

The Global Financial Cycle: Juggernaut or Anticlimax?

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The Big Bad Global Financial Cycle

There is a new bully in town, and policymakers round the world have recently come to fear the “Global Financial Cycle.” The Global Financial Cycle (hereafter “GFC”) was brought to prominence most dramatically by the work of Helene Rey, who wrote in her influential Jackson Hole paper (2013):

“Risky asset prices around the globe, from stocks to corporate bonds, have a strong common component. So do capital flows ... Global financial cycles are associated with surges and retrenchments in capital flows, booms and busts in asset prices and crises. The picture emerging is that of a world with powerful global financial cycles characterized by large common movements in asset prices, gross flows, and leverage ... The global financial cycle can be related to monetary conditions in the centre country and to changes in risk aversion and uncertainty ... capital flows, especially credit flows, are largely driven by a global factor ...”

The interest in the GFC is not confined to Rey and her co-authors. For instance, Forbes and Warnock (2012) write:

“Global factors, especially global risk, are significantly associated with extreme capital flow episodes. ... Our analysis indicates that waves of capital flows are primarily associated with global factors. Global risk, which incorporates both risk aversion and economic uncertainty, is the only variable that consistently predicts each type of capital flow episode; an increase in global risk is associated with more stops and retrenchments and fewer surges and flight. ... most domestic factors only have a limited correlation with capital flow volatility ... global factors, and especially global risk, are key to understanding periods of extreme capital flows by domestic and foreign investors. Increases in global risk predict sudden stops in capital flows by foreigners and retrenchments in capital flows by domestic investors ...”

Policymakers care about the GFC for good reason. Much of the recent literature implies that the GFC explains much of the variation in capital flows, particularly for small and emerging economies. These waves of capital fluctuate for reasons independent of the small and/or emerging markets, resulting in difficult policy choices. As Rey (2015) writes:

“As capital flows respond to US monetary policy, they may not be appropriate for the cyclical conditions of many economies. For some countries, the Global Financial Cycle can lead to excessive credit growth in boom times and excessive retrenchment in bad times. ... The Global Financial Cycle can be associated with surges and dry outs in capital flows, booms and busts in asset prices and crises... The empirical results on capital flows, leverage and credit growth are suggestive of an international credit channel or risk-taking

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channel and point towards financial stability issues.”

However, if the GFCy does not explain most or even much of the variation in capital flows, then the policy authorities in small and/or emerging countries have greater degrees of freedom to manage their economies. Conversely, it is less appropriate for policy-makers in small countries to blame the center economies for internal problems if the GFC simply does not explain many fluctuations in capital flows. So it is important to figure out whether the Global Financial Cycle is a juggernaut – an irresistible and overwhelming force – or an anticlimax that plays a relatively small role in driving capital flows, but one that perhaps can be used to divert attention from domestic mistakes.

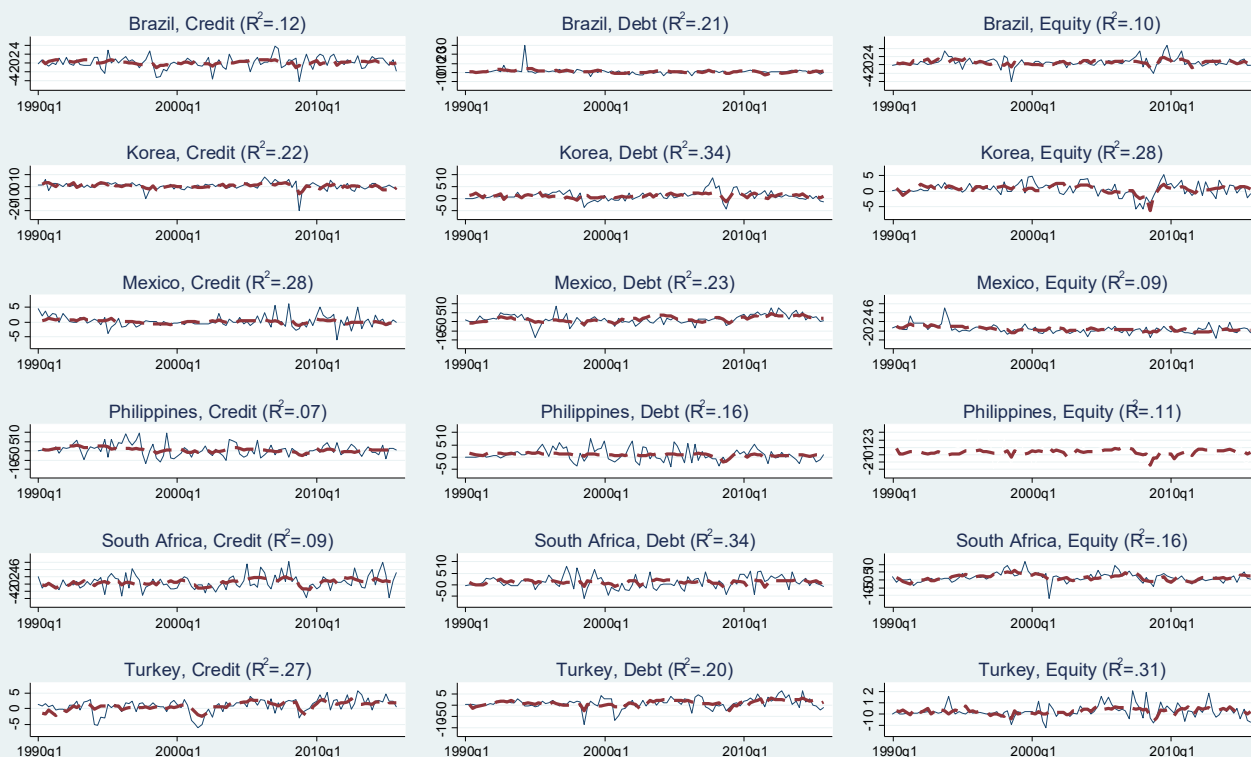
Comparing a Firecracker with a Damp Squib

