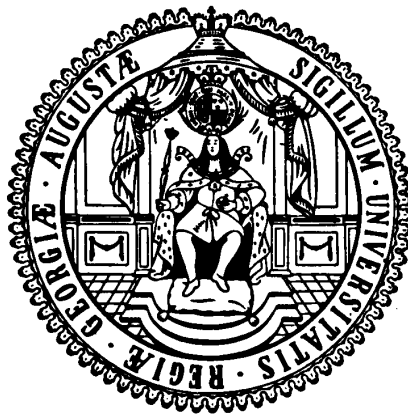# Courant Research Centre
'Poverty, Equity and Growth in Developing and Transition Countries: Statistical Methods and Empirical Analysis'

Georg-August-Universität Göttingen
(founded in 1737)

Discussion Papers

No. 180

Get in with a Foreigner:
Consumer Trust in Domestic and Foreign Banks

Werner Bönte, Ute Filipiak, Sandro Lombardo

September 2016

Get in with a Foreigner:

Consumer Trust in Domestic and Foreign Banks

Werner Bönte[*], Ute Filipiak[†]and Sandro Lombardo [‡]

Schumpeter School of Business and Economics

University of Wuppertal

Georg-August University of Goettingen

September 30, 2016

Abstract

Prior research suggests that trust plays an important role in an individual's decision to participate in stock markets. This paper focuses on potential customers in retail banking markets and empirically investigates their trust in foreign banks and domestic banks. Using a large survey on the savings patterns of Indian households, we find that potential retail banking customers in India are less likely to trust foreign banks with their money than private Indian banks. However, our results also suggest that highly educated Indians using information sources such as the Internet, radio or newspaper, tend to have more confidence in foreign banks than in private Indian banks.

---

[*]Email: `boente@wiwi.uni-wuppertal.de`
[†]Email: `u.filipiak@uni-goettingen.de`
[‡]Email: `lombardo@wiwi.uni-wuppertal.de`

1 Introduction

Consumer trust is of crucial importance for the development of financial markets, since trust not only influences the investment decision of customers of financial services (Guiso et al., 2004, 2008; Balloch et al., 2015; Grabowski, 1998), but also increases the efficiency of investments (Dearmon and Grier, 2009). However, although foreign banks are expanding their businesses to serve depositors in many developing countries, very few people are investing their money with a foreign bank.

Guiso et al. (2004), find that individuals who believe that most people are trustworthy, are more likely to participate in stock markets than less trusting individuals, suggesting that a low-level of trust may explain the limited stock market participation. Trust also plays an important role in retail banking as well, especially when potential bank customers open a bank account or make decisions about their investments. An individual's decision to place money with a bank is a decision of good faith, as the individual assumes the responsibility of the risk in which the return on the money invested might be low or even a complete loss. This might be an issue in countries where investor protection is low.

Therefore, the trustworthiness of a retail bank -its perceived reliability and fairness- is an important factor for banks as it may be a determining factor for new customers and their decision to establish a long term relationship with the bank. Moreover, consumers' trust in banks may vary by the type of bank. However, the existing literature focuses mainly on the supply side, rather than the demand side of banking markets. In particular, retail banking customers' trust in banks has gained very little interest thus far.

This paper focuses on customer trust in retail banking markets. More specifically, it deals with the difference between customers' trust in foreign banks and customers' trust in domestic banks in India. We argue that it may make a difference from the retail banking costumers' point of view whether they deposit their money with a domestic or foreign bank. On the one hand, customers may have more trust in domestic banks because they may be less familiar with foreign banks as compared to domestic private banks. Foreign banks may have different corporate cultures and have started their operations later than domestic banks. They may also be characterized by less dense spatial presence

of bank branches in the host country compared to domestic private banks and thus be less integrated in local networks (Denk et al., 2012). On the other hand, potential customers may have more confidence in foreign banks. In countries with a high-level of corruption or with less developed institutional frameworks of the financial market, for example, potential retail banking customers may face higher risks when committing their money to domestic banks. Consequently, potential customers may assess foreign banks as being more reliable and fair as compared to domestic banks.

In the literature, a lack of trust in foreign firms is identified as a driver of relational hazards, which may constitute a disadvantage for foreign firms. Relational hazards may result in the lower efficiency of foreign firms relative to domestic firms (Ataullah and Le, 2004; Denk et al., 2012). If potential retail banking customers had more confidence in domestic banks than in foreign banks, the latter might need to put relatively more effort in establishing a customer relationship. This would result in relatively higher costs. If such trust differences exist, it would be straightforward to investigate the reasons for these differences. This paper therefore first empirically investigates whether such differences exist. Secondly, it investigates the factors that may be related to differences in customers' trust in foreign and domestic banks.

In order to examine these trust differences, we make use of a unique data set that comprises detailed information about the respondent's trust in foreign banks and domestic private banks. Our data is obtained from a survey of Indian households conducted at the request of the Indian Ministry of Finance in 2004-2005. An important advantage of this data is that the respondents report how much trust they have in different types of banks. Hence, we are able to extend previous studies on participation in financial markets that used general trust measures (Guiso et al., 2008; Porta et al., 1997). We link this data set with additional data obtained from other sources, e.g. the Reserve Bank of India on the number of domestic private and foreign bank branches per Indian states.

In India, like in other emerging economies, trust in financial services is an issue.[1] A high level of political and institutional corruption may lead to a low level of trust

---

[1]India ranked 90th in the year 2005 according to the corruption perception index where it lagged behind countries like China, Mexico and Syria and has not improved remarkably until now.

in financial institutions (Hakhverdian and Mayne, 2012). Moreover, India deregulated its financial markets in 1990, but the regulatory framework is still very restrictive for foreign banks. In contrast, in developed economies almost all people have some personal experiences with banks since most people already have a bank account. This may result in a reverse causality problem as an established relationship with a certain type of bank tends to influence the level of trust in this type of bank. Many people in India, however, do not have savings accounts at private Indian banks nor at foreign banks although, the incomes of individuals in India have increased remarkably over the past several years. In our econometric analysis, we exclude all individuals who have a bank account at a domestic private bank or a foreign bank, and focus instead on potential future retail banking customers. By doing so, we avoid the potential bias caused by endogeneity that may arise from reverse causality.

This paper makes several relevant contributions to the existing literature. First, to the authors best knowledge, this is the first study that empirically investigates the differences between customer trust in domestic and foreign banks. Our results suggest that foreign banks in India face a lack of customer trust, which implies that they tend to be disadvantaged in the Indian retail banking market. Second, we also contribute to previous research investigating the relationship between trust and participation in financial markets. While prior studies mainly used general trust measures (Guiso et al., 2008; Porta et al., 1997), we make use of trust measures reflecting trust in certain types of financial institutions, namely domestic and foreign banks. Third, we contribute to the literature by examining the factors influencing trust differences. In particular, we discuss how *characteristics of domestic and foreign banks*, *individual characteristics* of potential customers and *the institutional environment* may influence a potential customer's trust in these financial institutions.

Our results show that a consumer's trust in both bank types differs and that educated Indians and those using information sources, such as the Internet and newspaper, tend to have more confidence in foreign banks than in private Indian banks. Moreover, risk-averse individuals have a higher probability of trusting both types of banks to the same

extent instead of having more trust in one type of bank.

The remainder of the paper is organized as follows. The next section discusses the potential differences between consumer trust in domestic banks and consumer trust in foreign banks. Section 3 describes the Indian retail banking market. The data source and the measurement of variables are described in Section 4. Descriptive statistics and the results of the econometric analysis are presented in section 5. Robustness checks and additional regressions are discussed in section 6. Section 7 provides a discussion and concludes.

