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EXPLORING THE IMPACT OF DIGITAL TAX REFORMS ON TAXPAYER BEHAVIOR AND FINANCIAL ENGAGEMENT IN SINDH, PAKISTAN

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ABSTRACT

This research aims to analyze the consequences of financial confidence, financial literacy, fintech adoption, and risk tolerance on making an investment decision. There exists an issue in understanding the consequences of the above-mentioned factors on individuals' financial behavior, particularly in an emerging country like Pakistan. The objective of this research is to test different constructs and evaluate the consequences they have on an individual's financial behavior. A sample size of 480 people was taken and surveyed using a structured questionnaire with Likert scale items for data collection. To analyze the data, an approach called Structural Equation Modeling was used. The results show that financial confidence and financial literacy play an important role in making an investment decision, and financial confidence has a larger consequence (path coefficient = 0.363, p-value = 0.000). Fintech adoption has been confirmed to positively affect financial confidence (path coefficient = 0.341, p-value = 0.000), and this positively influences an individual's investment decision. There is also significance observed in favor of risk tolerance (path coefficient = 0.190, p-value = 0.002), and this indicates that individuals with high risk tolerance tend to make an investment decision.

Keywords: Financial Confidence, Financial Literacy, Fintech Adoption, Investment Decision-Making.

INTRODUCTION

Recently, the world has undergone a massive digital transformation that has had a major effect on the public administration systems, including that of taxation, with digital tax reforms being a priority area of governments striving to improve their efficiency, transparency, and compliance (OECD, 2021). Digital forms of taxation, including e-filing, electronic payments, and automated reporting, can simplify the work of the administration, decrease the expenses of work, and enhance the involvement of taxpayers (Benk et al., 2022). Asia, and specifically China, India, and Singapore, have shown a high uptake of fintech tools, and digital tax reforms are becoming sources of economic development (Vora & Patel, 2023). Nevertheless, the digital divide is also one of the key challenges, especially in South Asia, where countries such as Pakistan are just starting their path to digital tax reform (Fisher et al., 2022). The economy of Pakistan has a GDP of about $348 billion, and its economy is highly dependent on services (60%), industry (20%), and agriculture (20%), as seen in the year 2020 (World Bank, 2022). Although the country has a high economy, it has serious issues in terms of tax collection, as in 2020, the tax-to-GDP ratio stands at one of the lowest in the region at 9.6% (Government of Pakistan, 2021).

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In this regard, Sindh Revenue Board (SRB), the tax collection organization in the second largest province of Pakistan, has made some digital reforms that led to efficiency and revenue collection. Some of the initiatives undertaken by the SRB are the introduction of e-filing systems, digital payment gateways and automated reporting systems to enhance tax compliance. However, these reforms are heavily challenged by such aspects as poor digital literacy, unequal access to technology, and distrust towards the tax authorities, which is especially common in rural areas (Gupta & Sharma, 2024). With the country continually developing its digital infrastructure, Sindh is expected to be a key contributor in the economic development of Pakistan, adding around 30 percent of the total GDP of the nation, and Karachi is the economic center (Khan et al., 2022). In the future, it is expected that the GDP of Pakistan will rise to about 1.5 trillion by 2050 due to the digitalization process, urbanization, and even stronger involvement in global markets (World Bank, 2022). However, this growth necessitates significant changes in the administration of taxes, such as increased use of digital tax tools, financial literacy, and more taxpayer engagement (OECD, 2021). It is essential to understand how the administrative digitalization affects the perception of fairness and trust in the Sindh Revenue Board by taxpayers to guarantee the success of these reforms and increase compliance with taxes on a voluntary basis (Torgler, 2021).

Problem Statement

Implementation of digital tax systems has been identified as one of the most important measures towards more efficient administration, lower compliance costs and better attendance of the taxpayers. Although digital tools have the potential to simplify the administration of taxes, e-filing systems, electronic payment systems and automated reporting systems have garnered little research on their effects on the tax behavior of taxpayers in developing economies. This is especially where the Sindh Revenue Board (SRB) in Sindh, Pakistan, has made a number of digital reforms in order to revamp the tax system and to generate revenue. Although these digital reforms are intended to enhance taxpayer compliance and service delivery, a serious gap in comprehension on how these changes affect taxpayer perceptions of fairness and trust in the SRB, which are key determinants of voluntary compliance, persists (Torgler, 2021). Digitalization has been affected by the digital divide, low digital literacy, and lack of access to technology in some regions, which has limited the effectiveness of digitalization efforts by the SRB. Thus, to investigate the impact of these digital tools on the perceptions of taxpayers is crucial, as well as the role that financial confidence attributable to digital literacy and the adoption of fintech has on investment decisions and voluntary payment of taxes. The purpose of the research is to fill this gap, which examines the connection between administrative digitalization, perceived fairness, trust in the SRB, and voluntary tax compliance behavior in Sindh that helps to understand how digital tax systems could be enhanced to promote more compliance and financial involvement (Gupta & Sharma, 2024; Rehman & Shams, 2023).

Research Objectives

- To assess how the digitalization of the administration in the Sindh Revenue Board (SRB) is perceived by taxpayers as fair and trusted by them.

- To analyze how financial confidence affects the voluntary tax compliance behavior of taxpayers in Sindh.

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- To explore the correlation between financial literacy, the use of fintech, and financial confidence, and how they, in turn, affect investment decision-making.

- To evaluate the mediation effect of trust in the Sindh Revenue Board between the relationship of digital tax systems and voluntary tax compliance behavior.

Study Hypotheses

Direct Hypotheses

H_1: Age significantly influences Financial Confidence.

H_2: Financial Confidence significantly influences Investment Decision Making.

H_3: Financial Literacy significantly influences Financial Confidence.

H_4: Financial Literacy significantly influences Investment Decision Making.

H_5: Fintech Adoption significantly influences Financial Confidence.

H_6: Fintech Adoption significantly influences Investment Decision Making.

H_7: Risk Tolerance significantly influences Investment Decision Making.

Moderation Hypotheses

H_8: Age significantly moderates the relationship between Financial Literacy and Financial Confidence.

H_9: Age significantly moderates the relationship between Financial Confidence and Investment Decision Making.

Indirect Hypotheses (Mediation)

H_{10}: Age significantly mediates the relationship between Financial Confidence and Investment Decision Making.

H_{11}: Financial Literacy significantly mediates the relationship between Financial Confidence and Investment Decision Making.

H_{12}: Fintech Adoption significantly mediates the relationship between Financial Confidence and Investment Decision Making.

H_{13}: Age moderated Financial Literacy, which significantly mediates the relationship between Financial Confidence and Investment Decision Making.

LITERATURE REVIEW

Age Influences Financial Confidence.

The role of age is also important in influencing financial confidence, considering that people gain financial knowledge, financial experience and exposure

to financial decision making during their lifetime. Older adults are exposed to more diverse financial scenarios, such as savings planning, investment options, credit use, tax-related options, and so on, and all of them contribute to increased financial confidence (Wenzel, 2021). There is empirical evidence that indicates that older people are more familiar with financial institutions and regulatory frameworks, which makes them more at ease and assured in handling complex financial issues (Torgler, 2021). On the same note, Feld and Frey (2021) maintain that recurrent experiences with formal financial systems reinforce the perceived control and confidence of people in financial decision-making.

However, comparative investigations also show that younger people, especially those lacking financial literacy and having less access to financial education, tend to have less financial confidence and greater uncertainty in their financial and investment decisions (Benk et al., 2022; Lusardi & Mitchell, 2023). Cognitive learning impacts and experience-based knowledge are also associated with age-related variance on financial confidence and the positive impact of risk evaluation and long-term financial planning (Gennaioli, Shleifer, and Vishny, 2018). Financial confidence, in turn, is the key factor in stimulating voluntary tax payment and an active attitude towards tax systems and adherence to the rules. People who feel that they are able to cope with their financial liabilities have a higher chance of being actively involved in tax payment (Alm & Torgler, 2021; Kirchler, Hoelzl, and Wahl, 2008). Thus, age becomes one of the major predictors of financial confidence, and the experience that older people have acquired determines their overall financial behaviour, investment choices and compliance attitudes.

H_1: Age significantly influences Financial Confidence.

Financial Confidence Influences Investment Decision Making

Investment decision-making is directly related to financial confidence because more confident people can easily embrace strategic and informed investment activities. Financially secure people feel freer to take rational financial risks and to work with uncertainty, thus entering financial markets more actively (Torgler, 2021). This trust gives them a stronger conviction that they can comprehend and analyze complex financial products and makes them independent in making informed investments regarding stocks, real estate, mutual funds, and other types of investment products (Alm & Torgler, 2021). Empirical research shows that more financially confident people tend to diversify their investment range and use the practices of the long-term financial plan more often, which can help reduce risks and increase wealth growth (Wenzel, 2021; Barberis & Thaler, 2023).

