Investing in Low-trust Countries:

On the Role of Social Trust in the Global Mutual Fund Industry

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Abstract

We hypothesize that social trust, in mitigating contracting incompleteness, may have an important effect on the activeness and effectiveness of delegated portfolio management. Using a complete sample of worldwide open-end mutual funds, we find that trust is positively associated with the activeness of funds and that trust-related active share delivers superior performance (e.g., approximately 2% per year for cross-border investments). Moreover, "trust in the market" and "trust in managers" play important yet different roles for different types of cross-border delegated portfolio management. Our results suggest that trust acts as a fundamental building block for delegated portfolio management.

 Key words: Trust, International Investments, Mutual Funds, Performance

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Introduction

Some forty years ago, Nobel laureate Kenneth Arrow noted that "virtually every commercial transaction has within itself an element of trust, certainly any transaction conducted over a period of time" (Arrow, 1972).[5] Such a broad impact of trust is not surprising. Given that the complex nature of a modern economy makes it almost impossible to write complete contracts that encompass all states of nature, trust plays a major role in mitigating such contracting incompleteness (see, e.g., Algan and Cahuc, 2014, and Karolyi, 2016, for recent surveys).

Contracting incompleteness is particularly important in delegated portfolio management. Take active portfolio management as an example. On the one hand, it represents an implicit contractual commitment in which mutual funds take more discretionary actions in exchange for the delivery of a higher return. On the other hand, while it is relatively easy to write a contract that obligates funds to explicitly track their benchmarks, it is almost impossible to write as complete a contract on active management that commits funds to optimally deviate from benchmarks and deliver performance in different states of the economy. Surprisingly, the literature has not yet provided a solid empirical understanding of the impact of trust on such contracting incompleteness.

Our paper aims to bridge this gap by exploring the potential role of trust in active management in the global mutual fund industry. In general, trust mitigates contracting incompleteness because it can reduce the subjective probability that individuals assign to the case of being cheated (Arrow, 1972; Gambetta, 1988; Putnam, Leonardi, and Nanetti, 1993; Williamson, 1993; Fukuyama, 1995). Guiso, Sapienza, and Zingales (2004; 2008) provide an intuitive economic framework to formulate this notion for stock market investors: in making investment decisions, investors assess not only the distribution of returns considered in traditional financial theories but also the subjective probability of being expropriated by the stock market. A higher level of trust means less concern regarding expropriation, which encourages investors to invest more in the market.

In active management, trust can influence investor demand in a similar manner. To see this intuition, consider the case in which investors can invest in an active fund in addition to the market portfolio that promises to deliver some additional return above and beyond market returns (i.e., fund performance) based on its market timing and stock selection abilities. Due to contracting

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[5] Trust, for instance, permeates many areas of economics from economic growth (Knack and Keefer, 1997) to international trade and investment (Guiso, Sapienza, and Zingales, 2009) and from financial development (Guiso, Sapienza, and Zingales, 2004, 2008) to corporate transactions (Bottazzi, Da Rin, and Hellmann, 2016; Duarte, Siegel, and Young, 2012; Ahern, Daminelli, and Fracassi, 2015), firm size (La Porta et al., 1997; Bloom, Sadun, and Reenen, 2012) and information dissemination (Pevzner, Xie, and Xin, 2015).

incompleteness (e.g., investors can neither fully observe fund actions nor verify their consequences), investors may worry about—and therefore assign a subjective probability of being cheated as a reduced-form description of the associated risk of—potential expropriation by the fund (which exists in addition to the expropriation risk of the market in which the fund invests).[6] Intuitively, trusting investors should delegate more capital to the active fund due to their lower self-assessed probability of being cheated by the fund. This effect can indeed be easily verified if we extend the model of Guiso, Sapienza, and Zingales (2008) to include an active fund (we provide such a theoretical model in the Internet Appendix), which further predicts a positive relationship between trust and the popularity of active management in the mutual fund industry.

The influence of trust, however, is not limited to the demand side. In particular, trust and trustworthiness are largely reciprocal—a society lacking trustworthy responses is unlikely to have a high level of trust as its prevailing cultural value (see, e.g., Algan and Cahuc, 2014, for a survey and theoretical treatment; Berg, Dickhaut, and McCabe, 1995, and Baran, Sapienza, and Zingales, 2010, for laboratory experiments). If trust is a fundamental social value influencing the principal-agent relationship in active management, then funds in a high-trust economy should behave in a trustworthy way, focusing more on their implicit commitment to deliver performance and expropriating less.[7] Other things being equal, more such trustworthy behaviors allow funds to deliver better performance. Jointly, therefore, social trust is likely to influence both the demand and the supply side of delegated portfolio management, resulting in a higher demand for active management by investors and reciprocally better performance by funds. When there is no confusion, we refer to these two interrelated impacts as the *mutual trust hypothesis*.

Alternatively, one may conjecture that allowing investors to withdraw capital from poorly performing funds in the survival-of-the-fittest spirit of Fama and Jensen (1983) may help solve the issue of contracting incompleteness and thus eliminate the influence of trust on activeness (call it the *no-influence-of-trust hypothesis*). This solution, however, requires fund investors to have knowledge of both fund activeness and fund performance, of which we have little evidence (e.g., Frazzini and Lamont, 2008). Repeated interactions will not solve this problem because the degree

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[6] Mutual fund scandals occurred in 2003 illustrate a good example in which retail investors need to worry about potential expropriation of fund investments (see Houge and Wellman, 2005 and Davis et al., 2007 for more details). In addition to such scandals, mutual funds may also mislead investors and inflate their value by, among others, window dressing, portfolio pumping, unnecessary portfolio churning, and improper risk taking (e.g., Lakonishok et al., 1991; Sias and Starks, 1997; Carhart et al., 2002; Agarwal et al., 2014).

[7] A reciprocal relationship between trust and trustworthiness implies that a lower subjective probability of cheating assigned by fund investors is likely to be matched with a lower intensity of real cheating by active funds, which suffices to allow investors to receive higher expected returns from funds conditioned on fund skills. It does not require fund managers to have better skills. The Internet Appendix provides further pertinent discussion.

of fund activeness can arguably be different in each period, making it difficult if not impossible for investors to determine their optimal level of fund activeness. Hence, we still expect trust to play a role.[8] Another possibility—call it the *diminishing returns to scale hypothesis*—is that high trust leads to more activeness, but the sector may subsequently become too crowded to deliver performance. Worse, mutual funds may even strategically expropriate high-trusting investors, leading to underperformance and agency issues (e.g., Jensen and Meckling, 1976; Myers and Majluf, 1984) as opposed to mutual trust, which we can refer to as the *breach-of-trust hypothesis*.

Since these competing hypotheses lead to very different normative implications, it is crucial to pin down which one prevails in the real economy. We therefore conduct several steps of analysis to examine these hypotheses based on the complete sample of worldwide open-end mutual funds. We begin by linking social trust to the activeness of domestic equity funds at the country level, whereby the value of trust is taken from the World Values Survey and the Europe Value Survey. We find that the fraction of active funds in the domestic equity mutual fund industry (in terms of total net assets) is in general positively related to the degree of trust in the country. Moreover, the magnitude of this relationship is economically sizable but unlikely to create an overcrowding issue: a one-standard-deviation increase in trust is linked to 6.2% more active funds in a country.

After sketching the country-level pattern, we move on to fund-level analyses by applying a two-stage approach to make inferences about both the activeness and the performance of domestic funds across economies with different levels of trust. In the first stage, we explore the relationship between social trust and the degree of fund activeness proxied by "active share" (Cremers and Petajisto, 2009), which is known to play a crucial role in the global mutual fund industry (e.g., Cremers, Ferreira, Matos, and Starks, 2016). In the second stage, we explore the performance of the trust-related active share—i.e., the part of the active share explained by trust in the first stage. The *mutual trust hypothesis* implies a positive relationship in both stages when funds cater to trusting investors' higher demand for active management and when trusted funds reciprocate with better performance.

Indeed, we find that a higher degree of trust allows domestic funds to be more active and that funds deliver high trust-related performance in return. A one-standard-deviation increase in trust,

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[8] In general, informal intuitions such as social norms and trust can foster cooperation in settings without complete information and repeated interaction (e.g., North 1991; Guiso, Sapienza, and Zingales, 2015). A related issue is that trust may affect investors' responses to fund performance (i.e., flow-performance sensitivity), which subsequently affect fund incentives. The hypothetical influence of trust in this case, however, is mixed. Trust may either increase or decrease the flow-performance sensitivity of mutual funds, depending on whether investors are concerned more with the trustworthiness of information or with that of managers in terms of expropriation risk. Li, Massa, and Zhang (2017), for instance, find that the former effect prevails among retail mutual fund investors in China.

for instance, is related to a 3.84% increase in the proportion of the active share in the panel specification, which further translates into an annual performance of 1.71% rolling alpha and 1.24% in-sample estimated alpha. Given that the mutual fund industry manages trillions of dollars of assets at the country level, the wealth impact of this effect is sizable: unlike fund investors in high-trust countries, those in low-trust countries could lose millions of dollars every year simply due to the lack of trust in the economy.[9] These findings lend initial support to the *mutual trust hypothesis* instead of the alternative hypotheses.

One limitation of the above analysis is that its focus on domestic funds makes it difficult to further examine the two elements of social trust involved in delegated portfolio management: "trust in managers" (e.g., Gennaioli, Shleifer, and Vishny, 2014a,b) and "trust in the market" (Guiso, Sapienza, and Zingales, 2004, 2008; Georgarakos and Inderst, 2014). These two elements are likely to be different because investors can assign different probabilities to different types of expropriation. However, both are important, because a lack of trust in either dimension is likely to reduce investors' demand for indirect investment (our model provides a mathematical treatment synchronizing the two properties). The empirical challenge is how to differentiate between the two when they are correlated in a given economy: a more trustworthy market is likely to be built on social norms that also contribute to the trustworthiness of fund managers.

In the second and main step of our analysis, we resort to one important type of management in the global mutual fund industry, *cross-border* delegated portfolio investment, to differentiate the two elements of trust. To see how cross-border delegation can provide a solution, consider the dominating scenario of cross-border capital flows in our sample, in which mutual funds domiciled in a high-trust home country raise capital therein and invest in assets of low-trust target countries. Although investors in general trust fund managers in their home country, investing in less-trustworthy foreign countries requires additional confidence that money will not be easily stolen in these markets. In this case, the more trustworthy a target country is in investors' view (compared to all potential targets), the willingness of the investors to bear contracting incompleteness and participate in such indirect cross-border investment increases.

The advantage of this setup is that "trust in managers" naturally concentrates in the high-trust home country, while "trust in the market" concentrates in the low-trust target country. Hence, we

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[9] Another way to interpret this magnitude is to compare this wealth impact to mutual fund fees, which can be explicitly contracted. The average expense ratio charged by the entire exchange-traded fund (ETF) industry and the open-end mutual fund (OEF) industry, for instance, is 37bps and 1.9%, respectively (Chen, Massa, and Zhang 2014). Take the impact of 1.71% as an example. The lack of trust induces a wealth loss equivalent to approximately four times of the amount of the average ETF fees and 90% of the average OEF fees.

can still use country-level values of trust to separately proxy for these two mechanisms. This identification strategy, though hardly perfect, allows us to use the previous two-stage framework to differentiate the influence of "trust in the market" from that of "trust in managers" on cross-border investment. Although bilateral trust (i.e., how people in the home country trust the target country in general) can provide a better proxy for how trustworthy a foreign market is in investors view, this variable is available only for a subsample of countries (e.g., Guiso, Sapienza, and Zingales, 2009). We therefore use country-level trust as our main specification, and we use subsample bilateral trust to further validate the main results.

We find that for funds investing in low-trust countries, "trust in the market" can significantly influence cross-border investment. In particular, funds manage more active shares when the target country has a relatively higher level of trust—and the trust-related active share still delivers higher performance, as predicted by the *mutual trust hypothesis*. A one-standard-deviation increase in trust of the target country is associated with an increase of approximately 10.81% in active share at the fund level for panel specifications, which further translates into a superior annualized performance of 2.56% rolling alpha using a panel specification and of 2.40% in-sample estimated alpha. Interestingly, this magnitude is higher than the one observed for domestic funds, suggesting that trust plays perhaps an even more important role in cross-border investments.

A potential concern is that the influence of "trust in the market" of the target countries can be spuriously related to certain country-level characteristics of the home or target country. Another concern is reverse causality, whereby investors may invest in active funds because of their awareness of superior fund performance, which somehow correlates with social trust. We conduct two tests to address these issues. First, we gauge the cross-border tests on the subsample of funds that raise capital in the U.S. to invest in countries with a lower level of trust than the U.S. This subsample has the advantage that trust (and other characteristics) of the home country (i.e., U.S.) is directly controlled for. The impact of trust on both active share and performance in this subsample is on par with that of the whole sample: a one-standard-deviation increase in trust of a target country generates an increase in active share that translates into an annual performance of 2.35% of rolling alpha and 2.24% of in-sample alpha.

While the U.S. subsample controls for characteristics of the home country, the remaining concern is about those of the target countries. To address this issue, we conduct two endogeneity tests. First, we explore time-series variations in trust based on the Gallup Poll on American's attitudes toward foreign countries (e.g., Hwang, 2011). A telling example is the French governments' opposition to the Iraq War in 2003, which significantly worsened the attitudes of US

people toward France and therefore shook their trust in the French market. We find that US investors reduce their demand on highly active mutual funds investing in France and that these funds respond reciprocally by reducing fund activeness. In a more general setting, we use *changes* in Americans' attitudes toward other countries as a proxy for plausibly exogenous variations in US investors' trust in those markets. We find that the trust-activeness relationship gets enhanced (weakened) when a positive (negative) variation occurs, which also increases (reduces) performance. These results lend support to a causal interpretation of the *mutual trust hypothesis*.

Since the Gallup Poll scores are only available in the US, in the second test, we focus on a subsample of European countries for which we can directly measure bilateral trust in the cross-section, following Guiso, Sapienza, and Zingales (2009). For this subsample, we use country-fixed effects to eliminate the spurious correlation created by time-invariant characteristics of both the home and the target countries. Moreover, by adopting the same generalized method of moments instrumented variable estimator (GMM-IV) of Guiso, Sapienza, and Zingales (2009), we can further attenuate endogeneity concerns. In particular, Guiso, Sapienza, and Zingales (2009) show that religious similarity and somatic distance (i.e., the average frequency that specific traits such as hair color, height, etc. are present in the population) can help instrument the cultural roots of bilateral trust. These instruments are reasonable for our purpose as well because they are unlikely to directly affect fund activeness (exclusion restriction). We find that, whether instrumented or not, bilateral trust plays a very similar role in active share and performance among European countries. Since the results are unlikely to be driven by reverse causality as well, these two subsample tests mitigate endogeneity concerns.

One interesting finding in the above "investing in low-trust countries" analysis is that "trust in managers" does not seem to exert a significant influence. However, how general is this result? Does it imply that cultural considerations of the market dominate those of the managers in delegated active portfolio management? Or could it be due to a lack of variation in the trust variable among high-trust countries that reduces statistical power?

To gain intuition on these important questions, in our third-step analysis, we consider the reverse "investing in high-trust countries" scenario in which funds invest in countries that have a higher surveyed value of trust than their home country. Our striking finding is that "trust in managers" now dominates the influence on fund activeness and performance. Although this reverse scenario occurs less frequently in the global mutual fund industry, its economic magnitude is nonetheless sizable. A one-standard-deviation increase in trust generates an increase in the active

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share that translates into an annual performance of 1.34% in terms of rolling alpha and 1.17% in terms of in-sample alpha if we use a panel specification.

Jointly, therefore, the two mechanisms of social trust seem to exert very different influences on the global mutual fund industry: "trust in the market" affects fund activeness and performance mainly in the "investing in low-trust countries" scenario, whereas "trust in managers" dominates the reverse "investing in high-trust countries" scenario. Are these two observations contradictory? We argue that the answer is no and that their difference may reveal a fundamental property of social trust that affects the mutual fund industry: the marginal impact of trust could decrease when the level of trust increases.[10] With a diminishing impact, the influence of trust is high (low) when it is associated with the low-trust (high-trust) side of cross-border transactions. Trust in the market and trust in managers have a significant influence on the two scenarios of investing in low-trust and high-trust countries, respectively, because they represent the low-trust side of these transactions. Additional tests support this *diminishing impact of trust* interpretation.

The diminishing impact of trust is consistent with, if not a part of, the more general notion that there may exist an optimal level of trust in facilitating economic activities (Butler, Giulian, and Guiso, 2016). Exceeding the optimal level may hurt investor payoffs, as observed in household finance (e.g., Butler, Giulian, and Guiso, 2016; Jiang and Lim, 2018). To see whether the above diminishing effect could imply overtrust, we zoom in on the low-trust side of cross-border transactions and examine how the influence of trust varies across quintiles of trust values. Interestingly, we find that the active share impact and performance benefit of trust increase across trust-quintiles with a diminishing pattern—but they do not revert (and so be observed for domestic funds as well). Unlike the case of household finance, therefore, the global mutual fund industry may have achieved a proper reciprocal relation between trust and trustworthiness, for instance, due to its high level of competitiveness and more repeated interactions between investors and managers.

In additional analysis reported in the online appendix, we also show that our results are robust to a battery of robustness checks, including the use of trust measured in earlier waves before our testing period, the exclusion of US-domiciled funds, the employment of a different data sample, the use of alternative variable definitions, the adoption of different factor models in computing fund performance, and controlling for a list of additional country characteristics related to financial development, culture, and institutions. We also show that trust significantly affects the activeness

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[10] In the extreme case, if a certain level of trust suffices to mitigate major contracting incompleteness, any further enhancement in social trust beyond this level may not lead to observable influences.

and performance of retail funds but not of institutional funds.

