SECTION 4
FinTech

Financial technology (FinTech)—defined in the 2022 SBLS as new business processes that use recent technological innovations to change or improve how financial services are conducted or provided—is reshaping the financial services industry.[42] The increasing use of FinTech presents a competitive challenge to the banking business model, for example as FinTech firms grow their market share relative to the traditional banking sector in areas such as residential mortgage lending. But FinTech use also provides an opportunity for banks to reduce costs and streamline their processes. This reduction in cost has the potential to increase credit availability and, more generally, to improve access to credit for small businesses.

In the context of small business lending, banks' FinTech use presents several concerns.[43] First, large banks are potentially more likely to use FinTech due to the high fixed costs of adoption, which could lead to further consolidation in the banking industry by increasing the efficiency of large banks. Section 3 shows that small banks emphasize soft information in loan underwriting relative to large banks, which in turn may be difficult to fully replicate through FinTech. As a result, the geographic consolidation of banks may leave some areas less well-served if not all potential customers are able to take advantage of remote or online loan applications and bank services. Second, and likely related, greater reliance on FinTech may cause banks to de-emphasize the relationship component in small business lending and remove humans from decision-making, with negative consequences for small businesses best served by relationship lenders. Conversely, the relationship-oriented practices of small business lending may limit the usefulness and adoption of FinTech.

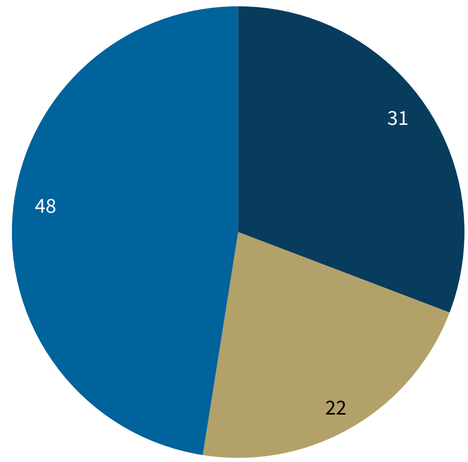
Findings from academic research offer some insight into how FinTech use by banks may shape the banking industry. A recent study shows that smaller banks were slower to implement mobile technologies and as a result lost deposits to larger banks.[44] Another study provides evidence that larger banks and banks with more branches use technology more similar to that of FinTechs than smaller banks or banks with fewer branches do.[45] This body of research suggests that large banks will adopt the technologies earlier and more comprehensively than small banks. Yet academic research also shows that FinTech adoption does not displace human involvement in the lending process. Recent research on residential mortgage lending, where most loans are made with relatively little soft information, has shown that differences in the soft information loan officers possess matters for access to credit, suggesting that humans can supplement even a highly automated process.[46] Further, banks that used more FinTech made more out-of-market Paycheck Protection Program loans in early 2020, suggesting that FinTech can facilitate small business lending at a distance.[47] However, if most small business lending remains local and supported by high-touch and staff-intensive practices, as found in the FDIC's report on the 2016 Small Business Lending Survey (FDIC 2018), the transformative potential of FinTech may be limited.

42 For more on the survey's definition of FinTech, see Part IE in Appendix B.
43 For a discussion of banks' competition with FinTech lenders, see Section 5; for a discussion of the perceived competitive advantages of FinTech lenders, see Section 6.
44 Haendler (2022).
45 Kutzbach and Pogach (2022).
46 Jiang, Lee, and Liu (2021).
47 Kutzbach and Pogach (2022).

This section reports on the banking industry's use of and experiences with FinTech in small business lending. Banks were asked about their use and development of FinTech in small business lending, their interactions with firms that specialize in the use of FinTech (FinTech firms), and their concerns about further FinTech adoption.

The findings in this section provide insight into FinTech's prevalence in the small business lending practices of large and small banks, the importance of scale in FinTech use, FinTech's impact on the relationship-driven business model, and the degree to which FinTech is—or is not—changing the banking industry.

FIGURE 4.1
Percentage of Banks Using or Considering Using FinTech in Small Business Lending



Source: SBLS 2022 Question I.E1.
Note: Banks are recorded as "Currently Using" if they are currently using FinTech in any step of their loan process and as "Under Discussion or Development" if use of FinTech is "Under discussion" or "Under development or in pilot testing" in any step but in no step are they currently using FinTech. Results may not sum to 100 percent due to rounding.

