Societal Trust Dynamics: Impact on Stock Market Responses to Corporate Earnings Announcements in Emerging Markets

Dr. Bushra Zulfiqar University Institute of Management Sciences, PMAS Arid Agriculture University, Rawalpindi bushra.zulfiqar@uaar.edu.pk

&

Aarooj Kiran University Institute of Management Sciences, PMAS Arid Agriculture University, Rawalpindi Aaroojkiran22@uaar.edu.pk

Abstract

Investors' responses have garnered significant interest in recent years, especially in emerging economies where shifting preferences are prevalent. Investors constantly seek valuable information to make more secure investments. As therefore, while making investment choices, investors question the reliability of the information provided by companies through corporate disclosure. This study examines the impact of societal trust, as a cultural factor and behavioral trigger, on investors' perception and utilization of information provided by corporations. As therefore, while making investment choices, investors doubt the accuracy of the information disclosed by corporate organizations. The paper utilizes event study methods to examine the average anomalous returns during the earnings announcement period in a substantial number of observations across three emerging countries: China, India, and Pakistan. The findings demonstrate a clear and meaningful correlation among trust of society trust and responses of the investor to business earnings statements. This supports the idea that societal trust plays a crucial role in shaping investors' behavior in these markets. Furthermore, the level of trust throughout society positively influences the way investors respond to company earnings statements in the emerging economies of China, Pakistan, and India.

Keywords: Corporate Earnings Announcements, Societal Trust, Culture, Investor Reaction.

Introduction

Today's investors are primarily focused on acquiring pertinent information about a company to mitigate investment risks. This emphasis on information exchange fosters effective communication between investors and corporate managers. This fact suggests that in the process of making investment decisions investors have little confidence and certainty in the information given by the firm (Ahmad & Sharif, 2023). Hence, in the field of finance, there has been considerable debate and dialogue about the reliability and accuracy of financial information in the context of research articles (Pevzner, Xie, & Xin, 2015). Another useful feature of information in financial representation which includes earnings announcements is that it offers a reliable and personal method of releasing information to many individuals through data processing. Therefore, a situation arises where there is a difference in the amount of information available to market makers and traders (Kim & Verrecchia, 1992). The investors' decisions are hindered, leading to a sense of scepticism and uncertainty. Trust, seen as the primary cultural aspect and a crucial element of social capital, is considered a behavioral incentive that facilitates favorable conditions for economic transactions. Investors, however, are the primary recipients of the information supplied by corporations and react to every new piece of information. Thus, these stakeholders need reliable and precise information to make informed and rational judgements.

The study of how stock market agents perceive and react to information, as well as the effectiveness of these methods in supplying price-related data to external investors, has been the subject of extensive academic research in the fields of accounting and finance (DeFond et al., 2007). This study aims to

investigate if the reactivity of investors to earnings releases is influenced by key national traits, in a distrustful atmosphere about the released data. This encompasses a focus on the extent of trust as a factor that influences behavior, the position of trust in society, and one of the cultural areas that impact how stakeholders react to earnings announcements - which is the most apparent aspect of social capital (Guiso et al., 2006).

In a study conducted by Zak and Knack (2001), he noted that in the societies which have higher levels of trust, the information that is disclosed by firms regarding its performance is reflected in the prices of securities in the market faster. This leads to increased investment, modernization, and thus economic growth. At the same time, corporations in countries with high levels of trust may be more incentivized to reveal sensitive information to the market given that investors' reaction can be expected to be emotionally charged and give more credence to the information disclosed. This reduces capital expenditure and contributes to improving the information culture at various businesses - an important step towards the growth of individual enterprises and achieving greater net-present value. As evidenced in the previous studies, these discourses do not provide a clear understanding of the relationship between investment, economic growth and trust (Pevzner, Xie, & Xin, 2015). Awais, Sulehri, Dar, Mohsin, and Estes (2021); Leuz et al. (2003) revealed that investors' reaction to the company earnings statements is greatly impacted on by trust. As pointed out by DeFond et al. (2007), the views of the capital market on corporate financial reporting and reporting are determined by institutions on the country-level, and country level social trust, and culture. This leads to a decrease in capital expenses and helps enhance the information culture within companies, ultimately allowing individual enterprises to achieve development and make more profitable net present-value investments. The aim of this study is to examine the differences in how investors in different countries respond to company earnings reports, with a focus on the level of trust within society, particularly in emerging nations. Emerging economies face challenges in their development, which give rise to many cultural aspects. Over time, their surroundings, culture, business methods, and markets are undergoing fast changes. Emerging markets investors are prone to behavior biases as a result of changes in their environment. These biases can lead to irrational decision-making, causing prices to diverge dramatically from their underlying values (Shleifer & Vishny, 1997).

This paper analyses the conflicting assumptions using a sample size of around 155 firm-year observations from 3 countries that reported their earnings during 2018 and 2019. This study examines investors' response to earnings announcements by measuring the average abnormal return around these announcements. Research studies that reflect this scenario include Ahmad and Sharif (2023), Guiso et al. (2008), and La Porta et al. (1997), which show that the volatility of returns after earnings disclosures rises with the accuracy and importance of disclosed information. This observation has been supported by several theories and archival studies as Bailey et al. (2006), Bamber et al. (2000), DeFond et al. (2007), Diamond and Verrecchia (1991), Harris and Raviv (1993), Kandel and Pearson (1995), Kim and Verrecchia (1991a, b, 1994), Landsman and Maydew (2002). We anticipate a positive correlation between trust and anomalous return volatility, as trust enhances the perceived reliability, precision, and significance of fresh information from the investors' standpoint. Several studies have aimed at establishing the connection between earnings release and post-release effects on the stock market. DeFond et al. (2007), Jahanshad and Eyvani (2015), and Pevzner, Xie, and Xin (2015) have advanced the knowledge by carrying out their research. In detail, these research works mainly focus on analyzing and assessing the role of formal institutions—comprising of investors' protection, insider trading legislation, disclosure and reporting standards, and earnings quality-on stock market responses to companies' earnings announcements in developed countries. In addition, Xin et al. (2015) further discuss the impact of the neutral institutional context of the country of interest on stock market reactions in developed regions.