2 Consumer Trust in Domestic and Foreign Banks

Consumer trust in a bank is needed to attract new customers in particular in developing countries where financial market participation is still low (Honohan, 2008). A *potential* retail banking customer may never become an *actual* customer without a certain level of trust in the respective bank. Hence, consumer trust is of crucial importance in retail banking and building consumer trust is a major challenge for banks. In this study, we focus on *potential* retail banking customers, defined here as individuals who do not have a bank account but who have sufficient income to build savings and who also have savings to invest. We argue that *potential* retail banking customers' trust in domestic banks may differ from their trust in foreign banks. These differences in the perceived trustworthiness of both financial institutions may result from differences in *characteristics of bank types*, differences in the *individual characteristics* of potential customers and these differences may be determined by the *institutional environment*. The conceptual framework of our investigation refers to the theoretical model proposed Guiso et al. (2008). Although their theoretical model is not directly related to consumer trust in different banks, but deals with the relevance of trust for financial market participation; we believe that their model is also helpful in clarifying why potential customers' trust in domestic banks may differ from their trust in foreign banks. Guiso et al. (2008) argue that an investor's trust depends on the individual characteristics of the investor as well as on the characteristics of the financial system. Guiso et al. (2008) show theoretically how trust can affect the portfolio

decision of an investor. In their theoretical model, an investor can choose between a safe asset with a certain safe return and a risky asset with an uncertain return. The investor assesses the risk as the probability that the firm in which he intends to invest might cheat. If the complementary probability called "trust" weighted with the gain from investment exceeds the assessed weighted loss probability that a bad outcome occurs, the individual will invest or, if not, will stay away from the risky investment. The investor thus intends to maximize her utility by choosing the optimal share of investment in these two assets by evaluating a certain risk of losing the amount invested in the risky asset. Since the model assumes that potential investors are able to assess their trust in different risky assets (firms) independently, this implies asset-specific trust levels. Therefore, only investors with a sufficiently high level of trust will invest in the stock market.

Likewise, it can be argued that in the context of retail banking, potential retail banking customers may be willing to place their money with a bank, incurring the risk of losing money if the bank cheats, or they may not be willing to become a customer of the bank and keep their money in their possession without any return (safe asset). We argue that a bank's perceived trustworthiness depends on the characteristics of the respective bank, the *individual characteristics* of *the potential customer* and that it may also depend on *the institutional environment*.

The *characteristics of the bank* that affect potential customers' trust in the bank are, for instance, the financial services they provide or their way of managing risks. Consequently, customer trust in banks may be bank-specific and therefore may differ between banks. Moreover, different groups of banks share certain characteristics and thus potential customers' trust may also vary between different *types of banks*. We argue that potential retail banking customers may distinguish between *domestic banks* and *foreign banks*. For instance, corporate cultures, as well as the services offered, may differ from domestic private banks because the activities of foreign banks are usually controlled by foreign headquarters. Branches of foreign banks operating in retail banking are often not as widespread in the host country as branches of domestic banks. Hence, potential customers tend to be more familiar with domestic banks. However, there is broad support

for the fact that investors are more likely to make an investment when it is geographically nearby (Coval and Moskowitz, 2001; Huberman, 2001; Ivkovic and Weisbenner, 2005). On the other hand, potential retail banking customers may believe that foreign banks are better managed than domestic banks. For example, they may originate from countries where financial markets are better developed than the financial market of the host country. Individuals may therefore expect that the probability of a negative outcome of a planned investment might be higher for domestic banks. Moreover, in countries where the level of corruption is very high, domestic banks might be perceived as more corrupt and less trustworthy than foreign banks.

These considerations determine the willingness of potential retail banking customers to place their money with domestic banks or with foreign banks. Customers take into account that the return of their invested money might be low or that the customer might even lose some or all of their investment. Of course, potential customers may also be convinced that it is the best option neither to become a customer of a domestic bank nor a customer of a foreign bank. Hence, the characteristics of domestic banks and foreign banks influence potential retail banking customers' overall degree of confidence, which may ultimately affect potential customers' decision to place their money with these types of banks.

A financial institution's perceived trustworthiness may further depend on the *individual characteristics* of the potential customer. Individuals differ in their personal characteristics and therefore the perceived trustworthiness of a financial institution may vary among potential customers of financial services. Individuals may differ in their risk attitude, education levels, general trust in financial institutions, but also in their way to gather information e.g. they may use different information sources.

Individuals who regularly use information sources, such as the Internet or the newspaper, may also be better informed on the practices of financial institutions. Financial institutions use different channels to advertise their products and to attract new customers (Claessens et al., 2002). Furthermore, the use of information sources could also help in bridging the barriers caused by the physical distance to a bank. Petersen and

Rajan (2002), for instance, find that distances between firms and their lenders have even increased over the past years in the US, and argue that this may be driven by the revolution in information and communication technologies. Consumers of financial products who use different information sources frequently, might be better able to assess the distribution of future payoffs of a planned investment with either a foreign or domestic bank, and the probability of a negative outcome might be lower. The use of information and communication technologies may be very important, particularly for foreign banks that have less dense networks in their host countries and may therefore face greater problems in providing information to potential customers than domestic banks. Nevertheless, a potential investor needs to understand the information that financial institutions provide on their products or services. Therefore, another important determinant for explaining trust differences between foreign and domestic banks is the investor's level of education. Campbell (2006) provides empirical evidence that poorer and less educated households avoid financial transactions for which they feel unqualified. Hence, a given level of an individual's uncertainty resulting from a lack of financial knowledge, may negatively affect an individual's trust in financial institutions, because the perceived risk of losing the money when investing it either with a domestic bank or with a foreign bank may be very high. Individuals with a very low educational background may trust domestic banks more than foreign banks because the former are often more familiar to potential customers.

Hakhverdian and Mayne (2012), for instance, argue that educated individuals reward the positive performance of public institutions with trust, while they do not if they know that the practices of these institutions are corrupt. Similarly, individuals with a higher education may be more likely to trust a foreign bank more than a domestic private bank because they might be better able to assess the practices of a domestic and foreign institution, and therefore might have a better idea of which bank is more reliable compared to individuals with a lower education.

Individuals who differ in their risk attitude may have different levels of trust in financial institutions as well. In their theoretical model of stock market participation Guiso

et al. (2008), show that two outcomes are possible if investors are risk averse. First, a risk averse investor may try to get benefits from diversifying into two stocks if losing the money through cheating in at least one stock occurs. Second, a risk averse investor can also diversify his money with respect to the expected idiosyncratic risks. Then, they will invest in the stock they consider to be less affected by these idiosyncratic risks (Guiso et al., 2008). Following this kind of reasoning, one can therefore argue that on the one hand risk averse individuals assess the probability of losing their money when investing in both types of banks equally. Consequently, their level of trust in domestic and foreign banks would be similar. However, risk averse individuals who fear idiosyncratic risks may trust a foreign bank more than a domestic bank, because they may be less affected by domestic market risks or other shocks since they are often strongly controlled by their foreign headquarters.

Finally, potential customers' trust in domestic and foreign banks may also be determined by the *institutional environment*. In the context of retail banking, consumer trust depends on objective characteristics of the financial system and spatial and cultural differences among individuals and banks (Guiso et al., 2008, 2009). In economies where the legal system is weak and property rights or the enforcement of contracts are not guaranteed, incentives for financial activities are low (Chinn and Ito, 2006). Empirical evidence suggests that educated individuals are more trusting in less corrupt societies, and less trusting when their environment is considered corrupt (Hakhverdian and Mayne, 2012). However, in many emerging countries the level of corruption is still remarkably high and public institutions often do not guarantee investors protection. For example, Hakhverdian and Mayne (2012), argue that individuals with a higher level of education are better able to learn and understand the quality of a specific institution and can thereby better assess whether a system is corrupt or not. Thus, the characteristics of the institutional environment may negatively affect an individual's trust in a financial institution if the perceived risk of losing their money increases, or on the other hand, reduce the perceived risk of losing the money when investor protection is high.

3 The Regulation of Foreign Banks' Market Entry

India's financial market is still characterized by a restrictive regulatory framework and a wide presence of public sector banks. National banks are very common and their branch network was expanded considerably between 1961 and 1991, particularly in rural and less developed areas in India. National banks offer the majority of financial services for the general public in India. They are considered to be very reliable as they offer deposit guarantees for investors. However, domestic and foreign private banks which operate in the retail banking sector, also offer investor protection insurance mechanisms, yet many individuals are not aware of that fact. Foreign banks in India are starting to extend their market strategies in order to reach more individuals and to compete with domestic private banks in the retail banking sector. Nevertheless, the number of branches of foreign banks is still very low and even compared to other developing economies, India is characterized by the smallest number of foreign banks operating in its financial market (Clarke et al., 2003). This imposes big challenges when competing with domestic private banks in attracting new customers.

For instance, the RBI has permitted up to 18 new foreign bank offices per year. Until the year 2005 the RBI authorized 33 foreign banks, operating a total of 245 foreign bank offices in India (Shobhana and Shanthi, 2008). Private Indian banks were authorized to expand their business to 4,962 bank offices in the same period, as compared to a total number of 70,324 bank offices in India in 2005.