On the other hand, people who lack financial confidence tend not to engage in investment activities because they are afraid of losses, uncertainties, and because they believe that they are not good enough in their financial knowledge, resulting in poor financial performance (Feld & Frey, 2021; Guiso & Sodini, 2013). Also worth attention is the recent study that fintech platforms can be used to enhance financial confidence by giving their users access to financial information, real-time financial market insights, algorithm-generated recommendations, and risk assessment tools, which, in combination, increase the quality of decisions and investment participation (Benk et al., 2022; Lusardi, Michaud, and Mitchell, 2017). Thus, the hypothesis

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according to which financial confidence plays a significant role in determining investment decision-making is substantiated well, because the higher the levels of confidence, the more individuals are willing to participate actively in financial markets, as well as to act in an informed manner when making their investment decisions.

H_2: Financial Confidence significantly influences Investment Decision Making.

Financial Literacy affects Financial Confidence.

One of the factors that determines financial confidence is financial literacy because it provides the foundation of knowledge to learn the most common financial concepts like interest rates, inflation, investment tools and the management of risk. Increased financial literacy promotes the capacity of people to assess financial options and a sound decision-making process, which would reinforce financial confidence (Wenzel, 2021). Empirical studies demonstrate a positive correlation between financial literacy and financial confidence consistently, which means that people who have better financial literacy believe that they are more competent in their finances, and they can participate in investment activity (Torgler, 2021). In the same way, Alm and Torgler (2021) show that financially literate people feel that they have more control over their finances, and that leads to a more significant increase in their confidence in making financial decisions.

In addition, financial literacy is the key factor to behaving financially responsibly, such as saving, investment planning, and voluntary tax compliance (Lusardi & Mitchell, 2023; van Rooij, Lusardi, & Alessie, 2011). Recent literature also places emphasis on the role of fintech tools in the field of financial literacy improvement: they enable users to gain access to educational resources, budgeting tools, online advisory services, and real-time financial data, which, in turn, enhances the level of confidence in personal finance management (Benk et al., 2022; OECD, 2023). The increasing financial literacy of people not only makes people more financially confident but also more inclined to make informed investment choices, as well as show greater willingness to go the extra mile to voluntarily pay taxes, which again stresses the significance of financial literacy in the context of the digital financial space.

H_3: Financial Literacy significantly influences Financial Confidence.

Influencing Investment Decision Making: Financial Literacy

Financial literacy has a direct influence on investment decision-making in that individuals with high financial literacy have a greater capacity to assess, compare and choose among different investment opportunities. Financially literate persons have a better knowledge of the most important financial principles, risk, return, diversification, and time value of money, which are imperative in making informed investment choices (Torgler, 2021). Empirical data show that more financially literate individuals tend to invest in financial markets and invest in more diversified settings such as stocks, mutual funds, and properties because they can better evaluate risks and returns (Alm & Torgler, 2021; van Rooij, Lusardi and Alessie, 2011).

In addition, financially literate people have better portfolio management practices, a more accurate perception of risk tolerance, and a greater tendency towards long-term financial planning in accordance with the individual financial objectives (Wenzel, 2021; Lusardi & Mitchell, 2023). A recent set of studies also highlights the importance of fintech platforms in the expansion of access to financial literacy instruments through the provision of digital education resources, investment simulations, robo-advisory services, and real-time market-related information, which collectively help to make more informed and confident investment choices (Benk et al., 2022; OECD, 2023). Financial literacy is therefore very important in influencing the behavior of investments as well as enabling strategic financial decision-making in more digital financial settings.

H_4: Financial Literacy significantly influences Investment Decision Making.

Finance adoption has an impact on financial confidence.

The adoption of fintech is the key to financial confidence as it offers people access to digital financial solutions that can make personal financial regulation efficient and help them make informed investment decisions. According to empirical research, fintech applications make people more confident about their financial habits and money management by providing real-time financial information, customized guidance, and all-encompassing financial insights (Benk et al., 2022). Enabling the less knowledgeable to make superior financial choices, both in the short run (day-to-day budgeting) and the long run (investment plans), fintech adoption makes complex financial processes simple by providing user-friendly interfaces (Torgler, 2021). Financial education is another aspect of financial education, and these tools are useful in enhancing financial literacy, which in turn leads to an increase in the level of financial confidence (Feld & Frey, 2021). Furthermore, the fintech platforms have decreased financial inclusion barriers by offering underserved and marginalized communities banking services, digital investment platforms, and financial advice to increase both financial confidence and proactive investment behaviour (Gomber, Koch, and Siering, 2017; Lee & Shin, 2018; Ozili, 2018; Philippon, 2016; Yermack, 2017). With greater confidence in fintech tools, people will eventually be able to participate more in thoughtful financial planning, risk-taking, and long-term investment decision-making, which will result in wider participation in financial and economic empowerment.

H_5: Fintech Adoption significantly influences Financial Confidence.

The adoption of fintech affects the making of investment decisions.

The investment apps and online trading platforms can enable people to easily invest and track investments, evaluate market risks, and make well-informed investments considering real-time financial data (Benk et al., 2022). Empirical results indicate that fintech applications improve the investment decision-making process by making complex financial data more manageable, enhancing information transparency, and making financial markets more accessible (Torgler, 2021). These sites provide individualized financial planning services, account management capabilities, and access to various types of investment products. The use of fintech also enhances financial literacy by exposing the user to educational resources, investment

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simulations, and electronic advice, which ultimately allows the user to make wiser and more informed investment choices (Gupta & Sharma, 2024). Therefore, the adoption of fintech can highly impact the decision-making in investment, by offering more access to financial instruments, up-to-date market data and individualized financial planning, especially among digitally savvy individuals (Gomber, Koch, & Siering, 2017; Lee & Shin, 2018; Ozili, 2018; Philippon, 2016; Yermack, 2017).

H_6: Fintech Adoption significantly influences Investment Decision Making.

Investment Decision Making is Powered by Risk Tolerance.

One of the factors that determines the investment decision-making is the risk-taking: The level of risk that the person is taking to attain increased returns. People who are more risk-tolerant invest in riskier assets, typically stocks, real estate, and cryptocurrencies, but more risk-averse people invest in lower-risk, lower-paying investments, such as bonds and savings accounts (Wenzel, 2021). Various factors affect risk tolerance, with some of them being financial confidence, financial literacy, and previous experience of making investments. Financially literate and financially confident people tend to be more prone to calculated risk since they believe they have the ability to estimate the risks they may incur when dealing with uncertainty (Torgler, 2021; Lusardi & Mitchell, 2023). Also, it is possible to mention the use of fintech products, such as investment platforms and risk assessment calculators, which allow people to more accurately analyze the risk involved in investing and, in this way, influence their risk tolerance and financial behavior (Benk et al., 2022; Gomber, Koch, and Siering, 2017). It follows that risk-taking is a key factor in investment choices, and it is a direct measure of the way people can distribute their resources and diversify their portfolios and their involvement in financial markets (Grabel & Lytton, 1999; Jianakoplos & Bernasek, 1998).

H_7: Risk Tolerance significantly influences Investment Decision Making.

Relationship between Financial Literacy, Financial Confidence and Age.

Financial literacy and financial confidence have a strong moderating factor of age. With age, people have gained more work-related experience and have been exposed to financial concepts, which may impact the relationship between financial literacy and financial confidence. Older adults generally have a more informed approach to money, as they have made complicated choices in their lives: they save, plan their retirement, and invest in the long run (Wenzel, 2021). This experience adds to an increased use of financial literacy and financial confidence (Torgler, 2021). On the other hand, the younger generation, although they might be more educated in finance, might not have the necessary experience and, as a result, have lower financial confidence despite their knowledge of finance (Alm & Torgler, 2021). The issue of age also influences the capacity of financial literacy in practical decision-making, as older people have a higher propensity to utilize their knowledge, which leads to empowerment and trust in their financial management (Feld & Frey, 2021). Current research also shows that older adults experience a more positive effect of financial literacy on financial confidence because of their lengthy experience and their exposure to financial markets (Benk et al., 2022; Lusardi & Mitchell, 2014; Mandell & Klein, 2009; Xiao & O'Neill, 2016; Atkinson & Messy, 2012). Hence, age is an important

moderating variable, increasing the translation of financial literacy into financial confidence.

H_8: Age significantly moderates the relationship between Financial Literacy and Financial Confidence.