The research gap identified here is the neglect of studying the connection between earnings announcements and stock market reactions, as well as the impact of a country's informal institutions, such as culture and societal trust, on this relationship. This neglect specifically applies to cross-country analysis, particularly in emerging economies. The literature review references the works of Ahmad and Sharif (2023), Jahanshad and Eyvani (2015), and Xin et al. (2015). The purpose of this research is to emphasize

the correlation among these concepts in the context of expanding markets, particularly in India, Pakistan, and China. Moreover, this research will enable investors to assess the dependability of organizations' earnings prior to making investment choices by comprehending the cultural trend in the market of their respective countries with regards to announcements and investments. Therefore, this study is anticipated to assist investors in making investment decisions in uncertain circumstances. This study also holds importance for future researchers, as it suggests the possibility of exploring more cultural factors to forecast their influence on stock market reactions, corporate earnings announcements, and other firm-related announcements.

The remaining parts of the paper are organized as follows: Section 2 contains information on literature review and the development of theory-based hypotheses. Section outlining the rationale for our research design and the participants involved in this study is given in section 3. Section 4 discusses the research outcomes of the study. The findings and recommendations are summarized in Section 5.

Literature Review

The research revealed that certain investors seek information prior to earnings announcements, leading to a stock market reaction before the official release date. This creates an information imbalance before the announcements (Alzahrani & Gregoriou, 2010). Corporate disclosure stimulates a greater influx of information into the market and results in price fluctuations (Kim & Verrecchia, 1992). When examining the connection between earnings announcements and stock prices (Awais, Zulfigar, Saghir, Sohail, & Rana, 2022; Kothari, 2001), it becomes evident that investors generally view accounting information as trustworthy. Prior to the scheduled earnings announcements, speculative trading increases as market participants speculate on the anticipated earnings results (Kim & Verrecchia, 1991). Trust is a crucial factor in fostering consumer commitment, leading to the establishment of client loyalty (Tabrani et al., 2018). Societal trust influences the actions of individuals in a community and can serve as an informal system to partially replace formal systems that monitor behavior (Cao et al., 2016). In countries with an unsatisfactory institutional framework, trust serves as a substitute (Abdelsalam et al., 2021). According to Realo and Allick (2009), countries with a higher level of social capital, where people can be trusted, tend to be more individualistic. Trust enhances the importance of fresh data, accuracy, and perceived trustworthiness from the perspective of investors (Pevzner, Xie, & Xin, 2015). According to Zingales (2011), modern economics believe that trust plays a pivotal role in enabling marketers to thrive and facilitating the evolution and development of advanced civilizations.

Research has demonstrated that a greater degree of trust contributes to improved social effectiveness and economic advancement. Trust is a critical element of various economic activities, such as financial evolution, corporate funding, merger and acquisitions deals (M&A), foreign business, and investment (Guiso et al., 2008). Arrow (1972) wants to point out that trust is a fundamental component of an efficiently working developed economy. Lack of trust is one of the main factors in the formation of the economy of the zone of backwardness. Based on the vast amount of literature available, it has been strongly proved that there is a strong positive relationship between the level of trust and the stock market reaction. According to Georgarakos and Pasini (2011), trust, especially when combined with sociability, can have a greater influence on people's participation in the stock market. Balloch et al. (2015) elucidate that the connection between trust, sociability, and stock market engagement is contingent upon stock market literacy and the extent of trust. Based on the results, persons who possess a deep understanding of the stock market and have complete confidence in it are more likely to allocate a greater portion of their funds towards equities. Qiu et al. (2020) conducted a study to explore the connection between social trust and stock price synchronization. Their findings indicate a favorable correlation between the two factors. According to their research, markets with high levels of society trust have a decreased probability of stock price collapses. In other words, trust is involved in ensuring that stock price changes are used to incorporate firm-specific information. Cao et al. (2016) have provided empirical evidence with regards to the proposed hypothesis that societal trust is inversely associated with stocks price crashes. Their research

shows that this effect is particularly significant for companies that receive more attention from analysts or have a large number of institutional owners.

The Efficient Market Hypothesis states that "all accessible data gets incorporated into price quotes of securities" (Marwala & Hurwitz, 2017). Earnings announcements are a primary source of such information. A vast body of work exists that confirms the robust correlation between earnings releases and the subsequent reactions in stock prices (Bouteska & Regaieg, 2017; Bizri, 2014; Kakiya et al., 2013). In the same way, Syed and Bajwa (2018) also investigated the effects on Saudi Arabian stock market announcement. They focused on quarterly announcements and discovered that the stock returns exhibited considerable abnormality in proximity to their corresponding earnings release dates. They also pointed out the fact that the effects are likely to be differential according to whether the news announcements are positive or negative. The effect of earnings announcement on the market is affected by following factors: Size of the companies, market liquidity, Transaction cost, Number of analysts who covers the company for forecasting the earnings, Risk arising out of arbitrage, Information asymmetry, and companies with institutional investors (Miao & Yeo, 2009). In the same way the extent of the impact related to the earnings releases and the stock prices also increases in the situations where the existing market sentiments are trustful. In our study, we have found that different rational investors may respond in different manners to the same information due to difference in the degree of belief with such information (Jia et al., 2015). Wei and Zhang (2014) examined the influence of trust on stock market response to earnings release using data from the United States. The research supports the idea that when there is a lack of societal trust or when trust levels are low, the stock market has a tendency to not react adequately to earnings announcements.

Eugster and Wagner (2021) found that companies with a history of low earnings experience a more pronounced market reaction to earnings announcements, based on the trust developed through their financial reporting method. Jia et al. (2015) have presented the same results, demonstrating that trust is established through cultural and social connections with the source of information. Their research emphasizes trust as a motivating factor by analyzing data from two categories of shares issued by Chinese companies: one allocated to domestic investors and another allocated to overseas investors. Moreover, through the examination of two specific categories of occurrences, namely earnings releases and financial experts' earnings estimates, the research asserts that local investors possess a significant degree of confidence in this information due to their social and cultural affiliations. Empirical testing has shown that when local analysts conduct the study, locally held shares exhibit a stronger reaction compared to stocks held by overseas investors. The findings indicated that during financial crises, enterprises lacking advanced information dissemination capabilities or facing information asymmetry risks should priorities subjective beliefs about the firms. According to the research, if investors have poor or no faith in the firms, it might lead to worries about the veracity of information. These reservations ultimately lead to a lack of response to the data presented (Jung et al., 2015).

