# Dollarization and the International Bank Lending Channel: Evidence from Latin America

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## Abstract

This paper examines the transmission of U.S. monetary policy shocks to bank lending in 12 Latin American countries between 2000 and 2020. Using data from 118 banks, we find evidence of an international bank lending channel, even in countries with low direct exposure to U.S. banks. Crucially, the strength and direction of this transmission depend on the degree of financial dollarization. While U.S. tightening is, on average, associated with rising credit, in more dollarized economies it leads to slower loan growth. These findings underscore the vulnerability of dollarized banking systems and point to the need for strengthened local macroprudential and supervisory frameworks.

**Keywords:** International bank lending channel; Financial dollarization; U.S. monetary policy shocks.

**JEL Codes:** E5, E52, E59, G21.

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# Content

## Introduction

While the domestic bank lending channel is well studied, its international dimension—how monetary policy is transmitted across borders via banks—has received less attention. Recent research has begun to explore how U.S. monetary policy, particularly through globally active banks, affects credit abroad. Lee et al. (2022) shows that large U.S. banks transmit monetary shocks through their international operations. Albrizio et al. (2020) find that U.S. monetary tightening reduces cross-border lending, while Denderski and Paczos (2021) show that in countries with strong foreign bank presence, domestic banks adjust lending after U.S. shocks, unlike foreign-owned banks.

This literature emphasizes the role of global banks in driving capital flows to lower-income countries. However, most evidence focuses on economies with a significant presence of U.S. banks. Less is known about how U.S. monetary shocks affect countries with minimal direct exposure—such as many small, open, and financially vulnerable Latin American economies. Recent work, including Nadal de Simone (2024) and Cao et al. (2023), shows that U.S. policy influences output and long-term interest rates in these countries.

Giraldo et al. (2025) study five Latin American countries with limited international bank penetration and find an international lending channel: local banks adjust credit in response to U.S. monetary shocks, depending on their balance sheets. This suggests that even without direct U.S. bank links, domestic lending reacts to external shocks.

We extend this analysis using quarterly data from 118 banks across 12 Latin American countries from 2000 to 2020. All countries exhibit some level of financial dollarization, though the degree varies. This variation allows us to address two questions: (1) Does an international lending channel operate in dollarized Latin American economies? (2) How does the degree of dollarization affect the strength of this channel? To our knowledge, this is the first study to examine how financial dollarization shapes the transmission of U.S. monetary shocks to bank lending in a broad set of emerging markets.

Our analysis includes bank-specific factors—such as liquidity, size, and capital adequacy—and external variables. We find that loan growth reverts to the mean, reflecting typical credit cycles. More liquid banks lend less, likely due to caution under uncertainty, particularly in dollarized systems with exchange rate and funding risks. Unlike earlier studies, we find no strong effect of size or solvency, consistent with recent research on Latin America.

Most importantly, the effect of U.S. monetary shocks depends on financial dollarization. On average, tighter U.S. policy is associated with higher loan growth, likely reflecting improved global conditions. But in highly

dollarized countries, U.S. rate hikes slow credit growth. This suggests that dollarization increases banks' sensitivity to external shocks by raising funding costs and creating currency mismatches. These effects are strongest where domestic policy responses are limited. The results highlight the asymmetric impact of global monetary conditions and the importance of reducing dollar dependence to strengthen financial resilience.

## Data and Methodology

We use an unbalanced quarterly panel of 118 banks from 12 Latin American countries with at least partial financial dollarization between 2000 and 2020. Table 1 presents descriptive statistics for financial dollarization by country. Deposit dollarization, measured as the share of deposits denominated in foreign currency, varies widely across countries. For instance, Uruguay exhibits the highest average deposit dollarization, with values close to 89%, indicating a strongly dollarized banking system. On the other side of the spectrum, Trinidad & Tobago shows minimal dollarization at about 4.5%. This pronounced variation in dollarization across the sample offers a rich setting to investigate its role in shaping banks' lending responses to external shocks.

