

Macroeconomic Stability in an Era of Global Discord: The Challenges for Emerging Market Central Banks

Pierre L Siklos
Wilfrid Laurier University, BSIA,
Research Fellow, University of Stellenbosch,
South Africa and South African Reserve Bank

*“Re-attaining Macroeconomic Stability: Challenges for Emerging Economies
SARB 2023 Biennial Conference*

The views expressed here are my own and not those of the SARB

Caveat Emptor

- What follows is my own views and based on a mix of model-based and stylized facts
- I will rely on a selection of data from EME and AE. Not all AE or EME are included.
 - ISO 3 codes identify countries included
 - Calculations are my own or based on recent research (see references) with data from BIS, IMF, OECD, World Bank, BER, Philadelphia Fed
- Some important EME are excluded in the interests of time (see, however, the conclusions)
- Explanations (mostly, but not exclusively) rely on data since 2000.
- Beware of aggregation bias(es)

What is Macroeconomic Stability? What Framework to Use?

- “...must be less susceptible to external shocks...”
- “...mitigate vulnerability to shocks...”
 - In other words, **resilience**
 - **But is this enough?**
 - Resilience may be necessary but not sufficient
- The NK that guides so much of the discussion among Central Bankers struggles to keep up with results difficult to reconcile with observed outturns...it may be down but its not entirely out
 - Due to Mix of AD/AS shocks
 - Due to ELB & UMP

What is Resilience?

DEFINITIONS

- **but little quantification or even explanation of what aids such resilience**
- Basic consensus is that resilience is the ability to absorb shocks
- An engineering approach suggests that there should be some redundancy within the system in order to be resilient
- Finally, good institutional systems are not only those which do not allow one institution to dominate, they also are systems which **minimize errors and do not allow bad policies to infect the rest of the system**

Economic Resilience	Political Resilience
<i>Property Rights:</i> ability to trade, manage, and dispose of one's own property should allow for adjustment mechanisms to work more efficiently in times of crisis	<i>Extent of democracy:</i> democracies can absorb shocks more easily because of reallocation mechanisms
<i>Exchange Rate Type:</i> the more flexible a country's exchange rate regime is, the greater should be the ability to adjust to external shocks	<i>Executive constraints:</i> more constraints on the executive means more veto points against bad policies
<i>External Openness:</i> Two measures of a country's openness; a country's openness to trade and its openness to capital movements	

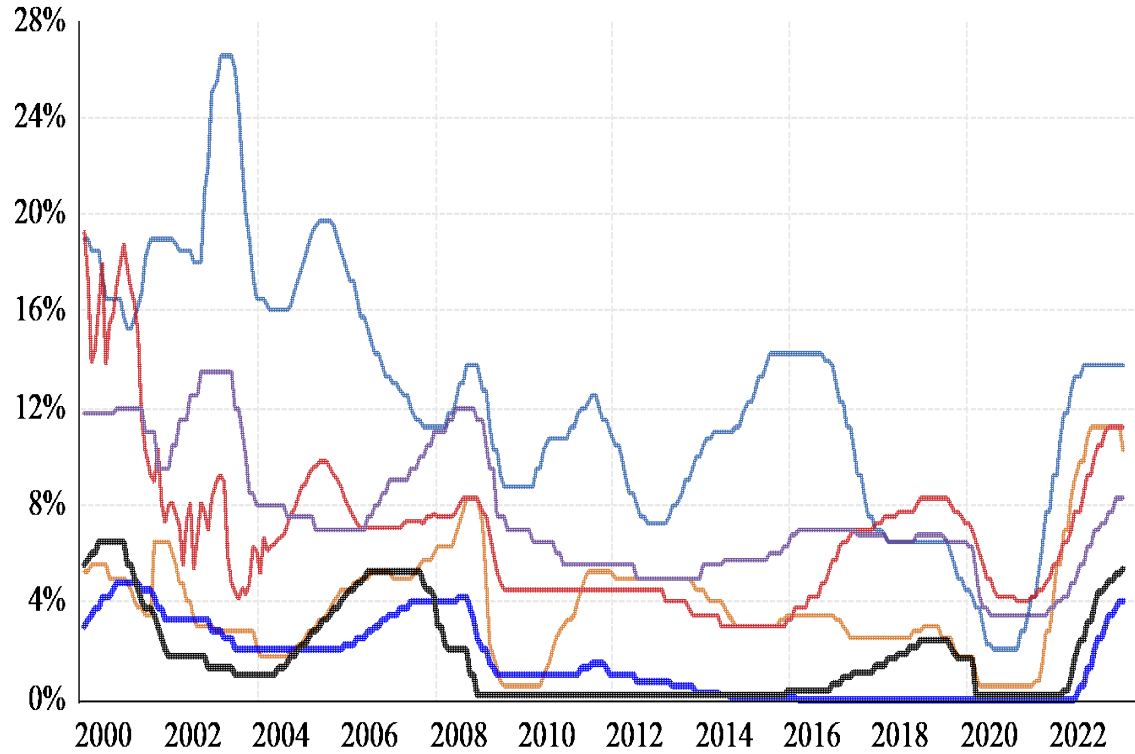
The Four Great Challenges

- ...not in order of importance
- Exchange Rate Regime
- Domestic versus Global Shocks
- Institutional Capacity
- Communication

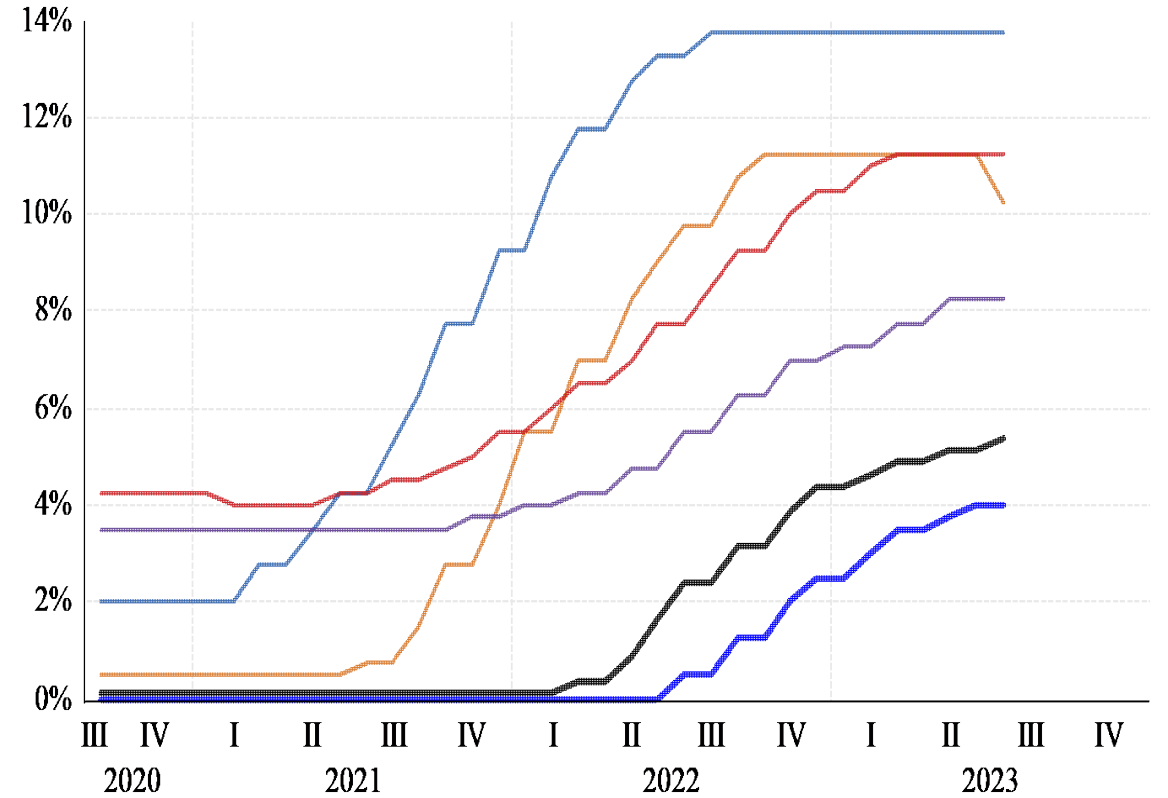
Where We've Been and Where We Are Today

- A set of **stylized facts** helps illustrate what EMEs have accomplished and the challenges they face