4.1 How Banks Use FinTech

The survey asked banks how they incorporate or plan to incorporate FinTech in their small business loan process, regardless of whether the technology was developed in-house or obtained from an outside firm. The survey divided the loan process into ten steps (listed in Figure 4.2). For each step, banks were asked to indicate whether they are currently using FinTech, whether its use is under discussion or development (i.e., whether banks are considering using FinTech), or whether the bank has no plans to use FinTech.[48] Banks using FinTech in any step of the loan process are referred to in this section as FinTech banks.

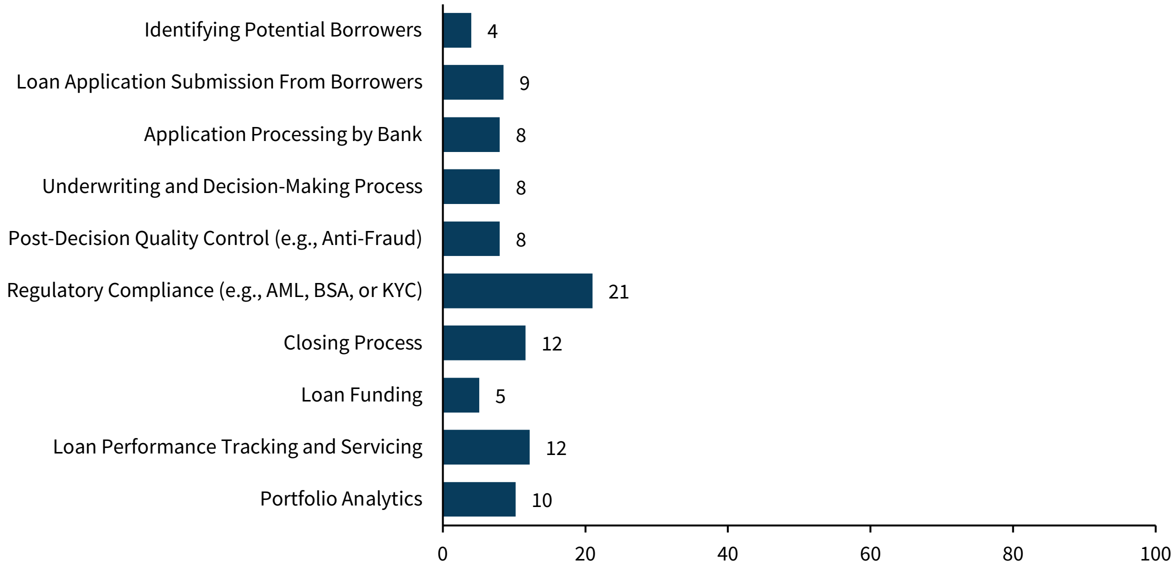
The survey finds that 31 percent of banks use FinTech in their small business lending (Figure 4.1). An additional 22 percent are discussing or developing FinTech, such that more than half of banks are at least considering its use.[49]

Banks use FinTech in all steps of the small business loan process (Figure 4.2). The largest share of banks—21 percent—use FinTech to help with regulatory compliance. Between 10 and 12 percent of banks use FinTech after the loan is made—for performance tracking and servicing, during the closing process, and for overall portfolio analytics. Between 8 and 9 percent use FinTech before the loan is made—for application submission, application processing, loan underwriting, and quality control of approvals. The smallest shares of banks use FinTech to help with loan funding (5 percent) and to identify potential borrowers (4 percent).

Relatively few banks incorporate FinTech across multiple steps of the loan process (Figure 4.3). About half of FinTech banks, or 15 percent of all banks, use FinTech in one or two steps of the loan process. An additional 16 percent use it in three or more steps. However, this measure does not distinguish how fundamental or deeply integrated FinTech use is within a particular step of the loan process or at a particular bank. For example, it cannot distinguish between using FinTech to process some types of financial statements and using it to automate the underwriting process. Still, this analysis confirms that few if any banks rely entirely on FinTech for their small business lending operations.