Table 1. Descriptive Statistics by Country 2000-2020

| Dollarization | Mean | Standard Deviation | Minimum | Maximum |
|---|---|---|---|---|
| Argentina | 16.6% | 13.1% | 0.9% | 70.0% |
| Bolivia | 17.3% | 4.4% | 12.0% | 45.7% |
| Chile | 13.6% | 2.0% | 8.0% | 17.1% |
| Costa Rica | 43.3% | 4.0% | 39.1% | 55.1% |
| Dominican Rep. | 36.7% | 1.5% | 32.7% | 41.1% |
| Guatemala | 26.9% | 1.1% | 25.0% | 29.3% |
| Honduras | 28.4% | 0.0% | 28.4% | 28.4% |
| Jamaica | 40.1% | 2.8% | 29.5% | 48.5% |
| Paraguay | 42.9% | 3.0% | 35.8% | 47.8% |
| Peru | 50.9% | 9.7% | 37.3% | 74.4% |
| Trinidad & T | 4.6% | 1.2% | 3.3% | 8.0% |
| Uruguay | 89.5% | 1.5% | 87.0% | 92.0% |

**Note:** The table shows the summary statistics for our main variables, dollarization level in Latin America on a country basis.

We use the U.S. monetary policy shock variable developed by Bu et al. (2021), which identifies exogenous shocks spanning both conventional and unconventional policy regimes while minimizing the influence of central bank communications. This approach allows a cleaner identification of U.S. monetary policy's external effects on Latin American banks lending. This variable is available through the end of the fourth quarter of 2020.

Our core empirical specification is given by the equation:

$$LoanGrowth_{i,c,t} = \beta_0 + \beta_1 LoanGrowth_{i,c,t-1} + \Gamma X_{i,c,t} + \alpha_1 BRWShock_t + \alpha_2 BRWShock_t \times Dollarization_{c,t} + \varepsilon_{i,c,t} \quad (1)$$

where $LoanGrowth_{i,c,t}$ denotes the annual growth rate of gross loans for bank $i$ of country $c$ at time $t$. The vector $X_{i,c,t}$ includes bank-specific characteristics such as solvency, liquidity, and size. $BRWShock_t$ represents the U.S. monetary policy shock at time $t$, $Dollarization_{c,t}$ stands for the degree of deposits dollarization of country $c$ at time $t$, and $\varepsilon_{it}$ captures the bank-specific error term. Our focus is placed on $\alpha_1$ and $\alpha_2$, the parameter associated with the U.S. monetary policy shock and the parameter corresponding to the interaction of the monetary policy shock with the degree of financial dollarization.

In an alternative specification, we also incorporate the degree of financial dollarization at the country level as an additional regressor. Given the persistence typically observed in bank lending, we employ the Arellano–Bover/Blundell–Bond system GMM estimator, which is well-suited for dynamic panel data with many cross-sectional units and relatively short time series. By including lagged dependent variables, the model accounts for unobserved factors that vary slowly over time, reducing omitted variable bias and improving identification.

To ensure the reliability of our inference, we apply robust standard errors using the Huber–White sandwich estimator. This approach mitigates the influence of outliers and corrects for heteroscedasticity, thus enhancing the precision and credibility of our coefficient estimates.

## Results

Table 2 reports results from the dynamic panel estimation using system GMM, with annual bank loan growth as the dependent variable. The coefficient on the lagged dependent variable is negative and statistically significant, indicating that loan growth displays a degree of mean reversion. This result suggests that, after a period of rapid credit expansion or contraction, banks tend to adjust lending toward more typical levels. This

behavior is consistent with the cyclical nature of bank lending, where credit growth tends to moderate over time due to internal balance sheet constraints, changes in borrower demand, or regulatory oversight.

Table 2. Empirical Results. Dependent Variable is Bank Gross Loan Growth Rate

| Predictors | (1) | (2) |
|---|---|---|
| Lagged LoanGrowth | -0.088** | -0.090** |
| | (0.040) | (0.042) |
| BRWShock | 0.269** | 0.246** |
| | (0.106) | (0.101) |
| BRWShock X Dolarization | -0.744*** | -0.665** |
| | (0.285) | (0.271) |
| Solvency | 0.053 | 0.078 |
| | (0.088) | (0.115) |
| Liquidity | -0.010*** | -0.009*** |
| | (0.003) | (0.003) |
| Size | 0.011 | 0.015 |
| | (0.016) | (0.016) |
| Dollarization | | 0.198** |
| | | (0.085) |
| Wald test | 16.52 | 18.89 |
| P-value WT | 0.011 | 0.008 |
| Observations | 4,238 | 4,238 |

**Note:** Standard errors in parentheses. *** indicates p-value is less than 0.01; ** indicates p-value is greater than 0.01 but less than 0.05; * indicates p-value is greater than 0.05 but less than 0.1

The liquidity ratio has a negative and statistically significant effect, implying that banks holding a higher share of liquid assets tend to extend less credit. Banks in more uncertain or volatile environments maintain high liquidity buffers at the expense of lending.

