

International Capital Flows and Financial Policies

Policy Panel

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October 2023



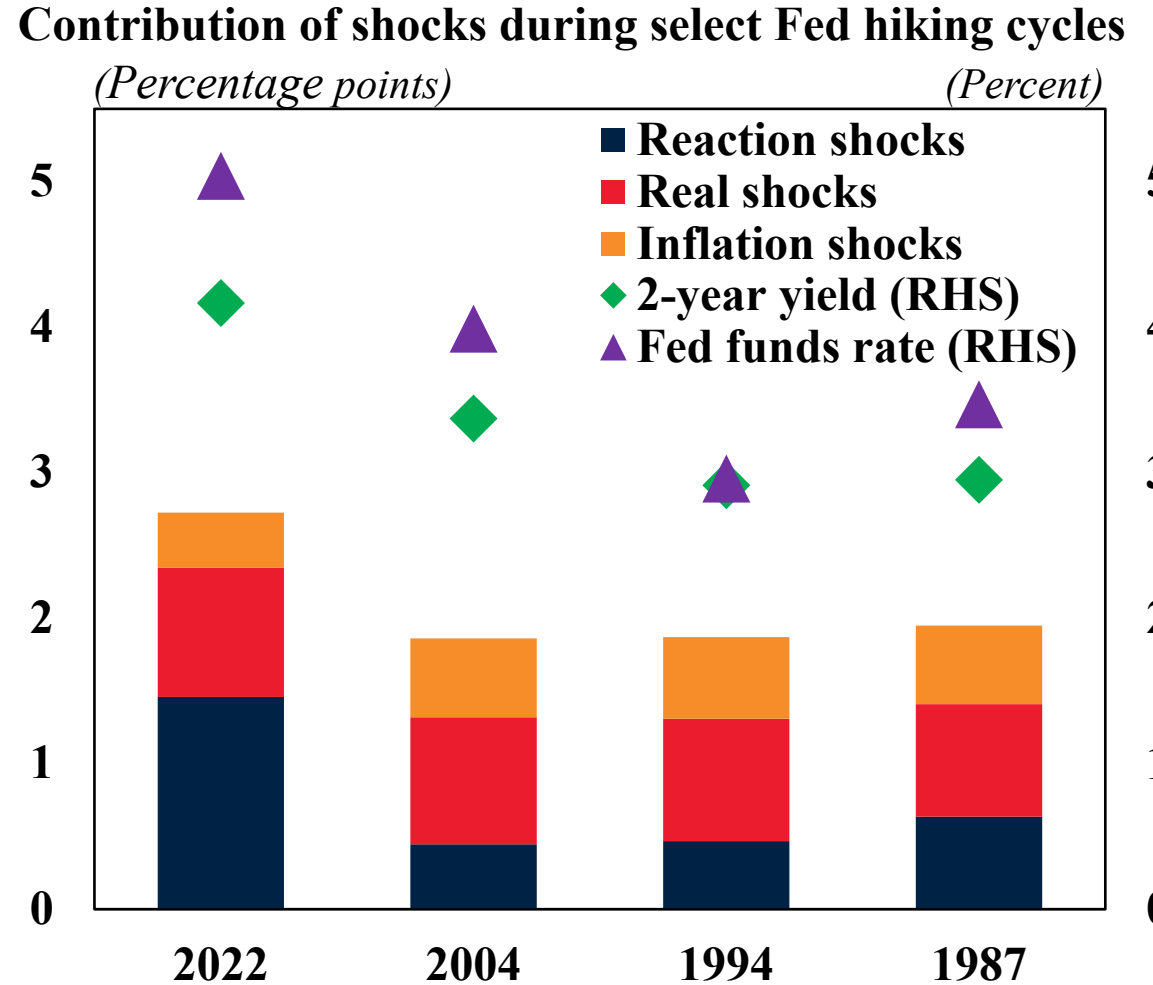
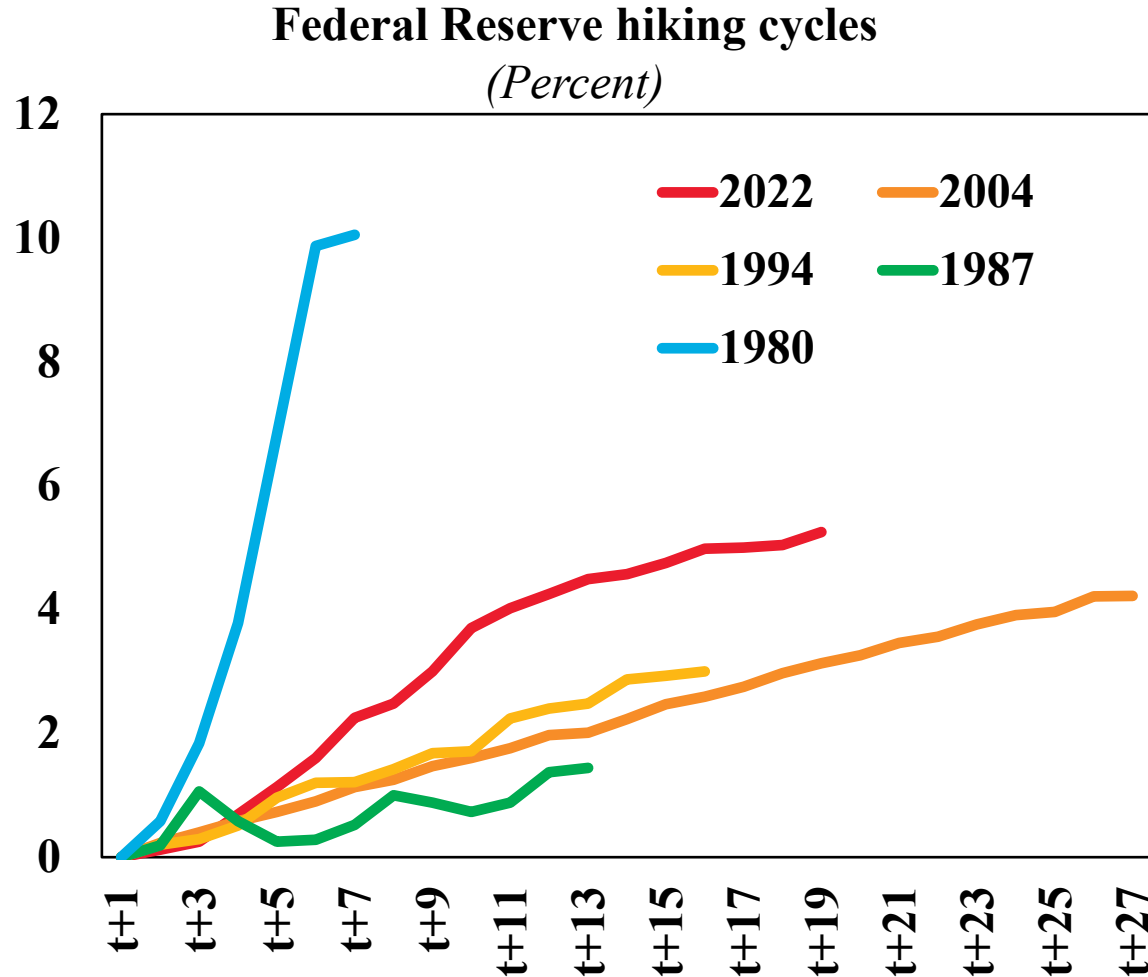
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U.S. Hiking Cycles

Current Hiking Cycle Fastest and Steepest Since 1980s



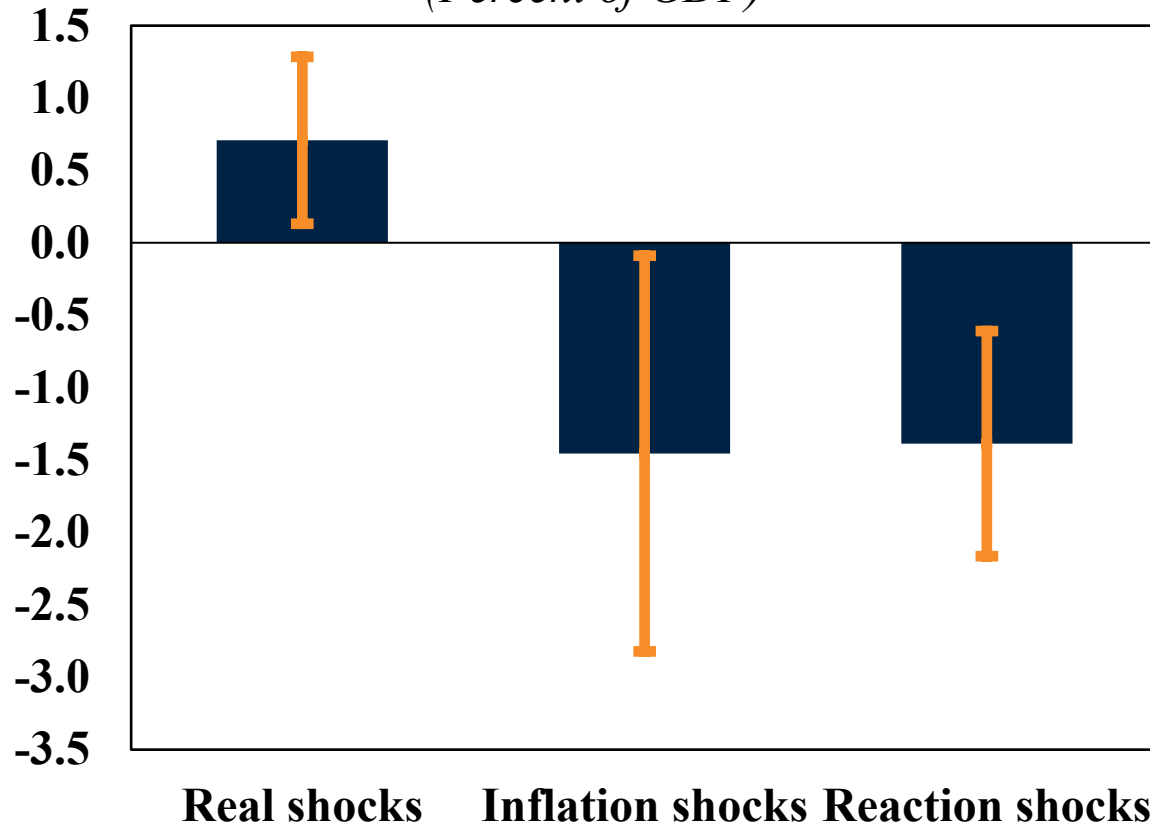
Sources: Arteta, Kamin, Ruch (2022); World bank

Note: Left panel: Based on the effective Federal Funds Rate. Monthly data. Last observation is August 2023. Right panel: Cumulative change in underlying shocks and yield. Inflation shocks are prompted by rising expectations of U.S. inflation. Reaction shocks are prompted by investors' assessments that the Federal Reserve has shifted toward a more hawkish stance. Real shocks are prompted by anticipation of improving U.S. economic activity.