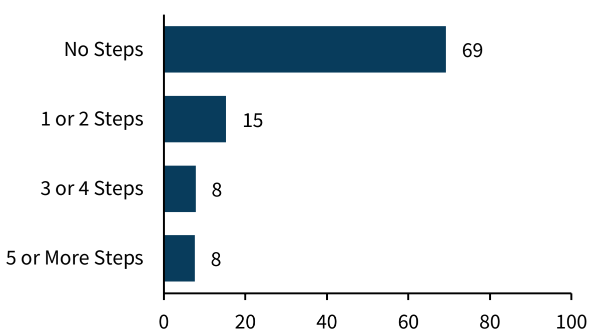
[48] In the subsequent analysis, banks that responded "not a stage of our loan process" are grouped with banks responding "no plans."
[49] To the extent that some of the FinTech usage that was under discussion or development in 2022 is now in production, actual use in 2024 likely exceeds these numbers.

FIGURE 4.2
Percentage of Banks Using FinTech in Each Step of the Loan Process



Source: SBLS 2022 Question I.E1.
Note: "AML" is Anti-Money Laundering, "BSA" is Bank Secrecy Act, and "KYC" is Know Your Client. Banks may select answers in multiple categories.

FIGURE 4.3
Percentage of Banks Using FinTech in a Certain Number of Steps of the Loan Process



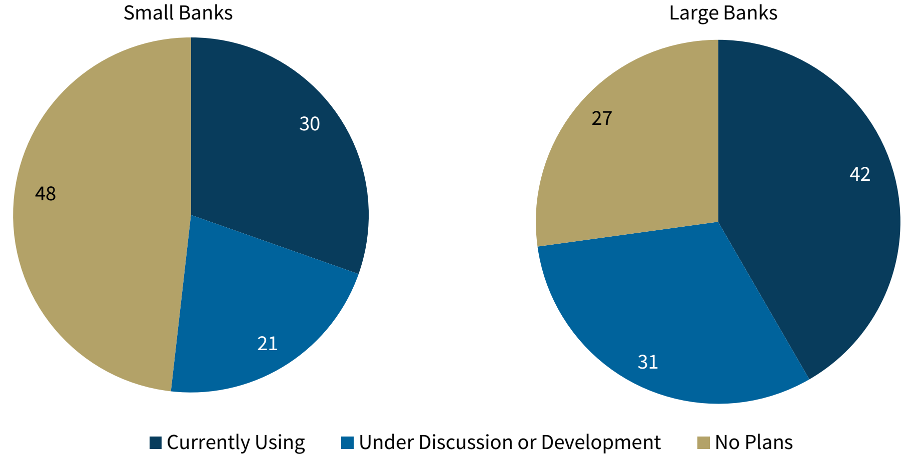
Source: SBLS 2022 Question I.E1.

4.2 Differences in FinTech Use by Bank Size

Given the standard characterization of small banks as relationship lenders and large banks as transactional lenders, discussed in Section 1, one might expect that large banks would be more likely than small banks to embrace FinTech at various points in the loan process, primarily because of the high fixed cost of adopting new technologies that is easier to justify at larger scales of operation.

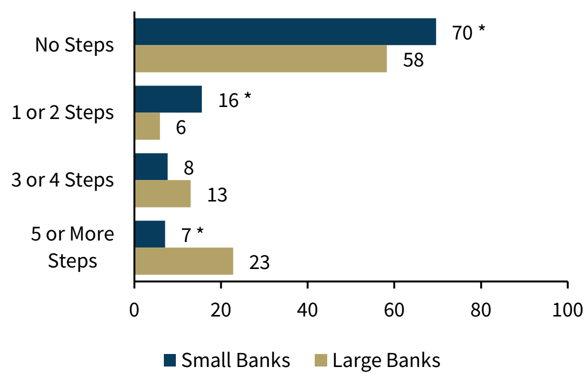
While large banks are more likely than small banks to use FinTech, FinTech adoption is by no means limited to large banks. Figure 4.4 shows the share of large and small banks currently using, considering using, or having no plans to use FinTech. Forty-two percent of large banks use FinTech in at least one step of the loan process. An additional 31 percent are discussing or developing FinTech, such that 73 percent of large banks are at least considering its use. Among small banks, 30 percent use FinTech. An additional 21 percent are discussing or developing FinTech, such that 51 percent of small banks are at least considering its use. Since small banks outnumber large banks by a wide margin, a sizeable majority of banks using FinTech are small banks. While these results indicate the importance of scale in deciding

FIGURE 4.4
Percentage of Banks Using or Considering Using FinTech in Small Business Lending, by Bank Size



Source: SBLS 2022 Questions I.E1.
Note: Banks are recorded as "Currently Using" if they are currently using FinTech in any step of their loan process and as "Under Discussion or Development" if use of FinTech is "Under discussion" or "Under development or in pilot testing" in any step but the bank is not currently using FinTech in any step. Results may not sum to 100 percent due to rounding.

