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**The death of Trust across the  
Finance industry**

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# The Death of Trust Across the Finance Industry

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## Abstract

Across all industries in the U.S., we document a significant and unique decline in the level of generalized trust among finance professionals relative to the decline of trust in the general U.S. population. This decline occurs in different age cohorts and among different levels of seniority. It is related to a lack of confidence only in institutions that are relevant to the finance industry. The relative decline of trust is associated with changes in economic conditions, the professional environment in the finance industry, and with the decreasing level of socialization among finance professionals.

**Keywords:** Finance industry, Generalized trust, Implicit incentives, Professional environment, Socialization

**JEL codes:** G20, G21, G22, G24, L14, A14

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## 1. Introduction

*“The fundamental problem isn’t lack of capital. It’s lack of trust. And without trust, Wall Street might as well fold up its fancy tents.”* - Former U.S. Labor Secretary Robert Reich

The financial sector plays a crucial role in a country’s economic development. Better developed financial systems are associated with faster economic growth (Calderón and Liu, 2003), increased levels of entrepreneurial activities (Guiso, Sapienza, and Zingales, 2004), technological innovation (Levine, 1999), and reduced poverty (Beck, Demirgüç-Kunt, and Levine, 2007). A well-functioning financial system depends on the reliability of contracts and contractors. This reliability can be achieved through explicit mechanisms, particularly formal regulation by the government, and by implicit incentives, such as social norms prevailing in a society or a class. Understanding the evolution of social norms, such as trust, among finance professionals is therefore relevant not only for financial institutions and their clients and but also for regulators and policymakers.

Despite the erosion of trust in American society in general (Putnam, 2000), little is known about the evolution of trust across finance professionals. In this paper, we show how implicit incentives in the form of *generalized trust*, i.e., trust in anonymous others, have gradually evolved in the finance industry. Using data from a representative U.S. survey spanning over four decades, we study the time trend in generalized trust across finance professionals.

We uncover three novel empirical findings on the evolution of the trend. First, we show that generalized trust of professionals working in the finance industry has declined substantially over the last four decades. Notably, the level of trust of finance professionals has not only declined in absolute terms, but also relative to the general U.S. population. Simply put, while generalized trust has declined in U.S. society as whole, it has declined significantly more across finance professionals. This relative decline in trust is unique to finance. Second, we find that the relative decline in trust is particularly strong in the investment sector and among professionals with higher seniority, i.e., those who set the tone. Third, we find evidence for several channels, particularly changes in economic conditions, professional environments, and the level of socialization, that are related to and may potentially explain the significant decline of trust across finance professionals.

Why does the level of generalized trust in the finance industry matter? Arrow (1972) notes that “[v]irtually every commercial transaction has within itself an element of trust” (p. 357). Generalized trust is crucial for interactions between unfamiliar people (Nannestad, 2008; Newton,

2007), which are common in financial markets. Economists have argued that generalized trust and other forms of social capital facilitate economic activities because they discourage opportunistic behavior (Guiso, Sapienza, and Zingales, 2011) and increase people's willingness to cooperate with each other (La Porta et al., 1997). Due to the reciprocal nature of trust, it determines their trustworthiness (e.g., Berg, Dickhaut, and McCabe, 1995; Abdulkadiroğlu and Bagwell, 2013) and trust responsiveness (Bacharach, Guerra, and Zizzo, 2007). In other words, people who trust more also tend to act more trustworthily.<sup>1</sup>

The level of generalized trust is essential in the finance industry because financial products have become increasingly complex (Ghent, Torous, and Valkanov, 2019) and conflicts of interest are common. Zingales (2015) notes that the finance industry provides services that most people need but only few understand. The level of information asymmetry between finance professionals and clients is higher than in most other industries. Clients are typically not well informed about financial products and find it difficult to assess which product best suits their needs, increasing their reliance on financial advisers. Providing financial advice and selling products to clients involves potential conflicts of interests (Bolton, Freixas, and Shapiro, 2007). Overall, significant informational rents due to high complexity and informational asymmetry, combined with potential conflicts of interest, render generalized trust particularly crucial for financial transactions.

Furthermore, the U.S. finance industry has experienced almost half a century of deregulation (Philippon and Reshef, 2012), which may make the role of trust even more important.<sup>2</sup> Both theoretical and empirical studies (see, e.g., Fukuyama, 1995; Zak and Knack, 2001; Carlin, Dorobantu, and Viswanathan, 2009; Aghion et al., 2010) suggest that when formal regulation and

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<sup>1</sup> Norm-deviant cheating behavior entails psychological and social costs in high-trust societies. These costs include guilt and shame as well as a lack of reciprocation, ostracism, or more direct forms of punishment by others (Knack and Keefer, 1997; Fehr and Gaechter, 2000; Francois and Zabojnik, 2005; Anderlini and Terlizzese, 2017). Costs increase with the level of trust and discourage opportunistic behavior. In high-trust environments, therefore, individuals need not spend much time in protecting themselves from being exploited in economic transactions (Zack and Knack, 2001). Consistent with this interpretation, Knack and Keefer (1997) contend that, in high-trust societies, written contracts are less likely to be needed and litigation may be less frequent.

<sup>2</sup> Examples include the relaxations of the Glass-Steagall Act in 1987, 1989, 1997, and 1999 (when the Gramm-Leach-Bliley Act finally repealed the Glass-Steagall Act) the removal of interest rates ceilings in the 1980s, and the repeal of the Bank Holding Company Act in 1999. An exception is the Dodd-Frank Act, which was enacted in 2010. However, several requirements of the Act have already been repealed or are planned to be repealed.

governance are less established or efficient, generalized trust is more valuable, because trust discourages opportunistic behavior, providing a substitute for formal regulation. It is thus plausible that a simultaneous decline of generalized trust and regulation may lead to adverse outcomes for both consumers and society.

Generalized trust is an implicit mechanism that guides the behavior of finance professionals, mitigates clients' risk of being expropriated, and serves as a protection against financial fraud. Not surprisingly therefore, scholars and practitioners widely agree that generalized trust is essential for financial markets (see, e.g., Guiso, Sapienza, and Zingales, 2008). It is thus fundamental to explore how trust and other forms of ethical behavior form in the finance industry.

In this study, we investigate the time trends in generalized trust of individuals working in the finance industry relative to the general U.S. population using data from the General Social Survey (GSS). We use survey responses from 25 cross-sectional waves spanning 39 years (covering about 1,500 respondents each year from 1978 through 1993 and around 2,800 respondents every second year from 1994 through 2016) to the question: "*Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?*" This measure of generalized trust is frequently used in the literature and has been shown to be a valid predictor for individuals' actual level of trust (e.g., Fehr et al., 2003; Johnson and Mislin, 2012; Sapienza, Toldra-Simats, and Zingales, 2013).<sup>3</sup>

We show that the level of generalized trust of professionals working in the finance industry has declined substantially over the last almost four decades, both in absolute and relative terms to the general U.S. population. Across all industries covered by the GSS, the relative decline in trust is unparalleled and is unique to finance. Other industries that are also heavily dependent on trust, such as healthcare, legal services, or the tech industry, do not experience such a decline in generalized trust. This decline in trust is even stronger in the investment sector and for finance professionals working in top hierarchy levels who generally strive to "set the tone" of an ethical work culture.

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<sup>3</sup> Sapienza, Toldra-Simats, and Zingales (2013) show that responses to the survey question we use here are driven by what they call the "belief-based component of trust". In other words, responses strongly correlate with the sender's expectations about the receiver's behavior in a standard trust game (Berg, Dickhaut, and McCabe, 1995).

We also examine the degree of confidence of individuals in the finance industry for various institutions and groups. We find a steady erosion in confidence across most of these institutions over the past four decades, though the loss in confidence is, in most cases, similar to the loss of confidence experienced by the average American. However, we find a significantly sharper loss in confidence in counterparties that are likely to be particularly relevant to the finance industry, specifically major companies, the executive branch of the Federal government, and Congress.

We examine three non-mutually exclusive explanations for the relative decline in generalized trust – changes in general economic conditions, selection, and socialization. The economic conditions hypothesis argues that disparities in economic conditions have differential effects on finance professionals. The selection hypothesis argues that the type of individuals entering the finance industry has changed over time and that the change in workforce composition affects individuals' levels of trust. The socialization hypothesis argues that changes in the style of working in the finance industry over time have led to fewer opportunities for human interactions which, in turn, made the formation of generalized trust more difficult.

For a factor to constitute an explanation for the relative decline of trust among finance professionals it needs (i) to be correlated with generalized trust of workers in finance, (ii) to change in the relevant way over our sample period, and (iii) either be correlated significantly more with generalized trust of workers in the finance industry or the change of the factor over time needs to be significantly larger than in the rest of the U.S. population. We test these criteria in our analyses and document evidence that is consistent with each of the three hypotheses.

Consistent with the first hypothesis, proxies for economic conditions in the U.S. are disproportionately strongly correlated with trust among finance professionals than for the average American. In particular, income inequality in the U.S. as measured by the Gini index is strongly negatively related to trust, while economic growth reflected by the change in GDP is strongly positively related to trust for individuals working in the finance industry. The Gini index also exhibits a significant and positive time trend over our sample, suggesting that changes in economic conditions is a potential explanation for the decline in trust.