Policy Rate Developments



— PR_BRA — PR_CHL — PR_EUR
— PR_MEX — PR_USA — PR_ZAF

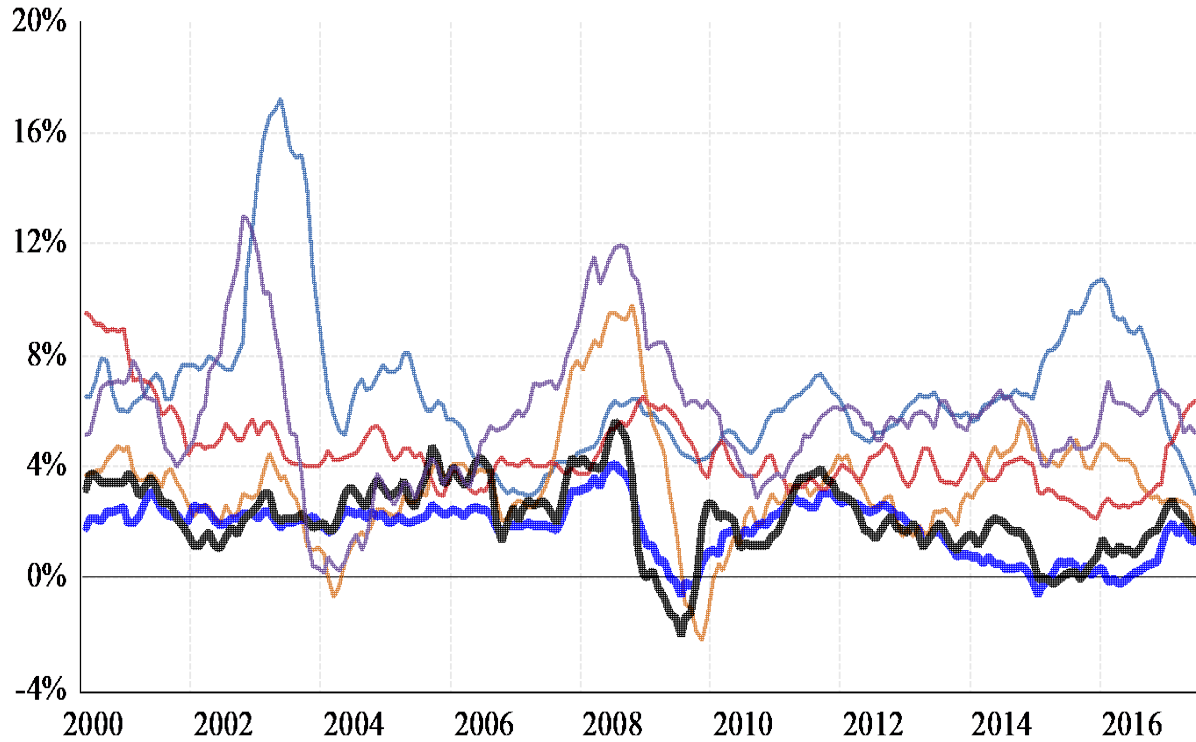


— PR_BRA — PR_CHL — PR_EUR
— PR_MEX — PR_USA — PR_ZAF

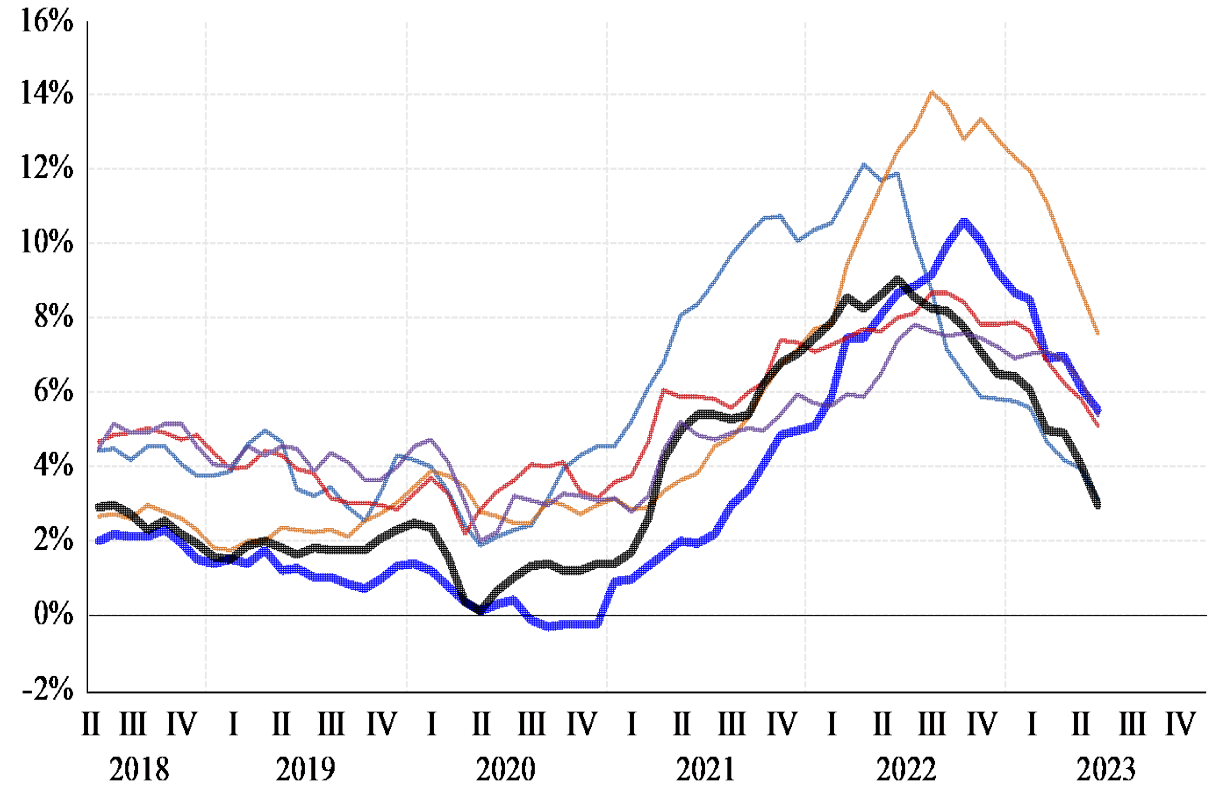
Take-Aways

- PR rises more synchronous than before
- PR rose faster and earlier in EME than in AE
 - But fewer ELB worries
- PR gap between AE & EME remain elevated
 - But smaller than the “historical” norm

Headline Inflation Developments

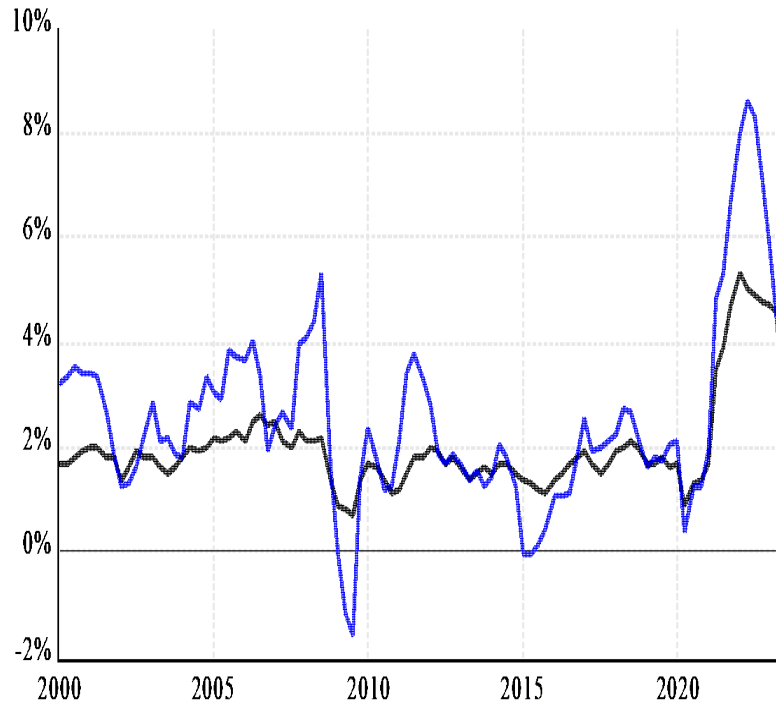


— INF_BRA — INF_CHL — INF_EUR
 — INF_MEX — INF_USA — INF_ZAF



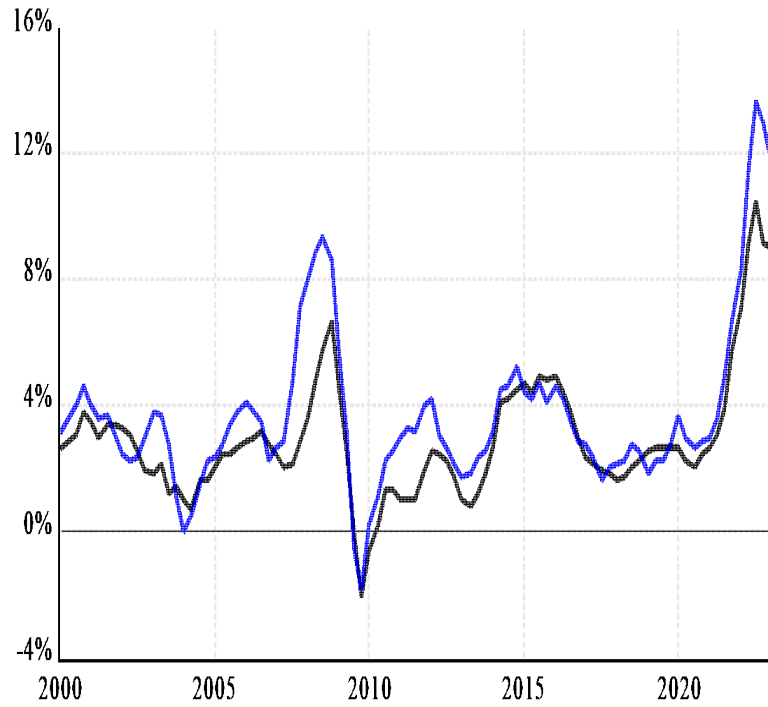
— INF_BRA — INF_CHL — INF_EUR
 — INF_MEX — INF_USA — INF_ZAF

