Financing Development at Home: A Survey Experiment on Diaspora Members

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Abstract

Developing countries often depend on the wealth of diaspora communities, but under which conditions are migrants willing to sacrifice personal gain for their origin country's national welfare? On the one hand, diaspora communities may support home country governments as a means of assisting family at home or out of a sense of nationalism. On the other hand, diaspora communities may oppose home country governments, which they may have intentionally left by emigrating or come to question after leaving their country of origin. This paper investigates how social, political, and self-interested motivations explain the decisions of diaspora members to share financial capital with home country governments in the form of diaspora bonds. These bonds allow diaspora members to invest directly in the governments of origin countries, usually at below-market returns, a "patriotic discount" that encourages migrants to contribute charitably through a less-lucrative investment. Using a conjoint survey experiment fielded to members of the Indian diaspora in the United States, we randomly manipulate features of hypothetical bonds to measure heterogeneity in willingness to invest in Indian diaspora bonds. We find the greatest evidence that diasporans select bonds for social reasons and little evidence of political motivations for their investments.

Note: The design and results of the first wave of our survey are reported in the paper. After completing our first wave of data collection, we have made some changes to our experimental design which we plan to implement in subsequent waves. This revised design is described in the appendix.

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1 Introduction

When will diaspora members support their countries of origin by buying sovereign bonds? On the one hand, diaspora members may be willing to lend funds to their origin country on favorable terms out of national affinity or a sense of obligation, offering a "patriotic discount" to home country governments. On the other hand, diasporans may oppose home country governments, which they may have intentionally left by emigrating or come to question after leaving their country of origin. We investigate how social, political, and self-interested motivations explain the decisions of diaspora members to share financial capital with home country governments in the form of diaspora bonds.

Diasporans' interest in government bonds is a live question for developing country governments, which are considering diaspora bonds as a means of harnessing the capital of their co-nationals living abroad. Diaspora members already contribute to their home countries by remitting money to family and friends. In 2017, diaspora communities of developing countries sent $466 billion in remittances to their home countries. However, remittances flow to individuals in developing countries, benefiting governments only indirectly. By contrast, diaspora bonds allow developing countries to tap the resources of co-nationals directly. In 2017, Nigeria raised $300 million through a diaspora bond sold to its diaspora community in the UK and the US (Warami, 2017). Pakistan launched a diaspora bond in January 2019, announcing intentions to raise $1 billion (Bokhari, 2019).

We suggest that diasporans' preferences with respect to origin country bonds are relevant to literatures in international political economy on investor sentiment and support for foreign aid. Diaspora bonds sit on a continuum between an investment vehicle and a charitable contribution, structured as a bond, but usually sold at a steep discount compared to bonds marketed to institutional investors. Therefore, ascertaining the tradeoffs made by potential buyers of diaspora bonds allows us to evaluate claims about investor preferences and support for development assistance.

We derive two sets of expectations about the role of national affinity and political support for the government in determining potential borrowers' willingness to buy diaspora bonds. We test these against an alternative expectation that willingness to buy a bond is simply a function of prospective financial return.

We test our three sets of expectations using a conjoint survey experiment fielded to members of the Indian diaspora living in the US. We focus on the Indian diaspora since India has issued multiple diaspora bonds in the past, making it a plausible case. Furthermore, the focus on a single diaspora community allows us to hold constant attributes of the home country and home country government. The experiment consists of a forced choice conjoint, in which we randomly manipulate the features of two bonds among which participants are asked to choose. Participants are presented with three pairs of Indian diaspora bonds and three pairs that compare Indian diaspora bonds to alternative investments (a US Treasury bond, a Brazilian sovereign bond, and an emerging markets bond index). In addition, we randomly assign respondent to receive treatments that prime them to consider bonds in altruistic or investment frames, to consider how the government will manage the money, and the current state of the economy. In addition to a $5 gift card for all who complete the survey, we inform respondents that three will be chosen

at random to receive a $100 US Treasury bond. This unique incentive encourages participants to take the exercise seriously and carefully weigh the trade-offs across different bonds.

We find evidence consistent with many of the hypotheses based on social affinity and national identity. In particular, we find that framing bonds as an opportunity to give back increases respondents' willingness to buy a diaspora bond compared to alternative investment vehicles. Furthermore, respondents with higher levels of self-reported national pride are more likely to select a diaspora bond compared to individuals with lower levels of national pride. There is less evidence that political support matters for respondents' willingness to lend to their home country government, even when respondents are primed to consider how the government will spend the money. Neither do respondents appear to appraise diaspora bonds purely through the lens of financial risk: even when the bonds are framed as an investment opportunity, respondents' support for bonds is not sensitive to economic conditions in the country of origin.

Our paper makes a number of contributions to the literatures on international and development finance and migration. We provide an empirical test of the potential for diaspora bonds, showing that diasporans are in fact willing to lend to the government in their country of origin, and will choose diaspora bonds over alternative investment vehicles when diaspora bonds are framed as an opportunity to give back. Furthermore, we show that this particular category of investor, a diaspora investor, is making investment decisions not purely based on financial return. Interest rates are less important in predicting bond choice when diaspora bonds are framed in terms of an opportunity to give back.

The remainder of the paper proceeds as follows. Section 2 explains what diaspora bonds are and why they are of interest for scholars of international political economy and development finance. Section 3 outlines our theoretical framework and introduces our hypotheses about diasporans' interest in diaspora bonds. Section 4 briefly describes the Indian case, while Section 5 describes the design of our study. Section 6 reports and discusses our results. Section 7 offers a brief conclusion and outlines some implications of our study for governments considering diaspora bonds.

2 Diaspora bonds and development finance

Attracting foreign finance can be challenging for developing countries. Particularly in international bond markets, investors often are less responsive to 'fundamentals' in developing countries than they are with more established borrowers, more likely to increase the cost of borrowing in response to a wide swathe of economic policy (Mosley, 2003) and to use broad categories to decide creditworthiness (Brooks, Cunha and Mosley, 2015). However, raising external finance is crucial for developing countries, including to fund investments in infrastructure. One way of meeting these financing needs, likely at a lower cost than bond market finance, is for developing countries to tap into the wealth of their populations living overseas.

The potential for migrants to contribute to development in their country of origin is increasingly being recognized, whether in facilitating foreign investment in their home country (Pandya and Leblang, 2017; Leblang, 2010) or investing directly themselves (Debass and Ardovino, 2009; Smart and Hsu, 2004; Nielsen and Riddle, 2009). Remittances, the funds that migrants send

home to family and friends, also make substantial contributions to development (Maimbo and Ratha, 2005; Ratha, 2003), allowing households to invest in education and housing (Adams and Cuecuecha, 2010) and enhancing financial sector development in the receiving country (Ambrosius and Cuecuecha, 2016). The wealth of diaspora communities thus can have a beneficial effect on development in their countries of origin.

Diaspora bonds are a means for governments to directly access the resources of their diaspora. These bonds are debt instruments sold to co-nationals living abroad. Like with any bond, a diaspora bond pays holders of the bond an annual interest and commits to the repayment of the principal at a specified maturity. For issuing governments, the appeal of a diaspora bond is that interest rates can often be lower than on comparable bonds issued to international investors in sovereign bond markets, a phenomenon referred to as a "patriotic discount" (Ketkar and Ratha, 2010). We investigate under which conditions prospective diaspora investors are willing to offer governments a "patriotic discount."

Several governments have successfully issued bonds to their co-nationals living abroad. Israel has issued bonds targeted at the Jewish Diaspora annually since 1951, focusing primarily on the Jewish community residing in the United States. India successfully issued diaspora bonds in 1991, 1998, and 2000 (Ketkar and Ratha, 2010). More recently, Nigeria raised funds in a 2017 diaspora bond and Pakistan launched a diaspora bond in early 2019. Other governments have explored the potential for a diaspora bond, but been unsuccessful in raising funds from co-nationals. Greece attempted to raise funds from its large US-based diaspora during its debt crisis in 2011, but was unable to solicit investor interest among the Greek-American community (Strohecker, 2016). Ethiopia hoped to tap the resources of its diaspora community for a 2009 bond to fund a hydroelectric dam, but did not attract sufficient support among Americans of Ethiopian descent and fell afoul of regulations of the US Securities and Exchange Commission (Bloomberg, 2016). We aim to explain what shapes investors' interest in diaspora bonds, helping to explain why some governments have been successful at issuing such bonds while others have failed as well as how governments might structure similar bonds in the future.

While all diaspora bonds are government debt sold to members of the diaspora community, the bonds vary in their cost, design, and marketing. Israel's bonds, for example, were historically sold at a steep "patriotic discount," issued regularly on an annual schedule, and made available in small ($100) as well as much larger ($1 million) denominations (Ketkar and Ratha, 2010). In Israel's case, the bonds are framed as a way of maintaining a link between the Jewish Diaspora and Israel. In 2018, Israel's Finance Minister Moshe Kahlon referred to the bonds as "Israel's connection to the Jewish people and the global economy".[1]

By contrast, when India issued its bonds in 1991 and 1998, it did not benefit from a "patriotic discount," but instead from migrants' willingness to lend to the country at all. At the time, international capital markets had largely shut India out, due to a balance of payments crisis in the early 1990s and the economic sanctions that followed India's May 1998 nuclear test. Similarly, Pakistan's 2019 diaspora bond issue comes amid an ongoing balance of payments crisis. Prime Minsiter Imran Khan directly appealed to diasporans' sense of duty, saying: "The balance of payments crisis has eased but not ended. I appeal to overseas Pakistanis to invest in

[1]Israel Bonds (accessed 03/15/19): `https://www.israelbonds.com/About-Us/DCI-Israel-Bonds.aspx`

Pakistan" (Bokhari, 2019).