A significant study endeavor to confirm this correlation was carried out by Pevzner et al. (2015). An analysis was conducted using a dataset of 53,000 observations of firms over a period of one year, collected from 25 different nations. This analysis was carried out so as to assess the extent to which firms are likely to be affected by trust levels on how they respond to earn announcements. This study investigated the relationship between ATV (Abnormal Trading Volume) and ARV (Abnormal Return Volatility) during the event window of (0, +1) following earnings announcements. The findings indicate that both variables exhibit a statistically significant increase in nations with higher levels of confidence. The estimation results indicated that some of these country characteristics have the significant impact on the model results when adding controls such as educational level of people, whether the country has the investor protection regulations and laws, or disclosure standards. Through the examination of the differences in various groups at a certain point in time, they additionally posited that trust can serve as a beneficial supplement to the financial system in situations where there are less established organizations or a lower percentage of literacy. Therefore, in situations where there is a significant imbalance of information, a less-educated investor may rely on faith when making financial judgements. Essentially, the research demonstrates that trust plays a pivotal role in influencing the impression of an investor of a company's financial reporting

and determining their response to earnings announcements. The research also explores the correlation between a nation's religious beliefs and the level of trust within society.

Hypothesis Development

After reviewing the literature on the role of societal trust on stock market reactions to corporate earnings announcement following hypothesis is formed:

H1: The societal trust positively influences investors' reactions to firms' earning announcement.

Data and Methodology

Sample Construction

The study sample comprises companies that publicly disclose their yearly earnings between July 1st, 2018 and June 30th, 2019, and are listed on reputable stock exchanges in several countries. These companies were chosen based on the criteria that they were consistently listed throughout the period from 2018 to 2019 and that data for them is accessible. Nevertheless, companies who did not make an annual earnings statement and companies that had fewer trading days throughout the estimation and sample period were not included in the sample. A study is performed on three distinct countries: China, India, and Pakistan. The sample consists of 155 enterprises that have disclosed their earnings.

Data

The availability of data is a crucial factor taken into account when choosing the sample of organizations. The duration of the study was limited due to the COVID-19 pandemic, which occurred suddenly. The potential outcomes of this event may vary (Fernandez-Perez et al., 2021), therefore, data is exclusively collected for the specified year. This event holds promise for future investigation. This study incorporates secondary sources of data. Data pertaining to stock markets, including daily closing prices, market index closing values, and earnings announcement dates, has been obtained from reputable stock exchanges such as the Pakistan Stock Exchange (PSX), Shanghai Stock Exchange (SSX), and Bombay Stock Exchange (BSE). Additionally, data on societal trust has been collected from the World Value Survey index (WVS) wave 7 (2017-2022). We collect daily stock return data within the time frame of (-160, -21), where day 0 corresponds to the date of the earnings release.

Methodology

The theoretical approach applied for this research is the event study method. In this regard, the event study method is utilized for estimating the average abnormal returns of each country by using the modified market model within the period of (-160, -21). Additionally, multiple regression analysis is utilized to assess the overall influence of social trust on reactions of the investor, as discussed by El Ghoul et al. (2023) and Yousaf et al. (2023). The predicted relationship between societal trust and stock market reactions to business profit statements is tested using the following econometric model:

Market Reaction_{it} =
$$a_0 + \beta_1$$
 Societal Trust_{it} + β_2 MKT Cap_{it} + β_3 Firm Age_{it} + \mathcal{E}_{it}

Where AAR is used to capture the market, reaction is explained by the level of societal trust, market capitalization and age of the firms. α and β are estimated coefficients of a regression equation and ϵ is the error term of the same regression equation.

Variable Definitions

Market Reaction / Reactions of Investor

The investors always respond to the information which is provided to them by these firms. To capture the reactions of investors information that was analyzed, the "basic event study approach" developed by Brown and Warner (1985) is employed. In this study, the methods of the event research approach of standard market model as explained by Mackinlay (1997) are employed to measure the impact of announcements on the market prices of stock. Some of the most appropriate measures to benchmark the investors' reaction to the earnings releases using market model event study techniques include the Average

Abnormal Return (AAR) and the Cumulative Average Abnormal Return (CAAR). The earnings announcement date is termed as the date in which sample firms release their earnings to the public. Event window is measured based on the number of days from t=-10 to t=+10, with t=0 being the date of earning announcement. The analysis of the betas was done using data gathered before the event window with an observation period of 160 days. Abnormal return can be defined as the "difference between actual return and expected return". Average Abnormal returns (AARs) are usually obtained from the sum of the modified daily returns within a certain time frame defined as the event window. More precisely, the calculation of the firm's market model adjusted returns on day t during the event window is done according to Mackinlay's (1997) methodology:

$$AR_{it} = R_{it} - (\alpha i + \beta_i R_{mt})$$

"Where, ARit = Abnormal Return of stock i on day t, Rit = The daily stock return of firm i on day t, Rimt = The daily market return of firm i's country on day t, $\alpha i = The firm i's market model estimates$, $\alpha t = The firm i's market model estimates at day t$. Average abnormal returns over the event window then is computed as the mean of the market adjusted returns".

Societal Trust

Building on existing research (e.g., La Porta et al. (1997), Guiso, Sapienza, and Zingales (2008), and Ahern et al. (2012), Ahmad and Sharif (2023), we assess social trust on the basis of questions from the WVS:

On the whole, would you assert that the majority of individuals are trustworthy or that one must use caution while interacting with others?

We derive metrics for trust and other cultural aspects by analyzing data from the World Values Surveys (WVS) wave 7, conducted between 2017 and 2022.

Control Variables

This research incorporates the subsequent control variables that have the potential to influence the stock market responses triggered by earnings announcements:

Market Capitalization

The market capitalization (MC) is the independent variable in this research. MC refers to the value of total shares of a particular company and this is obtained by the current price of the share into the total number of shares. Market capitalization is determined by taking the natural logarithm of the formula that follows:

Market Capitalization = Current price per share $(P) \times No.$ of shares outstanding

Firm Age

The time span, measured in years, during which a firm has been in operation from its incorporation. The age of a firm is determined using the following formula:

Empirical results

Average Abnormal Returns (AARs) and Cumulative Average Abnormal Returns (CAARs) of India

Table 4.1 displays the AARs and CAARs of stock market of India, along with their respective values of t-statistic and its status. Event days which range from -10 to +10 represent a total duration of 21 days.

