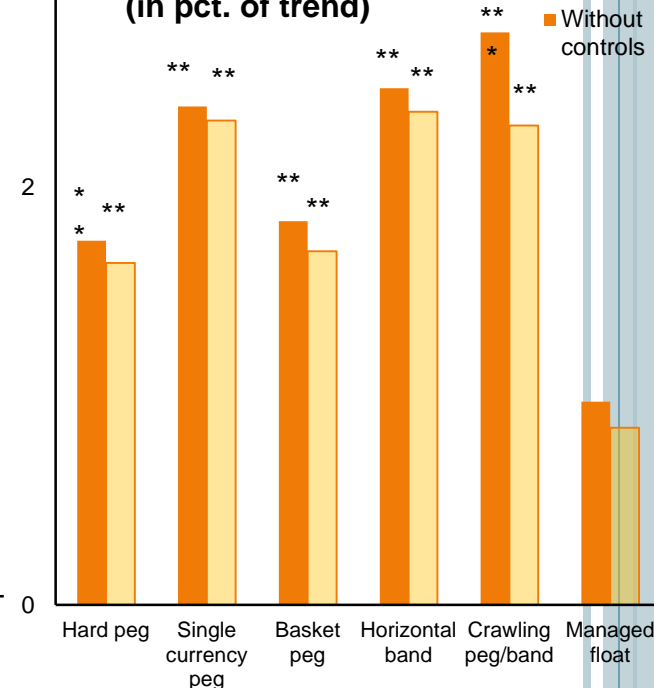
Change in private credit to GDP (expansion; in ppt.)



Banks' Foreign Liabilities (in pct. of GDP)



REER Overvaluation (in pct. of trend)



Source: Ghosh, Ostry and Qureshi (2014, 2015)

Note: Without controls includes real GDP per capita, region-specific and time effects. With controls adds real GDP growth, inflation, initial credit/GDP, net capital flows/GDP, bank foreign liabilities/GDP in the left panel; real GDP growth, REER deviation from trend, private credit/GDP in the middle panel; and real GDP growth, inflation, net capital flows/GDP, bank foreign liabilities/GDP right panel. Reference category is free float. ***, **, and * indicate statistical significance at 1, 5 and 10 percent levels, respectively.

- Domestic credit growth and banks' foreign borrowing is lower in pure and managed floats than in pegs (of different types) and horizontal bands
- Flexible regimes have the additional benefit of lower REER overvaluation

FLEXIBLE REGIMES HAVE LOWER CRISIS INCIDENCE

Vulnerabilities and Crisis in EMEs: IMF's De Facto Classification, 1980-2011

	Financial vulnerabilities			Macro vulnerabilities		Crisis ^a			
	Credit boom ^b	Foreign borrowing ^b	FX lending ^b	Fiscal balance ^b	REER deviation ^b	Bank	Currency	Debt	Growth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Hard pegs	6.1	14.3	58.9	-2.7	0.3	3.0	1.0	2.0	10.5
Intermediate	2.4	9.4	36.1	-3.6	0.2	4.7	5.2	1.9	4.4
Peg to single currency	3.5	12.3	34.9	-4.6	0.9	3.6	5.2	2.8	6.9
Basket peg	8.8	10.7	49.2	-1.9	-0.2	5.4	1.1	1.1	8.3
Horizontal band	5.1	9.9	44.5	-4.5	0.6	7.0	2.8	1.4	3.4
Crawling peg/band	1.1	8.3	35.1	-3.4	0.8	7.4	7.4	2.3	3.1
Managed float	1.2	8.0	35.4	-3.5	-0.7	2.7	4.9	1.5	3.3
Independent float	0.8	7.3	29.4	-3.2	-1.6	1.2	2.4	0.6	3.8

a/ In percent of exchange rate regime observations. Bank, currency, and debt crises from Laeven and Valencia (2012). Growth collapses are defined as those that are in the bottom fifth percentile of growth declines (current year relative to the average of the three previous years), and correspond to a fall in the growth rate of real GDP of about 7.5 percentage points. Regimes are lagged one period.

b/ Credit boom measures 3-year cumulative change in ratio of private sector credit to GDP (in percentage points). Foreign borrowing measures bank foreign liabilities/GDP (in percent). FX lending measures ratio of FX bank loans to total bank loans (in percent). Fiscal balance measures general govt. net lending/GDP (in percent). REER deviation measures deviation of REER from trend (in percent of trend).