Other governments have framed diaspora bonds more directly as investment vehicles. Nigeria, for example, placed its 2017 diaspora bond through private banks and wealth managers to wealthy Nigerians living abroad, sold the bond only in denominations of $2000 and higher, and emphasized the infrastructure projects that would be financed using the bond. Thus, diaspora bonds can be sold to members of the diaspora community primarily as an investment vehicle or rather as an exercise of patriotic duty, particularly during times of crisis. We investigate which of these frames are most successful in attracting prospective investors from one diaspora community.

The fact that diaspora bonds sit on a continuum between an investment and a charitable contribution or aid makes them of interest to scholars of international political economy, since they offer a unique context to test expectations from the existing literature about how investors choose investments and when individuals will support charitable giving. Nonetheless, there has not so far been an empirical study of the determinants of diasporans' support for these instruments. Ketkar and Ratha (2010) offer the only existing study of diaspora bonds, comparing the Indian and Israeli experience and using data on the number of high-skilled emigrants to suggest which other countries would be good candidates for issuing diaspora bonds. Our study uses insights from the literature on investor sentiment and support for foreign aid to address open questions about diaspora bonds: When will diasporans be willing to buy a diaspora bond? When will they offer their country of origin a "patriotic discount"? We turn to our theoretical framework and hypotheses next.

3 Financing development at home: Theoretical framework and hypotheses

We conceptualize diaspora bonds as falling on a continuum between investment and aid. Drawing from literature on investor preferences and support for foreign aid, we derive three broad sets of expectations about migrants' support for diaspora bonds. First, we expect that support for diaspora bonds will be a function of diasporans' national pride and the salience of their affinity to their home country. Second, we expect that political support for the ruling government and institutional considerations around the use of bond funds will be important in determining support for diaspora bonds. Finally, we suggest that support for diaspora bonds will be more sensitive to bond yields and economic conditions in their home country if bonds are framed as an "investment opportunity" and individuals are considering their financial self-interest. We go through these three sets of expectations in turn, explaining how existing insights from the investment and aid literatures shape our predictions about the interest in diaspora bonds.

3.1 Social affinity

With respect to affinity and identity-based explanations, both aid and investment allocation are often motivated by such social preferences. Scholars suggest that individuals' support for foreign aid is due to moral redistributive values (Paxton and Knack, 2012; Prather, 2018). In

particular, these altruistic attitudes often interact with the social affinity between donors and recipients. For example, Baker (2015) argues that individuals in donor countries are more likely to paternalistically support foreign aid to recipients of a distinct racial group.

Just as affinity with recipients makes individuals more likely to support foreign aid, the investment literature suggests that cultural and national proximity increases the propensity to invest, a phenomenon referred to as "home bias," since investors forego the benefits of diversification by privileging proximate assets (Karolyi and Stulz, 2003). Investors are more likely to hold home-country equities (Ahearne, Griever and Warnock, 2004) and sovereign debt issued by their own governments (Asonuma, Bakhache and Hesse, 2015). Similarly, credit rating agencies offer more positive assessments of country risk when borrowing countries are more culturally proximate to the home country of the rating agency (Fuchs and Gehring, 2017). Scholars disagree about the origins of home bias, with some suggesting that the imbalance in investment stems from the transaction costs associated with investing elsewhere, the informational advantage with proximate assets (Ahearne, Griever and Warnock, 2004), or from political connections (De Marco and Macchiavelli, 2016). Investor home bias becomes more pronounced during periods of crisis, as it did in Europe during the Eurozone debt crisis (Cornand, Gandré and Gimet, 2016).

Translated to the context of diaspora bonds, these findings on aid and investment suggest that individuals who feel a greater affinity for their country of origin will be more likely to purchase a diaspora bonds. In particular, we expect diaspora members who express greater patriotism or nationalism to be more inclined to buy diaspora bonds, especially if they are prompted to think of the bonds as a way of giving back to their home community. Furthermore, since the motivation to purchase bonds is driven by feelings of social affinity, we expect individuals to be willing to invest in bonds even when economic conditions in the issuing country are poor. This is in line with the fact that remittances tend to be countercyclical to the economic conditions in receiving countries, with migrants sending greater amounts to family and friends when needs are greater (Ratha, 2007; Frankel, 2010). Writing specifically about diaspora bonds, Ketkar and Ratha (2010) expect similar countercyclical behavior, though they do not test it empirically: "since patriotism is the principal motivation for purchasing diaspora bonds, they are likely to be in demand in fair as well as foul weather" (252).

Drawing on these various arguments about affinity, support for redistribution, and "home bias" we therefore expect:

- *H1a: Framing bonds as "giving back" will increase individuals' willingness to invest.*
- *H1b: Individuals will be no less likely to invest in diaspora bond when the economy is doing poorly than doing well.*
- *H1c: Individuals who share ethnic ties with the ruling party will be more likely to invest in a diaspora bond.*
- *H1d: Individuals will be more likely to invest in bonds that are open only to their co-nationals (exclusivity will trigger patriotic sentiment).*
- *H1e: Individuals with a stronger sense of patriotism will be more likely to invest in a diaspora bond [even at less competitive returns than alternative investments] and will be more likely to exhibit the dynamics described in H1a-d.*

3.2 Political beliefs

A second set of expectations revolves around individuals' assessments of public institutions in the issuing country. The literatures on public opinion on aid and investor appetite both find that countries perceived as democracies and as having more robust institutions receive more favorable treatment. Research on attitudes towards aid has found greater support for international redistribution when recipient countries are perceived as less corrupt (Bauhr, Charron and Nasiritousi, 2013). Furthermore, recipients' political institutions are likely to shape donors' aid allocation decisions. Dietrich (2013) finds that donors are more likely to bypass central governments and instead allocate aid to NGOs when the quality of institutions in the recipient country is considered to be weaker.

With respect to political beliefs, institutions, and investment, scholarship on sovereign debt has found a "democratic advantage": democracies tend to receive higher credit ratings, lower risk premiums on outstanding debt, and lower prices for insurance against default (Beaulieu, Cox and Saiegh, 2012; Cox and Saiegh, 2018). Scholars have argued sovereign bond investors have greater confidence that democratic governments will honor their obligations and repay their debts.[2]

Applied to the context of diaspora bonds, these insights about political beliefs suggest that approval of the host country government will increase diasporans' interest in diaspora bonds. Crucially, in both the aid and investment setting, political institutions are important because they foster trust that funds will be used responsibly and agreements will be honored. In the case of migrants deciding whether to lend funds to the government of their country of origin, trust that funds will be used appropriately and the government be able to repay the debt is likely to be a function of how individuals appraise the government. For instance, some have interpreted Ethiopia's difficulty in securing interest in its 2009 bond to the low levels of government support among the Ethiopian diaspora (Plaza, 2011). Some of these trust concerns may be ameliorated by earmarking the bond for a particular use, addressing fears that funds might be misappropriated.

A separate but related mechanism through which political attitudes may condition prospective diaspora bond investor behavior is through the investor's ability to exert political influence. As early as the Glorious Revolution, holders of wealth have entered into agreements with governments to share their capital in exchange for political voice (North and Weingast, 1989). Diaspora members may have special interest in participating in politics in their native countries. As Ketkar and Ratha (2010) argue, "diaspora investors may also believe that they have some influence on policies at home, especially on bond repayments. Whether such influence is real or imaginary is irrelevant" (254).

Whether through political influence, risk assessment, or desire to support institutions, we expect

- *H2a: Individuals who approve of the recipient country's government will be more likely to*

[2]Note that recent scholarship has nuanced the findings on regime type and bond issuance, highlighting that autocratic governments are also sensitive to their reputation in international bond markets (DiGuiseppe and Shea 2015) and that investors' focus on democracy may be conditional on global market conditions (Ballard-Rosa, Mosley and Wellhausen, 2017).

invest in diaspora bonds.

- *H2b: Individuals will be more likely to invest in bonds that are earmarked for specific purposes rather than general budgetary support (earmarked bonds are easier to hold to account).*
- *H2c: Priming individuals to think about politics will exaggerate the dynamics of H2a-b.*

3.3 Financial interest

We contrast these two sets of expectations about social affinity and political beliefs against the expectation that purchasing diaspora bonds is purely a question of financial interest, with individuals electing to purchase bonds on the basis of expected returns. This is more in line with seeing diaspora bonds as a classic investment instrument. Even in the aid literature there are findings that suggest support for charitable giving is premised on expected commercial benefits. For instance, individuals in donor countries often support foreign aid because they believe it will profit firms from their country or improve the donor country's geopolitical power.

Applied to the context of the diaspora bond, this means individuals will treat the bond like any other investment opportunity, making their choices by evaluating the costs and benefits. Furthermore, investors will seek to increase the likelihood of repayment and therefore be more likely to purchase bonds when the economy in their country of origin is faring well. Finally, if the diaspora bonds are explicitly cast as an "investment opportunity," such dynamics are likely to be exaggerated.

To test these investor motivations of financial self-interest, we examine whether financial features of the bonds seem to explain more of individuals' behavior than the patriotic and political elements described above.

- *H3: Framing bonds as an "investment opportunity" makes individuals more likely to select bonds (a) with higher yields and (b) when the economy is doing well.*

4 Diaspora bonds and the Indian context

In our empirical analysis, we study interest in diaspora bonds among a particular community, the Indian diaspora in the United states. We select India because it is one of the few countries that has already demonstrated the feasibility of a diaspora bond by issuing three successful bonds targeted at Indian emigrants. We prefer to study interest in diaspora bonds among the Indian community since the previous experience with diaspora bonds increases the plausibility of choices that respondents make in the survey. In addition, it is convenient to access the large Indian national population residing in the United States. The focus on a single diaspora population allows us to hold constant features of the issuing government and the broader diaspora community (e.g. whether the diaspora consists largely of economic migrants or refugees), and instead focus on the effect of individual-level heterogeneity (e.g. patriotism, support for the government, etc.) and design features of the bond (earmarked for infrastructure, only available to co-nationals, etc.).