FIGURE 4.5
Percentage of Banks Using FinTech in a Certain Number of Steps of the Loan Process, by Bank Size



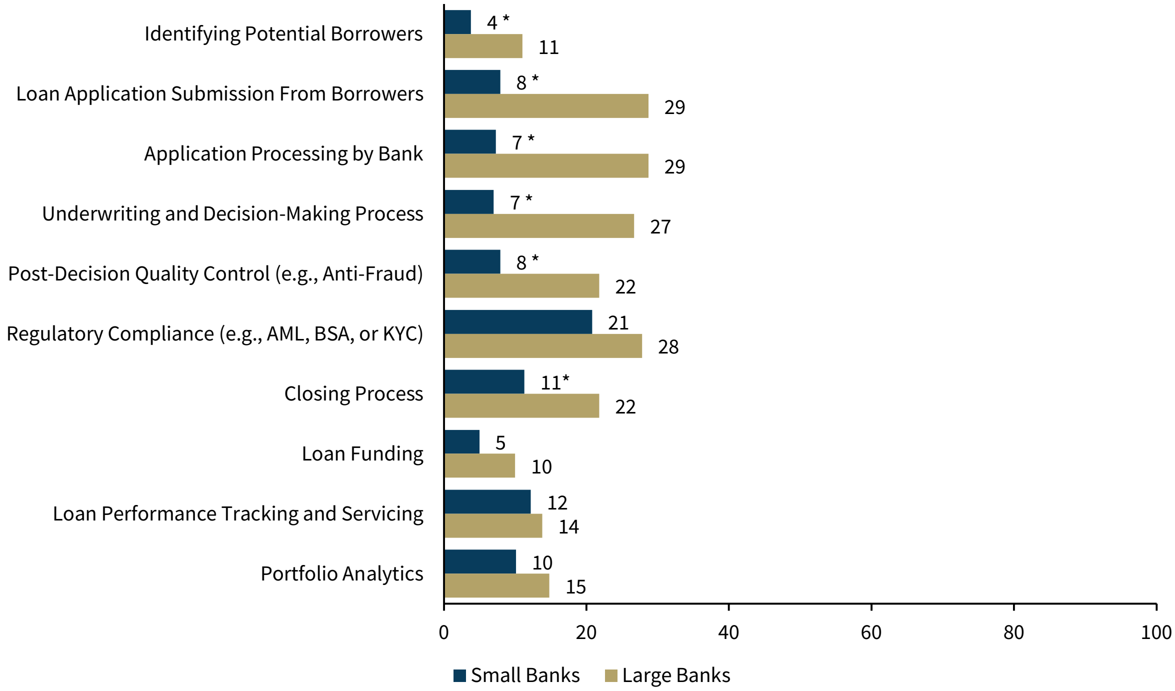
Source: SBLS 2022 Question I.E1.
Note: Results may not sum to 100 percent due to rounding.
* Denotes a statistically significant difference between small and large banks at the 10 percent level.

to incorporate FinTech, they also demonstrate that its use is not limited to large banks. When large banks use FinTech, they tend to do so more extensively across the loan process. Small banks are much more likely than large banks to use FinTech in only one or two steps of the loan process, while large banks are much more likely than small banks to use FinTech in five or more of the ten possible steps (Figure 4.5). Six percent of large banks (or 14 percent of large FinTech banks) use FinTech in one or two steps of the loan process, while 23 percent of large banks (or 55 percent of large FinTech banks) use it in five or more steps. Again, these patterns likely reflect, at least partially, the effect of the fixed costs that are easier to justify at larger scales of operation, but they also raise the possibility that small and large banks look for different functionality from FinTech.

The advantages of scale may make a large bank more likely to use FinTech and to use it in more steps of the loan process, but it does not necessarily follow that small and large banks would use FinTech the same way. As discussed in Section 3.5, small and large banks underwrite loans differently, which may be reflected in the differing rates of FinTech use among different-sized banks. Figure 4.6 breaks out FinTech use by small and large banks for each lending step. When small banks use FinTech for small business lending, they tend to incorporate it into secondary processes like regulatory compliance and performance tracking rather than early in the loan process. About one-quarter of small FinTech banks (or 4 to 8 percent of small banks overall) report using FinTech in the early steps of the loan process (e.g., taking the application and underwriting the loan), compared with two-thirds of large FinTech banks. This may reflect that FinTech can be integrated more easily into the more transactional underwriting practices at large banks.

