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A case for AXI: Summary for bank executives

Until recently, banks routinely tied revolving credit facilities to credit-sensitive benchmarks such as the London Interbank Offered Rate (LIBOR). Because LIBOR was built on panel bank submissions rather than broad transaction data, it was manipulated by some contributors to influence rates and mask funding stress; the resulting loss of confidence led regulators to retire LIBOR in favor of transaction-based, IOSCO-aligned rates such as the Secured Overnight Financing Rate (SOFR).[1] However, SOFR does not reflect bank funding costs; in stress it may even decline as credit spreads widen. In this study, Viktor Tsyrennikov assesses the Across-the-Curve Credit Spread Index (AXI) – a transparent, transaction-based measure of wholesale bank funding costs and a complement to SOFR – summarizing its behavior, construction, and loan-pricing implications. AXI aggregates observable, unsecured funding transactions across short- and long-term maturities to produce a daily credit spread that is IOSCO-aligned and operationally compatible with SOFR-based infrastructure, allowing straightforward incorporation into existing SOFR systems while restoring credit sensitivity.

Referencing “SOFR+AXI” in loan contracts (instead of SOFR alone) adds a component that rises when bank funding spreads widen, aligning loan yields with marginal funding costs and protecting net interest margins in stress. Relative to SOFR-only pricing, which pushes lenders to raise fixed spreads or restrict credit, this structure better balances risk and pricing and reduces borrowers’ incentives to draw heavily on credit lines during stress.

The Financial Conditions Credit Spread Index (FXI) is a broader market companion to AXI and serves as its fallback. FXI co-moves closely with AXI in normal times; under stress, the correlation of daily changes is very high for economy-wide shocks (approximately 94% during early COVID-19) and remains strong in bank-specific stress (around 80% during the Silicon Valley Bank episode), indicating AXI’s bank-focused signal is nested within broader financial conditions when systemic risk rises.

Empirically, AXI is strongly correlated with standard credit-spread measures and market-stress indicators and is inversely related to financial-sector performance. “SOFR+AXI” exhibits correlations with core macroeconomic variables with the signs and magnitudes expected of a credit-sensitive rate. Over the period

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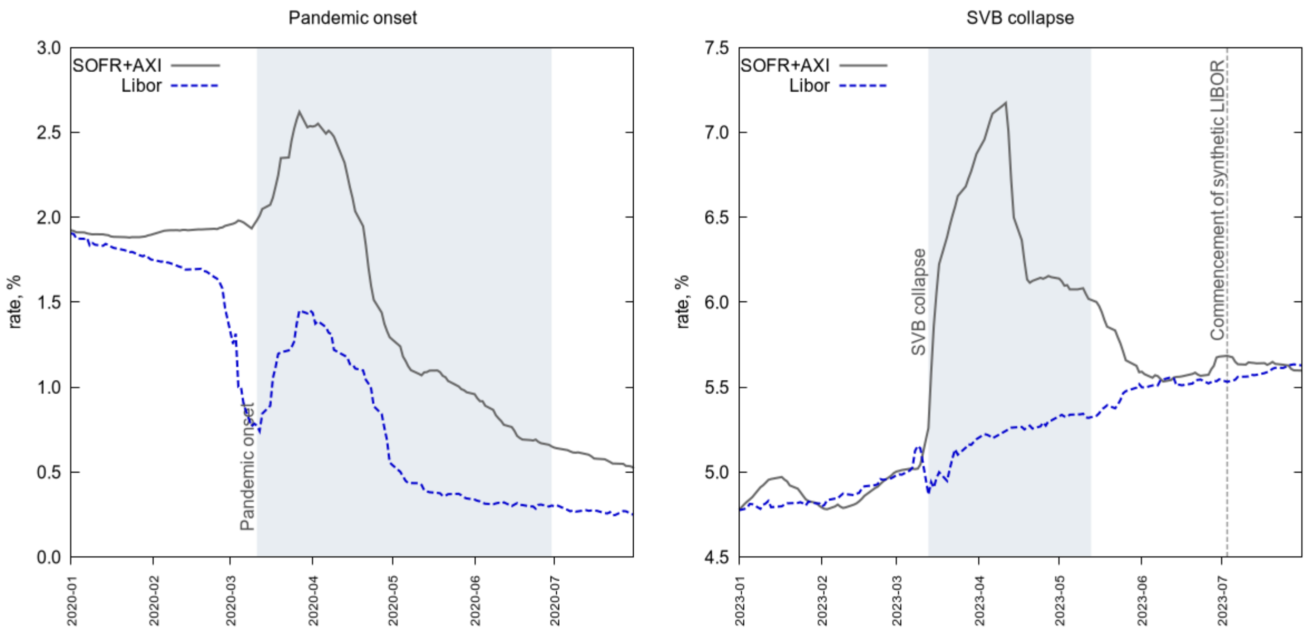
1 International Organization of Securities Commissions.

when LIBOR and SOFR+AXI overlapped, during stress, LIBOR under-represented banks' funding costs relative to SOFR+AXI.

Stress behavior is the most revealing of AXI's value. At the pandemic onset, LIBOR fell below SOFR while SOFR+AXI jumped, widening the difference above 2%; during SVB, SOFR+AXI again rose while LIBOR continued its trend, with the gap approaching 2.5%. In both episodes, LIBOR-linked loans could under-recover funding costs, whereas SOFR+AXI better tracked banks' true borrowing conditions. Banks relying on SOFR-only pricing can fail to recover as much as 15 bps on existing revolving credit lines over as little as three months.

Figure 1: Evolution of AXI during recent stress episodes



For banks, AXI offers improved loan pricing and risk management. When unsecured funding costs rise, loan rates reprice via the AXI component, aligning asset yields and liability costs and shielding the net interest margin—without the need to embed a large ex-ante fixed-spread buffer. The study calculates that SOFR+AXI reduces funding risk and can support spread discounts of up to 65 basis points without lowering risk-adjusted returns.

In conclusion, the study argues that AXI restores the credit sensitivity lost in the USD LIBOR transition while avoiding reliance on thin short-term markets, delivering significant economic value and supporting resilient credit supply across cycles. AXI aligns loan interest with funding costs, safeguarding margins and enabling continued lending through stress, while supporting borrowers and the broader economy through lower pricing in normal times.

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About the Financial Economics Practice at CRA

Our consultants provide economic and financial analysis and advice to financial institutions, financial regulators, and counsel representing financial institutions. Our experts are skilled in quantitative modeling and econometrics, particularly as applied to issues in credit and compliance risk in consumer lending markets. We provide fair lending analyses of underwriting, pricing, redlining, and servicing practices for use in litigation and regulatory investigations. We also provide ongoing statistical monitoring of credit and compliance risk, including monitoring required under the terms of consent orders with federal regulatory agencies.

For assistance with analysis of HMDA data, mortgage origination, pricing, or servicing data, or compliance or credit risk issues in either regulatory or litigation disputes, please contact the Financial Economics Practice of Charles River Associates.

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