In many ways, the Indian diaspora is an ideal target for diaspora bonds. The community is overwhelmingly high-skilled and high-income. In 2015, the median household income for households headed by an Indian-born migrant was $107,000, compared to an average of $51,000 for all migrant-headed households and $56,000 for US-born households (Zong and Batalova, 2017). 77% of Indian-born migrants in the US have a bachelor's degree or higher, compared to 29% of all foreign-born Americans and 31% of native-born Americans (Zong and Batalova, 2017). In their recent book, Chakravorty, Kapur and Singh (2017) argue that the distinctive traits of the Indian-born population in the US are attributable to a "triple selection" process, whereby social structures in India, an Indian examination-based education system, and the emphasis on specific IT-related skills in the US immigration system together lead to migration by individuals that have performed very well in the US economy.

The Indian government has issued three diaspora bonds in the past, in 1991, 1998, and 2000. Ketkar and Ratha (2010) refer to these as "opportunistic" issuances, benefiting from the goodwill of the diaspora during periods of crisis and foreign exchange shortage. In 1991, the country raised approximately $1.6 billion in India Development Bonds during a balance of payments crisis.[3] The second time the Indian government called on members of the diaspora community to help address foreign exchange shortfalls was in the midst of economic sanctions imposed after India's 1998 nuclear test. At that time, the Resurgent India Bonds raised $4.2 billion. In 2000, India issued yet another bond, the India Millennium Deposits, raising $5.5 billion. As Ketkar and Ratha (2010, 256) note, each of these bonds constituted a significant 'bailout' by the diaspora, "the fact that the Indian diaspora purchased these bonds when India had lost its access to international capital markets suggests that the Indian diaspora...offered a large discount" even if bonds were priced similarly to US corporate bonds at the same rating.

5 Research design

Our survey experiment consists of a forced choice conjoint, in which we randomly manipulate attributes of the two bonds among which respondents are asked to choose, as well as randomly assigning respondent-level treatments that prime respondents to consider their social obligations, their evaluation of the ruling government, and economic circumstances in the issuing country. Our primary outcome measure asks respondents whether they would consider purchasing hypothetical bonds. We present respondents with a series of pairs. For each pair, we ask "Which of these two bonds would you be more likely to buy?" (forced choice).[4]

We present our respondents with six pairs in total. In half of the pairs, respondents compare between two hypothetical Indian diaspora bonds. These comparisons allow us to examine which features of these bonds are preferred by which respondents. In the other half of the pairs, respondents compare between a hypothetical Indian diaspora bond and an alternative non-Indian bond. These comparisons allow us to examine how likely a respondent would be to select

[3] As a comparison, the 1991-1992 IMF program amounted to $1.2 billion. (Ghosh, 2006)

[4] We had initially also planned to ask respondents how likely they were to buy each bond (independent evaluation), but we removed this question after initial testing, because we believe it unnecessarily added to the cognitive load of the survey.

Figure 1: Advertisement placed on Facebook to recruit participants in the survey

an Indian diaspora bond over other investment options. We first discuss our sample, protocol, and incentives before describing the treatments in greater detail.

5.1 Sample, Protocol, and Incentives

We recruited members of the Indian diaspora to participate in our survey through an advertisement placed on the social media platform Facebook. Our advertisement, shown in Figure 1, was live March 10, 2019 - March 22, 2019. Facebook's advertising targeting features allow us to place our advertisement with Facebook users of certain demographics. We targeted members of the Indian diaspora by asking Facebook to display the advertisement to users who used Facebook in Hindi and were located in the U.S.[5] The advertisement contains a link to our Qualtrics survey, which takes approximately 20 minutes to complete. Our sample recruited in this manner consists of 200 respondents.[6]

We compensate all participants with a $5 Amazon gift card. In addition, we offer a unique incentive that is intended to enhance respondents' interest in the substantive content of the survey. We inform participants that three randomly selected participants will receive a $100 government treasury bond. This will be a U.S. Treasury bond, which can be purchased and transferred online. This incentive is designed to encourage respondents to learn what a bond

[5]We noted in the ad that the survey would be conducted in English. Open-ended responses and sensible patterns in participant covariates lead us to believe that language was not a barrier for respondents.

[6]In future waves, we plan to recruit participants to our study through community associations. We are currently creating a directory of Indian community associations in the U.S. In 2019-20, we will e-mail leaders of these organizations to ask them to disseminate a link to the survey to their listservs or through their e-newsletters.

is so that they can participate more effectively in our experimental activity. In this way, we believe this incentive greatly increases the quality of our data.

Prior to the experimental activity, we expose all participants to a short video that explains what a bond and a yield is.[7] No aspect of this educational video is experimentally manipulated. The purpose of the video is to allow respondents to understand the activity and, especially, to be able to identify when they are foregoing returns in order to support their country of origin. We also collect a number of background covariates prior to the experimental activity, which allow us to assess balance in the sample and test our hypotheses about heterogeneity based on expressed patriotism and government support. The full list of covariates is in Section B in the Appendix.

5.2 Treatments

We randomly manipulate several characteristics to test our hypotheses.

First, we introduce subject-specific treatments designed to prime some respondents and not others to consider certain factors. Specifically, these treatments encourage respondents to think about their social duties and political attitudes toward the government (which we subsequently interact with pre-treatment covariates). We also randomize whether the economy is thought to be booming or flagging, as this helps us distinguish between H1 and H3.

Most of our subject-specific treatments appear in the instructional text we present to all respondents, which reads as follows:

Now we would like you to consider some hypothetical bonds and whether you would personally purchase them. To start, we'd like you to consider some hypothetical bonds issued by the government of India. Remember that a bond is a loan to a government.

So you can think about bonds as ***[investment opportunities / opportunities to give back]***

When considering these [investment opportunities / opportunities to give back], keep in mind that the economy in India is currently ***[booming / flagging.]***[8] ***[Also, think about how the current government will manage this money.]***

Which of these bonds would you be more likely to buy?

In other words, our individual-level treatments adopt a 2x3 factorial design summarized in Table 1.

Second, we randomly manipulate several features of diaspora bonds using a conjoint analysis design. We ask our respondents to choose between pairs of hypothetical Indian diaspora bonds, which vary in interest rate, designated purpose, investor base, and currency. This design allows us to detect and directly compare the relative importance of each characteristic to a potential investor. We can also interact these bond-specific treatments with our subject-specific treatments to see if different primes change the relative importance of these features. We present three such pairs.

[7] The video is the following: `https://www.youtube.com/watch?v=IuyejHOGCro&t=1s`

[8] We believe there is justification for both claims. See `https://www.dailysignal.com/2018/06/19/indias-economy-is-booming-deregulation-is-the-next-important-step/` and `https://www.ft.com/content/54ece0f8-ba2c-11e8-94b2-17176fbf93f5`. However, to reduce cognitive load for our respondents, we do not provide additional detail to these descriptions.

Table 1: Summary of Individual-level Treatments

Framing	"investment opportunity"	"opportunity to give back"
Economy	"booming"	"flagging"
Politics	"think about how gov't will manage money"	(nothing)

For rounds 1-3, respondents will see pairs of these Indian government bond profiles (see Table 2). All characteristics are independently randomized, allowing us to determine which characteristics make a diaspora bond most appealing.

Table 2: Rounds 1-3: Comparing among Indian bonds (rated BBB-)

Yield	3% 7% 11%
Purpose	for general use earmarked for developing infrastructure
Investor eligibility	open to all consumers open only to Indian nationals
Currency[9]	Rupees US dollars

Note: Order of characteristics is randomized at the level of the subject.

Third, for rounds 4-6, we measure how likely a respondent is to invest in a diaspora bond at all. We ask our respondents to choose between pairs containing a hypothetical Indian bond and a hypothetical alternative bond. We select these comparison bonds because, as we further justify below, they represent logical counterfactual uses of an Indian diasporan's investment capital. There are three different hypothetical alternative bonds: a U.S.government bond, a Brazilian government bond, and an international bond index fund. All respondents make a U.S. comparison, an index comparison, and a Brazil comparison, in a randomly determined order. Table 3 summarizes.

We select these bonds because they are logical counterfactual uses of an investor's assets according to various investment logics. If an Indian American investor would otherwise use her assets to invest in her country of residence, she would likely select a U.S. Treasury bond. If she is seeking a bond investment with a higher yield than a U.S. Treasury Bond, she may turn to an alternate emerging market like Brazil. If she would like international bond exposure in her portfolio, but does not have a specific preference with respect to the issuing country, she may select an international bond index fund. The international bond index has an added benefit of providing a comparison that is not sensitive to Indians' perceptions of specific other countries.[10]

To make these alternative bonds plausible, we fix rather than randomly manipulate their characteristics. All of these bonds are for general use, open to all consumers, and denominated

[10]The rating for the international bond index is taken from the JP Morgan Emerging Markets Bond Index. `https://www.jpmorgan.com/jpmpdf/1320723155889.pdf`

Table 3: Rounds 4-6: Indian vs. alternative bond

	India (BBB-)	U.S. (AA+)	International Bond Index (BB+)	Brazil (BB-)
Yield	3%	3%		
	7%	3%	7%	11%
	11%		7%	11%
Purpose	for general use	for general use		
	earmarked for developing infrastructure	for general use		
Investor eligibility	open to all consumers	open to all consumers		
	open only to Indian nationals	open to all consumers		
Currency	Rupees	US dollars		
	US dollars	US dollars		

Note: While it would be ideal to order the characteristics according to the randomized order determined in Rounds 1-3, there are some programming limitations that prevent us from doing so. Characteristics appear in the order in this table. Each respondent sees all alternative bonds once, in randomized order. We also randomize whether the Indian or the alternative bond appears in the first column.

in US dollars. Each has a different yield, fixed at the various values we randomly assign to our Indian bonds: the U.S. yield is 3%, the Brazil yield is 11%, and the international bond index is 7%. These values are fairly close to the real-world yields of each of these bonds/indexes, making our profiles more believable. The values are also evenly spaced, allowing us to intuit linear relationships between the low, medium, and high yields. Fixing the comparison bonds somewhat removes us from the previous setup of a double profile conjoint analysis, essentially making this part of our design a single profile conjoint analysis with three different outcome variables.[11]

We restrict the randomization of our Indian bond yields to maximize our power in order to make the comparisons we care about. When comparing an Indian bond to a U.S. bond, we only look at Indian yields of 3% and 7%. When the Indian yield exceeds the U.S. yield, we expect investors to prefer the Indian yield, but we cannot determine whether this is because of the higher yield or the patriotic benefit. When both yields are 3%, we can test whether Indians prefer the patriotic benefit of investing in India, even when the yields are equivalent.[12] Because the 11% case would simply exaggerate the dynamics of the 7% case (both higher yield and patriotic benefit should cause them to select the Indian bond), we conserve power and omit this test.