The literature argues that a more heterogenous professional environment is related to less trust by individuals. We show that a larger fraction of highly educated workers, a more ethnically diverse workforce, and a larger income inequality in the finance industry are correlated with lower

levels of trust, while a higher share of females in finance is related to higher levels of generalized trust. Moreover, the share of highly educated finance professionals has grown disproportionately, while the share of female workers has declined disproportionately relative to trends in the general U.S. population. Hence, the shift in the selection of individuals in the finance industry over time provides a second potential explanation for the erosion of trust.

Finally, we document that the generation of social capital through social activities has become rarer for finance professionals than the U.S. population. Individuals in finance work more hours and are less likely to participate in social groups than they used to. In particular, the propensity of workers in finance to be a member of a Putnam-type group, i.e., a group that is unlikely to act as a distributional coalition focused on rent-seeking, focusing instead on social interactions that allow individuals to build trust and cooperative habits, has declined disproportionately over our sample. These two trends, an absolute and relative increase in working hours and a concomitant decrease in social engagement, is again unobserved in any other industry apart from finance.

Our work contributes to the ongoing debate on ethics and misbehavior in the finance industry. Cohn et al. (2014) demonstrate that as soon as bankers' professional identities become engaged in a moral dilemma scenario, they become considerably more dishonest – a finding not replicated across other industries. Zingales (2015) argues that “[...] without proper rules, finance can easily degenerate into a rent-seeking activity” (p. 1327). Our study supports this view. Specifically, the evidence we provide suggests that trust, i.e., implicit contracts, among people has significantly declined, which can make proper explicit rules necessary.

One potential consequence of this decline in trust is the evolution of disruptive technologies, such as blockchains, to eliminate the need for trust in the finance industry. Blockchains achieve consensus among multiple agents about the history of events, such as financial transactions, through mutual agreement and are able to prevent fraud by imposing sufficiently high resource costs (Abadi and Brunnermeier, 2019).

Our study also has implications for the effectiveness of bailout programs that governments around the world tend to enact during crises, including the recent coronavirus bailouts. A lack of generalized trust across finance professionals can complicate government efforts to implement credit programs and other measures to combat crises. Participants in the financial system, like

banks, need to trust the actions taken by central banks or governments in order for them to react appropriately by extending credit to the rest of the economy. This is also relevant for the recent coronavirus bailouts as governments are typically providing aid with few mandatory requirements, which raises the need for implicit regulatory mechanisms like trust. If banks do not react to government stimulus by relaxing credit constraints appropriately, a lack of trust can have direct consequences on the real economy. A recent example is the response to the 2020 Paycheck Protection Program. Designed to get needed funds to struggling small businesses, who do not have to pay it back provided they keep employees on the payroll, the program became mired in controversy over perceptions that banks were favoring their largest customers.<sup>4</sup>

More generally, we contribute to research on long-term trends in the U.S. finance industry. Prior studies have, for example, investigated the causes for the enormous growth of the financial sector during the second half of the past century (Greenwood and Scharfstein, 2013), the development of the cost of financial intermediation (Philippon, 2015), and the trends in wages and education in the U.S. finance industry (e.g., Goldin and Katz, 2008; Philippon and Reshef, 2012). Our paper complements this research and is, to the best of our knowledge, the first study to explore the long-term trend in an important social factor, i.e., generalized trust, in finance.

## **2. Data and methodology**

### **2.1 Data**

We examine trust of individuals working in the finance industry and the general U.S. population using data from the GSS. The GSS is a nationally representative survey administered by the National Opinion Research Center at the University of Chicago that is designed to track attitudes, preferences, political views and social behavior in the American society. We use data from 25 cross-sectional waves spanning the 39-year period from 1978 to 2016. The survey contains about 1,500 respondents each year from 1978 through 1993 (except 1979, 1981, and 1992), and continues with around 2,800 respondents every second year from 1994 through 2016. Our study

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<sup>4</sup> See for example, Flitter, E. and E. Cochrane, 2020, “Many Banks Bungled Aid, So Congress Seeks Plan B”, *New York Times*, May 12 2020, page B1.



generally relies on a subset of the total sample due to the availability of demographic and other information about respondents and questions that were not asked in every survey wave.

Generalized trust is measured in the GSS by the question: “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” This question was asked in all but two survey waves (1982 and 1985) and is the most common measure used in the literature to assess individuals’ level of generalized trust (e.g., Knack and Keefer, 1997; Guiso, Sapienza, and Zingales, 2004, 2006, 2008; Bloom, Sadun, and Van Reenen, 2012; Lins, Servaes, and Tamayo, 2017). We construct our main dependent variable, *Most people can be trusted*, as an indicator that equals one for a person who responds to the question that “most people can be trusted” and zero for a person who responds that either it “depends” or that you “can’t be too careful”.<sup>5</sup>

The long duration of the GSS and the use of consistent language to measure attitudes and preferences make it ideally suited for analyzing long-term trends. A few changes to the survey over time, however, require researchers to make some adjustments (see Smith, 1990). Three changes are particularly relevant in our context: (1) an oversample of blacks in the 1982 and 1987 survey; (2) from 2006 onwards, surveys that could not have been completed by respondents in English were administered in Spanish; (3) until 1988, the order of questions preceding the trust question was not the same in all interviews. This last point is pertinent because Smith (1988) shows that responses to the trust question are sensitive to the immediately preceding battery of questions. In particular, respondents reported a lower level of trust when the question followed questions on crime compared to questions on life and job values. To create a consistent data set, we adjust the data as suggested by prior studies that use the GSS (e.g., Stevenson and Wolfers, 2008a, 2008b, 2009; Ifcher and Zarghamee, 2014). First, we drop black oversamples in the years 1982 and 1987. Second, we exclude all interviews from 2006 onwards that occurred in Spanish and could not have been completed in English. Third, we adapt the methodology described by Stevenson and Wolfers (2008b) to account for the varying question order in 1978, 1983, 1986, and 1988 using the split-ballot experiments of the GSS. Finally, to ensure representativeness of our data, we weight all

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<sup>5</sup> We drop from our analyses all individuals who responded that they “don’t know” or refused to answer the question.

estimates using the GSS weight variable WTSSALL. After these adjustments, the GSS is well suited to studying trends in generalized trust.

We use the 2010 Census industry classification to classify respondents as workers in the finance industry. Following Philippon and Reshef (2012) and Greenwood and Scharfstein (2013), we define the finance industry as a combination of the credit intermediation, securities, and insurance subsectors.<sup>6</sup> This classification yields a proportion of around five percent of respondents who work in the finance industry in a year. We verify this figure using data from the March supplement of the Current Population Survey (CPS) for the same period. The CPS data provide similar yearly proportions, and the average yearly difference between the two data sets is 0.032%.

## 2.2 Graphical representation of the trust trends

Figure 1 shows how generalized trust has trended over time for individuals in finance and the general U.S. population. We adjust the level of trust for the socioeconomic status as well as other subjective characteristics that have been shown to be associated with individuals' trust levels (e.g., Alesina and La Ferrara, 2002; Guiso, Sapienza, and Zingales, 2008). The figure graphs the residuals of generalized trust after accounting for a wide range of personal characteristics. The left panel plots the residuals from an OLS regression of *Most people can be trusted* on demographic and socioeconomic controls as well as region fixed effects (we describe all controls in more detail below). The right panel shows the differences in the residuals as bars and plots its linear time trend as a dashed line. As has been documented by both scholars and the press (e.g., Putnam, 2000; Twenge et al., 2014; and Lins, Servaes, and Tamayo, 2017), trust among all Americans has eroded over the past several decades. Importantly for our study, the graphs show that individuals who work in the finance industry were historically more likely to report higher levels of trust. This gap reverses over time as the trust levels of finance professionals has declined more than that of the general U.S. population over our sample. Since the beginning of the 1990s, residual trust, i.e., the

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<sup>6</sup> The corresponding industry codes are 6870-6990. The U.S. Census Bureau's Industry Classification System is based on the North American Industry Classification System and is used in several official government data sets in the U.S. The 2010 Census classification system is equivalent to the 2007 NAICS and is the latest available in the GSS.

part of trust that is not explained by demographic, socioeconomic or regional factors, of individuals in finance is below that of the general population in the majority of survey years.

### 2.3 Empirical methodology

To analyze the time trends in trust for workers in the finance industry and the U.S. population in a more formal fashion, we follow the methodology in Stevenson and Wolfers (2009). Formally, we estimate a regression of the form

$$(1) \quad Trust_{i,t} = \alpha + \beta_1 InFinance_i \times (Year_t - 1978)/100 \\ + \beta_2 NotInFinance_i \times (Year_t - 1978)/100 + \beta_3 InFinance_i + \Gamma Controls_i + \varepsilon_{i,t}$$

where  $i$  denotes an individual and  $t$  denotes the year in which that individual was surveyed by the GSS. The coefficients on the time trend variables report the change in trust per 100 years. Our dependent variables are measures of generalized trust based on the GSS trust question.

