

The Promise of Economic Integration: Evidence from the First Bank in an American Indian Nation*

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Abstract

American Indian Nation “A” exercised its sovereignty in negotiating the entry of the first bank to its underserved reservation. The bank, Nation A’s first modern foreign-owned investment, is owned by American Indian Nation “B.” We conduct a first-of-its-kind survey of Nation A’s tribal members in the months before the bank’s groundbreaking. This unique opportunity allows us to investigate drivers of individuals’ support for and, crucially, willingness to become customers of the bank. Without deception, we explore effects of the bank’s Native ownership, as well as randomized interventions communicating the Nation A legislature’s endorsement and general support from the Federal Reserve. We find high baseline buy-in to the branch, especially given its identity, but weak and even counterproductive treatment effects that complicate the developmental promise of this instance of economic integration. We advocate for the theoretical relevance of the many non-Westphalian sovereigns that, like Nation A, make consequential choices over economic integration.

Keywords: American Indian; capital access; financial exclusion; economic development; foreign direct investment; international economic relations; experiments

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1 Introduction

Access to credit, which Nobel Peace Prize winner Muhammad Yunus pronounced as “a fundamental human right,” is inequitably distributed in the United States.¹ On average, 6% of adults in the US do not have a bank account, and 16% are underbanked, with an account but still reliant on alternative, and often more predatory, financial services. For American Indians/Alaskan Natives (AIAN) living in and around the 326 independent jurisdictions in Indian Country, this problem is longstanding (Brown, Cookson and Heimer, 2019; Akee and Jorgensen, 2014).² As efforts to quantify its scope have been stymied by consistent undersampling of AIAN communities in national surveys,³ the authors collaborated with American Indian Nation “A” to conduct a first-of-its-kind scientific survey exploring capital access on their reservation (January-March 2020).⁴ Extrapolating from the survey, an alarming 33% of Nation A adults do not have a bank account, and 50% of those with bank accounts report having auto title, payday, and non-bank loan debt and/or using check cashing services consistent with being underbanked.⁵ Such high percentages were not unexpected, as the Nation A reservation is a “banking desert” without a local provider of formal financial services, and has been for longer than tribal elders can remember. The closest retail bank branch is about ten miles away on roads that are difficult to drive in winter.

What precipitated the survey was Nation A’s success in securing a bank’s entry to its reservation. What is more, the bank is from Native Nation “B,” which intends the branch’s viability to justify further expansion in Indian Country. The pending entry of a Native-owned bank caught the attention of the Federal Reserve, given its mission to mitigate financial exclusion in the US, which includes Indian Country. Remarkably, Nation A’s development goals, the bank’s need for this foreign investment to be commercially viable, and the Federal Reserve’s mission are all contingent on the same thing: the voluntary consumption choices of individuals in this severely underserved, less-developed nation. That the stakeholders’ mutual goal relies on individuals as consumers of what is in fact customer-facing foreign direct investment (FDI) forcefully demonstrates the power of individual attitudes toward economic integration even in a highly impoverished nation (Rudra and Tobin, 2017). In fact, Nation A has no FDI in its reservation, from the US or otherwise, so

¹Nobel Lecture, 10 December 2006.

²Indian Country is the US nomenclature for reserved lands; the US federal government recognizes 574 Nations at the time of writing.

³See Ben Kessler, “Native Americans, the census’ most undercounted racial group, fight for an accurate 2020 tally.” *NBC News*, 29 December 2019.

⁴Consistent with their sovereign rights, Nation A’s Tribal Legislature approved our study conditional on anonymity. Nation A is a parliamentary democracy with legislative and judicial branches of government.

⁵As only 44% own a credit card, the majority do not have the option to accrue credit card debt.

this setting provides a unique baseline for individuals' attitudes toward economic integration in their community.

In the months between the branch's licensing and its groundbreaking, the authors collaborated with the stakeholders to consider whether, and how much, they could increase ex ante support for the branch and, most importantly, spark tribal members' interest in moving their money once it opened. We used the survey instrument as a means of testing cues designed by the stakeholders to be channels of positive influence. It is accurate to conceptualize this real-world setting as concerning national economic policy, FDI, and the influence of an external institution in the development space. Thus, our advantage as scholars is to integrate and challenge cueing theory born of large bodies of work in elite-public interactions; public opinion on international relations; and the links between voluntary economic transactions and development outcomes. Moreover, we do this without deception, with true cues chosen by stakeholders, and in an environment where their effects are consequential for individuals' intimate choices over their personal finances as well as positive externalities benefitting this larger underserved nation.

Descriptively, our survey revealed very high and quite homogenous baseline support for an on-reservation bank branch, highlighting the relevance of not only the cues' positive effects but also any unintended "backfire." The bank approved questions cueing its identity as a Native-owned, and not US/American-owned, foreign investor. Our results support the bank's expectation that its identity and specific Nation B-origin generate comparative advantages in Nation A. Experimentally, we test two interventions that hinge on the credibility of the messenger: an endorsement by the Nation A government, and a statement of general support provided to the authors by the Federal Reserve Board of Governors. Parallel average treatment effects allay the concern that the Federal Reserve's US-tied identity would be differentially counterproductive. However, not only are the positive effects of each cue small in magnitude and often insignificant, but there is evidence of systematic backfire. Exploratory analyses suggest that the treatments prove effective for respondents with deep community connections, but they undermine buy-in from financially precarious respondents. Our nuanced findings suggest that the stakeholders' credibility is unevenly distributed in ways that could make intervention in itself damaging to groups they are most interested in targeting, especially problematic in the context of quite homogenous high baseline support.

In what follows, we discuss our real-world setting and ethical issues driving our research design, emphasizing the scholarly benefits of non-deception and stakeholder-driven hypothesis testing. Although our setting is in many ways very different from those in which cueing theory has been

developed, we argue for its relevance to our stakeholders while also challenging its implications. We report survey results and explore both theoretically- and normatively-relevant heterogeneous effects. Lastly, we consider implications for economic integration as a development strategy in Nation A and so many other underserved nations of great normative importance, unfortunately overlooked when only Westphalian nation-states comprise the unit of analysis.

2 An Underserved Nation’s First Bank

Americans Indians living on reservations are some of the most economically marginalized US communities (Akee and Taylor, 2014), with lower average credit limits (Dimitrova-Grajzl et al., 2015), higher mortgage rates (Cattaneo and Feir, 2019), and less access to financial markets (Wellhausen, 2017; Brown, Cookson and Heimer, 2019; Anderson and Parker, 2008). Extremely marginalized Nation A, a federally-recognized tribe with more than 10,000 members, speaks to the lower bounds of such normatively troubling findings.⁶ Even in the context of the strong pre-pandemic economy, 31% of Nation A survey respondents reported that they could not come up with \$400 in case of an emergency, whether through savings or (informal or formal) borrowing, and a further 16% were unsure.⁷ Nation A leaders have long deliberated on how to improve capital access. As the reservation’s second biggest town is not covered by cell service, internet-enabled solutions remain unrealistic.⁸ The tribal government runs a well-received small-dollar loan program, but expansion is not thought viable. Rather, discussions have centered on attracting a physical branch of a non-Nation-A, and thus foreign, retail bank. Indeed, physical branches remain important throughout the US; in 2017, 84% of Americans visited branches, and almost all did more than access the ATM (Merry, 2018).

Nearby Nation B’s urban reservation helps to make its casino and hotel very profitable, although like many American Indian Nations it is diversifying away from gaming given its uncertain future. One of Nation B’s key ventures is Bank [X].⁹ Bank [X] is further unique in considering broad expansion in Indian Country; to this end, it has become certified as a Community Development Financial Institution (CDFI), a federal program that allows it to reorient from profit-maximization

⁶See Appendix Table B.1 for comparative development indicators.

⁷Compare 31% to 12% in the 2019 US Survey of Household Economics and Decision-making (SHED).

⁸Contrast this with Sub-Saharan Africa, where 21% of adults have mobile money accounts, and half of these adults do not have traditional commercial bank accounts (Demirguc-Kunt et al., 2018).

⁹Bank [X] is licensed in the US and subject to US banking regulations. As is common in Indian Country, the firm is wholly state-owned; given our commitment to non-deception, we cannot manipulate whether the bank’s state ownership impacts attitudes.

toward commercial viability. Bank [X] proposed to open its first Indian Country investment on Nation A’s reservation. While Nation A welcomed the proposal, it took well over a year from Bank [X]’s initial inquiry to a positive, unanimous vote from Nation A’s legislature. Much of this time lag was due to negotiations over the terms of entry. Like all firms investing abroad in a foreign jurisdiction, the bank’s interest is to mitigate legal uncertainties inherent in cross-border transactions. One key issue was to specify Bank [X]’s access to dispute resolution in case of conflict. Bank [X] and Nation A ultimately agreed to to use third-party, private arbitration outside of the legal systems of Nation A or Nation B – or the civil law of the US state or federal government, from which civil law in these (and many other) American Indian Nations is independent (Wellhausen, 2017).¹⁰ Bank [X] also required as a condition of entry that the Nation A government move its finances to the branch. These terms demonstrate that Bank [X] is cognizant of political risks arising from its engagement in FDI, which are not negated by their perceived comparative advantages.

For the branch to be commercially viable, as Bank [X] requires, and to improve access to capital on the reservation, as Nation A desires, Nation A’s tribal members must support the branch and, most importantly, become its customers. Previously un- and underbanked customers would derive direct, material benefits, and more customers overall would both improve commercial viability and grow the branch’s positive externalities for community development. These outcomes are consistent with the mission of the Federal Reserve, the external advisory institution with a specific mission to mitigate financial exclusion and promote economic growth in Indian Country (as well as the broader US). The Federal Reserve is further interested in proof-of-concept of a Native-owned bank successfully expanding via FDI in other American Indian Nations. After Bank [X] The question of both scholarly and practical interest arose: how might these three stakeholders now, prior to the branch’s opening, grow the ranks of supporters and willing customers that could later convert to actual customers?