To the best of our knowledge, we are the first to examine the role played by trust in affecting both the activeness and efficiency of delegated portfolio management, which extends the aforementioned literature on trust to the global mutual fund industry. In doing so, we are particularly linked to the emerging literature exploring how trust may influence delegated portfolio management (e.g., Choi and Kahan, 2007; Guiso, Sapienza, and Zingales, 2009; Gennaioli, Shleifer, and Vishny, 2014a; Kostovetsky, 2015; Gurun, Stoffman, and Yonker, 2018). Most empirical evidence focuses on the demand side of delegated portfolio management, showing how (bilateral) trust helps to promote portfolio flows among European countries (Guiso, Sapienza, and Zingales, 2009) or how disruptions in trust lead to the opposite effect of capital outflows (Choi and Kahan, 2007; Kostovetsky, 2015; Gurun, Stoffman, and Yonker, 2018). The positive relationship between trust and active management documented in this paper is consistent with these findings.[11] We further contribute by demonstrating that trust can influence not only investor demand but also fund performance and that different elements of trust play different roles in guiding cross-border portfolio flows. Trust in this regard serves as an important pillar of delegated portfolio management by shaping the behavior of both the principal and the agent.

Our results also show that the practice of active portfolio management in the mutual fund industry can be directly related to trust. In this way, we complement the existing literature on the source of fund performance (Coval and Moskowitz, 2001; Mamaysky, Spiegel, and Zhang, 2008; Cremers and Petajisto, 2009; Ferson and Lin, 2014) and studies rationalizing the existence of active and index funds (e.g., Berk and Green, 2004; Chen et al., 2004; Hortaçsu and Syverson, 2004; Stein, 2005; Garcia and Vanden, 2009; Glode, 2011; Pastor and Stambaugh, 2012; Pastor, Stambaugh, and Taylor, 2015). Our results provide a new angle—i.e., culture—for examining the principal-agent relationship and understanding the performance of active management.

Finally, we also contribute to the literature on the role of country-level institutions (e.g., Doidge, Karolyi, and Stulz, 2004, 2007; Aggarwal et al., 2009). Our results show that trust may play as fundamental a role as formal institutions. This observation has important normative implications. Indeed, for many emerging markets, the lack of trust could be an important reason explaining the unsatisfactory outcomes when these markets start to globalize. Our results imply that without a

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[11] Note that our study is not a direct test of Gennaioli, Shleifer, and Vishny (2014a), as we do not know the counterfactual risk preference and investment performance of investors when they do not use mutual funds to invest, which is a key starting point of their model. If we view active share as more risk-taking, however, our results are consistent with their predictions that trust enables investors to take more risk and that investors are better off in equilibrium.

proper level of trust, policies focusing solely on the free flow of capital may not achieve the full benefit of globalization.

The remainder of the paper is organized as follows. Section II presents our variables. Section III reports the impact of trust on domestic funds. Section IV explores how trust affects cross-border mutual fund investments. Section V discusses robustness checks. Finally, Section VI concludes. The Internet Appendix provides a theoretical framework as well as additional robustness checks.

II. Data and Variable Construction

We now describe the sources of our data and the construction of our main variables.

A. Data Sample and Sources

Country-level proxies for social trust, or, for brevity, simply "trust," come from two sources of survey data: the World Values Survey (WVS) and the Europe Value Survey (EVS). The WVS covers 97 countries in six continents, representing more than 88% of the total world population. The survey has been carried out in six waves: 1981-1984, 1989-1993, 1994-1998, 1999-2004, 2004-2008, 2010-2014, in which respondents were randomly chosen to be representative across age, sex, occupation and geographic region. The EVS survey has been implemented in a similar manner, focusing mostly on European countries. The inclusion of the two databases increases country coverage (e.g., Algan and Cahuc, 2014). Later sections will show that our results are robust if we focus only on WVS.

Following the literature (e.g., Pervzner, Xie, and Xin, 2014; Ahern, Daminelli, and Fracassi, 2015), we rely on the most recent survey wave to measure the level of trust. The WVS and EVS databases also provide other culture-related variables, such as individualism. In addition, we collect other country-level variables through various sources. For example, we obtain data on gross domestic product (GDP), market capitalization, Internet penetration and education from the World Development Indicators and Government Quality Index from La Porta et al. (1999).

We obtain mutual fund information, including fund name, domicile, investment style, initial year, benchmark, monthly returns, turnover and total net assets (TNA) from Morningstar International, which has complete coverage of open-end mutual funds worldwide beginning in the early 1990s. Morningstar is free from survivorship bias because it includes both active and defunct funds. For each fund, we aggregate multiple share classes to the portfolio level.

We then match these data with holding data from LionShares/FactSet, which covers portfolio equity holdings for institutional investors worldwide. The database provides holdings data for over 5,000 institutions on over 35,000 stocks for a total market value of US $18 trillion as of December 2005. We further exclude those benchmark indices followed by less than 10 open-end equity mutual funds, and we match our mutual fund databases with trust and other country-level variables. We include only funds that are not registered offshore, have TNA at or above 2 million US dollars in the previous year and possess no missing values for performance information. Our results are robust if we use other cutoff points, such as $5 million TNA, to filter out small funds. Our final sample spans from 2002 to 2015, with 42,156 fund-year observations covering 31 countries. Appendix B provides more details about the selection process and the resulting fund sample are provided.

B. Main Variables

To measure the level of trust in a given country, the literature typically focuses on the following survey questions in the WVS and EVS (e.g., Guiso, Sapienza, and Zingales, 2008; and Ahern, Daminelli, and Fracassi, 2015):

> *"Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"*

We recode the response to be 1 if the participant's answer to this question is that 'most people can be trusted', and 0 otherwise. Country-level trust in any given survey wave is then computed as the average score of the responses from all survey participants in a specific country. This variable is distributed between zero and one and is quite stable over different survey waves.[12]

To highlight the impact of trust, it is important to control for four sets of other country-level variables that could also affect mutual fund investors. The first set involves a country's formal institutions, which can affect the informational effectiveness of the mutual fund industry (Lin, Massa, and Zhang, 2014). We proxy for the formal institutions of a country by the Quality of Government Index of La Porta et al. (1999), which we refer to as *Qua_Gov*.[13] The variable ranges from 0 to 1, with higher scores implying better government quality. We provide a graphic view of

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[12] In the Internet Appendix, we show that other forms of social capital, such as the degree of individualism and egalitarianism, do not affect the main impact of trust. The construction of these additional variables and their related tests are detailed in Appendix A and in the Internet Appendix.

[13] The index includes the following four dimensions: 1) regulation policies related to opening a business and keeping open a business, 2) government corruption, 3) red tape and 4) facilities for and ease of communication between headquarters and the operation, as well as the quality of transportation. Other variables of formal institutions, such as Property Rights and Contracting institutions (i.e., Acemoglu and Johnson, 2005), lead to similar results, which we report in our Internet Appendix.

societal trust and the quality of government in Figure 1. The societal trust distribution is similar to the one reported in Pevzner, Xie, and Xin (2015). It is easy to see that the degree of trust differs drastically from formal governance at the country level.

Next, the second set of country characteristics for which we explicitly control involves literacy, as the latter may correlate with trust (e.g., Helliwell and Putnam, 2007) and affect investors' attitudes toward risk above and beyond formal institutions. We first obtain the education level of a country from World Development Indicators (WDI) as the gross enrollment rate for primary, secondary and tertiary schools combined. We then rescale the gross enrollment rate to be distributed between zero (worst) and one (best) and refer to this variable as *Education*.

The third set of country characteristics is about information diffusion, which affects the effectiveness of investment decisions. Although public information is relatively more abundant and reliable in countries with good governance (e.g., DeFond, Hung, and Trezevant, 2007; Morck, Yeung, and Yu, 2000; Jin and Myers, 2006; Bartram, Brown, and Stulz, 2012), the onset of the internet since the early 2000s has substantially reduced the information cost for investors in all countries. The popularity of internet-based message boards and social media has both allowed investors to better process information (e.g., Antweiler and Frank, 2004; Chen, De, Hu, and Hwang, 2014) and prompted more firm disclosure that may reduce the cost of monitoring (one notable example is the firm's use of Twitter; see Blankespoor, Miller and White, 2013; Miller and Skinner, 2015). Both effects can potentially reduce investors' concern regarding expropriation in a typical principal-agent relationship. To control for this effect, we obtain the number of Internet users per 100 people in a country from the WDI database. We again rescale the variable to range between zero and one (the highest) and refer to this rescaled variable as *Information*.

The last set of country characteristics involves financial development, which may also play an important role in affecting the formation of the mutual fund industry (Wurgler, 2000) and be related to trust (Guiso, Sapienza, and Zingales, 2004). Following Wurgler (2000), we obtain the gross domestic product (*GDP*) and the ratio of market capitalization to GDP (*MktCap/GDP*) from WDI to proxy for the country's size and level of financial development. We further control for several other indicators of financial development used by La Porta et. al. (1997) and Guiso, Sapienza, and Zingales (2004). These additional analyses are tabulated in the Internet Appendix.

We now describe the construction of mutual fund measures. We start with fund-level activeness, which we proxy for using the measure of active shares (Cremers and Petajisto, 2009).

The active share of a fund is the share of portfolio holdings that differs from the benchmark index holdings and is computed as follows:

$$Active\ Share = \frac{1}{2}\sum_{i=1}^{N}\left|w_{fund,i} - w_{benchmark,i}\right|,$$

where $w_{fund,i}$ and $w_{benchmark,i}$ are the portfolio weights of stock i in the fund and its benchmark, respectively, and the sum is taken over the universe of the stock. The benchmark weight is proxied by the average holdings of all the index funds tracking the benchmark.[14] We treat the funds that hold different securities (e.g., common shares and depository receipts) in the same company as the same ownership stake in the company and sum all holdings as part of the same portfolio holdings.

Using the fund-level measure of activeness, we also proxy for the activeness of the entire *equity* mutual fund industry in a given country. More explicitly, we compute *Active Fund%* as the TNA percentage of active funds among all equity mutual funds in the country, where "active funds" are defined as funds whose active shares are above 0.8. It is important to note that (unreported) results show that using different thresholds to define active funds does not change our results.

To proxy for investors' level of risk tolerance for the mutual fund industry in a given country, we look at the importance of equity funds relative to money market funds in the country. Indeed, equity funds are riskier than bond funds, which are still riskier than money market funds. A higher proportion of equity funds—especially when coupled with a lower proportion of money market funds—implies that investors are willing to take more risk. Accordingly, we compute the TNA percentage of equity and money market mutual funds in the entire mutual fund industry of a country, which we refer to as *Equity Fund %* and *MM Fund %*, respectively.

We differentiate domestic funds from international funds as follows. A fund is defined as "domestic" when more than 80% of the fund assets are invested in the domestic market of a fund (defined as fund sales country or fund domicile country) and as "international" otherwise. In later sections, we also define domestic (international) funds as funds that invest more than (less than) 50% of assets in the domestic market. Our results are robust across these different thresholds.

Fund performance is proxied by the benchmark-adjusted return and the Fama-French-Carhart four-factor alpha (Carhart, 1997). More specifically, fund alpha is estimated as net-of-risk fund return, where the risk adjustment is based on the fund risk exposure computed either from a 36-

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[14] The use of the actual weights of explicitly indexed funds tracking the benchmark has the advantage that some of the weights in the official benchmark include stocks that, in practice, may not be fully investable by mutual funds due to illiquidity or other constraints. See Cremers, Ferreira, Matos, and Starks (2016) for discussions related to the global mutual fund industry.

month rolling window (i.e., alpha is estimated out of sample[15]) or from the entire sample period (i.e., alpha is estimated in sample[16]). The use of full-sample factor loadings for cross-sectional, risk-adjusted return tests follows Black, Jensen, and Scholes (1972), Fama and French (1992), and Lettau and Ludvigson (2001). Although this performance measure is in sample, it has the advantage of obtaining better estimates of the risk coefficients. This in-sample proxy therefore complements the out-of-sample performance measure estimated from rolling windows. We use domestic factors to estimate the fund alpha because these factors are known to significantly affect asset returns, even in the global market (e.g., Griffin, 2002; Fama and French, 2012).

As we will later describe in the robustness section, we also use several alternative ways of defining the factors to control for risk. First, we use the risk factors of the leading investment country of an international fund. Second, we use the holding value (TNA)-weighted average of the local factors of all investing countries. Third, we use a combination of risk factors from both the fund sales country and the leading fund investment country (i.e., 8 factors in total in this case). The results are robust to all these alternative specifications. Therefore, we will focus only on the main one and report the others in the Internet Appendix.

Both the rolling window-based and the whole sample-based alphas are estimated using benchmark-adjusted fund returns. This convention follows Cremers and Petajisto (2009), as otherwise, time-varying investment weights in benchmarks may introduce errors to the alpha estimates. We compute the benchmark-adjusted return as the return of the fund net of the return of its benchmark. Our main tests focus on after-fee returns. Unreported results confirm that using before-fee returns does not change our main results.

We also control for fund-level variables that can be correlated with the activeness and performance of mutual funds. *Size* is the natural logarithm of the TNA in millions of U.S. dollars that the fund reported in the Morningstar. We follow Cremers and Petajisto (2009) and control for the nonlinear effect by including the square of Log(TNA). *Fund Flows* is computed as the percent growth in TNA in local currency. *Fund Age* is the number of years since the fund initiated. *Turnover* is defined by taking the lesser of purchases or sales (excluding all securities with maturities of less than one year) and dividing it by average monthly net assets.

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[15] More specifically, we estimate the factor loadings of funds based on the 36-month period prior to *t* and then compute the performance of the fund in month *t* as the difference between the realized fund return in month *t* (in excess of the risk-free rate) and the realized risk premium in the same month (i.e., the product of the vector of rolling factor loadings times the realized factor return in month *t*). We then average the monthly performance in a semi-annual period as the performance of the period. Finally, we annualize the performance of funds in each period.

[16] More specifically, we compute fund performance as the difference between the fund returns and the realized risk premium, which is estimated as the realized factor return multiplied by the risk exposure of the funds estimated over the full sample period.

In addition to fund-level control variables, we also control for the benchmark characteristics of a country's fund industry by including the number and level of concentration of the fund benchmark in the domicile country. *Benchmark Number* is the total number of benchmark indices that mutual funds follow in the country, and *Bench HHI* is measured by the benchmark Herfindahl index of aggregated mutual funds' TNA following this benchmark.

C. Summary Statistics

Table 1 presents summary statistics for our sample. Panel A tabulates the distribution for the main country-level variables. The last two columns list the name of the country with the minimum and maximum value for each variable. Panel B presents the summary statistics for our fund-level variables. On average, the funds in our sample have an active share of 71%, which is comparable to the average level (69%) in Cremers et al. (2014). The mean (median) of fund size is 0.95 (0.16) million USD, the mean (median) of flows per annum is 0.16 (0.05), the mean (median) of turnover per annum is 0.64 (0.39), the mean (median) of fund age is 13.54 (11.00). The average fund outperforms its benchmark index by 1.54% per year. However, this performance figure is decreased to 0.34% (0.41%) for the rolling (in-sample) four-factor model estimation.

In Panel C, we report the Pearson (lower triangle) and Spearman (upper triangle) correlations of the main variables in Panel A. We find that trust is positively correlated with measures of mutual fund activeness (e.g., *Equity Fund%* and *Active Fund%*). More active strategies of mutual funds, therefore, correlate with higher levels of societal trust at the country level. But societal trust itself is positively correlated with *Qua_Gov*, *Information* and *Education*. Hence, we need to control for these variables in examining the influence of trust on mutual funds.

III. Trust and Active Investments: Domestic Funds

A. Trust and the Activeness of the Mutual Fund Industry

In this section, we investigate the general link between trust and the activeness of the mutual fund industry in a market. As can be demonstrated in a simple model extending Guiso, Sapienza, and Zingales (2008), trusting investors have a higher demand for active management. To test this prediction, we begin with a broad country-level analysis in which we regress mutual fund activeness on our proxies of trust and a set of control variables as follows:

$$Mutual\ Fund\ Activeness_{j,t} = \alpha + \beta \times Trust_{j,t} + \gamma \times M_{j,t} + \varepsilon_{j,t}, \quad (1)$$

where *Mutual Fund Activeness*$_{j,t}$ is our proxy of the mutual fund activeness of country j in year

t, $Trust_{i,t}$ refers to the level of trust observed in the same country, and the vector $M_{j,t}$ stacks a list of control variables detailed in Appendix A. We include year-fixed effects in all the specifications.

We consider alternative measures to proxy for the market-wide activeness of the domestic mutual fund industry in a given country: the percentage of equity funds and money market funds in terms of TNA out of all available mutual funds in the country and the percentage of active funds out of all existing equity funds, again in terms of TNA. Active funds are defined as the funds whose active share exceeds 0.8 (our results are robust to the choice of the threshold).

We report the results in Table 2. In Panel A, the domestic mutual fund industry in a country is defined as the set of mutual funds that raise capital from the same country (i.e., fund sales country as a proxy for the home country), while in Panel B, the domestic mutual fund industry is defined as the set of funds domiciled in the same country. In both cases, the results show a strong and positive relationship between the trust of a country and the degree of activeness of its mutual fund industry. In the case of the fund sales country, for instance, a one-standard-deviation increase in trust is associated with a 3.2% increase in equity funds in the share of all funds, a 1.2% decrease in money market funds, and, most importantly, a 6.2% increase in actively managed equity funds.[17] All these numbers are highly significant both economically and statistically (using the fund domicile country leads to even more significant results)—yet with this magnitude, social trust is unlikely to create overcrowding or diminishing return to scale on its own.

B. Trust, Active Share, and Performance of Domestic Funds

Although the market-wide analysis of fund activeness provides a broad picture of the role of trust in the mutual fund industry, only an analysis at the fund level can help us to understand its performance implication. We therefore shift the focus to the individual fund level and zoom in on the sample of domestic funds to understand the general impact of trust. In future sections, we will use the sample of international funds to differentiate the impacts of the two mechanisms of trust.

For the domestic funds, we conduct a two-stage regression analysis. In the first stage, we explore how investors' trust affects the degree of fund activeness. Fund activeness is proxied by "active share" as defined in Cremers and Petajisto (2009). In the second stage, we explore the performance implications of trust-related active share (i.e., the part of active share explained by trust in the first stage). More explicitly, we estimated the following first-stage specification:

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[17] For instance, the regression coefficient of Model (1) in Panel A is 0.145. We then estimate the economic magnitude as $0.145 \times 0.223 = 3.2\%$, where 0.223 is the standard deviation of trust across all countries.

$$Active\ Share_{i,j,t} = \alpha + \beta \times Trust_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t}, \quad (2)$$

where $Active\ Share_{i,j,t}$ is the active share for fund i in country j at year t, and the vector $MFund_{i,j,t}$ stacks a list of fund-level control variables that are defined in Appendix A.