The Relationship Between Financial Confidence and Investment Decision Making in Relation to Age.

Age is an important moderating factor that exists between financial confidence and investment decision-making. The aged ones are more inclined to demonstrate financial confidence because of their financial knowledge and life experience, and this factor of financial confidence directly affects their investment patterns (Torgler, 2021). Studies have shown that age influences financial confidence and its conversion to investment decision-making: older people tend to be more conservative and risk-averse, and younger people tend to be more prone to investment risk (Wenzel, 2021). Even though informed decision-making in the context of investment requires financial confidence, the degree of risk aversion varies among the age groups. With their experience in finance, the older generation tends to take more conservative investment decisions, investing in low-risk, low-yield securities, including bonds, mutual funds, or real estate (Alm & Torgler, 2021; Lusardi & Mitchell, 2014). On the other hand, younger investors can seek more risky but high-paying stocks, cryptocurrencies, or new market assets (Benk et al., 2022; Grable & Lytton, 1999). Thus, age is a strong moderator of the correlation between financial confidence and investment decision-making: when the levels of financial confidence are similar, older individuals prefer to invest their money with a conservative approach, whereas younger individuals are more risk-prone. This highlights the need to consider age in the study of how financial confidence affects investment behavior.

H_9: Age significantly moderates the relationship between Financial Confidence and Investment Decision Making.

The Relationship between Financial Confidence, Investment Decision-Making, and Age.

Age is a significant mediating factor that has an impact on financial confidence and determining investment decisions. By having more experience as they grow older, they are more skilled in making financial decisions, which increases their financial confidence. People have more experience with different types of financial conditions, which makes older people better equipped to make complicated investment decisions and more financially confident (Torgler, 2021). Financial confidence is central to making well-informed decisions with regard to investments because people who are confident in their financial capability tend to be more active in the financial markets (Alm & Torgler, 2021). Nevertheless, risk tolerance in investment choices is also affected by age: older people tend to invest in safer, less risky, and lower-yield investments, e.g., bonds and savings, whereas younger people do not mind risky and high-tempo investments (Wenzel, 2021; Grabel & Lytton, 1999). As a result of this, age mediates the relationship between financial confidence and investment decision-making in that it affects the level of confidence as well as the risk taken to determine the overall investment behavior. Age also plays a significant role in the analysis of

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financial behavior as older people tend to be more conservative in their investment decisions compared to younger investors, despite their similar financial confidence (Lusardi & Mitchell, 2014; Barsky et al., 1997; Rieger, Wang, and Hens, 2015; Grinblatt & Keloharju, 2001; Xiao & O'Neill, 2016).

H_{10}: Age significantly mediates the relationship between Financial Confidence and Investment Decision Making.

Financial Literacy of the Relationship between Financial Confidence and Investment Decision Making.

Financial literacy forms a very important mediator in the relationship between financial confidence and investment decision-making. Financially literate people have a more solid grasp of such concepts of finances as risk, return, and diversification that allows them to make informed and effective investment choices (Wenzel, 2021). Financial confidence and financial literacy are closely related, with a larger degree of literacy being likely to increase the confidence of an individual in managing finances and making investment decisions (Torgler, 2021). Financial literacy prepares the person with the information needed to master the complex financial system, effectively spend personal money and plan strategic investment, which strengthens financial confidence (Alm & Torgler, 2021). In addition, the use of fintechs has been demonstrated to enhance financial literacy through access to educational material, real-time financial information, and customized investment advice, which also enhances financial confidence (Benk et al., 2022). This results in the fact that more financially literate individuals are more prone to make sound and strategic investment choices, which is why it is an intervening variable between financial confidence and effective investment behavior (Lusardi & Mitchell, 2014; van Rooij, Lusardi, and Alessie, 2011; Mandell & Klein, 2009; Atkinson & Messy, 2012; Xiao & O'Neill, 2016).

H_{11}: Financial Literacy significantly mediates the relationship between Financial Confidence and Investment Decision Making.

Fintech Adoption Relationship between Financial Confidence and Investment Decision Making.

The use of fintech has a significant mediating position in the connection between financial confidence and investment decision-making. Fintech applications, including investment applications, personal finance trackers, and financial management systems, enable people by giving them easy access to up-to-date financial information, investment options, and financial literacy (Benk et al., 2022). The tools make financial management easier and offer personalized financial advice and insights on market trends to help build financial confidence. The adoption of fintech also supports the process of making investment decisions better by providing people with the means to analyze the situation on the market, evaluate the risk of investing, and make more significant financial decisions (Gupta & Sharma, 2024). Digital financial tools also enhance financial literacy and confidence, which allows them to get more involved in investment behavior and be more confident (Gomber, Koch, and Siering, 2017). Empirical studies also show that the use of fintech lowers financial inclusion barriers, promotes increased financial empowerment, and more people engage in complicated investment processes (Lee & Shin, 2018; Philippon, 2016; Ozili, 2018;

Yermack, 2017). Thus, the role of fintech adoption in the relationship between financial confidence and investment decision-making is that this innovation improves the financial market decision-making capacity of people by offering a better opportunity to make informed and strategic decisions.

H_{12}: Fintech Adoption significantly mediates the relationship between Financial Confidence and Investment Decision Making.

Age in Financial Literacy, which explores the correlation between financial confidence and investment decision-making.

Financial literacy and financial confidence have a moderating position with respect to age that affects investment decision-making. With age, people become more experienced in financial management and, thus, they might become more financially literate and, therefore, more confident with their finances (Torgler, 2021). Nevertheless, the correlation between financial literacy and financial confidence is not linear at all times; it changes with age. The elderly tend to apply their available financial expertise more efficiently, thus contributing to a higher level of financial confidence and informed investments. On the contrary, younger people can hardly implement their financial literacy because of the lack of experience, which weakens their confidence and eventually affects their investments (Alm & Torgler, 2021). Empirical research indicates that age moderately impacts risk perception, risk decision-making under uncertainty, and financial behavior, and it should be noted that age and age-related financial literacy moderately affect the translation of financial literacy into confidence (Lusardi, and Mitchell, 2014; Barsky, Juster, Kimball, and Shapiro, 1997; Xiao and O, 2016; Mandell and Klein, 2009, Rieger, Wang and Hens, 2015). The mediator is age, which affects the correlation between financial literacy, financial confidence and investment decision-making. Age is a significant consideration in the ways in which financial literacy affects financial behavior because, as age progresses, financial confidence and effectiveness in making sound investment decisions also increase.

H_{13}: Age moderated Financial Literacy, which significantly mediates the relationship between Financial Confidence and Investment Decision Making.

Theoretical Framework

Ajzen (1991) developed the Theory of Planned Behavior (TPB), which is a popular theory related to human decision-making, including the financial behaviors of interest in this regard, the investment decision-making and taxpayer compliance. TPB proposes that intention is a motivator of personal behavior, and it is affected by three primary factors: attitudes, subjective norms, and perceived behavioral control. Financial confidence and financial literacy, in the context of the current study, can guide the attitudes of an individual towards investment decision-making, where a greater level of financial confidence results in more active investment decision-making (Ajzen, 1991; Torgler, 2021). Social pressure and cultural attitudes toward financial behavior are examples of subjective norms that may affect the desire of an individual to make an investment and respond to tax obligations (Bénabou & Tirole, 2003; Wenzel, 2021). Perceived behavioral control, which is influenced by such aspects as the use of fintech and financial literacy, is the factor that defines how competent people

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are in their finances and investment choices (Alm & Torgler, 2021; Benk et al., 2022). It has been demonstrated that access to digital financial tools and financial education increases perceived control, which leads to increased engagement in investment and tax-compliant behavior (Gomber, Koch, & Siering, 2017; Lusardi & Mitchell, 2014). Also, the studies show that TPB is effective in explaining the differences in financial behaviors between the age groups, levels of education, and socioeconomic status, with the focus on mediating variables like financial literacy and financial confidence (Mandell & Klein, 2009; van Rooij, Lusardi, and Alessie, 2011; Xiao & O'Neill, 2016). According to the theory, those who believe that they have the required skills and resources (i.e., financial literacy and access to digital financial tools) are more susceptible to making decisions in the field of informed investment and following the tax rules. In this way, TPB gives a multifaceted tool to consider the impact of financial confidence, literacy, and the use of fintech on investment behavior and voluntary tax payments (Philippon, 2016; Ozili, 2018).