To pursue this question, the Federal Reserve funded the first non-Census scientific survey of adult (18+) Nation A tribal members, which the authors designed and executed in collaboration with Nation A’s tribal college.¹¹ Like many American Indian Nations, Nation A has a baseline skeptical view of external actors conducting research – for good reason, given historical exploitation.¹² The approval process required the authors to testify before a legislative committee responsible for IRB-type review, with a focus on any sovereignty-threatening aspects of the research. We com-

¹⁰This solution parallels provisions in treaty-based international investment law (St John, 2018).

¹¹The target population also included registered descendants, a legal distinction that is not relevant here.

¹²From a research design point of view, it is unfortunate that getting sign-off on a pre-approval plan would have upset this already sensitive process, as the tribal legislature rejected the involvement of other external parties.

mitted to to anonymizing public-facing research (hence Nation “A”). The full legislature asked Bank [X] to endorse the survey and the capacity of the authors to conduct it. Bank [X] did so while also making clear that it is not part of the research team; it has no privileged access to data; and its investment is in no way conditional on the survey.¹³ In several rounds of in-person testimony, legislators carefully reviewed each survey question with the authors.¹⁴ As was their right, legislators required detailed changes, the most relevant of which included cutting voting and ideology questions that they saw as violations of tribal members’ privacy. The authors also cut replications of questions from national surveys intended to gauge financial knowledge that were viewed as simplistic and in that way disrespectful. Since it is our firm belief that the survey and embedded interventions generate positive externalities for Nation A, the authors felt that making tradeoffs necessary to secure approval was more valuable than incurring the very high risk that doing otherwise would lead to the legislature’s rejection of the survey.

3 Stakeholder Credibility and Individual Attitudes

Maximizing material gains to tribal members, especially those who are otherwise un- or under-banked, is the key pathway by which the bank’s success could generate direct effects and positive externalities that feed into broader development goals.¹⁵ We incorporated into the survey instrument interventions testing whether stakeholders could bolster respondents’ ex ante buy-in (i.e., support and willingness to become customers of Bank [X]). A key benefit is that these interventions are true, developed in collaboration with stakeholders, and implemented without deception. We support further work pivoting away from “engineered” interventions, especially given well-established lab-based and hypothetical findings.¹⁶

Theoretically, all three stakeholders provide cues, or “information that enables people to form evaluations about an attitude object without in depth knowledge” (Eagly and Chaiken, 1993; Nicholson, 2011). Non-experimentally, the survey cues Bank [X]’s Native and specific Nation B ownership. Experimentally, the survey considers two cues: an endorsement provided by Nation A, and a general statement of support provided to the authors by the Federal Reserve Board

¹³Bank [X] made a charitable donation to the authors’ tribal college partners, as appropriate under Nation A, Nation B, and US law.

¹⁴We check robustness to account for those involved in this process that may have taken the survey (specifically, by controlling for tribal government employment and prior knowledge of Bank [X]’s opening).

¹⁵Maximizing the losses to predatory service providers would be a simultaneous benefit.

¹⁶For example, the (non-hypothetical) unanimity here suggests variation unexplained by polarization and partisanship (Druckman, Peterson and Slothuus, 2013; Guisinger and Saunders, 2017).

of Governors. All three are top-down (or elite) cues that hinge on source credibility, which is comprised of expertise and trustworthiness.¹⁷ The stakeholders share the implicit hypothesis that their cues have positive effects on respondents via the mechanism that belief in the stakeholder as messenger would be great enough to shape respondent attitudes (Mondak, 1993). A credibility-based intervention stands in contrast to the standard intervention that teaches financial literacy, or *why* the respondent should support the bank.¹⁸ Myriad financial literacy programs that have long been deployed in underserved communities around the world (Goyal and Kumar, 2021), and many find success that parallels lab-based findings that teaching material self-interest can change attitudes (Rho and Tomz, 2017). However, such interventions have not solved Nation A’s issue. For example, of our Nation A respondents who reported being unbanked, 37% of them also said they had participated in formal financial literacy programs, and 50% self-reported levels of financial knowledge above 6 on a 10-point scale. These disappointments help explain why none of the stakeholders gravitated toward teaching-based interventions, which we see as a data point in itself.

The pathways via which each stakeholder builds credibility vary: Bank [X] suggests identity, the Nation A legislature suggests democratic representativeness, and the Federal Reserve suggests technocratic expertise (Pornpitakpan, 2004). What is more, the reality of economic integration in this setting places all three pathways in the sphere of individual attitudes and credibility in international relations (Guisinger and Saunders, 2017). We situate each cue in the literature, highlighting scholarly support for but also potential challenges to the stakeholders’ implicit hypotheses over their credibility.

3.1 Firm National Origin

First, we consider Bank [X]’s expectation that its national origin is a source of comparative advantage in Nation A, which implies that cues regarding Native ownership and Nation B-ownership in particular should have positive effects on respondents. Our starting point is the well-documented home-country bias in consumption decisions (Verlegh, 2007), which motivates the entire literature on the “foreign” in FDI as a determinant of firms’ experiences investing outside their home country (Wellhausen, 2021). It should hold in our setting as well.

Hypothesis 1a. *All else equal, respondents prefer a domestically-owned bank to a foreign-owned bank.*

¹⁷For a comprehensive review, see Pornpitakpan (2004).

¹⁸Given that the reservation is a “banking desert,” and we ended the survey well before Bank [X]’s groundbreaking, we can rule out the possibility that cues augmented informal teaching via local learning and experience.

Should a domestically-owned business not be an option, can the identity of a foreign-owned business influence attitudes toward it? Public opinion regarding economic integration, especially in a developing context, is shaped by a variety of factors including issues of fairness and exploitation (Weitz-Shapiro and Winters, 2017) and colonial histories (Arias and Girod, 2014). Nation A is, in many ways, an archetype of these factors. Its US-caused incomplete sovereignty, itself inextricably linked to settler colonialism, means that it is deeply economically integrated with the US while also constrained in its set of economic policy choices (Feir et al., 2017; Leonard, Parker and Anderson, 2020). Even setting aside possible discrimination-based motivations, US/American banks have proven generally unwilling to engage in cross-border lending into Indian Country, especially into sovereigns with their own civil law and courts, small populations, and high poverty levels (Wellhausen, 2017).¹⁹ Practically, US/American-owned banks have been the only choice of foreign investor to provide formal financial services to Nation A, but no such bank has even explored opening on its reservation. This has made it effectively impossible for Nation A to choose economic integration as a means of mitigating financial exclusion. In fact, no US/American-owned firm engages in FDI on the reservation.²⁰

That Bank [X] negotiated entry to Nation A is consistent with a wealth of scholarship finding that identity and in-group preferences have substantial influences on facilitating economic transactions, especially via the mechanism of building trust (Charness and Chen, 2020; Shayo, 2020; Kalin and Sambanis, 2018). In the specific setting of foreign-owned banks entering (Westphalian) developing nations, Mian (2006) provides compelling evidence that cultural similarities between home and host improves market outcomes. Additionally, these findings are consistent with arguments that moral values including in-group/loyalty and fairness/respect influence individual attitudes over foreign policy (Kertzer et al., 2014). Taken together, these literatures imply, first, that shared in-group understanding and values among Native peoples would ease economic transactions when a Native-owned business serves Native customers. Second, should a Native nation have the choice to engage in international economic relations with another Native nation, it would all else equal prefer to do so.

Bank [X] upends the expectation that a foreign investor into Nation A would also be a US/American-owned one. It also provides the first opportunity for tribal members to hold meaningful preferences

¹⁹Among US banks that do invest in Indian Country, political risk management strategies can be normatively questionable; for example, mobile homes are common on reservations, since they can be physically seized and thus better act as collateral (Wellhausen, 2017).

²⁰Anecdotally, tribal members understand that the few local US-branded stores are franchises that shift risks onto the Nation A operators. Other American Indian Nations do host FDI from the US as well as other (Westphalian) home states.

over the identity of a foreign investor. Nonetheless, in this real-world setting the realistic alternative to a Native-owned foreign investor would be a US/American-owned one, and it would be naive to assume respondents are indifferent to that identity. Thus, Bank [X]’s behavior is consistent with a most-likely-case of an identity-based advantage.

Hypothesis 1b. *All else equal, respondents prefer a Native-owned local bank to one owned by a non-Native US/American company.*

However, there is extreme variation among Indian Country Nations’ bilateral relations and perceptions of shared identity, which becomes especially relevant when moving from preferences over a hypothetical Native-owned bank to a specific bank owned by Nation B. Much about Nation B is familiar to those in Nation A. On one hand, it is well known that Nation B’s economic success translates into a very high per capita disbursement to its membership, compared to the low-to-no per capita disbursement in Nation A.²¹ On the other hand, Nation A took actions to support Nation B during a difficult historical period in B’s relations with the US federal government, and that cooperation continues to be referenced and honored by leaders in Nation B. Most relevant is that Bank [X]’s well-respected, jovial CEO – Nation B’s face on Nation A’s reservation – expect the bank’s specific Nation B identity to add to rather than detract from its Native comparative advantage.²²

Hypothesis 1c. *Respondent support for Bank [X] will match or exceed their support toward a Native-owned bank of unspecified origin.*

Due to practical constraints, we are not able to test H 1a, H1b, or H1c experimentally. We expect to find observational data consistent with the transitive implication that respondents support Nation A ownership, over Native ownership, over US/American ownership; and that the same ranking holds if Nation B is substituted for general Native ownership.²³

3.2 Nation A Endorsement

Next, we consider Nation A’s implicit hypothesis that its endorsement will have a positive effect on respondent buy-in. Nation A is a parliamentary democracy with a legislative and judicial branch. Its elected legislature voted unanimously to approve the terms of Bank [X]’s entry,

²¹Consistent with Nation A’s and B’s sovereignty, the value of their per capita payments were not disclosed to the authors.