We report the results for the panel specifications in Panel A of Table 3. For the panel specifications, we control for year-fixed effects and cluster the standard errors at the fund and year levels. The results illustrate a similar pattern and display a strong and positive relationship between the level of trust and activeness of individual funds, as predicted by the *investor-trust hypothesis*. If we focus on the fully-fledged specification reported in Model (3), we see that a one-standard-deviation increase in trust is related to 3.84% increases in the degree of active share for the panel specifications. As a robustness check, we also estimate the Fama-MacBeth specification and we get very similar results: a one-standard-deviation increase in trust is related to 3.79% increases in active share. In the interest of space, we tabulate the results for Fama-MacBeth specifications in Internet Appendix (Table IN3).[18]

When investors trust, the key distinction between the *mutual trust hypothesis* and the alternative *breach-of-trust* and *diminishing return to scale* hypotheses relies on fund performance. In particular, the existence of a reciprocal relationship is an important feature of trust-based collaborative equilibriums (e.g., Algan and Cahuc, 2014; Berg, Dickhaut, and McCabe, 1995; Baran, Sapienza, and Zingales, 2010). Based on this insight, the *mutual trust hypothesis* posits that trusted active funds will reciprocate with better performance for investors (the Internet Appendix provides a theoretical treatment). By contrast, both *diminishing return to scale* and *breach-of-trust* hypotheses would predict the nonsignificant, if not negative, performance of trusted funds.

To test these competing hypotheses, we use the projected components of active share that we can obtain from the first-stage analysis to predict future performance:

$$Perf_{i,j,t+1} = \alpha + \beta_1 \times \widehat{AS}(Trust)_{j,t} + \beta_2 \times \widehat{AS}(OtherChar)_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t+1}, (3)$$

where $Perf_{i,j,t+1}$ refers to the future performance of funds, including benchmark-adjusted return, rolling alpha, and in-sample alpha, $\widehat{AS}(Trust)_{j,t}$ refers to trust-projected active share obtained

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[18] Among the country characteristics, the impact of the quality of government is less robust: while the impact remains significant in the full-fledged panel regression, as reported in Model (3), in the Fama-MacBeth specification with a similar list of control variables—i.e., Model 3 of Table IN 3 it is absorbed by *Information*. Likewise, other country characteristics, such as *Education* and financial development (both *GDP* and *Market Cap/GDP*), do not significantly affect active share in a consistent manner. In this regard, trust seems to exert a more profound impact than other country characteristics within the mutual fund industry.

from first-stage regression, and $\widehat{AS}(OtherChar)_{j,t}$ refers to the projected value of active share based on other country characteristics.

We tabulate the results of panel regressions in Panel B of Table 3, where we control for year-fixed effects and cluster the standard errors at the fund and year levels. We find that the part of active share related to a one-standard-deviation increase in trust—which increases active share by 3.84% for the panel specifications—predicts 1.24% of in-sample alpha (from Model 2) and 1.71% of rolling alpha (from Model 3), respectively.[19] Again we find estimates of similar magnitude in the Fama-MacBeth specification.[20] All these numbers are highly significant, lending support to the existence of mutual trust in high-trust countries.

The tests in Table 3 focus on the level of trust of the fund sales country. As a robustness check, we re-estimate the specifications in Table 3 but replace the fund sales country with the fund domicile country. The results are very similar in terms of both economic and statistical significance. More robustness checks using the fund domicile country are tabulated in the Internet Appendix. Jointly, our two-stage analysis lends support to the *mutual trust hypothesis*, confirming that domestic funds in countries with high trust also operate in a more trustworthy manner.

IV. Trust in Cross-border Mutual Fund Investments

We now move on to our main analysis, in which we examine the role played by both trust in the market and trust in managers in delegated management by focusing on cross-border investments.

A. Investing in Low-trust Countries

We first focus on *cross-border investment in low-trust countries*, whereby mutual funds domiciled in a high-trust home country raise capital therein and invest in assets of less-trustworthy target countries. We are especially interested in this scenario not only because it allows us to distinguish the two mechanisms of trust but also because it represents the majority of cross-border investment cases and, thus, has important normative and policy implications. We therefore expand the previous two-stage analysis to incorporate both trust of the fund sales country (as a proxy for trust in

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[19] For instance, in Model (2), the regression coefficient of in-sample alpha on trust-related active share is 0.323 per year. When trust-related active share changes by 3.84%, which is associated with a one-standard-deviation increase in trust, the performance changes by $0.323 \times 3.84\% = 1.24\%$. Other numbers are computed in a similar manner. Note that, as our model illustrates, superior trust-related performance does not necessarily mean superior managerial skills. It could mean less expropriation. This interpretation may contribute to the recent debate on active share (e.g., Frazzini, Friedman, and Pomorski, 2016; Cremers, 2017). For instance, in addition to the factors discussed in Cremers (2017) such as expense ratio and duration, cultural value could also help differentiate the outcomes of active management.

[20] The Fama-MacBeth estimation shows that the part of active share related to a one-standard-deviation increase in trust predicts 0.60% of rolling alpha and 0.70% of in-sample alpha respectively.

managers) and trust of the fund-investing country (as a proxy for trust in the market) as follows:

$$1st \; Stage: Active \; Share_{i,j,t} =$$

$$\alpha + \beta_S \times Trust\_Sales_{j,t} + \beta_I \times Trust\_Inv_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t},$$

$$2nd \; Stage: Perf_{i,j,t+1} = \alpha + \beta_{1S} \times \widehat{AS}(Trust\_Sales)_{j,t} + \beta_{1I} \times \widehat{AS}(Trust\_Inv)_{j,t}$$

$$+\beta_2 \times \widehat{AS}(OtherChar)_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t+1}, \qquad\qquad (4)$$

where $Trust\_Sales_{j,t}$ and $Trust\_Inv_{j,t}$ refer to the trust of the fund sales country and trust of the fund-investing country, respectively.

Panel A of Table 4 tabulates the results of the first-stage regressions. Models (1) to (3) are for the panel regressions with year-fixed effects and fund-year-level clustering. In the interest of brevity, we omit the regression coefficients of fund-level control variables and refer to the Internet Appendix for details on these coefficients.

The results show that what affects active share is trust in the country of investment. A one-standard-deviation increase in trust of the fund-investing country is associated with increases of approximately 10.81% in active share at the fund level for panel specifications in Model (3). In contrast, the trust of fund sales countries is generally unrelated to active share. Note that the two variables have similar cross-sectional variations in the sample: the difference between the standard deviations of the two variables is economically small (0.008) and statistically insignificant (with a p-value for the test of equal variances of 0.205). Hence, the lack of influence of the latter variable is not due to its lack of statistical variations and thus, explanatory power. Instead, the difference between the two variables is due to economic reasons. Our later section will explore one potential economic ground that can help explain this asymmetry.

We next conduct the second-stage performance test for panel specifications with year-fixed effects and errors clustered at the fund-year level, and we report the results in Panel B of Table 4. The trust of the fund-investing country also predicts fund performance through the active share channel. More specifically, the part of active share related to a one-standard-deviation increase in the trust of the investing country—which amounts to an increase in active shares of 10.81% for panel specification, as reported in the previous table—predicts 2.56% of rolling alpha (from Model 6 of Panel B) and 2.40% of in-sample alpha (from Model 4 of Panels B), respectively.[21] These

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[21] Again, in Model (6) of Panel A, the regression coefficient of rolling alpha on the trust-related active share is 0.237 per year. When the trust-related active share changes by 10.81%, which is associated with a one-standard-deviation increase in trust, the performance changes by $0.237 \times 10.81\% = 2.56\%$.

results are in general consistent with the *mutual trust hypothesis*, except that the influence concentrates on the "trust in the market" mechanism of social trust.

A few observations are important. First, in our main analysis, we proxied for trust in managers of the home country by the trust of the fund sales country. As a robustness check, we also verified that our results are robust when we use the trust of the fund domicile country. In the interest of brevity, we tabulate the additional related results in the Internet Appendix.

Second, the performance impact of trust on international funds seems to be larger than that on domestic funds. Indeed, the performance impact of trust on international funds can be as high as 2.56%, whereas that on domestic funds typically is around 1%. Hence, the effectiveness of cross-border investments could be more sensitive to trust than that of domestic fund investments.

Third, although a full examination of the quality of government goes beyond the scope of this paper, we can see that the quality of government exhibits different pattern with respect to trust. In the first stage, a high quality of government in the fund sales country is positively associated with active share. In the second stage, the part of active share related to a high quality of government doesn't consistently deliver better performance. This drastic difference confirms that trust is very different from formal institutions.

Finally, two concerns may arise from the above results. First, the influence of "trust in the market" of the target countries can be spuriously related to the characteristics of the home country or some sort of reverse causality in which investors allow for more activeness because they are aware of the better performance associated with active share. Second, "trust in managers" does not seem to exert a significant influence in the above tests. Does this imply that market considerations dominate the influence of social norms in the global mutual fund industry? Below, we address these two issues in sequence.

B. Subsample and IV Tests to Address Endogeneity Concerns

B.1. U.S. Funds Investing in Low-Trust Countries

The destination of cross-border investments may be indirectly affected, if not partially determined, by the characteristics of the sales country. If this were the case, trust of fund-investing country could be spuriously related to the trust of the fund sales country. To address this issue, we design a nested test based on all U.S. funds investing in foreign countries of lower trust (than the U.S.) to gauge the implication of the above "investing in low-trust countries" scenario. This test allows us to directly control for trust and other characteristics of the sales country, leaving the trust of the

investing countries the only notion of trust to affect fund operations. We use U.S.-based factors to compute the performance of international funds from U.S. investors' perspective.

We perform an analysis similar to that in Table 3 and report the results in Table 5. Panel A reports the impact of trust on active share, as specified before. Panels B examines the performance impact of the second stage for panel specifications. We find that a one-standard-deviation increase in the trust of the investing country is associated with a 7.4% increase in active share in the first stage for the panel (Model 3 of Panel A), which translates into 2.24% of in-sample alpha (Model 4 in Panel B) and 2.35% of rolling alpha (Model 6 in Panel B), respectively. These results are highly significant and further confirm the previous results from Tables 4 regarding how trust affects fund investments from high- to low-trust countries.

B.2. Tests Based on Changes in Americans' Attitudes toward Foreign Countries

While the test based on the U.S. subsample controls for characteristics of the home country, the remaining concern is related to the characteristics of the target countries. To address this issue, we next explore two types of plausibly exogenous variations in trust. The first involves time-series variations in US investors' trust in foreign markets. The second exploits the cross-sectional variation in bilateral trusts across different pairs of European countries.

Specifically, we first follow Hwang (2011) to consider the survey conducted by the Gallup Poll, in which US respondents are asked to choose how they view a foreign country—in their overall opinion of the country—from the choices of *very favorable*, *mostly favorable*, *mostly unfavorable*, to *very unfavorable*. A critical feature of the survey is that American people's attitudes toward foreign countries often experience significant changes due to the occurrence of bilateral political events. Consider, for instance, the French governments' opposition to the US-led Iraq War around February and March 2003. This event had significantly influenced the attitudes of American people toward France. American people's attitudes toward France had dropped from above-average (13th out of 34 surveyed foreign countries) to among the worst (31st) after the event.

Since such a drastic change reflects a wave of American people's distrust in France, which can subsequently influence their investments in the French market, we first provide a descriptive illustration of what happened to US-domiciled funds investing in France around this event.[22] Two

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[22] Germany also had a similar opposition. However, there are very few US funds investing in Germany as of 2002 in our sample. Hence we only focus on US funds investing in France in this illustration. The opposition led to criticism from the US government, which prompted Americans to boycott French products and worsened bilateral trades between the two countries (Chavis and Leslie, 2009; Michaels and Zhi, 2010). The sharp decrease in the average level of Americans' favorability of France is also captured by the popularity score (Hwang, 2011).

variables are of particular interest for this purpose—i.e., investor demand and fund policy in terms of activeness—because, upon the occurrence of this distrust event, the *mutual trust hypothesis* would predict both a decline in US investors' demand for active funds investing in France and a decrease in fund active share as a reciprocal response from fund managers. Moreover, both effects should be more prominent among funds invested by investors who initially had high trust in France but subsequently changed their view because of the event (i.e., funds with high before-event activeness due to investors' high initial trust), as opposed to funds dominated by investors who distrusted France throughout the event (i.e., funds with low before-event activeness).

To see how these predictions play out in the data, we sort all these funds into quintiles on the basis of their pre-event (i.e., 2002) active share and calculate proxies of investor demand and fund activeness for the top/bottom quintiles of funds (i.e., funds with the highest or lowest levels of pre-event activeness). Investor demand for a particular fund is proxied by its monthly abnormal flows adjusted for time trend and a general time-varying EU demand.[23] Panel A in Figure 2 plots the abnormal fund flows around the Iraq War. We can see that, while the flows of both groups of funds exhibit a parallel trend before the event, a striking difference occurred afterward. Compared to low-active funds, funds with high before-event activeness indeed experienced substantial abnormal outflows. Panel B further plots the fund policy in terms of active share for both groups of funds around the event. It is easy to see a decreasing trend for the active share of high-active funds. In contrast, low-active funds did not change their policy.

Although the two plots are descriptive, they intuitively support the predictions of the *mutual trust hypothesis*. In particular, the observation that investor demand for the most active funds dropped the most after the distrust event endorses a direct link between investor trust and their demand on active delegated portfolio management. Likewise, the observation that fund managers reduce activeness, either as a response to observed demand changes or directly as a prudential policy following the distrust event, suggests a reciprocally trustworthy behavior of managers.

To generalize the above analysis and also to assess the performance implications, we notice that changes in the surveyed country scores are often triggered by bilateral events that can exogenously change the amount of trust that US investors have in foreign markets. Built on this property, we can formally investigate how variations in trust embedded in country-score changes

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[23] More specifically, we net out from actual fund flows both the 12-month moving average and the concurrent average fund flows of all US-domiciled funds investing in EU countries, except for France and Germany (the two countries that opposed the US). In the case of active share, since we need holdings information to calculate it and since fund policy adjustments need time, we still focus on annual frequency for this demonstration.

(labeled $\Delta CountryPopularity$ following the terminology of Hwang, 2011) affect the activeness and performance of U.S. funds investing in low-trust countries. More explicitly, we first examine whether the positive relationship between trust and fund activeness can be marginally enhanced (reduced) by the occurrence of such changes as captured by the interaction term $Trust \times \Delta CountryPopularity$. We then study the performance implication of such an influence.

Panel C of Table 5 presents the results of the general test. In Column (1), we first show that both trust and country scores are positively associated with fund activeness, though the influence of trust is larger in economic magnitude.[24] This observation supports the interpretation that country scores corroborate bilateral trust linking to the political institutions of foreign countries (e.g., Hwang, 2011). In Column (2), we include the interaction of $Trust \times \Delta CountryScore$. Consistent with Figure 2, we find a significantly positive relationship between active share and the interaction term. In the next few columns, we apply different controls, among which the interaction between country scores and changes in country scores. Our results remain largely the same.

We then identify fund performance that can be attributed to the active share associated with this interaction term and tabulate this second-stage result in Panel D of Table 5. We can see that the projected active share is positively associated with fund performance. Note that this effect is in addition to the generally positive relationship between performance and trust-projected activeness. Hence, when fund activeness gets marginally enhanced (reduced) due to the positive (negative) variations in US investors' trust, fund performance also marginally becomes more (less) positive, confirming that fund managers respond in a trustworthy matter.

Overall, variations in trust captured by the Gallup Poll exhibit a highly robust marginal influence on fund activeness and performance as predicted by the *mutual trust hypothesis*. To the extent that such variations are plausibly exogenous to delegated portfolio management when trigged by bilateral events between US and foreign countries, these results lend initial support to a causal interpretation of the influence of trust on fund activeness and performance.

B.3. Bilateral Trust - European Funds

We next conduct a second subsample test focusing on European countries, for which we can directly measure bilateral trust following Guiso, Sapienza, and Zingales (2009). Since the bilateral trust is obtained from a set of surveys conducted by Eurobarometer from 1970 to 1995 before our

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[24] The country score has a standard deviation of 0.18. Since the regression coefficient of trust (0.432) is much larger than that of country scores (0.094), its economic magnitude impact is also much larger.

sample period, we use the historical average value of these variables. We then apply a similar two-stage test, except that we now proxy for "trust in the market" by bilateral trust between the home country and target country, and we focus on the subsample of European mutual funds that invest in low-trust countries. The results are tabulated in Table 6.

Panel A reports the impact of trust on active share, with Models (1) to (2) for the panel regressions. We use country-fixed effects to eliminate the potentially spurious correlation created by time-invariant characteristics of both the home and the target countries. For this test, we also use two additional proximity variables related to the geographic distance and linguistic/colonial ties between the two countries to control for trading motivations related to cross-border information and familiarity (i.e., *Geo_Proximity* and *Linguistic_Proximity*; see Sarkissian and Schill, 2004 for more discussions).[25] It is easy to see that bilateral trust plays a similar role in enhancing active share among European countries, just as social trust does in the entire data sample.

Note that the use of historical value works against us in finding a significant influence of trust, if some unobserved contemporaneous economic conditions are the main driving force for fund activeness. In this regard, this test helps alleviate the concern of omitted variables that may be spuriously related to more recently surveyed trust values. To further control for any potential residual spurious correlation, Models (3) and (4) adopt the generalized method of moments instrumented variable estimator (GMM-IV) of Guiso, Sapienza and Zingales (2009), where the two instruments are religious similarity and somatic distance. GMM-IV allows for heteroscedasticity of an unknown form, whereas religious similarity and somatic distance capture the cultural root of bilateral trust among European countries. To the extent that religious similarity and somatic distance are unlikely to directly affect delegated portfolio management (e.g., fund investment in Guiso, Sapienza, and Zingales, 2009, and fund activeness in our analysis), they reaonablly meet the requests of both inclusion and exclusion restrictions. We find that instrumented bilateral trust significantly enhances active share among European countries.[26]

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[25] In this case, country-level trust will also be absorbed. Also note that Sarkissian and Schill (2004) refer to the second variable as cultural proximity. We rename the variable to reflect its specific cultural root and to differentiate it from other variables that reflect other elements of culture. Unreported tests show that controlling for these proximity variables will not affect the explanatory power of social trust in our other tests.