FIGURE 4.6

Percentage of Banks Using FinTech in Each Step of the Loan Process, by Bank Size



Source: SBLS 2022 Question I.E1.
Note: "AML" is Anti-Money Laundering, "BSA" is Bank Secrecy Act, and "KYC" is Know Your Client. Banks may select answers in multiple categories.
* Denotes a statistically significant difference between small and large banks at the 10 percent level.

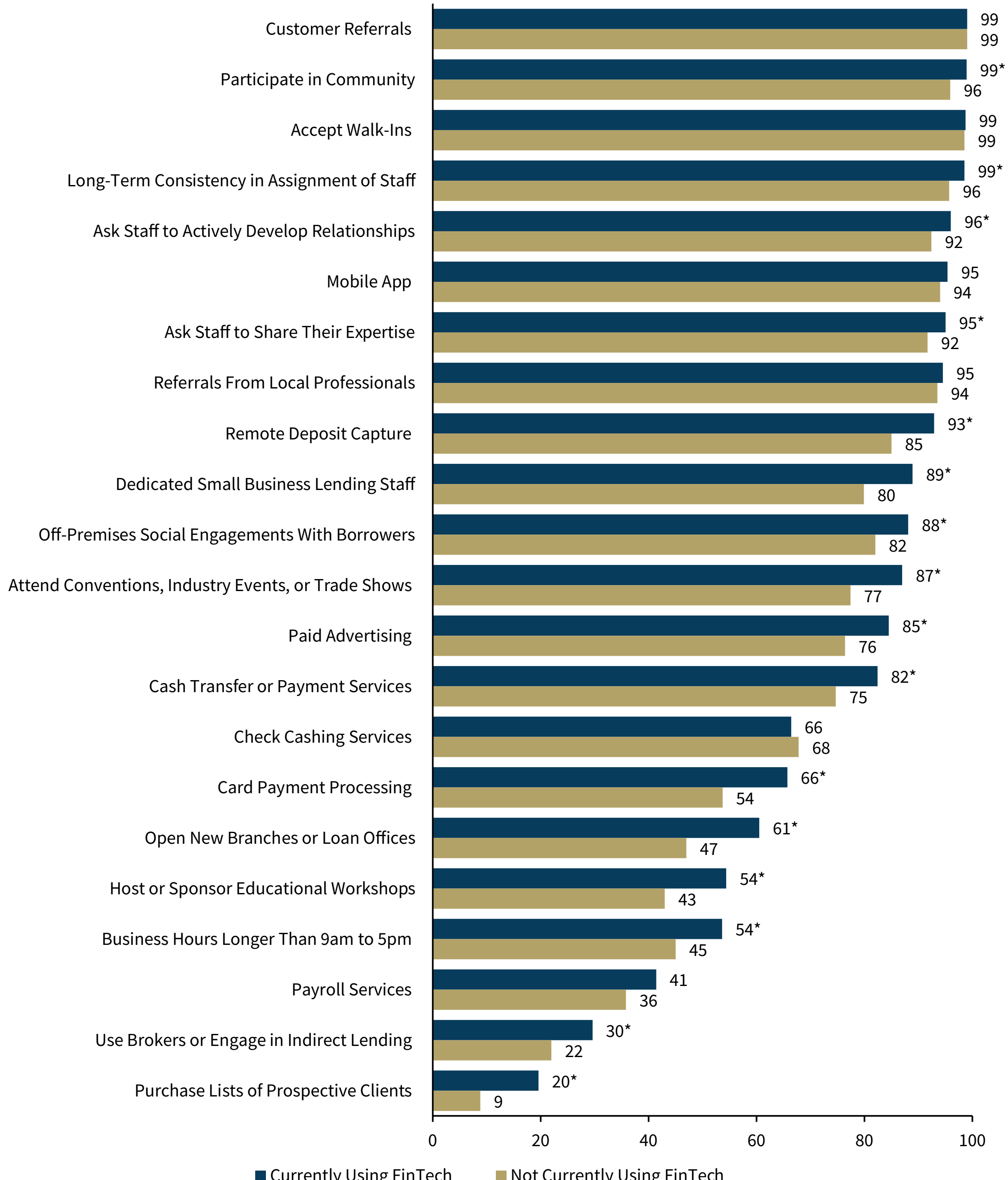
A second takeaway from Figure 4.6 is that small and large banks use FinTech at similar rates for the final steps of the loan process (i.e., those occurring after the underwriting and approval process). Both large and small banks use FinTech at similar rates for regulatory compliance, which is by far the main use for small banks. Small and large banks also use FinTech at similar rates for traditionally data-driven operations like loan servicing and overall portfolio analytics, in which recent technological innovation may lower the cost of data management for flagging potential problems and offering insights. The similar use rates may also suggest that the potential gains from FinTech adoption are less directly tied to scale than it might first appear.