DAY OF						
EVENT	AAR	t-STATS	OUTCOME	CAAR	t-STATS	OUTCOME
-10	-0.021	-2.753	Sig	0.037	12.554	Sig
-9	-0.012	-1.571	Insig	0.044	14.981	Sig
-8	-0.029	-3.908	Sig	0.049	16.706	Sig
-7	-0.024	-3.290	Sig	0.046	15.734	Sig
-6	-0.025	-3.439	Sig	0.048	16.316	Sig
-5	-0.016	-2.171	Sig	0.041	13.912	Sig
-4	-0.027	-3.672	Sig	0.032	10.779	Sig
-3	-0.031	-4.249	Sig	0.040	13.712	Sig
-2	-0.012	-1.672	Insig	0.042	14.382	Sig
-1	-0.013	-1.825	Insig	0.032	10.950	Sig
0	-0.006	-0.824	Insig	0.042	14.260	Sig
1	-0.012	-1.649	Insig	0.030	10.198	Sig
2	-0.027	-3.651	Sig	0.017	5.735	Sig
3	-0.024	-3.221	Sig	0.012	4.033	Sig
4	-0.024	-3.256	Sig	0.008	2.781	Sig
5	-0.035	-4.750	Sig	0.000	-0.006	Insig
6	-0.016	-2.184	Sig	-0.003	-1.139	Insig
7	-0.024	-3.245	Sig	0.001	0.261	Insig
8	-0.014	-1.951	Insig	-0.005	-1.757	Insig
9	-0.023	-3.159	Sig	-0.004	-1.273	Insig
10	-0.019	-2.596	Sig	-0.004	-1.359	Insig

Table 4.1: AARs and CAARs of India

Note: sig represents "significant", insig represents "insignificant"

The Average Abnormal Returns (AARs) of India

Table 4.1 displays an outcome for the stock market of India. The AARs exhibit a consistent pattern over the whole event timeframe. According to the data, the returns are consistently negative and statistically significant both before and after the announcement day, with the exception of days -1, -2, and -9. The returns show statistical insignificance even on the day of the earnings announcement, as they are negative. This implies that the event has no implication to the returns for any stock at any time prior to the event announcement, the event period and after the event period. To support this criterion, there is Fama (1965) in his concept of the efficient market theory. Thus, India is categorized as a semi-strong form efficient market, implying that share prices incorporate all available information and no extra information can earn a risk-adjusted return that would be superior to the general performance of the market. Thus, there is a negligible impact on returns on the day of the market announcement.





Figure 4.1 displays the return distribution from the Bombay Stock Exchange during the whole window duration. No notable pattern in securities prices has been detected on the day of earning announcement. The decline in returns immediately following the release day implies a substantial and adverse effect of

the event on returns. This suggests that both before and after the earnings announcement, this market experiences predominantly strong and negative impacts.

The Cumulative Average Abnormal Returns (CAARs) of India

The CAARs shows a positive and significant influence on the returns that were recorded on the day of the announcement. The post-announcement returns are largely inconsequential, which is further bolstered by efficient market theory in its semi-strong form. This theory suggests that there is no unequal access to information, therefore indicating that the Indian market is not significantly affected by earnings announcements. Prior to the results announcement period, there is a noticeable and meaningful occurrence of favorable market reactions.

Average Abnormal Returns and Cumulative Average Abnormal Returns of Pakistan

Table 4.2 displays the AARs and CAARs of the Pakistani stock market, along with their respective values of t-statistic and its status. The day of events range from 10 days before to 10 days after, resulting in a total window duration of 21 days.

Day of event	AAR	t-STATS	Outcome	CAAR	t-STATS	Outcome
-10	-0.008	-0.189	Insig	-0.008	-0.189	Insig
-9	-0.012	-0.272	Insig	-0.020	-0.461	Insig
-8	-0.621	-14.298	Sig	-0.641	-14.760	Sig
-7	-0.007	-0.158	Insig	-0.649	-14.918	Sig
-6	-0.008	-0.183	Insig	-0.657	-15.101	Sig
-5	0.615	14.155	Sig	-0.043	-0.947	Insig
-4	-0.003	-0.066	Insig	-0.045	-1.012	Insig
-3	-0.013	-0.299	Insig	-0.057	-1.311	Insig
-2	-0.625	-14.393	Sig	-0.682	-15.705	Sig
-1	-0.018	-0.410	Insig	-0.700	-16.115	Sig
0	-0.016	-0.376	Insig	-0.716	-16.490	Sig
1	0.603	13.887	Sig	-0.113	-2.603	Sig
2	-0.001	-0.018	Insig	-0.121	-2.621	Sig
3	0.005	0.114	Insig	-0.109	-2.507	Sig
4	-0.618	-14.214	Sig	-0.726	-16.721	Sig
5	0.002	0.057	Insig	-0.724	-16.664	Sig
6	-0.012	-0.282	Insig	-0.736	-16.946	Sig
7	0.612	14.080	Sig	-0.125	-2.866	Sig
8	-0.002	-0.053	Insig	-0.127	-2.919	Sig
9	0.005	0.122	Insig	-0.122	-2.797	Sig
10	-0.612	-14.095	Sig	-0.734	-16.892	Sig

Table 4.2: AARs and CAARs of Pakistan

Note: sig represents "significant", insig represents "insignificant"

Average Abnormal Returns (AARs) of Pakistan

The findings for the Pakistan market are displayed in Table 4.2. Analysis of AARs reveals a consistent pattern of behavior over the whole duration of the event window. The findings clearly suggest the minimal fluctuations in the returns throughout an entire window duration, encompassing both the pre and the post-

event days. Returns on days before the event, t-1, t-3, t-4, t-6, t-7, t-9, and t-10 are insignificant statistically, with days having the largest negative values. However, on day t-5, returns are statistically significant and have a positive value. Following the announcement, the day of return exhibits the same behavior as it did in the days preceding the event.