In the case of the international bond index, we also only look at Indian yields of 3% and

[11]This is evident in the unit of observation in our data. We observe a total of nine Indian bond assessments per individual — six from the first three (double-profile) rounds and three from the last three (single-profile) rounds.

[12]When presented with the choice of an Indian bond at 3% or a U.S. Treasury Bond at 3%, a diaspora investor who selects the U.S. bond may do so either because they perceive the risk to be lower or because they prefer to hold an investment in their country of residence. However, given that India's default risk is considered higher than that of the US, an Indian investor who selects the Indian bond over the U.S. bond at the same interest rate is expressing a preference for a riskier investment at no higher rate of return. Ideally, we would test this more explicitly by presenting respondents with a choice of an Indian diaspora bond at a *lower* rate of return than a U.S. Treasury bond. However, we find it implausible that Indian bonds would have a lower yield than American bonds, so we instead present this comparison at 3%. Nonetheless, the difference in behaviors between the 3% and 7% group should give us some ability to see how material or identity concerns motivate behaviors.

7%. At an Indian yield of 7%, investors may prefer the Indian bond for patriotic reasons or the index fund because it diffuses risk. Again, we cannot manipulate how risky the various funds are, but we can manipulate other material considerations. We therefore also compare a lower yield 3% Indian bond to the 7% international bond index to see if Indians are willing to forego returns out of patriotism.

In the case of the Brazil bond, we only look at Indian yields of 7% and 11%. At an Indian yield of 11%, we expect our Indian investors to prefer Indian bonds, as there is no material benefit to investing in Brazil, and they will prefer the patriotic benefit. When the Indian yield drops to 7%, we test to see whether our investors are willing to forego investment earnings in order to invest with their home country. Again, the 3% Indian yield simply exaggerates the dynamics of the 7% case, so we omit it to conserve power.

Finally, we consider the possibility that remittances and not alternative bonds are the true counterfactual use of funds that would be invested in a diaspora bond. While we cannot test this experimentally, we ask at the conclusion of the experiment how individuals would use an unexpected $100 windfall:

Suppose you received $100 unexpectedly. Now that you've taken our survey, what would you be most likely to do with that money?

The responses available are: "I'd send it to India by sending it to family or friends (remittances)", "I'd send it to India by purchasing an Indian bond", "I'd send it to India by purchasing stocks", "I'd send it to India by saving it in an Indian bank account", "I'd keep it in the US by purchasing stocks or bonds", "I'd keep it in the US by saving it in an American bank account", "I'd keep it in the US and spend it" and "Other".

We expect participants that support the government and those with lower perceptions of the government's corruption will be more likely to choose diaspora bonds over remittances.

6 Results

Our results are based on survey responses collected from 202 participants over the period March 10-22, 2019. The average respondent is 29 years old and the sample is gender balanced (see Table A2) Our sample is strongly connected to India: 88% were born in India, 78% of the sample attended high school in India, and 53% attended college in India. The majority of the sample (74%) moved to the US in the last ten years (see Figure A1) and much of the sample maintain active financial ties to India. 49% have remitted money to a family member or friend in the last year and 52% own assets in India. As expected, given the features of the Indian diaspora community described in section 4, the sample is highly educated and fairly high-income (see Figure A1).

Across our results, we find consistent support for social affinity explanations for interest in diaspora bonds, with less support for political hypotheses. Concerning alternative explanations focused on financial self-interest, participants are sensitive to the interest rates of the bonds, preferring higher-yielding bonds over lower-yielding ones. We take this as an indication that respondents understood the activity and took their choice of bonds seriously. Beyond this, however, we find little support for the expectation of purely financial self-interest. Participants

do not appear to be sensitive to the framing of bonds as an investment opportunity, nor to adjust their investment decisions based on economic performance. We first discuss results from bond-specific treatments (which show participants' responses to design features of the bonds), and then turn to subject-level treatments and the interaction of these with bond treatments.

Figure A2 reports the effect of bond treatments on participants' choice among two Indian diaspora bonds or an Indian bond versus an alternative investment vehicle. Across all six rounds, we see respondents choosing higher-yielding bonds. We see that investors appear to prefer bonds that are earmarked for infrastructure, in line with political expectations relating to accountability, but that this is only true when choosing among two Indian bonds. Contrary to expectations that making bonds only available to co-nationals would either trigger patriotic sentiment or the expectation of an exclusive investment opportunity, we find no significant difference in the choice of bond based on investor eligibility (see the third panel in Figure A2) Investors are less likely to choose bonds denominated in rupees than in US dollars, in line with financial self-interest expectations that investors prefer to invest in hard currency bonds and counter to suggestions that diasporans may choose home currency-denominated bonds for reasons of portfolio diversification or economic interests at home (Ketkar and Ratha, 2010).

The effect of subject treatments gives more support to social affinity and patriotism-based explanations. Table A3 shows the overall effects of our treatments on subjects' bond selections. In these models, we control for all treatments to improve precision of estimates. The outcome measure is whether the individual picks the Indian bond over a non-Indian bond, so we only use data from rounds 4-6. Note that we lose observations in models 2 and 3 because of missing responses to the covariates collected prior to the experiment. Framing bonds as "giving back" rather than as an "investment opportunity," increases the probability that individuals pick an Indian bond over the three alternatives, i.e. the US treasury bond, international bond index, and Brazilian bond. Describing a bond in terms emphasizing social responsibility and affinity thus enhances respondents' willingness to invest. By contrast, the economy status and political prime treatments do not have any effects on participants' bond selection on their own.

Next, we look at the interactions between subject treatments and bond treatments. We do this individually by each subject treatment. We start with the "giving back" treatment, which investigates whether respondents alter their appraisal of diaspora bonds when they are cast in a charitable light that emphasizes social affinity. Figure A3 reports the interactions between the "giving back" frame and bond treatments. There is indicative evidence that this framing lowers respondents' sensitivity to yield. The left-most panel shows individuals in the "investment" condition are much more sensitive to yield than the individuals in the "giving back" condition, and the bottom part of the panel shows that this difference between coefficients is nearly statistically significant. Interestingly, there is a difference in how participants respond to the investor eligibility based on the treatment, but this is in the opposite direction one might expect. Respondents for whom the bond is framed as an opportunity to "give back" are less likely to choose a bond open only to Indian nationals.

By contrast, the state of the economy treatment (Figure A4) does not seem to cause any differences in how individuals respond to the characteristics of the candidate bonds. We do see one effect for the political prime treatment (Figure A5), which has a statistically significant effect

on the choice of an Indian bond when interacted with the currency of the bond. This suggests that reminding respondents of the governments' responsibility for managing bond earnings raises investors' concerns about currency risk.[13]

Finally, we investigate our competing sets of expectations by examining the relationship between treatments, individual-level covariates, and bond choice in Tables A4, A5, and A6. Beginning with social affinity explanations, Table A4 shows fairly consistent support for these hypotheses. First, as already shown in Figure A2, we find a positive effect of the "giving back" treatment on selecting an Indian bond over alternative investment vehicles, in line with H1a. Second, we find a null effect for the economic circumstances treatment, in line with H1b, i.e. the expectation that diasporans will invest in foul as well as fair weather. Third, we find a strong relationship between respondents' reported pride in being Indian and their willingness to select an Indian bond over an alternative bond, in line with H1e. National affinity is strongly predictive of respondents interest in an Indian bond compared to alternatives.

We do not find that Hindus are more likely to buy diaspora bonds as expected by H1c on religious or ethnic ties between individuals and the ruling party, but this may be because religion is too general a measure of affinity or because we have been unable to recruit sufficient non-Hindu respondents to get proper variation on this variable. However, note that Sikh respondents are much less likely to choose an Indian bond over an alternative investment, providing some support for the notion that religious identity and affinity with the government is important for the willingness to buy a diaspora bond. We anticipated exclusivity of the bond (i.e. availability only to co-nationals) to trigger patriotic sentiment, but find no such effect. On balance, the pride and "giving back" results suggest that social affinity and patriotic sentiment play a significant role in diasporans' willingness to buy a diaspora bond.

With respect to political hypotheses, reported in Table A5, there is limited support for this set of expectations. We do not find, as H2a expects, that individuals with greater support for the government are more likely to buy a diaspora bond. Note that this may be attributable to the sensitivity of questions asked about respondents' political views. 62% report not supporting an Indian political party (and 20% did not answer the question at all), leaving little variation in terms of support for the ruling party. Furthermore, we do not find, as anticipated in H2c, that priming respondents to think about politics increases the effect of individuals' political support or assessment of corruption. We do find, consistent with H2b, that respondents prefer bond that are earmarked for infrastructure investment, but it is not clear that this is solely due to political motivations. In addition to concerns about spending accountability, the preference for earmarked bonds might reflect a preference for infrastructure investment.