Foreign banks are still restricted from easily opening their bank branches in preferred locations. For example, they are directed to open their bank branches in the so-called priority sectors in the rural regions of India, as soon as a given number of branches is reached in urban areas. This, however, leads to a lower presence of foreign banks compared to domestic banks in India. As already mentioned in the previous section, bank characteristics, such as the number of bank branches in a region, may affect potential customers' trust in these financial institutions. A lower presence of foreign banks as compared to domestic banks may negatively affect a potential customer's trust. Potential consumers of financial services may then trust a domestic bank more than a foreign bank

with their money. However, this regulation leads to a variation in the ratio of foreign banks to domestic private banks among Indian states and allows us to investigate the influence of these differences on potential retail banking customers' trust in domestic and foreign banks and the differences in that trust.

Another issue that may affect the level of trust in financial institutions is the high level of corruption in India. India ranked 90th in 2005 according to the corruption perception index, where it lagged behind countries, such as China, Mexico or Syria, and has still not improved. A high level of political and institutional corruption may also lead to a low level of trust in financial institutions (Hakhverdian and Mayne, 2012). In India, the level of corruption is not only remarkably high, but also very heterogeneous between Indian states. This situation facilitates the empirical investigation of the relation between corruption and consumer trust in these two types of banks.

4   Data

4.1   Source

For our analysis, we used data from the National Data Survey on Saving Patterns of Indians (NDSSP), which is an overall Indian survey that is comprised of comprehensive information on the saving behavior of Indian households. This data set contains information on the trust for different bank types as well as rich information on Indian households. Although the NDSSP covers 40,862 household heads, the final sample in our econometric analysis consists of 11,708 observations. We restrict our analysis to a sub-sample of potential customers of private Indian banks and foreign banks. First, we focus on households with positive savings as they are potential customers who possess money that can be used for making financial investments. Second, we focus on households that do not have an account with an Indian private bank nor a foreign bank. In our econometric analysis we also use data obtained from the Reserve Bank of India. In addition to the NDSSP data, official RBI data on the number of branches of foreign banks, as well as the number of branches of private Indian banks at the Indian state level, is used.

4.2 Measurement of Variables

4.2.1 Trust

Trust in Domestic and Foreign Banks:

In the NDSSP survey a household head's trust in banks is measured by the question *"What is your overall degree of confidence with the following financial institutions?"*. Several financial institutions were listed (e.g. National Banks, Indian private banks, and foreign banks) and the respondent could choose between five eligible answers ranging from one to five, being: (1) "I would definitely trust them with my money", (2) "I might trust them with my money", (3) "I would not like to trust them with my money", (4) "I would definitely not trust them with my money", and (5) "Don't know about this type of institution". From our econometric analysis we exclude all households that answered that they do not know Indian private banks or foreign banks.

Differences between Trust in Foreign and Private Banks:

In order to investigate the differences in consumer trust in both type of banks, we use the aforementioned trust variables to compute a new variable *Trust Difference*. This variable consists of three categories. It takes the value of 1 if a respondent scores higher on trust in private Indian banks than on trust in foreign banks. For instance, the variable takes the value of 1 when a respondent states that they would definitely trust an Indian private bank with their money (score=4), but reports that they would not trust a foreign bank with their money (score=2). The variable takes the value of 2 if the trust scores of private Indian banks and foreign banks are identical and the variable takes on the value of 3 if a respondent scores higher on trust in foreign banks than on trust in private Indian banks.

4.2.2 Explanatory Variables

Financial Instruments: The NDSSP data provides information on individuals possessing an ATM card. The variable "ATMCard" is one if the respondents states that he has an ATM card at any financial institution, and zero if not. The respondents were also asked whether they possess a credit card and could answer with yes or no. The dummy variable "CreditCard" takes on the value of one if the respondent states that they have a credit

card and zero otherwise.

Income: Private banks may have a target clientele that are often individuals with a certain level of income. The NDSSP dataset is comprised of information on individuals' total earnings from the primary and secondary occupation of the respondent during the last 12 months as well as other sources of incomes, e.g. rents or remittances. Moreover, respondents report their annual expenditures for food and groceries, real estate costs, education expenses, medical expenses or repayments of loans and others. The variable used to control for a certain investment potential, is the amount that the respondent has left after computing income minus expenditure.

Education: The education level of the respondent is considered by using twelve education dummy variables ranging from "illiterate" to "postgraduate and above", where illiterate is our reference category. Moreover, our dataset comprises information on the respondent's knowledge of the English language. We consider this by including a dummy variable that takes on the value one if the respondent is able to read, speak or write English. This is particularly important, because information about financial matters provided by foreign banks might be in English as opposed to the local language or Hindi.

Occupation: The NDSSP data contains very detailed information on the occupation of the respondent. The respondents declare their occupation among nine categories including regularly salaried, own account workers, self-employed, temporary employees and independent wage workers and whether their occupation is in the formal or informal sector. The variable "self-employed" takes on the value one if the respondent is self-employed in the formal sector and zero otherwise. The dummy variable "white-collar" takes on the value of one if the respondent declares that he is employed in a formal professional or managerial position. The reference category is "other work", which refers to an occupation in the informal sector. In India, occupational status is often related to a certain bank type where the person has a bank account. Moreover, foreign banks often provide financial services to business customers. Hence, controlling for self-employment is very important.

Trust National Banks: In India most of the banks are still government owned. Na-

tionalized Banks are very wide spread in India and offer deposit guarantees for investors. Moreover, national banks are among the most trusted of the existing financial institutions. We therefore take into account the respondent's level of trust in national banks. The variable "TrustNB" takes on the value one if the respondent answers that he would *definitely trust* a national bank with his money, or if he *might trust* a specific financial institution with money and zero otherwise.

Risk aversion: An individual's risk attitude might not only influence their decision to make an investment at a bank, but it may also affect an individual's trust in a financial institution. In order to take this into account, we employ the variable "risk aversion", which is measured using a lottery-type question. The interviewee has to make a hypothetical investment of 1000 rupees and can choose between three alternative investments. In the first choice, a deposit of Rs. 1000 may turn into 2000 Rs. after one year or the investor may only get Rs. 500 back. In the second choice, the deposit may grow to be up to Rs. 1200 or the investor may lose some of the money and get Rs. 800 back. In the third choice, the deposit may grow to be Rs. 1050 without any loss. The dummy variable for risk attitude takes on the value of one if an interviewee opts for the third choice and zero otherwise. Hence, this indicator may reflect an individual's risk aversion, since only the third choice guarantees a positive return, whereas the returns are uncertain in the first and the second choices.

Information sources: Although foreign, as well as private banks, are still not very widespread in India, geographical distances can be bridged by the use of modern communication technologies such as TV, the Internet or a newspaper. Therefore, we control for the regular and irregular use of these communication technologies.

Regional Characteristics: Trust in banks may be strongly related to an individual's perceived level of institutional corruption, which might be very relevant to consider when investigating a developing country such as India. We therefore use the "Corruption Perception Index" (CPI) at the Indian state level, which is provided by Transparency International and reflects an individual's perceived corruption of different public institutions in India. For India, the Index varies between 240 and 695 among the Indian states,

and the average is 477. The higher the value, the greater the perceived corruption at the institutional level. The variable "high-corruption", takes on the value of one when the respondent lives in a state where the corruption perception index is high, which means that it is above the average level. Unfortunately, the data is only available for 20 Indian states. Since the NDSSP Data considers 25 Indian states, including the CPI leads to a reduced sample size. We also include the Gross Domestic Product per capita GDP at the Indian state level as an additional control variable. Both variables, GDP and CPI are used for the years 2004 and 2005 in which the NDSSP survey was conducted.

5 Empirical Results

5.1 Difference between trust in domestic banks and trust in foreign banks

Although India liberalized its financial market at the beginning of the 1990s, retail banking is still underdeveloped in India. Our dataset confirms that in India, the proportion of people having a savings account at a bank is much lower than in developed economies. Table 1 shows that only about 52 percent (17,438 respondents) of the interviewees report having a bank account and most of them (9,747) have an account at a national bank. Moreover, only 7 percent (1,215) of the respondents report that they have a savings account at an Indian private bank. Only 36 respondents (0.21 percent) report that they have an account at a foreign bank, emphasizing that private banking is still an issue in India. Customers of financial services might not be very familiar with products that private financial institutions offer. Conversely, financial products and services provided by nationalized banks are common and frequently used by individuals. This problem is likely to be even more severe for foreign banks.

