

Box 6

Investment funds and the transmission of the global financial cycle to the euro area

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As the role of investment funds in financing the global economy has grown, so has their role in cross-border capital flows and the global financial cycle. Movements of asset prices have become more synchronised across countries since the early 1990s, indicating that a global financial cycle has emerged. US monetary policy is often considered as one of the main drivers of this cycle.³⁶ Up to the mid-2000s, banks' cross-border flows played a key role in the global synchronisation of financial conditions. Since then, portfolio flows of investment funds actively searching for yield in financial markets worldwide have increased.³⁷

Funds adjust their global asset allocation as investors respond to return differentials and fund performance or as they change their risk-taking. For example, after a loosening in monetary conditions in one region, global investors tend to reallocate away from assets there towards other regions where assets have a higher expected return. This might also imply that investment funds rebalance their portfolios towards riskier market segments. In addition, monetary conditions can affect fund returns through changes in valuations and thus influence cross-border investment fund flows, since there is evidence of a positive relationship between fund flows and past returns.³⁸

This box investigates the role of international investment funds in the transmission of global financial conditions to the euro area. The analysis is based on a structural Bayesian vector autoregression (BVAR) model and uses unexpected changes in US monetary policy, obtained from a standard Cholesky shock identification scheme, as an illustrative example of a shock to global financial conditions. The one-year US Treasury rate is used to measure the monetary policy stance,

³⁶ For an overview of the literature on the global financial cycle, see, among others, Shin, H. S., "The second phase of global liquidity and its impact on emerging economies", remarks at the 2013 Federal Reserve Bank of San Francisco Asia Economic Policy Conference, November 2013; Miranda-Agrippino, S. and Rey, H., "US monetary policy and the global financial cycle", NBER Working Paper No 21722, National Bureau of Economic Research, November 2015; and Bruno, V. and Shin, H. S., "Capital flows and the risk-taking channel of monetary policy", *Journal of Monetary Economics*, Vol. 71, 2015, pp. 119-132.

³⁷ See, for example, *Global Financial Stability Report*, IMF, October 2019.

³⁸ See, for example, *Financial Stability Review*, ECB, November 2017, Box 6, pp. 104-107; and Goldstein, I., Jiang, H. and Ng, D., "Investor flows and fragility in corporate bond funds", *Journal of Financial Economics*, Vol. 126(3), 2017, pp. 592-613.

as it can better capture variations in US monetary policy than changes in the federal funds rate because of the effective lower bound.

The baseline specification of the model considers five macro-financial variables. These include: flows from investment funds domiciled outside the euro area towards different segments of euro area bond markets, debt issuance by euro area non-financial corporations, the VIX volatility index as a measure of global risk aversion, the US dollar/euro exchange rate, and the one-year US Treasury rate. This model is augmented with further variables, including the euro area monetary policy stance, interest rate differentials between the United States and the euro area, and indices for bond and equity markets. The analysis is based on monthly data from April 2007 until March 2019, capturing the growing importance of investment funds and market-based finance over this period.