Finally, Table A6 shows the results of tests of our economic hypotheses. While investors are responsive to yield, the other tests do not suggest that bonds are chosen largely on the basis of financial self-interest. Contrary to H3, investors do not become more sensitive to yield when bonds are framed as an investment opportunity, nor do they become more sensitive to the state of the economy when bonds are cast in this returns-focused light.

[13]Given the recent recent concerns about the politicization of the Reserve Bank of India and suggestions that Shaktikanta Das, the new Chairman of the Reserve Bank of India, was appointed in December 2018 to toe a political line, it is likely that increasing the salience of politics would raise concerns about currency risk. `https://www.ft.com/content/391dbe4a-fd45-11e8-ac00-57a2a826423e`

Together, these results suggest that the choice to invest in a diaspora bond is most likely to be driven by a diasporans' pre-existing level of patriotism and national pride, as well as the branding of a bond as an opportunity to contribute to one's home country. By contrast, political support for the ruling party is less predictive of respondents' willingness to buy a government bond. Furthermore, respondents do not appear to be basing their choice of bond exclusively on financial risks. While respondents are sensitive to bond yields and less likely to choose rupee denominated bonds, they are less sensitive to news of how the economy is faring and whether to see the bond as an investment opportunity.

7 Conclusion

We investigate under which conditions members of the diaspora are willing to share their capital with home country governments by purchasing government bonds. We suggest that willingness to buy such bonds is likely to be shaped by social affinity, political support, and financial self-interest Evidence from our survey experiment fielded to members of the Indian diaspora indicates that social affinity and national pride are most important in shaping willingness to buy diaspora bonds. In particular, framing bonds as an "opportunity to give back", thus activating respondents' sense of social obligation, increases respondents' willingness to buy home country bonds. Furthermore, respondents who report having a higher level of national pride are more likely to express an interest in diaspora bonds.

These results ought to be encouraging to governments considering issuing a diaspora bond. They suggest that political support for the government is not a necessary precondition for diasporans' willingness to lend to the government, but rather that social affinity and identity are more important. The latter can likely be cultivated even separately from diasporans' attitudes towards the ruling government. A number of countries are expanding their diaspora outreach efforts. For instance, Senegal has allocated almost 10% of the seats in their parliament to representatives of the more than half a million Senegalese living abroad, as part of an effort to enhance engagement with diaspora communities.[14] Similar efforts may be able to enhance diasporans' sense of national affinity, increasing their willingness to share their capital with home country governments in the form of loans.

Our results stem from the Indian diaspora, a community with fairly high support for the home country government, given that most outmigration has been in the form of economic migration, rather than groups fleeing political persecution. It is possible that the extent of political support would be a stronger predictor of individuals' interest in diaspora bonds in migrant communities with more variation in support for the government. Furthermore, India is a stable country not affected by significant conflict or crisis. Some commentators have suggested that diaspora communities might be particularly helpful in providing financial support in the aftermath of a catastrophe such as a natural disaster, when feelings of sympathy and affinity are particularly high (Ketkar and Ratha (2010) discuss the example of Haiti after the 2010 earthquake). Similarly, diaspora communities may be more willing that international investors to lend to conflict-affected countries during post-conflict periods of reconstruction. Future work

[14] https://www.news24.com/Africa/News/senegalese-diaspora-to-receive-extra-seats-in-parliament-20170103

may wish to investigate these alternative contexts for financial mobilization of the diaspora.

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A Updated experimental design

We fielded our initial survey in March 2019 and collected responses from 202 participants recruited via Facebook. We plan to collect data in subsequent waves throughout the winter of 2019 and 2020. In these future waves, respondents will be recruited through their membership in community associations for the Indian diaspora. Based on feedback we have received on the results from the first wave of the survey, we intend to make some changes to the experimental design in future iterations of the survey.

Most importantly, we add a further subject-level framing treatment, in addition to describing the bonds as an "investment opportunity" and "opportunity to give back." We acknowledge that investors could anticipate directly benefiting from the results of a productive investment in India, not just from the yield of their bond purchase. To test this, we also frame bonds as an "opportunity to improve national conditions." Furthermore, we include a control condition in which individuals are not given a specific framing for the bonds, which are described as "bonds" rather than as an opportunity to achieve something. If individuals anticipate direct benefits from these national conditions, we expect this frame to compel primarily those individuals who plan to return to India or who have family there. We have the following expectations:

- *H4: Framing bonds as an "opportunity to improve national conditions" makes individuals more likely to select bonds (a) when they plan to return to India or (b) when they have family living in India.*

In contrast, if we do not observe heterogeneity in the effects of this frame, we would interpret this as evidence that individuals want to improve national conditions in India for altruistic rather than self-interested reasons (H1a).

The subject-specific treatments in the instructional text will thus read as follows:

Now we would like you to consider some hypothetical bonds and whether you would personally purchase them. To start, we'd like you to consider some hypothetical bonds issued by the government of India. Remember that a bond is a loan to a government.

[So you can think about bonds as investment opportunities / opportunities to give back / opportunities to improve national conditions / Control (text absent)]

When considering these [investment opportunities / opportunities to give back / opportunities to improve national conditions], keep in mind that the economy in India is currently ***[booming / flagging.]***[15] ***[Also, think about how the current government will manage this money.]***

In other words, our individual-level treatments adopt a 4x3 factorial design summarized in Table A1.

Furthermore, we will collect additional background covariates in subsequent rounds of the survey. These are marked with an asterisk (*) in Section B. The alternate national pride question, **indiacommitment**, is intended to help us validate the finding for the positive effect

[15] We believe there is justification for both claims. See `https://www.dailysignal.com/2018/06/19/indias-economy-is-booming-deregulation-is-the-next-important-step/` and `https://www.ft.com/content/54ece0f8-ba2c-11e8-94b2-17176fbf93f5`. However, to reduce cognitive load for our respondents, we do not provide additional detail to these descriptions.

Table A1: Summary of Individual-level Treatments

Framing	"investment opportunity"	"opportunity to give back"	"opportunity to improve national conditions"	(nothing)
Economy	"booming"	"flagging"	N/A	N/A
Politics	"think about how gov't will manage money"	(nothing)	N/A	N/A

of national pride. The two questions about respondents' plans to return to India and efforts to secure permanent residency in the U.S. (**returnindia** and **permanentUS**) are intended to help investigate whether respondents might have self-interested reasons to hope for economic improvement in India. This is intended to better help us probe the altruistic versus self-interested motivations for purchasing diaspora bonds.

B Background Covariates

- **age** [gating question] What is your age?
- **indian** [gating question] Do you identify as a member of the Indian diaspora? [Yes / No]
- **us** [gating question] Do you live in the US? [Yes / No]
- **female** What is your gender?
- **edu** What is the highest level of education you have completed? [No formal education / 1st, 2nd, 3rd, or 4th grade / 5th or 6th grade / 7th or 8th grade / 9th grade 10th grade / 11th grade / 12th grade (no diploma) / High school graduate or GED / Some college, no degree / Associate degree / Bachelor's degree / Master's degree / Professional degree / Doctorate degree]
- **edu_loc_hs** *if high school graduate or above:* Where did you complete your high school education? [U.S. / India / Other]
- **edu_loc_college** *if some college or above:* Where did you complete your college education? [U.S. / India / Other]
- **income** We would like to get an estimate of your total household income in the last 12 months before taxes. Was it... [Less than 15k, 15k-25k, 25k-35k, 35k-50k, 50k-75k, 75k-100k, 100k-150k, above 150k, PNTS][16]
- **finknowledge** On a scale of 1 to 7, where 1 means very low and 7 means very high, how would you assess your own knowledge about personal finance (e.g. savings, investments, debt)?[17]
- **finrisk** When thinking of your financial investments, how willing are you to take risks? Please use a 7 point scale, where 1 means "Not at all willing" and 7 means "Very willing."[18]

[16]Modeled on `http://www.usfinancialcapability.org/downloads/NFCS_2015_State_by_State_Qre.pdf`
[17]Modeled on `http://www.usfinancialcapability.org/downloads/NFCS_2015_State_by_State_Qre.pdf`
[18]Modeled on `http://www.usfinancialcapability.org/downloads/NFCS_2015_State_by_State_Qre.pdf`

- **finassets** Do you have any stocks, bonds, mutual funds, or other securities? [Yes / No / Don't know / PNTS]
- **indiafam** Do you have any family currently living in India? [Yes, a parent/sibling/child / Yes, a grandparent/aunt/uncle/cousin / No / PNTS]
- **remittance** In the last year, have you sent money to a friend or family member living in India? [Yes / No / PNTS]
- **indiaasset** Do you personally hold financial assets in India? [Yes / No / PNTS]
- **indianonres** *[if Yes:]* Do you have a Foreign Currency Non-Resident (FCRN) deposit account? [Yes / No / PNTS]
- **born** Where were you born? [U.S. / India / Other / PNTS]
- **movedwhen** *[if India/Other:]* When did you move to the U.S.? [in the last 5 years, between 5 and 10 years ago, between 10 and 20 years ago, over 20 years ago]
- **movedwhy** *[if India/Other:]* Briefly, why did you move to the U.S.? [check any that apply: To pursue my education / To pursue my career / To help my spouse's education or career / To be closer to family / To live in a place closer to my social or political views / Other / PNTS]
- ***returnindia** In future, do you plan to move to India to live there permanently? [Yes / No / Maybe / Don't Know][19]
- ***permanentUS** Have you taken any steps to obtain permanent resident status in the U.S. or U.S. citizenship? [Yes / No / Prefer not to say]
- **pride** How proud are you to be Indian? [Very proud / Quite proud / Not very proud / Not at all proud / PNTS][20]
- ***indiacommitment** How much do you agree with the following statement: Although at times I may not agree with the government, my commitment to India always remains strong [Strongly agree / Agree / Somewhat agree / Neither agree nor disagree / Somewhat disagree / Disagree / Strongly disagree][21]
- **caste** Do you belong to a Scheduled Caste, Scheduled Tribe or Other Backward Class? [Yes / No / PNTS]
- **religion** What religion do you most strongly identify with? [Hinduism / Islam / Christianity / Sikhism / Buddhism / Jainism / Judaism / Other / I do not identify with a religion / PNTS]
- **newsfreq** How often do you follow the news? (e.g. watching the news on TV, listening to the news on the radio, reading the news online or through a newspaper) [Multiple times per day / Once per day / A few times per week / Once per week / Less than once per week / Never]

[19] Modeled on Carling and Pettersen (2014).
[20] Modeled on `http://www.worldvaluessurvey.org/WVSDocumentationWV6.jsp`
[21] Modeled on Kosterman and Feshbach (1989).

