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Summary

This paper studies the drivers of bank branch openings and closings since 2001 in the U.S. banking sector. The authors construct a bank-level measure of deposit "beta" or cost sensitivity as a function of average demographic characteristics across banks' branches. They use the resulting regression coefficients to predict branch-level deposit betas, using zip-code level demographics. This local measure strongly negatively predicts both branch openings and closings. The authors interpret this finding as indicating more branch churn in areas where depositors are more rate-sensitive, so that banks have low deposit franchise value. To test whether branch closures are instead driven by declining physical usage of branches, the authors incorporate cell phone mobility data around the COVID-19 pandemic, measuring changes in foot traffic and travel distance to branches. They find that branch usage helps explain closures, but local deposit franchise value remains a dominant predictor.

The paper addresses an important trend in modern banking — the sharp decline in branch presence over the past two decades — and argues that this restructuring is driven by local variation in deposit franchise value (DF), inferred from demographics. While the patterns are intriguing, several issues limit the causal interpretation. First, most banks set uniform deposit rates, making the use of spatially varying deposit betas conceptually inconsistent; branch-level variation more likely reflects deposit outflows, which the paper does not directly measure. Second, the author's measure of DF is not identified — it may instead be capturing differences in bank business models, such as large banks exposure to institutional or uninsured deposits. Third, the focus on per-dollar DF ignores deposit scale, even though branch profitability depends on total value, not margin alone. Finally, the paper treats DF and branch usage as distinct mechanisms, though they likely reflect the same underlying shift toward digital banking. Together, these concerns suggest that observed closures and openings may reflect broader strategic or structural forces, not just demographic variation in deposit pricing power.

Comments.

1. Uniform Deposit Pricing. There is growing evidence that a large number of banks set uniform deposit rates across their branch networks (as the authors note on p.4; see also Begenau et al. 2023; dAvernas et al. 2023).

This creates a conceptual inconsistency with the paper's use of branch-level deposit betas, which are intended to capture geographic variation in deposit rate sensitivity. If banks do not vary deposit rates across branches, then any observed differences in pricing sensitivity must instead reflect variation in composition across deposit products (e.g. institutional vs retail) or on local depositor outflow behavior in response to uniform pricing.

The paper does not address this disconnect. Instead, it assumes a uniform deposit runoff rate (10 years) across branches when calculating DF, while imputing local betas from demographics. If the authors intend the deposit beta to serve as a proxy for local depositor flightiness rather than rate setting behavior, it would be more appropriate to validate that interpretation directly (such as by using FDIC Summary of Deposits (SOD) data to measure actual deposit outflows at the ZIP or branch level). As it stands, the measure blends price sensitivity and withdrawal elasticity, without clarifying which mechanism is at work.

The authors should either (i) reframe their measure as a proxy for deposit outflow sensitivity and test that interpretation explicitly using local deposit data, or (ii) clarify why demographic proxies for local deposit beta are valid in the presence of uniform pricing.

2. Measure of Deposit Franchise Value. The paper's main explanatory variable, branch-level deposit franchise value, is constructed by projecting bank-level deposit betas onto local demographics. This procedure embeds a key assumption: that cross-sectional variation in betas reflects differences in depositor characteristics, not broader differences in bank business models. However, this assumption is problematic. For example, large banks tend to operate in areas with younger, wealthier, and more educated populations, and they also exhibit higher deposit betas. The authors take this correlation as evidence that these demographic characteristics drive rate sensitivity. But this interpretation overlooks an important confounder: large banks may have high deposit betas because they hold a larger share of institutional or uninsured deposits (e.g., from large commercial clients), which are inherently more rate sensitive (Jiang et al. 2024).

These same large banks also tend to operate denser branch networks in urban areas and may close branches there not because the deposit base is unprofitable, but because digitalization allows them to maintain service with fewer physical locations. In such cases, observed closures in low-DF, demographically sophisticated ZIP codes may reflect strategic consolidation or cost-efficiency, not low pricing power. Similarly, banks entering these areas may be drawn by other attractive market features such as high wealth or fintech compatibility, not necessarily because they face rate-sensitive customers. In this light, the observed demographic patterns are equally consistent with alternate explanations unrelated to deposit franchise value.

To credibly attribute branch restructuring to local variation in DF, the authors would need some variation in DF that is exogenous with respect to other economic drivers of branching behavior. The COVID-19 analysis is presented as a behavioral shock, but it does not resolve this identification problem. Changes in branch usage during the pandemic may reflect broader shifts in work-from-home behavior, commercial foot traffic, or branch-level cost dynamics, not necessarily changes in deposit pricing power.

3. Marginal vs. Total Deposit Franchise Value.

A further concern is that the deposit franchise value used in the analysis is defined on a per-dollar basis, i.e. it reflects the margin earned per unit of deposits. However, banks likely make closure decisions based on total profitability, which depends on both the margin and the scale of deposits held at the branch.

Consider a branch in an urban area: it may serve highly mobile, rate-sensitive depositors (implying a low per-dollar DF), but also hold a large volume of deposits, such that the total DF remains substantial. Conversely, a rural branch may have a high per-dollar DF due to depositor stickiness but manage only a small deposit base, making it a more obvious closure target.

The authors partially address this by including lagged deposit levels as a control, but this does not fully resolve the issue. What matters is not just whether deposit volume predicts closures independently, but whether per-dollar DF is less predictive when deposit scale is high. A more complete approach would construct and test a total DF metric, or at least examine the interaction between margin and scale. Without this, the interpretation that banks are exiting low-DF areas may be overstated, as it implicitly assumes that low margins always imply low total profitability, regardless of volume.

4. Deposit Franchise Value vs. Branch Usage

The authors argue that deposit franchise value and branch usage are distinct and additive channels influencing branch restructuring. They use cell phone mobility data to show that usage, as measured by foot traffic and travel distance, fell more in sophisticated areas during COVID-19, and that usage predicts closures. However, they conclude that DF remains the dominant predictor, even when usage is included.

This treatment overlooks the likely endogeneity between usage and DF. As customers shift toward digital channels, they not only use branches less but become more attentive to deposit rates — making them more price-sensitive. In this way, declining usage is a precursor or cause of lower deposit franchise value, not an independent force. Moreover, both DF and usage are strongly tied to the same underlying demographic variables, such as age, education, and wealth. The authors acknowledge that these measures are correlated but do not fully address whether they are capturing two distinct mechanisms or two sides of the same behavioral shift.

As a result, regressions that include both DF and usage are difficult to interpret. The finding that DF remains statistically significant in the presence of usage does not imply it is the primary causal channel, especially if the two are driven by the same unobserved behavioral trends. A more coherent framework would treat usage as a determinant or component of DF, or at least test interaction effects explicitly.

References

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