²²Conversations with Bank [X] CEO, July 2019.

²³Nor do we expect these rankings to vary as a result of randomized experimental interventions.

which is notable given that legislators are well known to butt heads (as supported by the authors' experience). The legislature also unanimously approved the following for inclusion in the survey: "We would like you to know that the [Nation A] Tribal Legislature supports the opening of a bank on the [Nation A] Reservation." The well-documented consequences of political polarization on public opinion, whether over domestic or international issues, reinforces the importance of this cohesiveness among elected officials and the credible and strong signal it establishes. (Aldrich et al., 2006; Druckman, Peterson and Slothuus, 2013; Guisinger and Saunders, 2017; Saunders, 2022).

Two possible counteracting factors are worth considering. First, the Nation A endorsement informs the respondent that the legislature supports the opening of a bank in general, and not Bank [X] in particular. In light of scholarship on business-government relations, especially in an FDI context, it is understandable that the legislature does not explicitly "hitch its wagon" to Bank [X] and thereby risk political backlash should the venture fail to provide desired benefits (Pandya, 2016; Walter, 2020).²⁴ In this sense, the non-specificity is by design aimed at preserving credibility. The endorsement invokes the legislature's expertise and trustworthiness with regard to its economic development strategy in principle, and not in practice. Even for respondents predisposed to respond to the intervention, the onus is on them to interpret that the legislature intends to increase buy-in to Bank [X] in particular.

Without deception, all those who the Nation A endorsement were later provided follow-up information: "We would like you to know that the [Nation A] Tribal Legislature voted unanimously to move all of the Tribe's banking services (excluding investments and 401k) to Bank [X]." While we cannot experimentally test the effect of this second, non-randomized information relative to the treatment, we expect within-subject reactions to the treatment and to this information

A second issue is that dissatisfaction with the government would weaken the credibility and thus the effects of elected officials' (unanimous) endorsement. Anecdotally, tribal members express dissatisfaction with the role of family networks in elections and the fairness of the government's recent financial decisions. A trusted interlocutor suggested to the authors that one reason the legislature rejected questions on voting behaviors is that tribal elections are characterized by very low turnout. Perhaps most importantly, Nation A leaders have for decades failed to bring about exactly the investment that they are endorsing now. Indeed, the tribe has not always been marked by such poor economic conditions. Entrepreneurship and economic success is an important part of

²⁴Late in the survey those receiving the Nation A endorsement were informed that the legislature agreed as terms of Bank [X]'s entry "to move all of the Tribe's banking services (excluding investments and 401k) to Bank [X]." While we cannot experimentally test the effect of this non-randomized information, within-subject reactions are highly correlated (correlation coefficient of 0.46 on a 5-point scale).

the tribe’s early history, which could further reinforce the perception of government failures in the modern era.

Nonetheless, we align our prior with the legislature’s expectation that the net effect of their endorsement will be positive, given their public and unanimous approval of Bank [X]’s entry and their approval of the endorsement intervention (not to mention the survey itself). We expect to find positive within-subject effects after receiving this information, and as well as effects on levels relative to a control group that does not receive any experimental treatment.

Hypothesis 2a. *Following the Nation A endorsement, respondent support for Bank [X] will increase relative to (a) their baseline support and (b) a control group that does not receive this information.*

When asked their attitudes toward becoming Bank [X]’s future customers, respondents are obviously not making binding commitments. Still, raising the possibility of becoming a customer asks respondents to consider the bank’s potential role in their own consumption choices. A positive effect of the treatment would indicate that the government can causally affect respondent intentions over what to do with their own money. When put this way, it is reasonable to suspect respondents may see the intervention as an overstep that damages the government’s credibility as a trustworthy messenger, as opposed to one with commercial interests. That said, we again align our prior with the legislature’s implied hypothesis.

Hypothesis 2b. *Following the Nation A endorsement, respondents’ reported willingness to become customers of Bank [X] will increase relative to (a) their baseline willingness and (b) a control group that does not receive this information.*

3.3 Federal Reserve Support

In our second experimental intervention, we use a statement we elicited from the Federal Reserve Bank Board of Governors for inclusion in the survey: “We would like you to know that the Central Bank of the United States, the Federal Reserve, supports the expansion of safe and accessible retail financial services for underserved populations and minority communities.” The positive treatment effect intended by the statement would be consistent a body of work that speaks to both subject matter expertise and attitudes toward external institutions. First, the Federal Reserve statement is consistent with best practices: predatory financial service providers do harm, especially in marginalized communities, and non-predatory services should replace them (Demirguc-Kunt et al.,

2018). Especially applicable to this setting, Gopalan and Rajan (2018) and Léon and Zins (2020) consider several (Westphalian) developing nation settings to establish that foreign financial service providers can indeed successfully improve capital access in underserved communities. Moreover, there are a variety of efforts to leverage Native-owned financial institutions in improving welfare in Indian Country, which suggests the Federal Reserve’s statement repeats what expert actors in Native communities already believe.²⁵ Much of the Federal Reserve’s community development-oriented work takes place outside of the public view, for example by funding research such as ours. That the Federal Reserve provided an intervention for the survey suggests that it expects, or at least hopes, that its credibility as a messenger can further its mission.

To hypothesize whether the Federal Reserve intervention would have a positive effect as intended, we need to consider several complications. First, it is an advantage that we employ the Federal Reserve’s true language approved exactly for this purpose. As well-established by Baerg (2020), Central Bank messaging is subject to detailed word-smithing in order to balance information provision with the many other effects of its communication. At the same time, we highlight that this statement includes phrasing and terminology that may be unfamiliar and thus generate noisy responses. In particular, the statement refers to the relatively abstract concept of “retail financial services,” which is terminology consistent with the Federal Reserve principle of non-endorsement of any specific commercial entity. The onus is on the respondent to make the connection between “retail financial services” and “bank,” as the word “bank” is not inclusive of all service providers. The onus is further on the respondent to understand the statement as consistent with support for Bank [X], similar to the Nation A endorsement.

Second, building theory around individual attitudes and the credibility of the Federal Reserve as a messenger requires thinking through what respondents think the Federal Reserve is. Formally, the Federal Reserve System is a non-profit, institutional actor with subject-matter expertise that serves all of the greater United States, including all nations in Indian Country. It is highly autonomous and not subject to direct control by the US federal government. That said, it is unrealistic to expect respondents to know, much less understand, the Federal Reserve’s complicated and unique status as not strictly private nor part of the US federal government. From the point of view of our respondent pool, we expect the Federal Reserve to be understood as a US-tied institution originating from the United States, which is external to Nation A and Indian Country as a whole. Cueing it as “the Central Bank of the United States” in the statement reinforces this interpretation.

²⁵See for example Oweesta Corporation (<https://www.oweesta.org/>).

Undoubtedly, the consequences of settler colonialism and the specific historical injustices faced by Nation A have the potential to impugn the credibility of an institution tied to the US. Therefore, there is a legitimate concern that the Federal Reserve intervention could have a counterproductive, negative effect on respondent attitudes.

Still, our prior is that the Federal Reserve statement will have a positive effect on individual attitudes, consistent with what we infer as their priors given that they provided the statement including attribution. As before, we expect to find positive within-subject effects after receiving this information, and as well as effects on levels relative to a control group that does not receive any experimental treatment.

Hypothesis 3a. *Following the Federal Reserve statement, respondent support for Bank [X] will increase relative to (a) their baseline support and (b) a control group that does not receive this information.*

As with the Nation A treatment, our prior is that the Federal Reserve treatment will not only increase support but also respondent’s willingness to become customers once the bank opens. Regarding personal financial advice, an external institution with expertise in banking is a credible source, although its US identity could weaken perceptions of its trustworthiness in this setting.

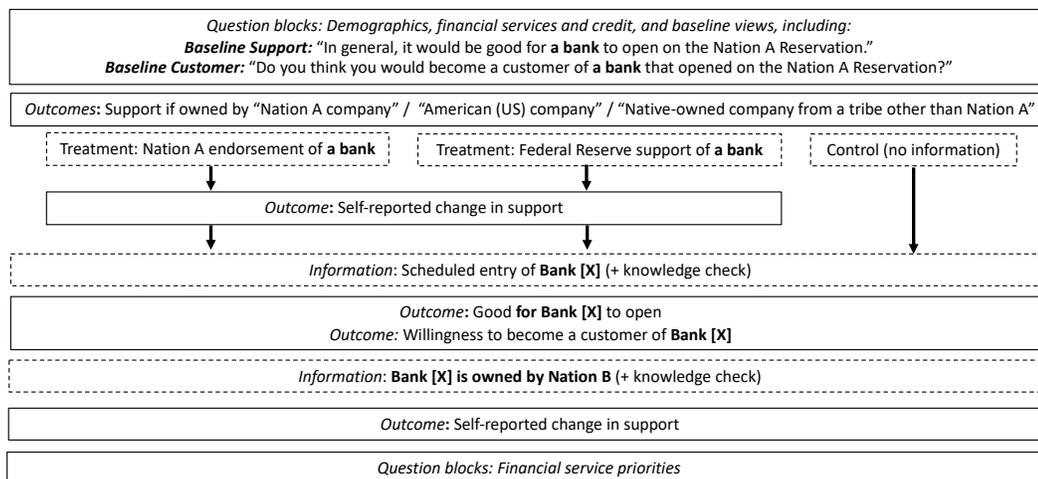
Hypothesis 3b. *Following the Federal Reserve statement, respondents’ reported willingness to become customers of Bank [X] will increase relative to (a) their baseline willingness and (b) a control group that does not receive this information.*

We pause to emphasize that the Nation A and Federal Reserve treatments are not parallel. While neither treatment references Bank [X] by name, they employ different language at different levels of generality that communicates different information. While our commitment to non-deception in this real-world setting facilitated buy-in from our stakeholders and meets our ethical priorities, this is a key methodological tradeoff. Nevertheless, both stakeholders intended their treatment to move attitudes in the same, positive direction, though there are plausible counteracting effects in either case. Of particular practical concern was that the Federal Reserve intervention would be so “polluted” by its US-tied identity as to be detrimental to the stakeholders’ shared goals. This made our empirical findings all the more normatively relevant to the Federal Reserve and its strategic communication decisions, both in isolation and in comparison to the Nation A endorsement.