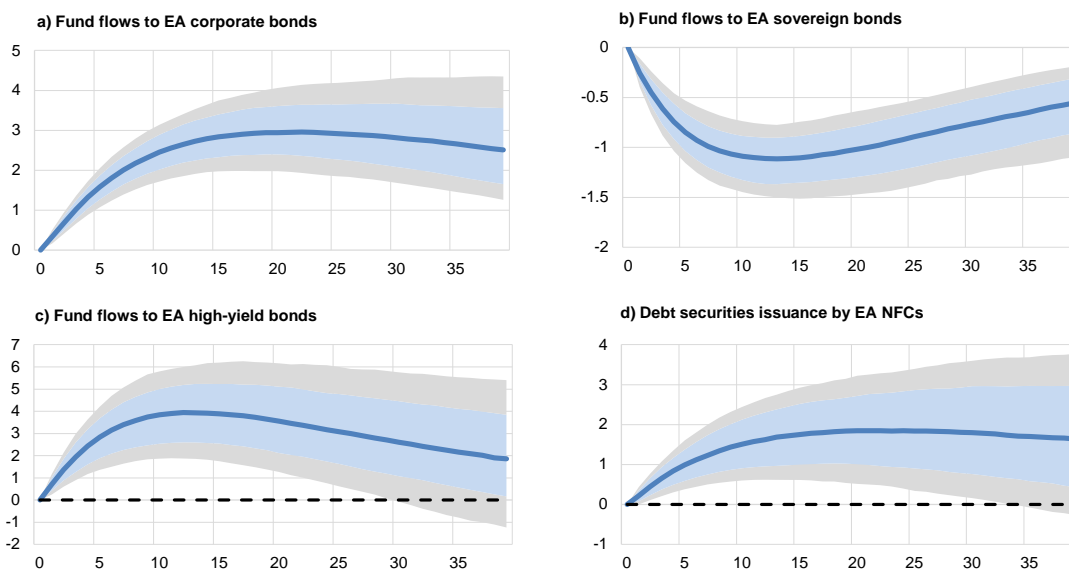
The results provide evidence of global spillovers to euro area financial conditions via the investment fund sector. After an easing of global financial conditions, investment funds tend to increase their purchases of euro area bonds. These portfolio inflows are particularly strong in riskier market segments, such as corporate and high-yield bonds, while funds investing in safer sovereign bonds experience outflows (see **Chart A**, panels a-c). For example, 12 months after the shock, foreign investment fund flows to euro area high-yield bonds are estimated to increase by 3.9%. At the same time, issuance of debt securities by euro area non-financial corporations is estimated to increase by 1.6% in the 12 months after the shock (see **Chart A**, panel d). This may suggest that euro area financing conditions improve after an easing in global financial conditions, proxied by US monetary policy developments.

Chart A

Investment fund flows to the euro area and securities issuance increase after a global financial easing

Impulse responses to a 1% loosening shock in US monetary policy

(x-axis: months after the initial interest rate reduction; y-axis: percentage change)



Sources: ECB staff estimates based on data from the ECB and EPFR Global.

Notes: Impulse responses to an accommodative US monetary policy shock inducing a transitory 1% reduction of the one-year US Treasury rate derived from a structural BVAR model with recursive identification. The charts show median responses of the posterior distribution (blue lines) with 70% (blue-shaded areas) and 90% (grey-shaded areas) credibility intervals. The model includes the following variables: debt securities issuance by euro area non-financial corporations (NFCs); measures of flows from investment funds domiciled outside the euro area towards corporate/sovereign/high-yield bonds in the euro area; the one-year US Treasury rate (serving as a monetary policy indicator); the VIX volatility index; and the US dollar/euro exchange rate. For the shock identification, the variables are ordered in the same way, reflecting the assumption that quantities move faster than prices. All results are robust to alternative orderings and monetary policy measures including the shadow federal funds rate (see Wu, J. C. and Xia, F. D., "Measuring the macroeconomic impact of monetary policy at the zero lower bound", *Journal of Money, Credit and Banking*, Vol. 48(2-3), 2016, pp. 253-291).

These results continue to hold when the model controls for other variables. These include monetary policy in the euro area, as well as short and long-term interest rate differentials between the United States and the euro area. Further analysis shows that bond and equity indices rise in both regions after the US monetary policy shock. Also, euro area equity markets experience inflows from non-domestic investment funds and there is increased equity issuance in the euro area.³⁹

Such spillovers of global financial conditions could affect risks to euro area financial stability.

The analysis has shown that a loosening of global financial conditions can lead to inflows to riskier segments of euro area bond markets and increased debt issuance by euro area non-financial corporations. This could raise financial stability concerns if it leads to excessive risk-taking by investment funds or too much borrowing by relatively risky non-financial corporates in the euro area.

³⁹ The analysis does not study substitution effects of NFC debt financing between debt securities and bank loans. It also does not assess the total impact on NFC external financing.