

## [Global Footprints of Monetary Policies](#)

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The large and increasing interconnectedness of global real and financial markets, the emergence of Global Value Chains (GVC), and of a Global Financial Cycle (GFC, Rey, 2013), all provide fertile ground for international spillovers. In fact, the unprecedented intricacy of global networks generates potentially new dimensions for the international transmission of monetary policy shocks that go beyond the standard textbook trade channels primarily brought about by fluctuations in the exchange rate.

Miranda-Agrippino and Rey (2015) document a channel for the international transmission of monetary policy that works through global financial markets. The synchronization of international financial markets epitomized by the GFC, together with the role of the dollar as the dominant currency of the international monetary system, consign a special role to US monetary policy as one of the drivers of the GFC itself (see also Jorda, Schularick, Taylor and Ward, 2018; Habib and Venditti, 2019). US monetary contractions are followed by a significant deleveraging of global financial intermediaries, a rise in aggregate risk aversion, a contraction in global asset prices and in global credit, a widening of corporate bond spreads, and a retrenchment in gross capital flows. The effects are economically significant, and not confined only to countries that adopt an exchange rate peg.

But is the Federal Reserve the only giant capable of influencing global conditions through its policies?

In this paper we compare the global effects of US monetary policy with those elicited by surprise changes in the Chinese monetary policy stance. For the first time we are able to make use of a monetary policy index that summarizes the policy stance of the People's Bank of China, and can be regarded as the analogue of the Federal Funds Rate (Xu and Jia, 2019). Postulating a standard Taylor-type rule for the Chinese monetary authority, and a delayed response for most of the global aggregates, we evaluate empirically how the world adjusts to a Chinese monetary policy shock.

Our estimates suggest that the monetary policies of the US and China have a sizeable impact on the global economy. However, the channels of transmissions of these spillovers differ. US shocks

propagate predominantly through financial markets: financial conditions, risk indices, asset prices, private liquidity, and international capital flows all respond very significantly. Moreover, while tighter US monetary policy leads to a contraction of capital flows both in and out of the US, pointing to a general weakening of global financial activity, EMEs also suffer additional capital flights that contribute to increase their vulnerability. Conversely, global financial variables do not appear to be the primary transmission channel when one focuses instead on Chinese monetary policy shocks. In this case, it is the contraction of domestic demand and prices that drags down global activity. Commodity prices contract with some delay, but very significantly. Global asset prices are essentially insensitive for several months, after which they contract presumably as a result of the fall in commodity prices, and in global growth. Similarly, financial conditions significantly tighten for major commodity exporters, while they are largely unaffected at the global level. Commodity producers also experience capital flights and disinvestment. Global trade, and global growth as a consequence, contract. Through global value chains, these repercussions ripple all the way into Europe: German output, imports and exports all suffer severe contractions.

We summarize fluctuations in global asset prices and capital flows through global factors. For asset prices, we extend the global factor of Miranda-Agrippino and Rey (2015) along two dimensions: time, with estimates now covering all the months between 1980:01-2019:04, and cross-section, by performing the extraction on a larger and richer set of price series that is updated to reflect compositional changes in global markets, particularly through the inclusion of Chinese stocks. We then conduct a thorough factor analysis of global capital flows. Here too we find evidence of a dominant common global component that, very interestingly, but perhaps not surprisingly, strongly correlates with the global factor in asset prices, providing further additional evidence of the potency of the GFC.