Following the announcement, the returns display a combination of positive and negative values on days t+2, t+3, t+5, t+6, t+8, and t+9. However, on days t+1, t+4, t+7, and t+10, these returns show substantial values with both positive and negative trends. Even on a particular event day, the returns are both negative and small. The consistent pattern of returns observed in the Pakistan stock market demonstrates that it operates as a semi-strong form efficient market. This finding aligns with Fama's (1965) idea of efficient market theory, which strongly supports the condition of average abnormal returns. A higher level of insignificance indicates that the event had no impact on the investor's choice. Furthermore, there was no information asymmetry related to the event that would have allowed investors to outperform the broader market.

Figure 4.2 depicts the performance of the Pakistan stock market returns over a specific time period. The returns follow the pattern both before, and after the day of announcement, and it validates a notion that an event does not have any effect on returns before or after the event. To a large extent, this pattern implies that there is no substantial market effect before or after the earnings announcement.





Cumulative Average Abnormal Returns (CAARs) of Pakistan

The trends toward the cumulative average abnormal returns are apparent and relatively steady during the entire observation period Before the announcement of the event, which is on t-3, t-4, t-5, t-9, and t-10, the returns are either insignificant or they are negative. However, in the case of behavior of returns on the event day, all the returns behave differently from the rest period; characterized by negative returns. Still, we have noted that on a certain day, specifically at day 0, AARs are pointing to a significant and negative impact. It is such a form of returns that make the market to be semi-strong form efficient as it contains all the relevant information on the occurrence. The sources of such information are easily accessible to assist investors to achieve better results that the overall market performance index.

Average Abnormal Returns and Cumulative Average Abnormal Returns of China

Table 4.3 displays the AARs and CAARs of stock market of China, along with their respective values of t-statistic and its status. The day of event range from -10 to +10, encompassing a total window time of 21 days.

Day of			0.4	CAAD		0.4
event	AAK	t-STATS	Outcome	CAAR	t-STATS	Outcome
-10	-0.345	-2.712	Sig	7.834	5.450	Sig
-9	-1.874	-15.343	Sig	6.846	6.229	Sig
-8	1.580	5.554	Sig	-1.257	-1.863	Insig
-7	-0.121	-0.000	Insig	-5.669	-4.940	Sig
-6	1.847	12.376	Sig	-1.063	-3.126	Sig
-5	-1.613	-10.430	Sig	-21.230	-2.942	Sig
-4	0.637	2.160	Sig	-0.757	-3.055	Sig
-3	-0.542	-3.023	Sig	-4.384	-4.221	Sig
-2	0.529	1.245	Insig	-4.014	-7.058	Sig
-1	0.549	2.123	Sig	3.059	6.859	Sig
0	-0.212	-3.151	Sig	0.810	2.965	Sig
1	0.527	3.057	Sig	2.759	2.561	Sig
2	-1.020	-16.644	Sig	6.555	6.974	Sig
3	1.121	17.362	Sig	4.222	5.133	Sig
4	-0.967	-15.669	Sig	4.957	4.754	Sig
5	-0.212	-3.171	Sig	4.523	4.162	Sig
6	-0.287	-3.979	Sig	1.426	5.932	Sig
7	0.597	3.087	Sig	6.212	3.460	Sig
8	-0.345	-2.772	Sig	10.889	10.250	Sig
9	-0.385	-1.445	Insig	2.650	4.937	Sig
10	-0.120	-0.714	Insig	0.354	2.526	Sig

Table 4.3: AARs and CAARs of China

Average Abnormal Returns (AARs) of China

Table 4.3 displays the outcomes of the stock market of China. The nature of the actual and expected returns and the market returns for this particular market have an erratic pattern of average abnormal returns for the whole observation period. Of the AARs to be collected during the pre-event days t-1 to t-10, the AARs represent cognitive significance for a total of eight days and lack statistical importance for the following two days. The AARs used in this study are higher than zero and statistically significant using data collected during days t-1, t-4, t-6, and t-8. Besides, for days t-3, t-5, t-9 and t-10 which are above mentioned, the different is significant in term of t-ratio but in negative value. The AARs are not meaningful for the rest two time points, t-2 and t-7. The magnitude of daily returns is positive and significant statistically not only after the day of the incident (day "0"), but on this particular day as well. Post-event the (AARs) display the significant values. In this case, the AARs have been found to be statistically significant when calculated over the period t+1 to t+8. In particular, for t+1, t+3, and t+7, the presented values in AARs are positive and significantly high. However, at period t+2, t+4, t+5, t+6, and t+8 returns have negative values that are quite substantial. During days t+9 and t+10, the AARs are both negative and statistically insignificant. Over a span of 21 days, the observed pattern of AARs in the Chinese market indicates that the market is weak form efficient. This conclusion is confirmed by the Fama principle (1965). A higher

importance level following the announcement day indicates that there may have been a release of information prior to the event, which assisted investors in achieving a performance level higher than that of the overall market.

Figure 4.3 displays the distribution of returns for the stock market of China throughout the specified event window duration. The returns demonstrate an instantaneous upward trend following the occurrence, which indicates that the earnings release has a greater impact on the returns of the market.





Cumulative Average Abnormal Returns (CAARs) of China

These market's overall average of abnormal returns presents the strongest and significant positive results both prior to and after the event. During the nine days leading up to the event, returns are substantial, but on the actual event day, they appear to be negligible. In particular, return is positive and statistically significant at t-1, t-9 and t-10. When it comes to the returns on t-2, t-3, t-4, t-5, t-6, and t-7 days, they are statistically significant but negative in value. During the eighth day prior to the current time point (t-8), the returns exhibit a lack of significance and are characterized by negative values. The results of the returns are positive and statistically significant on day "0.

The influence of the event appears to be particularly significant in the days following its occurrence. The results for the period ranging from day t+1 to t+10 are positive and statistically significant. It also shows that AARs behave in a way that supports the event influence, and thereby proves the importance of the pre-event information asymmetry in the Chinese market to integrate with investors which boosts their performance to a considerable extent. However, on the basis of the evidence presented in this paper, it can be reasonably argued that this particular market represents a weak form efficient market.

Summary Statistics

Table 4.4 presents the mean, maximum, minimum, and standard deviation values for both the dependent variable and all explanatory variables in the current investigation. The dependent variable in this study is the average abnormal returns (AAR), whereas the independent variable is Trust. The control variables, Firm age and Market cap (market capitalization), are also taken into consideration. The sample size for this study is N = 155.