****

insert Table 1 about here

****

Figure 1 reports the percentaged shares of trust in national banks, domestic private banks and foreign banks. The figure shows that most of the sample respondents (93.87

percent) state that they would definitely trust a national bank with their money. The share of those respondents who state that they would definitely trust a domestic private bank or a foreign bank stands at 13.16 percent and 6.54 percent respectively, remarkably lower in comparison to national banks. Conversely, when it comes to domestic private banks and foreign banks, most of the sample respondents say that given a choice, they would rather not trust them or that they would definitely not trust them with their money. These first descriptive statistics show that customer trust in foreign banks and domestic private banks may be an issue for potential customers of these banks in India. However, around 44.96 percent do not know of a foreign bank and 16.53 percent of a domestic private bank. These don't know responses are excluded from the empirical analysis.

****

insert Figure 1 about here

****

It can be argued that trust in banks tends to be related to an individual's income level, because individuals with higher incomes might be more familiar with financial matters, as they may make use of financial products more frequently than individuals with a low income. Figure 2 illustrates how the average level of trust in a certain type of bank is related to income and savings potential.[2] Again, these descriptive statistics show that national banks are very different from private banks with respect to the level of trust. While trust in national banks is very high and unrelated to income and savings potential, the average level of trust in private Indian banks and foreign banks is much lower and positively related to income and savings potential. Hence, the gaps between trust levels for the different types of banks seem to be lower for wealthier respondents. Even wealthy respondents trust private Indian banks and foreign banks, though this trust remains very low in comparison with trust in national banks. The difference between trust in national banks and trust in private banks might be explained by the fact that national banks are

---

[2] Savings potential is defined on the basis of how much the respondent is willing to save out of the household income minus household expenditures. The horizontal axis represents the deciles of income and savings potential. The vertical axis is the trust level.

backed by the Indian government, which implies that customers of national banks do not face the risk of losing their money. In contrast, bankruptcy is an issue for both types of banks. We will therefore focus on the comparison between trust in private Indian banks and foreign banks.

****

insert Figure 2 about here

****

Figure 3 shows the share of respondents having more confidence in Indian private banks than in foreign banks, the share of respondents having the same level of trust in Indian private banks and foreign banks, and the share of respondents who trust foreign banks more than Indian private banks. Hence, this figure focuses on relative trust and not on the absolute level of trust. The left pie chart presents these shares for the total sample of respondents. More than 58 percent of the respondents report identical levels of trust for both types of banks. Around 30 percent of the respondents would trust Indian private banks more with their money than foreign banks and around 11 percent have more confidence in foreign banks than in Indian private banks.

In addition, Figure 3 shows the share of respondents that have more confidence in private Indian banks than in foreign banks, the share of respondents having the same level of trust in private Indian banks and foreign banks, and the share of respondents who trust foreign banks more than private Indian banks. This figure thus, focuses on relative trust and not on the absolute level of trust. The left pie chart presents these shares for the total sample of respondents. More than 58 percent of the respondents report identical levels of trust for both types of banks. Around 30 percent of the respondents would trust private Indian banks more with their money than foreign banks and around 11 percent have more confidence in foreign banks than in private Indian banks. In addition, Figure 3 reports these shares for the sample of respondents who do *not* have savings account at an Indian private bank nor a foreign bank, the sample of respondents who have an account at an Indian private bank, and the sample of respondents who have an account at a foreign bank. Among the respondents that have a bank account at an Indian private bank, the

share of individuals trusting foreign banks more than private Indian banks is 10 percent, which is close to the share reported for the total sample. Among the individuals that have a bank account at a foreign bank, the share of individuals that have more confidence in foreign banks than in private Indian banks is 36 percent. This shows that foreign banks are more trusted than private Indian banks by individuals who have financial experience with foreign banks. Similarly, 38 percent of individuals who have an account at an Indian private bank trust private Indian banks more than foreign banks.

However, the number of individuals who have a bank account at a foreign bank is very low and the direction of causality is unclear. Experiences with a foreign bank or a domestic private bank may lead to more trust in the respective bank, but trust may also result in the opening of a savings account. In our empirical analysis, we will therefore focus on individuals who do not have accounts at private Indian banks nor foreign banks.

****

insert Figure 3 about here

****

5.2   Determinants of trust differences

Although we focus on individuals who do not have a bank account at a foreign bank nor an Indian private bank, people might have a bank account at another kind of bank. People who have a bank account may also use credit or ATM cards. Table 2, reports that 4 percent of our sample respondents have a credit card, and 10 percent possess an ATM card. Hence, only a few individuals hold financial relationships with banks or other financial institutions using these financial instruments. Furthermore, Table 2 shows that 17 percent of the sample respondents have a middle school education, 23 percent have a high school education, 11 percent have a higher secondary education, 14 percent have graduated from university and 55 percent report that they can either, read, write or speak English. 74 percent of the respondents can be considered being risk averse. The number of female respondents in our final sample is 8 percent, which is very low. Moreover, 14 percent of the sample respondents are self-employed in the formal sector and

32 percent are employed in white collar jobs. About 57 percent of the respondents use information sources such as the Internet and newspapers every day. Among the regional characteristics, Table 2 shows that 38 percent of the respondents live in a state where the perceived level of institutional corruption is very high.[3]

****

insert Table 2 about here

****

The results of the multinomial probit regression are reported in Table 3. The dependent variable comprises three outcome categories. In the first category, respondents have more confidence in private Indian banks than in foreign banks (column 1). In the second category, the level of trust in private Indian banks does not differ from the level of trust in foreign banks (column 2), and in the third category, respondents have more confidence in foreign banks than in domestic banks (column 3).[4] Table 3 does not report the estimated coefficients, but the average marginal effects, since the latter are easier to interpret and can be calculated for all three categories.

Among the *characteristics of the respective bank*, the table shows that the spatial presence of bank branches of foreign and private banks is very important for trusting domestic private banks and foreign banks.

The results show that individuals who live in a state where the share of foreign banks relative to private Indian banks is high, these individuals have a 9.8 percentage points lower probability of trusting a domestic private bank more than a foreign bank with their money, whereas these individuals have a 14 percentage points higher probability of trusting both financial institutions equally. The effects are significant at the one and five percent levels.

Table 3 shows that among the individual characteristics of the potential customers, the

---

[3]We computed variation inflation factors (VIFs) since multicollinearity might be an issue because we employ a large number of explanatory variables. The largest VIFs can be found for the education levels High School (3.16), higher secondary (4.33), and technical diploma (3.13). Since these values are below the critical value suggested in the literature, multicollinearity does not seem to be an issue.

[4]The dependent variable takes on the value one if the respondent trusts an Indian private bank more than a foreign bank (column (1)), it takes on the value 2 if trust in both types of banks is equal (column (2)), and the value is 3 if an individual trusts a foreign bank more than an Indian private bank (column (3)).

level of education of the potential customer is very relevant when investigating differences in trust between private Indian banks and foreign banks. In the first row, Table 3 shows that individuals with a higher education level are less likely to trust a private Indian bank with their money in comparison to a foreign bank. This result is the opposite for the third row. This indicates that individuals with a higher level of education are more likely to trust a foreign bank than a private Indian bank with their money.

Moreover, the effects increase in their size as the education level increases. Individuals who have graduated from university, have an 8.7 percentage point higher probability of trusting a foreign bank than a domestic private bank. For individuals with a professional degree, the effect is with 13.7 percentage points, even larger. On the other hand, being able to speak, read or write English, lowers the probability of trusting a foreign bank more than an Indian private bank by 2.3 percentage points, whereas this effect is not significant for the remaining two categories.

Among the variables reflecting a respondent's *trust* and *risk attitude*, trust in national banks is negatively related to trusting a foreign bank more than an Indian private bank, whereas the effect is positive but not statistically significant for trusting an Indian private bank more than a foreign bank with money. Nevertheless, by using trust in national banks as a regressor in our estimation, we take into account national banks as a benchmark as the latter are usually considered to be very reliable. Individuals who are rather risk averse are less likely to trust an Indian private bank more than a foreign bank. However, being risk averse increases the likelihood to trust both financial institutions equally by 2.5 percentage points. Among the use of information sources considered, the daily use of radio and TV, does not seem to be very relevant in explaining trust differences between domestic private and foreign banks, whereas reading the newspaper and using the Internet every day is related to a lower probability of trust in a domestic private bank more than a foreign bank, and to a higher probability, to trust a foreign bank more than a domestic private bank. In contrast, individuals who are not reading the newspaper or using the Internet at all, are more likely to trust a domestic private bank more than a foreign bank with their money.