We account for two types of controls in our regressions, exogenous demographic characteristics and socioeconomic characteristics. Demographic characteristics include decadal age categories, indicators for gender and race (black, white, and other), and an indicator for whether a respondent was born in the U.S. These controls are exogenous in the sense that they are not affected by choices that people make and by individuals' trust itself. Socioeconomic characteristics include controls for education, employment status, income, marital status, a respondent's number of children, his religious denomination, and whether he lives in a rural area. Education is measured using indicators for a respondent's highest degree (less than high school, high school, associates/junior college, bachelor's, or graduate degree) and his employment status by indicators for full- and part-time employment, temporary illness/vacation/strike, unemployed, retirement, in school, keeping house, and other in our regressions. Because the GSS does not provide a consistent measure of income across survey years (Hout, 2004), we manually construct a consistent income measure for our sample as described in Stevenson and Wolfers (2008b). First, we convert a respondent's categorical family income in the previous year to a continuous measure by fitting interval regressions to the data on the assumption that income follows a log-normal distribution. We then translate income to 2005 dollars using the Consumer Price Index provided by the U.S. Bureau of Labor Statistics. Lastly, we use the OECD-modified equivalence scale to make

family incomes of different household types comparable by taking into account shared consumption benefits (Hagenaars et al., 1994).<sup>7</sup> We take the quartic of the logarithmic equivalized measure as our income controls to also allow for a non-linear association between income and trust. We control for marital status using indicators for whether a respondent is married, widowed, divorced, separated, or has never been married and for a respondent's religious denomination with indicators for Protestant, Catholic, Jewish, none, and other denominations. Finally, we construct an indicator for whether a respondent lives in a rural area, which equals one if he lives in a place with less than 2,500 inhabitants. We include region fixed effects in our regressions using information about the U.S. Census Bureau divisions in which interviews were conducted. All regressions are estimated with standard errors clustered at year level.

### 3. The trust trend of individuals in finance

#### 3.1. Baseline results

Table 1 embeds our baseline results from regressions estimating equation (1). In the first three columns, we report results with *Most people can be trusted* as the dependent variable. Columns (1) and (2) present estimates from OLS regressions with demographic controls and demographic and socioeconomic controls, respectively. Consistent with the observations from Figure 1, the coefficient on the *In Finance* dummy is positive and significant in both columns indicating that, historically, individuals who have been working in the finance industry report higher levels of trust. In addition, the coefficients on the trend variables show that generalized trust has declined significantly during our almost four-decade sample for both individuals in finance and the general population. We compare the decline in trust between the two groups in the fourth row of the table by estimating the difference between the *In Finance* and *Not In Finance* trends. This difference is significant on the 10% level when we control for demographics in column (1) and on the 1% level when we also add socioeconomic controls in column (2). The results hence

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<sup>7</sup> Household needs, e.g., housing space and electricity, do typically not grow proportionally with the number of household members due to economies of scale. The OECD-modified scale assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child. For details see <http://www.oecd.org/els/soc/OECD-Note-EquivalenceScales.pdf>.

suggest that generalized trust of individuals working in the finance industry has not only declined in absolute terms, but also relative to the U.S. population over our sample.

When evaluating the estimates reported in column (2), we find that individuals in finance begin the sample around seven percent more likely than others to report that most people can be trusted. Relative to the mean likelihood with which a person trusts others, this is a substantial variation of 18 percentage points and is hence likely to be economically important. From 1978 to 2016, the propensity of individuals who work in the finance industry to report that most people can be trusted fell relative to the U.S. population by  $(\beta_1 - \beta_2)\Delta t = (-0.864 - (-0.559)) \times (2016 - 1978)/100 \approx 12\%$ . This shift amounts to about one-fourth of the cross-sectional standard deviation of the *Most people can be trusted* indicator. Because the level of trust that is prevalent in a society is relatively persistent over short time periods (e.g., Knack and Keefer, 1997; Mackie, 2001), the cross-sectional standard deviation is typically much larger than the intertemporal variation, and so the same shift is 2.3 times the standard deviation of the annual population proportion that responded that most people can be trusted. By the year 2000, individuals in finance and the average person in the U.S. population were roughly equally likely to report that, conditional on their demographic and socioeconomic characteristics, they believed that most other people can be trusted. Respondents working in finance, however, end the sample in 2016 with a 5 percent lower likelihood of responding that most people can be trusted, relative to the average U.S. American.

The remainder of the table explores whether these results are robust to alternative specifications. In column (3), we run a probit rather than OLS regressions which does not alter our findings. In column (4), we change the dependent variable to *Can't be too careful*, which equals one for a person who responded that “you can't be too careful” when dealing with people and zero if he responded that either it “depends” or that “most people can be trusted”. This specification also allows us to analyze whether the decline in generalized trust reflects both changes in the propensity of people to report that most people can be trusted as well as changes in the propensity of people to report that you can't be too careful. We indeed also find a relative incline in the proportion of individuals in finance who are less trusting, although this shift is slightly lower. Finally, in column (5), we estimate an ordered probit with *Trust* as the dependent variable, which is coded as a count variable taking the values 1 (“*Can't be too careful*”), 2 (“*Depends*”), and 3

(“*Most people can be trusted*”). All these alternative specifications provide results that are qualitatively similar to the results in the first two columns (results in column (4) are inversely signed as this specification assess the propensity to trust less). This leads us to conclude that our results provide consistent evidence that generalized trust of individuals working in the finance industry has significantly declined over the past 39 years, and even more so than in the general U.S. population.<sup>8</sup>

To illustrate the economic magnitude of the relative decline in generalized trust of people in the finance industry, we compare it with other determinants of trust in a society. One of these determinants is the level of income inequality (e.g., Knack and Keefer, 1997; Zak and Knack, 2001; Uslander, 2002). Analyzing U.S. data, Alesina and La Ferrara (2002) find that an increase in the Gini coefficient by one percent in people’s local environment decreases their likelihood of reporting that most people can be trusted by 0.96 percent. The ratio between this estimate and the relative decline in trust for individuals in finance that we find suggests that their relative trust decline over the past 39 years is roughly comparable to a 13 percent increase in the Gini coefficient, for example, from its nation-wide value of 48 percent in 2016 to 61 percent (almost the level of South Africa). An alternative metric is the racial fragmentation in a person’s area of living. Prior studies suggest that – at least in the short term – a higher racial diversity in neighborhoods generally leads residents to trust others less (e.g., Putnam, 2007). Drawing again on results from Alesina and La Ferrara (2002), the relative decline in generalized trust of individuals in the finance industry is quantitatively equivalent to moving from the least to the most racially fragmented metropolitan area in the U.S. in the 1990s.

In a further set of unreported robustness checks, we analyze whether the relative decline in trust of individuals in the finance industry occurred throughout our sample or whether it is caused

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<sup>8</sup> Corroborating evidence for our finding comes from an additional test (not reported in tables), in which we assess how people's belief about the benevolence of others has trended over our sample. Respondents’ beliefs about the benevolence of others is assessed in the GSS using the question: “Would you say that most of the time people try to be helpful, or that they are mostly just looking out for themselves?” Like the question on generalized trust, this question was asked in all survey waves between 1978 and 2016, except for 1982 and 1985. We find that respondents working in the finance industry demonstrate a significantly sharper drop in their perceived benevolence of others than the U.S. population. This result makes sense as individuals who believe that you “can't be too careful” when dealing with people are also most likely to believe that people are “mostly looking out for themselves”.

by a shift in a particular subperiod. We test for this by breaking the sample at various points and estimate equation (1) separately in each subperiod. Absent significant shocks, trust is relatively persistent over short time periods and shifts occur only slowly. One reason is that the formation of generalized trust in a society is tied to historical developments often dating back hundreds of years as beliefs and values are transmitted fairly unchanged from one generation to the next one (see Guiso, Sapienza, and Zingales, 2006; Algan and Cahuc, 2010; Dohmen et al., 2012; Okada, 2020). We do therefore not expect to find a relative trust decline in all subperiods.

We split the sample into three 13-year periods, i.e., 1978-1990, 1991-2003, and 2004-2016, and alternatively into four periods with the first three being ten years and the fourth nine years long, i.e., 1978-1987, 1988-1997, 1998-2007, and 2008-2016. Examining the subperiod-to-subperiod change in trust, we find that the mean difference in residual trust between individuals in finance and the general U.S. population consistently decreases from one subperiod to the next. The sharpest decline occurred between the 1980s and 1990s, followed by the decline in the middle of the 2000s. Turning to within-subperiod shifts in trust, we find that the relative trust decline in the earliest subperiod, i.e., during the 1980s, is most pronounced. Besides this phase, the within-subperiod decline in generalized trust is mostly not significantly different for people in finance compared to the U.S. population. Hence, the results indicate that the disproportional erosion of trust among workers in finance was a rather gradual process over our sample and not caused by one particular subperiod.

Taken together, the results in this section suggest that individuals who work in the finance industry have become significantly less trusting over the past decades. Most notably, this decline is quantitatively substantial and significantly larger than the decline in trust in the general U.S. population, which has been frequently discussed by scholars and in the press.