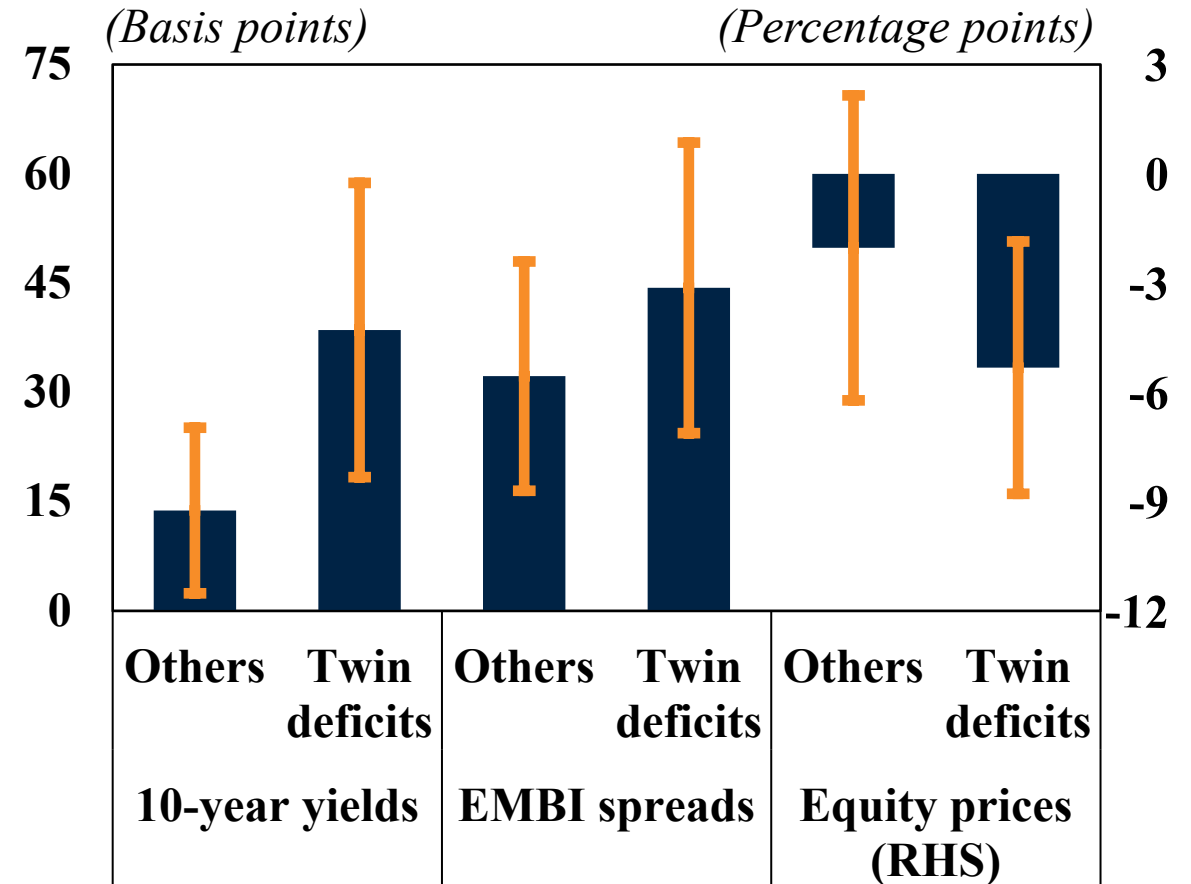
Spillovers to EMDEs

Capital Outflows; More Adverse for Twin Deficit Economies

Impact of a 25-basis-point shock on EMDE capital flows, peak response
(Percent of GDP)



Impact of 25-basis-point reaction shock after one quarter



Sources: Arteta, Kamin, and Ruch (2022); World Bank.

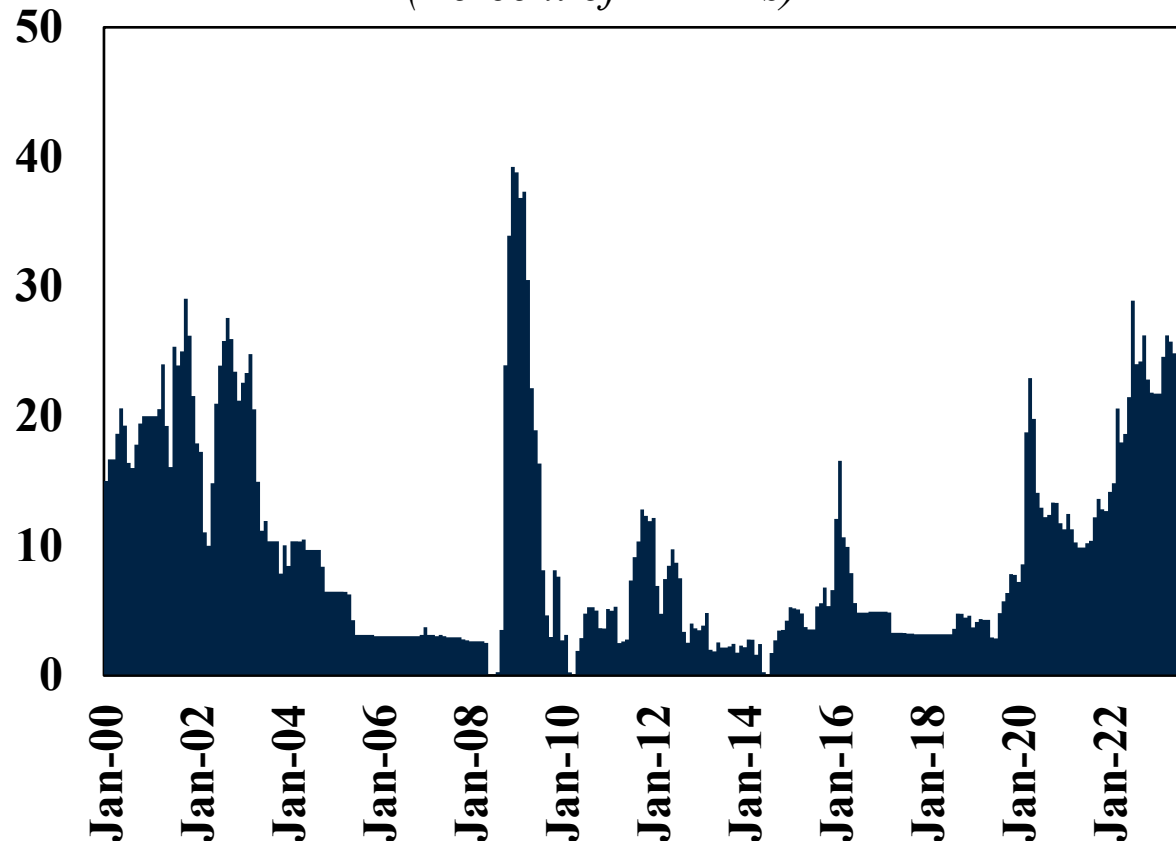
Note: Panel linear (left) and non-linear (right) local projection models with fixed effects and robust standard errors. Left panel: Positive “capital flows” values reflect an increase in net liabilities of portfolio and other investments as a percent of GDP for EMDEs. Right panel: Blue bars reflect estimated impact in first quarter ($y_{(t+1)}$). Orange whiskers reflect 90 percent confidence intervals.