[26] As in Guiso, Sapienza, and Zingales (2009), these instruments pass the over-identification restrictions in our sample. Guiso, Sapienza, and Zingales (2009) find that, in their tests on the influence of bilateral trust on cross-border trades and investments, coefficients on instrumented trust are about four times greater in magnitude (than un-instrumented trust). They explore two possible causes for this difference—either when instruments are only weakly correlated with the measure of trust or when the measure of trust is a noisy measure of the true trust that really affects cross-country activities—and reject the first possibility. Our results are different in that the magnitude of coefficients are of a similar order with or without instruments. This consistency suggests that both GMM-IV and the panel specification properly capture the influence of true trust on fund activeness.

Panel B further reports the performance impact of bilateral trust-related active share for the three different types of specifications. We find that bilateral trust-related active share is still associated with better performance. These results alleviate concerns of spurious correlation related to unobserved country-level characteristics of the home country and the target country.

What about the issue of reverse causality in which investors allow for more activeness because of the better performance associated with it? For reverse causality to work, some investors need to be aware of the existence of a positive relationship between active share and performance—and such awareness needs to be more prominent in countries with high trust. However, it will be difficult to explain why investors from the same home country (e.g., the U.S. in our first subsample test) will have different degrees of awareness according to the levels of trust of the target countries. It is even more difficult to relate such awareness to religious similarity and somatic distance in the GMM-IV test of bilateral trust. In this regard, reverse causality is unlikely to explain our results.

Jointly, the subsample tests on U.S. and European funds help mitigate the general concern of endogeneity. These tests also demonstrate the pervasiveness of the influence of social trust in cross-border delegated portfolio management: the influence is highly robust for both the entire sample of international mutual funds as well as subsamples of funds that we examine.

C. The Reverse Scenario of Investing in High-trust Countries

Now we move on to examine the concern that "trust in managers" does not seem to exert a significant influence in the above tests. This concern is economically important because it may appear that market considerations dominate the influence of social norms in the global mutual fund industry. To see whether this is the case, we consider the reverse "investing in high-trust countries" scenario, in which funds invest in countries that have higher trust than their home country.

We re-estimate the same two-stage specification as described in the equation system (4) and tabulate the results in Table 7. Panel A reports the impact of the two mechanisms of trust on active share, focusing on panel regressions, as specified in Table 4. Panels B examines the performance impact of the second stage. We find that in the reverse scenario of investing in high-trust countries, trust in managers appears to be positively associated with active share in the first stage: a one-standard-deviation increase in trust of the investing country is associated with a 3.81% increase in active share in the first stage for the panel specifications (Model 3 of Panel A). In the second stage, trust-related active share still predicts positive fund performance: a one-standard-deviation trust-

related active share predicts 1.17% in-sample alpha (Model 4 in Panel B) and 1.34% of rolling alpha (Model 6 in Panel B).

These results strongly suggest that trust in managers also matters in the global mutual fund industry when we consider the reverse scenario of investing in high-trust countries. Compared to Table 4, though there are fewer observations in this case, the economic magnitude is comparable.

The puzzling observation here is that adding the scenario of investing-in-low-trust countries, the two mechanisms of social trust appear to exert very different influences on the global mutual fund industry: while "trust in the market" has a dominating influence on fund activeness and performance in the scenario of "investing in low-trust countries," "trust in managers" dominates the reverse scenario of "investing in high-trust countries." Are these two observations contradictory? How can we interpret and reconcile these results? We will try to provide answers to these questions in the next section.

D. Reconciling the Two Cases: A Parsimonious Framework

We argue that the seemingly contradictory observations regarding the two mechanisms of social trust may be reconciled based on a fundamental property of social trust in affecting delegated portfolio management. In particular, the marginal impact of trust in mitigating contracting incompleteness in delegated portfolio management could be a diminishing function of the value of social trust. This diminishing impact of trust can arise, for instance, when trust effectively mitigates incomplete contracts to such an extent that a certain level of trust suffices to mitigate major incompleteness of contracts in delegated portfolio management. In this case, further enhancement of social trust beyond this level may not lead to further observable influences.

The observations of the two mechanisms of social trust can be reconciled based on this property. With a diminishing impact, the influence of social trust should concentrate on the low-trust-country side of cross-border investments. This intuition helps to explain why "trust in the market" and "trust in managers" appear significant in the scenarios of "investing in low-trust countries" and that of "investing in high-trust countries," respectively—because the two mechanisms represent the low-trust side of cross-border investment in these two scenarios. By contrast, the other (high-trust) side of cross-border investment could have a much smaller or even nonsignificant impact due to the diminishing impact of social trust.

A direct test of the diminishing impact of trust can be conducted based on a parsimonious framework integrating the previous two scenarios of cross-border investment. We can first identify,

between the two countries of cross-border investment, the one with high trust (i.e., high-trust country) and the one with low trust (i.e., low-trust country). We can then re-estimate the same two-stage specification of the equation system (4) but replace the trust of the fund sales country and that of the fund-investing country by the trust of the low-trust country (denoted as *Trust_Low*) and the trust of the high-trust country (denoted as *Trust_High*), respectively. By construction, the two trust variables have very similar distributions.[27] However, they should exhibit very different economic influences according to the diminishing impact property: the trust of the low-trust country should matter more for cross-border investment.

We report the results in Table 8: Panel A for the first stage and Panels B for the second stage.[28] We see that the trust of the low-trust country is in general positively associated with active share in the first stage. In the second stage, active share induced by the trust of the low-trust country predicts fund performance. The magnitude of both the first- and the second-stage impacts is on par with what we observe in Tables 4 and 7. In contrast, the trust of the high-trust country does not have a significant influence. Hence, the results are consistent with the *mutual trust hypothesis* in general and the interpretation of the diminishing impact of trust in particular.

V. Additional Analysis and Robustness Checks

A. Do Mutual Fund Investors Overtrust?

Prior literature documents an intriguing hump-shaped effect of trust on household financial outcomes, suggesting that the right amount of trust is needed to facilitate economic activities and that overtrust reduces household welfare (e.g., Butler, Giulian, and Guiso, 2016; Jiang and Lim, 2018). Both properties can apply to delegated portfolio management. For instance, as long as maintaining a high level of trust incurs a high social cost (e.g., the cost of intergenerational transmission of social value), optimal trust can arise due to the aforementioned diminishing impact of trust on the benefit side. Meanwhile, overtrust may also hurt fund investors because excess trust above its optimal level may trigger *breach-of-trust* as opposed to a reciprocal trustworthy response. In other words, although our previous analysis rejects the *breach-of-trust hypothesis* as an average

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[27] The difference between the standandard deviations of the two variables is small in magnitude (i.e., 0.005) with an insignficant p-value of the test for equal variances (0.131). Hence, if they affect the activeness and performance of international funds differently, this distinction is more economical than due to the lack of statistical power. This property further alleviates the concern that the distributional difference between the two trust variables may influence our results reported in Table 4, because *Trust_Inv* and *Trust_Sales* are now nested into the two variables of *Trust_High* and *Trust_Low* for the whole sample of funds (as opposed to being constructed on a subsample of funds).

[28] Fama-MacBeth specifications lead to similar results. Table IN3 of the Internet Appendix provides details.

effect, it may nonetheless occur marginally within certain groups of (high-trusting) investors, creating a hump-shaped effect of trust in delegated portfolio management as well.[29]

To empirically examine this effect, we follow the methodology of Butler, Giulian, and Guiso (2016) and Jiang and Lim (2018) to classify funds into quintiles on the basis of the level of trust of fund investors. More explicitly, for each year, we sort either domestic funds or the low-trust side of international funds into trust quintiles and create dummy variables indicating the trust quintile of each fund.[30] Quintile 1 funds are associated with the lowest level of trust, and Quintile 5 the highest level. We then replace *Trust* in Table 3 and *Trust_Low* in Table 8 with these dummy variables, which allow us to zoom in on the more detailed influence of trust among these funds. In particular, for both domestic and international funds, we examine: 1) how fund activeness is related to the level of trust as revealed by the quintile ranks of funds, and 2) the performance of funds that can be attributed to quintile-trust related active share. Since the dummy variables of all funds sum up to one, we let Quintile 1 funds to absorb the regression constant. In this case, the regression coefficient of a particular quintile dummy captures the marginal effect of trust for funds belonging to this quintile group in excess to that of funds with the lowest level of trust.

The results are tabulated in Table 9, Panel A for domestic funds and Panel B for international funds. Within Panel A (Panel B), subpanels A1 and A2 (B1 and B2) report the impact of trust on the activeness and the performance implication, respectively. We observe a similar marginal impact of trust for both types of funds. In Model (3) of both Panel A1 and Panel B1, for instance, we find that the influence of trust on fund activeness increases from group-2 to group-5 funds. Likewise, in both Panel A2 and B2, we find that fund performance of quintile-trust related active share increases from group-2 to group-5 funds. In other words, high trust does not seem to trigger *breach-of-trust* from managers.

Perhaps the most intuitive way to demonstrate the welfare impact of trust is to visualize the relationship between trust and the part of fund performance attributable to it through active delegated portfolio management, particularly for our focal group of international funds investing in low-trust countries. Figure 3 achieves this goal, in which we plot the relationship between the average level of trust of the (low-trust) quintiles of international funds and the performance that can be generated by the corresponding quintile-rank related active share. Fund performance is measured as either in-sample or rolling alpha, as reported in the last two columns of Panel B2. We

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[29] We thank the referee for this great insight.
[30] Note that *Trust_High* always exhibits insignificant influence regardless of whether we decompose it into quintile dummies or not. Hence we focus on *Trust_Low* for our analysis in this section for international funds.

can see that, when we zoom in on the *Trust_Low* part of cross-border delegated portfolio management, fund performance increases in quintile trust. Interestingly, the incremental benefits of additional trust decrease over quintiles, which reveals a diminishing impact of social trust in terms of performance. The same pattern also graphically demonstrates that the level of trust does not seem to exceed its optimal level to revert its benefits.

It is interesting to compare the diminishing benefits received by mutual fund investors to the hump-shaped welfare effect of trust faced by households. If anything, Quintile 5 of the low-trust side of cross-border investment seems to have about the right amount of trust in maximizing investor benefits in Figure 3. Adding this pattern to our previous findings that the high-trust side of cross-border investment, which exceeds the right amount of trust, does not have any effect on fund activeness and performance, we observe that mutual fund investors do not seem to overtrust and thus revert the benefits of their trust. Hence, the mutual fund industry and the industry for household financial services could equilibrize differently around trust and trustworthiness. The difference could arise because the principal-agent relationship of the mutual fund industry is subject to more repeated interactions and intense competition, which tightly constrain the behavior of fund managers and allow the industry to achieve a proper reciprocal relation between trust and trustworthiness. How a financial industry is organized, in this regard, may affect the influence of trust therein and the distribution of wealth among its participants.

B. The Long-term Influence of Trust from the First-Wave WVS

In one of our endogeneity tests, we have used the historical value of bilateral trusts among European countries and argued that such a setup could help alleviate the concern of omitted variables. The same argument applies to our main variable of social trust obtained from the World Values Survey. Instead of using the most updated value of trust from the most recent survey waves, therefore, we can also adopt as an alternative measure the value of trust coming from the very first survey (i.e., wave 1, 1981-1984). This analysis allows us to assess the long-term influence of social trust on the (much later) development of the global mutual fund industry.

Table 10 implements this empirical strategy and reports the impact of the first-wave trust for both domestic and international funds. We find that the influence of trust on both activeness and performance remains highly significant. To estimate the economic magnitude, we notice that the standard distribution of trust from the first wave (0.20) is slightly smaller than that of the main sample we use. In this case, the rolling alpha for domestic and international funds attributable to a one-standard-deviation increase in the first-wave trust amounts to 1.08% and 1.57%, respectively.

Compared to the influence of trust in our baseline case (1.71% in Table 3 for domestic funds and 2.56% in Table 4 for international funds), the influence of the first-wave trust is close to two-thirds in magnitude.

Note that the reduction in magnitude is reasonable because Table 10 aims to capture the influence of the long-term component of trust uncontaminated by more recent economic conditions and financial development. In this regard, the observation that the long-term component of trust can capture about two-thirds of the overall impact is economically essential. It not only suggests that leading social values such as trust may have persistent influence in our financial markets but also alleviates the concern that omitted variables related to more recent economic conditions may spuriously contribute to most of the observed influence of trust on delegated portfolio management.

C. Additional Robustness Checks

We finally conduct seven sets of robustness checks to further validate our previous conclusions. Our conclusions are highly robust across all these robustness checks. In the interest of brevity, we tabulate the results in the Internet Appendix and report only the main findings here.

The first set of tests evaluates the extent to which our baseline results are driven by the sample of funds domiciled in the US. To assess the influence of trust outside of the US, we restrict our sample to non-US funds and replicate our main specifications for both domestic and international funds in Panel A and B of Table IN2. The results are similar to our baseline estimates.

The second set of tests uses only the WVS sample rather than the joint sample, including both the WVS and the EVS. More explicitly, Table IN4 in the Internet Appendix replicates Table 2 for the WVS subsample. Tables IN5 and IN6 further apply the two-stage tests to domestic funds (as reported in Table 3) and international funds (as reported in Table 8), respectively, based on the subsample of WVS survey. This robustness check eliminates concerns regarding the potential difference across these two survey samples for our baseline results.

The third set of tests uses alternative definitions of our main variables: alternative thresholds to define domestic/international funds (i.e., more or less than 50% domestic stocks), alternative measures of trust (detailed in Appendix A and the Internet Appendix), and the alternative classification of a "domestic" fund based on the fund domicile country. With the alternative thresholds, we replicate the two-stage tests for domestic funds (as reported in Table 3) in Table IN7 and international funds (as reported in Table 8) in Table IN8, respectively. Tables IN9 and IN10 report the results of the two-stage tests for domestic and international funds based on this

alternative definition of trust. Finally, Table IN11 replaces the fund sales country with the fund domicile country.

The fourth set of robustness checks involves the use of alternative factor models to compute fund performance. More specifically, we use 1) the risk factors of the leading investment country of an international fund, 2) the holding value (TNA)-weighted average of the local factors of all investing countries, and 3) the combination of risk factors from both the fund sales country and the leading fund investment country (i.e., 8 factors in total in this case). Table IN12 tabulates the second-stage performance tests for both domestic and international funds and shows that our conclusions are robust to this robustness check.

The fifth set of robustness conducts an in-depth investigation of the role of financial development, which can be closely linked to the level of social capital, one key outcome of which is trust (Guiso, Sapienza, and Zingales, 2004). Given the importance of financial development, we further control for several alternative indicators of financial development following La Porta et. al. (1997) and Guiso, Sapienza, and Zingales (2004), such as External equity/GNP, Debt/GNP, as well as the number of domestic firms or IPOs scaled by population (Appendix A provides the definition). Tables IN13 and IN14 control for these variables for both domestic and international funds.

The sixth set of robustness checks controls for additional country characteristics related to informal culture (religion, individualism, and hierarchy), formal institutions (we consider six important measures as specified in the Internet Appendix), and the distribution of the population. The influences of these variables are examined in Tables IN15, IN16, and IN17.

Finally, the last set of robustness checks examines whether the influence of trust differs when mutual funds serve different types of investors. Given that institutional investors can rely on their professional expertise when making investment decisions, the impact of trust—either in terms of trust in the market or trust in managers—should be higher for funds dominated by retail investors. To explore this intuition, we follow Berk and van Binsbergen (2015) and Pastor, Stambaugh and Taylor (2015) to identify share class type as either institutional or retail/non-institutional. For both domestic funds (Table IN18) and international funds (Table IN19), we observe that trust significantly affects the activeness and performance of retail funds but not of institutional funds.

Overall, through all these robustness checks, we confirm our main conclusions regarding both the activeness and performance of domestic funds and international funds: trust plays a major role in the global mutual fund industry.

Conclusion

While the literature has long argued that trust, as one of the most important types of informal institutions, affects the development of economies, scarce evidence has been uncovered regarding how it may affect the principal-agent relationship in active portfolio management. Our paper fills this gap by exploring the impact of trust in general and the role of the two mechanisms of trust in particular—i.e., trust in the market and trust in managers—in the global mutual fund industry.

We find compelling evidence that trust plays an important role in affecting both the activeness and effectiveness of the global mutual fund industry. In particular, trust is positively associated with fund activeness and, through the active share channel, fund performance. In the context of international mutual funds conducting cross-border investments, we further find that "trust in the market" has a dominating influence on fund activeness and performance in the "investing in low-trust countries" scenario, whereas "trust in managers" dominates the reverse scenario of "investing in high-trust countries." In both cases, trust-related active share still delivers superior performance. These observations could imply a diminishing marginal impact of social trust in facilitating active portfolio management in the global mutual fund industry.

Our results confirm the importance of trust in financial intermediaries such as mutual funds. Its impact on global delegated portfolio investment is heuristic. Our study calls for more attention from both academic researchers and policymakers to understand how culture affects financial intermediaries and, through these financial intermediaries, the globalization processes of various countries.

References

Acemoglu, D., Johnson, S., 2005. Unbundling institutions. Journal of Political Economy 113, 949-995.

Aggarwal, R., Erel, I., Stulz, R., Williamson, R., 2009. Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. Review of Financial Studies 23, 3131-3169.

Agarwal, V., Gay, G.D. and Ling, L., 2014. Window dressing in mutual funds. The Review of Financial Studies 27, 3133-3170.

Ahern, K., Daminelli, D., Fracassi, C., 2015. Lost in translation? The effect of cultural values on mergers around the world. Journal of Financial Economics 117(1): 165 - 189.