### 3.2 Trust trend in other industries

Is the trend in generalized trust in the finance industry different from the trend in other industries? To answer this question, we investigate the trend in generalized trust of individuals working in two other industries for which scholars have argued that trust is fundamental: the

healthcare industry and the legal service industry.<sup>9</sup> Zingales notes that “the healthcare sector is a particularly good comparison for the financial [industry]” because both sectors provide services that most people need but only a few understand. Accordingly, he concludes that “both sectors depend heavily on trust” (Zingales, 2015, p. 1342). Gennaioli, Shleifer, and Vishny (2015) make a similar argument to illustrate the relationship between an investor and his financial adviser. The healthcare sector has also grown steeply relative to the overall economy in a similar manner as the finance industry and both sectors have experienced large amounts of abuse and fraud cases. Consequently, the imposition of new regulatory rules to both sectors is constantly on the agenda of policy makers while companies attempt to influence or prevent government interventions through massive levels of lobbying. Trust is also frequently cited as an essential element for the provision of legal services and as a prerequisite for effective legal representation (see, for example, Goldstein, 2005, and the literature therein). Courts, for instance, often describe the importance of trust in a lawyer-client relationship and stress its reciprocal nature which leads to implicit contracts between a legal advisor and his client. Hence, both industries can be viewed as valid comparisons for the finance industry with regards to the value of trust. Finally, we study the trend in generalized trust in technology firms using the definition of Loughran and Ritter (2004). Technology firms typically produce products and offer services that are difficult for the average consumer to understand but account for crucial parts of the lives of U.S. consumers.

Table 2 embeds the results from OLS regressions estimating equation (1) for the three industries. Results for the healthcare sector are reported in columns (1) and (2), results for the legal service industry in columns (3) and (4), and results for tech firms in the last two columns. Across all three industries, the generalized trust of individuals working in these industries has declined significantly over our sample (albeit only marginally for the tech industry). However, the difference in time trends is not significantly different from the decline in generalized trust experienced by the general U.S. population. In robustness tests (not shown), we also estimate probit regressions and use the alternative trust measures as dependent variables as in Table 1 with

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<sup>9</sup> Smith (1776) contends that one cause for the varying wages of labour in different occupations is the amount of trust that customers repose in workers in these occupations. He specifically argued that “[w]e trust our health to the physician, our fortune and sometimes our life and reputation to the lawyer and attorney” (p. 118), which, in his view, is one reason for their comparatively high salaries.



qualitatively similar results. Overall, there appears to be no evidence that the decline in generalized trust that we observe for the finance industry is shared by other industries that depend heavily on trust.

In unreported tests, we also investigate the time trend in generalized trust across *all* other industries in the sample. Regardless of the industry, there is no significant relative decline in trust for workers in any of these except finance. This result holds irrespective of whether we include individuals working in the finance industry in the control group or not. Taken together, our results suggest that the relative decline in generalized trust among workers in finance that we find is unparalleled by any other industry and hence unique to the finance industry. This finding raises the question why trust has decreased so substantially specifically in the finance industry.

### 3.3 Heterogeneity in the trust trend

To explore why trust has declined so much among finance professionals, we divide the generalized trust trend by hierarchy level, seniority, and industry subsectors. It is likely that the decline in trust is not equal for all workers in the industry. It is also plausible to expect differences in the trust trend across subsectors. We specifically compare the banking, insurance, and the investment subsectors. Not only is the latter often criticized in public for its allegedly low ethical standards, such as the trustworthiness of its employees, but the complexity of products offered by investment companies results in particularly high information asymmetries between customers and financial service providers which renders trust even more important (see, for example, Carlin, 2009, and Ghent, Torous, and Valkanov, 2019).

We begin our analysis by studying the trend in generalized trust for individuals in higher hierarchy levels of the finance industry, which we refer to as *upper echelons*. To classify respondents as belonging to the upper echelons, we use the latest International Standard Classification of Occupations (ISCO-08) provided in the GSS. The ISCO-08 divides jobs into ten major groups depending on the skill level required to perform the duties of these jobs. We classify a worker in the finance industry as member of the upper echelons if he belongs to one of the top three major groups, i.e., managers, professionals, or associate professionals. These jobs typically require workers to perform tasks that need an extensive body of knowledge, complex problem-solving, and decision making (International Labour Office, 2012). About 60 percent of individuals in the finance industry and 40 percent of the general population belong to these groups.

To formally test whether trust trended differently for individuals in the upper echelons, we rerun our OLS estimation of equation (1) accounting for demographic and socioeconomic controls, i.e., paralleling column (2) of Table 1, and adjust our sample in different ways. Panel A of Table 3 presents the results from these regressions. In the first column, we restrict respondents in the finance industry to only those who belong to the upper echelons of the industry. We thus compare the upper echelons in finance with the general U.S. population. The results show a positive and highly significant coefficient on the *Upper echelons in finance* dummy, suggesting that individuals who work in higher hierarchies in the finance industry are historically about 11 percent more likely to report that most other people can be trusted than the average U.S. American. Particularly important, the coefficients on the time trend variables indicate that this likelihood has decreased substantially during our almost four-decade sample. From 1978 to 2016, the propensity of individuals working in the upper echelons of the finance industry to report that most people can be trusted fell relative the U.S. population by 14 percent. Column (2) presents estimates from a regression in which we additionally restrict the respondents who do *not* work in the finance industry (i.e., the general population), to individuals in upper echelons. Though our study's focus is the discrepancy in the generalized trust trend between individuals in finance and the average American, as described in the introduction, it is still interesting to understand whether the relative decline in generalized trust is a phenomenon that is generally shared among individuals in higher hierarchies irrespective of their profession. The results in column (2) do not support this conjecture. The relative trust decline is significant at the 1% level and amounts to nearly 14 percent. Thus the propensity of individuals working in the upper echelons of the finance industry to report that most other people can be trusted has also declined substantially relative to people working in the upper echelons in other industries.

Since our demographic controls include decadal age categories, the relative loss of trust by the upper echelons in finance is not simply an age effect. Notwithstanding this control, it is still interesting to examine how generalized trust trends for individuals of different age groups. A decline in trust by seniors is perhaps likely to self-correct as these individuals retire and drop out of the industry. Hence, we examine the generalized trust trend using a cohort analysis. Specifically, we include in the sample only those finance professionals with ages either below (and equal to) or above the median age of all persons working in finance in a year. Table 3 Panel B reports the results in columns (1) and (2). The relative trust decline holds for both junior and senior cohorts

in finance. In columns (3) and (4), we additionally shrink the group of respondents who do not work in finance to those with an age that is either below (and equal to) or above the median age of people working in the finance industry in a year. Again, relative to their cohort peers, the relative decline of trust holds across both senior and junior cohorts.

Table 4 examines the trend in generalized trust separately by finance industry subsector, i.e., banking, investment, and insurance.<sup>10</sup> We include all respondents who work in the respective subsector in specifications with odd numbers and restrict the sample to only those in the upper echelons of a subsector in specifications with even numbers. Our results provide evidence for a decline in generalized trust relative to the U.S. population in all three subsectors. We do, however, observe some differences between subsectors with regard to the size of the decline. The estimates that rely on the full sample (columns with odd numbers) show that the largest relative decline occurred in the investment sector, followed by insurance and banking. In line with our findings from Table 3 Panel A, estimates in columns with even numbers show that the relative trust decline is generally stronger in higher hierarchy levels. The only exception is the banking sector where we do not observe a significant relative decline in trust for individuals in the upper echelons.

Hence, the results in this section indicate that the decline in generalized trust has not been equally strong for all workers in the finance industry over the past almost four decades. While both juniors and seniors in finance experienced an erosion of trust relative to the general population, the decline in trust was particularly strong in the investment sector and for workers in higher hierarchy levels, i.e., those who set the tone.

#### **4. Confidence in institutions and groups**

The fact that generalized trust of individuals working in the finance industry has deteriorated not only in absolute terms but also relative to the average American raises the question of whether workers in finance also experienced a disproportionately larger trust erosion in other domains. In this section, we examine responses to a number of survey questions that assess individuals' confidence in several institutions and groups. The question is available in all survey waves except in 1985: "As far as the people running [*institution or group*] are concerned, would you say you

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<sup>10</sup> The corresponding industry codes are 6870 and 6880 (banking), 6970 (investments), and 6990-6999 (insurance).

have a great deal of confidence, only some confidence, or hardly any confidence at all in them?”. We create an indicator that equals one if a respondent reports to have “a great deal” of confidence in a party, and zero otherwise. Our analysis covers the following institutions and groups: banks and financial institutions; major companies; the executive branch of the federal government; Congress; the U.S. Supreme Court; the military; the press; and the scientific community.

Table 5 reports how confidence in these institutions and groups trended over time for people in finance and the U.S. population. Each row shows the estimates of one regression of the form described in equation (1) using as the dependent variable the confidence indicator for the respective institution or group. All regressions include demographic and socioeconomic controls as well as region fixed effects.

