

Interest Rates and Subnational Finance: How China's Local Governments Manage Interest Rate Risk

Yatong Duan

Abstract:

This paper analyzes how interest rates affect China's local governments through their on-budget local government bonds (LGBs) and off-budget Local Government Financing Vehicles (LGFVs), and evaluates the main tools used to manage interest-rate risk. Using a policy-anchored case study drawing on fiscal documents, central-bank communications, and market research from 2021–2025, I trace four channels: refinancing costs, debt-service burdens, project valuation, and market access via spreads. I then assess the effectiveness of debt-refinancing programs and related governance frameworks. I find that the 2024–2025 environment of stable policy rates alongside targeted refinancing reduced average new-issue LGB coupons versus 2023, easing near-term cash-flow pressure. However, benefits are uneven: Iaker LGFVs continue to face rollover constraints and limited access to derivative hedges, leaving residual vulnerabilities. The paper highlights implications for fiscal sustainability and outlines directions for microdata-based evaluation of risk transfers between budgets and LGFVs.

Keywords: Local Government Bonds; Local Government Financing Vehicles; Interest Rate Risk; Refinancing; Risk Management

1. Introduction

China's leadership has repeatedly underscored that "high-quality development is the first and foremost task in building a modern socialist country in all respects," elevating the role of efficient factor allocation—including capital costs—as a national priority. Monetary authorities have pledged to "strengthen marketized interest rate formation and transmission

mechanisms," improving the policy-rate system and the role of benchmark loan rates (LPR) in allocating credit to the real economy. Within this macro framework, subnational public finance is foundational: local governments build and operate much of China's infrastructure, steward urbanization, and stabilize employment via investment. The scale is vast—outstanding local government debt officially exceeded RMB 40 trillion by end-2023, with additional "hid-

den” or quasi-fiscal debt at LGFVs that ratings agencies and international institutions estimate brings the broader stock to roughly half of GDP. Policy has evolved beyond stimulus toggles toward structural tools: the 14th Five-Year Plan calls for market-based rate transmission; fiscal authorities have rolled out special refinancing quotas and swaps that replace costlier, shorter-tenor obligations with longer, cheaper debt. These actions translate abstract rate policy into concrete budget relief and financial-stability gains. Seen through this lens, understanding how interest rates affect local governments is not a narrow technicality but a strategic task that links macro policy credibility with public-investment efficiency and regional coordination (Charbit, 2011). Hence, strengthening subnational interest-rate risk management is a key task for safeguarding high-quality development and the public balance sheet. Conceptually, I define our research subject as China’s local governments and their financing perimeter: (i) on-budget issuance of local government general and special bonds (LGBs) governed by the Ministry of Finance (MOF), and (ii) off-budget LGFVs—state-owned entities that finance public-purpose projects where budget channels are incomplete. Economically, this perimeter intermediates long-duration public investment and transforms short-medium-term funding conditions into multi-decade assets; interest rates therefore affect both annual debt-service capacity and project valuation. In practice, China has expanded market-based rate references since the 2019 LPR reform and grown the RMB interest-rate-derivatives market, enabling selective hedging via interest-rate swaps—albeit from a low base. These developments coexist with pragmatic fiscal measures such as special refinancing bonds and a late-2024 debt-swap program targeted at high-risk regions. International and domestic literature generally finds that credible rate transmission and prudent debt management support growth and crowd-in private activity (Shetta, & Kamaly, 2014), but micro evidence on how specific refinancing tools shift risk between budgets and LGFVs remains limited. This motivates our case-based analysis of 2023–2025 policy episodes and market data.

2. Literature Review and Research Gap

Empirical work on China’s monetary transmission shows that interest-rate instruments (policy repos, LPR) increasingly shape credit conditions (Kamber, 2018), with macro effects traceable in high-frequency data. Studies of subnational debt highlight that larger official LGB stocks coexist with sizable LGFV obligations (Qiu et al., 2023); credit-spread movements reflect varying implicit support and fiscal capacity. Positive assessments argue that debt stan-

dardization (LGBs) and loIr coupons can crowd-in private activity by reducing uncertainty (Friedman, 1978). However, gaps remain: I lack granular, micro-level evidence on how refinancing programs (e.g., special swaps) redistribute duration and interest-rate risk between budgets and LGFVs across provinces, and on the conditions under which derivatives deliver measurable savings in a still-developing RMB IRS market. Thus, evidence remains incomplete and non-consensual, motivating a structured case analysis of recent measures.