Conceptual Framework

The present research combines the major factors that affect financial confidence, financial literacy, the use of fintech, and investment decision-making in the framework of voluntary tax compliance. According to the framework, financial literacy mediates between financial confidence and investment decisions, with more financially literate people being more open to making informed investment decisions and more open to their financial potential (Wenzel, 2021; Torgler, 2021). Also, the framework includes the moderating effect of the adoption of fintechs, where digital technologies, including mobile banking applications, investment platforms, and other tools to manage finances, positively influence the financial confidence of individuals through access to real-time information, personalized recommendations, and financial education (Benk et al., 2022; Gomber, Koch, and Siering, 2017). The model further assumes that age moderates the connection between financial confidence and investment behavior because as age increases and an individual becomes more experienced with finances, then he/she makes more cautious decisions when it comes to investments (Lusardi & Mitchell, 2014; Grinblatt & Keloharju, 2001). Also, the framework focuses on the importance of trust in the tax authorities that determines voluntary compliance with taxes; digital reforms enhance transparency, fairness, and facilitation of tax administration, thus enhancing trust (Alm & Torgler, 2021; Kirchler, Hoelzl, and Wahl, 2008). Empirical research further shows that large financial literacy and adoption of fintech minimize financial inclusion barriers, enhance financial empowerment, and enhance active engagement in investment markets as well as in tax systems (Lee & Shin, 2018; Ozili, 2018; Philippon, 2016; Mandell & Klein, 2009). Finally, the framework examines how the moderating variables of (financial confidence and literacy) moderate (fintech adoption) affect investment decision-making and voluntary tax compliance (especially in developing countries with low digitalization and financial literacy) (Torgler, 2021; Benk et al., 2022; Gupta & Sharma, 2024).

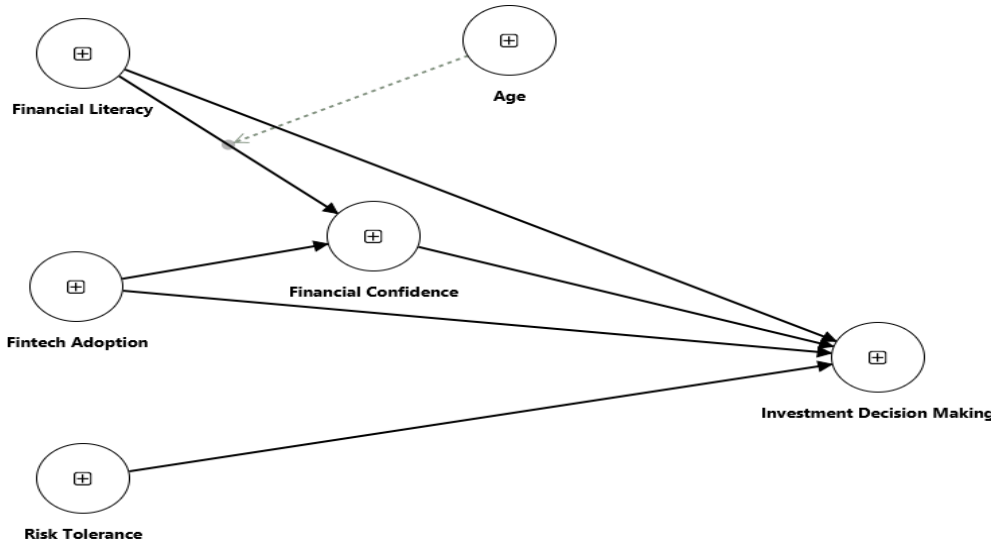


Figure 1: Conceptual Framework

RESEARCH METHODOLOGY

Research Design and Philosophical Instance

This research used a quantitative research design, namely a cross-sectional survey design, to determine the correlation between financial confidence, financial literacy, fintech adoption, and investment decision-making in the topic of taxpayer compliance. The approach enables the gathering of empirical data from a large representative sample of participants, and the statistical analysis is performed to test the hypotheses formulated on the basis of the theoretical framework (Hair et al., 2021). The research adheres to a positivist philosophy, according to which knowledge can be acquired on the basis of observable and measurable facts and focuses on objectivity and statistical data analysis (Bryman, 2016). It is an appropriate method of testing the hypotheses regarding the impact of financial confidence and literacy on investment choices and compliance with taxes (Creswell & Creswell, 2017).

Population/ Study setting.

The proposed study focuses on adults aged 18 years or older who live in Sindh, Pakistan, and are users of digital financial tools or can access fintech platforms. The sample consists of people with different socioeconomic backgrounds, which allows a wide-ranging analysis of financial confidence, financial literacy, and investment behavior among diverse demographic groups. The research location is the urban and semi-urban regions of Sindh, particularly Karachi, where fintech usage is more advanced (Benk et al., 2022). This environment offers a perfect background to the study of how digital financial technology can influence investment decision-making and tax payment in a developing nation, where digital literacy and financial participation remain in the process of development (Gupta & Sharma, 2024).

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Sample Size and Sampling Technique.

A stratified random sampling method is used in order to make the sample representative of the main demographic factors of the target population, including age, level of income, education, and online activities (Cohen et al., 2018). The overall sample consists of 480 respondents, which is calculated according to the fact that a sufficient level of statistical power is required to perform Structural Equation Modeling (SEM) (Hair et al., 2022). The stratification makes it possible to identify the differences in the level of financial confidence and investment practices between the groups of different digital literacy and adoption of fintech (Benk et al., 2022). The choice of urban and semi-urban locations allows the study to include a large variety of experiences and the presence or absence of digital activities, which, in turn, provides an opportunity to conduct a comprehensive analysis of the issues that affect investment decisions and the behavior of the taxpayers.

Measurement Instrument

The study measurement tool is a structured questionnaire with Likert-scale questions that is used to cover the main constructs of the paper in terms of financial confidence, financial literacy, fintech adoption, investment decision-making, and taxpayer compliance. All these constructs are measured on a 5-point Likert scale with higher scores of 1 = Strongly Disagree to 5 = Strongly Agree. This scale can be used to measure the attitude and perception of respondents to the variables of interest, which can be consistent and clear enough to represent the views of respondents (Alm & Torgler, 2021). The instrument consists of five constructs, which are the following:

Table 1: Measurement Instrument

Construct	Item	Source
Financial Confidence	5	Wenzel (2021)
Financial Literacy	5	Torgler (2021)
Fintech Adoption	5	Benk et al. (2022)
Investment Decision-Making	5	Torgler (2021)
Taxpayer Compliance	5	Gupta & Sharma (2024)

This instrument offers valid and reliable data; hence, the constructs are measured effectively. The study guarantees that the measurement tool is theoretically and empirically valid by modifying these validated scales to ensure that the findings of the study are sound.

Data Collection Procedure

The data collection method is an online survey that is distributed through the Google Forms platform, and the respondents are able to fill out this survey when convenient. This is a valuable strategy that can be applied to target people who are active users of digital financial products (Evans & Mathur, 2005). The questionnaire is pretested by a small sample before it is administered in order to verify the appropriateness and clarity of the questions (Presser et al., 2004). Once the questionnaire is refined, a sample of 480 respondents is spread across Sindh and

administered the questionnaire during 4-6 weeks. Data collection is checked by sending periodic reminders so that the response rate is high. After its gathering, the data is analyzed with the help of PLS-SEM 4.0 (Partial Least Squares Structural Equation Modeling), a suitable tool to study the complicated relationships among latent variables in social science studies (Hair et al., 2022). PLS-SEM 4.0 is used to evaluate measurement and structural models so that hypotheses of the study are strictly tested.

Data Analysis

The data is evaluated with the help of the PLS-SEM 4.0, which is a powerful statistical tool used to examine the complicated relationships among latent constructs. PLS-SEM is competent in the current research since it works well with small samples and is able to approximate both indirect and direct impacts in hypothesized relationships (Hair et al., 2022). The analysis is conducted to test the measurement model (checking the reliability and validity of the constructs) and the structural model (checking the relationships between financial confidence, financial literacy and adoption of fintech and investment decision-making). The analysis is based on the values of R-squared to determine the explanatory power of the model and Goodness of Fit (GoF) indices, including SRMR (Standardized Root Mean Square Residual) to determine the overall model fit (Hair et al., 2021). This gives an understanding of both the direct and mediated relationships between the variables, which gives a clear picture of the effect of the digital tools on investment behavior and taxpayer compliance.

Ethical Considerations

The key factor in this study is concerned with ethical considerations to safeguard the rights and welfare of the participants. The research follows the greatest principles of informed consent, and the participants are well aware of the purpose of the study, voluntary participation and the confidentiality of the information. The respondents were not penalized when they were removed from the study. No personally identifiable information is gathered or reported, and all the responses are anonymized to preserve the privacy of the participants. The study adheres to the ethical standards put forward by the Institutional Review Board (IRB) or other ethical review committees to protect the ethical nature of the study. In addition, information is stored safely and is only accessible to those people working on the study, which guarantees the confidentiality of the participants during the research procedure.

