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Dollarization and financial integration ☆

Cristina Arellano [a,b,c], Jonathan Heathcote [a,d,*]

[a] *Research Department, Federal Reserve Bank of Minneapolis, 90 Hennepin Avenue, Minneapolis, MN 55480-0291, United States*
[b] *University of Minnesota, United States*
[c] *NBER, United States*
[d] *CEPR, London, United Kingdom*

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Abstract

How does a country's exchange rate regime impact its ability to borrow from abroad? We build a small open economy model in which the government responds to shocks by adjusting monetary policy and foreign borrowing. Sovereign borrowing is subject to endogenous limits, which ensure repayment when the default punishment corresponds to financial autarky. Dollarizing implies renouncing monetary policy, but can make access to international debt markets more valuable, thereby loosening borrowing constraints. This mechanism linking dollarization to financial integration is consistent with observed declines in spreads on foreign-currency debt in countries adopting the dollar or the euro.

JEL classification: E4; F3

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1. Introduction

Dollarizing means abandoning domestic monetary policy as an instrument for responding to aggregate shocks. At the same time, proponents of dollarization view improvements in a coun-

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* Corresponding author at: Research Department, Federal Reserve Bank of Minneapolis, 90 Hennepin Avenue, Minneapolis, MN 55480-0291, United States. Fax: +1 612 204 5515.
E-mail address: heathcote@minneapolisfed.org (J. Heathcote).

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try's credit worthiness as one of the main benefits from adopting a foreign currency (see, for example, [13] and [30]). Motivated by these two observations, we develop a theory that connects dollarization to credibility in international debt markets.[1]

In our model, the extent of sovereign international borrowing is endogenously constrained, because default can only be punished by future exclusion from debt markets. A government that dollarizes relinquishes control over monetary policy, but also faces a different calculus when deciding whether or not to repay debts, precisely because monetary easing is no longer a potential substitute for increased borrowing. If dollarization strengthens repayment incentives, and thus a sovereign's credibility in financial markets, more borrowing can be supported in equilibrium. We highlight the trade-off that arises in the decision to dollarize between the loss of seigniorage as a flexible domestic policy instrument on the one hand, and the potential gain from increased international financial integration on the other.

Retaining the ability to print one's own currency gives governments a flexible way to raise revenue. Emerging markets economies are typically subject to big shocks, and large fractions of government revenue are linked to volatile commodity prices. Moreover, increasing traditional tax rates is difficult, and does not guarantee additional revenue when evasion is widespread and the informal sector is large. In this context, seigniorage is a valuable fiscal instrument, since extra money can rapidly be printed as required. Click [19] documents that seigniorage accounted for a large share of government spending in many Latin American countries in the 1970s and 1980s, and countries with more volatile spending relied more heavily on seigniorage as a fiscal instrument.[2] Calvo and Guidotti [14] find that inflation taxes tend to be much more volatile than regular taxes in practice. They rationalize this finding by developing a model in which it is optimal to let changes in the inflation tax do all the work in adjusting to unanticipated fluctuations in spending.[3]

At the same time, emerging markets economies issue debt on international markets to smooth fluctuations and to ease temporary liquidity problems. In our model, dollarization may strengthen fragile sovereign debt markets. The logic is that because dollarizing rules out the use of monetary policy to respond to shocks, it may increase the value to the sovereign of repaying debts and maintaining access to the debt instrument. Suppose the environment is such that a floating government optimally loosens (tightens) monetary policy and debt policy in tandem, by simultaneously raising (lowering) inflation and increasing (reducing) borrowing. Then a dollarized government will want to borrow even more in periods when policy is optimally expansionary to substitute for the fact that it cannot loosen monetary policy. Because borrowing is adjusted more aggressively, debt is a more valuable instrument, and thus dollarization reduces default incentives and loosens borrowing limits. On the other hand, if the environment is such that a floating government optimally repays borrowing in periods when it is loosening monetary policy, then a dollarized government will have less use for debt, indicating tighter borrowing limits. Thus, the relationship between the exchange rate regime and borrowing conditions will depend on the

[1] In discussing papers in a conference volume on the topic of dollarization, Sargent [34] writes: "*In their papers and verbal discussions, proponents of dollarization often appealed to commitment and information problems that somehow render dollarization more credible and more likely to produce good outcomes. Those proponents presented no models of how dollarization was connected with credibility. We need some models.*"

[2] Canzoneri and Rogers [15] explore the importance of seigniorage in the European Union. They find that the optimal inflation rate is country-specific and depends on the efficiency of the domestic tax collection system.

[3] In fact, high volatility of inflation relative to other taxes is a common feature of optimal policy in macro models (see [16]).