Source: Ghosh, Ostry and Qureshi (2014, 2015)

- Highest FX vulnerabilities and crisis incidence in pegs also for the recent crisis, illustrating that the above pattern continues to hold for more recent periods (Ostry et al., 2012)

FLOATS APPEAR CONSISTENT WITH POLICY AUTONOMY

- Obstfeld (2014): Correlation between domestic and US ST policy rates is around zero for flexible ER regimes, and higher for pegs
 - *“It strikes me as not really fruitful to ask if the exchange rate regime materially influences the scope for monetary policy independence. Of course it does.”*
 - *“Those EMEs able to exploit a flexible exchange rate are far better positioned than those that devote monetary policy to fixing the rate - a reflection of the classical monetary policy trilemma”*
- Klein and Shambaugh (2013): Controlling for the level of capital account openness, the more flexible is the ER regime, the lower is the correlation between the domestic policy rate and the foreign rate
 - These findings hold true for the cross-section of country responses to more recent events: US monetary tightening in the 2000s, the global financial crisis

OPTIONS FOR REDUCING MONETARY POLICY SENSITIVITY TO THE CENTER



FX INTERVENTION CAN SUPPORT MONETARY AUTONOMY

- Can bring FX intervention to bear as a policy tool
 - If UIP does not hold, sterilized FXI constitutes a second instrument which can be used to manage spillovers from the global cycle
- “Two Targets, Two Instruments” (Ostry et al., 2012)
 - Using FXI to manage the ER is compatible with strict IT, provided that interventions are subordinated to delivering the inflation objective
- Blanchard, Ostry and Ghosh (2014, 2015): Generalize to a problem with more instruments (i.e., policy rate, FXI, macropru, capital controls)
 - Sterilized FXI can have similar or different effects (depending on the structure of inflows) as capital controls on the ER and net inflows
 - Inclusion of FXI in the policy mix is optimal, especially when many objectives (e.g., inflation, ER, output gap, financial stability) and limited instruments

CAPITAL CONTROLS

- We are not in Genoa anymore
 - Genoa Monetary Conference (1922): *“All artificial control of operations in exchange... is futile and mischievous”* - a sentiment, however, which lives on in some quarters: *“I have only eight seconds left to talk about capital controls. But that’s OK. I don’t need more time than that to tell you: they don’t work, I wouldn’t use them, I wouldn’t recommend them”* (Carstens, 2015)
- Bretton Woods architecture recognized that capital controls would be needed
 - Keynes (1944): *“What used to be heresy is now endorsed as orthodoxy”*
 - White (1937): *“Without the co-operation of other countries such control is difficult”*
- In the 1970s, US favored capital mobility - to help generate dollar devaluation
 - And the IMF became a cheerleader for open capital markets: *“What I would like to do is to persuade those of you who remain skeptical... that the benefits of liberalizing the capital account outweigh the potential costs”* (Fischer, 1997)
- But since the GFC, the IMF has outlined a greater role for controls
 - The Economist, commenting on Ostry et al. (2010): *“The IMF...acknowledges that controls on capital inflows can be a useful tool. For an organization that has long focused on the distortions such controls create, the shift is significant. It is also timely.”*
 - Even Fischer became a “convert”: *“What useful purpose is served by short-term international capital flows?”* (Fischer, 2014)
- Liberalization may reduce welfare in a second-best world (Rodrik, 2015), by causing excessive ER volatility or an ER level damaging for development (Jeanne, 2015)

NO MORAL SUPERIORITY OF MACRO-PRUDENTIAL MEASURES

- Sometimes macro-prudential measures are superior (Jeanne, 2012)
 - When all borrowing is risky (credit boom), no need to discriminate between domestic and foreign lenders. Optimal policy is tax on domestic borrowing
- But other times, capital controls may be the best response
 - When external borrowing is the source of distortions, authorities should discriminate against resident-nonresident transactions. Optimal policy is capital controls
- When borrowing is channeled through unregulated financial sector instead of banks, broad restrictions on foreign borrowing work better
- There is uncertainty regarding how each of the tools operate
 - Several macro-prudential measures are effectively capital controls
 - Road-testing both measures still at an early stage
 - Circumvention risks apply for both sets of measures
 - Which could argue for simple rules, e.g., limits on leverage or open FX positions
- In practice, employ both instruments if use of each has convex costs

THERE IS SCOPE FOR MULTILATERAL COOPERATION

- Cooperation need not work against domestic mandates
 - The argument presumes that CBs have equal number of targets and instruments
 - In practice, CBs have more objectives than instruments, which creates the scope for Pareto gains through policy coordination
 - Gains of similar order of magnitude to multilateral trade liberalization (McKibbin, 1997, Ostry and Ghosh, 2015)
- When Pareto improvements don't exist, “rules of the road” are needed (Ostry and Ghosh, 2015)
 - To constrain spillovers operating through both the CA and the KA
 - To guide the use of capital controls or equivalent policies in some circumstances, e.g., when they are a substitute for warranted external adjustment, or when the costs of the policies are convex
 - Keynes and White long ago recognized the need to regulate flows “at both ends”

KEY TAKEAWAYS

- Ability of EMDCs and smaller AE to insulate their economies against global financial cycle/reserve currency monetary policy a key issue
- This paper suggests that a flexible exchange rate regime can somewhat reduce sensitivity of domestic financial variables
- Other evidence supports this view
- But that may not be enough...
- Bring to bear other policy instruments
 - FX intervention
 - Capital controls/prudential measures