We first report relative time trends in confidence in banks and financial institutions in Panel A. The negative and significant coefficient on the time trend variable for the general U.S. population indicates that the confidence that Americans have in banks and financial institutions has eroded steadily over our sample. The time trend for respondents in finance is also significantly negative. The difference between the two trends is, however, not significant. In other words, both groups experienced a similar growth in their distrust towards financial institutions over the past decades. Examining confidence levels, we find strong evidence for a difference in the level of confidence respondents have in banks and financial institutions. As one would expect, people working in the finance industry are significantly more likely to report that they have a great deal of confidence in their industry than the average American.

For the remainder of Table 5, we separate parties that are particularly relevant to the finance industry from others. Companies, the executive branch of the federal government, and Congress are plausibly relevant to finance for a number of reasons. First, companies make up a large proportion of customers of financial corporations and use various kinds of financial services. Second, the executive branch of the federal government includes regulatory authorities that are responsible for monitoring financial players, enforcing regulatory standards, and protecting consumers. Third, the U.S. Congress shapes the regulatory environment for financial intermediaries. We report the confidence time trends by group for these three parties in Panel B. Workers in finance begin the sample with significantly more confidence in companies, the executive branch of the government, and Congress. The trend estimates suggest that confidence in

major companies and Congress declined throughout our sample for the general U.S. population as well as individuals who work in finance. However, people in finance additionally show a significantly greater loss in confidence than the general U.S. populace. The estimates in the last column shows that loss in confidence in all three parties has been significantly more pronounced for people in finance compared to the average American. It thus seems likely, that the relative decline in generalized trust that we observe is linked to the relative decline in confidence vis-à-vis parties with whom individuals working in finance regularly interact.

Finally, Panel C shows that respondents' confidence in parties that are not particularly relevant to the finance industry trended equally for respondents who work in the finance industry and other Americans. Furthermore, the confidence levels do not show any evidence for a difference between workers in finance compared to the general population towards the U.S. Supreme Court, the military, and the press, and the scientific community.

To summarize, the results in this section allow us to draw some conclusions about how confidence in various parties trended for workers in finance relative to the U.S. population. While their degree of confidence vis-à-vis various institutions and groups eroded over the past 39 years, the loss in confidence is in many cases similar to that experienced by the average American. Importantly, parties for which we find a sharper loss in confidence are all deemed particularly relevant to the finance industry. It is, hence, likely that the decline in generalized trust that we find is related to a growing skepticism and vigilance towards people from institutions and groups with whom individuals who work in the finance industry regularly interact or whom they depend on.

## **5. Potential reasons for the relative trust decline**

What has led to the relative trust decline of people working in finance? In this section, we shed light on this question by examining different types of transitions in people's lives over our sample that may be associated with a steeper trust decline for workers in finance relative to the general U.S. population. Specifically, we investigate three non-mutually exclusive explanations – a change in economic conditions, selection, and socialization.

Before we motivate each of the three hypotheses separately, it is important to lay out the criteria a factor would need to fulfill in order to constitute an explanation, even a partial one, for the relative decline of trust among finance professionals. First, a proposed factor needs to correlate

with generalized trust of workers in finance. Second, it needs to change in the relevant way over our sample period. Third, it needs to be either correlated significantly more with trust of workers in the finance industry or the change over time needs to be significantly larger than in the rest of the U.S. population to explain the *relative* trust decline. We hence test for each of these criteria in our analyses.

The *economic conditions hypothesis* argues that trends in economic conditions in the U.S. affected generalized trust of workers in the finance industry significantly more than the rest of the U.S. population. The hypothesis is motivated by prior research suggesting that social capital wanes when more citizens are struggling economically and the gap between rich and poor widens (e.g., Uslaner; 2002; Pickett and Wilkinson, 2010). In light of this literature, one might expect that the rise in income inequality over the past decades has affected workers in finance differently due to the steep increase in wages in that industry, which has accounted for up to a fourth of the overall increase in wage inequality in the U.S. since 1980 (Philippon and Reshef, 2012). Therefore, we examine the relation between different measures of economic conditions in the U.S. and the level of generalized trust.

The *selection hypothesis* argues that the type of individuals entering the finance industry has changed over time and that the changing workforce composition, in turn, has affected the level of generalized trust of workers in the industry. Importantly, as we control for a wide-range of individual-level characteristics in our regressions in Section 3, e.g., gender, ethnicity, education, and income, the selection hypothesis does not maintain that changes in workers' own characteristics influenced their level of trust. Instead, the hypothesis argues that an individual's level of generalized trust eroded, conditional on his or her characteristics, due to changes in the type of colleagues he or she worked with. The hypothesis is motivated by several studies showing lower levels of trust and social capital in more heterogenous environments (e.g., Alesina and La Ferrara, 2000; Putnam, 2007). Prior research provides evidence for a shift in the professional environment along several dimension in the finance industry. The proportion of individuals with professional graduate degrees in finance, for example, strikingly increased over the last decades of the 20<sup>th</sup> century (Goldin and Katz, 2008). Philippon and Reshef (2012) show a tight link between deregulation and the flow of human capital in and out of the finance industry. High-skilled employees began to enter the finance industry in the 1980s and 1990s when more and more

regulations were removed. Finally, income levels have increased dramatically over time within the finance industry leading to a large growth in the finance wage premium (Philippon and Reshef, 2012; Bell and Van Reenen, 2013; Célérier and Vallée, 2019).

Lastly, the *socialization hypothesis* argues that changes in the style of working in the finance industry over time have led to fewer opportunities for human interactions, especially outside the job. The hypothesis is motivated by an established literature (Putnam, 2000), which suggests that social interactions are particularly conducive for generating social capital and generalized trust. Thus, if workers in the finance industry have had relatively less opportunities to engage socially, for example due to increasingly higher workloads, their level of generalized trust may consequently have eroded relatively more.

### 5.1 Changing economic conditions

We obtain three annual measures to investigate the association of generalized trust with changing economic conditions over our sample: (1) the Gini coefficient of income inequality, (2) the change in gross domestic product, and (3) the poverty rate. Results from OLS regressions with each of the measures interacted with an *In Finance* and a *Not in Finance* indicator are reported in Table 6. Consistent with Twenge et al. (2014), we find a negative relation between income inequality and generalized trust. The difference between the regression coefficients for individuals in finance and the U.S. population is significant at the 1% level, indicating that generalized trust of finance professionals declines even more as income inequality rises. Similarly, while economic growth promotes trust among both groups, which is consistent with Zak and Knack (2001), finance professionals appear to be more sensitive to GDP changes than the average U.S. American. As expected, results in the last column indicate that the poverty rate in the U.S. relates negatively to trust. The association with generalized trust is, however, not significantly different for finance professionals compared to the general population. In all, the results in Table 6 suggest that rising income inequality and higher economic growth are correlated with disproportionately larger shifts in generalized trust of individuals working in the finance industry.

When we study the time trends in both measures in unreported tests, we find that only income inequality exhibits a significant linear and positive trend over our sample. Specifically, the Gini coefficient of income inequality increased on average by 0.27 percent per year from its starting point of 36.3 percent in 1978. Therefore, only the sharp rise in income inequality in the U.S., which

is to a large part driven by the finance industry itself, represents a potential driver for the relative erosion of generalized trust among finance professionals.

## 5.2 Selection into the finance industry

Next, we explore whether changes in workforce composition in the finance industry explains the observed trends in generalized trust. Panel A of Table 7 reports coefficients from regressions estimating the relation between trust and four dependent variables for finance professionals and, for comparison, also for the rest of the U.S. population. The first variable, *Highly educated fraction*, is the fraction of individuals with greater than high school educations in a year in the finance industry and the rest of the population, respectively. Similarly, *Non-white fraction* is the fraction of non-white people and *Female fraction* is the fraction of females. The fourth variable, *Income dispersion*, is measured as the Gini index of equalized family income as described in Section 2.3. Results in the first row of specifications (1) and (2) suggest the fractions of better educated as well as non-white people working in the finance industry relate negatively to levels of generalized trust. However, a higher fraction of females correlates with more generalized trust, as indicated by specification (3). Finally, specification (4) indicates that larger income inequality within the finance industry is associated with less trust of finance professionals.

In Panel B of Table 7, we examine the time trends in each of the four variables defined above. Although we find linear time trends for each one of them, only two variables experience a significantly different time trend in the finance industry when compared to the general U.S. population. First, consistent with the literature (e.g., Philippon and Reshef, 2012), the results in specification (1) suggest that finance has become a high-skill industry over the past decades. Over our sample period, the growth in the fraction of highly educated workers was significantly steeper in finance than among the rest of the population. Second, as shown in specification (3), the fraction of females declined in finance, while it slightly increased in the general population. The fraction of non-white people and income dispersion do not exhibit different time trends.

Overall, we conclude that the flow of highly educated human capital into the finance industry and the decline in the share of women over the past almost four decades provide two potential explanations for the absolute as well as relative erosion of generalized trust among finance professionals. In contrast, rising income inequality and growing ethnic heterogeneity are unlikely to serve as explanations for the observed trust trend in the finance industry.



