

economies, and holds throughout the sample period. Schularick and Taylor (2012) similarly highlight the role of leverage in financial vulnerability, especially that associated with the banking sector. Our framework addresses the theoretical mechanism behind the link between currency appreciation and the build-up of leverage and is in contrast to conventional macro models of exchange rates where the focus is on the current account.<sup>2</sup>

Another related feature of our model that sets it apart from conventional macro models of exchange rates is that it addresses directly the monetary policy spillovers, especially the impact of lower US dollar borrowing rates on global financial conditions. By addressing the link between funding costs and bank leverage, we can fill in some of the theoretical boxes associated empirical studies of monetary policy spillovers. Eichenbaum and Evans (1995) found that a loosening of US monetary policy led to a subsequent depreciation of the US dollar. Bruno and Shin (2013) and Rey (2013) update the evidence and find that banking sector capital flows are closely associated with US monetary policy. Our model provides a possible mechanism to explain the link.

More broadly, our model is well suited in addressing the capacity of the global banking system to bear and distribute the fundamental credit risk. Since risk must be borne somewhere in the system - either directly by lenders to ultimate borrowers, or indirectly by lenders to banks - the aggregate credit risk has to be absorbed by the global banking system as a whole. Our model shows how the risk absorption role of the global banking system imposes a joint restriction on the leverage of the regional and global banks taken together.

The logic of the argument also implies that the growth of the global banking system is constrained only by the contemporaneous fundamental risks. Thus, when fundamental risks decline - say, due to an expected depreciation of the US dollar - the banking system expands to use up any slack in the system. Borio and Disyatat (2011) and Borio (2014) have coined the term “excess elasticity” to denote the expansion of the financial system in the face of subdued fundamental risks.

The second contribution of our paper is empirical. We investigate how closely the

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<sup>2</sup>On the other hand, our model focuses just on the banking sector and hence is a partial equilibrium in nature. General equilibrium models will enable researchers to integrate macro effects and financial channels in exchange rate determination. Gabaix and Maggiori (2013) is a promising recent example.