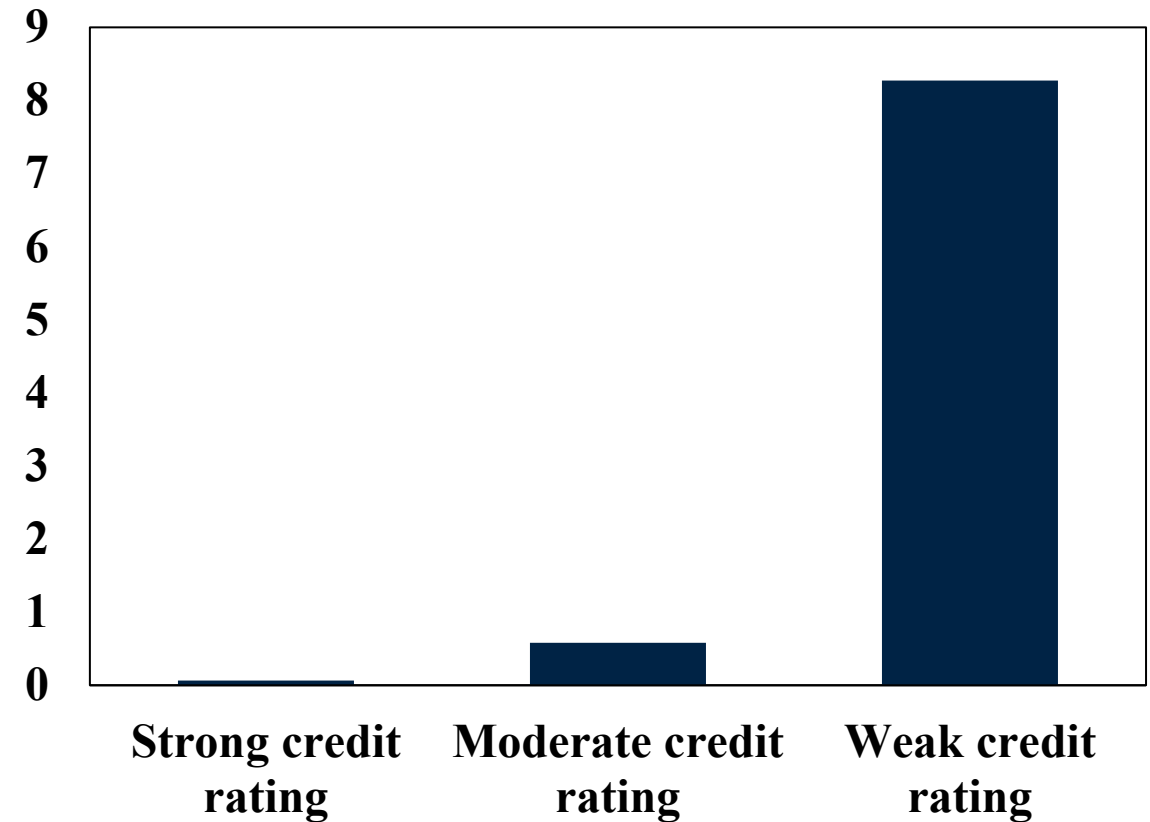
Financial Conditions in Vulnerable EMDEs

More Stressed EMDEs; Higher Sovereign Risk Spreads

EMDEs with sovereign spreads above 10 percentage points
(Percent of EMDEs)



Sovereign spread changes in EMDEs, 2022-23
(Percentage points)



Sources: Arteta, Kamin, and Ruch (2022); J.P. Morgan; Moody's; World Bank.

Note: Left panel: Sample includes 50 EMDEs. Right panel: Change in emerging market bond index global (EMBIG) spreads from January 2022 across long-term foreign-currency sovereign debt ratings by Moody's. "Strong credit rating" includes "Aaa," "Aa," "A," and "Baa." "Moderate credit rating" includes "Ba" and "B." "Weak credit rating" includes "Caa," "Ca," and "C." Sample size includes 45 EMDEs. Sample excludes Belarus, Lebanon, the Russian Federation, Ukraine, and República Bolivariana de Venezuela. Last observation is September 11, 2023.

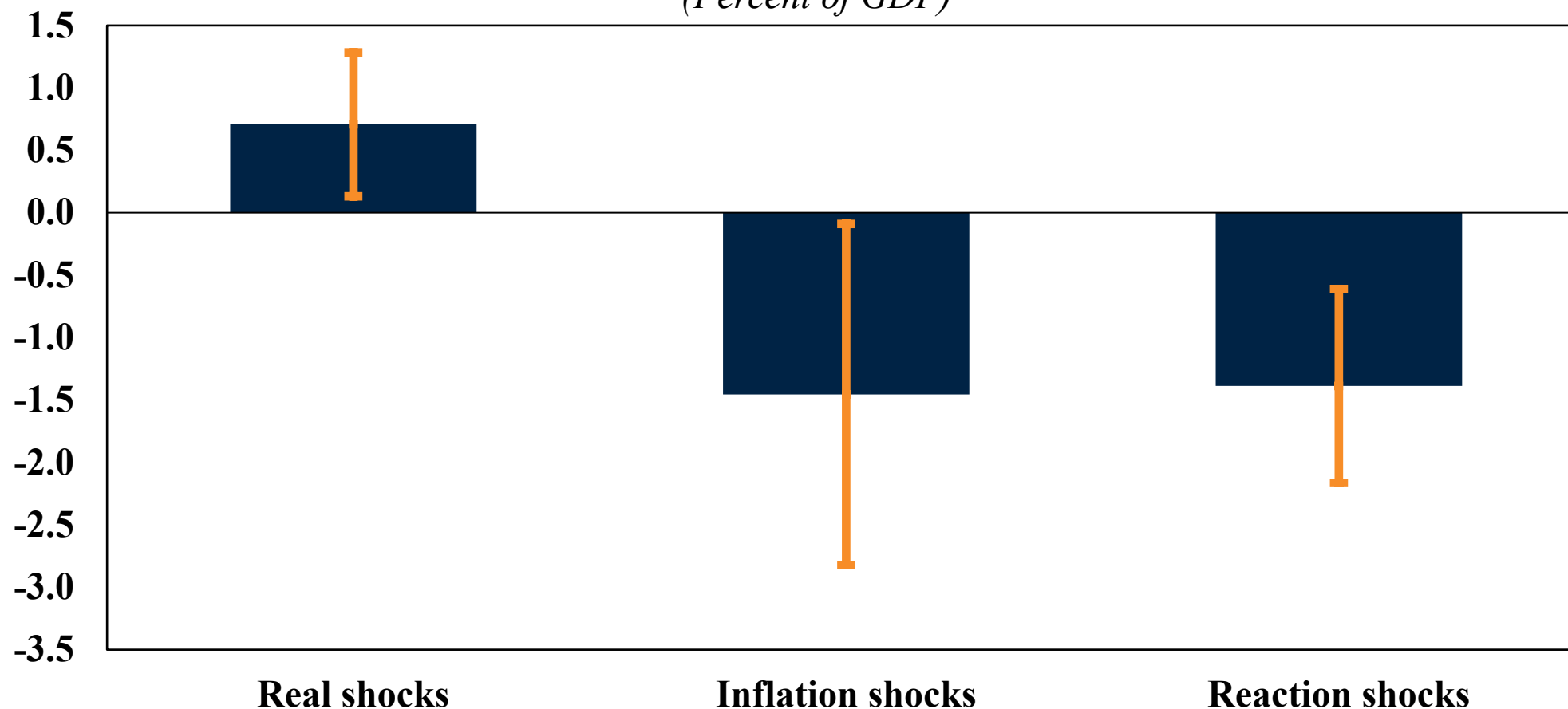


Alternative slides

Spillovers to EMDEs

Inflation and Reaction Shifts Detrimental to EMDE Capital Flows

Impact of a 25 basis point shock to EMDE capital flows, peak response
(Percent of GDP)



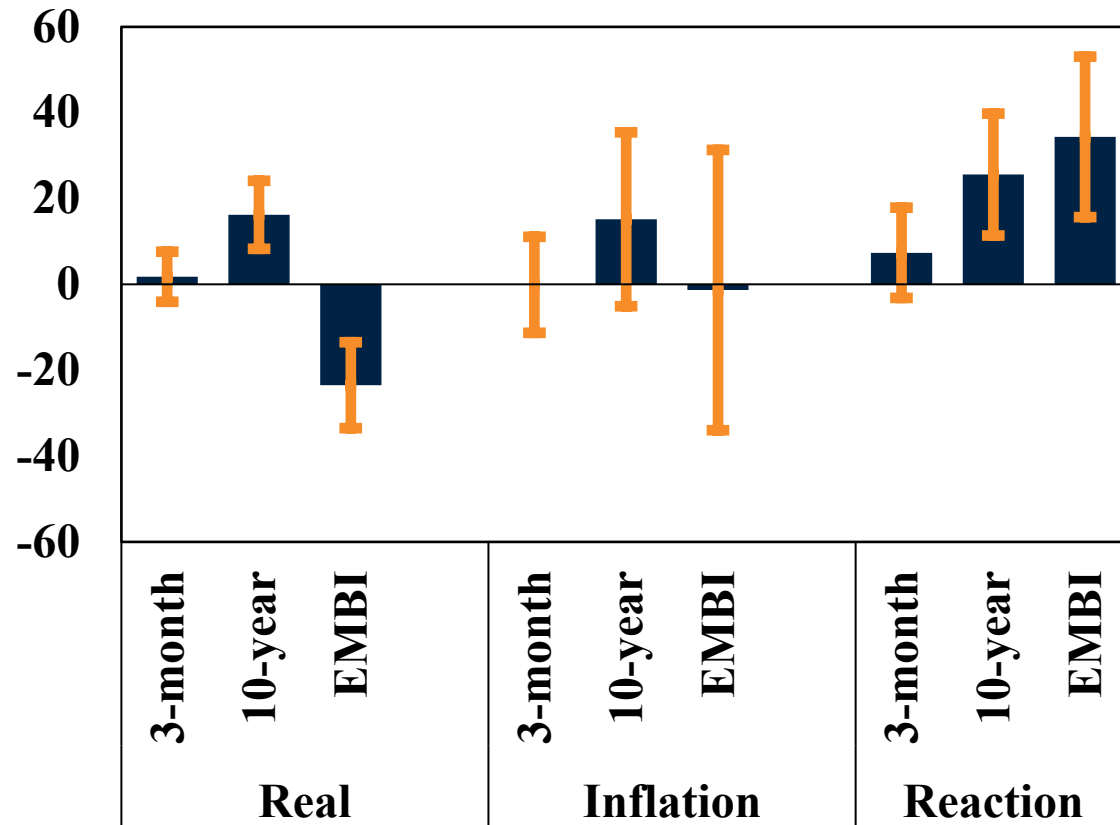
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Note: Panel local projection models with fixed effects and robust standard errors. Positive “capital flows” values reflect an increase in net liabilities of portfolio and other investments as a percent of GDP for EMDEs.