4 Implementation Considerations

Figure 1 summarizes the survey flow for the ease of the reader.²⁶ Dotted boxes indicate the points at which the survey introduced different pieces of information, alongside an information check where appropriate. The survey begins with blocks of questions on demographics; financial knowledge; use of financial services and credit; and respondents’ baseline support and willingness to become a customer of a local bank. These blocks are followed by our main questions of interest, in an observational form and then a randomized experimental design. The last block is specific to the needs of our stakeholders, including questions about respondents’ priorities regarding financial services and their preferred means of accessing a local bank branch.²⁷

Figure 1: Survey Flow



The survey was intended to run from January through May 2020, which would be approximately one month before Bank [X]’s scheduled groundbreaking. After that time, Nation A would

²⁶See Appendix B.3 for question wording.

²⁷Figure 1 excludes a final intervention in which the enumerator provided information to the respondent on how to access their free annual credit reports (annualcreditreport.com). We find normatively positive high levels of respondent follow-up but no significant effects of the treatments. Results available upon request.

no longer be in a credibly pre-bank context. We of course stopped the survey abruptly in March, consistent with public health priorities around the arrival of the COVID-19 pandemic.²⁸ Nonetheless, we collected 982 high-quality responses from the target population, adult (18+) Nation A enrolled members (and legally recognized descendants). For its part, Bank [X] delayed its scheduled groundbreaking until finally able to hold a socially-distanced event in summer 2020.

To conduct the survey, we collaborated with Nation A’s tribal college to hire and train ten enumerators, who were all female students without prior experience.²⁹ Enumerators facilitated the survey on tablet computers via the offline Qualtrics app (Bush and Prather, 2019).³⁰ Enumerators set up stations in high-foot traffic areas on the Nation A reservation, including the casino lobby, which is a typical space used for community events; the on-reservation grocery store; the health clinic; senior centers; government offices; and the main tribally-owned enterprise during shift breaks.³¹ Enumerators also leveraged their personal connections, for instance to the main on-reservation bar and restaurant; disability care services; and drug and alcohol rehabilitation services. However, even enumerators’ implicit sampling strategies were stymied by the survey’s abrupt stop after three months (of a planned five).

We instructed enumerators to use convenience sampling, rather than selecting potential respondents randomly or randomly within demographic strata, for three reasons. First, the Legislature required as a condition of approving the project that as many people from their community as possible participate in the survey. Second, our enumerators helped us settle on a \$10 gift card to the only on-reservation grocery store as an effective form of compensation for survey respondents, which had the added benefit of keeping funds in the local economy. Our enumerators assured us that, in this small and highly impoverished community, news of this incentive would travel fast. We therefore saw it as a high risk that randomly denying some tribal members the opportunity to receive a gift card would generate unpredictable confounders via resentment or other mechanisms. Third, methodology aside, the authors believed that implementing randomization – thereby forcing enumerators to prevent fellow tribal members from having their voices heard – was simply inappropriate.

²⁸We find little evidence of differential responses to treatment between earlier and later respondents, increasing our confidence that the SUTVA assumption holds (see Appendix B.6).

²⁹Enumerators were paid \$15/hour (compared to the on-reservation average of \$9/hour). The tribal college received a charitable donation from Bank [X]. There was no cost to Nation A.

³⁰Although originally an incentive, due to the pandemic halt all enumerators were gifted their tablets.

³¹Our tribal college partner organized a large initial roll-out in the casino lobby, with free breakfast and lunch. Unexpectedly, the casino donated \$5 match play coupons to respondents on the day. Results are robust to a casino or first day fixed effect.

To determine whether or not our convenience sample is reasonably representative, we compare it to population averages in Nation A’s official records and its state (Appendix Table B.4). The main imbalance is our oversample of women, which may be a function of the composition of our (female) enumerators’ social networks (Schroedel et al., 2020). Each of two treatment groups and the third control group are generally well-balanced on observables, indicative of successful randomization. Nonetheless, we report results with and without a battery of controls (Appendix B.2).

5 Results

Baseline measures of attitudes provide a reference point on which to layer inferences regarding stakeholder cues. As the stakeholders hoped, baseline attitudes toward an on-reservation bank in Nation A were very favorable and also low variance. For both a hypothetical bank and the specific Bank [X], over 49% respondents chose the highest level of support (Figure A.1).³² There is some indication of lower support for Bank [X], which makes sense given the introduction of confounders associated with a specific named firm, although changes in the distribution are small in magnitude.³³ One concern is that high baseline support will generate inferential challenges due to ceiling effects. They also suggest that treatment effects may be small in magnitude in terms of movement on the relevant scale. In part because of these prior expectations, one of our question formats asked respondents directly whether and in which direction a cue changed their support, which allows even the most (least) enthusiastic respondents to express even more (less) enthusiasm without censoring.³⁴

5.1 Observational Results: Firm National Origin

We ask all respondents their opinion on the extent to which different national origins of the owner of a hypothetical on-reservation bank would cause their support to increase, decrease, or stay the same (1-5 scale). All respondents consider the same three kinds of owners, presented in a randomized order: a “Nation A-owned company,” “a Native-owned company from a tribe other than Nation A,” and “an American (US) company.”³⁵ As reported in Figure 2, domestic ownership by Nation A is significantly preferred to American (US) ownership; Nation A ownership

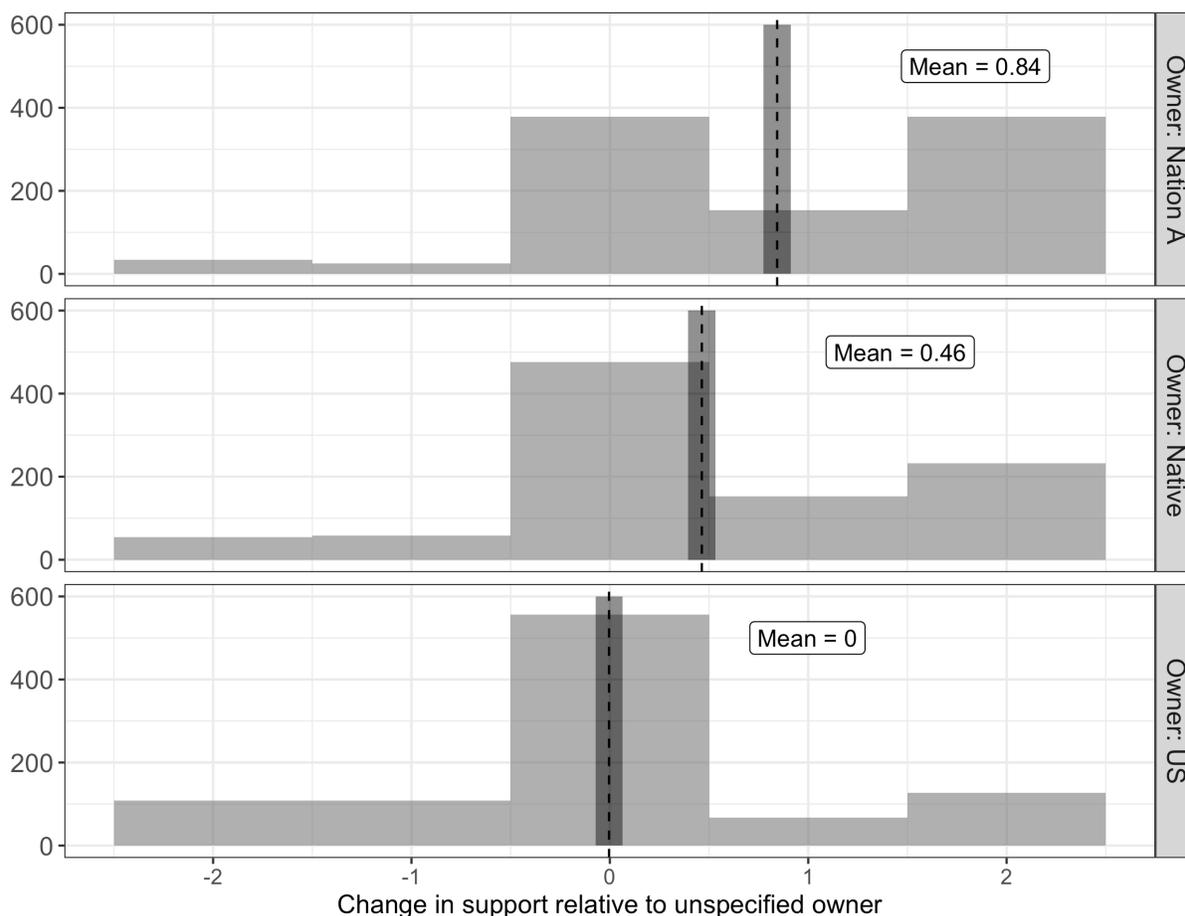
³²We drop 29 respondents who report that they are already customers of Bank [X].

³³Changing from a hypothetical to a true, concrete setting could also reduce noise in question answers if respondents’ attention increases.

³⁴Results are robust to data manipulations relevant to potential ceiling effects (Appendix C.1).

³⁵We chose the name “American (US) company” in consultation with our local partners to avoid implying that Native companies are not themselves American.

Figure 2: Evidence of home bias (H1a) and Native- over US-ownership (H1b).