The *institutional environment* of the state where the respondent lives, may influence a potential customers trust in a domestic bank or in a foreign bank as well. Table 3 shows that individuals living in a state where the perceived level of institutional corruption is very high, have a 4.7 percentage points lower probability of trusting a domestic private bank more than a foreign bank. This is also positively related to trusting both types of financial institutions equally. Moreover, living in a state where the GDP per capita is relatively high, is associated with a higher probability of trusting a domestic private bank more than a foreign bank. Furthermore, living in a state where the share of foreign banks to domestic private banks is relatively high, is associated with a lower probability of trusting domestic private banks more than foreign banks.

****

insert Table 3 about here

****

6   Robustness Checks

In order to check the robustness of our results, we conduct additional regressions. First, we estimate consumer trust in domestic private banks and foreign banks separately using ordered Probit regressions, because of the ordered structure of our trust variable. The estimation results confirm our main findings by pointing to significant differences among the determinants affecting consumer trust in foreign banks and consumer trust in domestic private banks. For instance, we find that individuals with a higher level of education have a lower probability of trusting a domestic private bank, whereas the level of education does not seem to be very important when investigating trust in foreign banks.

****

insert Table 4 about here

****

****

insert Table 5 about here

****

So far, it remains unclear whether a higher level of trust in the respective bank also favors a relationship with this bank. In order to consider this, we then estimate Probit regressions on the probability of having a bank account at an Indian private bank and at a foreign bank and we used trust in both banks as a regressor. Although not reported here (results are available upon request), our results point to a positive relationship between a higher level of trust in a foreign bank and having a bank account with a foreign bank (same for domestic private banks). However, these results should be interpreted with some caution as they may be affected by reverse causality given that investment experience may affect an individual's trust. Moreover, we are not able to investigate the development of an individual's trust in both banks over time since we make use of a cross-sectional dataset.

Therefore, our empirical analysis focuses on trust in foreign banks and trust in domestic private banks as a *pre-stage* of investment using a sample of *non-investors*, whereby we avoid potential endogeneity issues resulting from prior experiences. Moreover, this allows us to investigate the group of potential future investors, because in our empirical analysis, only those respondents who possess a positive savings potential to invest are considered.

Third, we account for town-specific fixed effects by including 77 town-dummy variables and test the robustness of our results by adjusting the standard errors for intra-cluster correlation within Indian states, since unobserved state level-effects may be an issue. The results are robust with respect to controlling for town-specific fixed effects and intra-cluster correlation.

7 Discussion and conclusions

While the existing literature focuses on the role of customer trust for stock market participation (Guiso et al., 2008; Porta et al., 1997), our knowledge about customers' trust in the retail banking market in emerging countries is still limited. This paper investigates empirically *potential* retail banking customers' trust in domestic and foreign banks using data from Indian households. From a theoretical point of view, it is unclear a priori

whether potential retail banking customers have more confidence in domestic or foreign banks.

Due to a lower level of perceived trustworthiness, foreign banks might face disadvantages in competition with domestic banks, since the former require greater effort in acquiring retail banking customers. Hence, foreign banks may experience additional costs above those incurred by domestic banks, usually termed "liability of foreignness" in the literature (Miller and Parkhe, 2002). Our results contribute to this literature as existing studies tend to investigate the supply-side in business banking, e.g. the lower efficiency of foreign banks relative to domestic banks (Ataullah and Le, 2004; Denk et al., 2012), whereas our study focuses on the demand side of the retail banking markets. Although, the literature dealing with "liability of foreignness" in capital markets has identified a lack of trust as a driver of relational hazards (Denk et al., 2012), differences between consumer trust in foreign banks and domestic banks have not been empirically investigated thus far. Consequently, our results complement the liability of foreignness literature by showing that a low level of customer trust -as a potential relational hazard- exists for foreign banks in India, and may also exist in other emerging economies.

Moreover, we examine the determinants that might explain differences in trust between domestic and foreign banks. Our results show that this difference can be explained by three factors, namely by *bank-specific characteristics*, *individual characteristics* of the potential customer and *characteristics of the institutional environment*.

In developing countries such as India, foreign retail banks have started to put some effort in relationship marketing and establishing long-term relationships with their customers (Mukherjee and Nath, 2003).Our results suggest that certain characteristics of banks play an important role in determining a potential customer's propensity to trust a bank with their money. For instance, the number of bank branches in a region seems to be very relevant. Our results show that the higher the number of branches of foreign banks relative to the number of private Indian banks at the state-level, the lower an individual's probability of trusting domestic private banks more than foreign banks. Potential customers of foreign banks who live in a region where the number of foreign

banks is high, might be more familiar and have better knowledge on foreign banks. This would imply that existing regulations by the Indian government that restrict the opening of new branches by foreign banks, tend to lead to a lower level of trust of potential customers in foreign banks, as compared to domestic banks. This is an important result, since domestic banks are not regulated to the same extend as foreign banks.

Furthermore, this paper provides evidence that individual characteristics may explain trust differences in domestic private banks and foreign banks. Firstly, trust differences are related to the willingness to take risks. Potential customers, who are risk-averse

have a higher probability of trusting both types of banks to the same extent, instead of having more trust in one type of bank. This might suggest that risk-averse individuals try to diversify the risk of being cheated and losing their money. Secondly, the level of education is relevant for the differences in trust. A higher level of education leads to a decrease in the probability of trusting a domestic bank, but increases the probability of trusting a foreign bank. Individuals with a higher level of education might be less affected by a "home bias" since they may have a greater ability to assess the financial services provided by foreign banks and domestic banks, as they might be better informed of the practices of foreign banks. Thirdly, the use of information sources affects differences in trust. Although the use of various information sources may be very relevant in providing information on financial institutions, only the daily use of the newspaper, as well as the daily use of the Internet, is relevant for trusting a foreign bank more than a domestic bank. Potential customers who use the Internet or read the newspaper daily may also get information about foreign banks and private banks and their current practices. This in turn may affect their level of trust respectively.

Finally, the institutional environment seems to be important as well. Indian states differ with respect to income levels and our results show that individuals living in a region that is characterized by a high GDP per capita are more likely to trust a domestic bank than a foreign bank and that they are less likely to trust both equally. In India, the overall level of corruption is still very high, but Indian states differ with respect to the level of corruption. Our results suggest that potential customers living in an Indian state where

the perceived institutional corruption is very high, are less likely to trust a domestic bank more than a foreign bank and that they have a higher probability of trusting both types of banks to the same extent. One possible explanation may be that potential investors may try to diversify perceived idiosyncratic risks of losing their money. Foreign banks might not be as strongly affected by local corruption issues as domestic banks and this may be anticipated by their potential customers.

These results may not only be relevant for retail banks aiming to establish a trust based relationship with their customers, but also for government policies. Recently, the Indian Prime Minister Narendra Modi has launched an initiative to help the poor by providing a bank account for every household. Many Indians have little access to financial services and this is also confirmed in our data. Only about 53 percent of the respondents report that they have a bank account and most of them have an account at a national bank, whereas only 7 percent of the respondents report that they have a savings account at a private Indian bank and the number of respondents having an account at a foreign bank is negligible. Hence, there is a large number of potential retail banking customers that do not have a bank account at domestic private bank or at a foreign bank. In principle, potential customers might benefit from the market entry of foreign banks. For instance, studies show that investors tend to invest not only in local assets, but also in assets offered by foreign banks or companies, and this increases when markets are better integrated (Baele et al., 2007).

However, India's banking sector is still highly regulated and India still faces a high level of corruption. Hence, the regulation of market entry by the Indian government, corruption and the resulting lack of customer trust, may inhibit foreign banks from entering the market. This is a crucial point since foreign banks may also be very important for introducing financial innovation in emerging countries (Bauer et al., 2008). Moreover, our results might not only be relevant for India, but also for other emerging economies and developing countries with similar financial market characteristics.

References

Ataullah, A. and Le, H. (2004). Financial repression and liability of foreignness in developing countries. *Applied Economics Letters*, 11(9):545 – 549.

Baele, L., Pungulescu, C., and Horst, J. T. (2007). Model uncertainty, financial market integration and the home bias puzzle. *Journal of International Money and Finance*, 26(4):606–630.

Balloch, A., Nicolae, A., and Philip, D. (2015). Stock market literacy, trust, and participation. *Review of Finance*, 19(5):1925 – 1963.

Bauer, C., Herz, B., and Hoops, S. (2008). A cheap lunch for emerging markets: Removing international financial market imperfections with modern financial instruments. *World Development*, 36(9):15141530.