Core Inflation Developments

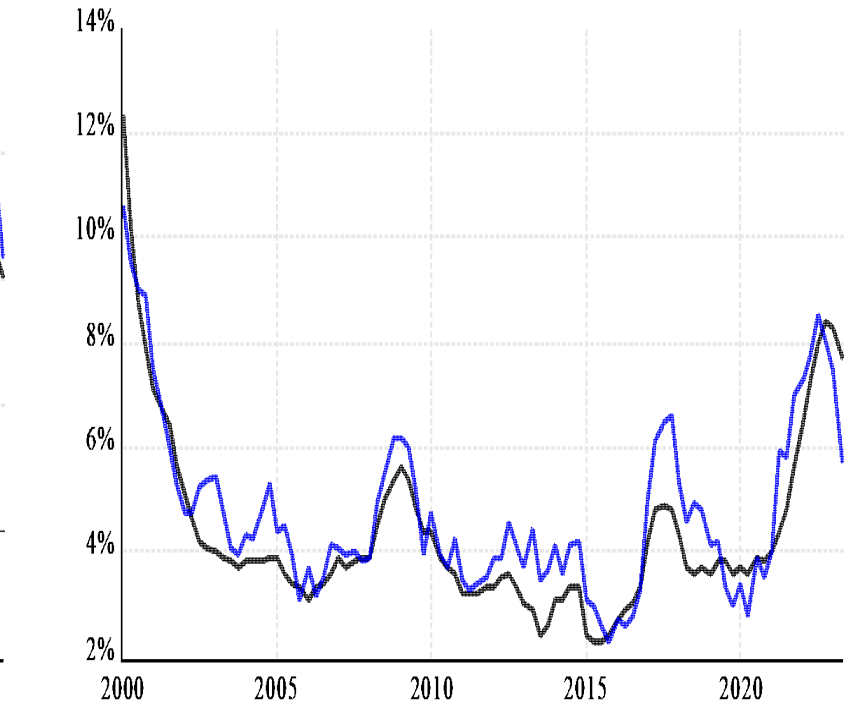


— CORE_USA — INF_USA

AE



— CORE_CHL — INF_CHL



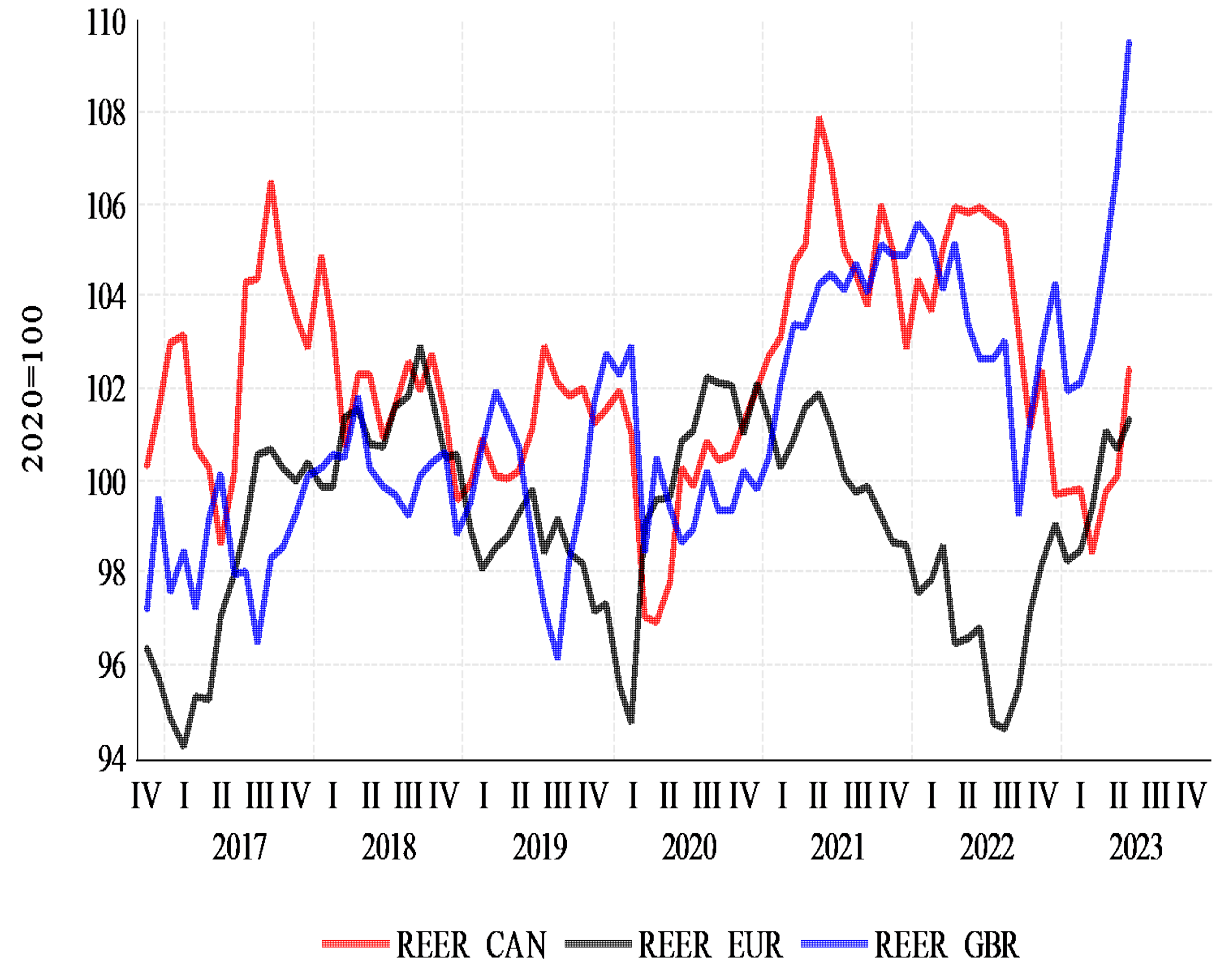
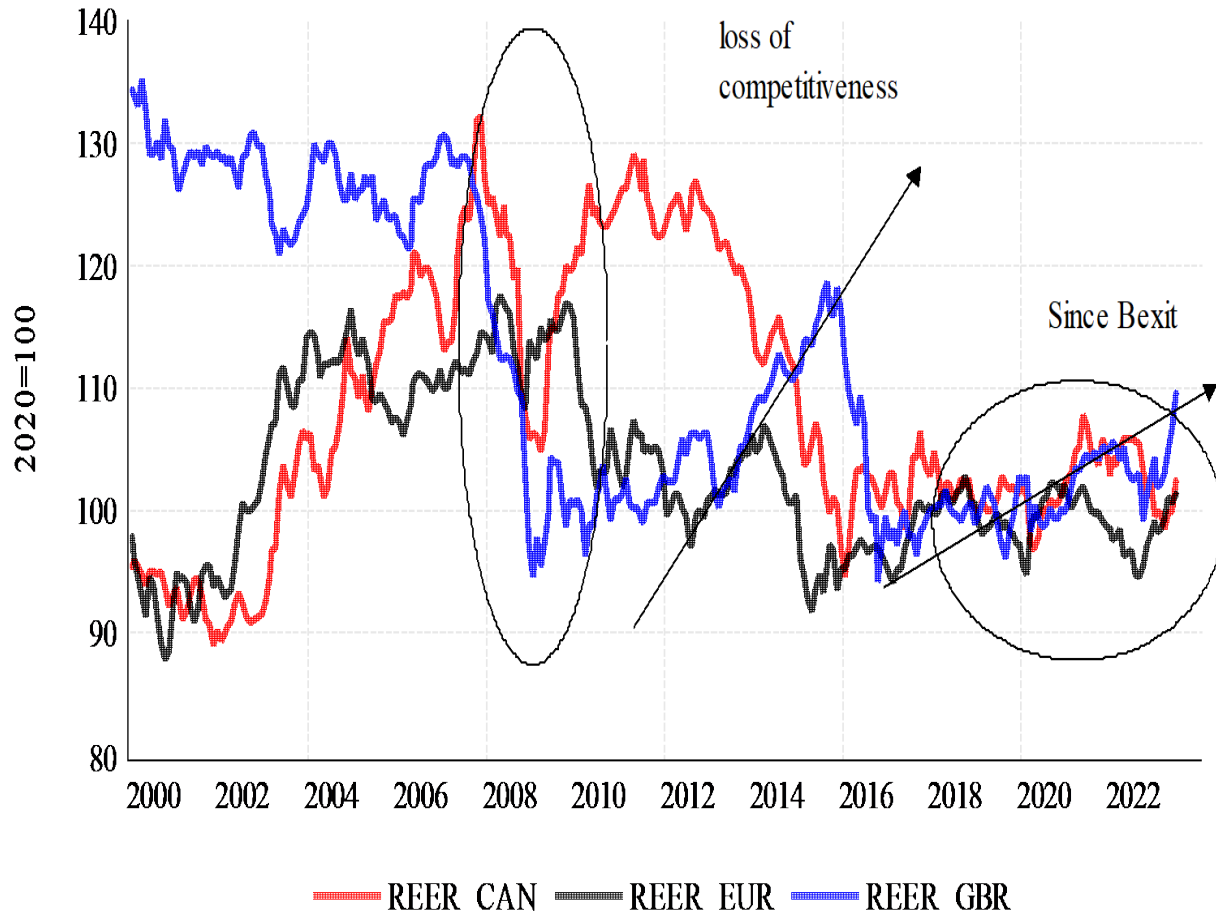
— CORE_MEX — INF_MEX

EME

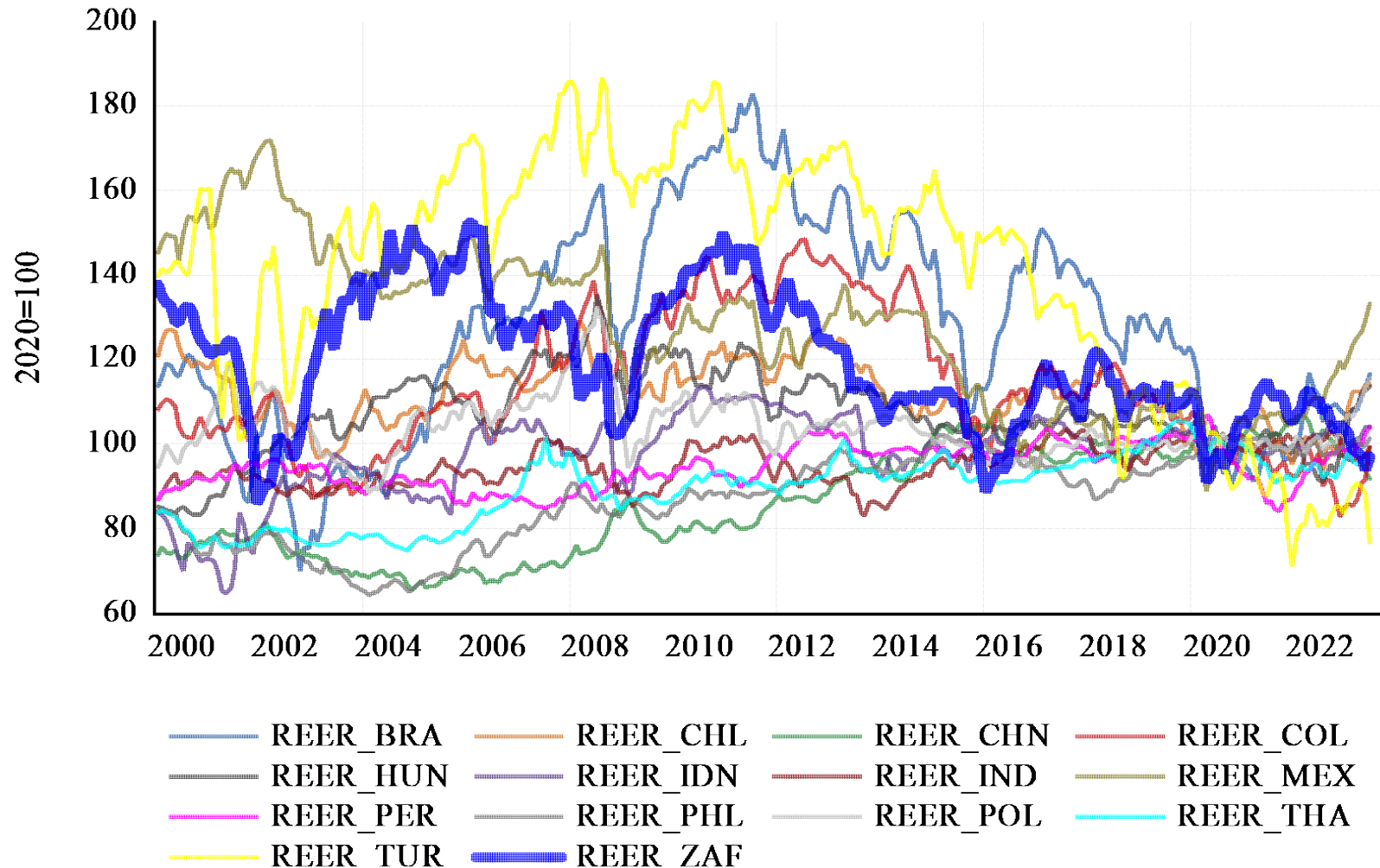
Take-Aways: EMEs Versus AEs

- Synchronous inflation developments
- Inflation gaps remain lower than the "historical" norm
- Core inflation "historically" less volatile in AE than in EME
- BUT
 - CORE INFLATION BEHAVE SIMILARLY FOLLOWING THE LATEST INFLATION SURGE