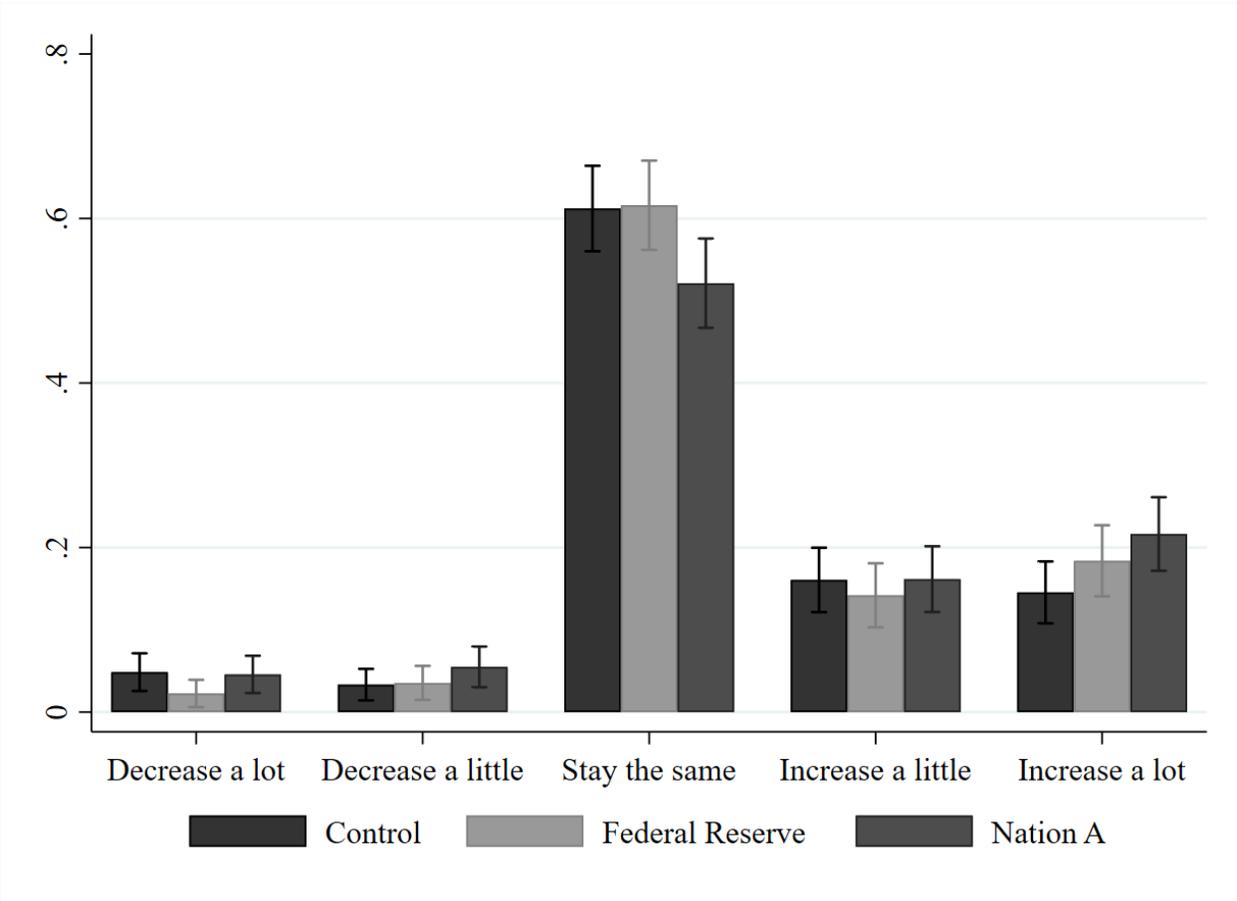
Note: dashed vertical lines identify the means of the distributions, and the shaded regions surrounding the lines are 95% confidence intervals.

is also preferred to foreign ownership by another Native Nation, although that effect is not as stark (H1a). Further, between foreign choices, Native (non-A) is preferred to American (US) (H1b).

Later in the survey, all respondents are informed that Bank [X] is 100% owned by Nation B and asked to self-report how this information might change their attitudes. Consistent with H1c, a very large proportion answer that their support of Bank [X] was the same or higher, and there is not heterogeneity across treatment groups (Figure 3). Further, in the associated knowledge check question, 45% of respondents answered that they already knew that Bank [X] was owned by Nation B, and 96% of them answered as predicted by H1c.³⁶ Taken together, these results support Bank [X]’s implicit hypothesis that its Native identity and Nation B identity in particular provide positive cues to respondents.

³⁶Eight percent of respondents decreased their support after learning of Nation B’s ownership, which is inconsistent with H1c. These respondents also had lower baseline support for Bank [X].

Figure 3: Evidence of overall stable or increasing support for Bank [X] after 100% Nation B ownership information shared (H1c).



5.2 Experimental Results: Nation A and Federal Reserve Interventions

We leverage three experimental outcome variables: a respondent’s self-report of the effect of the treatment; their post-treatment answer to whether it is good for Bank [X] to open; and their post treatment answer as to how likely it is that they will become a customer of Bank [X]. We first measure “difference(s) in levels,” or the difference between treatment groups in the average value of the relevant post-treatment survey item. Formally, we calculate the quantity $\bar{Y}_{D=1}^{Post} - \bar{Y}_{D=0}^{Post}$.³⁷ Second, “differences(s) in changes” is the difference between treatment groups in the average *change* between respondents’ baseline and post-treatment responses to the relevant survey item.³⁸ Formally, we calculate the quantity:

$$\left[\frac{\sum_{i=1}^n Y_{i,D=1}^{Post} - Y_{i,D=1}^{Pre}}{n} \right] - \left[\frac{\sum_{i=1}^m Y_{i,D=0}^{Post} - Y_{i,D=0}^{Pre}}{m} \right] = \overline{\Delta Y}_{D=1} - \overline{\Delta Y}_{D=0} \quad (1)$$

Because of our commitment to non-deception, the survey moves from a hypothetical bank to Bank [X] in particular. If this generates confounders that are not balanced across the treatment groups, we could misattribute changes to treatment effects. This is a key motivation for our empirical strategy that considers both levels and changes relative to appropriate baselines.

Figure 4 plots values are standardized “difference(s) in levels” and “difference(s) in changes” estimates, which can be interpreted as the average treatment effect (ATE) measured in standard deviations of Y .³⁹ Standard errors are estimated using seemingly unrelated regression (SUR) to account for possible correlation in the standard errors across outcomes.

The first panel of Figure 4 shows that, when asked to self-report the effect of the Nation A treatment in light of their baseline view, respondents reported a positive and large effect. The same is true of the Federal Reserve treatment in the second panel. Compared to the control group, those receiving the Nation A treatment increased their support by 0.66 standard deviations, and those receiving the Federal Reserve treatment increased by 0.79 standard deviations.

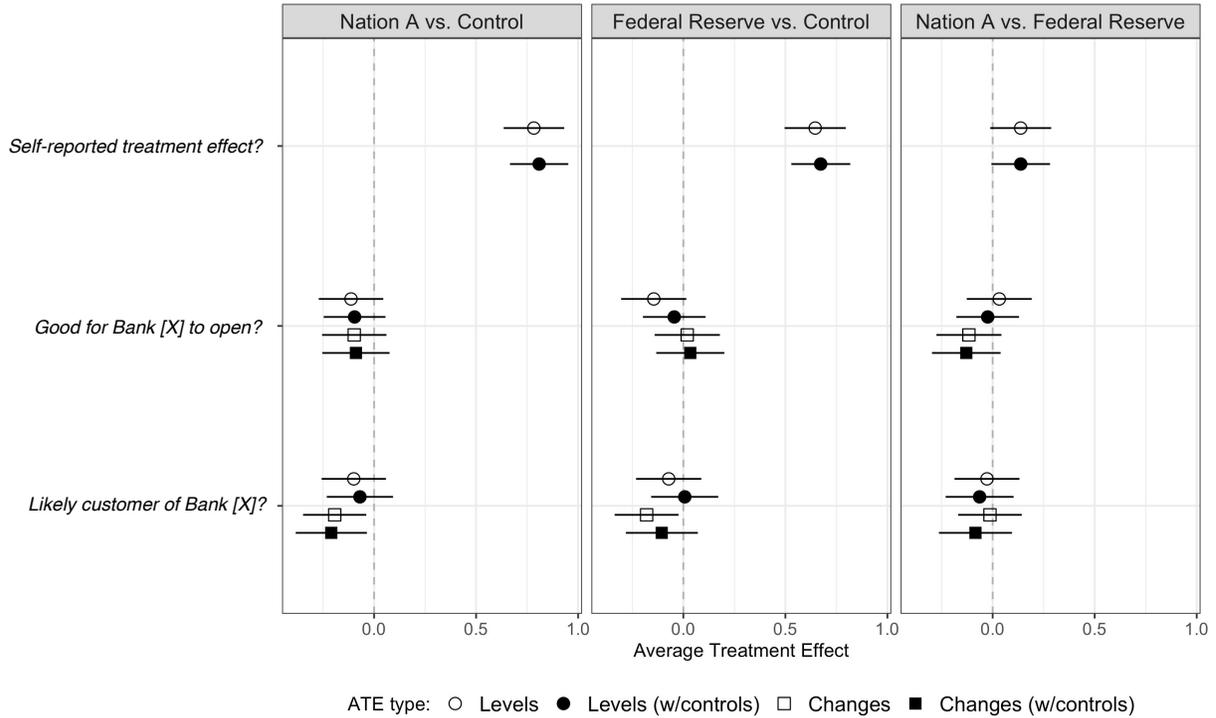
Effects on outcome variables that do not rely on self-reports are much more muted. Neither the

³⁷For *Self-reported treatment effect?* the control group outcome is a vector of zeros.

³⁸Measuring within-subject change requires asking similar questions at different points in the survey. This could generate fatigue, which may change the variance of responses even within the control group if for example respondents become more likely to select a “middle of the road” answer, or responses become more random. Helpfully, we cannot reject the hypothesis that the variance in question responses within the control group before and after treatment is the same (Appendix B.7). In the case of consistency bias, our results could be thought of as a lower bound of the treatment effect (Falk and Zimmermann, 2013).