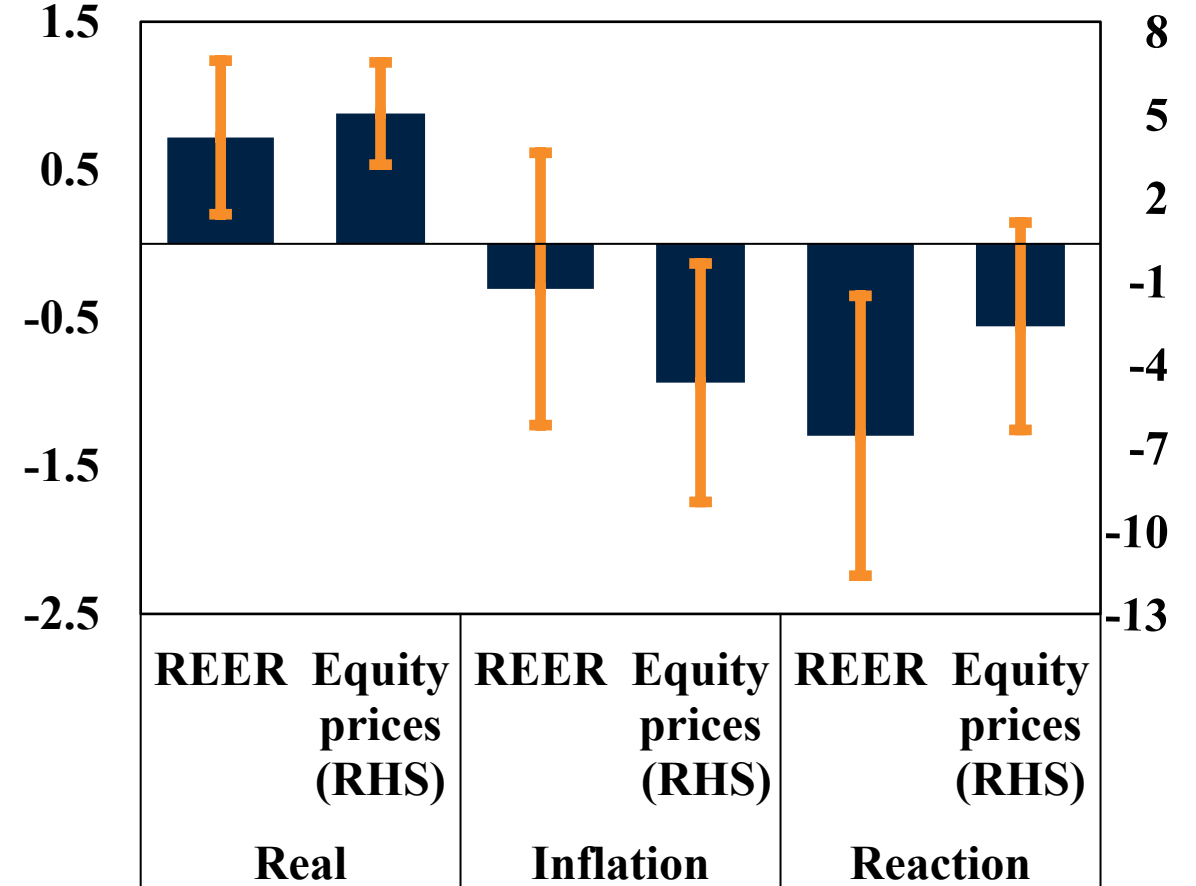
Impact of U.S. Interest Rate Shocks on EMDEs

Benign Real Shocks, Adverse Reaction Shocks

Impact of 25 basis point shock after one quarter
(Basis points)



Impact of 25 basis point shock after one quarter
(Percentage points)



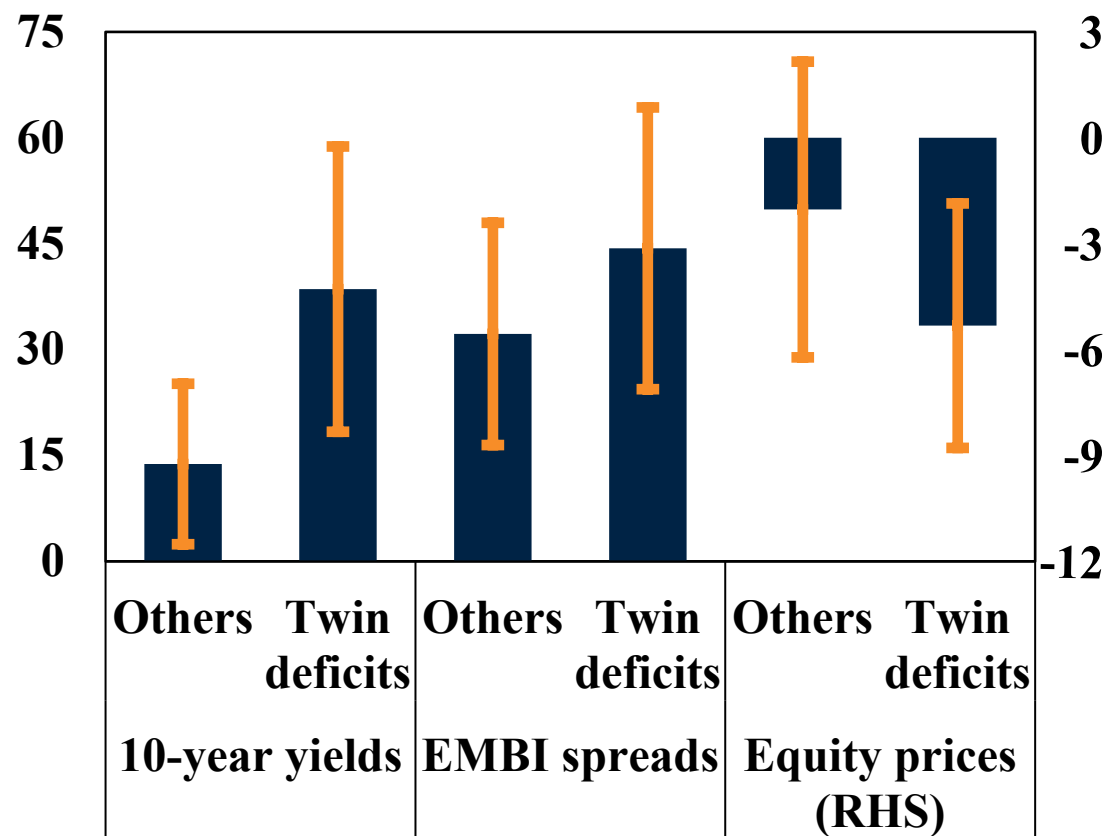
Sources: Arteta, Kamin, Ruch (2022); World bank

Note: Panel local projection models with fixed effects and robust standard errors. Blue bars reflect estimated impact in first quarter ($y_{(t+1)}$). Orange whiskers reflect 90 percent confidence intervals. EMBI = emerging market bond index; REER = real effective exchange rate. Positive "REER" values reflect an appreciation in the exchange rate. Figure excludes fixed exchange rate economies.

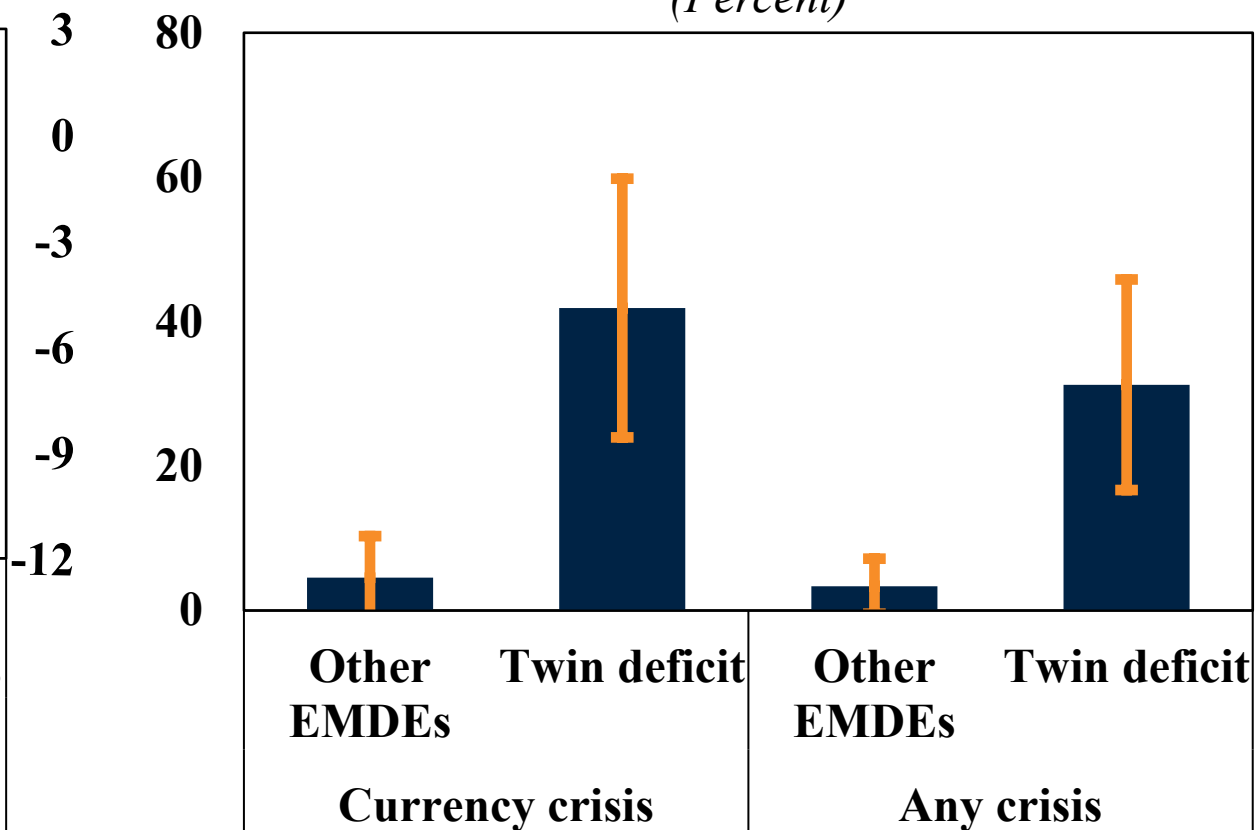
Twin Current Account and Fiscal Deficit EMDEs