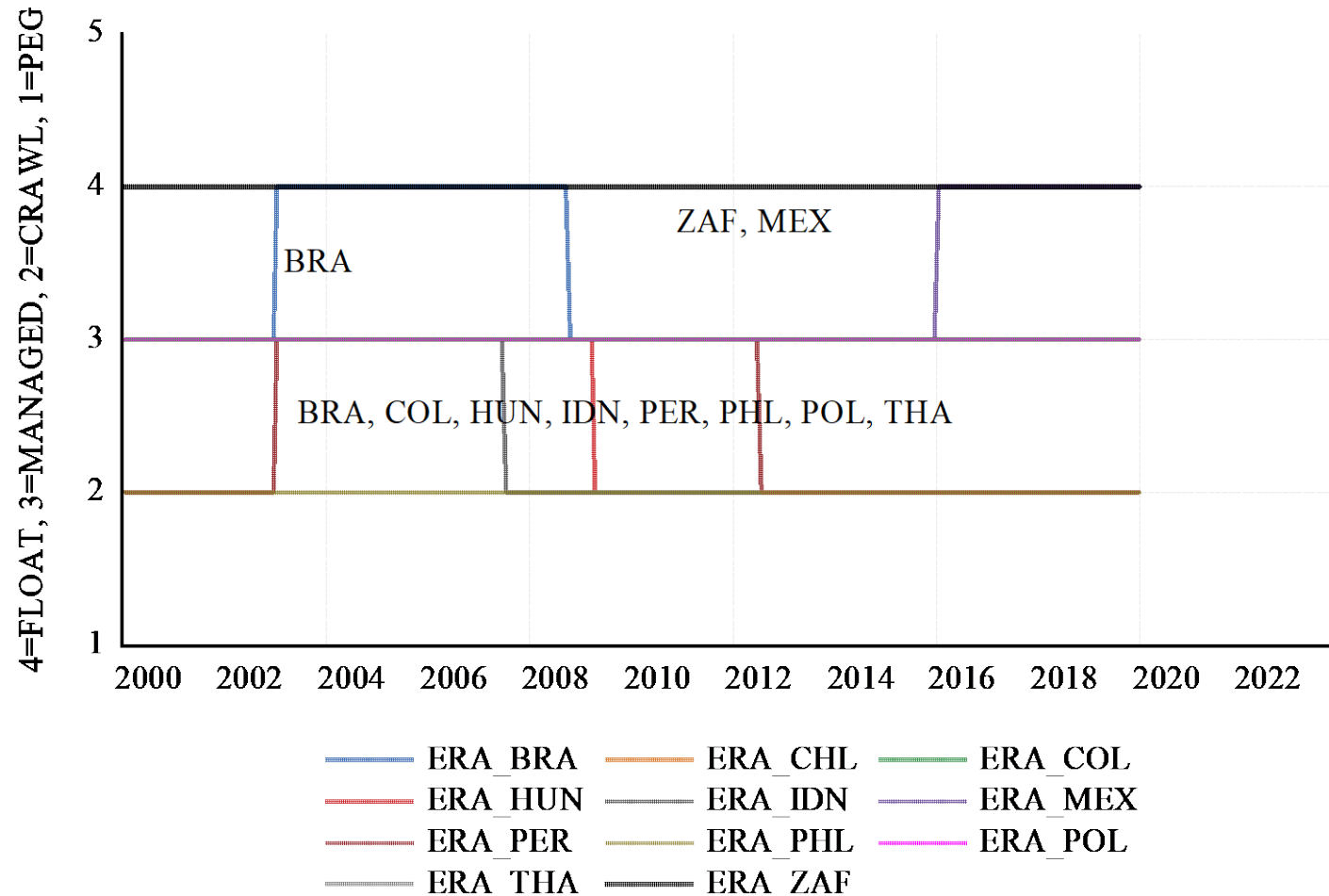
Real Exchange Rate Developments: AE



Real Exchange Rate Developments: EME



Selected Exchange Rate Regimes in EME

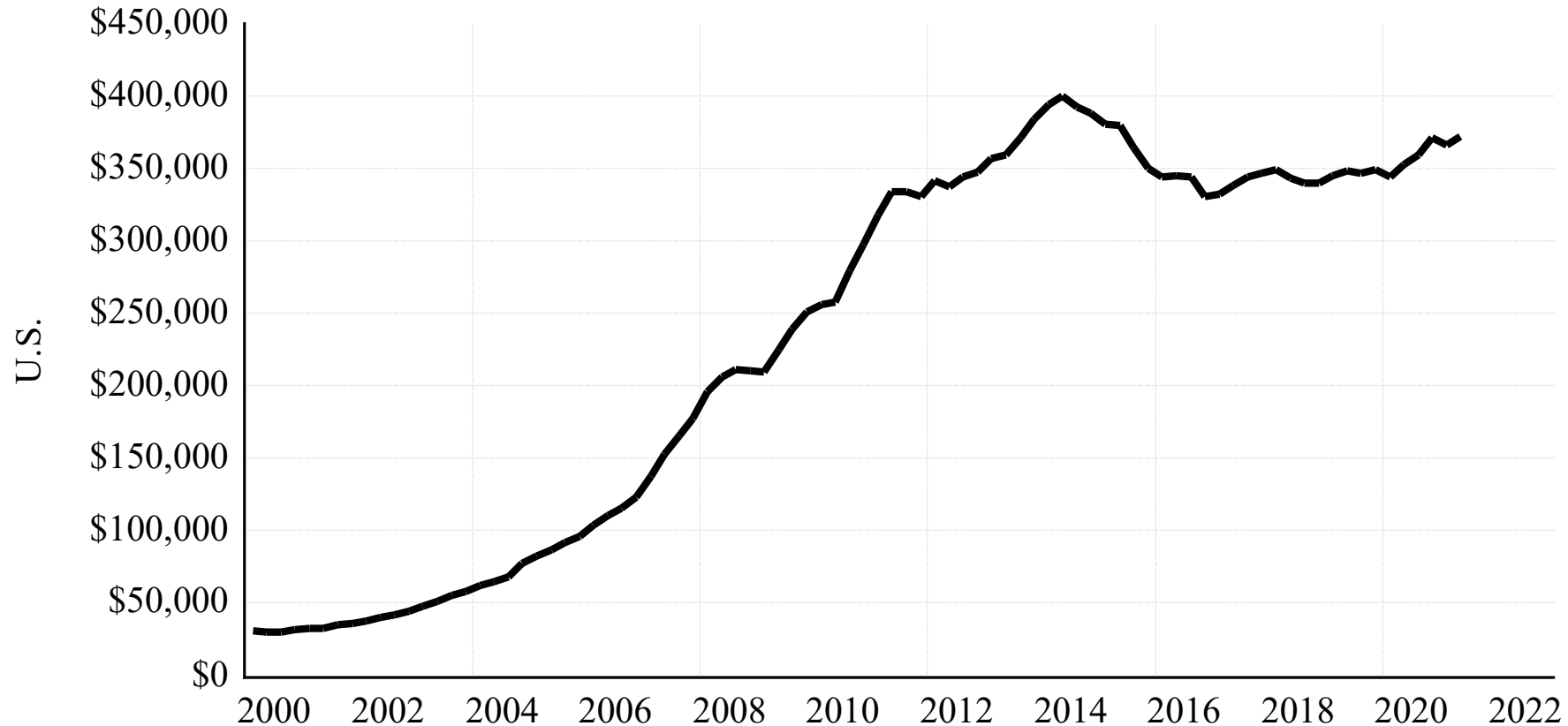


Take Aways

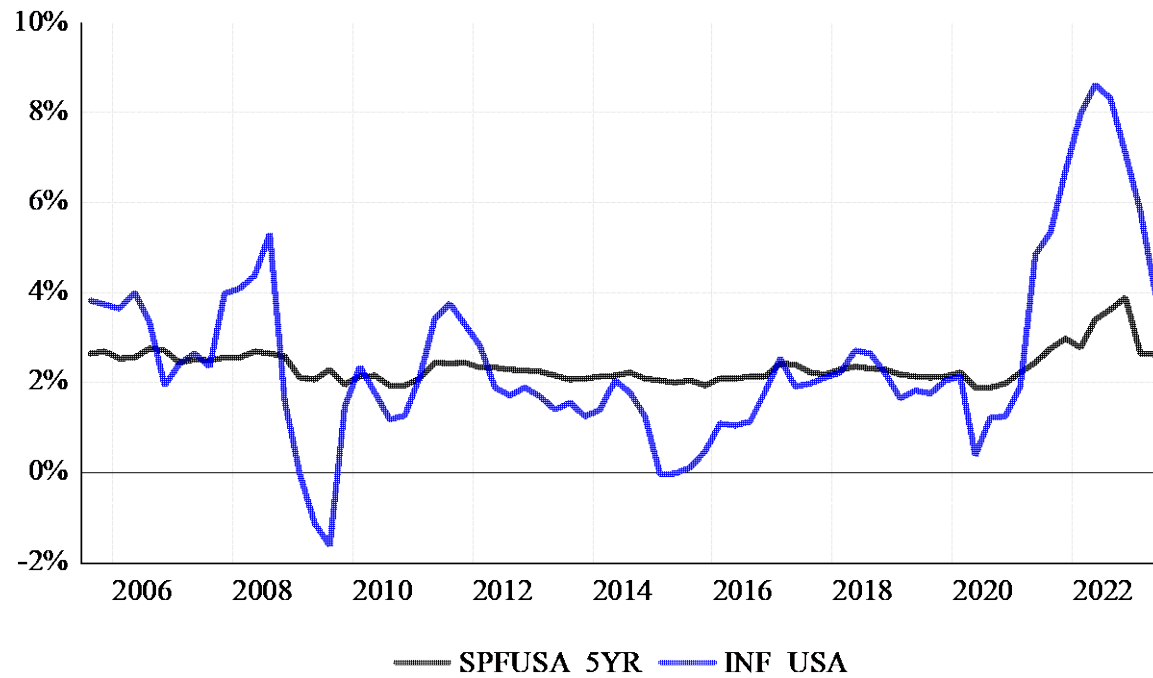
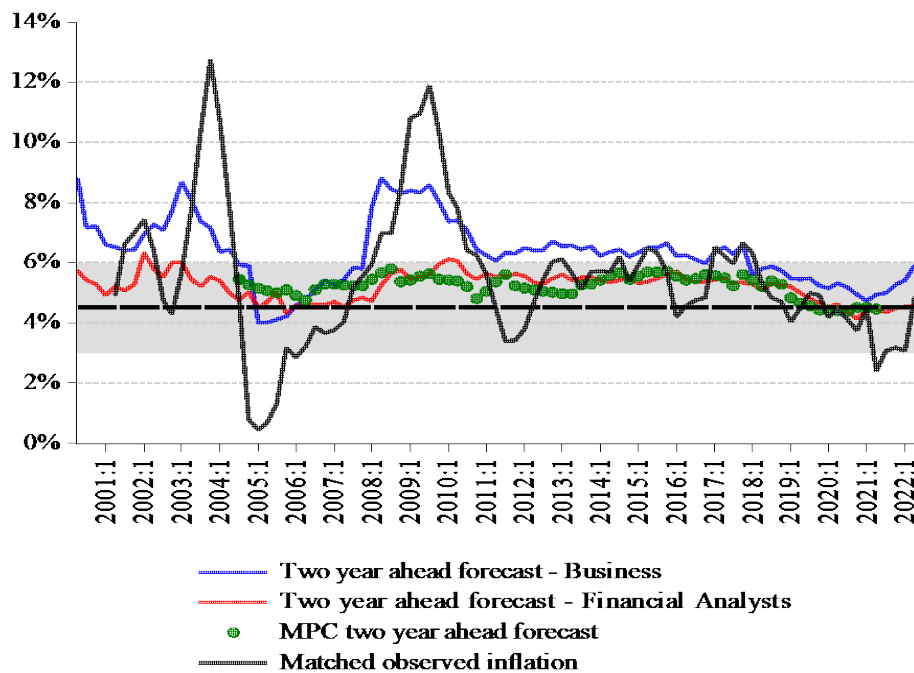
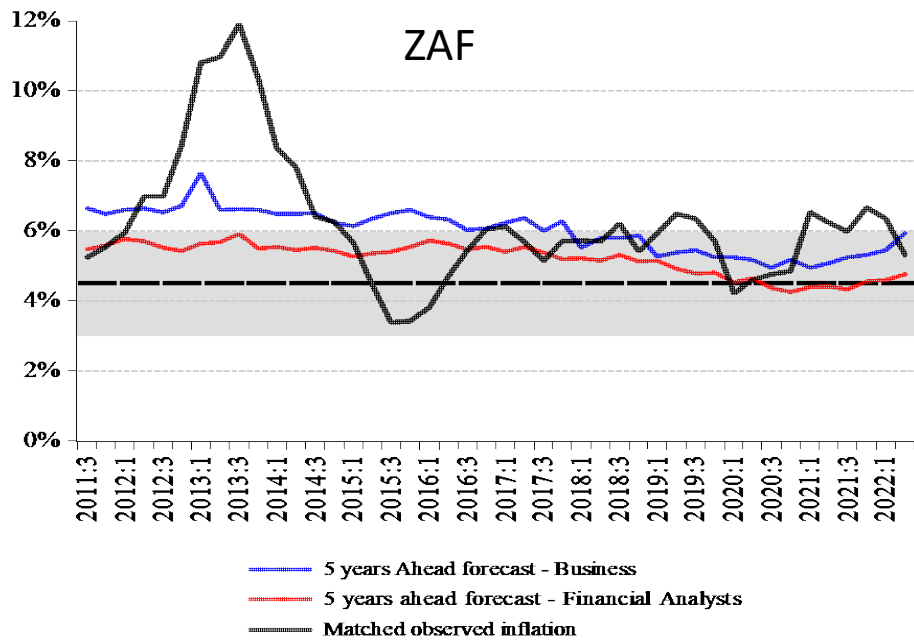
- A lot of volatility in REER but no real medium-term trends in EME at least since the GFC. This is less true for AE