Algan, Y., Cahuc, P., 2014. Trust, growth and well-being: new evidence and policy implication. Handbook of Economic Growth 2, 49-120.

Antweiler, W., Frank, M., 2004. Is all that talk just noise? The information content of internet stock message boards. Journal of Finance 59 (3), 1259-1294.

Arrow, K., 1972. Gifts and exchanges., Harvard University, the United States.

Baran, N., Sapienza, P., Zingales, L., 2010. Can we infer social preferences from the lab? Evidence from the trust game. NBER Working Paper 15654, January.

Bartram, S., Brown, G., Stulz, R., 2012. Why are US stocks more volatile? Journal of Finance 67, 1329-1370.

Berg, J., Dickhaut, J., McCabe, K., 1995. Trust, Reciprocity and Social History. Games Econ. Behav. 10, 122–142.

Berk, J., Green, R., 2004. Mutual fund flows and performance in rational markets. Journal of Political Economy 112, 1269-1295.

Berk, J., van Binsbergen, J., 2015. Measuring skill in the mutual fund industry. Journal of Financial Economics 118(1), 1-20.

Birdsall, N., Londono, J., 1997. Asset inequality matters: An assessment of the World Bank's approach to poverty reduction. American Economic Review 87(2), 32-37.

Black, F., Jensen, M., Scholes, M., 1972. The capital asset pricing model: some empirical tests. In Michael,J.(Ed.), Studies in the Theory of Capital Markets, 79-121..

Blankespoor, E., Miller, G.S. and White, H.D., 2013. The role of dissemination in market liquidity: Evidence from firms' use of Twitter. The Accounting Review 89(1), 79-112.

Bloom, N., Sadun, R., Reenen, J., 2012. The organization of firms across countries. Quarterly Journal of Economics 127(4), 1663-1705.

Bottazzi, L., Da Rin, M., Hellmann, T., 2016. The importance of trust for investment: evidence from venture capital. Review of Financial Studies 29(2), 2283-2318.

Bushman, R., Piotroski, J., Smith, A., 2004. What determines corporate transparency. Journal of Accounting Research 42(4), 207-252.

Butler, J.V., Giuliano, P., Guiso, L., 2016. The right amount of trust. Journal of the European Economic Association, 14(5), 1155-1180.

Carhart, M., 1997. On persistence in mutual fund performance. Journal of Finance 52, 57-82.

Carhart, M. M., Kaniel, R., Musto, D. K., Reed, A.V., 2002. Leaning for the tape: Evidence of gaming behavior in equity mutual funds. Journal of Finance 58, 661–93.

Chavis, L., Leslie, P., 2009. Consumer boycotts: the impact of the Iraq War on French wine sales in the US. Quantitative Marketing and Economics 7, 37–67.

Chen, H., De, P., Hu, Y., Hwang, B., 2014. Wisdom of crowds: The value of stock opinions transmitted through social media, Review of Financial Studies 27(5), 1367-1403

Chen, J., Hong, H., Huang, M., Kubik, J., 2004. Does fund size erode mutual fund performance? The role of liquidity and organization. American Economic Review 94,1276-1302.

Chen, S., Massa, M., Zhang, H., 2019. The unexpected activeness of passive investors: a worldwide analysis of ETFs. Review of Asset Pricing Studies 9(2), 296-355.

Choi, S., Kahan, M., 2007. The Market penalty for mutual fund scandals. Boston University Law Review 87, 1021–57.

Coval, J., Moskowitz, T., 2001. The geography of investment: Informed trading and asset prices. Journal of Political Economy 109, 811-841.

Cremers, M., 2017, Active Share and the Three Pillars of Active Management: Skill, Conviction and Opportunity, Financial Analysts Journal 73, 61-79.

Cremers, K., Petajisto, A., 2009. How active is your fund manager? A new measure that predicts performance. Review of Financial Studies 22, 3329-3365.

Cremers, M., Ferreira, M., Matos, P., Starks, L., 2016, Indexing and Active Fund Management: International Evidence, Journal of Financial Economics 120, 539–560.

Davis, J., Payne, G., McMahan, G., 2007. A Few Bad Apples? Scandalous Behavior of Mutual Fund Managers. Journal of Business Ethics 76, 319–334.

DeFond, M., Hung, M., Trezevant, R., 2007. Investor protection and the information content of annual earnings announcements: International evidence. Journal of Accounting and Economics 43, 37-67.

Djankov, S., La Porta, R., Lopez-de-Silanes F., Shleifer, A., 2008. The law and economics of self-dealing Journal of Financial Economics 88, 403-465.

Doidge, C., Karolyi, G., Stulz, R., 2004. Why are foreign firms listed in the US worth more? Journal of Financial Economics 71, 205-238.

Doidge, C., Karolyi, G., Stulz, R., 2007. Why do countries matter so much for corporate governance? Journal of Financial Economics 86, 1-39.

Duarte, J., Siegel, S., Young, L., 2012. Trust and credit: the role of appearance in peer-to-peer lending. Review of Financial Studies 25, 2455-2484.

Durnev, A., Errunza, V., Molchanov, A., 2009. Property rights protection,corporate transparency, and growth. Journal of International Business Studies 40, 1533-1562.

Fama, E., French, K., 1992. The Cross-Section of Expected Stock Returns. Journal of Finance 47(2), 427-465.

Fama, E., French, K., 2012. Size, value, and momentum in international stock returns. Journal of Financial Economics 105, 457-472.

Fama, E., and Jensen, M., 1983. Agency Problems and Residual Claims, Journal of Law and Economics 26, 327–349.

Ferson, W., Lin, J., 2014. Alpha and performance measurement: the effects of investor disagreement and heterogeneity. Journal of Finance 69, 1565-1596.

Frazzini, A., Lamont, O., 2008. Dumb money: mutual fund flows and the cross-section of stock returns. Journal of Financial Economics 88(2), 299-322.

Frazzini, A., Friedman, J., Pomorski, L., 2016. Deactivating Active Share. Financial Analysts Journal 72, 14-21.

Fukuyama, F., 1995. Trust: Social virtues and the creation of prosperity. Free Press, New York.

Gambetta, D., 1988. Can we trust trust? Trust: making and breaking cooperative relations. Blackwell, New York.

Garcia, D., Vanden, J., 2009. Information acquisition and mutual funds. Journal of Economic Theory 144, 1965-1995.

Gennaioli, N., Shleifer, A., Vishny, R., 2014a. Money doctors. Journal of Finance 70(1), 91-114.

Gennaioli, N., Shleifer, A., Vishny, R., 2014b. Finance and the preservation of welath. Quarterly Journal of Economics129(3), 1221-1254.

Georgarakos, D., Inderst, R., 2014. Financial advice and stock market participation. Unpublished working paper. European Central Bank.

Glode, V., 2011. Why mutual funds "underperform". Journal of Financial Economics 99, 546-559.

Griffin, J., 2002. Are the Fama and French factors global or country specific? Review of Financial Studies 15, 783-803.

Guiso, L., Sapienza, P., Zingales, L., 2004. The role of social captial in financial development. American Economic Review 94, 526-556.

Guiso, L., Sapienza, P., Zingales, L., 2008. Trusting the stock market. Journal of Finance 63, 2557-2600.

Guiso, L., Sapienza, P., Zingales, L., 2009. Cultural biases in economic exchange? Quarterly Journal of Economics 124, 1095-1131.

Guiso, L., Sapienza, P., Zingales, L., 2015. Corporate Culture, Societal Culture, and Institutions. American Economic Review 105(5), 336-339.

Gurun, U.G., Stoffman, N., Yonker, S.E., 2018. Trust busting: The effect of fraud on investor behavior. The Review of Financial Studies 31(4), 1341–1376.

Helliwell, J., Putnam, R., 2007. Education and social capital. Eastern Economics Journal 33(1), 1-19.

Hortaçsu, A., Syverson, C., 2004. Search costs, product differentiation, and welfare effects of entry: a case study of SP 500 index funds. Quarterly Journal of Economics 119, 403-456.

Houge, T., Wellman, J., 2005. Fallout from the Mutual Fund Trading Scandal, Journal of Business Ethics 62, 129–139.

Hwang, B.H., 2011. Country-specific sentiment and security prices. Journal of Financial Economics, 100(2), 382-401.

Hwang, I., 2015, Which Type of Trust Matters?: Interpersonal vs. Institutional vs. Political Trust, SSRN working paper.

Jensen, M.C., Meckling, W.H., 1976. Theory of the firm: Managerial behavior, agency costs and ownership structure. Journal of Financial Economics 3(4), 305-360.

Jiang, D., Lim, S.S., 2018. Trust and household debt. Review of Finance 22(2), 783-812.

Jin, L., Myers, S., 2006. R2 around the world: new theory and new tests. Journal of Financial Economics 79, 257-292.

Karolyi, A., 2016. The gravity of culture for finance. Journal of Corporate Finance 41, 610–625.

Karolyi, A., Lee, K., Van Dijk, M., 2012. Understanding commonality in liquidity around the world. Journal of Financial Economics 105, 82-112.

Knack, S., Keefer, P., 1997. Does social capital have an economic payoff? A cross-country investigation. Quarterly Journal of Economics, 1251-1288.

Kostovetsky, L., 2015. Whom do you trust?: Investor-advisor relationships and mutual fund flows. The Review of Financial Studies, 29(4), 898-936.

Lakonishok, J., Shleifer, A., Thaler, R., Vishny, R., 1991. Window dressing by pension fund managers. American Economic Review 81, 227–31.

La Porta, R., Lopez-de-Silanes F., Shleifer, A., Vishny, R., 1997. Trust in large organization. American Economic Review Papers & Proceedings 87, 333-338.

La Porta, R., Lopez-de-Silanes F., Shleifer, A., Vishny, R., 1999. The Quality of Government. Journal of Law, Economics and Organization, 15(1), 222-279.

Lettau, M., Ludvigson, S., 2001. Resurrecting the (C) CAPM: a cross-sectional test when risk premia are time-varying. Journal of Political Economy 109, 1238-1287.

Li, J., Massa, M., and Zhang, H., 2017, Culture vs. Bias: Can Social Trust Mitigate the Disposition Effect?, working paper.

Lin, C., Massa, M., Zhang, H., 2014. Mutual funds and information diffusion: the role of country-level governance. Review of Financial Studies 27, 3343-3387.

Mamaysky, H., Spiegel M., Zhang, H., 2008. Estimating the dynamics of mutual fund alphas and betas. Review of Financial Studies 21, 233-264.

Michaels, G., Zhi, X., 2010. Freedom Fries. American Economic Journal: Applied Economics 2(3), 256-281.

Miller, G.S., Skinner, D.J., 2015. The evolving disclosure landscape: How changes in technology, the media, and capital markets are affecting disclosure. Journal of Accounting Research 53(2), 221-239.

Morck, R., Yeung, B., Yu, W., 2000. The information content of stock markets: why do emerging markets have synchronous stock price movements? Journal of Financial Economics 58, 215-260.

Myers, S., Majluf, N., 1984. Corporate financing and investment decisions when firms have information that investors do not have. Journal of Financial Economics 13, 187-221.

North, Douglass C., 1991. Institutions. Journal of Economic Perspectives 5 (1), 97–112.

Pastor, L., Stambaugh, R., 2012. On the size of the active management industry. Journal of Political Economy 120, 740-781.

Pastor, L., Stambaugh, R.F., Taylor, L., 2015. Scale and skill in active management. Journal of Financial Economics 116, 23-45.

Pevzner, M., Xie, F., Xin, X., 2015. When firms talk, do investors listen? The role of trust in stock market reactions to corporate earnings announcements. Journal of Financial Economics 117(1), 190-223.

Putnam, R., Leonardi, R., Nanetti, R., 1993. Making democracy work: civic traditions in modern Italy. Princeton university press, New Jersey.

Sias, R. W., Starks, L. T., 1997. Institutions and individuals at the turn-of-the-year. Journal of Finance 52, 1543–62.

Sapienza, P., Zingales, L., 2012. A trust crisis. International Review of Finance 12, 123-131.

Sarkissian, S., Schill, M., 2004. The Overseas Listing Decision: New Evidence of Proximity Preference. Review of Financial Studies 17, 769-809.

Stack, S. Kposowa, A., 2006. The effect of religiosity on tax fraud acceptability: A cross-national analysis. Journal for the Scientific Study of Religion 45, 325-351.

Stein, J., 2005. Why are most funds open-end?Competition and the limits to arbitrage. The Quarterly Journal of Economics 120, 247-272.

Williamson, O., 1993. Calculativeness, trust, and economic organization. Journal of Law and Economics 36, 453-486.

Whittle, P., 1990. Risk-Sensitive Optimal Control (John Wiley & Sons, New York).

Wurgler, J., 2000. Financial markets and the allocation of capital. Journal of Financial Economics 58(1-2), 187-214.

Appendix A: Variable Definitions

Panel A: Country-Level Variables

General Trust	Based on the responses to the question, "*Generally speaking, would you say that most people can be trusted or that you cannot be too careful in dealing with people?*", we recode the response to be 1 if the participant reports that most people can be trusted and 0 otherwise and take average for each country-year. A higher score indicates more trust (World Value Survey and Europe Value Survey)
Trust_Know	Trust level in the question "*How much do you trust people you know personally*?"; index ranges from 0 to 1 (a higher score indicates more trust) (World Value Survey and Europe Value Survey)
Trust_First	Trust level in the question, "*How much do you trust people you meet for the first time?*"; index ranges from 0 to 1 (a higher score indicates more trust) (World Value Survey and Europe Value Survey)
Trust_Nationality	Trust level in the question, "*How much do you trust people of another nationality?*"; index ranges from 0 to 1 (a higher score indicates more trust) (World Value Survey and Europe Value Survey)
Alternative Trust	Sum of Trust_Know, Trust_First and Trust_Nationality, normalized to [0,1] (World Value Survey and Europe Value Survey)
Individualism	Based on responses to the question, "*How would you place your views on this scale? 1 means completely agreeing with statement (1); 10 means completely agreeing with statement (2); and if your views fall somewhere in between, you can choose any number in between.* (1) Incomes should be made more equal; (2) We need larger income differences as incentive for individual effort",* we rescale the responses to be between 0 and 1, with 0 representing completely agreeing with statement (1) and 1 representing completely agreeing with statement (2), and then take the average of the response in each country-year. Higher index values correspond to more individualism (World Value Survey and Europe Value Survey)
Hierarchy	Based on responses to the question, "*People have different ideas about following instructions at work. Some say that one should follow one's instruction event when one does not fully agree. Others say that one must be convinced first before following instructions. With which of these two opinions do you agree?* (1) Should follow instructions; (2) Must be convinced first*", we recode the response to 1 if the participant agrees with the first opinion and 0 otherwise and then take the average for each country-year. Higher index values correspond to greater hierarchy (World Value Survey and Europe Value Survey)
Qua_Gov	Quality of Government Index from La Porta et al.(1999) measuring the quality of government, including 1) regulation policies related to opening a business and keeping open a business, 2) government corruption, 3) red tape and 4) facilities for and ease of communication between headquarters and the operation, as well as the quality of transportation; index ranges from 0 to 1 (a higher score indicates better government quality)
Information	Internet users per 100 people in a country; rescaled as an index ranging from 0 to 1 (a higher score indicates higher internet penetration)(World Development Indicators)
Education	School enrollment, primary, secondary and tertiary combined (% gross); rescaled as an index ranging from 0 to 1 (a higher score indicates higher education) (World Development Indicators)
GoodGovIndex	The good government index is defined as the sum of the following three indices from the International Country Risk Guide (each ranging from zero to ten): (i) government corruption, (ii) the risk of expropriation of private property by the government, and (iii) the risk of the government repudiating contracts following Karolyi, Lee, and van Dijk (2012)
Disclosure	The variable is on the basis of the prevalence of disclosures concerning research and development (R&D) expenses, capital expenditures, product and geographic segment data, subsidiary information, and accounting methods from Bushman, Piotroski, and Smith (2004).The source is the 1995 International Accounting and Auditing Trends from the Center for Financial Analysis and Research (CIFAR)
Anti-self-dealing index	The anti-self-dealing index is an average of the indices of ex ante and ex post private control of self-dealing. For details, please refer to Djankov, La Porta, Lopez-de-Silanes and Shleifer (2008)
External equity/GNP	The fraction of the capitalization of the equity not detained by outsiders divided by GNP from La Porta et al(1997) and Guiso, Spienza and Zingales(2004)
Debt/GNP	Total debt outstanding divided by GNP from La Porta et al(1997) and Guiso, Spienza and Zingales(2004)
No. of domestic firms/Population	The number of listed companies divided by million inhabitants from La Porta et al(1997) and Guiso, Spienza and Zingales(2004)
No. of IPOs/Population	The number of initial public offerings divided by million inhabitants from La Porta et al(1997) and Guiso, Spienza and Zingales(2004)
AccTransparency	Acc_transparency measures the extent that a firm's stock return incorporates information about future earnings. For details, please refer to Durnev, Errunza and Molchanov (2009)
Contracting Institution	Contracting refers to the rules and regulations governing contracting between two parties of similar power, such as those between the creditor and debtor from Acemoglu and Johnson (2005)
Property Rights	Property refers to the rules and regulations protecting market participants against the power of the government (or the elite) from Acemoglu and Johnson (2005)
Life_expectancy	Life expectancy indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life (the world development indicator data of the World Bank)
Pop_age	Pop_age is the percentage of the population within the age of 15-64 and represents the number of people who could potentially be economically active (the world development indicator data of the World Bank)
Religiosity	Religiosity measures the involvement in formal religious rituals and intrinsic religiosity. It is based on response categories to the question: "*How often do you attend religious services?*" from the World Values

	Survey (Stack and Kposowa, 2006). Responses were coded on a seven-point scale from never (1) to more than once a week (8)
Geo_Proximity	The great circle distance between the capitals of countries i and j in megameters taken with a negative sign (Sarkissian and Schill, 2004)
Linguistic_Proximity	Dummy that is set to one if countries i and j share a common major spoken language or if they were part of the same colonial empire (Sarkissian and Schill, 2004)
Active Fund %	The TNA percentage that active funds (if active share>0.8) represent of all equity mutual funds in a country
Bench Number	Log total number of benchmark indices that mutual funds follow in a country
Bench HHI	The amount of competition among different benchmarks in a country, represented by the HH Index of aggregated mutual funds TNA following each benchmark
GDP	Log GDP in billions of U.S. dollars per country (World Development Indicators)
MktCap/GDP	Total market capitalization of listed companies divided by GDP per country (World Development Indicators)

Panel B: Fund-Level Variables

Active Share	The percentage of a fund's portfolio holding that is different from its benchmark
Benchmark-adjusted Return	Difference between the fund annual net return and its benchmark return
Benchmark-adjusted Four-factor Alpha	Four-factor annualized alpha is estimated using three years of past monthly fund excess return in U.S. dollars with country factors
Benchmark-adjusted Four-factor Alpha (In Sample)	Four-factor annualized alpha is estimated using monthly fund benchmark-adjusted return in U.S. dollars with country factors in the full sample period, 2002~2015
Log(TNA)	Log total net assets in millions of U.S. dollars
Log(TNA)_squared	Square of log total net assets in millions of U.S. dollars
Turnover	Fund turnover ratio
Flows	Percentage growth in TNA
Fund Age	Number of years since the fund was launched

Appendix B: Sample Selection

This table shows the procedure for how we construct our final sample from the following main datasets: Morningstar International, FactSet/LionShares, WVS and EVS. We report the total number of funds for each step.