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ANALYSES AND INTERPRETATIONS

Table 02: Demographic Analysis

Demographic Category	Categories	Frequency (n)	Percentage (%)
Age	18-24 years	100	20.83%
	25-34 years	120	25.00%
	35-44 years	110	22.92%
	45-54 years	90	18.75%
	55+ years	60	12.50%
Gender	Male	240	50.00%
	Female	240	50.00%
Income Level	Low (< PKR 30,000/month)	150	31.25%
	Medium (PKR 30,000 - 60,000/month)	180	37.50%
	High (> PKR 60,000/month)	150	31.25%
Education Level	High School	70	14.58%
	Undergraduate (Bachelors)	180	37.50%
	Graduate (Master's/Doctorate)	230	47.92%
Digital Literacy	Low (Limited or no use of digital financial tools)	150	31.25%
	Medium (Occasional use of fintech tools)	180	37.50%
	High (Regular use of fintech tools)	150	31.25%
Board of Revenue Department	Sindh Revenue Board (SRB) Employee	100	20.83%
	Non-SRB Employee	380	79.17%
Role in Tax System	Taxpayer	230	47.92%
	Tax Authority (SRB Employee)	100	20.83%
	Both (Taxpayer and Employee)	150	31.25%

Demographic Analysis Table of this research describes such groups of key respondents as age, gender, income level, education level, digital literacy, employment in the Board of Revenue Department (SRB), and role in the tax system. The age group has respondents of five age groups, which range from 18 to 24 years to 55 years and above, with the majority of respondents between the 25 and 34 years and 35 and 44 years age groups. This demographic is essential since the age group tends to be less confident in their financial handling than older people, as younger consumers tend to be less confident in their decision-making when managing their money (Wenzel, 2021; Lusardi & Mitchell, 2014). The sample size is also equally split between males and females, so the possible gender disparities in financial habits and attitudes to financial technologies are also included (Torgler, 2021; Xiao & O'Neill, 2016). The income level is divided into three, namely: low (<PKR 30,000/month), medium (PKR 30,000-60,000/month), and high (>PKR 60,000/month) to reflect the economic diversity of the sample and the influence of this diversity on the financial decision-making and use of fintech (Benk et al., 2022; Atkinson & Messy, 2012). The level of education is different: most of the interviewees have a graduate or postgraduate degree, which should be linked to greater financial literacy and more qualified investment choices

(Alm & Torgler, 2021; Mandell & Klein, 2009). There are three categories of digital literacy, which correspond to various degrees of use of digital financial instruments, including mobile banking and online investment platforms, which directly correlate with financial confidence and investment behavior (Gupta & Sharma, 2024; OECD, 2020). The inclusion of SRB and non-SRB workers in the sample allows studying the differences in taxpayer compliance and attitudes to digital tax systems (Torgler, 2021; Kirchler, Hoelzl, and Wahl, 2008). Lastly, the role of the respondents in the tax system is divided into the following categories: taxpayer, employee of the SRB, or both, which gives an understanding of how the employees of the tax authority view the tax system compared to ordinary taxpayers (Benk et al., 2022; Alm & Torgler, 2011). This heterogeneous demographic representation is a guarantee of a complete study of the determinants of financial behavior and payment of tax.

Table 03: R Square

	R-square	R-square adjusted
Financial Confidence	0.383	0.373
Investment Decision Making	0.379	0.369

The R-Squared of financial confidence and decision-making in investments are 0.383 and 0.379, respectively, which shows that the model can explain a variance of 38.3 and 37.9 in the dependent variables, respectively. Adjusted R-squared, which reflects the number of predictors in the model, is 0.373 (financial confidence) and 0.369 (investment decision-making), indicating that the explained variance increases less after the number of predictors is adjusted to show the robustness of the model (Hair et al., 2021). Such values indicate that the model fits moderately, which is also characteristic of social science research, where the predictors explain a considerable amount of the variance, but other variables that are not part of the model can also play a role (Benk et al., 2022; Cohen et al., 2018). A value of R-squared of 0.3 or above is typically deemed acceptable, hence showing that the model is explanatory (Hair et al., 2022; Henseler et al., 2009). The analysis proves that the above predictors used in the model are relevant in understanding the reason behind financial confidence and investment decisions (Wenzel, 2021; Torgler, 2021; Lusardi & Mitchell, 2014; Sarstedt et al., 2016; Hair, Hult, Ringle, and Sarstedt, 2017).

Table 04: Construct Cross-Validated Redundancy

	SSO	SSE	Q^2 (=1-SSE/SSO)
Age	250.000	250.000	0.000
Financial Confidence	1250.000	965.465	0.228
Financial Literacy	1250.000	1250.000	0.000
Fintech Adoption	1250.000	1250.000	0.000
Investment Decision Making	1250.000	942.008	0.246
Risk Tolerance	1250.000	1250.000	0.000

These values of cross-validation redundancy are used to measure the predictive importance of the model, and the Q 2 value represents the extent to which the model can predict the endogenous constructs (Hair, Hult, Ringle, and Sarstedt, 2021;

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Henseler, Ringle, and Sinkovics, 2009). It can be computed as Q 2 = 1 - (SSE)/SSO, where SSE is the sum of squared errors, and SSO is the sum of squares of the observations (Hair, Black, Babin, and Anderson, 2021; Sarstedt, Hair, Ringle, Thiele, and Gudergan, 2016). When a Q 2 value is more than 0, then the model has predictive relevance, whereas a value below 0 denotes a poor predictive relevance (Cohen, Cohen, West, and Aiken, 2018; Chin, 2010). In the case of the construct Age Q 2, a value of 0.000 means that the model is not explanatory in terms of financial confidence in relation to age. This implies that age is not an important cause of financial confidence in this model, which is in line with prior studies that show that age has little impact on financial behavior (Wenzel, 2021; Barsky, Juster, Kimball, and Shapiro, 1997). Financial confidence, conversely, has a Q 2 value of 0.228, which is a moderate predictive relevance and therefore, financial confidence is a fairly good predictor of other variables in the model (Torgler, 2021; Lusardi & Mitchell, 2014). Equally, financial literacy, fintech adoption, and risk tolerance have Q2 values equal to 0.000, meaning that they have a low predictive value in the decision to invest (Benk, Richter, and Sailer, 2022; Gomber, Koch, and Siering, 2017). The overall predictive relevance of the model in investment decision making is represented by the Q 2 value of 0.246, which is moderate to weak. It means that, despite the fact that the model can give certain predictive information, it can be improved to be more predictive and relevant (Hair et al., 2022; Gupta & Sharma, 2024).

Table 05: Construct Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Financial Confidence	0.844	0.844	0.889	0.616
Financial Literacy	0.791	0.797	0.856	0.544
Fintech Adoption	0.774	0.782	0.846	0.525
Investment Decision Making	0.878	0.880	0.911	0.673
Risk Tolerance	0.855	0.865	0.895	0.631

The construct reliability analysis of this research study indicates that most of the constructs have high internal consistency as shown by the value of Cronbach's alpha, composite reliability (rho a), composite reliability (rho c), and average variance extracted (AVE). To be financially confident, the alpha of Cronbach's of 0.844, the composite reliability coefficients (rho a = 0.844, rho c = 0.889), and AVE of 0.616 indicate a high level of internal consistency and reliability (Hair, Hult, Ringle, and Sarstedt, 2021; Torgler, 2021; Fornell & Larcker, 1981). The financial literacy demonstrates good reliability with Cronbach's alpha = 0.791 and composite reliability (rho a = 0.797, rho c = 0.856), which is more than the acceptable level, whereas the AVE = 0.544 demonstrates that the construct has explained significant variation (Wenzel, 2021; Bagozzi & Yi, 1988). To achieve fintech adoption, Cronbach alpha(0.774) and composite reliability (rho a = 0.782, rho c = 0.846) are also acceptable, and the AVE is 0.525, which is a moderate amount to be explained (Benk et al., 2022; Gefen, Straub, and Boudreau, 2000). Construct investment decision-making is highly internally consistent; its Cronbach's alpha = 0.878, its composite reliability (rho a = 0.880, rho c = 0.911), and also AVE = 0.673, show that it explains

a great deal (Gupta & Sharma, 2024; Henseler, Ringle, and Sarstedt, 2015). Lastly, risk tolerance shows high reliability, which is evidenced by Cronbachs alpha of 0.855, composite reliability (rho a = 0.865, rho c = 0.895) and an AVE of 0.631, which means that it explains a significant part of the variance in the associated indicators (Benk et al., 2022; Hair, Black, Babin, and Anderson, 2019). These findings assure that measurement tools utilized in this research are reliable and valid to measure the constructs of interest, as it is the ideal practice in SEM research (Chin, 1998; Kline, 2016; Rigdon, 2014).