In my recent research with Cerutti and Claessens (2017), we quantify the importance of the GFC for capital flows. We use a conventional approach, with widely used data, techniques, capital flow models and statistical metrics. The drivers of the GFC that we examine include measures frequently used in the literature: risk (e.g., the VIX index, a measure of volatility expected in the stock market); monetary policy (nominal and real interest rates, the TED spread and the slope of the yield curve); and other fundamentals (like growth of GDP, the exchange rate, and the money supply). We follow the literature in assuming that America is the primary center-country source of the GFC, but also consider analogues from the Eurozone and the UK. We then ask the question “how much variation in capital flows for small and/or emerging markets is explained by these GFC fundamentals?” We do this essentially by regressing capital flows of a particular type for a particular country over time (e.g., flows of debt into Brazil, as a percentage of Brazilian GDP) on our eight fundamental American variables, and then asking how well these GFC drivers explain capital flows – that is, how well does the equation fit? This plain-vanilla strategy allows us to drill through the hoopla associated with the GFC and focus on the fraction of variation in capital flows actually explained by global influences, without being distracted by minor issues associated with data or methodology.

How does the GFC, as manifest in American fundamentals, actually explain the variation in capital flows? Not particularly well. Consider Figure 1, which presents a series of time-series plots of actual capital flows and those predicted by our eight American fundamentals. The top-left graph shows that actual capital inflows of bank credit for Brazil (in a thin solid line) are poorly correlated with those predicted by GFC fundamentals (in a thick dashed line); only 12% of the actual variation is explained by the fitted GFC fundamentals. Inflows of Brazilian debt and equity are shown in graphs in the middle and right of the figure; analogues for Korea, Mexico, the Philippines, South Africa, and Turkey are in successive rows of Figure 1. None of the equations fit particularly well; the highest R^2 is .34, meaning that only 34% of the variation in Korea and South African inflows of debt are explained by American fundamentals. American fundamentals explain even less for other countries and types of capital flows. Succinctly, the importance for capital flows of center-country fundamentals – the Global Financial Cycle – is limited.

Emerging Markets Capital Flows, 1990Q1-2015Q4

Actual (thin-solid) and fitted (thick-dashed) inflows, % GDP



8 US fundamentals: VIX, TED/yield spreads, nominal/real policy interest rates, growth in GDP/M2/REER

Figure 1

Playing Fair

One might reasonably object that the (six) countries and (three) types of capital (in)flows portrayed in Figure 1 have been selected. Still, the weak results of Figure 1 are actually representative. In our research, we estimate similar models (with additional measures of the GFC) for 63 small countries, dis-aggregating capital flows by two directions (capital can flow in and out) and four types (FDI, debt, equity, and bank credit). This means that we estimate literally hundreds of capital flow equations, all trying to understand whether capital flows are driven by American fundamentals. The vast majority of these equations fit poorly. This is demonstrated in Figure 2, which presents histograms of adjusted R² measures for our fitted capital flow equations (adjusting R² provides a small penalty for additional regressors). The top-left histogram of Figure 2 shows the distribution of goodness-of-fit for all of the (598) capital flow equations; the average adjusted R² is only .12, and only a few even approach .5! The poor fit of the capital flow equations seems to characterize inflows and outflows, and flows of FDI, portfolio capital (whether debt or equity), and bank credit. The message from Figure 2 is that it is

difficult to model capital flows for small countries using only American fundamentals, at least over the last twenty-five years.