Procedure	Number of funds
Open-end equity mutual from Morningstar, merged with mutual fund holding from Factset/LionShares from 2002-2015	15,493
Require funds to follow benchmark indices that have at least 10 open-end equity mutual funds	10,168
Merge with social trust and other cultural values from WVS and EVS	9,768
Other Screening procedures: TNA>=2million, non-offshore funds, non-missing performance value	7,883

Table 1: Summary Statistics

This table presents summary statistics for the data from 2002 to 2015 used in this paper. Panel A and Panel B report the cross-country level and fund-level statistics, respectively, while Panel C reports the correlation coefficient matrix. All variables are averaged over the sample period for each country. For the mutual fund activeness variables in Panel A, we present statistics based on both the country of sale (first row) and the country of domicile (second row). Panel C shows the correlation matrix (Pearson below diagonal, Spearman above the diagonal, figures in bold are statistically significant at the 5% level).

Panel A Country-Level

Variables	N	Mean	SD	25%	Median	75%	Country Examples	
							Minimum	Maximum
Trust	50	0.389	0.223	0.239	0.352	0.512	Philippines	Norway
Qua_Gov	38	0.672	0.277	0.435	0.739	0.912	Philippines	Switzerland
Information	47	0.552	0.223	0.368	0.573	0.748	India	Norway
Education	49	0.458	0.027	0.444	0.454	0.467	India	Belgium
GDP	49	26.738	1.538	26.060	26.662	27.724	Andorra	United States
MktCap/ GDP	46	0.910	1.266	0.362	0.619	0.975	Argentina	Hong Kong
Equity Fund %	31	0.580	0.166	0.476	0.530	0.702	Spain	Finland
	24	0.538	0.129	0.435	0.535	0.645	Spain	Sweden
MM Fund %	31	0.079	0.075	0.022	0.052	0.125	Netherlands	France
	24	0.089	0.082	0.025	0.055	0.137	Netherlands	France
Active Fund %	31	0.169	0.136	0.081	0.144	0.229	Portugal	Sweden
	24	0.136	0.102	0.043	0.126	0.231	South Africa	Hong Kong
Bench Number	31	3.715	1.570	2.201	3.659	4.964	Argentina	Switzerland
	24	4.227	1.247	3.357	4.349	5.261	Andorra	United States
Bench HHI	31	0.200	0.146	0.072	0.174	0.261	Switzerland	Argentina
	24	0.159	0.108	0.064	0.158	0.214	Switzerland	Portugal

Panel B Fund-Level

Variable	N	Mean	SD	25%	Median	75%
Active Share	42156	0.71	0.24	0.59	0.77	0.90
TNA(in billion)	42156	0.95	4.22	0.04	0.16	0.60
Flows (per annum)	42156	0.16	0.54	-0.17	0.05	0.33
Turnover(per annum)	42156	0.64	0.83	0.08	0.39	0.88
Age	42156	13.54	11.25	6.00	11.00	17.00
BenchAdj Ret(%)	42156	1.54	11.72	-6.37	0.42	8.64
Rolling Alpha_BenchAdj(%)	41606	0.34	14.06	-8.67	-0.95	8.84
InSample Alpha_BenchAdj(%)	42156	0.41	14.11	-8.65	-0.88	8.99

Panel C Correlation Matrix

		1	2	3	4	5	6	7	8	9	10	11
1	Trust		0.760	0.317	0.706	0.141	0.057	0.320	-0.209	0.443	0.190	-0.220
2	Qua_Gov	0.702		0.426	0.716	0.338	0.053	0.258	-0.112	0.372	0.249	-0.200
3	Information	0.360	0.414		0.362	0.073	-0.359	-0.061	-0.005	0.228	-0.091	-0.100
4	Education	0.636	0.701	0.363		0.279	0.038	0.500	-0.343	0.452	0.352	-0.244
5	GDP	0.150	0.326	0.035	0.075		0.029	0.056	-0.214	0.526	0.670	-0.376
6	Mkt Cap / GDP	0.085	-0.065	-0.269	0.047	-0.202		0.275	-0.082	-0.161	-0.047	0.241
7	Equity Fund %	0.146	0.151	0.041	0.415	-0.161	0.148		-0.598	0.081	0.044	0.219
8	MM Fund %	-0.124	-0.167	-0.152	-0.325	-0.020	-0.091	-0.513		-0.121	-0.116	-0.141
9	Active Fund %	0.486	0.468	0.110	0.459	0.438	-0.196	0.063	-0.152		0.498	-0.275
10	Bench Number	0.218	0.350	0.124	0.340	0.672	-0.152	-0.095	0.100	0.453		-0.697
11	Bench HHI	-0.225	-0.203	-0.155	-0.316	-0.345	0.190	0.065	-0.211	-0.299	-0.770	

Table 2: Trust and the Activeness of the Mutual Fund Industry in an Economy

This table presents estimates of annual country-level regression as follows:

$$Mutual\ Fund\ Activeness_{j,t} = \alpha + \beta \times Trust_{j,t} + \gamma \times M_{j,t} + \varepsilon_{j,t},$$

$Mutual\ Fund\ Activeness_{j,t}$ are our proxies of mutual fund activeness of country j in year t: Equity Fund TNA%, Money Market Fund TNA%, Benchmark Number, Benchmark TNA HHI and Active Fund TNA % (with active share above 0.8). We also use other thresholds to define the Active Fund TNA% and report the results in the Internet Appendix. $Trust_{i,t}$ refers to the level of trust observed in the same country, and the vector $M_{j,t}$ stacks a list of country-level control variables that are detailed in the Appendix A. The sample period is from 2002 to 2015. In Panel A, the unit of observation is the country of sale i in year t, while in Panel B it is the country of domicile j in year t. Year-fixed effects are included in all specifications. Robust t-statistics are reported in parenthesis. *,**,*** denotes significance at the 10%, 5% and 1% levels, respectively.

	Equity Fund%	MM Fund%	Bench Number	Bench HHI	Active Fund(%)				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A By Country of Sale									
Trust	0.145***	-0.053**	0.586***	-0.110***	0.265***	0.297***	0.269***	0.257***	0.278***
	(5.47)	(-2.36)	(7.86)	(-3.81)	(17.48)	(12.36)	(16.61)	(11.50)	(11.73)
Qua_Gov						-0.080			-0.161**
						(-1.51)			(-1.96)
Information							0.014		-0.015
							(0.42)		(-0.30)
Education								-0.035	0.097**
								(-0.76)	(2.03)
Log GDP	-0.034***	-0.000	0.629***	-0.040***	0.053***	0.055***	0.052***	0.052***	0.055***
	(-6.13)	(-0.08)	(22.61)	(-4.06)	(11.70)	(11.21)	(11.69)	(11.13)	(10.96)
MktCap / GDP	0.004	-0.002	-0.050***	0.014***	-0.011***	-0.012***	-0.012***	-0.011***	-0.012***
	(1.14)	(-0.66)	(-3.78)	(4.66)	(-5.58)	(-5.79)	(-5.47)	(-5.55)	(-5.83)
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
R- Square	0.65	0.36	0.60	0.37	0.66	0.66	0.66	0.66	0.67
N	357	357	357	357	274	274	274	274	274
Panel B By Country of Domicile									
Trust	0.157***	-0.041**	0.578***	-0.098***	0.262***	0.293***	0.258***	0.251***	0.267***
	(5.64)	(-2.00)	(6.00)	(-3.16)	(16.68)	(12.05)	(15.90)	(11.15)	(10.62)
Qua_Gov						-0.078			-0.160**
						(-1.46)			(-1.99)
Information							0.019		-0.181
							(0.57)		(-0.83)
Education								-0.290	0.105**
								(-1.40)	(2.12)
Log GDP	-0.013***	-0.004	0.566***	-0.027***	0.053***	0.056***	0.053***	0.053***	0.055***
	(-3.93)	(-1.46)	(15.66)	(-3.16)	(11.89)	(11.38)	(11.80)	(11.23)	(11.29)
MktCap / GDP	0.010**	-0.003	-0.082***	0.019***	-0.013***	-0.014***	-0.013***	-0.013***	-0.013***
	(2.27)	(-1.12)	(-6.51)	(5.39)	(-3.48)	(-3.63)	(-3.37)	(-3.44)	(-3.71)
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES
R-Square	0.72	0.36	0.60	0.36	0.64	0.65	0.65	0.64	0.65
N	320	320	320	320	272	272	272	272	272

Table 3: The Impact of Trust on Fund Activeness and Performance of Trust-related Active Share (Domestic Funds)

Panel A present estimates of how trust affects the active management of domestic mutual funds from 2002 to 2015.

$$Active\ Share_{i,j,t} = \alpha + \beta \times Trust_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t}$$

$Active\ Share_{i,j,t}$ is the active share of fund i in country j at year t, defined as the percentage of a fund's portfolio holding that is different from its benchmark. The vector $M_{j,t}$ stacks a list of country-level control variables in the domicile country, while the vector $MFund_{i,j,t}$ stacks a list of fund-level control variables. Please refer to Appendix A for control variable definitions. Panel B reports two-stage estimates of the effect of trust on fund performance via active share. In the first stage, we decompose active share by regressing it on trust and other controls, as in Table 3:

$$Active\ Share_{i,j,t} = \alpha + \beta \times Trust_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t}$$

In the second stage, we use the decomposed component of active share in the first stage to predict future performance:

$$Perf_{i,j,t+1} = \alpha + \beta_1 \times \widehat{AS}(Trust)_{j,t} + \beta_2 \times \widehat{AS}(OtherChar)_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t+1}$$

Following Cremers and Petajist (2009), $Perf_{i,j,t+1}$ refers to the future performance of funds, including benchmark-adjusted return, rolling alpha, and in-sample alpha. $\widehat{AS}(Trust)_{j,t}$ refers to trust-projected active share, and $\widehat{AS}(OtherChar)_{j,t}$ refers to the projected value of active share based on other country characteristics. The sample includes open-end active domestic funds in both Morningstar and Factset from 2002 to 2015, which are defined as those that invest more than 80% of its portfolio in its domicile country. Offshore funds and small funds with TNA below 2 million are excluded. Year fixed effects are included in the panel regression estimates. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)
Panel A: The impact of trust on fund-level activeness			
Trust	0.278***	0.207***	0.172***
	(10.75)	(8.23)	(7.24)
Qua_Gov		-0.331***	-0.644***
		(-8.34)	(-12.32)
Information			0.342***
			(8.26)
Education			-1.878***
			(-7.52)
TNA	-0.009	0.026**	0.033***
	(-0.73)	(2.19)	(2.83)
TNA_squared	-0.000	-0.001***	-0.002***
	(-1.51)	(-4.74)	(-5.36)
Fund Flows	0.028***	0.026***	0.026***
	(10.31)	(10.13)	(9.97)
Fund Age	0.005***	0.006***	0.006***
	(5.03)	(6.90)	(6.84)
Bench Number	0.001***	0.000***	0.000***
	(20.99)	(15.91)	(15.22)
Bench HHI	1.155***	1.200***	1.036***
	(10.86)	(13.25)	(12.26)
Market Cap/GDP	0.001***	0.000***	0.000***
	(10.63)	(4.37)	(4.83)
GDP	0.063***	0.040***	0.044***
	(22.37)	(11.13)	(12.90)
Year Fixed-Effects	YES	YES	YES
Observations	26,498	26,498	26,498
R-square	0.17	0.22	0.22
Panel B: Performance of Trust-related Active Share (Panel Regressions)			
	BenchAdj Return	InSample Alpha _BenchAdj	Rolling Alpha _BenchAdj
ActiveShare(Trust)	0.268***	0.323***	0.447***
	(4.34)	(4.56)	(6.21)
ActiveShare(Qua_Gov)	-0.128***	-0.163***	-0.090***
	(-5.13)	(-5.62)	(-3.09)
ActiveShare(Information)	-0.761***	-0.913***	-0.918***
	(-12.67)	(-13.51)	(-13.38)
ActiveShare(Education)	0.749***	1.073***	1.089***
	(11.05)	(13.08)	(12.71)
log(TNA)	-0.001	0.004	0.006
	(-0.15)	(0.70)	(0.96)
log(TNA)_squared	0.000	-0.000	-0.000
	(0.43)	(-0.30)	(-0.59)
Flows	0.033***	0.041***	0.041***
	(23.06)	(23.52)	(23.56)
Turnover	0.004***	0.007***	0.007***
	(4.38)	(6.76)	(6.81)
Fund Age	0.001	0.001	0.001
	(1.14)	(1.40)	(1.26)
YEAR FE	YES	YES	YES
Observations	26,498	26,498	26,370
R-squared	0.31	0.36	0.36

Table 4: The Impact of Trust on Fund Activeness and Performance of Trust-related Active Share (International Funds Investing in Low-trust Countries)

Panel A presents estimates of how trust affects the active management of international mutual funds that invest in countries of lower trust relative to their sale country from 2002 to 2015. The regression is as follows:

$$Active\ Share_{i,j,t} = \alpha + \beta_S \times Trust\_Sales_{j,t} + \beta_I \times Trust\_Inv_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t},$$

Where $Active\ Share_{i,j,t}$ is the active share for fund i in country j at year t, defined as the percentage of a fund's portfolio holding that is different from its benchmark. $Trust\_Sales_{j,t}$ ($Trust\_Inv_{j,t}$) denotes the level of trust in the fund's sales (investing) country. Panel B reports two-stage estimates of the effect of trust on the performance of international mutual funds that invest in countries of lower trust relative to their sale country via active share. In the first stage, we decompose active share by regressing it on trust and other controls as in Panel A. In the second stage, we use the decomposed component of active share in the first stage to predict future performance: $Perf_{i,j,t+1} = \alpha + \beta_{1S} \times \widehat{AS}(Trust\_Sales)_{j,t} + \beta_{1I} \times \widehat{AS}(Trust\_Inv)_{j,t} + \beta_2 \times \widehat{AS}(OtherChar)_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t+1}$. Following Cremers and Petajist (2009), $Perf_{i,j,t+1}$ refers to the future performance of funds, including benchmark-adjusted return, rolling alpha, and in-sample alpha. $\widehat{AS}(Trust\_Sales)_{j,t}$ and $\widehat{AS}(Trust\_Inv)_{j,t}$ refer to trust-projected active share using the level of trust in the fund sales and investing country, and $\widehat{AS}(OtherChar)_{j,t}$ refers to the projected value of active share based on other country characteristics. The vector $M_{j,t}$ stacks a list of country-level control variables in the domicile country, while the vector $MFund_{i,j,t}$ stacks a list of fund-level control variables. Please refer to Appendix A for control variable definitions. The sample includes open-end active international funds in both Morningstar and Factset from 2002 to 2015, which are defined as those that invest more than 20% of their portfolios outside of the domicile country. Offshore funds and funds with TNA below 2 million are excluded. Year-fixed effects are included in the panel regression. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year in panel regression estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: The impact of trust on fund-level activeness

	(1)	(2)	(3)
Trust of Sale	0.013	0.005	0.002
	(1.46)	(0.77)	(0.29)
Trust of Investment	0.365***	0.321***	0.485***
	(7.23)	(12.86)	(13.76)
Qua_Gov of Sale		0.350***	0.194**
		(5.83)	(2.09)
Qua_Gov of Investment		-0.037***	-0.027***
		(-3.98)	(-2.87)
Information of Sale			0.107*
			(1.66)
Information of Investment			-0.009
			(-1.11)
Education of Sale			0.006
			(0.84)
Education of Investment			0.863***
			(8.62)
Controls	YES	YES	YES
YEAR FE	YES	YES	YES
Observations	8,983	8,983	8,983
R-squared	0.13	0.13	0.14

Panel B: Performance of Trust-related Active Share (Panel Regressions)

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(Trust of Sale)	0.023	0.022	0.033	0.032	0.029	0.026
	(1.45)	(1.43)	(1.58)	(1.56)	(1.48)	(1.51)
ActiveShare(Trust of Investment)	0.204***	0.186***	0.247***	0.222***	0.257***	0.237***
	(6.53)	(6.07)	(6.45)	(5.92)	(6.70)	(6.29)
ActiveShare(Qua_Gov of Sale)	0.110	0.240	0.533**	0.681***	0.466**	0.601***
	(0.58)	(1.29)	(2.43)	(3.17)	(2.12)	(2.78)
ActiveShare(Qua_Gov of Investment)	0.977***	0.927***	1.209***	1.141***	1.004***	0.942***
	(5.31)	(5.22)	(5.23)	(5.11)	(4.36)	(4.22)
ActiveShare(Information of Sale)	-0.187	-0.354	-0.529*	-0.738**	-0.464	-0.663**
	(-0.71)	(-1.39)	(-1.70)	(-2.44)	(-1.48)	(-2.18)
ActiveShare(Information of Investment)	1.718***	1.556***	1.056*	0.865	0.882	0.697
	(4.01)	(3.74)	(1.89)	(1.59)	(1.59)	(1.29)
ActiveShare(Education of Sale)	0.121	0.334	-0.711	-0.453	-0.658	-0.431
	(0.22)	(0.64)	(-1.04)	(-0.68)	(-0.96)	(-0.64)
ActiveShare(Education of Investment)	0.714***	0.635***	0.935***	0.836***	0.991***	0.895***
	(12.00)	(11.20)	(12.09)	(11.27)	(12.78)	(12.01)
Domicile Country Control Variables	YES	YES	YES	YES	YES	YES
Fund Control Variables	NO	YES	NO	YES	NO	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	8,983	8,983	8,983	8,983	8,716	8,716
R-squared	0.26	0.30	0.28	0.32	0.28	0.32