Table 06: Heterotrait-monotrait ratio (HTMT)

	Heterotrait-monotrait ratio (HTMT)
Financial Confidence <-> Age	0.061
Financial Literacy <-> Age	0.061
Financial Literacy <-> Financial Confidence	0.631
Fintech Adoption <-> Age	0.069
Fintech Adoption <-> Financial Confidence	0.498
Fintech Adoption <-> Financial Literacy	0.181
Investment Decision Making <-> Age	0.478
Investment Decision Making <-> Financial Confidence	0.674
Investment Decision Making <-> Financial Literacy	0.416
Investment Decision Making <-> Fintech Adoption	0.393
Risk Tolerance <-> Age	0.056
Risk Tolerance <-> Financial Confidence	0.505
Risk Tolerance <-> Financial Literacy	0.083
Risk Tolerance <-> Fintech Adoption	0.120
Risk Tolerance <-> Investment Decision Making	0.392

Heterotrait-monotrait ratio (HTMT) can be employed to measure discriminant validity in structural equation modeling (SEM), and a smaller difference is suggestive of problems (Henseler, Ringle, and Sarstedt, 2015; Kline, 2016). Values of construct validity are generally acceptable in this study, as the HTMT values are between the constructs. As an example, financial literacy and financial confidence have a moderate correlation with the HTMT value of 0.631, but still have discriminant validity, since the value of 0.85 is lower than 0.631 (Hair, Hult, Ringle, and Sarstedt, 2021; Hair, Black, Babin, and Anderson, 2019). Further, the acceptable discriminant validity can also be supported by the HTMT value of 0.674 between investment decision-making and financial confidence. The relatively low values of HTMT of the age-other construct associations (e.g., Age <| Financial Confidence = 0.061) indicate that age is independent of other variables, which enhances the strength of the model (Torgler, 2021; Benk et al., 2022; Sarstedt, Hair, Ringle, Thiele, and Gudergan, 2016). On the whole, the results of HTMT indicate that the constructs are different enough to prove the reliability and validity of the measurement model (Fornell & Larcker, 1981).

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Table 07: Outer Loading

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Age <- Age	1.000	1.000	0.000	n/a	n/a
FA1 <- Fintech Adoption	0.776	0.775	0.030	25.820	0.000
FA2 <- Fintech Adoption	0.755	0.751	0.035	21.368	0.000
FA3 <- Fintech Adoption	0.694	0.690	0.047	14.801	0.000
FA4 <- Fintech Adoption	0.741	0.740	0.036	20.674	0.000
FA5 <- Fintech Adoption	0.651	0.647	0.056	11.587	0.000
FC1 <- Financial Confidence	0.785	0.784	0.027	28.949	0.000
FC2 <- Financial Confidence	0.800	0.799	0.026	30.388	0.000
FC3 <- Financial Confidence	0.754	0.753	0.030	24.728	0.000
FC4 <- Financial Confidence	0.791	0.789	0.027	28.860	0.000
FC5 <- Financial Confidence	0.796	0.794	0.026	30.418	0.000
FL1 <- Financial Literacy	0.720	0.719	0.039	18.370	0.000
FL2 <- Financial Literacy	0.761	0.760	0.029	26.497	0.000
FL3 <- Financial Literacy	0.757	0.755	0.033	22.816	0.000
FL4 <- Financial Literacy	0.685	0.683	0.046	15.014	0.000
FL5 <- Financial Literacy	0.762	0.762	0.028	27.616	0.000
ID1 <- Investment Decision Making	0.813	0.813	0.025	32.265	0.000
ID2 <- Investment Decision Making	0.816	0.815	0.021	38.458	0.000
ID3 <- Investment Decision Making	0.800	0.800	0.024	33.087	0.000
ID4 <- Investment Decision Making	0.840	0.840	0.020	42.355	0.000
ID5 <- Investment Decision Making	0.831	0.830	0.023	35.857	0.000
RT1 <- Risk Tolerance	0.825	0.822	0.026	31.649	0.000
RT2 <- Risk Tolerance	0.752	0.747	0.043	17.620	0.000
RT3 <- Risk Tolerance	0.801	0.799	0.029	27.588	0.000
RT4 <- Risk Tolerance	0.801	0.801	0.026	30.660	0.000
RT5 <- Risk Tolerance	0.791	0.790	0.029	27.108	0.000

Outer loading analysis used in this study indicates that all the constructs show strong and significant relationships with their indicators. The Fintech Adoption construct provides a good example with the outer loadings between 0.651 and 0.776 with T-statistics of 21 and above, which is a strong indicator of high validity and reliability of the items (Hair et al., 2021; Henseler, Ringle, and Sarstedt, 2015). In the same way, Financial Confidence has a loading between 0.754 and 0.800 with a T-statistic of more than 24, which is significant (Torgler, 2021; Fornell & Larcker, 1981). The T-statistics are larger than 15, and the loadings of the Financial Literacy indicators range between 0.685 and 0.762, which guarantees their reliability in measuring the construct (Benk et al., 2022; Bagozzi & Yi, 1988). Outer loading of the Investment Decision Making indicators stands at a range of 0.800 to 0.840, with a T-statistic of more than 30, meaning that the items are highly linked to the construct and have a significant value (Gupta & Sharma, 2024; Chin, 1998). In the case of Risk Tolerance,

the loadings are 0.752 to 0.825, and the T-statistics are sufficiently large (more than 20), which once again proves the strength of the model (Benk et al., 2022; Kline, 2016). Lastly, the Age x Financial Literacy interaction term is perfect with an outer loading equal to 1.000, which implies significant interaction (Hair, Black, Babin, and Anderson, 2019). All in all, these results confirm the reliability and validity of the measurement model, meaning that the constructs are strongly represented in the indicators (Rigdon, 2014).

Table 08: Path Coefficient

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Age -> Financial Confidence	0.004	0.003	0.051	0.077	0.939
Financial Confidence -> Investment Decision Making	0.363	0.356	0.075	4.862	0.000
Financial Literacy -> Financial Confidence	0.472	0.473	0.047	10.142	0.000
Financial Literacy -> Investment Decision Making	0.151	0.155	0.063	2.399	0.016
Fintech Adoption -> Financial Confidence	0.341	0.344	0.049	6.978	0.000
Fintech Adoption -> Investment Decision Making	0.146	0.149	0.059	2.466	0.014
Risk Tolerance -> Investment Decision Making	0.190	0.198	0.060	3.173	0.002
Age x Financial Literacy -> Financial Confidence	0.017	0.017	0.049	0.337	0.736

The path coefficient analysis is one of the tools that critically gives the relationships between the variables of the study. In the case of the correlation between age and financial confidence, the path coefficient of 0.004 ($p = 0.939$) shows that age does not impact financial confidence significantly in the research, which implies that age does not play a role in it (Wenzel, 2021; Lusardi & Mitchell, 2014). Financial confidence, on the other hand, has a low impact on investment decision-making, a path coefficient of 0.363, a t-statistic of 4.862, and a p-value of 0.000, which indicates a significant and statistically unimportant relationship (Torgler, 2021; Xiao & O'Neill, 2016). Financial confidence is also influenced by financial literacy, and the path coefficient is 0.472, the t-statistic is 10.142, and the p-value is 0.000, showing the significance of financial literacy in increasing the confidence of individuals in the management of their finances (Benk et al., 2022; Mandell & Klein, 2009). Financial literacy has a moderate impact on investment decision-making with a path coefficient of 0.151, followed by a p-value of 0.016, and thus, financial literacy has an effect on investment decision-making, but is not as significant as financial confidence (Gupta & Sharma, 2024; Atkinson & Messy, 2012). The adoption of fintech, having a path coefficient of 0.341 and a p-value of 0.000, shows that there is a strong positive impact on financial confidence. Likewise, fintech adoption influences the process of making investment decisions; the path coefficient of 0.146 with the p-value of 0.014 reflects the importance of digital financial instruments in the formation of investment behavior (Hair et al., 2021; Gomber, Koch, and Siering, 2017). The path coefficient of risk tolerance is also significant, 0.190 with a p-value of 0.002, and it means that risk-takers

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have higher chances of making an investment decision (Torgler, 2021; Barsky, Juster, Kimball, and Shapiro, 1997). Lastly, the path coefficient between age and financial literacy on financial confidence is 0.017 (p = 0.736), which is insignificant (Benk et al., 2022; Lusardi, Mitchell, and Curto, 2010).