	AAR	Trust	Firm Age	MKT CAP
Mean	0.972	27.87	39 years	\$2.70B
Maximum	3.82	49.50	80 years	\$9.81B
Minimum	-17.56	1.37	11 years	\$0.08B
Std. Dev.	0.187	15.89	26.2	1.26

Table 4.4: Descriptive Statistics

Table 4.4 provides a summary of key statistics for AARs, trust, firm age, and the capitalization of market. The average AARs are reported at 0.972 with a standard deviation of 0.187. The AARs range from a value of high of 3.82 to a low of -17.56. Trust levels show an average mean value of 27.87 and a standard

deviation of 15.89, having a maximum recorded value of 49.50 and a minimum value of 1.37. Firms have an average age of 39 years, with a standard deviation of 26.2 years which spans from a minimum of 11 years to a maximum of 80 years. Market capitalization averages to \$2.70B, with a standard deviation of 1.26. The highest market capitalization is reported as \$9.81B, while the lowest is \$0.08B.

Correlation Analysis

The hypothesis test results supported the research arguments that there was a high positive relation between the predictor and predicting variables and these were assessed using the Pearson's correlation coefficients whose outcomes are presented in Table 4.5. The dependent variable that is to be used in is AARs, while the independent variable to be used in the study is Trust. Market capitalization and firm age are included within the list of control variables. The Pearson's correlation coefficients are presented in the table below the diagonal.

	AAR	Trust	Firm Age	MKT CAP
AAR	1.00			
Trust	0.47	1.00		
Firm Age	0.15	0.46	1.00	
MRKT CAP	0.19	-0.04	-0.16	1.00

Table 4.5: Correlation Coefficient Analysis

This Table 4.5 shows the regression between all the variables looked at in the current study. Following are the conclusion derived on the basis of above results that the relationship between AARs and the related study variables, such as trust, market capitalization, and business age, is not proven to be statistically significant. It is evident that there is a high degree of multicollinearity among these variables.

Regression Analysis

Table 4.6: Model 1 (Regression analysis market reactions (AARs) and Societal Trust and control variables Market capitalization & firm age)

Table 4.6 is a summary of the findings from a multivariate regression analysis of Equation (1). The analysis examines the relationship between the predicting variable, AARs, and the independent variable, Trust (Societal Trust), while controlling for two additional variables: market capitalization (Mkt Cap) and firm age (FA). The total number of observations included is 155.

Variable	Coefficient	Standard error	t-Stats	Probability
Trust	0.289	0.027	7.445	0.00
Firm Age	3.923	0.778	5.156	0.00
MKT CAP	1.665	4.798	3.490	0.00
R ²	0.287	F-statistic	27.774	
Adjusted R ²	0.243	Prob. (F-statistic)	0.000	
Durbin-Watson	1.878			

Table 4.6: Multivariate Regression Analysis

Table 4.6 shows the results of using multivariate regression analysis in which societal trust was used as independent variable and average abnormal return as the predicting variable. The regression analysis control variables are the size of the market, which is measured by the market capitalization of listed companies, and the age of the market. The result indicate that social trust exercises a favorable and significant influence over investor's response. The coefficient of trust has a value of 0.289, having a t statistic of 7.445 and a level of significance is found to be (0.00). These data suggest that the level of trust enhances reaction of an investor to the earnings signals and confirm the notion that investors in these emerging, developing economies place greater trust in firms' reporting (corporate disclosure).

Regarding control variables, it has been determined that both capitalization of market and age of firm have a statistically significant and positive correlation with reaction of investor. The coefficient value for market capitalization is 1.665, while the coefficient value for firm age is 3.923. Both of these variables are statistically significant, with a market cap statistic value of 3.490 and a firm age statistic value of 5.156. The positive correlation between market reaction and the average age of firms in these specific markets indicates that these companies are considered mature, with a well-defined corporate structure and a stable stage of development. Their high rating and perceived accuracy of information make them credible to investors. Consequently, markets with older firms tend to experience stronger investor reactions to these events.

Regarding market capitalization, high cap companies are perceived as having a safer and more stable reputation compared to small size stocks. These results indicate that marketplaces where organizations have significant market capitalization stocks are deemed stable in terms of their reputation and the information they provide. As a result, fresh information has a stronger impact on investor reactions. The model demonstrates a 27.7% level of support in representing the behaviors of variables that imply a stronger investor reaction in the presence of the independent variable trust, as well as the control variables market capitalization and business age. The statistical significance of the F-statistics indicates that the model is a suitable fit for the independent variables. The Durbin-Watson statistic is 1.878, indicating the absence of autocorrelation in the given data.

Discussion

The significance of corporate disclosure has been emphasized in finance literature. These disclosures offer investors valuable and pertinent information to make informed judgements. Earning announcements are regarded as crucial information that serves as a primary means of communication between a company's insiders and external investors. Earnings releases give valuable information that allows some investors to make more informed decisions about a firm's performance compared to other firms (Pevzner, Xie, & Xin, 2015). The response of investors to earnings announcements is influenced by various elements, with trust being the most significant one. Societal trust, which is a prominent feature of social capital and a significant cultural aspect, is regarded as a behavioral incentive for investors' response to earnings releases (Jahanshad & Eyvani, 2015).

The study findings indicate a favorable correlation between society trust and investor response to earnings releases in the emerging economies of China, India, and Pakistan. society trust also plays a significant influence in investor decision-making. The results align with the research conducted by Ahmad and Sharif (2023) and Pevzner, Xie, and Xin (2015). These studies indicate that social trust influences how investors respond to company earnings announcements and can serve as a substitute in situations where there is a lack of trust in the environment, specifically in Pakistan, India, and China. These changes in different sections of a group are consistent with earlier findings and past literature regarding mutual trust as the fundamental type of social capital, which underlies future commitments and expectations. Thus, if the relationship between parties is trusting, there will be a positive expectation from both sides, communication lines with be open, and more particularly there will be manifestation of norms of interaction that depict acceptable social behavior (Coleman, 1988). Hence, this study demonstrates the significance of public trust in influencing investors' decisions and highlights a more pronounced investor response to earning announcements. In terms of control variables, the analysis reveals a favorable correlation between firm age and market capitalization on all of these stock exchanges and investors' reactions. Investors tend to have a more significant reaction to older and reputable companies. Societal trust has a greater impact on investor response to corporate earnings statements when considering market size and business age.