Neither bank size nor solvency show statistically significant effects on loan growth. This contrasts with several studies in the bank lending channel literature that emphasize the importance of bank solvency and

size in the transmission of monetary policy shocks (e.g., Kishan and Opiela, 2000; Kishan and Opiela, 2012; Gambacorta and Shin, 2018). However, the findings are consistent with more recent research focusing on the traditional (Gomez-Gonzalez et al., 2021) and international (Giraldo et al., 2025) bank lending channels in the Latin American context.

The most relevant results concern the effects of U.S. monetary policy and its interaction with financial dollarization. The estimated coefficient on U.S. monetary policy shocks is positive and statistically significant. On average, periods of tighter U.S. monetary policy are associated with higher loan growth among banks in Latin America. While at first this may appear counterintuitive, it reflects the broader global context in which U.S. rate increases occur. In many cases, rising U.S. rates coincide with global or regional economic improvements, which can support credit expansion in emerging markets. Stronger external demand, higher commodity prices, or greater investor confidence may all contribute to more favorable domestic credit conditions, even in the face of modest increases in global borrowing costs.

However, this average effect masks important differences across countries. The interaction between U.S. monetary policy shocks and the degree of deposit dollarization is negative and statistically significant, indicating that the impact of U.S. interest rate changes depends critically on how exposed a country's banking system is to foreign currency liabilities. In countries with low levels of dollarization, U.S. monetary tightening may not significantly affect credit markets and can even coincide with rising loan growth. In contrast, in more dollarized systems, increases in U.S. interest rates lead to a slowdown in credit expansion.

This result is consistent with the idea that financial dollarization increases the vulnerability of banking systems to external shocks. When banks rely on U.S. dollar funding—either through local dollar deposits or external borrowing—an increase in U.S. rates raises their funding costs (Temesvary et al., 2018). If banks lend in local currency but borrow in dollars, a tightening of U.S. monetary policy can also generate balance sheet mismatches, especially if accompanied by exchange rate depreciation. This makes banks more cautious in extending new credit. The risks are particularly acute in countries with limited ability to absorb shocks through monetary policy or foreign exchange intervention, where dollarization constrains the central bank’s room for maneuver.

The findings therefore point to an important asymmetry in how global financial conditions are transmitted to domestic credit markets. While U.S. monetary policy may have expansionary or neutral effects in some contexts, it can have contractionary effects in countries with higher levels of financial dollarization. This asymmetry is not only of academic interest, as we document by the first time the existence of an international credit channel conditional on the level of dollarization of the banking system; but also raises practical concerns for policymakers in countries where the financial system remains heavily dollarized. In such settings, U.S. policy

changes can tighten domestic financial conditions, even in the absence of domestic macroeconomic imbalances. Strengthening local currency funding markets, enhancing foreign exchange risk management, and reinforcing macroprudential frameworks are potential policy responses to mitigate these risks.

## Conclusions

This paper provides evidence of an international bank lending channel through which U.S. monetary policy shocks influence domestic credit dynamics in Latin American countries. Using panel data from 118 banks across 12 countries between 2000 and 2020, we show that the transmission of U.S. monetary policy to bank lending is significantly conditioned by the degree of financial dollarization. While, on average, tighter U.S. monetary policy is associated with higher loan growth—likely reflecting improved external conditions that often accompany such tightening—this effect reverses in more dollarized economies, where rising U.S. rates lead to a contraction in bank credit. This asymmetry underscores the financial vulnerabilities introduced by dollarization, as banks with a larger share of foreign currency liabilities face higher funding costs and balance sheet mismatches in response to external shocks. These findings highlight the need for policy strategies aimed at reducing reliance on foreign currency deposits, strengthening local currency funding markets, and enhancing macroprudential frameworks to improve the resilience of banking systems in the face of global financial tightening.

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