More Adverse Response and Rising Crisis Probability

Impact of 25 basis point shock after one quarter
(Basis points) (Percentage points)



Likelihood of crisis in response to reaction shocks of the past 12 months
(Percent)

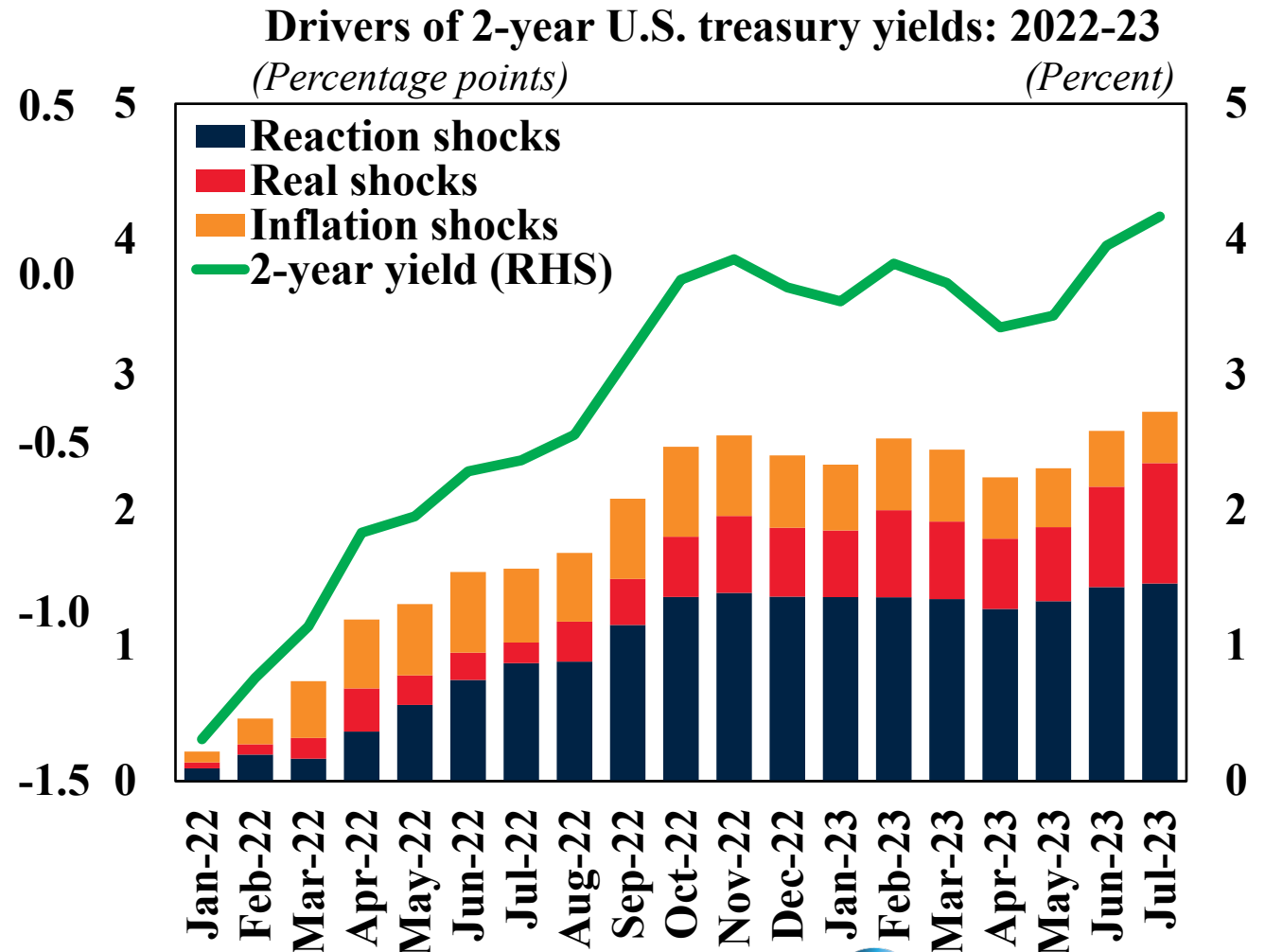
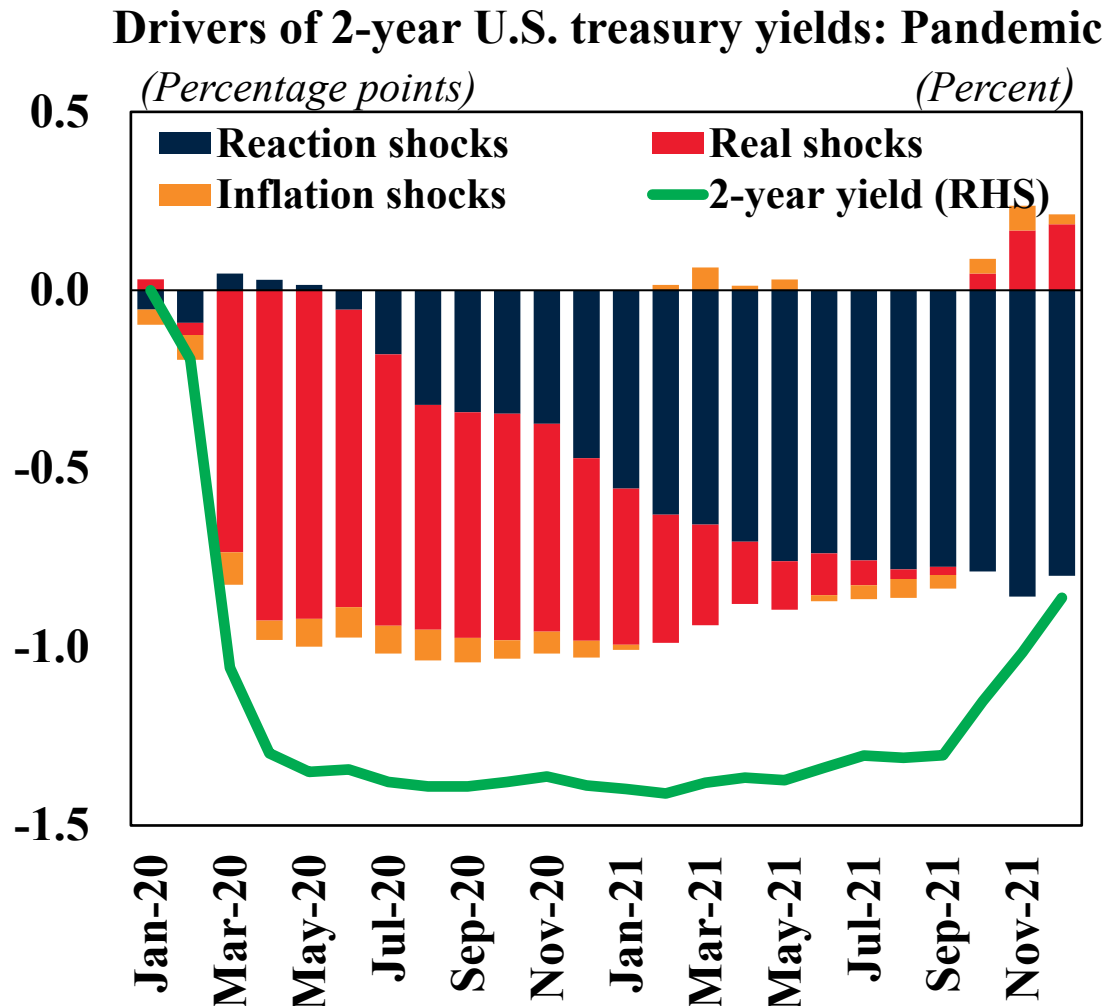


Sources: Arteta, Kamin, and Ruch (2022); World Bank.

Note: Left panel: Blue bars reflect estimated impact in first quarter (y_{t+1}). Orange whiskers reflect 90 percent confidence intervals. Right panel: Based on a logit model with random effects that includes an interaction term for economies that run twin current account and primary fiscal deficits. Reflects a 0.72 percentage point increase in the 2-year U.S. Treasury yield driven by a reaction shock (the increase seen in the 12 months to mid-May 2023). Orange whiskers reflect 68 percent confidence intervals.

Recent U.S. Interest Rate Moves

Pandemic-Related Economic Collapse; Hawkish U.S. Fed Policy Reaction



Sources: Arteta, Kamin, Ruch (2022); World Bank

Note: Cumulative change in underlying shocks and yield. Inflation shocks are prompted by rising expectations of U.S. inflation. Reaction shocks are prompted by investors' assessments that the Federal Reserve has shifted toward a more hawkish stance. Real shocks are prompted by anticipation of improving U.S. economic activity.