4.3 How Other Lending Practices Vary With Use of FinTech

Analysis of FinTech use also must consider whether, independent of overall scale, certain types of banks are more likely to use FinTech. If FinTech is more useful for transactional as opposed to relationship lending, then a bank that relies more on transactional lending may be more likely to adopt FinTech. Also, if FinTech reduces or displaces the need for human interaction in a bank's small business loan process, it would be expected that FinTech banks and non-FinTech banks would differ in their lending practices. It is also possible that technological innovation reduces the cost to banks of performing tasks like compiling information and regulatory compliance in a way that complements, rather than displaces, relationship lending or high-touch practices. This subsection explores the differences and similarities among FinTech banks in how they interact with customers and evaluate loan applications.

Figure 4.7 compares the practices FinTech and non-FinTech banks use to generate and maintain small business relationships (as discussed in Section 6.2). The figure shows that FinTech banks are as likely, if not more, to engage in many of the business practices banks view as integral to relationship lending, including building relationships with customers and accepting walk-ins. Where meaningful differences occur, they primarily relate

FIGURE 4.7
Percentage of Banks Using Selected Practices to Generate and Maintain Small Business Lending Relationships, by FinTech Usage



Source: SBLS 2022 Question II.A5.
Note: Question is keyed to the bank's highest-volume small business lending product, excluding credit cards and government-guaranteed products (see Appendix A for more information).
* Denotes a statistically significant difference between banks that do and do not currently use FinTech at the 10 percent level.

to less-common business practices such as offering payroll and card payment processing, though some of these differences may reflect the higher proportion of large banks within the set of FinTech banks. While not conclusive, the evidence suggests that FinTech banks generally engage in the same set of high-touch small business lending practices that non-FinTech banks do. This finding is consistent with the notion that typical FinTech use complements rather than supplants the conventional emphasis on high-touch customer interaction.

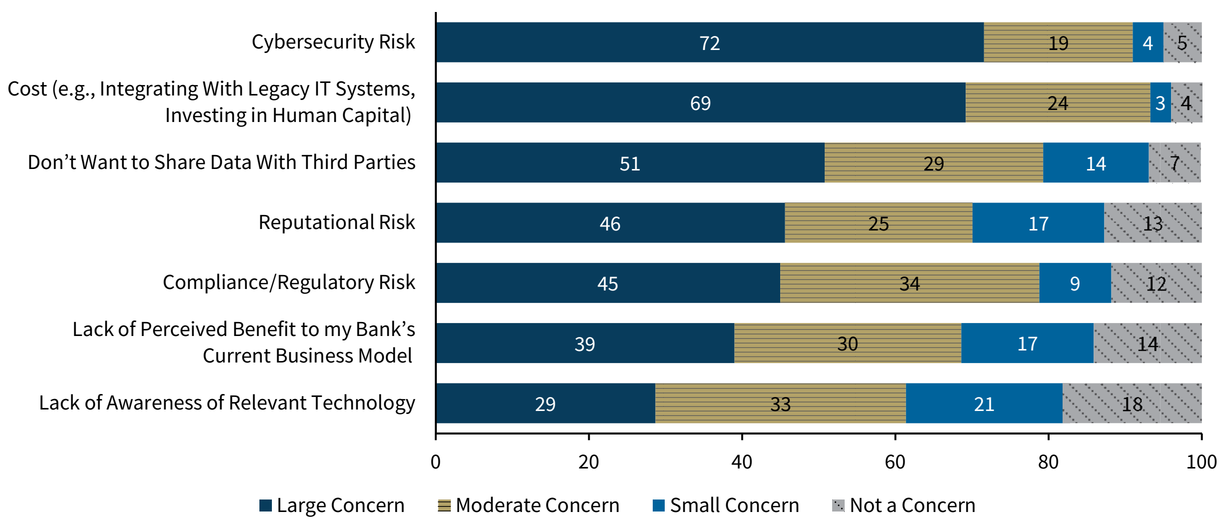
While FinTech may not change the way banks interact with customers and maintain relationships, it may change how they evaluate loan applications, as FinTech may replace customary underwriting practices. As discussed in Section 3.3, meeting with a small business loan applicant is a proxy for the importance of soft information in the underwriting process. Staff at FinTech banks are significantly less likely than staff at non-FinTech banks to meet with applicants (78 percent versus 92 percent), which may suggest that FinTech banks place less emphasis on soft information in their loan process.[50] However, since most FinTech banks typically meet with applicants, the use of FinTech clearly does not fully replace the human touch in underwriting.