³⁹To most fully address potential imbalance across treatment groups, we include ATEs for models with a battery of controls (see Appendix Table B.2). “Differences in changes” are not relevant to the *Self-reported treatment effect?* outcome.

Figure 4: Causal effects of the Nation A treatment and the Federal Reserve treatment, alone and compared.



Notes: Standardized treatment effects. 95% confidence intervals. (For controls, see Appendix Table B.2.)

Nation A nor the Federal Reserve treatment have a positive effect on the outcome variable *Good for Bank [X] to open?* Contrary to the stakeholders’ implicit hypotheses, there is no evidence of increased support from respondents treated with the Nation A endorsement (H2a) or the Fed statement (H3a). Nor do the treatments have positive effects on the outcome *Likely customer of Bank [X]?* Both treatments have negative and significant effects on “difference(s) in changes,” meaning that respondents on average were more interested in becoming customers of Bank [X] before receiving either of the treatments, exactly opposite to the stakeholders’ intended effect of the cues (H2b and H3b).

Panel 3 of Figure 4 shows that both sets of treatment effects are highly similar. Respondents

who received the Nation A treatment self-reported larger increases in support than those who received the Federal Reserve treatment, but both were positive and the difference is only marginally significant. The differences between the Nation A and Federal Reserve treatment groups on all other outcome variables are statistically insignificant and near zero in magnitude. This is a positive result for the Federal Reserve, insofar as its intervention’s effects were on par with that of Nation A and not counterproductive.

It is fair to say that interventions from both Nation A and the Federal Reserve “backfired.” Each cue aimed to leverage the stakeholder’s credibility in generating positive treatment effects. However, not only were the cues inconsistent in generating positive effects, they may have even moved respondents in a negative direction. This is especially concerning for the *Likely customer of Bank [X]?* outcome, given its importance in using this commercial venture as an economic development strategy.

6 Extension: Exploring “Backfire”

It is possible that the ATEs reported in Figure 4 are masking underlying heterogeneity in effects across groups of respondents. From a normative point of view, this is particularly relevant when it comes to evidence of “backfire.” To be clear, looking into heterogeneous effects is a post-hoc, exploratory exercise. However, if treatments backfired (or worked well) for identifiable groups, our stakeholders could use this information in updating their priors, and we could gain insight into the conditions under which top-down cues might trigger individual attitudes contrary to policy goals.

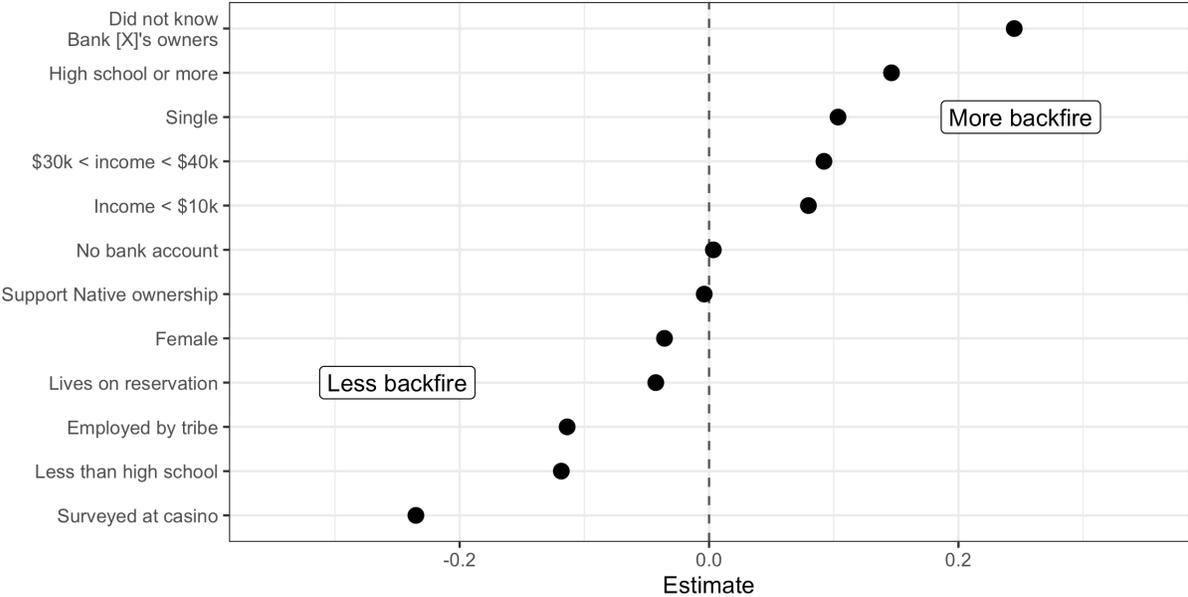
We focus on the “difference(s)-in-changes” of the *Likely Bank [X] customer?* outcome, given its special importance and that its ATEs most consistently “backfired.” We employ a several-step process. First, we estimate individual treatment effects based on a large set of possible pre-treatment covariates derived from our survey questions (Appendix B.2). We regress the outcome variable on a set of covariates for the Nation A treatment group, the Federal Reserve treatment group, and the control group, and we predict the counterfactual outcomes for each treatment group (Appendix B.8). We then use these predicted counterfactual outcomes to generate estimated individual-level treatment effects based on observable covariates (Appendix A.2). We then form an indicator variable of whether each individual’s predicted treatment effect is negative, which would indicate that it “backfired.”

Next, we want to examine whether we see patterns among the sets of individuals for whom our process has predicted “backfire.” To do so, we use lasso regression, which minimizes the sum

of squared errors while constraining the sum of all estimated coefficients below some threshold, and in the process retains the strongest predictors of Y while shrinking the rest of the coefficients towards zero (Tishbirani, 1996). In our case, the dependent variable Y is the “predicted backfire” dummy. We plot the variables and coefficients retained via the lasso selection procedure in Figure 5. Given that we are not aware of any theoretically grounded post-selection inference procedure that would give us correct standard errors for our multi-step process, we do not report them and again emphasize that this is an exploratory exercise.

Figure 5 can be read as follows. The vertical axis indicates the variables selected by the lasso procedure; these are the factors one can think of as most predictive of “backfire” out of the full set of covariates in Appendix B.2. Along the horizontal axis, we plot the associated marginal effect of the variable on the estimated ATE. If the coefficient is to the right of the dashed line, the variable results in a higher probability of “backfire,” and if the coefficient is the left of the dashed line, the variable results in a lower probability of “backfire.”

Figure 5: **Which variables are most predictive of treatment “backfire”? LASSO estimates.**



The results suggest patterns in that heterogeneity that merit further attention.⁴⁰ First, we see several of the “less backfire” factors as suggestive of a role for community connectedness in especially positive treatment effects. Given that the casino effectively functions as meeting place, it alongside being employed by the tribe and living on the reservation suggest that respondents with

⁴⁰We focus only on recovered factors that we see as reasonably interpretable even via post-hoc speculation.

strong sociotropic ties are particularly receptive to the treatment. Additionally, knowledge of Bank [X]’s ownership is almost certain for anyone who was attentive to the lengthy negotiation process, so one could interpret not knowing Bank [x]’s ownership (the strongest predictor of “backfire”) as evidence of weak community involvement. It would be consistent with the stakeholders’ interests if individuals exhibiting strong community connectedness were effective influencers in the broader population.

Given the policy goal that Bank [X]’s entry would mitigate financial exclusion, and the context of very high baseline buy-in, patterns in the set of factors most predictive of “backfire” are of special normative concern. First, it is a credible assumption that financially precarious respondents are among those with less community connectedness. Second, it is troubling that “backfire” is higher among lower-income respondents. Third, while not having a bank account is a meaningful factor recovered by the lasso procedure, the interventions are not especially effective for those who are unbanked. It is normatively promising that the interventions had a positive influence on respondents with less than a high school education. Nonetheless, our overall interpretation of this exercise is that Nation A and Federal Reserve interventions were damaging especially to respondents in groups that they were most interested in targeting. As the interventions relied on a credibility mechanism, a broader takeaway is that stakeholders’ ex ante evaluations of their credibility – and not only its average, but also its distribution in the target population – is a key input to deciding whether intervention in itself is on net a productive choice.

7 Conclusion

We implemented a unique survey in American Indian Nation A, a highly-impooverished “banking desert” bereft of a formal financial service provider, in which an intended development-enhancing branch of a retail bank was soon to break ground. By successfully negotiating the entry of a foreign bank to its reservation, Nation A made a policy choice to leverage FDI in pursuit of its goals of mitigating financial exclusion in its jurisdiction. Nation A, Bank [X], and the Federal Reserve as an external advisory institution have shared interests in the branch’s viability. However, the strategy of fighting financial exclusion via economic integration relies on the voluntary consumption choices of individuals, and thus their attitudes and intentions with regard to the branch.

We find very high baseline buy-in to a hypothetical local branch, as well as the specific Native-owned Bank [X] from Nation B, consistent with expectations that shared identity eases economic transactions even across borders. True interventions provided by both Nation A and the Fed-

eral Reserve, implemented without deception, had similar results, reassuring to the Federal Reserve that cueing its US-tied identity did not generate specific backlash. However, both interventions generated weak results. While it appears respondents with strong community connectedness responded positively, normative “backfire” is associated with financially precarious groups.

That our results are in many ways complex is worthy of acknowledging. There are many actors in the world interested in bringing the benefits of economic integration to promote development in underserved areas – including a firm like Bank [X] that is taking a risk in investing abroad to provide some of those needed services in a formal “banking desert.” Still, even given high baseline buy-in, as well as support from the national government and an external advisory institution, it is not a foregone conclusion that stakeholders’ top-down cues are useful in moving individual attitudes toward the development-enhancing outcome. Here, unforeseen variation in credibility, and its distribution among the population, appears to have weakened the effectiveness of well-intentioned, united stakeholders to build the ex ante support crucial for future success. That the path to maximizing shared economic development goals is complex should further motivate scholarly activity in such normatively compelling spaces.