- Greater homogeneity in REER movements in AE than in EME since the COVID crisis
- Exchange Rate regime choice is “sticky” with a few exceptions but very few pure floats in EME (ZAF, MEX are exceptions). Has “floating” aided macro-financial stability? Maybe worth pursuing implications for regime choice in an era of global discord (as a defensive measure)

Regarding Defensive Measures: EME Experience

Foreign Exchange Reserves



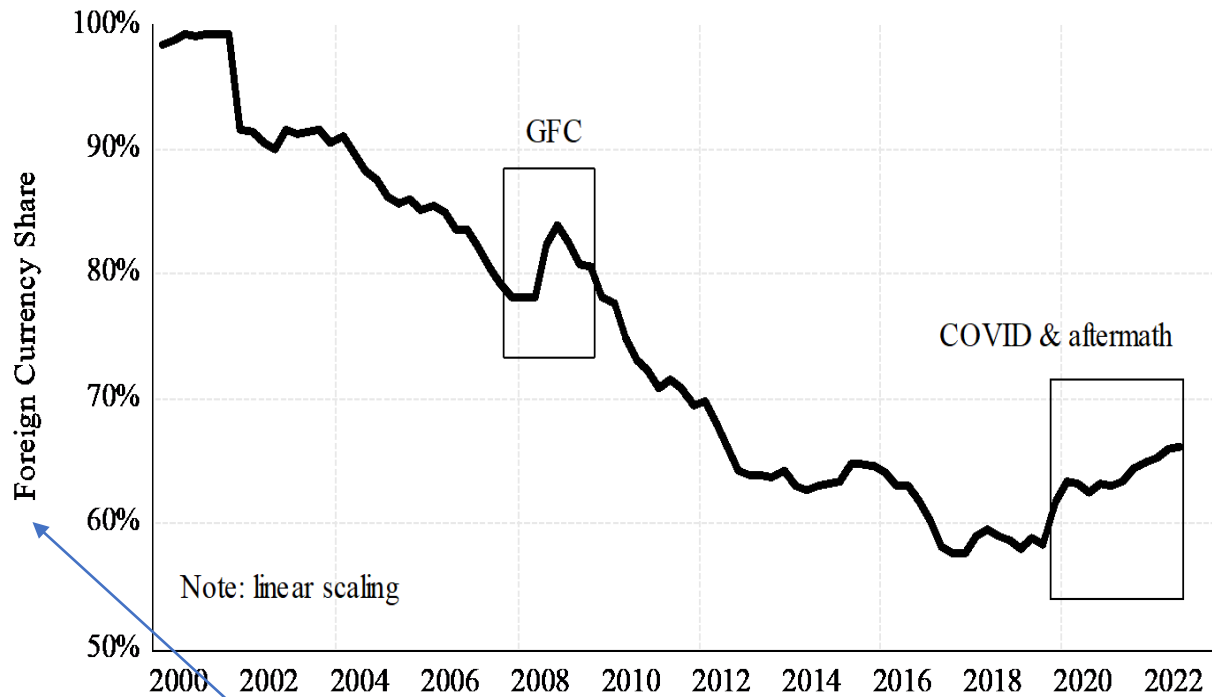
The Behaviour of Expected Inflation: Selected Examples