Table 5: Subsample Tests—U.S. Funds Investing in Low-Trust Countries

This table presents estimates for US funds that invest in foreign countries of lower trust than the US from 2002 to 2015. Panel A reports the impact of trust on active management and Panel B shows the performance test. Panel C presents coefficient estimates from regressions of fund-level activeness on both the change and level of country popularity (of investment) among Americans and Panel D displays the performance test. Year-fixed effects are included in the panel regression estimation. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year in the panel regressions. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: The Impact of Trust on Fund-level Activeness

	Dependent Variable= Active Share		
	(1)	(2)	(3)
Trust of Investment	0.611***	0.623***	0.332***
	(15.43)	(15.20)	(3.87)
Qua_Gov of Investment		-0.010	-0.010
		(-1.16)	(-1.24)
Information of Investment			-2.719***
			(-9.42)
Education of Investment			-0.072*
			(-1.93)
Control Variables	YES	YES	YES
YEAR FE	YES	YES	YES
Observations	5,022	5,022	5,022
R-squared	0.13	0.13	0.15

Panel B: Performance of Trust-related Active Share

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(Trust)	0.354***	0.309***	0.344***	0.302***	0.363***	0.317***
	(6.50)	(6.08)	(6.93)	(6.49)	(6.67)	(6.25)
ActiveShare(Qua_Gov)	17.127**	14.948**	14.663**	12.700*	16.134**	13.975*
	(2.13)	(1.96)	(1.98)	(1.82)	(2.01)	(1.84)
ActiveShare(Information)	4.295***	3.830***	3.053**	2.634**	3.859**	3.403**
	(2.82)	(2.64)	(2.20)	(1.99)	(2.53)	(2.34)
ActiveShare(Education)	1.671	2.032	1.477	1.822	1.447	1.817
	(1.04)	(1.32)	(1.00)	(1.29)	(0.90)	(1.18)
Control Variables	NO	YES	NO	YES	NO	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	5,022	5,022	5,022	5,022	5,022	5,022
R-squared	0.29	0.34	0.29	0.34	0.29	0.34

Panel C: Country Popularity and Fund-level Activeness

	(1)	(2)	(3)	(4)	(5)	(6)
Trust	0.432***	0.623***	0.434***	0.440***	0.442***	0.267**
	(8.21)	(6.06)	(3.43)	(3.48)	(3.50)	(2.13)
Trust*Delta(Country Popularity)		0.812**	0.895**	0.890**	0.899**	0.782**
		(2.06)	(2.33)	(2.31)	(2.34)	(2.02)
Delta(Country Popularity)		-0.143	-0.137	-0.134	-0.139	0.526
		(-0.80)	(-0.78)	(-0.77)	(-0.80)	(0.95)
Country Popularity	0.094***		0.100***	0.101***	0.101***	0.110*
	(6.14)		(2.97)	(2.99)	(2.99)	(1.87)
Country Popularity*Delta(Country Popularity)						-0.206
						(-0.89)
Qua_Gov				-0.005	-0.005	-0.006
				(-0.44)	(-0.42)	(-0.50)
Information					-0.005	-0.007**
					(-0.63)	(-2.08)
Education					-0.003	-0.005
					(-0.51)	(-1.62)
Control Variables	YES	YES	YES	YES	YES	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	5,022	5,022	5,022	5,022	5,022	5,022
R-squared	0.13	0.13	0.14	0.14	0.14	0.14

Panel D: Performance Test - Country Popularity and Fund-level Activeness

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(Trust)	0.506***	0.317*	0.510***	0.336**	0.538***	0.343**
	(2.93)	(1.95)	(3.28)	(2.31)	(2.92)	(1.98)
ActiveShare(Trust*Delta(Popularity))	1.419**	1.277**	1.297**	1.170**	1.451**	1.307**
	(2.13)	(2.14)	(2.00)	(1.98)	(2.11)	(2.13)
ActiveShare(Delta(Popularity))	-0.776	-0.617	-0.985	-0.824	-0.726	-0.548
	(-0.20)	(-0.18)	(-0.27)	(-0.25)	(-0.18)	(-0.15)
ActiveShare(Popularity)	0.260***	0.304***	0.240***	0.280***	0.252***	0.297***
	(3.84)	(4.72)	(3.94)	(4.82)	(3.60)	(4.46)
ActiveShare(Popularity*Delta(Popularity))	-1.419	-1.066	-1.311	-0.976	-1.364	-0.994
	(-0.55)	(-0.43)	(-0.56)	(-0.43)	(-0.51)	(-0.39)
ActiveShare(Qua_Gov)	3.375*	2.779	2.828*	2.291	3.475*	2.876
	(1.81)	(1.56)	(1.66)	(1.40)	(1.85)	(1.59)
ActiveShare(Information)	4.557***	3.980***	3.264**	2.742*	4.909***	4.331***
	(2.85)	(2.60)	(2.22)	(1.94)	(2.99)	(2.75)
ActiveShare(Education)	0.897	1.135	0.788	1.014	0.699	0.938
	(1.02)	(1.34)	(0.98)	(1.31)	(0.77)	(1.07)
Control Variables	NO	YES	NO	YES	NO	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	5,022	5,022	5,022	5,022	5,022	5,022
R-squared	0.30	0.36	0.31	0.36	0.29	0.34

Table 6: Subsample Tests—Bilateral Trust and Investing in Low-Trust Countries

This table uses the bilateral trust between European countries in Guiso, Sapienza and Zingales (2009) and presents estimates for the sample of European funds (1) that invest in other European countries and (2) for which the trust across individuals in the domestic country towards investing countries is lower than towards local people. Panel A reports the impact of trust on active management, where Panel regression results are shown in Columns (1) and (2), while Columns (3) and (4) are estimated using the generalized method of moments instrumented variable estimator (GMM-IV) following Guiso, Sapienza and Zingales (2009). The instruments are religious similarity and somatic distance. A test of over-identifying restriction, Hansen J-statistics, is also reported. Panels B shows the performance tests. The proximity measures between domicile and investing countries follow Sarkissian and Schill (2004) and include the following: Geo_Proximity is the great circle distance between the capitals of countries i and j in megameters taken with a negative sign; Linguistic_Proximity is set to one if countries i and j share a common major spoken language or if they were part of the same colonial empire. All regressions include the domestic country, investing country and year fixed effects. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)		(3)	(4)
Panel A: The impact of trust on fund-level activeness					
	Panel Regression			IVGMM	
Mean Trust towards people	0.125***	0.186***		0.220***	0.299***
in Investing Country	(4.73)	(6.32)		(4.47)	(4.29)
log(TNA)		0.015			0.018
		(0.32)			(0.40)
log(TNA)_squared		-0.001			-0.001
		(-0.67)			(-0.76)
Flows		0.000***			0.000***
		(4.03)			(4.11)
Fund Age		-0.002***			-0.002***
		(-3.51)			(-3.16)
Geo_Proximity		0.000***			0.000***
		(8.77)			(11.32)
Linguistic_Proximity		0.034			0.073***
		(1.17)			(2.90)
YEAR FE	YES	YES		YES	YES
Domicile Country FE	YES	YES		YES	YES
Investing Country FE	YES	YES		YES	YES
Observations	3,655	3,655		3,655	3,655
R-squared	0.16	0.20			
Hansen J-Statistics				0.739	0.678
Chi-squared p-value				0.390	0.410
Panel B: Performance of Trust-related Active Share					
	Panel Regression			IVGMM	
	BenchAdj Ret				
ActiveShare(Trust)	0.098***	0.121***		0.061***	0.076***
	(3.03)	(3.57)		(3.03)	(3.45)
Controls	NO	YES		NO	YES
YEAR FE	YES	YES		YES	YES
Domicile Country FE	YES	YES		YES	YES
Investing Country FE	YES	YES		YES	YES
Observations	3,295	3,295		3,295	3,295
R-squared	0.56	0.58		0.56	0.58
	InSample Alpha_BenchAdj				
ActiveShare(Trust)	0.109***	0.104**		0.068***	0.110***
	(2.77)	(2.50)		(2.77)	(4.16)
Controls	NO	YES		NO	YES
YEAR FE	YES	YES		YES	YES
Domicile Country FE	YES	YES		YES	YES
Investing Country FE	YES	YES		YES	YES
Observations	3,295	3,295		3,295	3,295
R-squared	0.51	0.53		0.51	0.53
	Rolling Alpha_BenchAdj				
ActiveShare(Trust)	0.129***	0.120***		0.081***	0.114***
	(3.33)	(2.92)		(3.33)	(4.33)
Controls	NO	YES		NO	YES
YEAR FE	YES	YES		YES	YES
Domicile Country FE	YES	YES		YES	YES
Investing Country FE	YES	YES		YES	YES
Observations	3,254	3,254		3,254	3,254
R-squared	0.51	0.53		0.51	0.53

Table 7: The Reverse Scenario of Investing in High-Trust Countries

This table reports the estimates for international mutual funds that invest in countries of higher trust relative to their sales country from 2002 to 2015. Panel A presents the impact of trust on the active management, while Panel B report the performance test. Offshore funds and funds with TNA below 2 million are excluded. Year-fixed effects are included. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year in panel regression estimates. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: The impact of trust on fund-level activeness

	(1)	(2)	(3)
Trust of Sale	0.119***	0.191***	0.171***
	(4.60)	(6.46)	(5.89)
Trust of Investment	0.008	0.008	0.009
	(1.02)	(0.99)	(1.18)
Qua_Gov of Sale		-0.122***	-0.278***
		(-4.45)	(-6.20)
Qua_Gov of Investment		0.019	0.022
		(1.39)	(1.64)
Information of Sale			0.193***
			(4.41)
Information of Investment			-0.006
			(-0.64)
Education of Sale			-0.002
			(-0.25)
Education of Investment			-2.110***
			(-8.45)
Control Variables	YES	YES	YES
YEAR FE	YES	YES	YES
Observations	6,675	6,675	6,675
R-squared	0.06	0.06	0.07

Panel B: Performance of Trust-related Active Share

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(Trust of Sale)	0.384***	0.338***	0.387***	0.308**	0.431***	0.352***
	(3.90)	(3.55)	(3.08)	(2.47)	(3.38)	(2.80)
ActiveShare(Trust of Investment)	-0.050	-0.082	0.094	0.074	0.278	0.270
	(-0.13)	(-0.22)	(0.19)	(0.16)	(0.57)	(0.57)
ActiveShare(Qua_Gov of Sale)	0.022	-0.041	0.041	-0.074	0.100	0.005
	(0.24)	(-0.42)	(0.38)	(-0.66)	(0.86)	(0.04)
ActiveShare(Qua_Gov of Investment)	0.041	0.047	-0.292	-0.260	-0.287	-0.249
	(0.16)	(0.18)	(-0.88)	(-0.80)	(-0.86)	(-0.76)
ActiveShare(Information of Sale)	0.191	0.145	0.404***	0.340**	0.449***	0.387***
	(1.63)	(1.30)	(2.87)	(2.47)	(3.08)	(2.75)
ActiveShare(Information of Investment)	1.396*	1.201	1.865**	1.606*	1.749*	1.507*
	(1.86)	(1.64)	(2.00)	(1.77)	(1.86)	(1.66)
ActiveShare(Education of Sale)	-1.593	-1.897	-0.555	-0.864	-0.599	-1.007
	(-0.90)	(-1.10)	(-0.25)	(-0.40)	(-0.27)	(-0.47)
ActiveShare(Education of Investment)	0.019	0.014	-0.215**	-0.210***	-0.199**	-0.195**
	(0.31)	(0.24)	(-2.56)	(-2.58)	(-2.22)	(-2.24)
Domicile Country Control Variables	YES	YES	YES	YES	YES	YES
Fund Control Variables	NO	YES	NO	YES	NO	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	6,675	6,675	6,675	6,675	6,520	6,520
R-squared	0.26	0.30	0.29	0.32	0.29	0.32

Table 8: Reconciling Based on the Diminishing Impact of Trust

This table reports the estimates for international mutual funds by defining countries of high and low trust. Panel A presents estimates of how trust affects active management as follows:

$$Active\ Share_{i,j,t} = \alpha + \beta_H \times Trust\_High_{j,t} + \beta_L \times Trust\_Low_{j,t} + \theta_H \times Country\ Institutional\_High_{j,t}$$
$$+ \theta_L \times Country\ Institutional\_Low_{j,t} + \gamma \times M_{j,t} + \delta \times MFund_{i,j,t} + \varepsilon_{i,j,t},$$

where $Active\ Share_{i,j,t}$ is the active share for fund i in country j at year t, defined as the percentage of a fund's portfolio holding that is different from its benchmark. $Trust\_High_{j,t}$ ($Trust\_Low_{j,t}$) denotes the higher (lower) level of trust in the fund sales and investing country. $Country\ Institutional\_High_{j,t}$ ($Country\ Institutional\_Low_{j,t}$) denotes the level of country intuitional variables in the country in which the fund faces a higher (lower) level of trust. The vector $M_{j,t}$ stacks a list of country-level control variables in the domicile country, while the vector $MFund_{i,j,t}$ stacks a list of fund-level control variables. Please refer to Appendix A for control variable definitions. Panels B present the two-stage estimates of the effect of trust on the performance of international funds via active share. Offshore funds and funds with TNA below 2 million are excluded. Year-fixed effects are included in the panel regressions. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: The impact of trust on fund-level activeness

	(1)	(2)	(3)
Trust_High	0.009	0.008	0.008
	(1.64)	(1.54)	(1.43)
Trust_Low	0.273***	0.292***	0.319***
	(16.09)	(15.74)	(13.95)
Qua_Gov of High		-0.040*	-0.187***
		(-1.85)	(-5.36)
Qua_Gov of Low		-0.015**	-0.011
		(-1.99)	(-1.48)
Information of High			0.164***
			(5.52)
Information of Low			-0.004
			(-0.58)
Education of High			0.002
			(0.29)
Education of Low			0.214***
			(2.74)
Control Variables	YES	YES	YES
YEAR FE	YES	YES	YES
Observations	15,658	15,658	15,658
R-squared	0.09	0.09	0.09

Panel B: Performance of Trust-related Active Share

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(High Trust)	-0.145	-0.070	-0.004	0.090	0.197	0.304
	(-0.47)	(-0.23)	(-0.01)	(0.23)	(0.50)	(0.79)
ActiveShare(Low Trust)	0.251***	0.218***	0.282***	0.236***	0.297***	0.256***
	(7.31)	(6.45)	(6.34)	(5.27)	(6.77)	(5.83)
ActiveShare(Qua_Gov_High)	0.205**	0.113	0.261**	0.139	0.335***	0.227**
	(2.23)	(1.23)	(2.52)	(1.34)	(3.04)	(2.07)
ActiveShare(Qua_Gov_Low)	1.501***	1.393***	1.992***	1.840***	1.706***	1.559***
	(4.25)	(4.06)	(4.54)	(4.30)	(3.98)	(3.72)
ActiveShare(Information_High)	0.222**	0.122	0.318***	0.193*	0.374***	0.254**
	(2.32)	(1.31)	(2.79)	(1.73)	(3.23)	(2.24)
ActiveShare(Information_Low)	3.519***	3.097***	2.595**	2.074**	2.262**	1.753*
	(4.07)	(3.68)	(2.45)	(2.01)	(2.16)	(1.72)
ActiveShare(Education_High)	0.969	1.613	-1.231	-0.462	-1.090	-0.342
	(0.64)	(1.09)	(-0.64)	(-0.24)	(-0.56)	(-0.18)
ActiveShare(Education_Low)	2.340***	2.026***	3.266***	2.849***	3.420***	3.009***
	(12.52)	(11.24)	(13.27)	(11.80)	(13.77)	(12.34)
Domicile Country Control Variables	YES	YES	YES	YES	YES	YES
Fund Control Variables	NO	YES	NO	YES	NO	YES
YEAR FE	YES	YES	YES	YES	YES	YES
Observations	15,658	15,658	15,658	15,658	15,236	15,236
R-squared	0.25	0.29	0.27	0.31	0.28	0.31