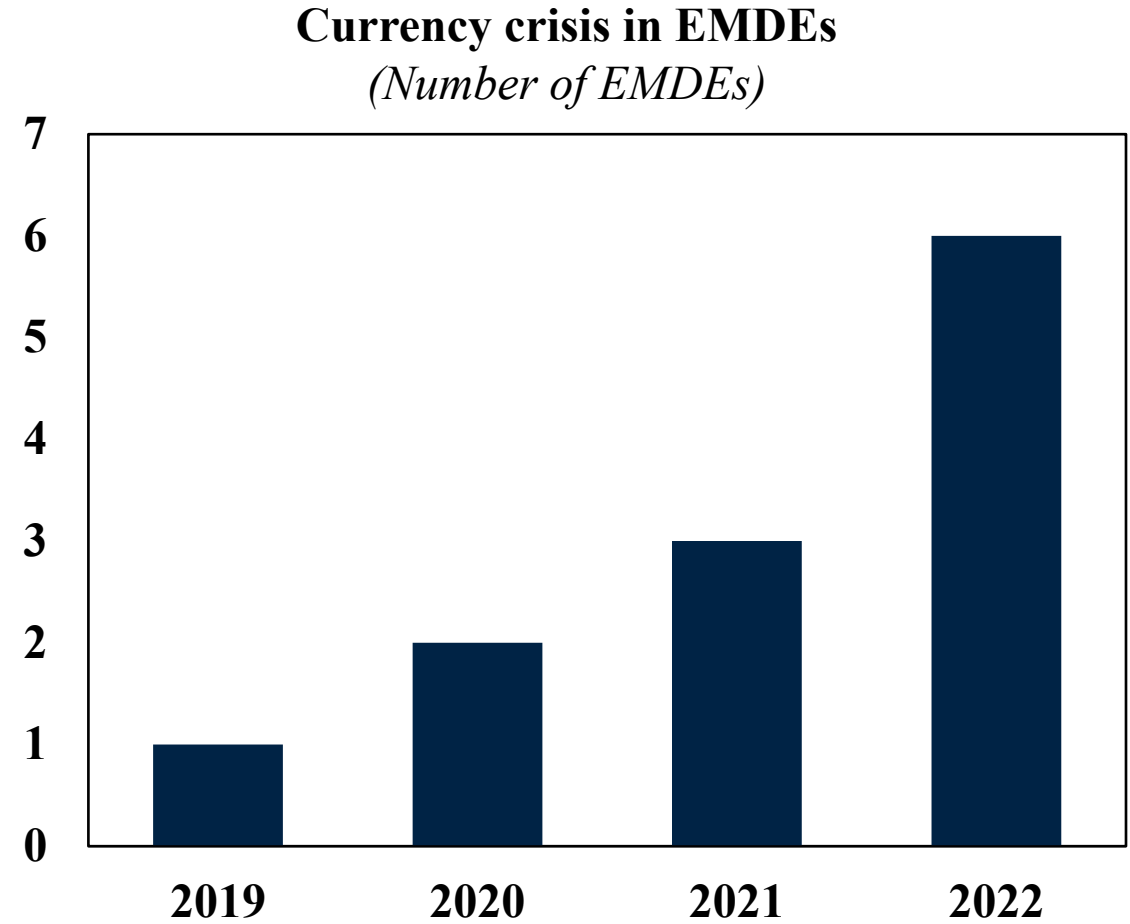
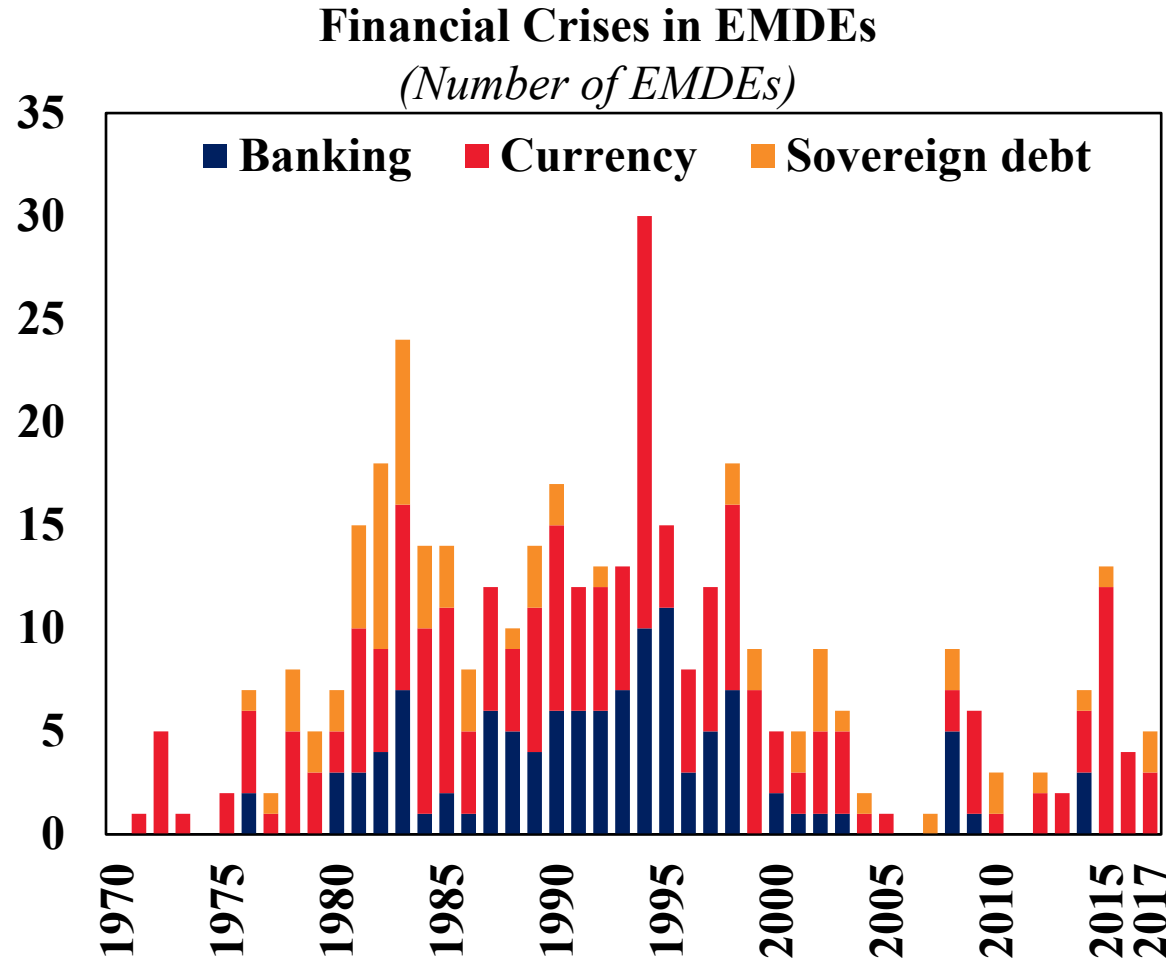
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Financial Crises in EMDEs