Last, there exist many nations in the world that are not Westphalian nation-states but nonetheless have sovereign authority over whether a business, a cash flow, a good or service, or an economic migrant can come across their border. Including such nations in the unit of analysis allows us to extend theory development and testing to the full set of sovereigns making choices over economic integration. These additional sovereigns include many others like Nation A, where steps toward deeper economic integration are incredibly salient and normatively consequential.

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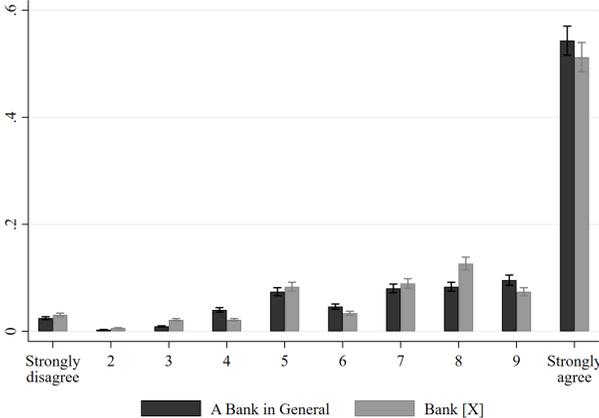
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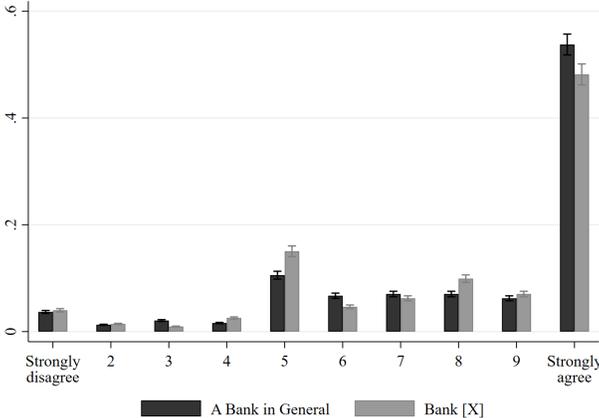
Online Appendix

A Figures

Figure A.1: “It would be good for (a bank / Bank [X]) to open a branch on the Nation A Reservation.” Patterns are consistent with descriptive expectations of high baseline support and a skewed distribution.

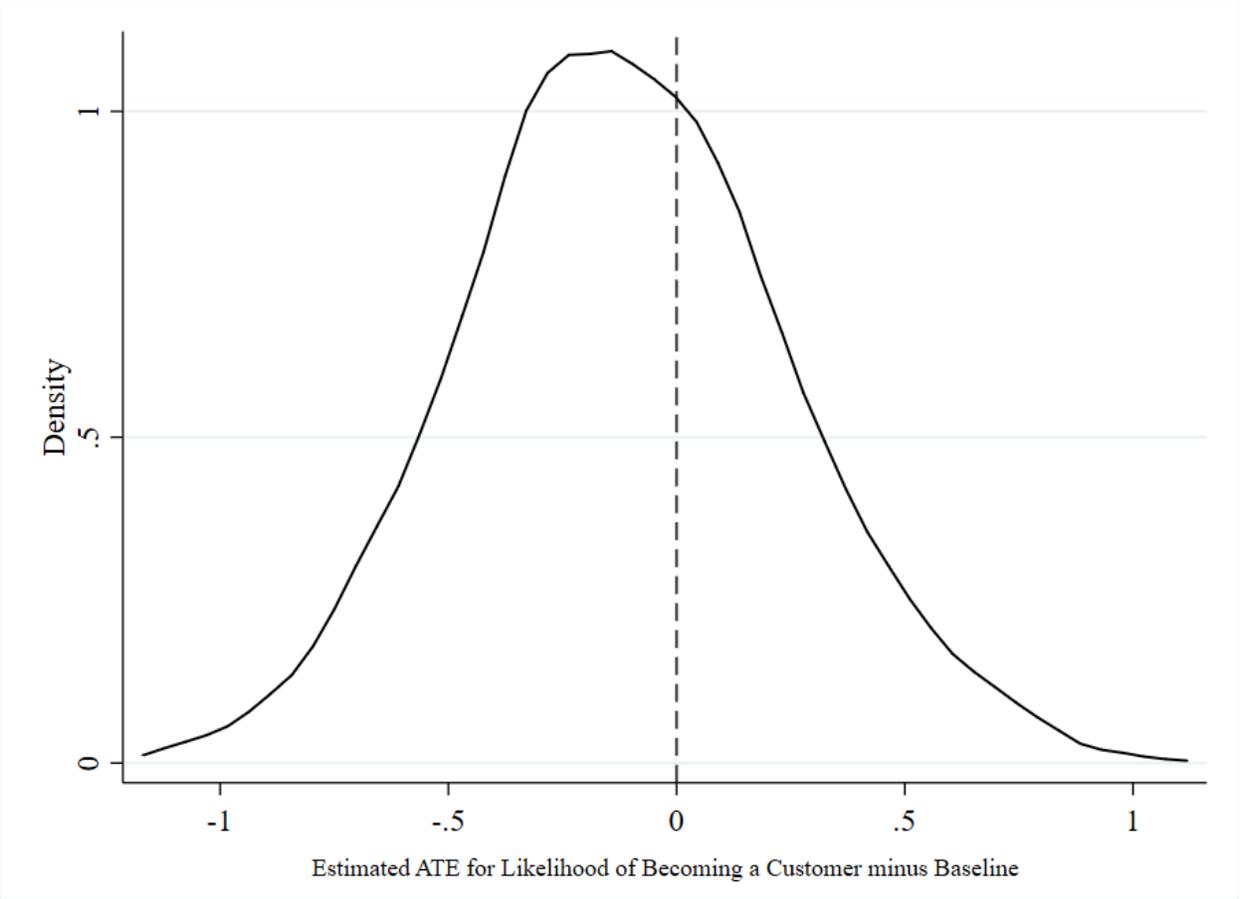


(a) Control Group Only.



(b) Treatment Groups Pooled.

Figure A.2: Distribution of estimated individual treatment effects on “Become a customer (change from baseline)” DV



B Tables

Table B.1: Comparison of Nation A, AIAN, and United States Development Indicators

	Nation A	AIAN Avg.*	United States
Poverty rate	37.9%	26.2%	14.6%
% \leq High school education**	56.3%	45.9%	37.9%
Median household income	\$33,836	\$39,719	\$57,652
Life expectancy***	60.3	73.0	78.8

Notes: *AIAN Avg. = Average values for individuals self-identifying as AIAN. **Of adults age 25+. ***2013-2016 average. Sources: Tribal records, Indian Health Service, US Center for Disease Control and Prevention, and the American Community Survey conducted from 2013-2017.

Table B.2: List of Variables included in Reweighting and ATE LASSO Procedure.

Indicator of whether someone took the survey on a tablet
Enumerator fixed effects
Indicator of having less than a high school education
Indicator of having a high school education
Indicator of having a some college
Indicator for indicating sex as female
Indicator of having a household having at least four dependents (either adults or children)
Indicator of being Single (rather than married or in a common law relationship)
Indicator for living on the reservation
Indicator for not being employed
Indicator for being employed by the tribal government (government only - not enterprises)
Indicator for having an invalid age answer
Indicator for being 18-25 years old
Indicator for being 26-35 years old
Indicator for being 36-45 years old
Indicator for being 46-55 years old
Indicator for having household income less than \$10,000
Indicator for having household income between \$10,000 to 20,000
Indicator for having household income between \$20,000 to 30,000
Indicator for having household income between \$30,000 to 40,000
Indicator for having household income between \$40,000 to 50,000
Indicator for having done the survey at the Casino
Indicator for having done the survey on their cellphone
Indicator for having done the survey at the first day of the rollout
Their ranking of support for a Nation A owned bank opening
Their ranking of support for a US owned bank opening
Their ranking of support for a Native owned bank opening
Indicator of being an enrolled member
Indicator of having not having got their free credit report
Indicator of not being able to get \$400 in an emergency
Indicator of having Internet access at home
Indicator of listening to Natin A news most of the time
Indicator of having payday loan debt
Indicator of not having a credit card
Indicator of having trust in banks five or less out of 10
Indicator of not having a bank account
Indicator of not wanting a bank account
Indicator of self-assessed "very bad" credit
Indicator of having more than four different sources of debt
Indicator of using cash checking services most of the time
Indicator of having a self-assessed financial knowledge less than 5 out of ten
Indicator of having self-assessed financial satisfaction less than four out of ten
Indicator of not knowing their could get a free credit report
Indicator of not knowing Bank [X] was Nation B owned
Indicator of not knowing Bank [X] was going to open

The precise questions related to the outcome variables of interest and their respective baselines can be found in Table B.3

Table B.3: Outcome Variables of Interest and Associated Questions and Baselines A