4.4 Factors That Limit Additional Use of FinTech

A variety of factors might deter banks from incorporating FinTech into their small business loan process, such as cybersecurity risk, high cost of adoption, or a lack of awareness of FinTech. Understanding the factors banks consider when weighing whether to incorporate FinTech into their small business lending practice matters for predicting how FinTech use might continue to grow in the industry. The survey asked banks about several concerns that might impede their use of FinTech and to designate them as “no concern,” a “small concern,” a “moderate concern,” a “large concern,” or a “very large concern.”

Banks’ top concerns with adopting FinTech relate to risk and cost. About 70 percent of banks consider cybersecurity risk and the cost of implementation large concerns (Figure 4.8). The three other types of risk asked about in the survey—data sharing, reputational risk, and regulatory risk—were all considered large concerns by at least 45 percent of banks and at least moderate concerns by 71 percent of banks.

FIGURE 4.8
Percentage of Banks Citing Selected Factors as Limiting or Discouraging Use of FinTech



Source: SBLS 2022 Question I.E3.
Note: "Large Concern" combines “large concern” and “very large concern” responses. Results may not sum to 100 percent due to rounding.

[50] This analysis is not presented in a figure. It compares the likelihood that a decision-maker typically meets with applicants (as described in Section 3.3 and sourced from Questions I.B11, I.B16, I.B21, and I.B26) for banks currently using FinTech and those that are not currently using it in at least one step of the loan process. The differences remain significant even after controlling for bank size.

Slightly fewer banks are hindered by a lack of awareness of relevant technology or a lack of perceived benefit to their business model. Sixty-two percent of banks consider the lack of awareness of relevant technology to be at least a moderate concern. A lack of awareness may indicate that a bank has not encountered any relevant technology for small business lending or that technologies do not offer a perceived benefit. Sixty-nine percent of banks consider the lack of perceived benefit to be at least a moderate concern and 39 percent consider it a large concern. The lack of perceived benefit may indicate that technology is not available to improve their operations or the perceived benefit does not outweigh its expected cost. These findings suggest that more than half of banks do not see a strong case for further FinTech integration into their small business lending operations. While innovative technology is, by definition, an evolving space, the nature of bank concerns and their prevalence may limit the near-term growth of FinTech use in small business lending.

4.5 Conclusion

Across the banking industry, about half of banks were using or considering the use of FinTech in the loan process in 2022. The most common application of FinTech was to help with regulatory compliance. Banks typically use FinTech in the post-approval steps of the loan process (such as closing, servicing, and portfolio analytics) rather than in pre-approval steps (like application processing and underwriting). While most banks do not use FinTech in any steps of the loan process, a small minority use it in three or more steps. Risk and cost are the top factors that discourage the use or further adoption of FinTech in small business lending, with awareness of potential uses for or benefits of FinTech being relatively less important concerns.

While large banks are more likely to use FinTech, the gap in use between large and small banks is not as vast as the difference in the breadth of its use. Among banks that use FinTech in at least one step of the loan process, more than half of large banks use FinTech in at least five of the ten possible steps, compared with less than a quarter of small banks. More than half of the small banks that use FinTech use it in no more than two steps of the loan process. In terms of how they use FinTech, small and large banks tend to use FinTech in post-approval stages at similar rates, but large FinTech banks are much more likely to also use FinTech in pre-approval steps like application processing and underwriting. Finally, FinTech banks seem to use the same relationship-driven practices to generate and maintain their small business relationships as non-FinTech banks, but they differ in other ways, such as a lower likelihood of meeting with applicants.