- **newsfreq_india** How often do you follow news about India? (e.g. watching the news on TV, listening to the news on the radio, reading the news online or through a newspaper) [Multiple times per day / Once per day / A few times per week / Once per week / Less than once per week / Never]
- **partyid_us** Do you support a political party in the U.S.? [Yes / No / PNTS] *[if yes]* Which one? [Democratic Party / Republican Party / Other / PNTS]
- **pres_us** Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of U.S. President Donald Trump. [Very favorable / Somewhat favorable / Somewhat unfavorable / Very unfavorable / Don't know / PNTS]
- **corruption_us** How big of a problem do you think corruption is in the U.S.? [Very big problem / Moderately big problem / A small problem / Not a problem at all / Don't know / PNTS]
- **partyid_india** Do you support a political party in India? [Yes / No / PNTS] *[if yes]* Which one? [Bharatiya Janata Party / Indian National Congress / Communist Party of India (Marxist) / Communist Party of India / Bahujan Samaj Party / Nationalist Congress Party / Other / PNTS]
- **pm_india** Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of Narendra Modi. [Very favorable / Somewhat favorable / Somewhat unfavorable / Very unfavorable / Don't know / PNTS][22]
- **rulingparty_india** Please tell me if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavorable opinion of the BJP. [Very favorable / Somewhat favorable / Somewhat unfavorable / Very unfavorable / Don't know / PNTS][23]
- **corruption_india** How big of a problem do you think corruption is in India? [Very big problem / Moderately big problem / A small problem / Not a problem at all / Don't know / PNTS] [24]

Questions denoted with an asterisk (*) will be included in the next wave of the survey in the winter of 2019-2020.

[22]Modeled on `http://www.pewglobal.org/2017/11/15/india-modi-remains-very-popular-three-years-in/`
[23]Modeled on `http://www.pewglobal.org/2017/11/15/india-modi-remains-very-popular-three-years-in/`
[24]Modeled on `http://www.pewglobal.org/2017/11/15/india-modi-remains-very-popular-three-years-in/`

C Figures and Tables

Table A2: Descriptive statistics for all numeric variables

	Mean	SD	Min	Max	N
Age	29.26	7.47	18	68	202
Female	0.49	0.50	0	1	202
Did HS in India	0.78	0.41	0	1	202
Did college in India	0.53	0.50	0	1	202
SA Financial knowledge	4.57	1.12	2	6	180
SA Financial risk	3.98	1.18	2	6	180
Owns financial assets	0.57	0.50	0	1	187
Sent remittance	0.49	0.50	0	1	196
Owns Indian assets	0.52	0.50	0	1	174
Indian nonresident	0.26	0.44	0	1	82
Born in India	0.88	0.33	0	1	202
Member of OBC	0.07	0.26	0	1	196
Pride in India	3.50	0.63	2	4	199
Reads news	5.32	0.94	1	6	202
Reads Indian news	4.82	1.26	1	6	202
U.S. president favorability	1.56	0.84	1	4	152
U.S. corruption severity	2.73	0.80	1	4	171
India PM favorability	2.64	1.16	1	4	178
India ruling party favorability	2.40	1.14	1	4	163
India corruption severity	3.80	0.42	2	4	194

Table A3: Effects of subject-specific treatments

	DV: Selection of Indian bond (compared to non-Indian bond)		
	(1)	(2)	(3)
TreatFrame (Give Back)	0.078^{*}	0.049	−0.002
	(0.045)	(0.052)	(0.070)
TreatEcon (Booming)	0.040	0.075	0.095
	(0.044)	(0.050)	(0.069)
TreatPols (Prime)	0.043	0.070	0.047
	(0.045)	(0.047)	(0.062)
Yield: 7	0.182^{***}	0.209^{***}	0.205^{**}
	(0.064)	(0.072)	(0.087)
Yield: 11	0.375^{***}	0.393^{***}	0.449^{***}
	(0.081)	(0.088)	(0.112)
Purpose: Earmarked	0.029	0.058	0.079
	(0.040)	(0.043)	(0.054)
Eligible: Indians	0.033	0.014	0.021
	(0.039)	(0.041)	(0.049)
Currency: Rupees	-0.090^{**}	-0.079^{*}	−0.049
	(0.041)	(0.044)	(0.055)
Alt: Intl Index	-0.250^{***}	-0.230^{***}	-0.240^{***}
	(0.043)	(0.049)	(0.063)
Alt: U.S.	-0.205^{***}	-0.174^{**}	-0.175^{*}
	(0.063)	(0.070)	(0.090)
Covariates	None	Basic	Basic+Financial
Num. Respondents	202	168	115
Observations	606	504	345
R^2	0.154	0.199	0.231
Adjusted R^2	0.140	0.160	0.163
Note:			*p<0.1; **p<0.05; ***p<0.01

Table A4: Testing social explanations for investor behavior

	DV: Selection of bond			
	(1)	(2)	(3)	(4)
TreatFrame (Give Back)			0.078*	0.084*
			(0.045)	(0.046)
TreatEcon (Booming)			0.040	0.044
			(0.044)	(0.045)
TreatPols (Prime)			0.043	0.048
			(0.045)	(0.045)
Yield: 7	0.165***	0.109	0.182***	0.181***
	(0.030)	(0.162)	(0.064)	(0.067)
Yield: 11	0.326***	0.348*	0.375***	0.360***
	(0.032)	(0.196)	(0.081)	(0.084)
Pride		0.045		0.145***
		(0.031)		(0.037)
Purpose: Earmarked	0.062**	0.063***	0.029	0.055
	(0.024)	(0.024)	(0.040)	(0.040)
Eligible: Indians	−0.021	−0.020	0.033	0.038
	(0.026)	(0.026)	(0.039)	(0.039)
Currency: Rupees	−0.091***	−0.095***	−0.090**	−0.095**
	(0.026)	(0.027)	(0.041)	(0.041)
Yield: 7*Pride		0.016		
		(0.047)		
Yield: 11*Pride		−0.008		
		(0.055)		
Alt: Intl			−0.250***	−0.244***
			(0.043)	(0.045)
Alt: U.S.			−0.205***	−0.202***
			(0.063)	(0.063)
Rel: Hindu				−0.064
				(0.108)
Rel: None				0.026
				(0.121)
Rel: Muslim				−0.067
				(0.145)
Rel: Jain				−0.028
				(0.138)
Rel: Sikh				−0.370***
				(0.132)
Rounds	1-6	1-6	4-6	4-6
Covariates	None	None	None	None
Observations	1,818	1,791	606	576
R^2	0.078	0.079	0.154	0.181
Adjusted R^2	0.075	0.075	0.140	0.158
Note:				*p<0.1; **p<0.05; ***p<0.01

Table A5: Testing political explanations for investor behavior

	DV: Selection of bond			
	(1)	(2)	(3)	(4)
TreatFrame (Give Back)		0.098^{**}	0.098^{**}	0.096^{**}
		(0.048)	(0.048)	(0.048)
TreatEcon (Booming)		0.017	0.017	0.017
		(0.048)	(0.048)	(0.048)
TreatPols (Prime)		0.005	−0.018	0.089
		(0.048)	(0.116)	(0.407)
Yield: 7	0.165^{***}	0.270^{***}	0.270^{***}	0.271^{***}
	(0.030)	(0.052)	(0.052)	(0.052)
Yield: 11	0.326^{***}	0.464^{***}	0.465^{***}	0.465^{***}
	(0.032)	(0.058)	(0.059)	(0.058)
Purpose: Earmarked	0.062^{**}	0.038	0.038	0.038
	(0.024)	(0.042)	(0.042)	(0.043)
Eligible: Indians	−0.021	0.034	0.034	0.035
	(0.026)	(0.044)	(0.044)	(0.044)
Currency: Rupees	-0.091^{***}	-0.087^{*}	-0.088^{*}	-0.087^{*}
	(0.026)	(0.046)	(0.046)	(0.046)
SupportRulingParty		0.030	0.025	0.030
		(0.023)	(0.032)	(0.023)
TreatPols*CorruptionIndia				−0.022
				(0.107)
CorruptionIndia		-0.113^{**}	-0.114^{**}	−0.102
		(0.057)	(0.057)	(0.079)
TreatPols*SupportRulingParty			0.009	
			(0.043)	
Rounds	1-6	4-6	4-6	4-6
Covariates	None	None	None	None
Observations	1,818	486	486	486
R^2	0.078	0.131	0.131	0.131
Adjusted R^2	0.075	0.113	0.111	0.111

