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Foreign Reserve Management and U.S. Money Market Liquidity: A Cost of Exorbitant Privilege

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During periods of market stress, foreign use of the dollar as a reserve currency can lead to illiquidity in U.S. money markets.

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We show theoretically and empirically that the dollar's status as the global reserve currency can lead to economically significant changes in U.S. money market liquidity. We develop a model in which U.S. money market spreads respond to foreign central banks' exchange-rate management decisions. Foreign central banks remove liquidity from U.S. money markets and cause spreads to widen by selling Treasuries to supply liquidity to their financial systems. Our analysis focuses on the major oil exporting countries with fixed exchange rates because their foreign-exchange market interventions are straightforward to characterize. Our regression analysis shows that shifts in the central banks' demand for dollar liquidity related to oil price volatility are associated with significantly higher overnight spreads in domestic money markets. A one-standard deviation increase in the demand for dollar liquidity by a central bank in an oil-exporting country leads, on average, to three billion dollars of Treasury sales and a two to six basis point increase in U.S. money market spreads. At the same time, deposits held with the Federal Reserve increase in response to this higher oil-price volatility, which is consistent with the model's predictions. This evidence indicates that the widespread use of the U.S. dollar as a reserve currency acts as a channel that can propagate funding shocks from the rest of the world to the United States.

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