	Outcome label	Exact Question
1	Support change for local bank (self-reported effect)	We would like you to know [statement treatment]. Does knowing this about the [treatment] make your support for a bank opening on the [Redacted] Reservation increase, decrease, or stay the same? (0 Decrease a lot to 5 increase a lot)
2	Bank [X] support level	How much do you agree with this statement, on a scale from strongly disagree (1) to strongly agree (10)? "It would be good for Bank [X] to open a branch on the [Redacted] Reservation."
3	Support change for Bank [X] due to Nation B owner	Does knowing that Bank [X] is 100% owned by the Nation B make your support of Bank [X] increase, decrease, or stay the same?
4	Bank [X] customer likelihood level	Do you think you will become a customer of Bank [X] when it opens on the [Redacted] Reservation?
5	Behavior: Steps towards accessing credit report	After telling them they could get a free copy of their credit report every 12 months, this variable equals one if they a) ask the enumerator about how to get their credit report, click on the website link provided, or write the link down (as indicated by the enumerator).
Baseline for		
2	Bank [X] support level	How much do you agree with this statement, on a scale from strongly disagree (1) to strongly agree (10)? "In general, it would be good for a bank to open on the [Redacted] Reservation."
3	Support change for Bank [X] due to Nation B owner	Do you think you would become a customer of a bank that opened on the [Redacted] Reservation? (0 Definitely not to 5 Definitely yes)
5	Bank [X] customer likelihood level	Would your support increase, decrease, or stay the same if the bank was owned by a Native-owned company from a tribe other than Nation A? (0 Decrease a lot to 5 Increase a lot)

Table B.4: Evaluating Representativeness of Our Respondents: Comparison to Nation A Administrative Data and 2013-2018 American Community Survey Data for American Indians Living in the Same State as Nation A

	Nation A Records	ACS
Average age	0.64	
Proportion female	0.11***	0.13***
Single		0.09***
No children in household		-0.03 ⁺
Employed		0.16***
Less than HS		-0.09***
High school or GED		0.00
Some college		0.03
2-year degree		0.05***
4-year degree		0.01
Advanced degree		-0.01
18 to 24		-0.04**
25 to 34		0.06***
35 to 44		-0.01
45 to 54		-0.03 ⁺
55 to 64		0.00
65 and over		-0.04**

Differences in proportions or means reported. Observations vary due to missing responses. ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$ *** $p < 0.001$.

Table B.5: Regressions of outcome variables on treatments, controlling for baseline response.

Comparison:	Control				US Fed	
Outcome:	Support	Customer	Support	Customer	Support	Customer
US Fed treatment	-0.082 (0.151)	-0.153*** (0.058)				
Nation A treatment			-0.231 (0.152)	-0.142** (0.058)	-0.080 (0.156)	0.012 (0.060)
Baseline FE	Y	Y	Y	Y	Y	Y
Num.Obs.	628	622	645	637	625	623
R2	0.186	0.126	0.143	0.107	0.166	0.096
R2 Adj.	0.173	0.119	0.130	0.100	0.152	0.089

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table B.6: Evidence of Violations of SUVTA?

	levels			changes	
	Self-reported	Open	Customer	Open	Customer
Federal Reserve	0.770*** (0.121)	-0.00929 (0.160)	0.228 (0.164)	0.0888 (0.142)	-0.270* (0.143)
Days Since Start	-1.85e-16 (0.000)	0.00761** (0.004)	0.00380 (0.004)	0.00114 (0.003)	-0.00254 (0.004)
(Federal Reserve) ×Days Since Start	-0.00865** (0.004)	-0.00627 (0.006)	-0.0108* (0.006)	-0.00571 (0.005)	0.00797 (0.005)
Roll-Out Day	-5.23e-15 (0.000)	0.165 (0.121)	0.252* (0.129)	-0.137 (0.122)	-0.0932 (0.123)
(Federal Reserve) ×(Roll-Out Day)	0.0559 (0.151)	-0.0925 (0.180)	-0.351* (0.180)	0.0461 (0.190)	-0.164 (0.188)
Nation A	0.828*** (0.131)	0.0399 (0.162)	0.0291 (0.176)	0.000663 (0.141)	-0.226 (0.148)
(Nation A) ×(Days Since Start)	-0.00462 (0.005)	-0.0108* (0.006)	-0.00762 (0.006)	-0.00493 (0.005)	0.00186 (0.006)
(Nation A) ×(Roll-Out Day)	0.0840 (0.149)	0.0755 (0.176)	-0.00672 (0.187)	-0.0172 (0.179)	0.0102 (0.178)
Observations	982	970	946	949	941
Adjusted R^2	0.124	0.006	0.008	-0.002	0.011

Notes: Linear outcome model used. Heteroskedasticity robust standard errors reported. Interpretation: Across five models, we recover only a few non-systematic, small magnitude, and weakly significant relevant coefficients. We interpret this as very little evidence of differential responses to treatment between earlier and later respondents, increasing our confidence that the SUVTA assumption holds.

Table B.7: Evidence on Fatigue: F-Tests for Difference in Variance within the Control Group Before and After Treatment

	Good for Bank/Bank [X] to Open	Likelihood of Becoming Customer of Bank/Bank[X]
Ha: ratio < 1	0.2436	0.4771
Ha: ratio != 1	0.4872	0.9541
Ha: ratio > 1	0.7564	0.5229

Notes: Classic F-test for differences in variance. P-values reported in cells. Interpretation: We cannot reject the hypothesis that the variance in question responses within the control group before and after treatment is the same; therefore, we do not find evidence in support of fatigue effects.

Table B.8: Models the Predict Likelihood of Becoming a Customer By Treatment Group

	Control	Federal Reserve	Nation A
Less than high school degree	0.0774 (0.184)	-0.307 (0.256)	0.447 (0.298)
High School or GED	0.0658 (0.155)	-0.0780 (0.166)	-0.0625 (0.135)
Some college but no degree	-0.0448 (0.154)	-0.104 (0.149)	0.0798 (0.123)
Female	-0.0988 (0.111)	0.0319 (0.108)	0.0574 (0.120)
Has at least four dependents	-0.0858 (0.115)	0.186* (0.103)	-0.0191 (0.132)
Single	0.0213 (0.107)	-0.0779 (0.110)	-0.0402 (0.120)
Lives on reservation	-0.0897 (0.120)	-0.155 (0.111)	0.117 (0.128)
Not employed	0.0824 (0.113)	0.232 (0.148)	0.0900 (0.125)
Employed in Tribal Government	-0.121 (0.144)	-0.143 (0.119)	0.00485 (0.140)
Missing age	0.297 (0.203)	0.0450 (0.192)	0.0722 (0.274)
18 to 24	0.0511 (0.296)	-0.262 (0.290)	0.228 (0.227)

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Table B.8 – continued from previous page

	Control	Federal Reserve	Nation A
25 to 34	0.234 (0.158)	-0.105 (0.149)	0.190 (0.160)
35 to 44	-0.0373 (0.163)	-0.0520 (0.150)	-0.0803 (0.149)
45 to 54	-0.191 (0.140)	-0.0487 (0.164)	-0.186 (0.152)
Less than \$10,000	-0.0433 (0.162)	-0.369* (0.189)	-0.457** (0.195)
Between \$10 to \$20,000	-0.0803 (0.178)	-0.151 (0.173)	-0.349** (0.148)
Between \$20 to \$30,000	0.114 (0.166)	-0.197 (0.170)	-0.165 (0.151)
Between \$30 to \$40,000	0.260 (0.180)	-0.348* (0.177)	-0.156 (0.167)
Between \$40 to \$50,000	0.243* (0.141)	0.0974 (0.154)	0.0306 (0.174)
casino	-0.150 (0.123)	-0.0192 (0.101)	0.258** (0.114)
Survey taken with enumerator	0.240 (0.440)	0.0666 (0.263)	-0.223 (0.275)
Took on cell phone	0.0947 (0.470)	-0.443 (0.290)	-0.251 (0.288)
Nation A ownership change support?	-0.0335	-0.0161	0.0109

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Table B.8 – continued from previous page

	Control	Federal Reserve	Nation A
	(0.049)	(0.045)	(0.047)
Native ownership change support?	-0.0527 (0.054)	0.0213 (0.044)	-0.0166 (0.045)
US ownership change support?	-0.0133 (0.055)	-0.0937* (0.056)	-0.00483 (0.051)
Enrolled member	0.0841 (0.098)	0.106 (0.122)	0.125 (0.121)
Can't get \$400 in emergency	0.00374 (0.103)	0.0862 (0.117)	0.0384 (0.110)
Has internet at home or smartphone	-0.178 (0.158)	-0.0812 (0.124)	-0.193 (0.206)
Pays attention to NNA news most times	0.172 (0.108)	-0.0454 (0.103)	0.0573 (0.103)
Has Payday loan debt	-0.0943 (0.158)	-0.000183 (0.143)	-0.0374 (0.131)
Doesn't have a credit card	-0.114 (0.116)	0.151 (0.109)	-0.0657 (0.099)
Less than median bank trust, less than 7/10	0.145 (0.103)	0.0655 (0.095)	0.200* (0.107)
No bank account	0.0720 (0.121)	-0.203 (0.131)	-0.0620 (0.151)
Didn't know Bank [X] Nation B owned	0.201*	-0.156	-0.0652

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Table B.8 – continued from previous page

	Control	Federal Reserve	Nation A
	(0.114)	(0.106)	(0.098)
Didn't know Bank [X] was going to open	-0.196 (0.135)	-0.0401 (0.114)	-0.187 (0.122)
Didn't know could receive free credit report	-0.0441 (0.102)	-0.123 (0.099)	-0.116 (0.104)
Self-assessed financial knowledge ranked < 5/10	0.134 (0.149)	0.115 (0.165)	0.103 (0.165)
Satisfaction with finances less < 4/10	-0.296* (0.157)	-0.0395 (0.116)	-0.317** (0.142)
Uses cash checking most of the time	0.274* (0.157)	0.135 (0.171)	0.239 (0.224)
Doesn't have or want a bank account	-0.256 (0.297)	-0.0422 (0.164)	0.0670 (0.198)
More than four sources of debt	0.150 (0.144)	0.161 (0.138)	0.0370 (0.162)
Very bad self-assessed credit	0.0936 (0.259)	0.232 (0.149)	0.143 (0.163)
Observations	299	290	298
Adjusted R^2	0.014	0.065	0.034
Actual Mean of Outcome	0.071	-0.059	-0.11
Predicted Mean of Outcome	0.071	-0.059	-0.11

Linear outcome model used. Heteroskedasticity robust standard errors reported. Observations vary due to missing responses.