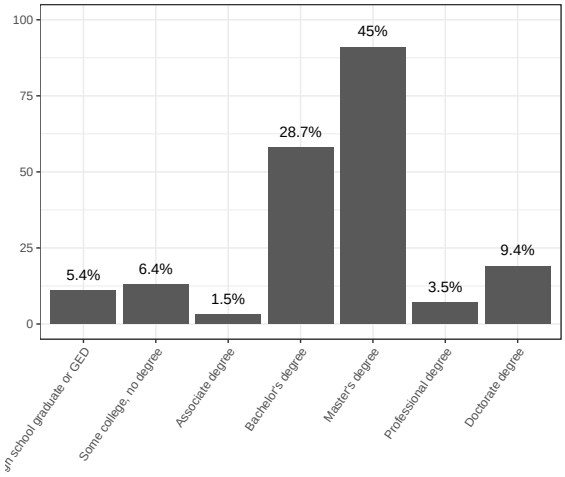
Note: *p<0.1; **p<0.05; ***p<0.01

Table A6: Testing economic explanations for investor behavior

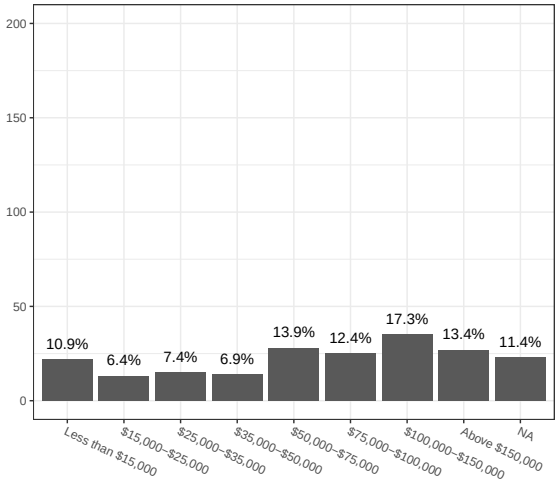
	DV: Selection of bond	
	(1)	(2)
TreatFrame (Give Back)	0.067^{*}	0.140^{**}
	(0.039)	(0.066)
TreatEcon (Booming)	0.202^{***}	0.234^{***}
	(0.041)	(0.048)
TreatPols (Prime)	0.342^{***}	0.457^{***}
	(0.044)	(0.051)
Yield: 7	0.007	0.100
	(0.015)	(0.063)
Yield: 11	0.016	0.044
	(0.015)	(0.045)
Purpose: Earmarked	0.064^{***}	0.031
	(0.024)	(0.040)
Eligible: Indians	-0.020	0.019
	(0.026)	(0.040)
Currency: Rupees	-0.090^{***}	-0.091^{**}
	(0.026)	(0.041)
TreatFrame (Give Back)*Yield: 7	-0.073	
	(0.060)	
TreatFrame (Give Back)*Yield: 11	-0.030	
	(0.065)	
TreatFrame (GiveBack)*TreatEcon (Booming)		-0.122
		(0.089)
Rounds	1-6	4-6
Covariates	None	None
Observations	1,818	606
R^2	0.080	0.114
Adjusted R^2	0.074	0.100
Note:	*p<0.1; **p<0.05; ***p<0.01	

Figure A1: Descriptive statistics

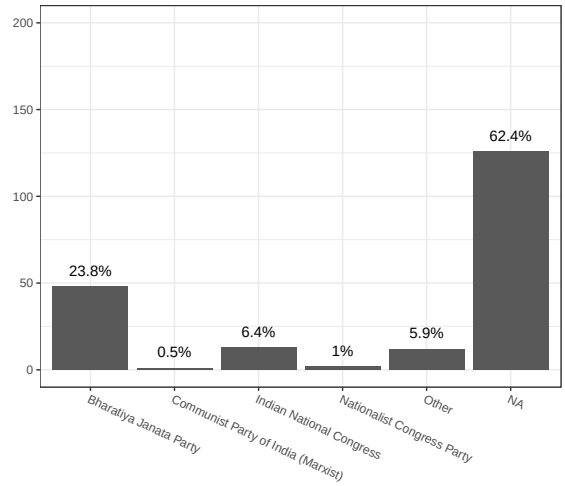
(a) Education



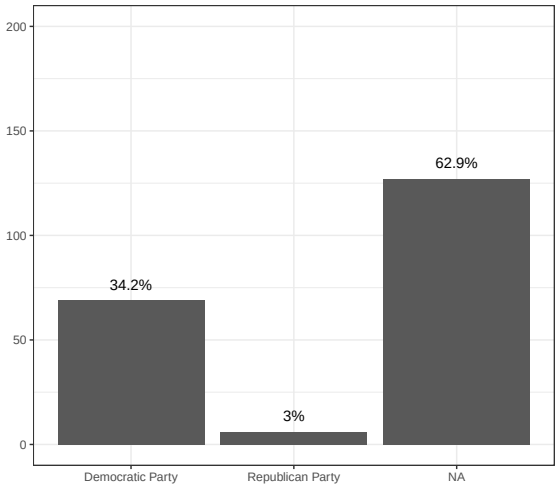
(b) Income



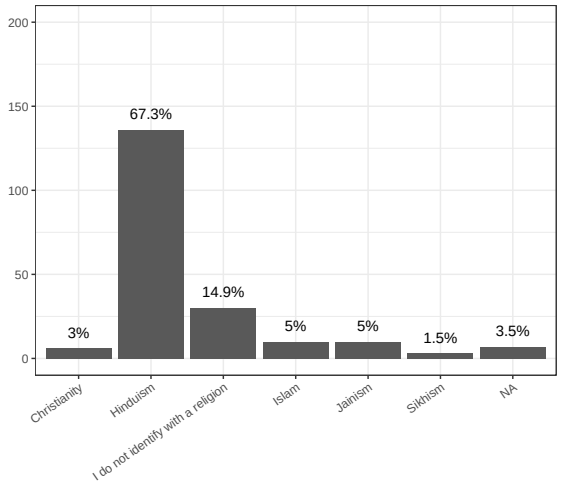
(c) Party ID in India



(d) Party ID in U.S.



(e) Religion



(f) Moved to U.S. when?

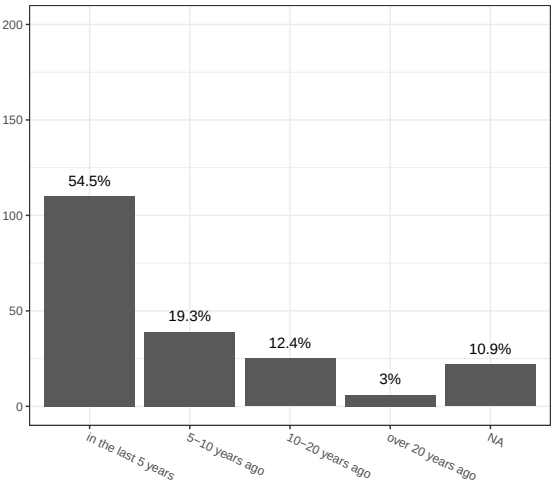
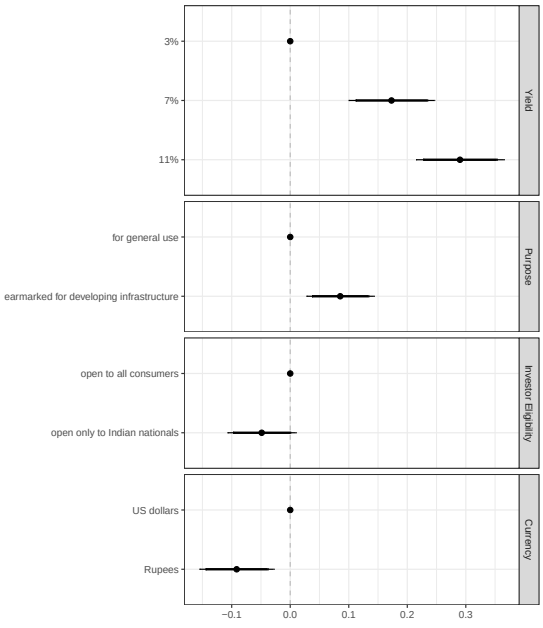
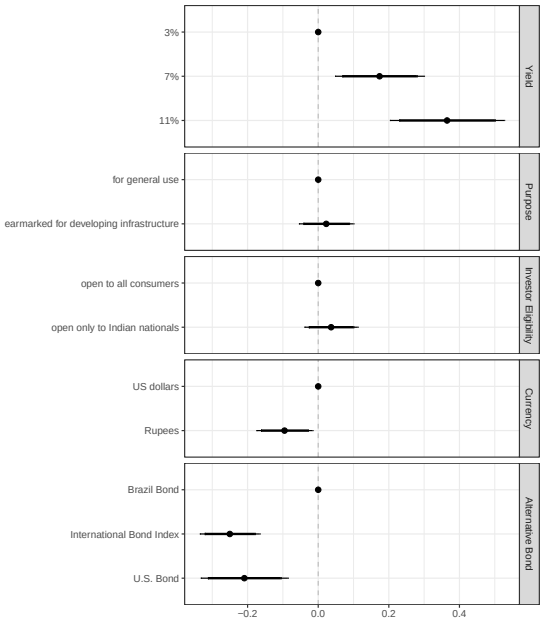


Figure A2: Effects of bond-specific treatments

(a) Comparing between Indian bonds



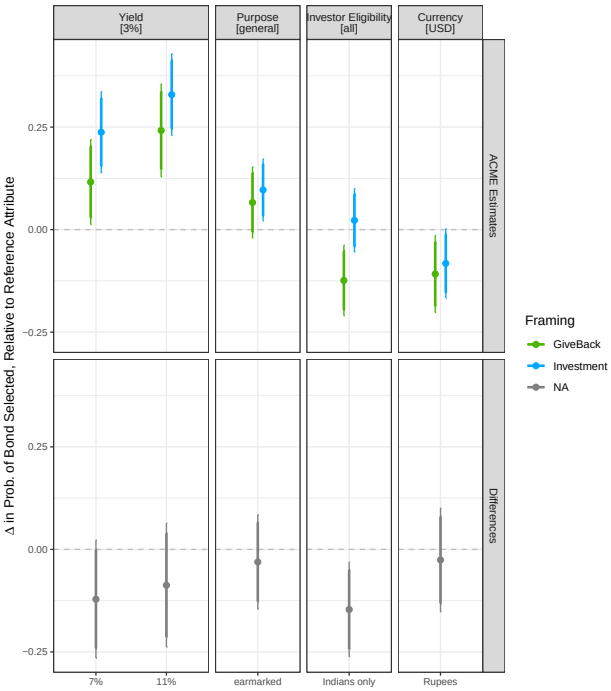
(b) Comparing between Indian and alternative bonds