Table 9: The Effect of Trust across Trust Quintiles

This table reports the coefficient estimates from regressions of fund-level activeness on dummies for different quintiles of trust as well as the second-stage estimates of fund performance that can be attributed to quintile-related active share for the sample of international and domestic funds. For each year, we sort either domestic funds or the low-trust side of international funds into trust quintiles, and we create dummy variables indicating the trust quintile of each fund. Funds in quintile group 1 (5) are associated with the lowest (highest) level of trust. We then replace Trust in Table 3 and Trust_Low in Table 8 with these dummy variables to examine the more detailed influence of trust among these funds. The key independent variable is the four higher levels of trust (group = 2,3,4,5), which denotes the incremental influence of trust in addition to group 1 funds. Year-fixed effects are included in the panel regressions. Robust t-statistics are reported in parentheses and based on standard errors clustered by fund and year. *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A Domestic Funds			
	(1)	(2)	(3)
Panel A1 The Impact of Trust on Fund-level Activeness			
Trust (group=2)	0.042***	0.055***	0.045***
	(9.75)	(11.11)	(9.57)
Trust (group=3)	0.065***	0.077***	0.078***
	(14.32)	(15.64)	(13.42)
Trust (group=4)	0.079***	0.091***	0.080***
	(18.79)	(19.42)	(17.01)
Trust (group=5)	0.081***	0.095***	0.088***
	(15.42)	(15.96)	(12.75)
Government		-0.715***	-1.269***
		(-15.25)	(-19.37)
Information			0.652***
			(11.59)
Education			-2.083***
			(-4.89)
Controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	26,498	26,498	26,498
R-squared	0.170	0.19	0.20
Panel A2 Performance of Trustworthy Active Shares			
	BenchAdj Return	InSample Alpha BenchAdj	Rolling Alpha BenchAdj
Active Share(Trust,group=2)	0.114***	0.125***	0.096***
	(4.94)	(5.10)	(3.97)
Active Share(Trust,group=3)	0.220***	0.252***	0.236***
	(5.54)	(5.79)	(5.50)
Active Share(Trust,group=4)	0.506***	0.567***	0.550***
	(16.18)	(16.61)	(16.36)
Active Share(Trust,group=5)	0.620***	0.645***	0.661***
	(15.12)	(14.81)	(15.35)
Active Share(Government)	-0.075	-0.086	-0.100
	(-0.50)	(-0.53)	(-0.63)
Active Share(Information)	1.558	1.549	1.576
	(0.74)	(0.68)	(0.69)
Active Share(Education)	0.133	0.240	0.216
	(0.18)	(0.30)	(0.27)
Controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	26,498	26,498	26,370
R-squared	0.32	0.36	0.37

Panel B International Funds

Panel B1: The impact of trust on fund-level activeness

	(1)	(2)	(3)
Trust_High	0.006	0.007	0.006
	(1.20)	(1.33)	(1.12)
Trust_Low(Group=2)	0.037***	0.038***	0.039***
	(6.71)	(6.95)	(6.70)
Trust_Low(Group=3)	0.051***	0.056***	0.058***
	(6.33)	(6.71)	(6.74)
Trust_Low(Group=4)	0.103***	0.107***	0.109***
	(17.09)	(17.17)	(15.99)
Trust_Low(Group=5)	0.134***	0.139***	0.140***
	(17.03)	(17.27)	(16.34)
Qua_Gov of High		-0.044**	-0.150***
		(-2.10)	(-4.42)
Qua_Gov of Low		-0.010	-0.008
		(-1.37)	(-0.99)
Information of High			0.002
			(0.34)
Information of Low			0.121*
			(1.76)
Education of High			0.126***
			(4.27)
Education of Low			0.003
			(0.46)
Control Variables	YES	YES	YES
Year FE	YES	YES	YES
Observations	15,658	15,658	15,658
R-squared	0.10	0.10	0.10

Panel B2: Performance of Trust-related Active Share

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(High Trust)	-8.964	-5.234	-7.173	-3.196	-2.366	2.151
	(-0.68)	(-0.41)	(-0.53)	(-0.24)	(-0.17)	(0.16)
ActiveShare(Low Trust, group=2)	0.184***	0.139**	0.218**	0.189***	0.223**	0.213***
	(3.07)	(2.35)	(2.19)	(3.07)	(2.25)	(3.45)
ActiveShare(Low Trust, group=3)	0.195**	0.220**	0.240***	0.242**	0.260***	0.256***
	(2.02)	(2.33)	(3.88)	(2.47)	(4.18)	(2.62)
ActiveShare(Low Trust, group=4)	0.280***	0.246***	0.302***	0.264***	0.308***	0.273***
	(8.40)	(7.66)	(8.67)	(7.87)	(8.80)	(8.11)
ActiveShare(Low Trust, group=5)	0.334***	0.291***	0.321***	0.274***	0.332***	0.290***
	(9.10)	(8.00)	(8.38)	(7.17)	(8.75)	(7.67)
ActiveShare(Qua_Gov_High)	0.189*	0.096	0.190*	0.088	0.233**	0.143
	(1.67)	(0.85)	(1.68)	(0.78)	(1.98)	(1.22)
ActiveShare(Qua_Gov_Low)	5.536***	5.161***	6.118***	5.700***	5.337***	4.916***
	(3.94)	(3.78)	(4.21)	(4.04)	(3.74)	(3.55)
ActiveShare(Information_High)	0.211	0.093	0.247*	0.120	0.277**	0.153
	(1.64)	(0.74)	(1.88)	(0.93)	(2.08)	(1.18)
ActiveShare(Information_Low)	-1.601***	-1.402***	-1.507***	-1.291***	-1.422***	-1.204**
	(-3.33)	(-3.00)	(-3.05)	(-2.70)	(-2.88)	(-2.51)
ActiveShare(Education_High)	0.817	1.328	0.284	0.825	0.291	0.822
	(0.68)	(1.13)	(0.23)	(0.68)	(0.23)	(0.68)
ActiveShare(Education_Low)	2.343***	2.037***	2.601***	2.268***	2.698***	2.364***
	(13.14)	(11.87)	(14.00)	(12.69)	(14.26)	(13.00)
Domicile Country Control Variables	YES	YES	YES	YES	YES	YES
Fund Control Variables	NO	YES	NO	YES	NO	YES
Year FE	YES	YES	YES	YES	YES	YES
Observations	15,658	15,658	15,658	15,658	15,236	15,236
R-squared	0.26	0.29	0.24	0.28	0.24	0.28

Table 10: The Long-term Influence of Trust using the First Wave of WVS

This table reports the results of robustness test for Table 3 and 8 by using trust from the first wave of World Value Survey. Other specifications in Panel A (domestic funds) and Panel B (international funds) are similar to those in Table 3 and 8, respectively.

Panel A Domestic Funds			
	(1)	(2)	(3)
Panel A1 The Impact of Trust on Fund-level Activeness			
Trust	0.382***	0.281***	0.226***
	(14.08)	(11.16)	(9.24)
Government		-0.268***	-0.568***
		(-8.41)	(-11.80)
Information			0.325***
			(7.77)
Education			-1.689***
			(-6.63)
Controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	26,498	26,498	26,498
R-squared	0.18	0.22	0.22
Panel A2 Performance of Trustworthy Active Shares			
	BenchAdj Return	InSample Alpha BenchAdj	Rolling Alpha BenchAdj
Active Share(Trust)	0.223***	0.197***	0.239***
	(4.66)	(3.56)	(4.26)
Active Share(Government)	-0.152***	-0.202***	-0.130***
	(-5.53)	(-6.33)	(-4.05)
Active Share(Information)	-0.787***	-0.933***	-0.926***
	(-12.55)	(-13.18)	(-12.87)
Active Share(Education)	0.795***	1.182***	1.215***
	(10.05)	(12.20)	(11.99)
Controls	YES	YES	YES
Year FE	YES	YES	YES
Observations	26,498	26,498	26,370
R-squared	0.31	0.36	0.36

Panel B International Funds

Panel B1: The impact of trust on fund-level activeness

	(1)	(2)	(3)
Trust_High	0.005	0.004	0.003
	(0.93)	(0.83)	(0.57)
Trust_Low	0.256***	0.248***	0.270***
	(13.99)	(13.30)	(10.85)
Qua_Gov of High		0.039*	-0.080**
		(1.93)	(-2.35)
Qua_Gov of Low		-0.006	-0.002
		(-0.73)	(-0.23)
Information of High			0.139***
			(4.65)
Information of Low			-0.000
			(-0.01)
Education of High			0.001
			(0.23)
Education of Low			0.182**
			(2.16)
Control Variables	YES	YES	YES
Year FE	YES	YES	YES
Observations	15,658	15,658	15,658
R-squared	0.08	0.08	0.08

Panel B2: Performance of Trust-related Active Share

	(1)	(2)	(3)	(4)	(5)	(6)
	BenchAdj Ret		InSample Alpha_BenchAdj		Rolling Alpha_BenchAdj	
ActiveShare(High Trust)	-0.306	-0.164	-0.451	-0.272	0.168	0.321
	(-0.39)	(-0.21)	(-0.45)	(-0.28)	(0.17)	(0.33)
ActiveShare(Low Trust)	0.463***	0.424***	0.587***	0.531***	0.579***	0.527***
	(10.11)	(9.37)	(10.24)	(9.28)	(10.08)	(9.15)
ActiveShare(Qua_Gov_High)	0.256	0.090	0.395*	0.180	0.541**	0.350
	(1.24)	(0.44)	(1.71)	(0.78)	(2.18)	(1.42)
ActiveShare(Qua_Gov_Low)	8.057***	7.588***	10.935***	10.275***	9.191***	8.500***
	(3.64)	(3.53)	(4.00)	(3.84)	(3.43)	(3.23)
ActiveShare(Information_High)	0.173	0.066	0.266**	0.134	0.339**	0.211
	(1.54)	(0.60)	(2.00)	(1.03)	(2.51)	(1.60)
ActiveShare(Information_Low)	260.242***	229.680***	184.694**	147.491*	159.530*	122.319
	(3.83)	(3.47)	(2.22)	(1.82)	(1.93)	(1.52)
ActiveShare(Education_High)	1.155	1.973	-1.623	-0.643	-1.410	-0.463
	(0.61)	(1.07)	(-0.67)	(-0.27)	(-0.58)	(-0.20)
ActiveShare(Education_Low)	3.408***	3.034***	4.797***	4.293***	4.908***	4.407***
	(13.54)	(12.45)	(14.77)	(13.50)	(14.90)	(13.61)
Domicile Country Control Variables	YES	YES	YES	YES	YES	YES
Fund Control Variables	NO	YES	NO	YES	NO	YES
Year FE	YES	YES	YES	YES	YES	YES
Observations	15,658	15,658	15,658	15,658	15,236	15,236
R-squared	0.26	0.29	0.28	0.31	0.28	0.31

Figure 1: Trust Index by Country.

This figure shows the general social trust and quality of government index by country. The general trust is based on the World Value Survey and European Value Survey, while the quality of government index is from La Porta et al. (1999). A larger index value indicates a higher level of trust (or better quality of government) in the sample.
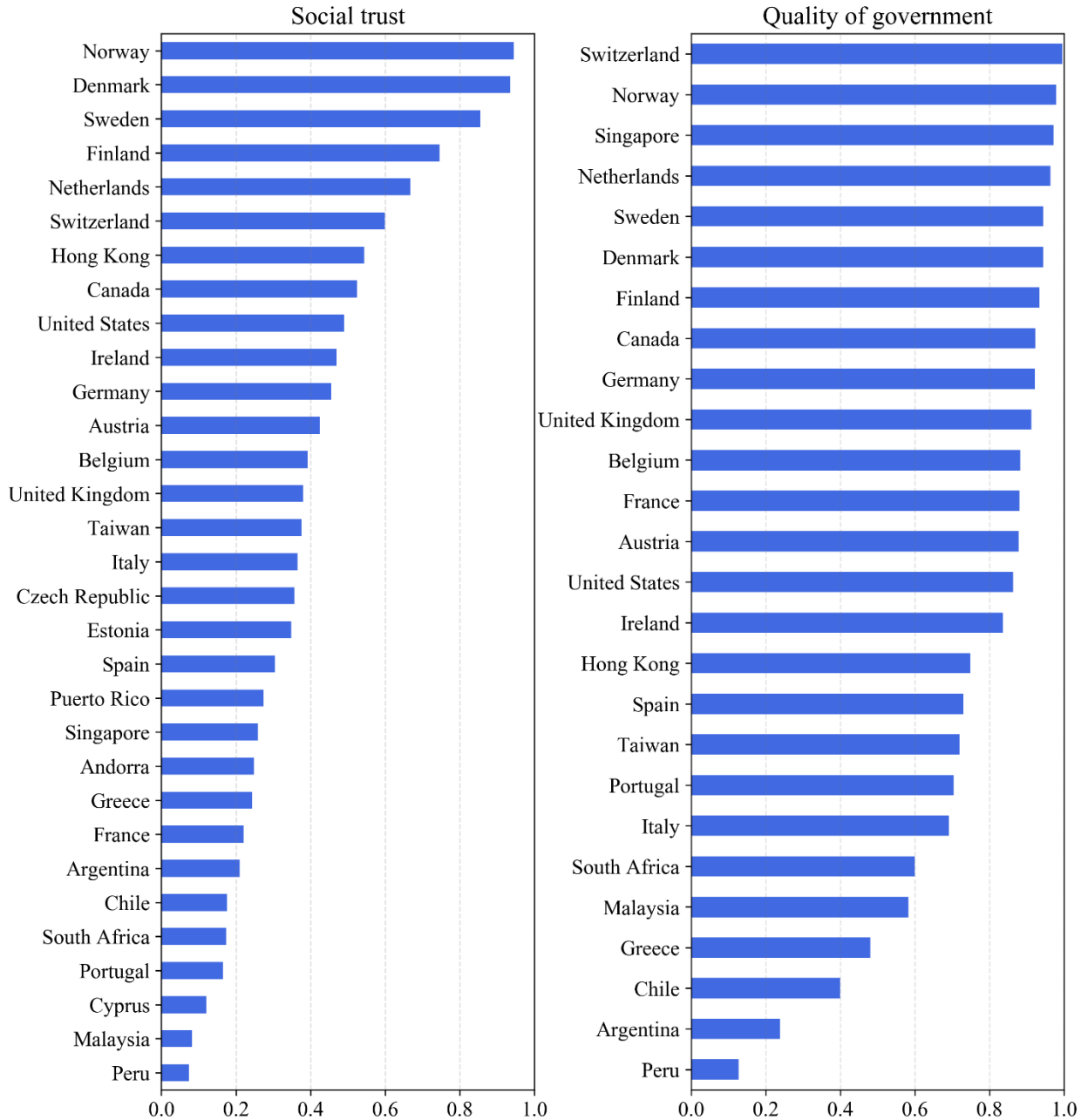
Figure 2: Evolution of Fund Activeness and Flow around Iraq War

This figure plots the time series evolution of fund active share (annual) and dollar flow (12-month moving average, adjusted for all US funds that invest in EU countries, except for France and Germany) around the Iraq War. The high/low active share sample of funds are defined based on the active share in 2002 for US funds that invest in France and denotes the top/bottom quintile respectively.
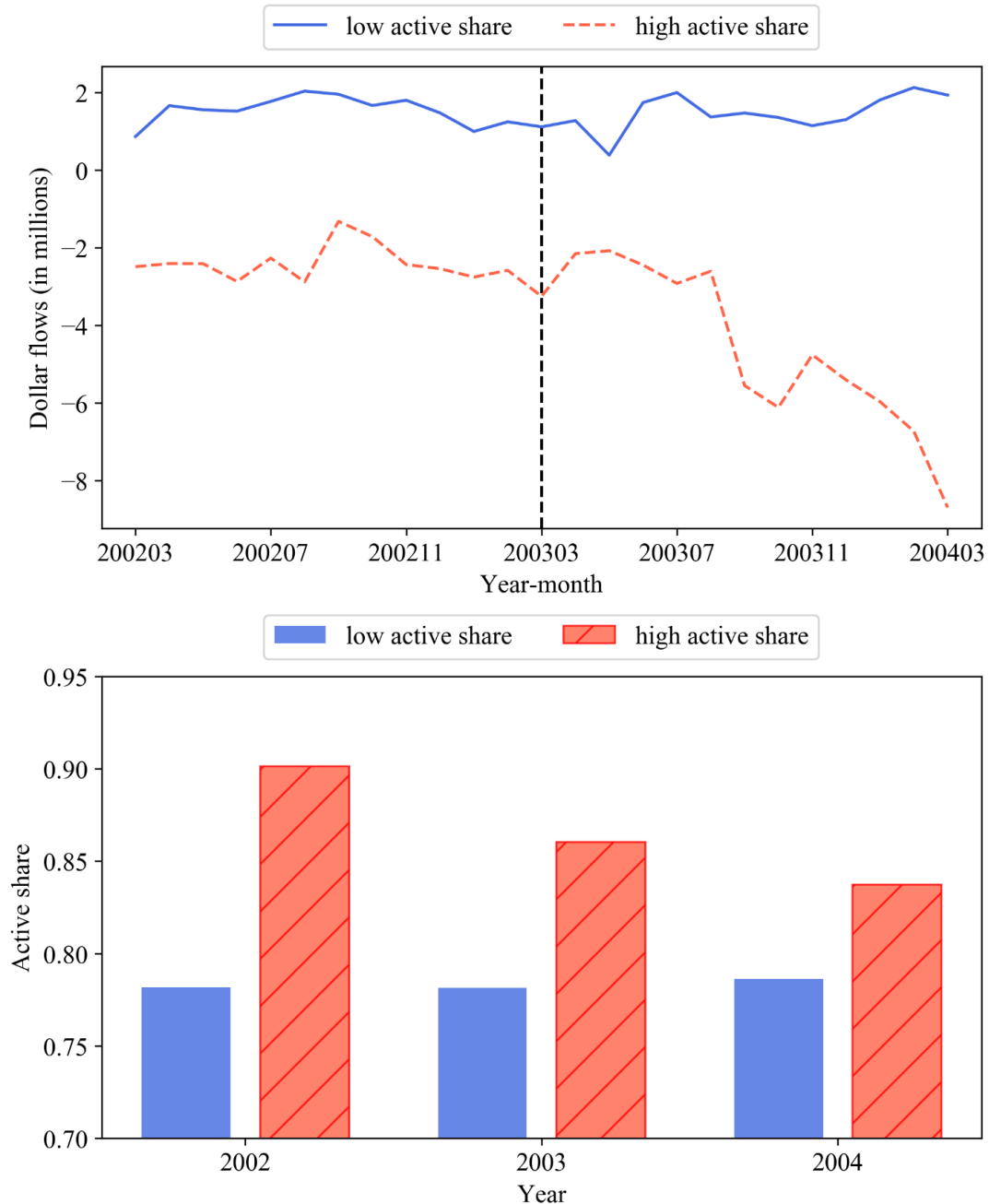
Figure 3: Performance of Trust-related Active Share: Non-linear Effect

This figure plots the relationship between the average level of trust of the quintiles of low-trust side of cross-border investment and the part of fund performance that can be generated by the corresponding quintile-rank related active share. The latter variable is proxied by the coefficient estimates of trust quintiles on either in-sample alpha or rolling alpha in the second-stage analysis as reported in Panel B2 of Table 9. The x-axis denotes the average trust for each of the five groups.