One plausible explanation is that investors are more certain in their judgment of established and recognized firms as opposed to relatively young and low-Valuation firms. This is because older firms are in the maturity stage, established firms, and the investors would have a positive attitude towards such firms. Such kind of firms is attributed to the class of mature firm and their moves are perceived as mature

and coherent. Younger firms on the other hand are at the growth stage of their life cycle and their choice is not valued as much as that of older firms by investors. Therefore, older and reputable firms have a greater influence on investors' reactions. These findings align with the research conducted by Sare and Esumanba (2013), which suggests that older and larger capital firms are perceived as more trustworthy by investors compared to younger and smaller organizations. As a result, they tend to elicit stronger reactions from investors. The findings corroborated the favorable influence of society trust on stock market responses to business earnings statements, hence supporting the hypothesis of this study. The model's fitness in this analysis aligns with the previous work conducted by Jahanshad and Eyvani (2015) and is also similar with the findings of Sare and Esumanba (2013).

Conclusion

This research examines the influence of national culture on investor perception and the use of financial transparency by corporations. In this study, earnings releases are regarded as valuable and significant information among all the financial disclosures made by corporations. This research specifically examines the influence of social trust on the stock market response to business earnings statements in three rising markets: China, India, and Pakistan. The study examines the idea that social trust has a favorable impact on investors' responses to business earnings statements. This study examines the average anomalous returns during the earnings announcements period in developing markets to evaluate the hypothesis.

The study discovered a favorable impact of societal trust on the response of investors to business earnings statements. Investors in China, India, and Pakistan consider the firm's financial disclosure, particularly earnings announcements, to be more reliable. As a result, they react more significantly to these announcements in the markets. The impact of social trust on response of an investor to earnings announcements is stronger in countries with matured and large-cap enterprises. These findings align more closely with previous theoretical and empirical research, indicating that social trust significantly influences investors' decision-making.

Therefore, according to the evidence presented in the study, the reaction of capital markets to corporate CFD particularly earnings announcements is explained not only by formal country level institutions but cultural influences like national societal trust. Therefore, this study asserts that the level of trust within a society has a significant impact on how investors respond to company earnings reports in the rising economies of China, India, and Pakistan.

This study offers significant suggestions for future research in various areas, such as other events similar to Covid-19, different emerging markets or regions, cultural norms, corporate disclosures, and alternative statistical models like factor models, market models, and constant mean return models.

References

- Abdullah, H., & Valentine, B. (2009). Fundamental and Ethics Theories of Corporate Governance. *Middle Eastern Finance and Economics*, *4*, 88-96.
- Acker, D. (2002). Implied standard deviations and post-earnings announcement volatility. *Journal of Business Finance & Accounting*, 29(3&4), 429-456.
- Affleck, G. J., Callahan, C. M., & Chipalkatti, N. (2002). Earnings predictability, information asymmetry and market liquidity. *Journal of Accounting Research*, 40(3), 561-583.
- Afzal, M., & Sehrish, S. (2011). Ownership Structure, Board Composition and Dividend Policy in Pakistan. *International Conference on Management, Business Ethics and Economics (ICMBEE)*. Held on December 28- 29, at Pearl-Continental Hotel Lahore, Pakistan.
- Ahmed Q. N., & Sharif, S. (2023). Who gets believed? Trust and Investors Reactions to Corporate Earnings Announcements in Shariah-Compliant Vs Shariah Non-Compliant. *ISRA International Journal of Islamic Finance (IJIF)*, 15(1) pp. 4-21
- Alzahrani, A. A., & Gregoriou, A. (2010). What Happens Around Earning Announcements? An Investigation of Information Asymmetry and Trading Activity in the Saudi Market. *Economics and Finance Working Paper Series*, 10(1), 19-35.

- Amir, E., & Lev, B. (1996). Value-relevance of nonfinancial information: the wireless communications industry. *Journal of Accounting and Economics*, 22, 3–30.
- Awais, M., Sulehri, N. A., Dar, I. B., Mohsin, M., & Estes, J. (2021). Antecedents of Optimism Bias of Investors in the Stock Market of Pakistan along with the Scale Development of Optimism Bias. *Academy of Strategic Management Journal*, 20(3), 1-35.
- Awais, M., Zulfiqar, B., Saghir, R., Sohail, A., & Rana, A. U. R. (2022). Psychological Indicator (s) in Stock Activities considering SDGs: The Wealth Maximization Criteria of Investors and Growth of Economy. *NICE Research Journal*, 47-60.
- Baker, M., & Stein, J. C. (2004). Market liquidity as a sentiment indicator. *Journal of Financial Markets*, 7(3), 271-299.
- Balsam, S., Krishan, J., & Yang, J. (2003). Auditor industry specialization and earnings quality. *Auditing: Journal of Practice and Theory*, 22, 71–97.
- Barberis, N., Shleifer, A., & Vishny, R. (1998). A model of investor sentiment. *Journal of Finance*, 49, 307–345.
- Barth, M. E., & Hutton, A. P. (2000). Information intermediaries and the pricing of accruals. *Working Paper, Stanford University, Stanford, CA*.
- Beaver, W. H. (1968). The information content of annual earnings announcements. *Journal of Accounting Research*, *6*(3), 67-92.
- Begley, J., & Fischer P. E. (1998). Is there Information in an Earnings Announcement Delay? *Review of Accounting Studies*, *3*, 347–363.
- Berkman, H., Dimitrov, V., Jain, P. C., Koch, P. D., & Tice, S. (2009). Sell on the news: Differences of opinion, short-sales constraints and returns around earnings announcements. *Journal of Financial Economics*, *9*(3), 376-399.
- Bourdieu, P. (1983). Handbook of Theory and Research for the Sociology of Education, Forms of Capital 'in J. Richardsons (ed.), Greenwood, New York.
- Chan, H. S., Martin, J. D., & Keinsinger, J. W. (1990). Corporate research and development expenditures and share value. *Journal of Financial Economics*, 26, 255-276.
- Choi, S. K., & Jeter, D. C. (1992). The effects of qualified audit opinions on earnings response coefficients. *Journal of Accounting and Economics*, 15, 229–248.
- Coleman, J. (1990). Foundations of Social Theory. Cambridge, Mass: Harvard University Press.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *The American Journal of Sociology*, 94, S95-S120.
- Daily, C. M., Dalton, D. R., & Canella, A. A. (2003). Corporate Governance: Decades of Dialogue and Data. Academy of Management Review, 28(3), 371-382.
- Dechow, P., Ge, W., & Schrand, C. (2010). Understanding earnings quality: A review of the proxies, their determinants and their consequences. *Journal of Accounting and Economics*, 50, 344–401.
- DeFond, M., & Park, C. (2001). The reversal of abnormal accruals and the market valuation of earnings surprises. *The Accounting Review*, *76*, 375–404.
- 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.
- Dopuch, N., Holthausen, R., & Leftwich, R. (1986). Abnormal stock returns associated with media disclosures of 'subject to' qualified audit opinions. *Journal of Accounting and Economics*, 8, 93– 118.Edwards, B., & Foley, M. (1999). Is it time to disinvest in social capital? *Journal of Public Policy*, 19, 141-173.
- Edwards, B., Foley, M., & Diani, M. (2001). Beyond Tocqueville: Civil Society and the Social Capital Debate in Comparative Perspective. University Press of New England.
- El Ghoul, S., Guedhami, O., Mansi, S. A., & Sy, O. (2023). Event studies in international finance research. *Journal of International Business Studies*, 54(2), 344-364.
- Eugster, F., & Wagner, F., (2021). Earning investor Trust: The role of Past Earning Management. Journal of Business Finance Accounting, *48*, 269-307