Crises in EMDEs Common; Currency Crisis Rose in 2022

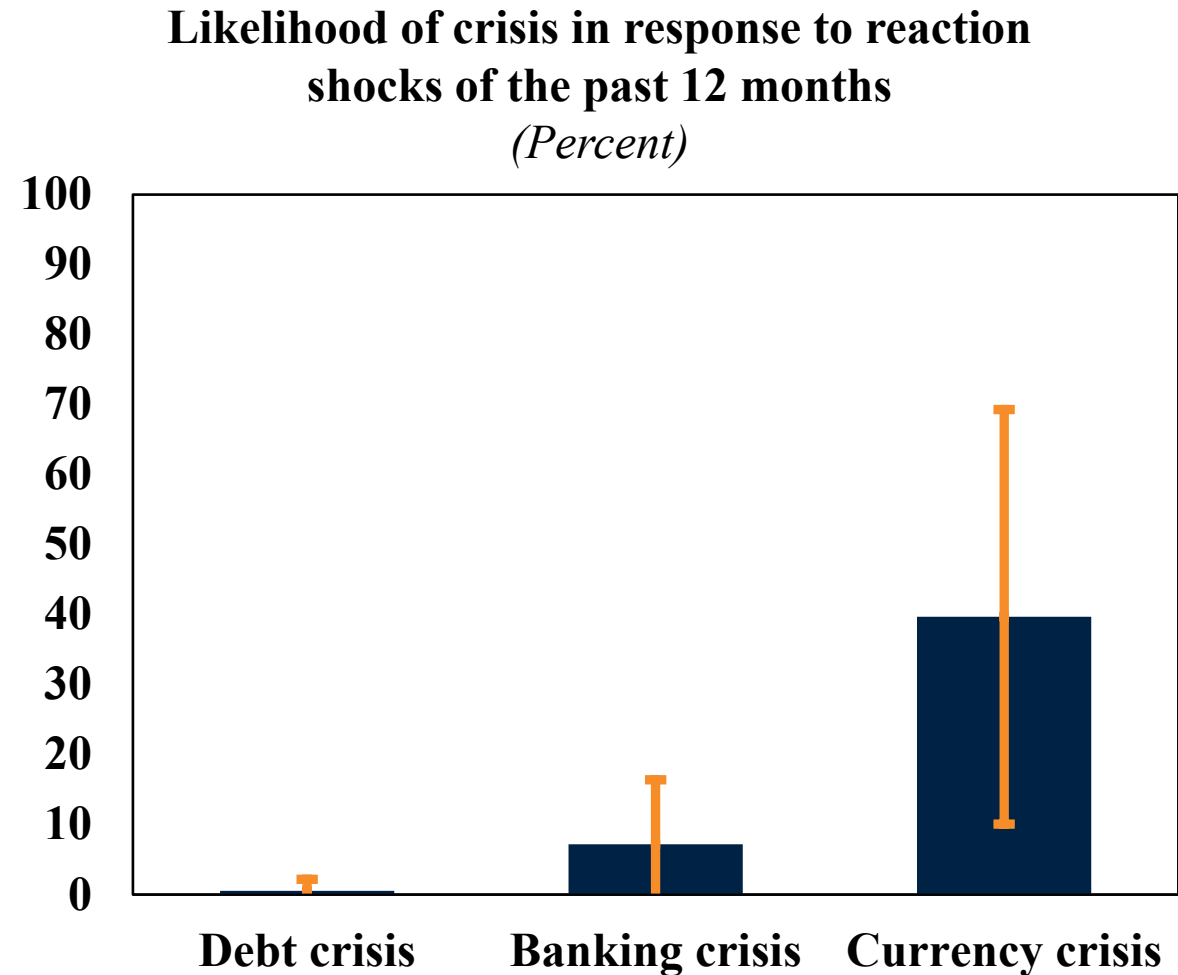
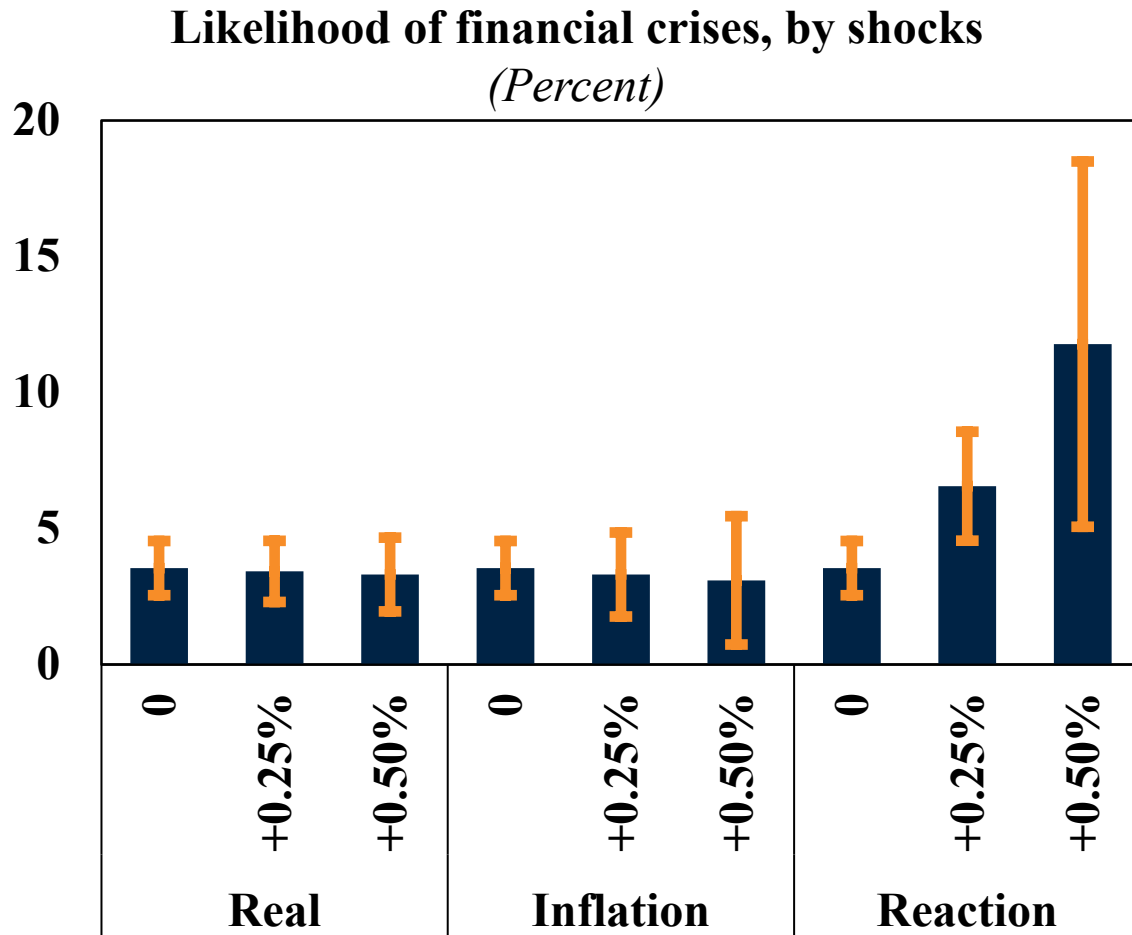


Sources: Laeven and Valencia (2020); Arteta, Kamin, and Ruch (2022); World Bank.

Note: Right panel: A currency crisis is defined as a “sharp” nominal depreciation (at least 30 percent) vis-a-vis the U.S. dollar. For additional details, see Laeven and Valencia (2020).

Financial Crises in EMDEs

Reaction shocks significantly raise the probability of financial crisis



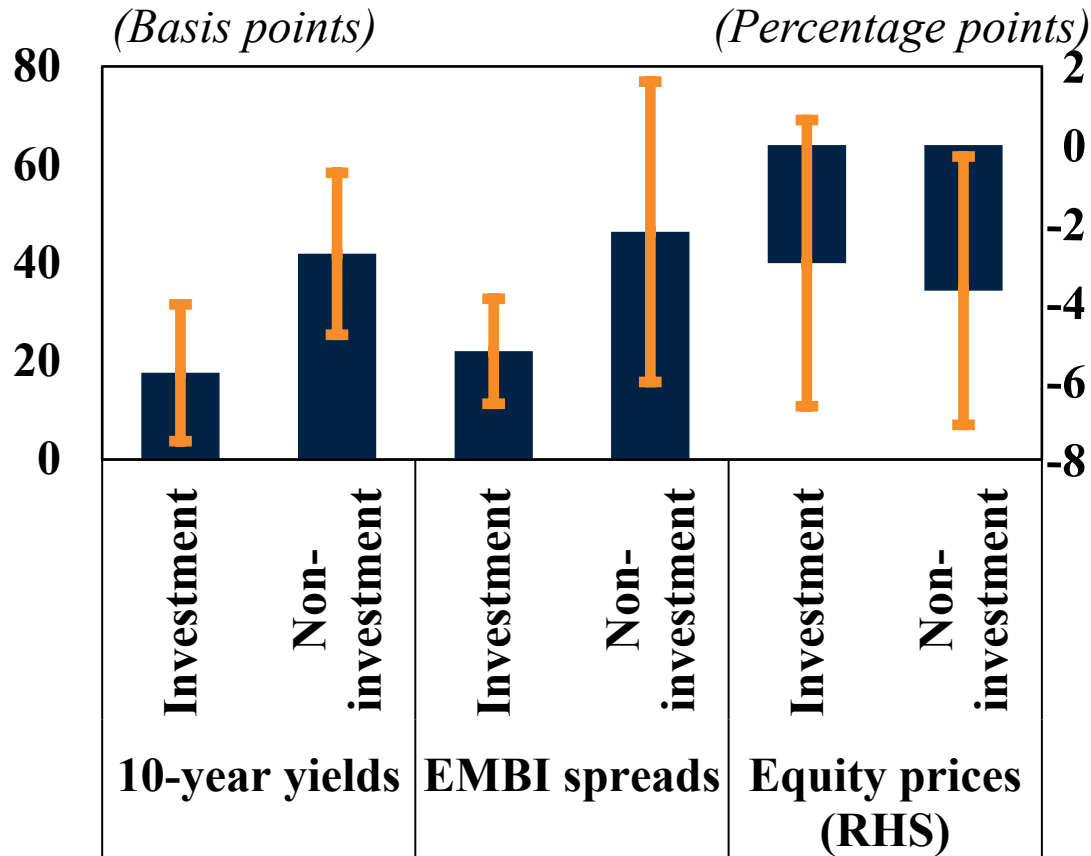
Sources: Laeven and Valencia (2020); Arteta, Kamin, and Ruch (2022); World Bank.

Note: Left panel: “0” indicates the probability of a crisis in a given year when there is no change in the underlying shock and all other variables included in the regression are at their sample means. “+0.25%” and “+0.50%” indicate the crisis probabilities in the case of 25 and 50 basis point increases in the 2-year U.S. Treasury yield driven by the underlying shock. Orange whiskers reflect 90 percent confidence intervals. Probability of any crisis conditional on underlying shocks to U.S. interest rates. Right panel: Reflects a 0.72 percentage point increase in the 2-year U.S. Treasury yield driven by a reaction shock (the increase seen in the 12 months to mid-May 2023). Orange whiskers reflect 90 percent confidence intervals.