### 5.3 Socialization of individuals in finance

Finally, we analyze shifts in people's opportunities to generate social capital and generalized trust. Specifically, we investigate whether working hours have increased disproportionately in the finance industry leaving workers with less chances to engage in social activities compared to other Americans. In addition, we explore whether the propensity of workers in finance to participate in social groups has decreased over time. Our interest in people's opportunities to associate with others is motivated by Putnam (1993, 1995, 2000), who argues that social interactions, particularly interactions as a member of a social group, are conducive to generating social capital. Putnam maintains that participating in a social group, for example, a bowling club, enhances the transmission of knowledge and facilitates the development of trust in a society. Accordingly, Alesina and La Ferrara (2000) study group memberships in the U.S. and find that participation in social activities is significantly less likely in more unequal and more racially fragmented localities, in which residents are also known to be less trusting.

Table 8 reports findings from regressions estimating equation (1) with three dependent variables, *Workings hours*, *Group membership*, and *P-Group membership*. The variable *Working hours* measures the number of hours individuals worked in the past week and is constructed by clustering responses into bins of 20 hours. Following Alesina and La Ferrara (2000), we construct *Group membership* as an indicator that takes the value one for a respondent who belongs to at least one social group, and zero otherwise.<sup>11</sup> Because questions on memberships were only asked in 1978 through 1994 (except 1982 and 1985) and in 2004, regressions with *Group membership* as the dependent variable rely on a smaller sample. The population proportion that is part of a social group varies between 72.7 percent in 1983 and 62.1 percent in 2004 and steadily decreases over time. Additionally, we explore the trends in social activeness by differentiating between types of groups following Knack and Keefer (1997). In particular, we classify groups as "Putnam-type" groups (denoted P-groups) if they are least likely to act as distributional coalitions focused on rent-seeking, but rather focus on social interactions that allow individuals to build trust and cooperative

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<sup>11</sup> Social groups include, among others, fraternities and sororities, service groups, veteran groups, political clubs, labor unions, sports clubs, youth groups, school service groups, hobby clubs, nationality groups, farm organizations, literary or art groups, professional societies, and church groups.

habits. We define *P-Group membership* as an indicator that equals one for respondents belonging to either a sports or hobby club, a (school) service club, youth groups, literary, art, discussion or study groups, or a church-affiliated group.

The significant coefficients on both *Working hours* trend variables in specification (1) indicate that working hours have increased over time for both workers in finance and the general U.S. population. The difference between the time trends is significant at the 10% level suggesting that the increase in working hours was slightly larger in the finance industry. Turning to group memberships, specifications (2) and (3) suggest that the likelihood to participate in a social group or P-group has generally declined and even more so among individuals working in finance. The coefficient difference is significant at the 10% and 1% level, respectively. Interestingly, the time trends in P-group memberships, i.e., those groups that are most likely to focus on the association with one another, deviate most strongly from each other. The likelihood of workers in finance to be a member of a P-group declined six percent more over a ten-year period than the likelihood of the average American. Taken together, the results provide evidence that the formation of social capital and consequently the development of generalized trust through social activities has become rarer for workers in finance than the general U.S. population.

In unreported analyses, we test whether workers in any other industries also experienced a significantly positive trend in working hours (in absolute terms as well as relative to the average American) and simultaneously a negative trend in their likelihood of participating in social groups. Our results do not provide evidence for this pattern in *any* other industry except the finance industry. The higher number of hours worked by individuals in the finance industry paired with their lower propensity to engage socially is unique to the finance industry and a potential reason for its disproportionate decline in generalized trust.

## **6. Conclusion**

This study provides novel empirical evidence on the evolution of generalized trust prevailing in the U.S. finance industry. Across all industries in the U.S., we document that the level of generalized trust among finance professionals has uniquely declined, significantly more so than the decline of trust in the general U.S. population. This decline holds in different age cohorts and among different levels of seniority and is related to a lack of trust only in institutions that are related to the finance industry. The relative decline of trust appears at least partly related to changes

in economic conditions in the U.S., the professional environment in the finance industry, and to the level of socialization among finance industry professionals.

We note that there are additional non-mutually exclusive causes that might also explain the relative decline of trust in the finance industry that we cannot test for lack of data. For example, organizational forms in finance have changed considerably over the past few decades with partnerships being replaced by large publicly traded institutions. In a partnership, individual trust and reputation are relatively closely bound to the success of the partnership. In large publicly traded institutions, in contrast, individual reputation is likely to be less closely linked to firm reputation. Trust declines because reputation may no longer serve as a signal of quality. Similarly, as financial complexity increases, finance professionals may experience a form of imposter syndrome (Clance and Imes, 1978). Clance and Imes define the impostor syndrome as an individual experience of self-perceived intellectual phoniness. The imposter syndrome has been shown to be related to generalized anxiety and it is plausible that it leads to declines in trust levels.

This is one of the first papers that seeks to develop our understanding of the social mechanisms that motivate professionals who work in the finance industry. Our results have potential implications for the use of disruptive technologies eliminating the need for trust in the finance industry as well as for the effectiveness of governmental financial aid and regulations, particularly during economic crises.

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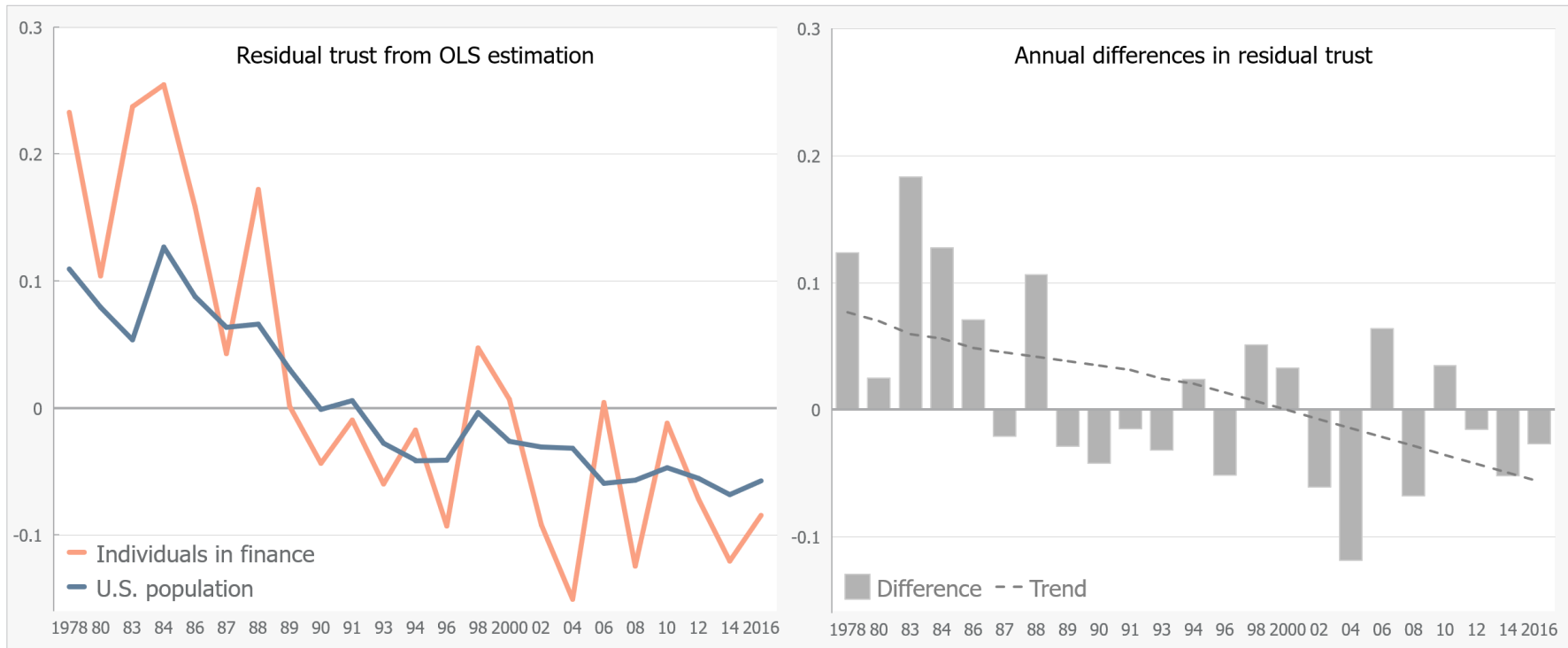
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**Figure 1: Residual trust in the United States, 1978-2016**

This figure illustrates how residuals of trust have trended over time for individuals in finance and the general U.S. population after accounting for a wide range of personal characteristics. The left panel plots the residuals from an OLS regression of *Most people can be trusted* on demographic and socioeconomic controls as well as region fixed effects for both groups (all variables are described in the text). The right panel shows the differences in the residuals as bars and plots its linear time trend as a dashed line.





