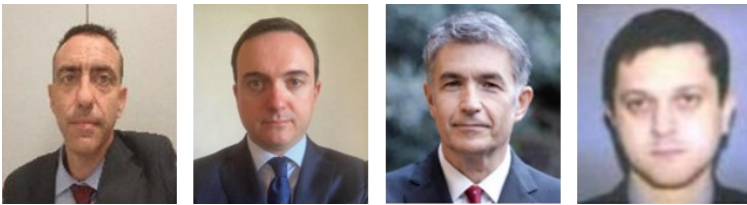


Do stablecoins alter the monetary policy transmission mechanism?*



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Keywords: digital currency, CBDC, monetary policy, international finance

JEL codes: E51, E52, F30

The so-called “stablecoins” are a specific category of crypto-assets that aim to maintain a stable value relative to a pool of assets denominated in official currencies. A wide adoption of global stablecoins (GSCs) as means of payment, while potentially driving further innovation in payments, may also induce currency substitution and alter the transmission of monetary policy. This column assesses the impact of a large use of GSCs on monetary policy effectiveness. When GSCs are widely adopted, the transmission of a monetary policy shock may be affected, depending on the adjustment of GSC supply.

*Authors' note: The opinions expressed in this column are our own and not necessarily those of Banca d'Italia or the Eurosystem. We would like to thank Michele Caivano, Paolo Del Giovane, and Massimo Sbracia their helpful comments.

The so-called “stablecoins” are a specific category of crypto-assets that aim to maintain a stable value relative to a specified asset or pool of assets denominated in either a single official currency, or a “basket” of currencies.¹ Currently, stablecoins are primarily used to facilitate trading, lending, or borrowing of other crypto-assets on or through crypto-asset trading platforms. They are not yet commonly employed as a means of payment. Uses for payment purposes are limited to specific types of domestic and international payments. At the moment, high transaction fees and price volatility act as an impediment to their use as a widespread form of payment.²

This situation may change if transaction fees were to fall. As suggested by Brunnermeier and Landau (2022), in a digital world, currency competition may develop inside and across borders. A widely adopted stablecoin with potential reach across multiple jurisdictions (so-called “global stablecoins” or GSCs) could become an important means of payment in and across many jurisdictions: it could further drive innovation in payments and satisfy the need for more efficient and cheaper cross-border payments and remittances, compared to other existing means of payment. However, GSCs adoption entails policy challenges. In particular, it could raise pressures for currency substitution, limiting the component of domestic liquidity directly influenced by the local authorities and, hence, reduce the latter’s ability to conduct monetary policy. As argued by Jamet et al. (2022), a world that sees a diminished role of central bank money and a stronger one for stablecoins and crypto-assets, with risks for monetary sovereignty, cannot be excluded. Also for this reason, monetary authorities in several countries are exploring the issuance of a central bank digital currency (CBDC), that is, public money for digital payments. At the same time, they are closely examining the supervision and oversight implications of GSCs ecosystems given their potential impact on payment systems and financial and monetary stability.³

In a recent paper (Cova et al. 2022), we assess the impact of a large use of GSCs on monetary policy effectiveness in two hypothetical countries (which we label Home and Foreign).

We simulate a two-country New Keynesian model in which we expand the means of payment beyond traditional cash. In particular, we allow households in both countries to use a GSC issued by a profit-maximizing private fund owned by households in one of the countries (Foreign).

Furthermore, we allow households in the other country (Home) to use also a CBDC, unconstrained and unremunerated. These assets are imperfect substitutes for the liquidity services provided. The GSC is a claim on the private fund and is fully backed by Foreign cash and by Foreign and Home riskless short-term sovereign bonds. Thus, the value of the GSC is linked to the prices of the assets chosen by the Fund to back it.

