

THE GLOBAL DOLLAR CYCLE
BY OBSTFELD AND ZHOU

Discussion by Şebnem Kalemli-Özcan

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TAKEAWAYS AND CONTRIBUTION: BRINGING ALL UNDER ONE ROOF

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 - Large literature on 'contractionary depreciations' in EMDE
 - EMDE affected worse than AE from GFC: Kalemli-Ozcan (2019, JH), di Giovanni, Kalemli-Ozcan, Ulu, Baskaya (2022, RESTUD)

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3. What are the necessary ingredients in the new generation open economy macro models to capture this 'financial' channel of international transmission?
 - USD exchange rate determination modeling needs financial factors: Gabaix and Maggiori (2015, QJE), Itskhoki and Mukhin (2021, JPE)
 - Risk averse investors, financial frictions/segmented markets or both?

COMMENTS

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My comments will be on digging deeper on the following Qs:

1. Why EMDE affected worse than AE from GDC?
2. How to match models of UIP deviations with the UIP facts?
3. Why EBP?

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Authors' Answer:

- Shallower financial markets (**outcome**)
- High FX debt/balance sheet weakness (**outcome**)
- Weak regulation and/or less credible macro/monetary policies (**primitive**)

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I will argue:

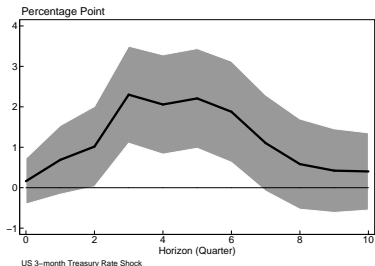
- UIP not holding in EMDE and the reasons why it does not hold can separate outcomes from primitives, explain why EMDE affected more from GDC and provide lessons for EMDE policy makers on what to do
 - ⇒ **Recent optimal policy models' welfare maximization works via closing the UIP wedge**
 - ⇒ **EM specific frictions/risks are going to be important**

FLOATERS RATE RESPONSE TO DEPRECIATIONS: EXOGENOUS US TIGHTENING

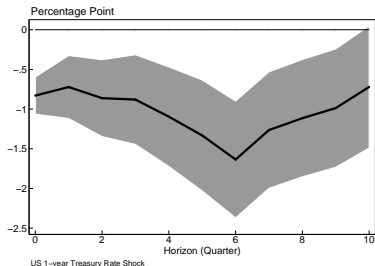
Using surprise \uparrow in U.S. policy rate—1996-2018:

Government bond rate differentials (12month) increase in EMs and decrease in AEs

Emerging Economies



Advanced Economies

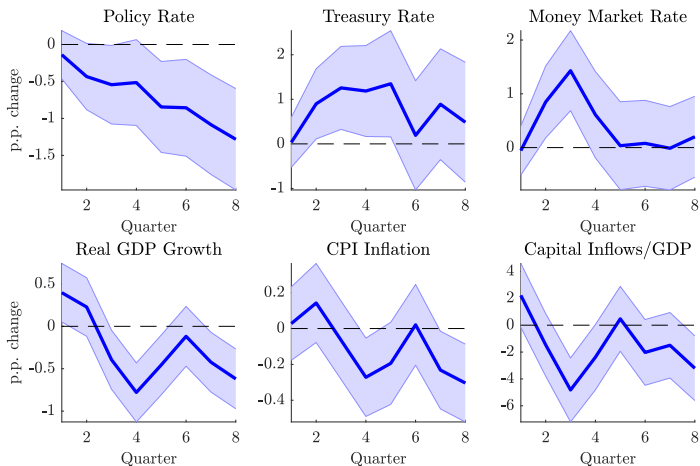


Investors pricing of EMDE risk plays an important role

Source: Kalemli-Ozcan (2019-JH); di Giovanni, Kalemli-Ozcan, Ulu, Baskaya (2021-RESTUD)

EXOGENOUS US TIGHTENING IS CONTRACTIONARY FOR EMDE (AND DEPRECIATES THE EXCHANGE RATE)

In spite of loose monetary policy!



Source: de Leo, Gopinath, Kalemli-Ozcan (2022)

2. UIP Modelling and UIP Facts

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The authors provide a very useful framework to connect several models and facts in the literature

$$\lambda_{t+h}^e = \underbrace{(i_t - i_t^{US})}_{\text{IR Differential}} - \underbrace{(s_{t+h}^e - s_t)}_{\text{ER Adjustment}} \neq 0 = \underbrace{\gamma_t^{\$}}_{\text{convenience/liquidity premium}} + \underbrace{\rho_t}_{\text{excess returns}}$$