**Table 1: Generalized trust trends for individuals in finance and the U.S. population, 1978-2016**

This table reports coefficients from regressions of the form described in equation (1) with different measures of generalized trust based on the GSS question “Generally speaking, would you say that most people can be trusted or that you can’t be too careful in dealing with people?” The coefficients on the time trend variables report the change in trust per 100 years. *Most people can be trusted* (specifications 1 to 3) is an indicator that equals one for a person who responds that “most people can be trusted” and zero for a person who responds that either it “depends” or that you “can’t be too careful”. *Can’t be too careful* (specification 4) equals one for a person who responds that “you can’t be too careful” when dealing with people and zero if he responds that either it “depends” or that “most people can be trusted”. *Trust* (specification 5) is coded as a count variable taking the values 1 (“Can’t be too careful”), 2 (“Depends”), and 3 (“Most people can be trusted”). Exogenous demographic controls include indicators for decadal age categories, gender and race (black, white, and other), and an indicator for whether a respondent was born in the U.S. Socioeconomic characteristics include controls for education, employment status, income, marital status, a respondent’s number of children, his religious denomination, and whether he lives in a rural area. Income is a quartic in log real family income per equivalent = 1 + 0.5 (other adults) + 0.3 kids. All specifications include region fixed effects using the U.S. region in which an interview was conducted. Robust t and z-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

<i>Generally speaking, would you say that most people can be trusted or that you can't be too careful with people?</i>					
[3] Most people can be trusted; [2] Depends; [1] Can't be too careful					
<i>Dependent variables</i>	<i>Most people can be trusted</i>			<i>Can't be too careful</i>	<i>Trust</i>
	OLS (1)	OLS (2)	Probit (3)	OLS (4)	Ordered Probit (5)
<b>In Finance time trend</b>	<b>-0.575***</b> (-5.48)	<b>-0.864***</b> (-7.08)	<b>-2.417***</b> (-7.09)	<b>0.822***</b> (5.68)	<b>-2.349***</b> (-6.22)
Not in Finance time trend	-0.411*** (-9.20)	-0.559*** (-12.14)	-1.624*** (-12.64)	0.540*** (12.68)	-1.560*** (-13.36)
In Finance dummy	0.096*** (4.74)	0.074*** (3.16)	0.195*** (2.95)	-0.076*** (-3.22)	0.200*** (2.96)
<b>Difference in time trends</b>	<b>-0.164*</b>	<b>-0.306***</b>	<b>-0.793***</b>	<b>0.283**</b>	<b>-0.789**</b>
<b>p-value of difference</b>	<b>0.0877</b>	<b>0.00289</b>	<b>0.00617</b>	<b>0.0197</b>	<b>0.0133</b>
Exogenous demographic controls	Yes	Yes	Yes	Yes	Yes
Socioeconomic controls	No	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes	Yes
Observations	30,959	27,892	27,892	27,892	27,892
Pseudo / Adj. R-squared	0.0671	0.127	0.104	0.132	0.0887

**Table 2: Generalized trust trends in other industries and tech firms**

This table reports coefficients from regressions estimating equation (1) with *Most people can be trusted* as dependent variable. Specifications 1 and 2 report results for the healthcare industry, specifications 3 and 4 for the legal service industry, and specifications 5 and 6 for all tech firms following the definition in Loughran and Ritter (2004). Columns with odd numbers present estimates with demographic controls, while columns with even number additionally include socioeconomic controls. Control variables are described in Section 2.3. All specifications include region fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dependent variable</i>	<i>Most people can be trusted</i>					
	<b>Healthcare</b>		<b>Legal</b>		<b>Tech firms</b>	
	OLS (1)	OLS (2)	OLS (3)	OLS (4)	OLS (5)	OLS (6)
<b>In Industry time trend</b>	<b>-0.509***</b> (-5.19)	<b>-0.613***</b> (-5.88)	<b>-0.429*</b> (-1.97)	<b>-0.802**</b> (-2.72)	<b>-0.032</b> (-0.18)	<b>-0.345*</b> (-1.87)
<b>Not in Industry time trend</b>	-0.409*** (-9.66)	-0.569 (-12.47)	-0.421*** (-9.42)	-0.572*** (-11.89)	-0.431*** (-10.11)	-0.580*** (-12.63)
<b>Industry dummy</b>	0.024 (1.13)	-0.005 (-0.21)	0.145*** (2.83)	0.062 (1.09)	0.005 (0.14)	0.019 (0.53)
<b>Difference in time trends</b>	<b>-0.0996</b>	<b>-0.0442</b>	<b>-0.00880</b>	<b>-0.229</b>	<b>0.399***</b>	<b>0.234</b>
<b>p-value of difference</b>	<b>0.200</b>	<b>0.592</b>	<b>0.967</b>	<b>0.437</b>	<b>0.00994</b>	<b>0.143</b>
Exogenous demographic controls	Yes	Yes	Yes	Yes	Yes	Yes
Socioeconomic controls	No	Yes	No	Yes	No	Yes
Region FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	30,959	27,892	30,959	27,892	30,959	27,892
Adj. R-squared	0.0662	0.127	0.0670	0.127	0.0673	0.128

**Table 3: Heterogeneity in the trust trend**

This table reports results exploiting variation in the generalized trust trend by breaking it apart by hierarchy level and age. All specifications report coefficients from regressions of *Most people can be trusted* on time trend variables of trust along with demographic and socioeconomic controls (see equation 1). Panel A shows how trust trended in the upper echelons, i.e., for those people who set the tone. Specification 1 compares individuals working in the upper echelons in the finance industry with the general U.S. population, while specification 2 compares people in upper echelons in finance with people in upper echelons in all other industries. Panel B investigates how generalized trust trended for individuals of different ages. Specification 1 shows the trend in generalized trust for juniors in the finance industry compared to the general U.S. population. Juniors are defined as respondents whose age is equal or below the median age of all respondents working in finance in a year. Analogously, seniors in finance have an above-median age. Their trend in comparison to the U.S. population is reported in specification 2. The last two specifications compare juniors and seniors in finance with their corresponding age groups in the U.S. population. Control variables are described in Section 2.3. All specifications include region fixed effects. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

**Panel A: Heterogeneity in the trust trend by hierarchy level**

<i>Dependent variable</i>	<i>Most people can be trusted</i>	
	OLS (1)	OLS (2)
<b>Upper echelons in Finance time trend</b>	<b>-0.929***</b> (-9.73)	<b>-0.917***</b> (-9.88)
Not in Finance time trend	-0.558*** (-12.26)	
Upper echelons Not in Finance time trend		-0.552*** (-8.11)
Upper echelons in Finance dummy	0.111*** (5.33)	0.081*** (4.11)
<b>Difference in time trends</b>	<b>-0.371***</b>	<b>-0.365***</b>
<b>p-value of difference</b>	<b>1.90e-05</b>	<b>4.72e-05</b>
Exogenous demographic controls	Yes	Yes
Socioeconomic controls	Yes	Yes
Region FE	Yes	Yes
Observations	27,378	11,973
Adj. R-squared	0.127	0.101

**Panel B: Heterogeneity in the trust trend by seniority**

<i>Dependent variable</i>	<i>Most people can be trusted</i>			
	<i>Juniors in Finance &amp; general U.S. population</i>	<i>Seniors in Finance &amp; general U.S. population</i>	<i>Juniors in Finance &amp; Juniors not in Finance</i>	<i>Seniors in Finance &amp; Seniors not in Finance</i>
	<i>Age of respondents in finance &lt;= Median age in finance</i>	<i>Age of respondents in finance &gt; Median age in finance</i>	<i>Age of respondents &lt;= Median age in Finance</i>	<i>Age of respondents &gt; Median age in Finance</i>
	OLS (1)	OLS (2)	OLS (3)	OLS (4)
<b>In Finance time trend</b>	<b>-0.858*** (-6.38)</b>	<b>-0.866*** (-4.96)</b>	<b>-0.831*** (-6.02)</b>	<b>-0.808*** (-4.70)</b>
Not in Finance time trend	-0.555*** (-12.17)	-0.559*** (-12.29)	-0.580*** (-8.57)	-0.486*** (-9.63)
In Finance dummy	0.060* (1.95)	0.091** (2.32)	0.065* (2.07)	0.080* (1.87)
<b>Difference in time trends</b>	<b>-0.303**</b>	<b>-0.307**</b>	<b>-0.251*</b>	<b>-0.322**</b>
<b>p-value of difference</b>	<b>0.0264</b>	<b>0.0343</b>	<b>0.0687</b>	<b>0.0441</b>
Ex. demographic controls	Yes	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Observations	27,261	27,209	12,812	15,080
Adj. R-squared	0.126	0.128	0.103	0.126



**Table 5: Confidence in institutions and groups**

This table reports how confidence in various institutions and groups trended over time for people in finance and the U.S. population. Each row shows the result of one OLS regression of the form described in equation (1) and examines the trend in a different party. Individuals' confidence is measured by the question "As far as the people running these institutions are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?" An indicator is used in each regression that equals one for individuals who respond that they have "a great deal" of confidence and zero if they respond that they have "only some" or "hardly any" confidence. Panel A reports estimates for banks and financial institutions, Panel B for parties that are especially relevant to the finance industry, and Panel C for various other parties. The first two columns show the coefficients on the trend variables *In Finance* × Time and *Not in Finance* × Time and the third column reports the difference in these estimates and its p-value. All regressions include demographic and socioeconomic controls as well as region fixed effects. Control variables are described in Section 2.3. Sample sizes vary by data availability. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