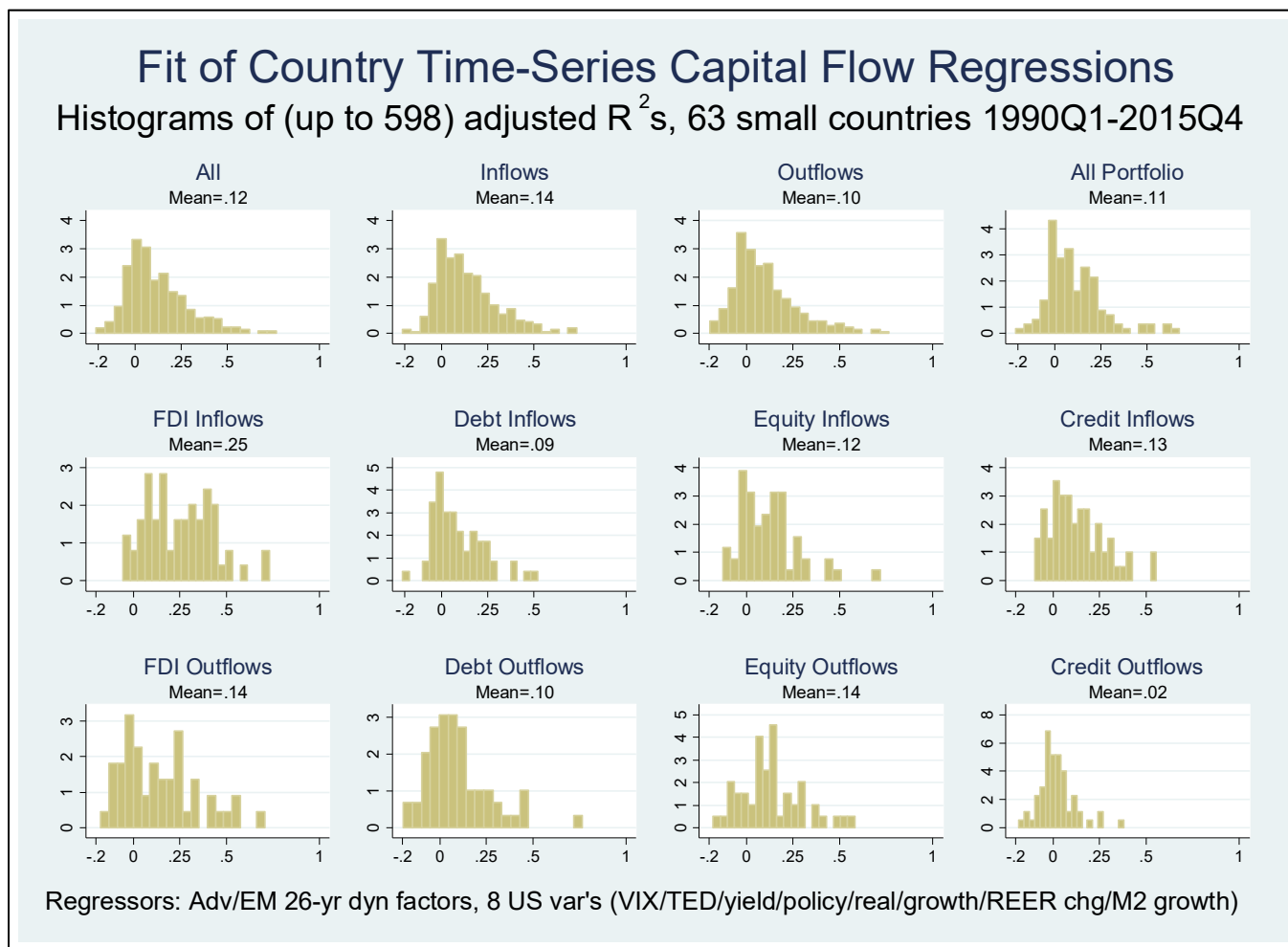


Figure 2

In my research with Cerutti and Claessens, we take pains to show that the negative results of Figures 1 and 2 are general, and insensitive to the exact way one models the GFC, cuts the data, and so forth. We show that our results are robust to adding lags, using European and British fundamentals, dropping outliers, using different measures of goodness of fit, and splitting the sample by income, time, region, degree of capital mobility, and exchange rate regime.

To summarize: it is difficult to explain much variation in the capital flows of small and/or developing countries if one uses only center-country (e.g., American) fundamentals. We conclude that conservatively, perhaps a quarter of the variation in capital flows arises from the Global Financial Cycle. The lion's share of capital flows arises from other causes, presumably domestic.

The Takeaway

Despite the impression given in the literature, most variation in capital flows for small and/or emerging markets is not driven by the Global Financial Cycle. My recent research with Cerutti and Claessens argues that no more than 25% of the fluctuations of capital flows can be ascribed to center-country phenomena like fluctuations in global risk aversion or the stance of American monetary policy. This should be welcome news to policy-makers in small countries; the GFC does not seem to be the juggernaut portrayed in the literature. On the other hand, it also means that the same policy-makers cannot reasonably blame foreign influences for their domestic woes; autonomy comes with responsibility.

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