Campbell, J. Y. (2006). Household Finance. *The Journal of Finance*, 61(4):1553 – 1604.

Chinn, M. D. and Ito, H. (2006). What matters for financial development? Capital controls, institutions, and interactions. *Journal of Development Economics*, 81(1):163–192.

Claessens, S., Glaessner, T., and Klingebiel, D. (2002). E-finance in emerging markets: Is leapfrogging possible? *Financial Markets Institutions & Instruments*, 11(1):1 –125.

Clarke, G., Cull, R., Peria, M. S. M., and Sanchez, S. M. (2003). Foreign Bank Entry: Experience, Implications for Developing Economies, and Agenda for Further Research. *The World Bank Research Observer*, 18(1):25–59.

Coval, J. D. and Moskowitz, T. J. (2001). The Geography of Investment: Informed Trading and Asset Prices. *Journal of Political Economy*, 109(4):811 – 841.

Dearmon, J. and Grier, K. (2009). Trust and Developement. *Journal of Economic Behavior and Organization*, 71(2):210–220.

Denk, N., Kaufmann, L., and Roesch, J.-F. (2012). Liabilities of foreignness revisited: A review of contemporary studies nd recommendations for future research. *Journal of International Management*, 18(4):322–334.

Grabowski, R. (1998). Development, markets and trust. *Journal of International Development*, 10(3):357 – 371.

Guiso, L., , Sapienza, P., and Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, 63(6):2557 – 2600.

Guiso, L., , Sapienza, P., and Zingales, L. (2009). Cultural biases in economic exchange. *The Quarterly Journal of Economics*, 124(3):1095–1131.

Guiso, L., Sapienza, P., and Zingales, L. (2004). The role of social capital in financial developement. *The American Economic Review*, 94(3):526 – 556.

Hakhverdian, A. and Mayne, Q. (2012). Institutional trust, education, and corruption: A micro-macro interactive approach. *Journal of Politics*, (74):739–750.

Honohan, P. (2008). Cross-country variation in household access to financial services. *Journal of Banking and Finance*, 32:2493–2500.

Huberman, G. (2001). Familiarity breeds investment. *Review of Financial Studies*, 14(3):659–680.

Ivkovic, Z. and Weisbenner, S. (2005). Local does as local is: Information content of the geography of individual investors common stock investments. *Journal of Finance*, 60(1):267 – 306.

Miller, S. R. and Parkhe, A. (2002). Is there al liability of foreignness in global banking? an empirical test of banks' x-efficiency. *Strategic Management Journal*, 23(1):55–75.

Mukherjee, A. and Nath, P. (2003). A model of trust in online relationship banking. *International Journal of Bank Marketing*, 21(1):5 – 15.

Petersen, M. A. and Rajan, R. G. (2002). Does distance still matter? The information revolution in small business lending. *The Journal of Finance*, 57(6):2533–2570.

Porta, R., Lopez-de Silanes, F., Schleifer, A., and Vishny, W. R. (1997). Trust in large organizations. *The American Economic Review*, 87 (2):333–338.

Shobhana, V. K. and Shanthi, G. (2008). Operational efficiency of foreign banks operating in India: A non-parametric model. *The IUP Journal of Bank Management*, 7(1):41–49.

Table 1:

Bankaccount Holders in the NDSSP-Data

Bankaccount	Yes	No	Total
	17,438	15,989	33,427
	(52.17)	(47.83)	(100.00)
Account Holders			
National Bank	9,747	7,691	17,438
	(55.90)	(44.10)	(100.00)
Indian Private Bank	1,215	16,223	17,438
	(6.97)	(93.03)	(100.00)
Foreign Bank	36	17,402	17,438
	(0.21)	(99.79)	(100.00)
Other Banks	6,440	10,829	17,438
	(37.9)	(62.1)	(100.00)

Table 1 reports the number of bank account holders in the NDSSP Dataset. Out of 33,427 individuals, 17,438 respondents report that they have a bank account at a financial institution. Among those respondents who possess a bank account, 9,747 report having an account with a national bank, 1,215 report having a bank account with an Indian private bank, 36 respondents report having a bank account with a foreign bank. 6,440 respondents have a bank account with another type of bank, e.g. a regional rural bank or a cooperative bank. Numbers in parentheses denote the relative frequencies which sum up to 100 in total.

Figure 1: Customer trust in banks
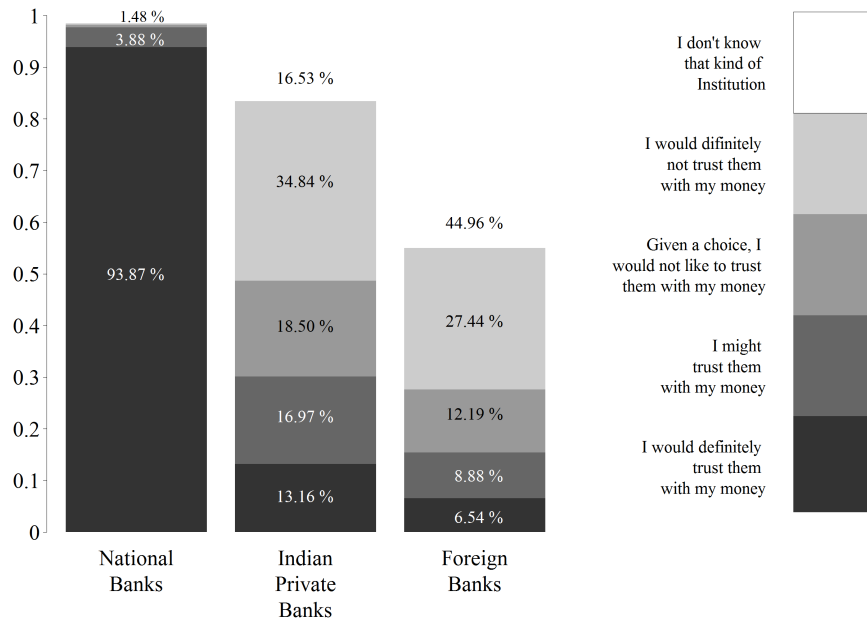
Figure 1 shows the percentage share of different levels of trust in different financial institutions in India. 93.87 percent of the sample respondents state that they would definitely trust a national bank with their money, 13.16 percent state that they would definitely trust a private Indian bank with their money and 6.54 percent state that they would definitely trust a foreign bank with their money.

Figure 2: Income levels and trust in banks
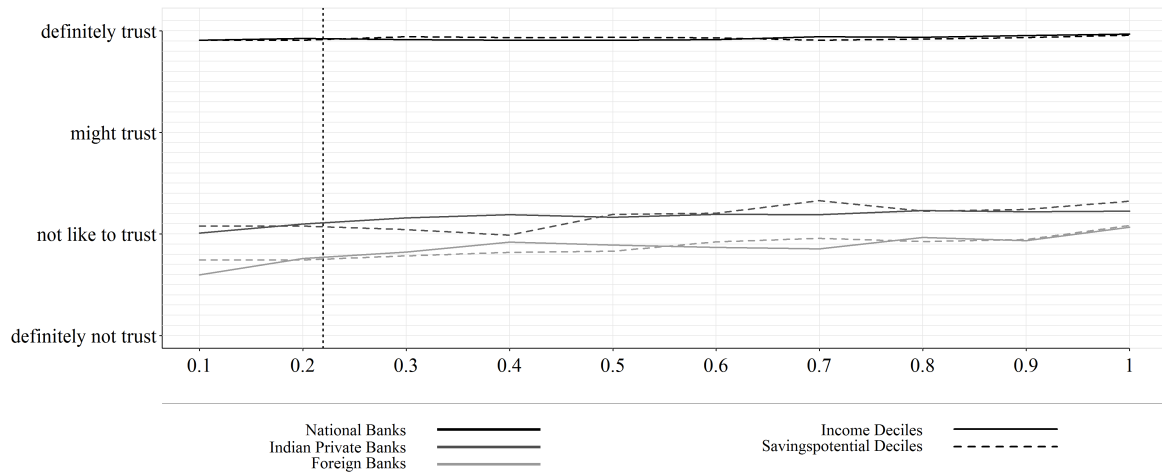
Figure 2 shows different incomes, as well as savings deciles and the corresponding level of trust in private Indian banks and foreign banks in India. Among all income deciles, respondents state that they would definitely trust a national bank with their money. Trust in private Indian banks, as well as trust in foreign banks, is increasing with increasing income, but it remains very low even in the highest income decile.