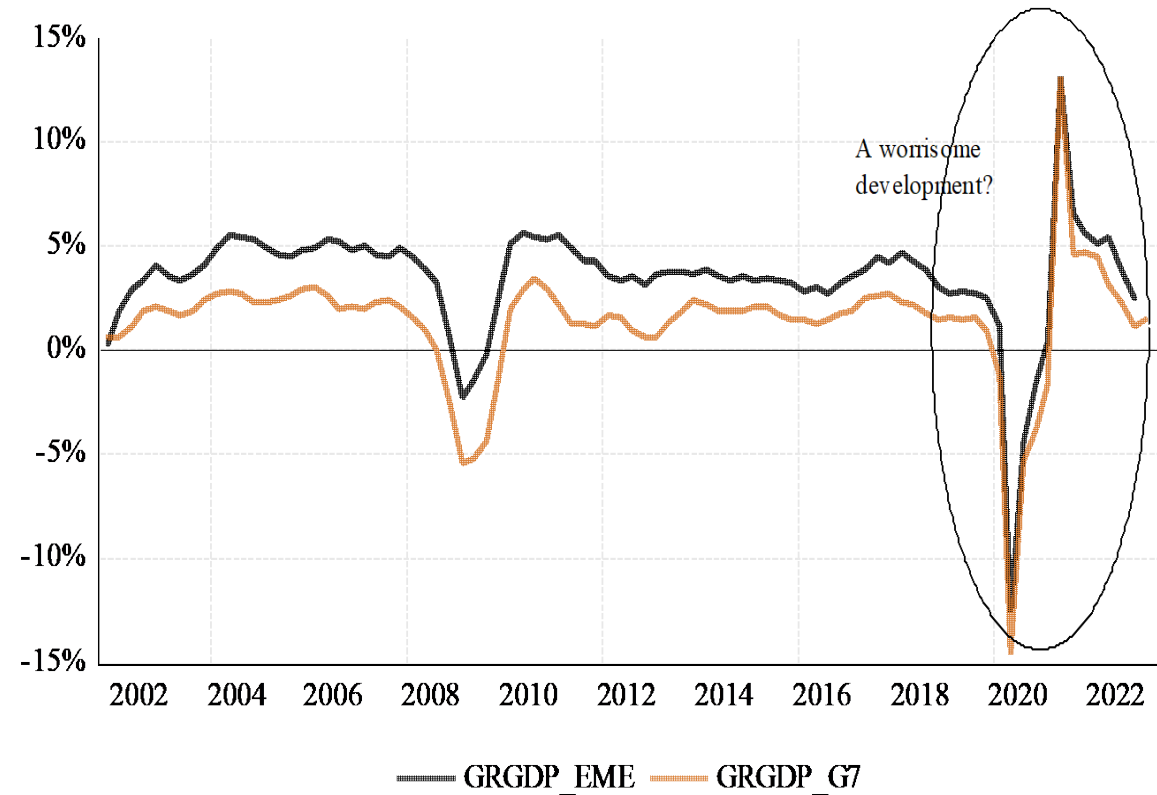
USA

The Debt Conundrum

SHARE_DEBT



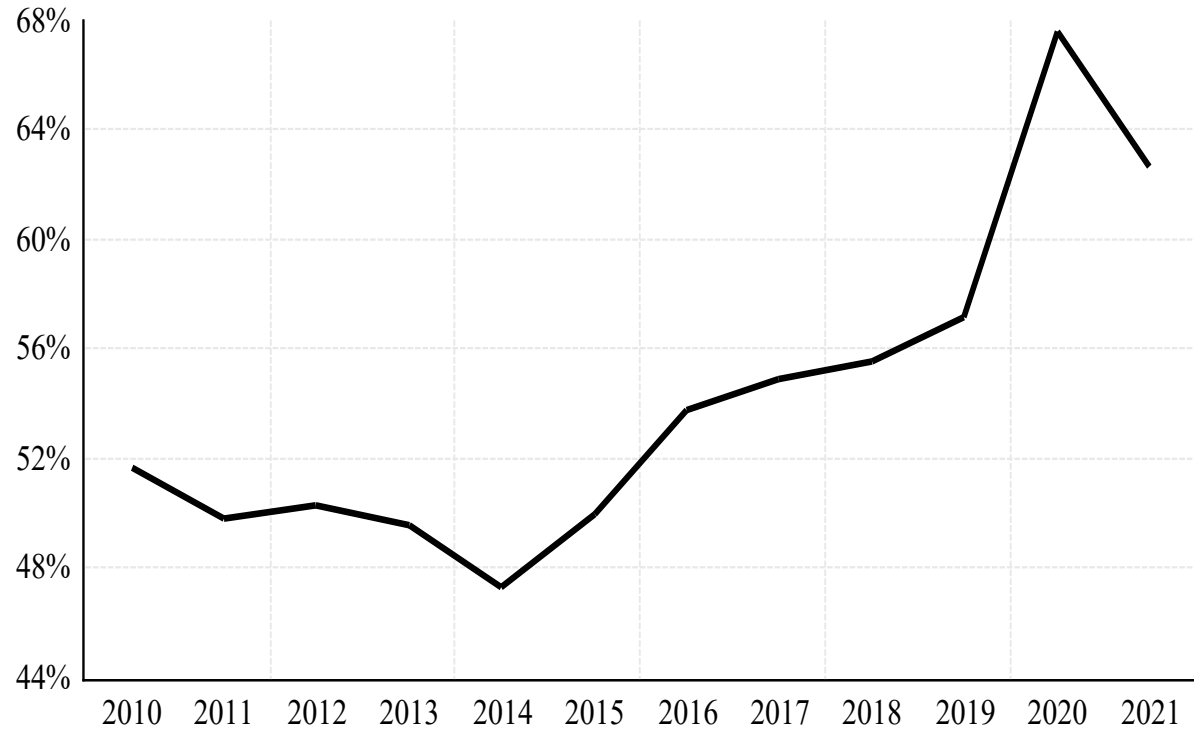
Real GDP Growth



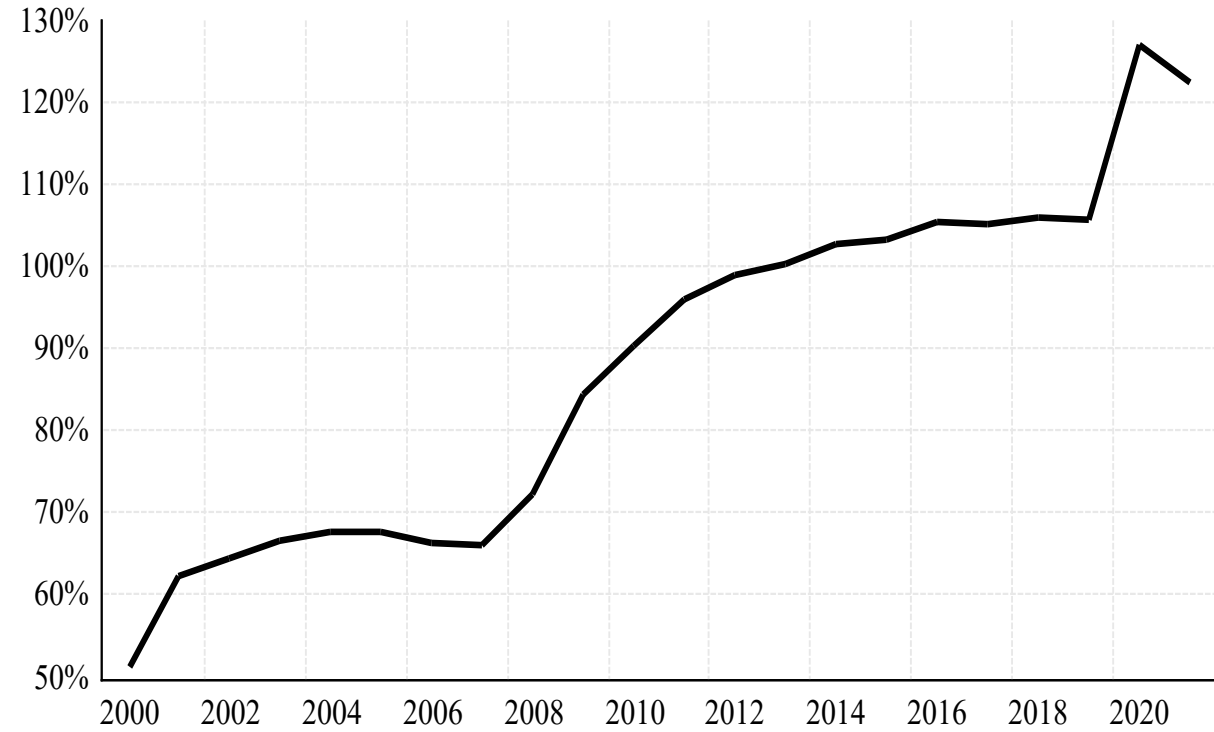
More precisely: share of EME FOREIGN held debt in DOMESTIC currency

Debt Around the World

Debt to GDP (%): Emerging Market Economies



Debt to GDP (%): OECD



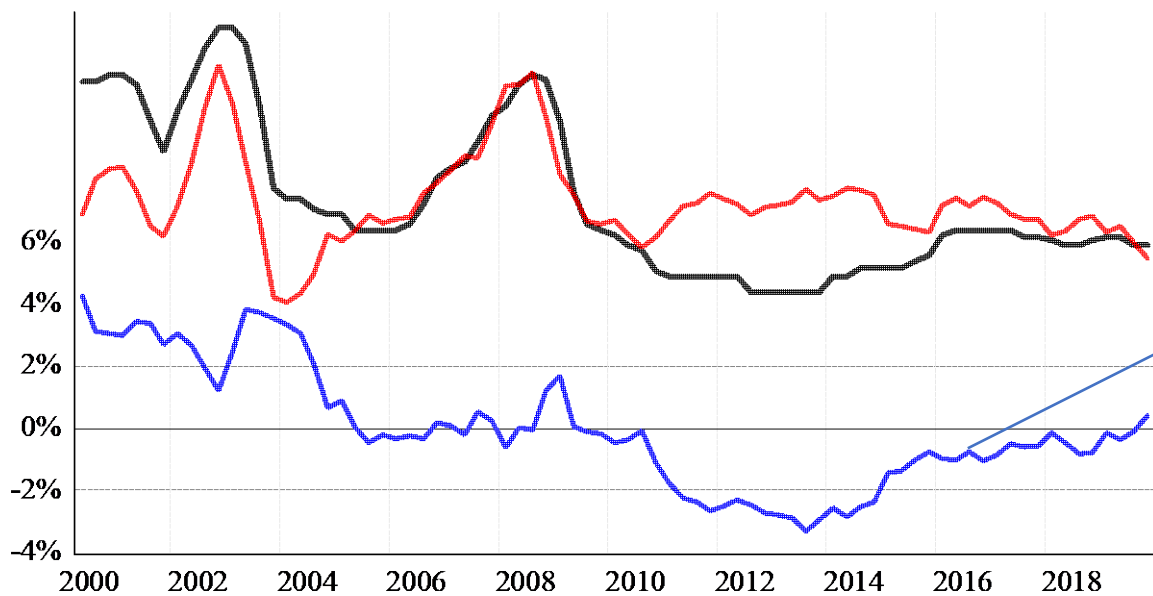
Take-Aways

- The GFC prompted a surge in FOREX reserves holdings
 - Has "complacency" has set in? Is the current level the new normal?
- Critical to CB performance is credibility (more on this later), that is, the performance of inflation expectations
 - Inflation expectations appear more fragile (i.e., more sensitive to shocks) in EME than in AE
 - Credibility, of course, need not be the only explanation (e.g., rational inattention, institutional factors, etc...)
- Debt and Economic Growth
 - "Original sin" is less problematic than in the past but do developments since COVID raise anew the resilience of EME?
 - Growth 'catch-up' has faltered since COVID although Debt to GDP performance suggests what goes up may also go down (r vs g is another question best left for another day)

