A note on Begenau and Stafford (2022)

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Background

Begenau and Stafford (2022, henceforth "BS") recently posted a working paper ("Uniform Rate Setting and the Deposit Channel") where they criticize the Deposits Channel of Monetary Policy of Drechsler, Savov, and Schnabl (QJE 2017; henceforth "DSS").

The core of BS's argument is that most bank branches do not set their own deposit rates, hence they do not fully exploit their local market characteristics such as market concentration. Rather, their rate follows that of a rate-setting branch, and some banks even set the same rate throughout their branch network ("uniform rate setting"). According to BS, this shows that banks do not have market power in deposit markets, or at least they do not use it, and hence the Deposits Channel is "inoperative". They write, "By definition, the deposit channel does not operate through branches that are part of a centralized rate setting network" (pg. 2).

Response

1. BS's theoretical argument is clearly wrong. A bank can have a lot of market power and yet choose not to fully exploit local market characteristics at each branch. The definition of market power is that the bank can pay a deposit rate that is below the competitive market rate without losing all of its customers. This is exactly what banks do, paying deposit rates that are far below competitive market rates such as the Fed funds rate, the Treasury bill rate, or the yields of money market funds.

2. Contrary to BS's argument, having market power does not imply that the bank must set a different rate at each branch. Indeed, DellaVigna and Gentzkow (QJE, 2019) find that it is common for retail firms to choose not to exploit differences in local pricing power due to concerns that this could harm their brand/image. Like other firms, banks often do not set different rates at each branch.[1] But make no mistake, banks do exploit their market power at each branch by paying deposit rates that are well below competitive market interest rates. This is true at all branches, whether they set their own rate or not.

[1] It is not news that most branches are not rate setters. DSS already points this out, "There is about one rate setting branch for every three non-rate setting branches in the data." (pg. 1839). Moreover, there are at least two other papers discussing these points that precede BS by several years: Dlugosz et al. (2018) study the real effects of local rate setting after natural disasters, and Granja and Paixao (2019) study the impact of mergers on local rate setting. BS do not make it clear that this point already appears in all three earlier papers.

3. BS are confused about the purpose of the within-bank analysis in DSS. Contrary to their understanding, the purpose of the within-bank analysis is not to establish that banks have market power over deposit rates. The existence of market power is already clear from the aggregate and cross-bank analysis, which shows that banks increase deposit rates far less than one-for-one with the competitive market interest rate, and that there are large differences across banks in the rates paid on the same deposit product.[2] Instead, the purpose of the within-bank analysis is to analyze the impact of this market power on the sensitivity of deposit supply to monetary policy while controlling for loan demand. The within-bank analysis allows DSS to do this because deposits can be transferred from one branch of a bank to another to meet local lending needs, which means that within-bank differences in deposit pricing reflect differences in local market power rather than loan demand. Thus, the purpose of the within-bank analysis is not to establish that banks have market power, but to show that it induces banks to shrink deposit supply when the Fed raises rates. This requires some variation in within-bank deposit rates, but not that all branches set their rates independently.

4. How much variation is required? This is a question of statistical power, answered by the fact that DSS's within-bank estimates are highly statistically significant. Note that BS are able to replicate these results. How is that possible if, as BS assert, deposit rates are set uniformly? It wouldn't be; but in fact there are plenty of rate-setting branches. BS's own Table 1 reports 4,878 rate-setting branches in its dataset in 2005 Q4.

5. Nevertheless, BS argue that there is a problem because rate-setting branches are disproportionately at small- and medium-sized banks rather than the largest banks. But so what? To have statistical power, the within-bank analysis needs within-bank variation in deposit rates and quantities, which can come from any multi-branch bank. BS appear to think it needs to be the largest banks because, as discussed in point #2 above, they erroneously believe that banks only have market power at rate-setting branches. As explained above, this is clearly incorrect. In any case, even some of the very largest banks engage in regional pricing. For example, as shown in BS's own Table A1, Bank of America has at least one independent rate-setting branch in each US state.

6. BS make claims about how DSS's within-bank results depend on the sample. We spent significant time and effort trying to replicate their claims but were unable to do so. Neither were two other researchers whom we asked to independently check BS's results. While we suspect that we know where BS erred, we cannot be sure because they do not make their code or data available. We note that, in contrast, our code and data are publicly available, which makes it straightforward for BS to replicate our results.

[2] Bank's market power has been widely noticed during 2022 as deposit rates at most (but not all) banks remained close to zero even as the Fed repeatedly hiked rates. A WSJ video highlighting this can be found here WSJ deposit video. The degree of banks' market power, commonly measured as the increase in deposit rates per 100 basis points increase in the Feds rate ("deposit rate beta"), is a closely watched metric in the banking industry (see Drechsler et al. (2021)). Early evidence from the 2022 hiking cycle suggests that large banks' market power is in line with previous hiking cycles (see, for example, Financial Times, Oct 15, 2022).

7. The way BS have handled their paper suggests that they do not want it to be scrutinized. First, they never made us aware of their paper. We only became aware of it after it was listed as Revise & Resubmit on one of their websites. Second, to the best of our knowledge they have never circulated their paper, nor presented it at any seminar or conference. Third, they only posted their paper on SSRN in June 2022, apparently after submitting it to the *Journal of Finance*. And fourth, as stated above, they do not make either their code or data available.

8. We note that to this point we have not been asked to weigh in during the refereeing process for BS at the *Journal of Finance*.

References

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