Figure 3: Trust-Differences in Banks
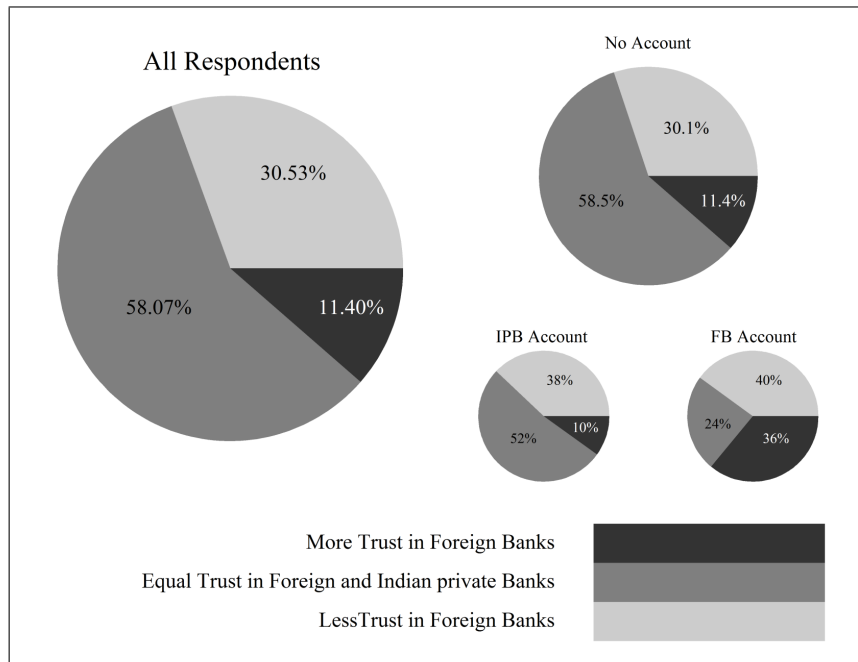
Figure 3 shows the differences in consumer trust among Indian private and foreign banks. The black color shows the share of respondents who trust a foreign bank more than an Indian private bank, dark grey indicates the share of respondents who have equal trust in foreign and private Indian banks, and the light grey color indicates the share of respondents who have less trust in foreign banks and more trust in domestic private banks. First, we consider all sample respondents (left chart). Second, we build different sub-samples of those respondents who do not have a bank account at an Indian private bank and at a foreign bank. We compare it to those who have an account at an Indian private bank, as well as to those who have an account at a foreign bank (right charts). The percentage share of respondents who state that they would trust a foreign bank more than a domestic private bank, is the lowest in three of four pie-charts, except when employing the sample of respondents who have a bank account at a foreign bank.

Table 2:

Summary Statistics for Explanatory Variables

	Observations	Mean	Standard Deviation	Min	Max
Financial Instruments					
CreditCard	11708	0.042	0.200	0	1
ATMCard	11708	0.104	0.305	0	1
Trust and Risk					
Trust in National Banks	11708	0.992	0.090	0	1
Risk Averse	11708	0.738	0.440	0	1
Education					
Literate no schooling	11708	0.018	0.134	0	1
Less than primary	11708	0.037	0.188	0	1
Primary school	11708	0.094	0.291	0	1
Middle school	11708	0.170	0.376	0	1
High school	11708	0.235	0.424	0	1
Higher secondary	11708	0.112	0.315	0	1
Technical diploma	11708	0.026	0.159	0	1
Graduate	11708	0.145	0.352	0	1
Professional degree	11708	0.031	0.174	0	1
Post graduate	11708	0.038	0.190	0	1
English	11708	0.551	0.497	0	1
Personal Characteristics					
Income	11708	72.284	102.659	0.7	6400
Age	11708	39.614	11.335	17	98
Female	11708	0.080	0.271	0	1
Married	11708	0.853	0.354	0	1
White Collar	11708	0.318	0.466	0	1
Self Employed	11708	0.140	0.347	0	1
Information Sources					
Daily use of radio and TV	11708	0.774	0.418	0	1
No use of radio and TV	11708	0.075	0.264	0	1
Daily use of newspaper and Internet	11708	0.575	0.494	0	1
No use of newspaper and Internet	11708	0.220	0.414	0	1
Regional Characteristics					
High Corruption (state level)	11708	0.377	0.485	0	1
GDP p.c. (state level)	11708	9.949	0.413	8.841	10.816
Ratio of Foreign Banks to Indian Banks	11708	0.074	0.096	0	0.305

Table 2 reports the summary statistics for the explanatory variables that were used. Those respondents are considered who do not possess a savings account at present at either a foreign bank nor an Indian Private bank. Official data for Indian states are used to control for regional characteristics, such as the number of financial institutions, the Gross Domestic Product (GDP) per capita at the state level and the number of banks per state are given in Rupees (RS). Variables denoted with an asterisk are the logarithmic values of the corresponding continuous variables. The sample consists of 11,708 respondents.

Table 3:

Trust Difference: Foreign and Private Banks

	(1)	(2)	(3)
Financial Instruments			
CreditCard	-0.008	-0.021	0.029*
	(0.023)	(0.025)	(0.016)
ATMCard	0.008	-0.015	0.007
	(0.016)	(0.017)	(0.010)
Trust and Risk			
Trust in National Banks	0.027	0.040	-0.067*
	(0.046)	(0.052)	(0.040)
Risk Averse	-0.033***	0.025**	0.009
	(0.010)	(0.011)	(0.006)
Education			
Literate no schooling	0.008	-0.005	-0.004
	(0.034)	(0.038)	(0.027)
Less than primary	-0.065***	0.006	0.059**
	(0.024)	(0.030)	(0.026)
Primary school	-0.053***	0.049**	0.004
	(0.020)	(0.023)	(0.017)
Middle school	-0.069***	0.051**	0.018
	(0.018)	(0.022)	(0.017)
High school	-0.050**	0.021	0.029
	(0.020)	(0.023)	(0.018)
Higher secondary	-0.042*	-0.015	0.057**
	(0.022)	(0.027)	(0.023)
Technical diploma	-0.060**	-0.019	0.079**
	(0.030)	(0.038)	(0.035)
Graduate	-0.070***	-0.017	0.087***
	(0.022)	(0.027)	(0.025)
Professional degree	-0.057*	-0.080**	0.137***
	(0.029)	(0.038)	(0.038)
Post graduate	-0.064**	-0.005	0.069**
	(0.027)	(0.034)	(0.031)
English	0.0087	0.014	-0.023***
	(0.012)	(0.013)	(0.008)
Personal Characteristics			
Income	-0.012*	0.003	0.009**
	(0.007)	(0.007)	(0.004)
Age	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)
Female	0.030*	-0.035**	0.005
	(0.017)	(0.018)	(0.011)
Married	-0.008	0.011	-0.003
	(0.013)	(0.014)	(0.009)
White Collar	0.012	-0.008	-0.004
	(0.011)	(0.012)	(0.007)
Self Employed	-0.002	-0.010	0.012
	(0.014)	(0.015)	(0.009)
Information Sources			
Daily use of radio and TV	0.006	0.002	-0.007
	(0.013)	(0.014)	(0.009)
No use of radio and TV	-0.010	0.018	-0.008
	(0.020)	(0.021)	(0.014)
Daily use of newspaper and Internet	-0.009	-0.004	0.013
	(0.012)	(0.013)	(0.008)
No use of newspaper and Internet	-0.047***	0.056***	-0.010
	(0.015)	(0.016)	(0.011)
Regional Characteristics			
High Corruption (state level)	-0.047***	0.047***	0.000
	(0.010)	(0.010)	(0.006)
GDP p.c. (state level)	0.018	-0.030**	0.012
	(0.012)	(0.013)	(0.008)
Ratio of Foreign Banks to Indian Banks	-0.098**	0.14***	-0.038
	(0.047)	(0.050)	(0.032)
Observed probabilities	0.301	0.585	0.114
Predicted probabilities	0.301	0.589	0.110

Table 3 reports the marginal effects at the mean using multinomial logit regression. Column (1) reports the probability to trust a domestic private bank more than a foreign bank, to trust a domestic private bank and a foreign bank similarly (2), and to trust a foreign bank more than a domestic private bank (3). The number of observations is 11,708. Standard errors are given in parentheses. ***, **, * denote significance at the 1, 5, 10 percent level.