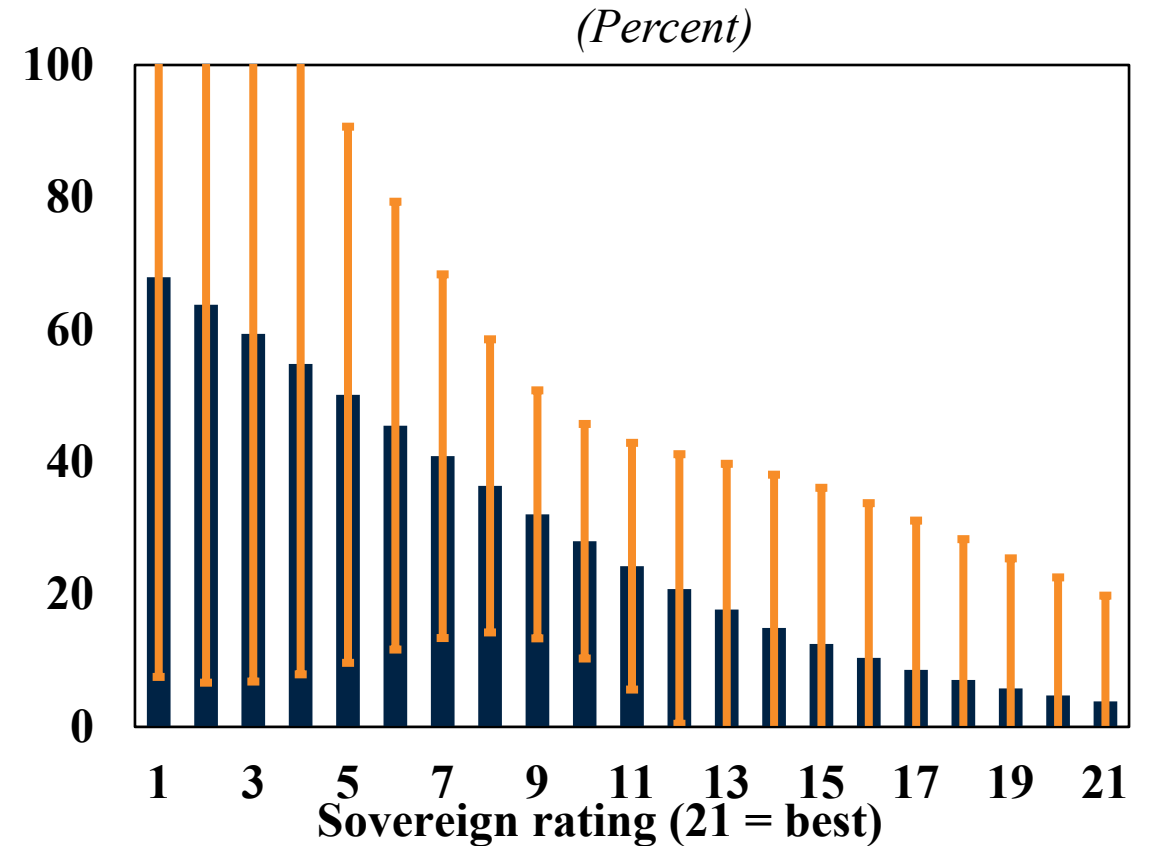
EMDEs By Investment Rating

More Adverse Response and Rising Crisis Probability

Impact of 25-basis-point reaction shock on EMDE financial variables after one quarter, by credit rating



Likelihood of a financial crisis in response to reaction shocks of the past 12 months



Sources: Arteta, Kamin, and Ruch (2022); World Bank.

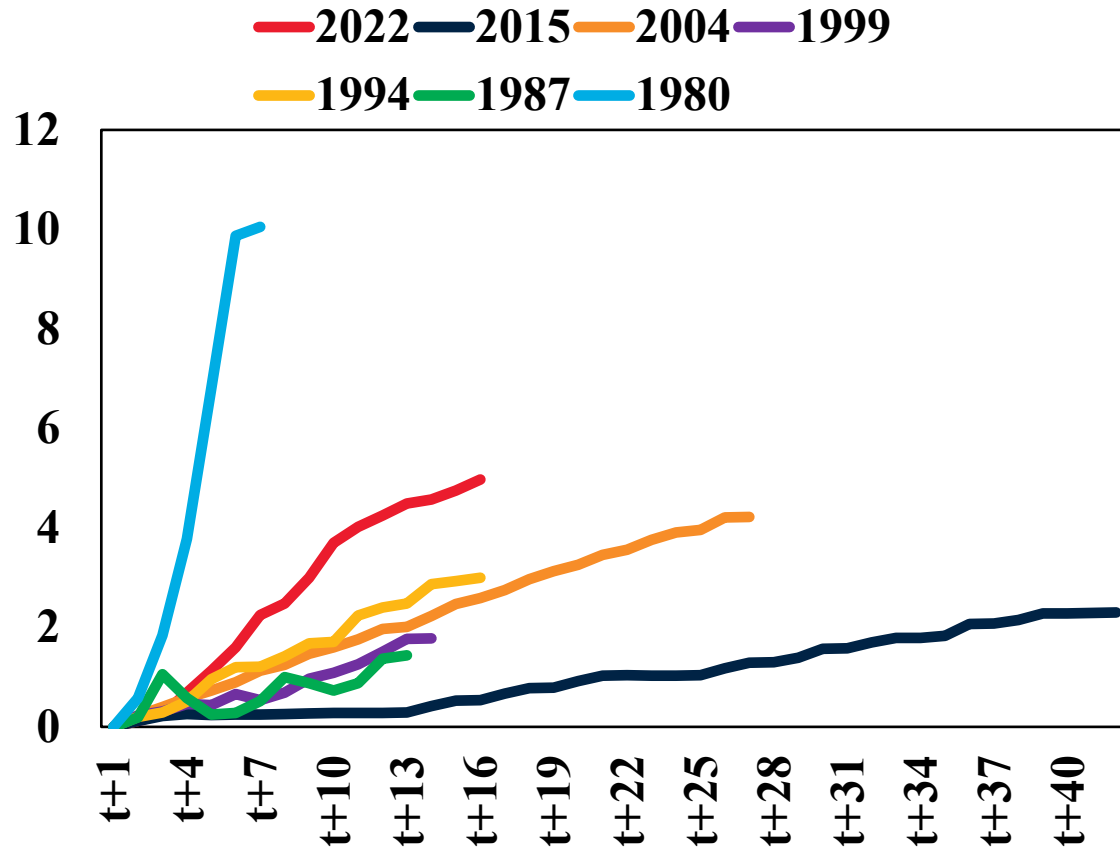
Note: Left Panel: Panel non-linear local projection model with fixed effects and robust standard errors. Blue bars reflect estimated impact in first quarter. Orange whiskers reflect 90 percent confidence intervals. Right Panel: Based on a logit model with random effects that includes an interaction term for economies that run twin current account and primary fiscal deficits. Reflects a 0.72 percentage point increase in the 2-year U.S. Treasury yield driven by a reaction shock (the increase seen in the 12 months to mid-May 2023). Orange whiskers reflect 68 percent confidence intervals.



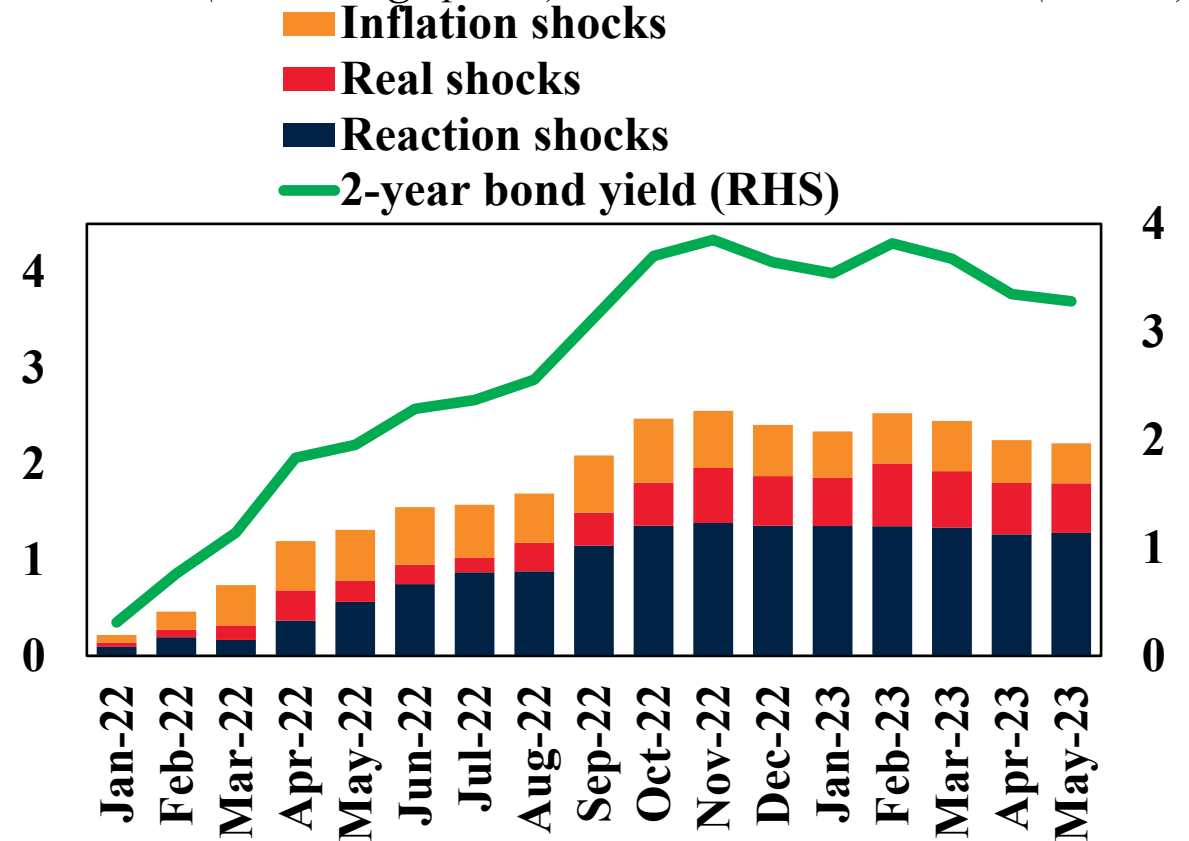
U.S. Hiking Cycles

Current Hiking Cycle Driven by Inflation and Fed Stance

Federal Reserve hiking cycles
(Percent)



Drivers of 2-year U.S. treasury yields: 2022-23
(Percentage points) (Percent)



Sources: Arteta, Kamin, Ruch (2022); World bank

Note: Left panel: Based on the effective Federal Funds Rate. Monthly data. Last observation is May 2023. Right panel: Cumulative change in underlying shocks and yield. Inflation shocks are prompted by rising expectations of U.S. inflation. Reaction shocks are prompted by investors' assessments that the Federal Reserve has shifted toward a more hawkish stance. Real shocks are prompted by anticipation of improving U.S. economic activity.