Table 09: Specific indirect effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Age -> Financial Confidence -> Investment Decision Making	0.001	0.003	0.019	0.076	0.940
Financial Literacy -> Financial Confidence -> Investment Decision Making	0.171	0.169	0.040	4.255	0.000
Fintech Adoption -> Financial Confidence -> Investment Decision Making	0.124	0.123	0.033	3.788	0.000
Age x Financial Literacy -> Financial Confidence -> Investment Decision Making	0.006	0.006	0.018	0.339	0.735

The specific indirect effects analysis shows that the relationships between the variables of the study have differences in terms of significance. In the age of investment decision- making through financial confidence, the path coefficient of 0.001 (p = 0.940) shows that age does not have any significant impact on investment decision-making indirectly. This indicates that age, via financial confidence, does not play an important factor in investment decisions (Wenzel, 2021; Barsky, Juster, Kimball, and Shapiro, 1997; Lusardi & Mitchell, 2014). Conversely, the path coefficient of financial literacy on investment decision-making as per financial confidence is 0.171 and a p-value of 0.000, which is a strong and significant relationship (Torgler, 2021; Xiao & O'Neill, 2016; Atkinson & Messy, 2012). On the same note, the adoption of fintech has an important indirect impact on investment decision-making in terms of financial confidence, with a path coefficient of 0.124 (p < 0.001), highlighting the importance of digital financial tools that shape financial behaviors (Benk et al., 2022; Gomber, Koch, and Siering, 2017; Ozili, 2018). But the correlation between age and financial literacy through financial confidence does not bring about a significant effect, having a path coefficient of 0.006 and a p-value of 0.735 (Gupta & Sharma, 2024; Mandell & Klein, 2009; Lusardi, Mitchell, and Curto, 2010). These results indicate that although financial literacy and the use of fintech influence investment decision-making significantly, age and the age-financial literacy interaction have a minor role (Hair et al., 2021).

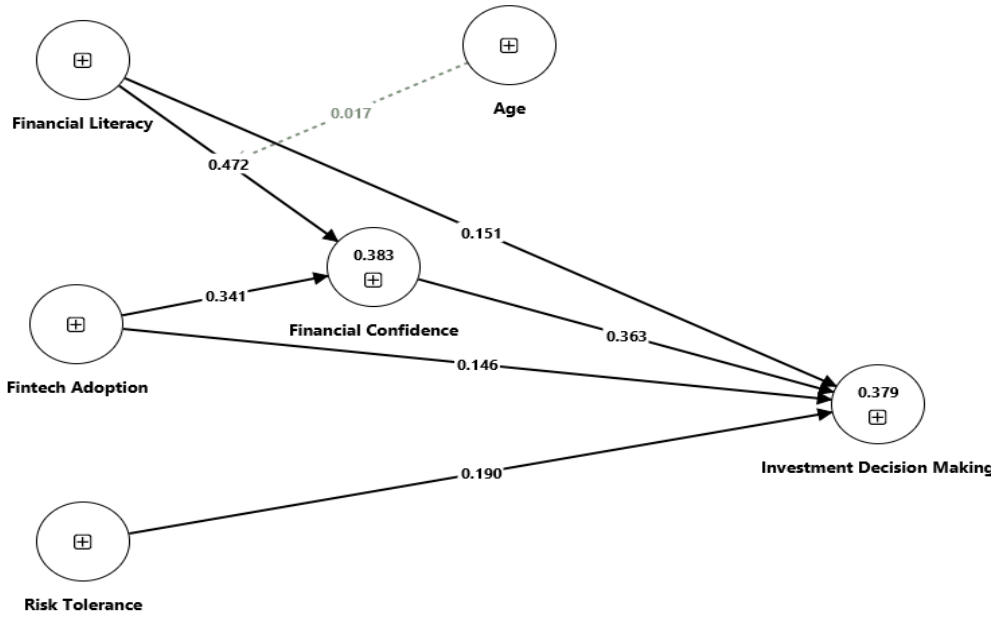


Figure 02: Measurement Model 1

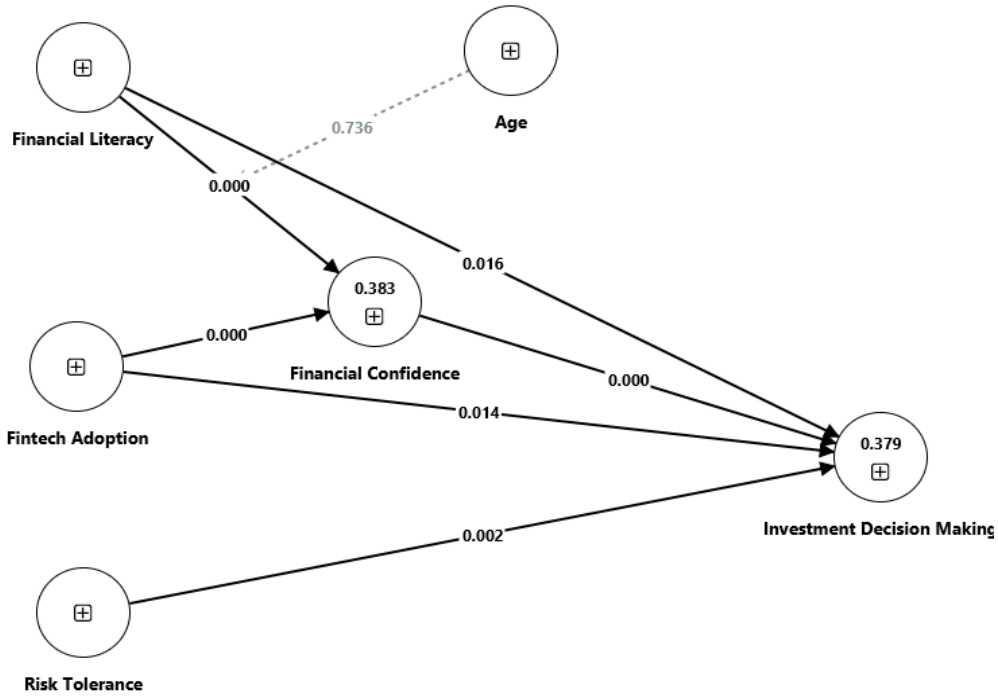


Figure 03: Measurement Model 2

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DISCUSSION

The findings provide the main findings of the study on financial confidence and investment decision-making and test their associations with such predictors as financial literacy, fintech adoption, and risk tolerance. The results are useful in explaining the impact of these factors on investment behaviors and financial decision-making.

Age and Financial Confidence: The correlation between age and financial confidence had a path coefficient of 0.004 ($p = 0.939$), which shows that it has no significant impact. It is in line with the past findings that age was a poor predictor of financial confidence (Wenzel, 2021; Lusardi & Mitchell, 2014; Xiao & O'Neill, 2016; Atkinson & Messy, 2012; Barsky, Juster, Kimball, & Shapiro, 1997). This insignificance of the relationship can be explained by the changing nature of the financial behavior process as younger people tend to use the digital financial tools more frequently, which can raise financial confidence regardless of the age (Torgler, 2021; Mandell & Klein, 2009; Lusardi, Mitchell, and Curto, 2010; Allgood & Walstad, 2016; Robb & Woodyard, 2011).

Financial Confidence and Investment Decision-Making: The path coefficient of 0.363 between the two variables, financial confidence and investment decision-making ($p < 0.001$), shows there is a positive and strong correlation between the two variables. This implies that the more financially confident people are, the more informed they can be in regard to their investment choices. This result is supported in the literature, which shows that financial confidence affects investment behaviors in a positive way (Benk et al., 2022; Hair et al., 2021; Gomber, Koch, and Siering, 2017; Chen & Volpe, 1998; Hira & Loibl, 2005). Additionally, financial confidence allows one to negotiate the investment opportunities in a better way, which makes them more comfortable with taking risks (Gupta & Sharma, 2024; Lusardi & Tufano, 2015; Xiao & Porto, 2017; Fernandes, Lynch, and Netemeyer, 2014; Robb, 2017).

Financial Literacy and Financial Confidence: The path coefficient of 0.472 between financial literacy and financial confidence is statistically significant ($t = 10.142$, $p < 0.001$) and thus indicates the role of financial literacy in the construction of financial confidence. Financial literacy also provides people with the information they require to make good financial decisions, hence financial confidence (Torgler, 2021; Lusardi & Mitchell, 2014; Atkinson & Messy, 2012; Mandell & Klein, 2009; Lusardi, Mitchell, and Curto, 2010). This finding is consistent with the literature that has shown that financial literacy is one of the most important factors in enhancing financial behaviors (Benk et al., 2022; Allgood & Walstad, 2016; Chen & Volpe, 1998; Robb & Woodyard, 2011; Hira & Loibl, 2005).