Monetary Policy: An Illustration from ZAF

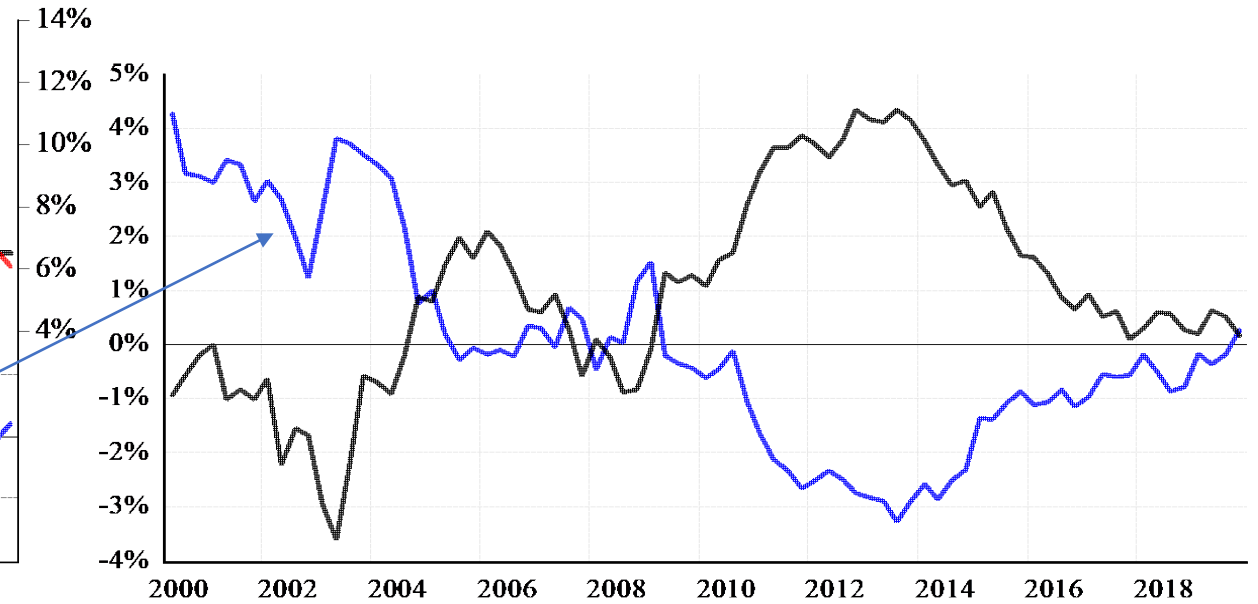
The neutral rate of interest is the real policy rate that prevails when an economy's output is at its potential level and inflation is at the central bank's target, after the effects of all cyclical shocks have dissipated.

Policy Rules I: Estimated



— Deviations from TR — Policy Rate — Taylor Rule

Policy Rules II: Time-varying r^*



— Figure 4(a)
— Figure 4(a) with TV r^*

Take-Away

- Deviations from “Taylor” type principles can be sizeable and persistent
 - Is this policy flexibility or the role of global factors?
 - Much also depends on whether r^* is time-varying or not
- If results reflect a “flexible” form of IT does this make enough of a contribution to achieving macro-economic stability?

What is Institutional Capacity?

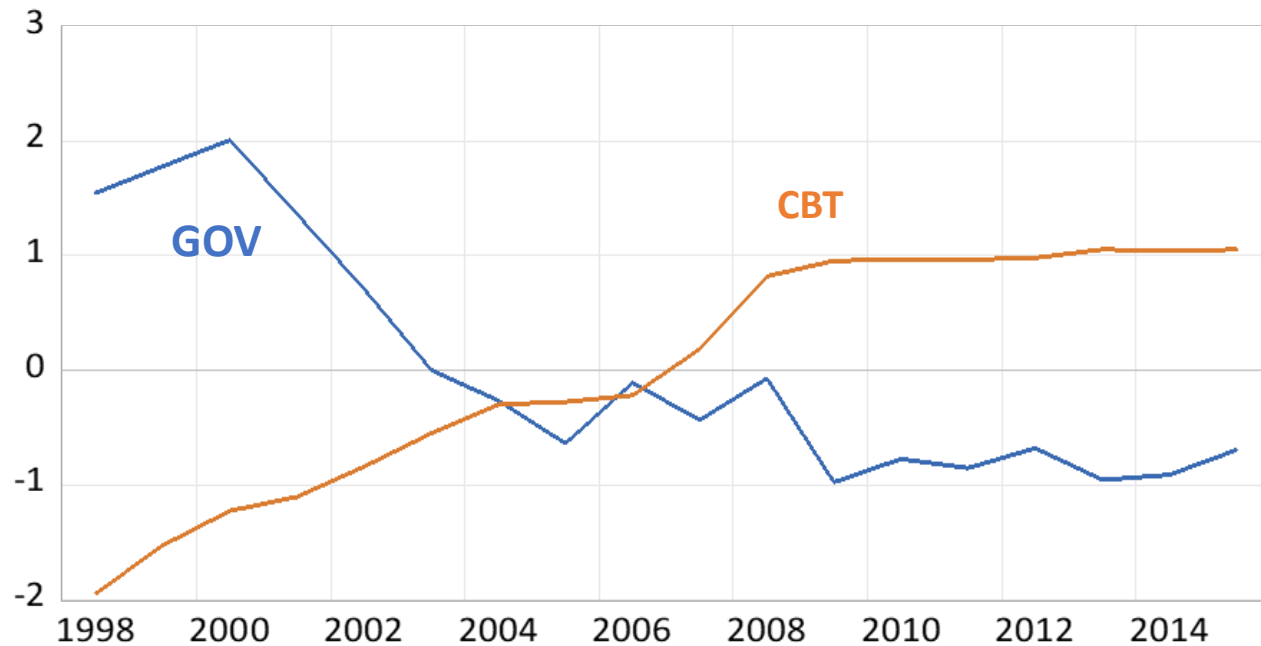
- There is no universally accepted definition of “credibility”
- For over three decades now, credibility has centered on inflation performance
 - Inflation can be observed and observed quickly
- Credibility is akin to a flow while trust is a stock
- Trust or confidence is also linked to performance – how well is the central bank doing on its stated metrics?
 - In general, this means inflation targeting



RESILIENCE is the dependent variable	1	2	3
	BMA	Stepwise	Lasso
	IV-GMM	IV-GMM	IV-GMM
CB Credibility	-0.64 3.64***	-0.71 3.89***	-0.64 3.49***
Property rights volatility	-7.17 4.96***	-6.46 4.63***	-6.45 4.61***
Central government debt	-0.002 2.02**		
Human capital	0.02 0.32	0.09 1.72*	0.08 1.44
FDI	0.01 2.51**		0.01 1.45
Informality		-0.002 0.82	-0.002 0.78
GDP Growth		0.02 1.26	0.01 1.04
Population Growth		-0.17 0.59	-0.10 0.31
Central bank independence	0.22 1.10	0.30 1.56	0.27 1.34
Excess Crises	-0.05 0.50	0.03 0.34	0.02 0.19
Resource Rents		-0.003 1.32	-0.002 1.06
N	1575	1605	1605

“Remarkably” robust to technique (but perhaps not time)

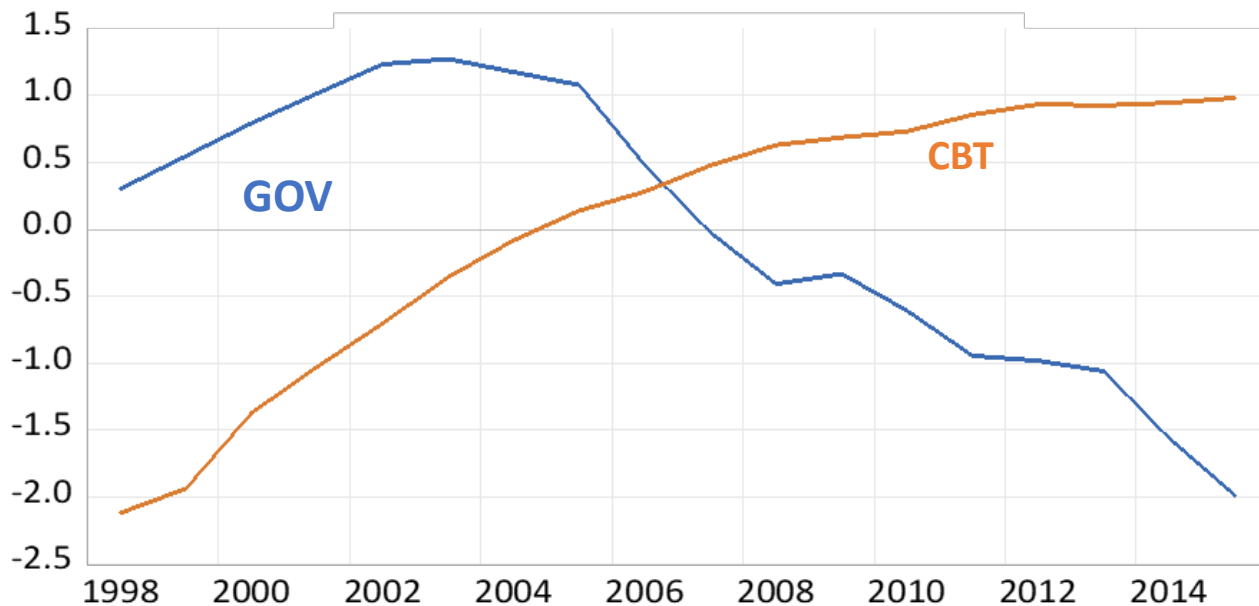
$$RES_{it} = f(\widehat{CONFIDENCE}_{it}, MACRO_{it}, INSTITUTIONS_{it}, ATTRIBUTES_{it}, CRISES_{it})$$



Over-Emphasis on Transparency?

Figures show average levels of CBT against an average of the World Bank's indicator of governance indicators

For the AE following a drop in the quality of governance from 1998 to 2004 the indicator remains relatively stable.



In contrast to a rise in CBT
For the EMEs there is a steady drop in the overall quality of governance beginning in 2005 that continues to the end of the sample. This contrasts with the steady rise in CBT.