Table 4:

Trust Levels: Indian Private Banks

	(1)	(2)	(3)	(4)
Financial Instruments				
CreditCard	0.035**	0.018***	-0.003	-0.050**
	(0.015)	(0.007)	(0.002)	(0.020)
ATMCard	0.063***	0.030***	-0.007***	-0.086***
	(0.011)	(0.004)	(0.002)	(0.013)
Trust and Risk				
Trust in National Banks	0.046**	0.032*	0.004	-0.082*
	(0.022)	(0.019)	(0.005)	(0.046)
Risk Averse	-0.047***	-0.025*	0.003***	0.068***
	(0.006)	(0.003)	(0.001)	(0.008)
Education				
Literate no schooling	0.004	0.002	-0.000	-0.006
	(0.020)	(0.012)	(0.001)	(0.031)
Less than primary	-0.038***	-0.026**	-0.002	0.066**
	(0.013)	(0.010)	(0.002)	(0.026)
Primary school	-0.044***	-0.030***	-0.002	0.076***
	(0.010)	(0.008)	(0.002)	(0.020)
Middle school	-0.045***	-0.030***	-0.002	0.076***
	(0.010)	(0.008)	(0.001)	(0.019)
High school	-0.037***	-0.0232***	-0.001	0.060***
	(0.011)	(0.008)	(0.001)	(0.019)
Higher secondary	-0.027**	-0.018**	-0.001	0.046**
	(0.013)	(0.009)	(0.001)	(0.022)
Technical diploma	-0.038**	-0.026**	-0.002	0.065**
	(0.016)	(0.013)	(0.003)	(0.031)
Graduate	-0.050***	-0.034***	-0.003	0.087***
	(0.012)	(0.009)	(0.002)	(0.022)
Professional degree	-0.052***	-0.038***	-0.005	0.095***
	(0.015)	(0.013)	(0.004)	(0.031)
Post graduate	-0.046***	-0.032***	-0.003	0.081***
	(0.014)	(0.012)	(0.003)	(0.029)
English	0.013*	0.008*	-0.000	-0.020*
	(0.007)	(0.004)	(0.0002)	(0.011)
Personal Characteristics				
Income	-0.007*	-0.004*	0.000	0.010*
	(0.004)	(0.002)	(0.000)	(0.006)
Age	-0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.004	-0.002	0.000	0.006
	(0.009)	(0.006)	(0.000)	(0.015)
Married	-0.022***	-0.012***	0.001*	0.032***
	(0.008)	(0.004)	(0.001)	(0.012)
White Collar	0.022***	0.013***	-0.001**	-0.034***
	(0.006)	(0.004)	(0.000)	(0.010)
Self Employed	0.020**	0.011**	-0.001	-0.030**
	(0.008)	(0.004)	(0.001)	(0.012)
Information Sources				
Daily use of radio and TV	0.011	0.006	-0.000	-0.017
	(0.007)	(0.004)	(0.000)	(0.012)
No use of radio and TV	-0.011	-0.007	0.000	0.018
	(0.011)	(0.007)	(0.000)	(0.018)
Daily use of newspaper and Internet	0.020***	0.012***	-0.000*	-0.031***
	(0.007)	(0.004)	(0.000)	(0.011)
No use of newspaper and Internet	-0.030***	-0.019***	-0.000	0.050***
	(0.008)	(0.006)	(0.001)	(0.014)
Regional Characteristics				
High Corruption (state level)	-0.089***	-0.056***	-0.002*	0.146***
	(0.005)	(0.004)	(0.009)	(0.001)
GDP p.c. (state level)	-0.003	-0.002	0.000	0.004
	(0.007)	(0.004)	(0.000)	(0.011)
Ratio of Foreign Banks to Indian Banks	0.015	0.009	-0.000	-0.023
	(0.026)	(0.015)	(0.001)	(0.041)
Observed probabilities	0.167	0.228	0.233	0.372
Predicted probabilities	0.158	0.231	0.242	0.369

Table 4 reports the marginal effects at the mean using ordered logit regression in combination with one of the following responses by the interviewee: (1) I would definitely trust this financial institution with my money, (2) I might trust this financial institution with my money, (3) Given a choice I would not trust this financial institution with my money (4) I would definitely not trust this financial institution with my money. The total number of observations is 11,708 Standard errors are given in parentheses. ***, **, * denote significance at the 1, 5, 10 percent level.

Table 5:

Trust Levels: Foreign Banks

	(1)	(2)	(3)	(4)
Financial Instruments				
CreditCard	0.037***	0.026***	0.009***	-0.072***
	(0.013)	(0.008)	(0.002)	(0.022)
ATMCard	0.044***	0.030***	0.011***	-0.084***
	(0.009)	(0.005)	(0.001)	(0.015)
Trust and Risk				
Trust in National Banks	0.023	0.019	0.011	-0.052
	(0.019)	(0.017)	(0.011)	(0.047)
Risk Averse	-0.022***	-0.017***	-0.007***	0.046***
	(0.005)	(0.003)	(0.001)	(0.010)
Education				
Literate no schooling	0.015	0.011	0.005	-0.030
	(0.017)	(0.012)	(0.005)	(0.034)
Less than primary	-0.007	-0.006	-0.003	0.016
	(0.012)	(0.010)	(0.005)	(0.027)
Primary school	-0.017*	-0.014*	-0.007	0.037*
	(0.009)	(0.008)	(0.004)	(0.021)
Middle school	-0.009	-0.008	-0.004	0.021
	(0.009)	(0.007)	(0.004)	(0.020)
High school	-0.010	-0.008	-0.004	0.022
	(0.009)	(0.008)	(0.004)	(0.021)
Higher secondary	0.009	0.007	0.003	-0.019
	(0.012)	(0.009)	(0.004)	(0.024)
Technical diploma	0.014	0.010	0.004	-0.029
	(0.017)	(0.012)	(0.004)	(0.033)
Graduate	0.004	0.003	0.002	-0.009
	(0.011)	(0.009)	(0.004)	(0.024)
Professional degree	0.019	0.014	0.006	-0.038
	(0.016)	(0.011)	(0.004)	(0.032)
Post graduate	0.003	0.002	0.001	-0.006
	(0.014)	(0.011)	(0.005)	(0.030)
English	0.000	0.000	0.000	-0.001
	(0.006)	(0.004)	(0.002)	(0.012)
Personal Characteristics				
Income	0.003	0.002	0.001	-0.007
	(0.003)	(0.002)	(0.001)	(0.007)
Age	-0.000	-0.000	0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Female	-0.015**	-0.012**	-0.006*	0.034**
	(0.007)	(0.006)	(0.003)	(0.016)
Married	-0.011*	-0.008*	-0.004*	0.023*
	(0.006)	(0.005)	(0.002)	(0.013)
White Collar	0.010**	0.008**	0.004**	-0.022**
	(0.005)	(0.004)	(0.002)	(0.011)
Self Employed	0.017**	0.013***	0.005***	-0.035***
	(0.007)	(0.005)	(0.002)	(0.013)
Information Sources				
Daily use of radio and TV	0.005	0.004	0.002	-0.011
	(0.006)	(0.005)	(0.002)	(0.013)
No use of radio and TV	-0.009	-0.007	-0.003	0.019
	(0.009)	(0.007)	(0.004)	(0.020)
Daily use of newspaper and Internet	0.020***	0.016***	0.007***	-0.043***
	(0.005)	(0.004)	(0.002)	(0.012)
No use of newspaper and Internet	-0.019***	-0.015***	-0.008***	0.042***
	(0.007)	(0.006)	(0.003)	(0.015)
Regional Characteristics				
High Corruption (state level)	-0.070***	-0.057***	-0.031***	0.158***
	(0.004)	(0.004)	(0.002)	(0.010)
GDP p.c. (state level)	-0.012**	-0.010**	-0.005**	0.0267**
	(0.005)	(0.004)	(0.002)	(0.012)
Ratio of Foreign Banks to Indian Banks	0.068***	0.053***	0.025***	-0.146***
	(0.021)	(0.016)	(0.008)	(0.044)
Observed probabilities	0.117	0.161	0.223	0.499
Predicted probabilities	0.108	0.162	0.231	0.499

Table 5 reports the marginal effects at the mean using ordered logit regression in combination with one of the following responses by the interviewee:: (1) I would definitely trust this financial institution with my money, (2) I might trust this financial institution with my money, (3) Given a choice I would not trust this financial institution with my money, (4) I would definitely not trust this financial institution with my money. The total number of observations is 11,708 Standard errors are given in parentheses. ***, **, * denote significance at the 1, 5, 10 percent level.