	Estimated time trends in confidence per party		
	In Finance	Not in Finance	Difference
<b>Panel A: Financial institutions</b>			
Banks and financial institutions	-0.337* (-2.04)	-0.331*** (-3.87)	<b>-0.00631</b> <b>0.962</b>
<b>Panel B: Parties especially relevant to the finance industry</b>			
Major companies	-0.596*** (-6.47)	-0.356*** (-6.46)	<b>-0.240***</b> <b>0.00378</b>
Executive branch of the federal government	-0.293** (-2.35)	-0.101 (-1.49)	<b>-0.193***</b> <b>0.00755</b>
Congress	-0.277*** (-3.88)	-0.169*** (-3.26)	<b>-0.108**</b> <b>0.0222</b>
<b>Panel C: Parties not especially relevant to the finance industry</b>			
U.S. Supreme Court	-0.260 (-1.39)	-0.159* (-1.93)	<b>-0.101</b> <b>0.445</b>
Military	0.963*** (8.05)	0.853*** (13.21)	<b>0.110</b> <b>0.420</b>
Press	-0.343*** (-6.10)	-0.370*** (-8.46)	<b>0.0275</b> <b>0.633</b>
Scientific Community	-0.391** (-2.59)	-0.173*** (-4.41)	<b>-0.217</b> <b>0.148</b>

**Table 6: Changes in economic conditions and the relative trust decline**

This table reports results of analyses that explore whether different changes in economic conditions in the U.S. over our sample constitute potential causes for the relative decline in generalized trust experienced by individuals working in the finance industry. The table present coefficients from OLS regressions that investigate correlations of three measures of the economic condition in the U.S. with generalized trust for people working in finance and the general population. These measures are the Gini coefficient of income inequality (specification 1), the annual change in gross domestic product (specification 2), and the poverty rate (specification 3). All specifications include demographic and socioeconomic controls as well as region and year fixed effects. Control variables are described in Section 2.3. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

<i>Dependent variable</i>	<i>Most people can be trusted</i>		
	Gini index	GDP change	Poverty rate
	OLS (1)	OLS (2)	OLS (3)
<b>Economic condition measure × In Finance</b>	<b>-0.031*** (-8.57)</b>	<b>0.073*** (12.19)</b>	<b>-0.163*** (-13.45)</b>
Economic condition measure × Not in Finance	-0.020*** (-33.68)	0.051*** (35.72)	-0.156*** (-35.75)
In Finance dummy	0.489*** (3.01)	-0.052** (-2.33)	0.104 (0.61)
<b>Difference p-value of difference</b>	<b>-0.0111*** 0.00358</b>	<b>0.0218*** 0.000470</b>	<b>-0.00648 0.614</b>
Exogenous demographic controls	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes
Region & Year FE	Yes	Yes	Yes
Observations	27,892	27,892	27,892
Adj. R-squared	0.131	0.131	0.130

**Table 7: Changes in the professional environment in finance and the relative trust decline**

This table reports results of analyses that investigate whether changes in the composition of the workforce in the finance industry over our sample constitute a potential cause for the relative decline in generalized trust experienced by individuals working in the finance industry. Panel A presents coefficients from OLS regressions that explore the correlation of generalized trust with different indicators of the professional environment in the finance industry as well as the U.S. population. The independent variable of interest in specification (1) is *Highly educated fraction*, which is defined as the fraction of individuals with more than high school education in a year in the finance industry and the rest of the U.S. population, respectively. Similarly, *Non-white fraction* in specification (2) is the fraction of non-white people and *Female fraction* in specification (3) is the fraction of female individuals. In specification (4), we use *Income dispersion* as a measure for income inequality, which is measured as the Gini index of equivalized family income as described in Section 2.3. All specifications include demographic and socioeconomic controls as well as region fixed effects. Control variables are described in Section 2.3. Panel B shows results from OLS regressions that explore the unconditional time trends on individual level of four measures that are defined in accordance with the variables used in Panel A. *Highly educated* is an indicator that equals one for a respondent who has more than high school education, *Female* equals one for a female person, and *Non-white* equals one for a non-white person. *Income dispersion* is the Gini index of equivalized family income. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

**Panel A: Relation of trust with the professional environment in finance**

<i>Dependent variable</i>	<i>Most people can be trusted</i>			
	<b>Highly educated fraction</b>	<b>Non-white fraction</b>	<b>Female fraction</b>	<b>Income dispersion</b>
	OLS (1)	OLS (2)	OLS (3)	OLS (4)
<b>Professional environment in Finance × In Finance</b>	<b>-0.899*** (-8.11)</b>	<b>-1.245*** (-6.40)</b>	<b>0.802** (2.21)</b>	<b>-1.973*** (-5.26)</b>
Environment outside Finance × Not in Finance	-0.990*** (-16.99)	-1.274*** (-11.02)	-0.597 (-0.35)	-1.760*** (-8.62)
In Finance dummy	0.087* (1.91)	-0.008 (-0.24)	-0.839 (-0.93)	0.018 (0.14)
<b>Difference</b>	<b>0.0914</b>	<b>0.0287</b>	<b>1.400</b>	<b>-0.213</b>
<b>p-value of difference</b>	<b>0.401</b>	<b>0.888</b>	<b>0.414</b>	<b>0.534</b>
Ex. demographic controls	Yes	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes	Yes
Region FE	Yes	Yes	Yes	Yes
Observations	27,892	27,892	27,892	27,892
Adj. R-squared	0.129	0.125	0.113	0.123



**Panel B: Time trends in the professional environment in finance and the U.S. society**

<i>Dependent variables</i>	<i>Highly educated</i>	<i>Non-white</i>	<i>Female</i>	<i>Income dispersion</i>
	OLS (1)	OLS (2)	OLS (3)	OLS (4)
<b>In Finance time trend</b>	<b>0.823***</b> <b>(6.53)</b>	<b>0.534***</b> <b>(5.88)</b>	<b>-0.218**</b> <b>(-2.35)</b>	<b>0.259***</b> <b>(4.63)</b>
Not in Finance time trend	0.582*** (15.14)	0.398*** (20.02)	0.035** (2.22)	0.231*** (8.86)
In Finance dummy	0.061** (2.45)	-0.044** (-2.57)	0.202*** (10.46)	-0.050*** (-4.83)
<b>Difference in time trends</b>	<b>0.241*</b>	<b>0.135</b>	<b>-0.253**</b>	<b>0.0279</b>
<b>p-value of difference</b>	<b>0.0542</b>	<b>0.150</b>	<b>0.0115</b>	<b>0.606</b>
Controls / Fixed effects	No	No	No	No
Observations	49,162	49,251	49,251	49,251
Adj. R-squared	0.0219	0.0128	0.00429	0.801

**Table 8: Changes in socialization habits in finance and the relative trust decline**

This table reports results of analyses that explore whether changes in the style of working in the finance industry over time have led to fewer opportunities for human interactions. The table shows results from regressions that explore time trends in people's opportunities to associate with one another and build up generalized trust. Specification (1) presents estimates from an ordered probit regression investigating how working hours have changed over time for workers in the finance industry and the average U.S. American. The dependent variable, *Working hours*, measures the number of hours individuals worked in the past week in bins of 20 hours. Specifications 2 and 3 show results from OLS regressions which analyze how the propensity of individuals to participate in social groups has shifted over time. *Group membership* (specification 2) is a dummy that indicates whether a respondent belongs to any social group, while *P-Group membership* (specification 3) only considers groups least likely to act as distributional coalitions. All specifications include demographic and socioeconomic controls as well as region fixed effects. Control variables are described in Section 2.3. Robust t-statistics (in parentheses) are based on standard errors clustered by year. \*\*\*, \*\*, \* denote statistical significance at the 1%, 5% and 10% level, respectively.

**Trend in socialization: Working hours and group memberships**

<i>Dependent variables</i>	<i>Working hours</i>	<i>Group membership</i>	<i>P-Group membership</i>
	Ordered probit (1)	OLS (2)	OLS (3)
<b>In Finance time trend</b>	<b>0.854***</b> <b>(3.09)</b>	<b>-0.696***</b> <b>(-4.70)</b>	<b>-0.934***</b> <b>(-5.73)</b>
Not in Finance time trend	0.318*** (3.55)	-0.514*** (-4.23)	-0.300** (-2.50)
In Finance dummy	-0.195** (-2.45)	-0.050** (-2.69)	0.055* (1.80)
<b>Difference in time trends</b>	<b>0.536*</b>	<b>-0.183*</b>	<b>-0.634***</b>
<b>p-value of difference</b>	<b>0.0564</b>	<b>0.0782</b>	<b>0.00116</b>
Exogenous demographic controls	Yes	Yes	Yes
Socioeconomic controls	Yes	Yes	Yes
Region FE	Yes	Yes	Yes
Observations	27,928	13,589	13,589
Adj. / Pseudo R-squared	0.228	0.112	0.0927

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2020

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