Shocks and Economic Performance: A Summary*

- Many global shocks (U.S. shocks) impact AE and EME in a similar manner BUT ones from large economies (US & CHN) amplify the effects
- First, a tightening of US monetary policy leads to higher policy rates in both
- But at the expense of lower real growth
- Second, better US economic conditions improve CB credibility in both groups of countries as well as lead to higher policy rates
- Third, in line with the greater integration of EME in the global financial system, tighter monetary conditions also result in tighter financial conditions

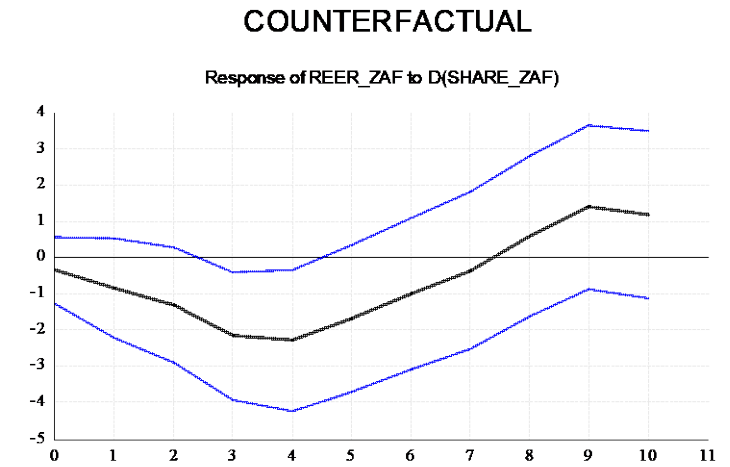
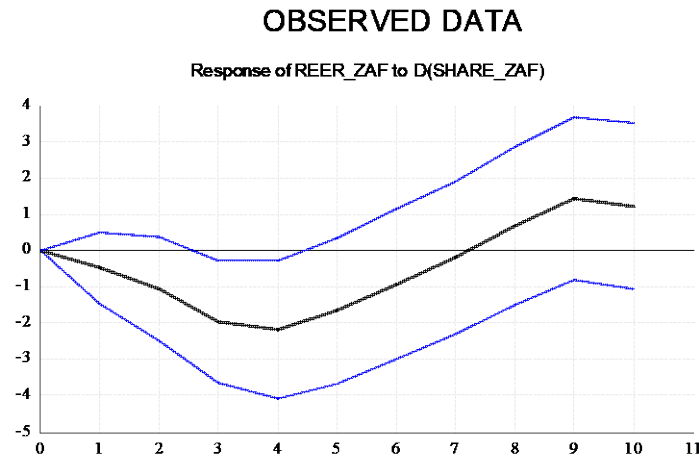
*See Appendix and Bordo & Siklos (2022) and Chen & Siklos (2023) for details

An Illustration of the Macroeconomic Stakes

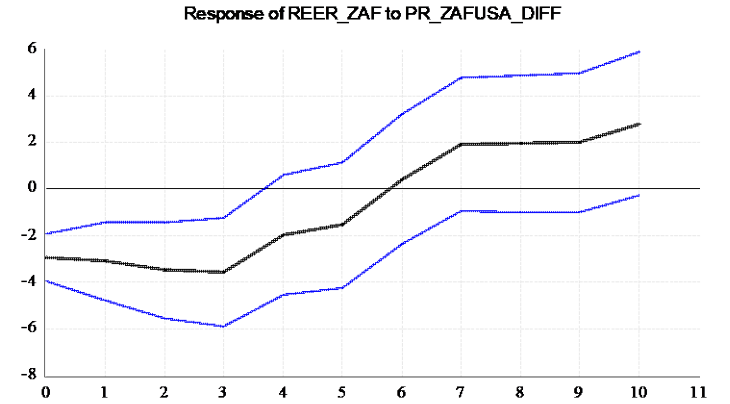
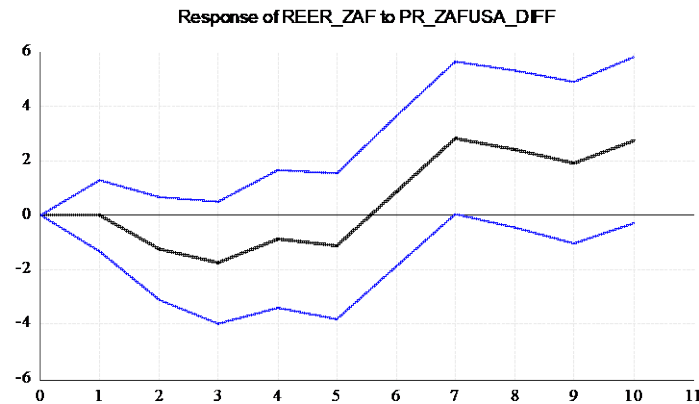
- Specify a “simple” model
 - [Real GDP growth, Difference between Observed and Expected* inflation, Oil price inflation**, Difference between SARB & Fed policy rates, Change in ZAF’s share of global GDP]
 - * Mean of BER Survey of FA & Business sectors
 - ** WTI crude oil prices
- Estimate relationship via LP
- Consider a counterfactual: What of SARB had “engineered” the REER we observe (via intervention)?

A SMALL SELECTION OF RESULTS

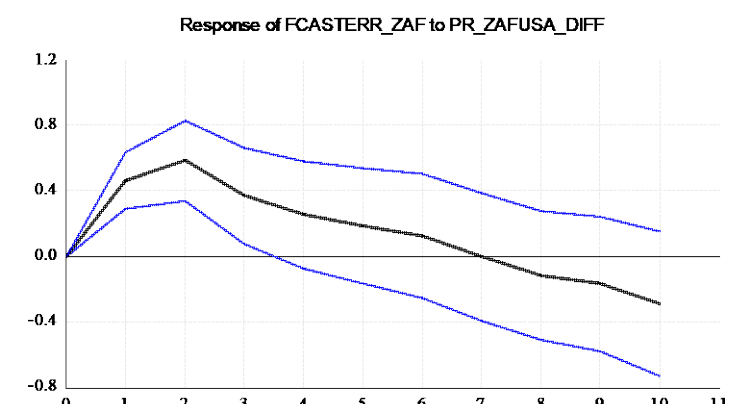
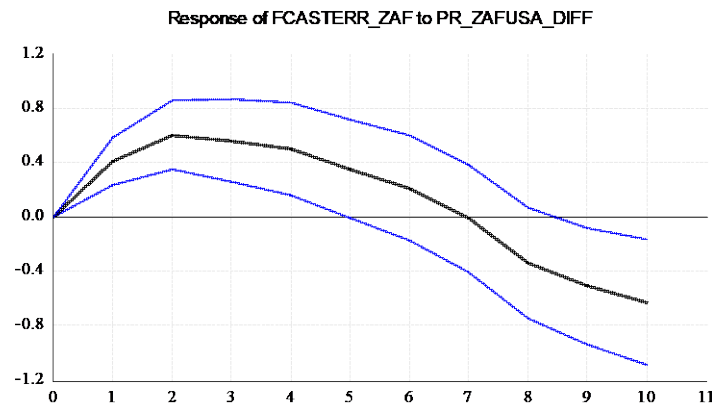
Greater “global”
Shocks would not impact
Competitiveness under a
More interventionist ER
policy



A larger ZAF-USA PR
differential would RAISE
Competitiveness if ER
Policy is more
interventionist



A more interventionist
ER would slightly reduce
Forecast errors



What's the Way Ahead?

- Can the world take a step back from more inward-looking policies?
 - Its not all bad: a chance to improve fiscal-MP coordination/cooperation
- How can EME (not to mention AE) foster more dialogue/diplomacy in an era of Global Discord?
 - Is the best defense offence?
- For Central Banks: How to communicate through all this?
 - Acknowledge limitations
 - Restate forward vs Backward-looking views about how MP is set
 - Even before the “transitory” debacle the “data dependence” rhetoric may have damaged credibility
 - Are we experiencing a reckoning (“a plethora of market distortions”) for more than 10 years of UMP in AE?
- The Future MP regime in EME
 - A Lower IT?
 - A more ‘flexible’ IT? A zone of tolerance and a downplaying (in the short-run) of the mid-point of the target range

And a Warning?

- “If policy is not restrictive enough to bring inflation to target on a reasonable timetable, there is a risk that rates will have to be increased by even more later,”
- “If policy is simply taking longer to work because the lagged effects of nominal tightening are only recently starting to have an impact on overall consumption, over-tightening risks making economic conditions more painful than necessary.”
 - <https://www.bankofcanada.ca/2023/07/summary-governing-council-deliberations-fixed-announcement-date-july-12-2023/>
- *AE and EME are in the same boat more than you think*

Selected References

- “The Transformation and Performance of Emerging Market Economies Across the Great Divide of the Global Financial Crisis” (with M. Bordo), NBER working paper 26342, October 2019, in *Independence, Credibility and Communication of Central Banking*, edited by Ernesto Pastén and Ricardo Reis (Santiago: Central Bank of Chile), pp 1-65;
- “Central Bank Credibility and Institutional Resilience” (with Christopher Hartwell);
- The Taylor Rule in South Africa: Comparing Survey And Notional Views (with Monique Reid), in progress;
- Rationality and biases: insights from disaggregated firm-level inflation expectations data (with Monique Reid), SARB WP/23/07 August 2023;
- Ilzetzki, Ethan, Carmen M. Reinhart, and Kenneth S. Rogoff. 2019. “Exchange Arrangements Entering the 21st Century: Which Anchor Will Hold?” *Quarterly Journal of Economics* 134 (2): 599-646;
- “Ocean’s Apart? China and Other Systemically Important Economies”, (with H. Chen) *Emerging Market Finance and Trade* 59 (5), 2023: 1349-1371.

Macroeconomic Stability in an Era of
Global Discord:
The Challenges for Emerging Market
Central Banks

APPENDIX

Econometrics in Bordo & Siklos (2022)

- VARs and factor models to examine the impact of selected shocks: real, monetary, financial, trade, credibility and global shocks emanating from systemically important countries (the US)

Factors as Sources of Shocks: An Illustration

CRED	REAL	TRADE	FINANCIAL	MONETARY	GLOBAL
CRED is the credibility indicator	Real GDP	Real exchange rate	Equity prices	Policy rate	US
	Inflation	Current account/GDP	Private non-bank financial assets to GDP ¹		or
	Real GDP growth forecast	Forex Reserves	Housing prices		S3 = US, EZ, JP
	Inflation forecast		Yield curve (i.e., short less long rate)		
			Interest rate differential (domestic less US short-term interest rate)		