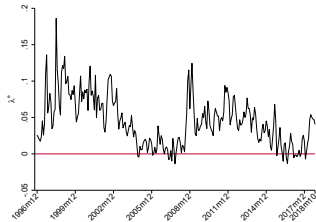
$$\text{'Dark Matter'} = \rho_t = \rho_t^{US} + \rho_t^{\text{COUNTRY}} = \text{Global} + \text{Local}$$

⇒ Global risk-aversion+Intermediary Friction+Country friction/risk sensitivity

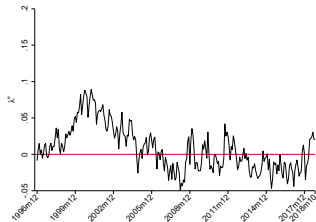
$$\lambda_{t+h}^e = \gamma_t^{US} + \gamma_t^{GOV} + \rho_t^{US} + \rho_t^{\text{credit/default risk}} + \rho_t^{\text{currency/policy risk}}.$$

UIP MACRO FACTS

Emerging Markets



Advanced Economies



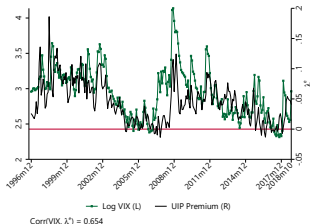
$$\underbrace{\lambda_{t+h}^e}_{\text{UIP Premium}} = \underbrace{(i_t - i_t^{US})}_{\text{IR Differential}} - \underbrace{(s_{t+h}^e - s_t)}_{\text{ER Adjustment}} \quad (s \text{ in LC/\$})$$

- UIP holds on average in AE, **but not** in EM.

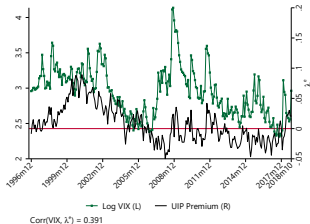
Source: Kalemli-Ozcan and Varela (2019)

UIP MACRO FACTS

Emerging Markets



Advanced Economies



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- UIP holds on average in AE, **but not** in EM.
- **VIX** and UIP premium comove in both AE and EM.

Source: Kalemli-Ozcan and Varela (2019)

UIP GRANULAR FACTS: EM

	UIP Premium					
	(1)	(2)	(3)	(4)	(5)	(6)
Inflows/GDP _{<i>it-1</i>}	-0.005*** (0.001)	-0.003*** (0.001)	-0.001 (0.001)	0.003 (0.050)	-0.010 (0.040)	0.031 (0.031)
<i>EPU</i> _{<i>it-1</i>}		0.015*** (0.005)	0.011** (0.004)	0.010** (0.004)	0.012*** (0.004)	0.009*** (0.003)
log(<i>VIX</i> _{<i>t-1</i>})			0.054*** (0.008)	0.054*** (0.009)	0.046*** (0.009)	0.039*** (0.010)
Convenience Yield/Liquidity Premium _{<i>it-1</i>}				0.050 (0.037)	0.040 (0.030)	0.017 (0.020)
Expected Inflation Differential _{<i>it-1</i>}					0.393*** (0.054)	0.074 (0.390)
Sovereign Default Risk _{<i>it-1</i>}						0.584*** (0.110)
Observations	3288	3288	3288	2782	2245	1711
Number of Countries	21	21	21	19	18	17
Currency FE	Yes	Yes	Yes	Yes	Yes	Yes

Notes: * p < 0.10 ** p < 0.05 *** p < 0.01. Currency-time two-way clustered standard errors in parentheses. 21 emerging markets currencies. Period 1996m11:2018m12. Capital inflows are measured as changes in gross debt liabilities. The UIP premium and the exchange rate adjustment term are measured using expected exchange rate changes from Consensus Forecast.

Source: Kalemli-Ozcan and Varela (2019)

UIP GRANULAR FACTS: EM AND AE DOES NOT DEPEND ON MEASUREMENT OF EXCHANGE RATE CHANGES—SURVEY BASED EXPECTATIONS OR REALIZED

	Panel A: Emerging Markets				Panel B: Advanced Economies				
	<i>Realized UIP Premium</i>			<i>Expected UIP Premium</i>		<i>Realized UIP Premium</i>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Inflows/GDP _{it-1}	-0.023*** (0.004)	-0.021*** (0.004)	-0.017* (0.003)	0.019 (0.032)	0.020 (0.031)	0.034 (0.027)	-0.045 (0.049)	-0.039 (0.049)	-0.016 (0.047)
<i>EPU</i> _{it-1}		0.019** (0.008)	0.015** (0.007)		0.001 (0.003)	-0.004 (0.002)		0.010* (0.006)	0.001 (0.006)
log(<i>VIX</i> _{t-1})			0.052** (0.021)			0.037*** (0.013)			0.061*** (0.021)
Observations	3288	3288	3288	2209	2209	2209	2209	2209	2209
Number of Countries	21	21	21	12	12	12	12	12	12
Currency FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: * p < 0.10 ** p < 0.05 *** p < 0.01. Currency-time two-way clustered standard errors in parentheses. 12 advanced economies currencies economies currencies. Period 1996m11:2018m12. Capital inflows are measured as changes in gross debt liabilities. The UIP premium and the adjustment term are measured using expected exchange rate changes from Consensus Forecast and realized exchange rates.