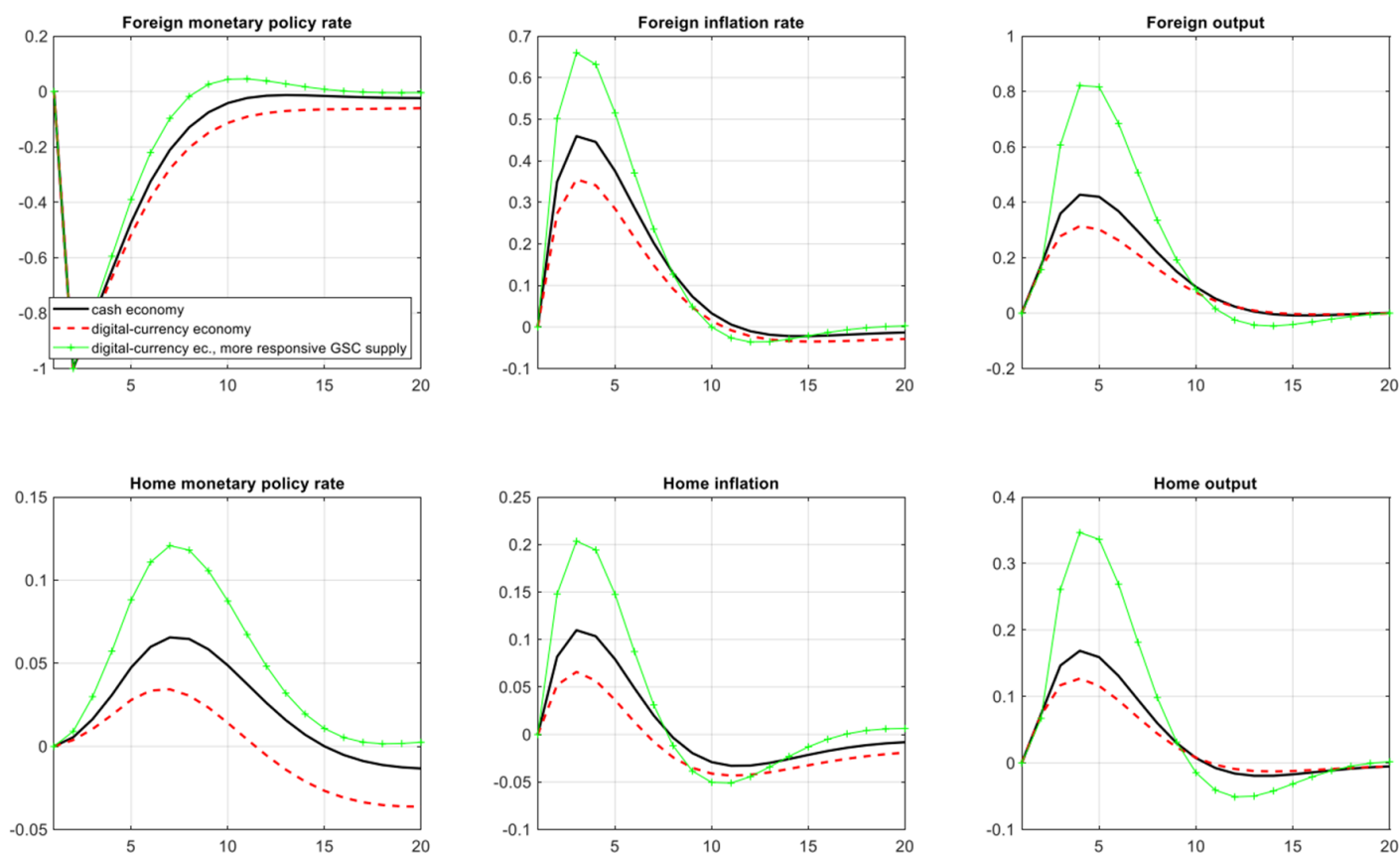
As shown in the Figure, in a situation where the GSC is widely used, the macroeconomic effects of a standard monetary policy shock (e.g. an unexpected reduction in the monetary policy rate) can be smaller or larger than in a (benchmark) cash economy, depending on how the GSC supply, set to maximize the issuer’s profits, responds to the shock. The less responsive the GSC supply, the more limited the change in overall liquidity following the shock and the associated macroeconomic effects.

¹ According to the Financial Stability Board (2020, page 9) the term “stablecoin” does not denote a distinct legal or regulatory classification and the use of this term is not intended to affirm or imply that its value is necessarily stable. Rather, the term is used because it is commonly employed by market participants and authorities.

² See Financial Stability Board (2022).

³ Financial Stability Board (2022) points out (page 15) that “International work on standards and recommendations for regulatory frameworks for stablecoins is ongoing. The FSB published in 2020 a report that set out high level recommendations for the regulation of global stablecoins, which includes an effective risk management framework for reserve management. The Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (CPMI-IOSCO) are coordinating with the FSB to determine regulatory approaches for GSCs, including those intended for use in mainstream payments.”

Negative monetary policy shock and global stablecoin (GSC) supply responsiveness
 (quarters on the horizontal axis; on the vertical axis: monetary policy rate and inflation rate in annualized percentage-point deviations from the baseline, output in percent deviations)



In the case of a monetary policy shock in the country where the Fund issuing the GSC resides the benchmark transmission of monetary policy can be restored if we impose the GSC to be fully backed only by cash. Under this assumption, the supply of GSC adjusts one-for-one to changes in the money supply, and the standard transmission mechanism of monetary policy applies. Tight regulation on the type of assets backing the GSC can therefore preserve the standard monetary policy transmission mechanism.

In the case of a monetary policy shock in the other country, if households make a large use of GSC, monetary policy will be less effective as the supply of GSC (which is issued abroad and backed mainly by Foreign assets) will adjust less than one-for-one to that of cash. In this context, if the CBDC can easily substitute for the other means of payment, the central bank can substantially restore the standard monetary policy transmission by changing the supply of CBDC and, thus, the overall liquidity available to domestic residents.⁴

⁴ The degree of substitutability is, in our model, a parameter exogenously set. In general, substitutability among different means of payment depends on many intertwined factors, like design and diffusion. For example, one can think that in an already “dollarized” economy it can be more difficult to substitute domestic CBDC for a GSC fully backed by “dollars”.

Tight regulation and the introduction of a CBDC can therefore contribute to a great deal to restoring the monetary policy transmission mechanism, even if GSCs were extensively used. In our analysis, we focus on the case of a GSC issued in one country (Foreign) and the CBDC in the other (Home) to investigate the spillover effects between the two economies. Of course the results would be specular if the GSC is issued in the Home country and backed by domestic rather than foreign cash. Moreover, we have deliberately neglected some important issues associated with the diffusion of digital currencies. In particular, we do not consider the impact of these innovations on the banking sector and, more generally, on financial intermediation;⁵ this sector could play a significant role in, and could be largely affected by, the issuance of both GSC and CBDC. Finally, international spillovers could arise from the cross-border use of CBDCs, which we have also ruled out by assumption.⁶ Both issues call for additional investigation and cooperation at international level. ■

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⁵ See Jamet et al. (2022).

⁶ See Ferrari et al. (2021).

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