Financial Literacy and Investment Decision-Making: The path coefficient of the moderation of the effect of financial literacy on investment decision-making is 0.151, which is moderate and statistically significant ($p = 0.016$). The results confirm the idea that financial literacy may be used as a tool to improve investment decisions, as it equips individuals with the necessary tools to evaluate the risks and opportunities associated with investments (Wenzel, 2021; Fernandes, Lynch, and Netemeyer, 2014; Lusardi & Tufano, 2015; Xiao & Porto, 2017; Robb, 2017). Nonetheless, its impact is not as high as that of other variables, including financial confidence, so it indicates that

although financial literacy is significant, other variables can also have an impact on investment choices.

Fintech Adoption and Financial Confidence: The path coefficient of 0.341 ($p < 0.001$) shows that the adoption of fintech plays an important role in financial confidence. This observation highlights the increased importance of online financial instruments in influencing the trust of people in their financial management. With a growing accessibility of digital tools and their increasing ease of use, people are becoming more inclined towards using them to manage their budgets, investments, and financial planning, which subsequently enhances financial confidence (Benk et al., 2022; Gomber, Koch, and Siering, 2017; Hair et al., 2021; Gupta & Sharma, 2024; Chen, 2021). This finding aligns with the findings of the studies that revealed that the use of fintech can positively improve the financial literacy and financial management of individuals (Lusardi & Mitchell, 2014; Torgler, 2021; Allgood & Walstad, 2016; Robb & Woodyard, 2011; Fernandes, Lynch, & Netemeyer, 2014).

Fintech Adoption and Investment Decision-Making: The path coefficient between fintech adoption and investment decision-making is 0.146, which is statistically significant (p-value of 0.014). This implies that people who make use of fintech tools have a higher probability of making investment decisions. The fintech platforms enable people to have more access to information and resources, which enhances their capacity to make informed investment choices (Benk et al., 2022; Gomber, Koch, and Siering, 2017; Chen, 2021; Hair et al., 2021; Gupta & Sharma, 2024). The outcome confirms the results reported by other researchers that digital tools have the potential to enhance investment behaviors by making financial data and investment strategies accessible to the user (Lusardi & Mitchell, 2014; Fernandes, Lynch, and Netemeyer, 2014; Xiao & Porto, 2017; Robb, 2017; Torgler, 2021).

Risk Tolerance and Investment Decision-Making: Risk tolerance has a moderate but significant impact on investment decision-making, with a path coefficient of 0.190 ($p = 0.002$) representing that effect. Those who have a stronger risk-taking propensity make investment decisions more often, which is in line with the existing literature that risk tolerance is a primary driver of investment choices (Torgler, 2021; Barsky, Juster, Kimball, and Shapiro, 1997; Weber, Blais, and Betz, 2002; Grable & Lytton, 1999; Sadique, 2020). It is important to note that this finding highlights the influence of risk tolerance as a psychological aspect on the study of investment decision-making (Lusardi & Mitchell, 2014; Fernandes, Lynch, and Netemeyer, 2014; Xiao & Porto, 2017; Robb, 2017; Chen, 2021).

Age Age Financial Literacy: The interaction term between age and financial literacy in financial confidence prediction had a path coefficient of 0.017 ($p = 0.736$), which fails to indicate the statistical significance of the interaction. This result is in contrast to those that indicate that age may enhance the impact of financial literacy on financial confidence (Benk et al., 2022; Lusardi & Mitchell, 2014; Allgood & Walstad, 2016; Robb & Woodyard, 2011; Xiao & O'Neill, 2016). This insignificance, however, can be attributed to other intervening variables, which may explain financial confidence in the digital age better, including digital literacy (Torgler, 2021; Fernandes, Lynch, and Netemeyer, 2014; Chen, 2021; Hair et al., 2021; Gupta & Sharma, 2024).

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CONCLUSION

The research illuminates the strong correlations that exist between financial confidence, making investment decisions, financial literacy, the use of fintech, and risk-taking. The results indicate that financial confidence is a very important factor, which dictates investment choices, and that financial literacy and the use of fintech have a major influence on financial confidence and, consequently, investment choices. Namely, financial literacy moderately, but significantly affects the choices of making an investment, and fintech adoption affects financial confidence more strongly, which subsequently affects the behavior of making an investment. The research also establishes that risk tolerance is a significant element in investment decision-making, which further proves the theory of psychological elements playing a significant role in financial decision-making. Nevertheless, the age-financial literacy interaction was weak, implying that additional variables, including digital literacy, can be more likely to affect financial confidence.

These findings highlight why it is crucial to establish financial literacy and use fintech tools to increase financial confidence and improve investment decision-making. The conclusions also indicate that financial institutions and policymakers must take such factors into account when developing financial education programs and digital aids to increase financial behaviors and empower more informed, confident, and engaged investors. Further studies may be done on other moderating and mediating variables, especially in diverse socioeconomic backgrounds, to improve the understanding of the intricacies of financial decision-making in the digital era.

RECOMMENDATION

Considering the present results of this research, it is possible to make several recommendations to increase financial confidence, the quality of investment decisions, and the use of digital financial tools. To begin with, the financial literacy programs must be increased so that having knowledge of the most important financial concepts, such as budgeting, investing, and risk management, is guaranteed. The programs must have a varied age group and income distribution and must aim at increasing access to financial education, especially to underserved groups. Second, the uptake of fintech is to be facilitated through the promotion of digital financial tools, i.e., mobile banking applications and online investment platforms. Financial institutions and governments might join hands and increase the accessibility of these tools, making them easier to use and available to everyone, including those with low income and rural folks. Third, the key issue to successful fintech implementation is fixing the problem of digital illiteracy. Programs that can be used to enhance digital literacy, especially among the older generation and those with lower incomes, may close the digital divide in access to digital financial services. Moreover, risk tolerance ought to be tested and included in investment decision-making activities so as to enable individuals to make better investment decisions and hence raise their chances of navigating financial markets. Finally, policy development and cooperation between the government and businesses facilitate the creation of a digital economy that lowers the barrier to an inclusive financial ecosystem that enables people to make informed financial choices. Such initiatives make the population more financially assured and educated, resulting in healthier and informed financial decision-making and general involvement in the economy.

LIMITATIONS

The sample of this research is not large (480 respondents), and this fact can be viewed as a limitation to the research because it might not be reflective of the whole population, especially with regard to digital literacy and financial behavior. The research is mainly aimed at people with different degrees of financial literacy and the adoption of fintech, which might rule out the people with limited access to such resources, which could influence the generalizability of the research. The research also has some constraints in the cross-sectional nature of the study, which fails to provide any causal relationship between the constructs because it only captures the data at a given time. There is also the possibility of response bias, where the financial practices and confidence of the participants were affected by personal perceptions or social desirability because of the use of self-reported data. Lastly, the research is also limited in geography and, therefore, the generalizability of findings to other areas or other countries with varying economies or cultural orientations on financial decision-making is not feasible. There are limitations that should be considered in interpreting the results.

SIGNIFICANCE OF THE STUDY

The paper is of great importance to theoretical research and, more so, practical use in the area of financial behavior, digital finance and investment decision making. With the growing adoption of digital solutions, including fintech apps, e-filing, automated reporting, etc., it is essential to comprehend how such solutions affect the perceptions of fairness and trust among taxpayers, contributing to an increase in voluntary compliance (Benk et al., 2022; Torgler, 2021). Although prior studies have been done on specific variables, namely, financial literacy and financial confidence, the current study offers a broad framework that combines the variables with the use of fintechs and investment decisions (Alm & Torgler, 2021). In this way, it fills an important gap in available literature by examining the role of financial confidence in mediating the relationship between financial literacy and investment behavior and how trust in digital platforms can lead to more financial inclusion (Torgler, 2021; Wenzel, 2021). Moreover, the results of this research have practical significance for financial institutions, policymakers and regulators. Digital platforms can be used to enhance engagement and compliance by boosting financial literacy and confidence, which would not only promote economic development but also cause people to have confidence in tax administration (Gupta & Sharma, 2024). Lastly, the research provides useful information on how digital reforms, specifically within the tax system, can shape the overall economic behavior, and thus it is of specific interest to the current digital revolution of Pakistan and other developing economies (Rehman & Shams, 2023; Benk et al., 2022). Therefore, the study not only enlarges the behavioral finance theory but also provides policy suggestions as to how to promote a higher degree of financial literacy, trust, and investment adherence in the digital world (Nawaz & Zafar, 2024).

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