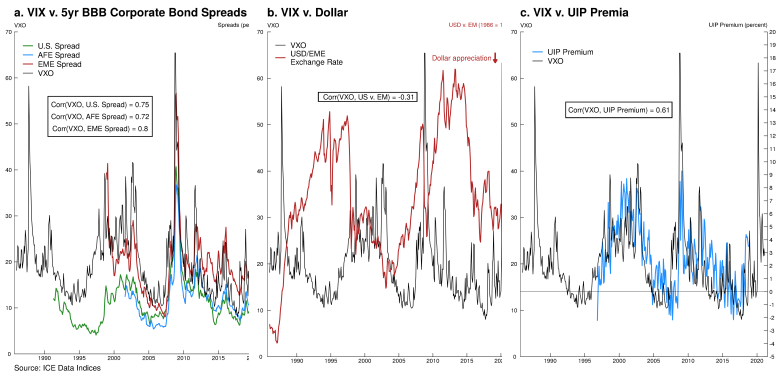
Source: [Kalemli-Ozcan and Varela \(2019\)](#)

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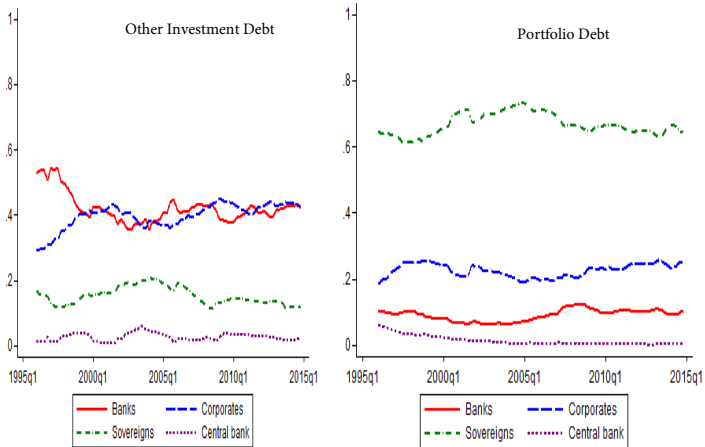
How to measure exogenous changes in risk sentiments leading to \$ appreciations and \uparrow spreads?

Dollar 'shocks' not same as VIX or US monetary policy shocks, EBP captures former better. Why?



3. Why EBP? Are US corporate bonds substitute for EM government bonds?

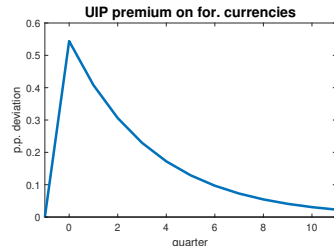
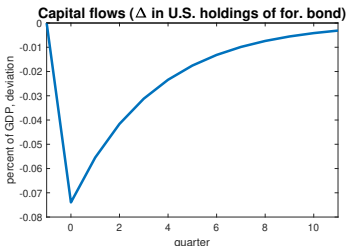
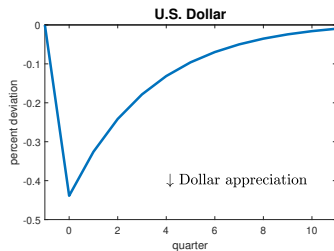
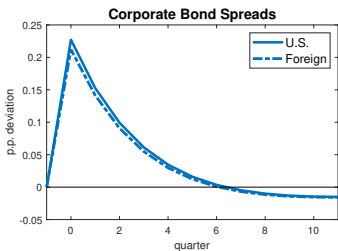
Sectoral Shares in External Debt—EM sovereigns borrow in bonds (mostly local currency), EM corporates and banks in loans (mostly FX)



Source: Avdjiev, Hardy, Kalemli-Ozcan, Serven (2022, JEEA)

ALTERNATIVE: EARNINGS VOLATILITY

Financial frictions amplify uncertainty shocks (for earnings) through pricing of risk, and not due to binding balance sheet constraints



Source: Akinci, Kalemli-Ozcan, Queralto (2022)

CONCLUSION

- Valuable paper providing a unifying framework on how to think GDC and its detrimental effects especially on EMDE
- Important policy implication:
 - ⇒ The case for flexible exchange rate stronger
 - If most detrimental effects go from higher risk premia, flexible rates absorb some of this premia
 - Authors show: ONLY pegs and crawls hike policy rates as a response to GDC. Not hiking policy rate helps with the contractionary effects.