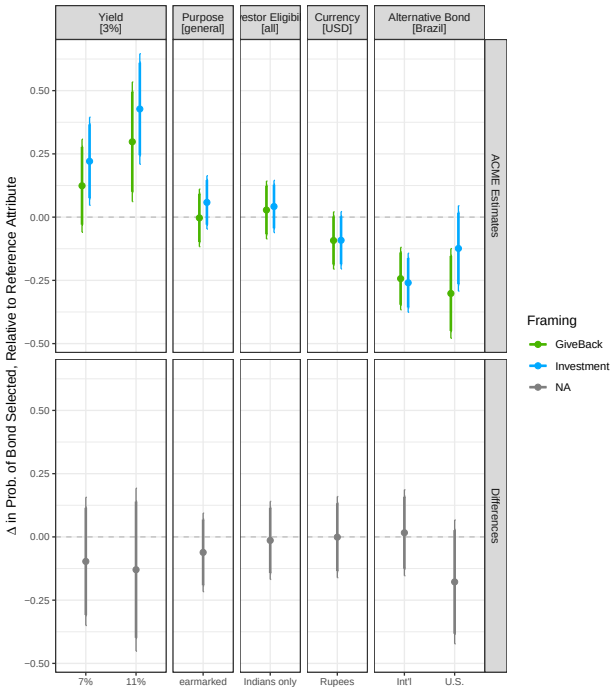
Note: Figures indicate ACMEs obtained by regressing bond selection on characteristics of bonds. Unit of observation is the bond. In rounds 1-3 (panel A), respondents compared between Indian bonds, resulting in two bond observations per round. In rounds 4-6 (panel B), respondents compared between Indian bonds and alternative bonds, resulting in one (Indian) bond observation per round (the comparison bond is treated as an additional bond-specific feature). Regressions include no covariates. Standard errors are clustered by respondent.

Figure A3: Interactions between subject-specific framing treatment and bond-specific treatments

(a) Comparing between Indian bonds



(b) Comparing between Indian and alternative bonds

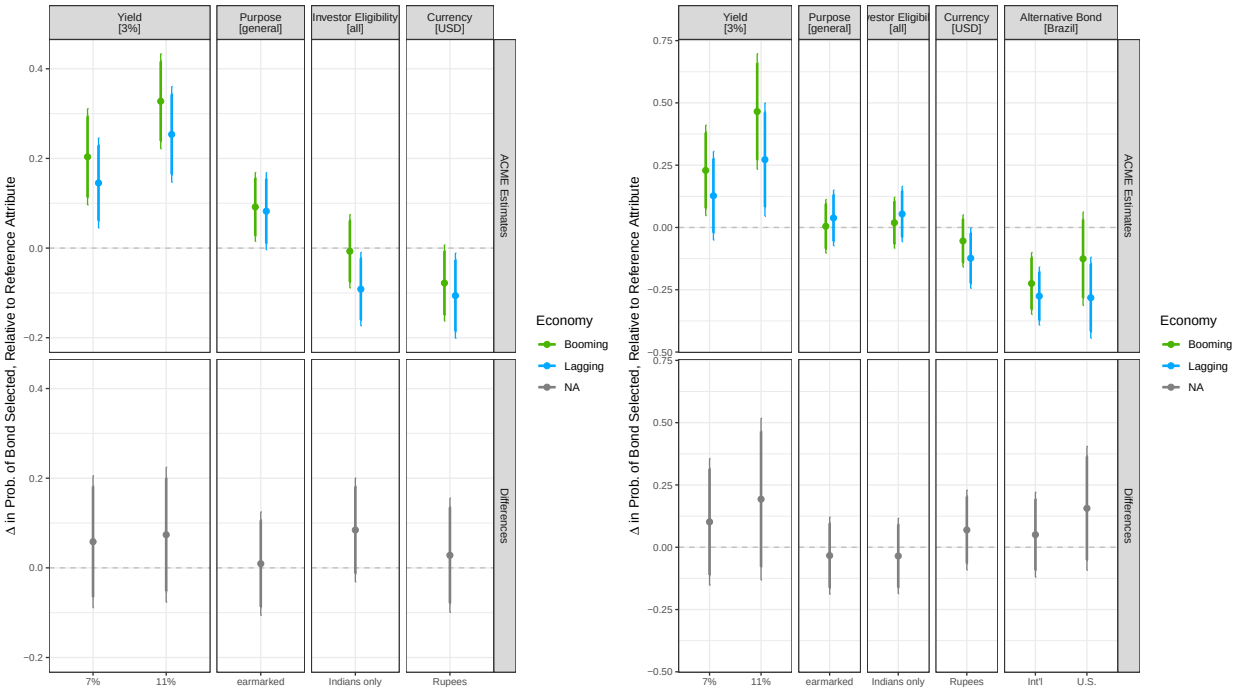


Note: Figures indicate ACMEs obtained by regressing bond selection on characteristics of bonds and the subject-specific framing treatment. Unit of observation is the bond. In rounds 1-3 (panel A), respondents compared between Indian bonds, resulting in two bond observations per round. In rounds 4-6 (panel B), respondents compared between Indian bonds and alternative bonds, resulting in one (Indian) bond observation per round (the comparison bond is treated as an additional bond-specific feature). Regressions include no covariates. Standard errors are clustered by respondent.

Figure A4: Interactions between subject-specific economy treatment and bond-specific treatments

(a) Comparing between Indian bonds

(b) Comparing between Indian and alternative bonds

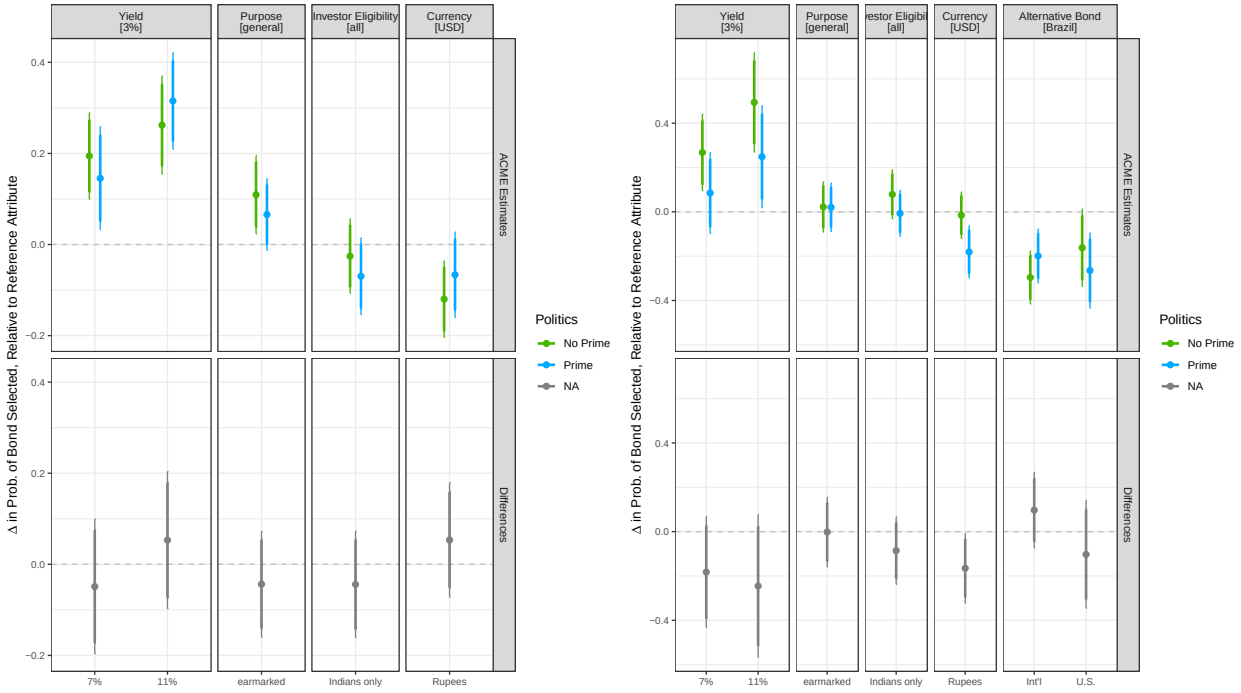


Note: Figures indicate ACMEs obtained by regressing bond selection on characteristics of bonds and the subject-specific economy treatment. Unit of observation is the bond. In rounds 1-3 (panel A), respondents compared between Indian bonds, resulting in two bond observations per round. In rounds 4-6 (panel B), respondents compared between Indian bonds and alternative bonds, resulting in one (Indian) bond observation per round (the comparison bond is treated as an additional bond-specific feature). Regressions include no covariates. Standard errors are clustered by respondent.

Figure A5: Interactions between subject-specific politics prime treatment and bond-specific treatments

(a) Comparing between Indian bonds

(b) Comparing between Indian and alternative bonds



Note: Figures indicate ACMEs obtained by regressing bond selection on characteristics of bonds and the subject-specific politics prime treatment. Unit of observation is the bond. In rounds 1-3 (panel A), respondents compared between Indian bonds, resulting in two bond observations per round. In rounds 4-6 (panel B), respondents compared between Indian bonds and alternative bonds, resulting in one (Indian) bond observation per round (the comparison bond is treated as an additional bond-specific feature). Regressions include no covariates. Standard errors are clustered by respondent.