3. Materials and Methods

- (1) Design. I conduct a policy-anchored case study of China’s local governments (2023–2025), focusing on how interest-rate movements and instruments affect financing costs and risk.
- (2) Data sources. MOF budget reports and monthly LGB statistics; PBOC/LPR announcements; IMF Article IV reports; S&P/Fitch research on regional risk; market journalism (Reuters/FT) on rate expectations and swap-curve signals; and analytical notes from central banks/industry bodies (BIS, ISDA, ICMA, RBA). All sources are publicly available and dated within the study window or provide enduring institutional definitions.
- (3) Measures. I track (i) outstanding local debt stocks; (ii) average LGB coupon/yield snapshots; (iii) policy-rate (LPR) levels; (iv) qualitative indicators of LGFV market access/spreads; and (v) the scope of refinancing programs. Where precise microdata are unavailable, I triangulate multiple reputable sources and report ranges.
- (4) Analytical approach. Descriptive synthesis linked to four rate-transmission channels (refinancing, debt service, NPV of projects, market access). I interpret findings against IRRBB principles to frame risk-management practices.

4. Results

- (1) Rate levels have eased new-issue LGB costs, cushioning budgets
Ministry of Finance data show the average LGB coupon in Jan–Feb 2024 was 2.58%, about 54 bps loIr than the same period in 2023, with tenors of 10–30 years clustering around 2.59–2.73%. This improvement coincided with a loIr LPR environment (1-year LPR at 3.00%, 5-year at 3.50% in 2025), supporting cheaper term financing for infrastructure. Finding: Measured policy rates and benchmark transmission translated into loIr primary-market costs for standardized local debt, directly easing interest outlays for new issuance.

Table 1. Average LGB coupon rates, Jan–Feb 2024 (selected maturities)
(percent)

5y	7y	10y	20y	30y
2.48	2.58	2.59	2.65	2.73

Source: MOF Local Government Bond Market Report.

(2) Debt burden remains large, making refinancing terms pivotal

The 2024 MOF budget report lists official local government debt at RMB 40.7 trillion at end-2023, within statutory limits. External analyses estimate LGFV-related hidden debt lifts broader local obligations toward 50% of GDP by 2023/24. Finding: Even modest coupon differences compound over a large base; loIring issuance yields and terming-out liabilities materially affects cash-flow solvency and fiscal room.

(3) Policy tools shifted duration and reduced near-term rollover risk—unevenly

Authorities launched special refinancing bonds and a late-2024 debt-swap program (often reported around RMB 6–10 trillion in scope across measures) to replace costlier, shorter-tenor or off-budget obligations with cheaper, longer-dated paper. Ratings research in 2025 notes high-risk regions “edging toward resolution,” while Fitch warns that any LGFV default could trigger broader funding shocks if renegotiations stall. Finding: Targeted refinancing has stabilized many balance sheets by loIring average coupons and extending duration, but heterogeneity persists; laker regions and LGFVs still face elevated spreads and intermittent market access.

(4) Derivatives and market signals matter but remain ancillary in practice

RMB interest-rate swaps (IRS) offer a way to hedge fixed/floating mismatches and duration, with activity expanding via CIBM Direct and related access. Market signals—such as an inverted RMB swaps curve in early 2025—also shape issuance timing and hedging appetite. Still, reports point to limited depth and usage by public issuers relative to banks, keeping policy-led refinancing the dominant tool. Finding: Derivatives complement, but do not substitute for, balance-sheet and policy solutions; governance and market depth constrain widespread hedging by subnational entities.

5. Discussion

Our case evidence shows that interest rates affect local

governments through large and intuitive channels—refinancing costs, annual interest burdens, project valuation, and market access. In the 2024–2025 episode, loIr LGB coupons (relative to 2023) and proactive refinancing materially cushioned budgets, aligning with literature that links credible rate transmission and standardized debt to improved allocative efficiency and crowd-in effects. Yet the same literature—and our sources on LGFV spreads—remind us that heterogeneity in fiscal capacity and implicit support keeps risk uneven. Where refinancing is delayed or investor confidence falters, spreads widen and rollover stress re-emerges.

The novelty of this paper lies in integrating policy design (LPR transmission, debt swaps) with market microstructure (swaps curve signals, derivatives depth) to explain why China’s subnational interest-rate risk is managed primarily through balance-sheet engineering and regulatory programs, with derivatives as a secondary layer. Future research should compile province-issuer-level panels of coupons, maturities, swap usage, and fiscal metrics to estimate the causal savings from refinancing and to quantify any risk migration betlen budgets and LGFVs.

References

- Charbit, C. (2011). Governance of public policies in decentralised contexts: The multi-level approach.
- Shetta, S., & Kamaly, A. (2014). Does the budget deficit crowd-out private credit from the banking sector? The case of Egypt. *Topics in Middle Eastern and North African Economies*, 16.
- Kamber, G., & Mohanty, M. S. (2018). Do interest rates play a major role in monetary policy transmission in China?.
- Qiu, Z., Sun, X., Wu, L., Jia, D., & Wang, Z. (2023). The 2018 new asset management regulation and LGFV bonds in China. *Economic and Political Studies*, 11(4), 469–493.
- Friedman, B. M. (1978). Crowding out or crowding in? The economic consequences of financing government deficits (No. w0284). National Bureau of Economic Research.