Fama, E. F. (1965). The Behavior of Stock Market Prices. Journal of business, 38, 34-105.

- Fernandez-Perez, A., Gilbert, A., Indriawan, I., & Nguyen, N. H. (2021). COVID-19 pandemic and stock market response: A culture effect. *Journal of behavioral and experimental finance*, 29, 100454.
- Francis, J., Schipper, K., & Vincent, L. (2005). Earnings and dividend informativeness when cash flow rights are separated from voting rights. *Journal of Accounting and Economics*, *39*, 329–360.
- Frazzini, A., & Lamont, O. A. (2007). The earnings announcement premium and trading volume. *NBER* working paper.
- Frieder, L. (2008). Investor and price response to patterns in earnings surprises. *Journal of Financial Markets*, *11*, 259–283.
- Gambetta, D. (1988). Can we trust trust? In: Gambetta, D. (Ed.), Trust: Making and breaking cooperative relations, Blackwell, New York, 213–237.
- Guiso, L., Sapienza, P., & Zingales, L. (2006). Does culture affect economic outcomes? Journal of Economic Perspectives, 20, 23–48.
- Guiso, L., Sapienza, P., & Zingales, L. (2008a). Social capital as good culture. *Journal of the European Economic Association*, *6*, 295–320.
- Guiso, L., Sapienza, P., & Zingales, L. (2008b). 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. (2010). Civic capital as the missing link. In: Benhabib, J., Jackson, M., Bisin, A. (Eds.), Hand book of Social Economics, North-Holland, Amsterdam, *1A*, 417–480.
- Hand, J., Holthausen, R., & Leftwich, R. (1992). The effect of bond rating agency announcements on bond and stock prices. *The Journal of Finance*, 47, 733–753.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics*, 31, 405–440.
- Jahanshad, A., & Eyvani, J. (2015). The role of social trust on the reaction of investors regarding stock earnings announcement and the effect of disclosure quality on its relationship. *Journal of Scientific Research and Development*, 2(7), 28-34.
- Kim, O., & Verrecchia, E. R. (1992). Market liquidity and volume around earnings announcements. *Journal of Accounting and Economics*, 17(1), 41-67.
- Kim, O., & Verrecchia, R. E. (1991). Market reaction to anticipated announcements. *Journal of Financial Economics*, *30*(2), 273-309.
- Kothari, S. P. (2001). Capital markets research in accounting. *Journal of Accounting and Economics*, 31(1-3), 105–231.
- Krinsky, I., & Lee, J. (1996). Earnings announcements and the components of the bid-ask spread. *Journal* of Finance, 51, 1523-1535.
- Leuz, C., Nanda, V., & Wysocki, P. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics*, 69, 505–527.
- Libby, R., & Tan, H. (1999). Analysts' reactions to warnings of negative earnings surprises. *Journal of Accounting Research*, *37*, 415–435.
- Mackinlay, A. C. (1997). Event studies in Economics and Finance. *Journal of Economic Literature*, 35(1), 12-39.
- Mahajan, V., & Banga, K. (2006). The 86 percent solution: How to succeed in the biggest market opportunity of the next 50 years. Upper saddle river, NJ: Wharton school publishing, Pearson Education.
- Palmrose, Z. V., Richardson, V. J., & Scholz, S. (2004). Determinants of market reactions to restatement announcements. *Journal of Accounting and Economics*, *37*, 59-89.
- Pevzner, N., 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, 190–223.

- Putnam, R. D. (1995). Bowling alone: America's Declining Social Capital. *Journal of Democracy*, 6(1), 65-78.
- Qiu, B., Yu, J. & Zhang, K. (2020), 'Trust and stock price synchronicity: evidence from China', *Journal* of Business Ethics, 167(1), pp. 97–109.
- Realo, A., & Allik, J. (2009). On the relationship between social capital and individualism–collectivism. Social and Personality Psychology Compass, 3(6), 871-886.
- Rogers, J., & Stocken, P. (2005). Credibility of management forecasts. Accounting Review, 80, 1233–1260.
- Sare, Y., & Esumanba, S. (2013). Determinants of abnormal returns on the Ghana stock exchange. *Journal* of finance and accounting, 4(11), 7-17.
- Shleifer, A., & Vishny, R. W. (1997). The limits of arbitrage. The Journal of Finance, 52(1), 35-55.
- Su, D. (2003). Stock price reactions to earnings announcements: evidence from Chinese markets. *Review* of Financial Economics, 12, 271–286.
- Waymire, G. (1984). Additional evidence on the information content of management earnings forecasts. *Journal of Accounting Research*, 22, 703–719.
- Yousaf, I., Riaz, Y., & Goodell, J. W. (2023). What do responses of financial markets to the collapse of FTX say about investor interest in cryptocurrencies? Event-study evidence. *Finance Research Letters*, 53, 103661.
- Zak, P., & Knack, S. (2001). Trust and growth. *Economic Journal*, 111, 295–321.