

Article

Government Policies for Promoting Financial and Fiscal Literacy: Evidence from a Questionnaire-Based Study

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Abstract

This paper aims to assess the level of financial and tax literacy among the resident population in Portugal, as well as to evaluate their perception of existing public measures in this field. Financial literacy is a key pillar for individual development and for making informed economic decisions. Recent data indicate that Portugal lags behind the European average in this area, underscoring the importance of this research. Using a questionnaire applied to a representative sample of the Portuguese population, the data were analysed through statistical methods. The results reveal a reasonable level of knowledge in areas such as budgeting and saving, but also significant shortcomings in the tax domain. In a global context marked by economic, political, and geopolitical instability, financial literacy stands out as a strategic skill essential for both individual and collective resilience. A lack of competence in this area is linked to poor financial decisions, over-indebtedness, and economic exclusion. The findings underline the need for a more systematic and structured approach to financial literacy in Portugal. This study offers practical recommendations designed to promote a more informed, prepared, and financially inclusive population, thereby contributing to the country's economic sustainability and development.

Keywords: financial literacy; tax literacy; public policies; financial education; economic inclusion; financial behaviour



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1. Introduction

The rapid shifts observed in the global economic and political landscape, coupled with the increasing complexity of financial systems driven by digitalisation, have created a pressing need for citizens to acquire new competencies. In this context, financial and tax literacy constitute essential tools, enabling individuals to manage their personal finances more effectively and contribute to a more sustainable economy (European Commission, 2023). These literacies extend beyond theoretical understanding, as they influence attitudes and behaviours that support more conscious and responsible decision-making (Sticha & Sekita, 2023).

Proficiency in financial and tax matters is now broadly recognised as indispensable in contemporary society. It reinforces individuals' roles as economic agents and promotes a more informed and collaborative relationship with the national tax and economic system (Sticha & Sekita, 2023). The State plays a central role in this domain, as well-designed public policies can inform and empower citizens to apply relevant knowledge in their daily lives. The development and effective implementation of financial education initiatives—moving

beyond the mere transmission of information—are crucial for this purpose. However, their impact depends largely on accessibility, clarity, and alignment with the specific needs of the population.

Data indicate that the Portuguese population displays insufficient levels of financial knowledge relative to other EU Member States, ranking second lowest among them (European Commission, 2023). This shortfall may jeopardise individual financial stability and undermine both the fairness and the efficiency of the tax system, as well as the redistribution of resources.

The objective of this article is to analyse the level of financial literacy among the population residing in Portugal and to assess citizens' evaluations of public measures aimed at promoting financial literacy.

In Portugal, several policies have been introduced to promote financial literacy, including the National Plan for Financial Education (PNFF) and various educational campaigns. Despite these initiatives, their effectiveness remains uncertain due to shortcomings in communication strategies, outreach capacity, and the absence of continuous monitoring and evaluation mechanisms.

The growing complexity of taxation, compounded by frequent legislative changes and the digitalisation of tax processes, demands more advanced knowledge to ensure compliance and adaptability. This scenario underscores the urgent need to rethink and strengthen government policies, ensuring that they are inclusive, accessible, and effective in enabling Portuguese citizens to navigate the evolving fiscal landscape.

The article is structured into six sections. Following this introduction, Section 2 presents the literature review, tracing the evolution of the concept of financial literacy, its relevance to everyday decision-making, existing gaps, and selected implemented initiatives. Section 3 outlines the adopted methodology, while Section 4 reports the results, examining participants' sociodemographic characteristics, knowledge levels, behaviours, financial perceptions, and differences across key variables. Section 5 discusses the findings and considers their practical implications. Finally, Section 6 presents the conclusions, identifying weaknesses in financial and tax literacy among the Portuguese population, the influence of prior training, the evaluation of public policies, and recommendations such as compulsory financial education and targeted adult training programmes.

2. Literature Review

2.1. Concepts of Financial and Fiscal Literacy

2.1.1. Definition of Financial Literacy

According to the OECD (2013), literacy encompasses not only the ability to read and write but also the capacity to apply these skills to acquire knowledge, develop competencies, and participate actively in society. When applied to the financial domain, this definition broadens to include the understanding of financial concepts and risks, as well as the practical application of such knowledge to enhance both individual and collective financial well-being, thereby fostering more informed participation in economic activities (OECD, 2013).

The Banco de Portugal (2011) reinforces this perspective by emphasising that financial literacy extends beyond technical expertise and also encompasses the attitudes and behaviours adopted by individuals when making financial decisions. Its importance has grown in a context marked by constant transformations in the financial system, where individuals are increasingly required to make complex decisions involving savings, investment, credit, and financial protection (Houston, 2010). Atkinson and Messy (2012) note that insufficient financial literacy can result in poor decision-making, which in turn may lead to excessive indebtedness and inadequate preparation for financial contingencies.

The relevance of financial literacy is further heightened by digital transformation and the growing individual responsibility associated with pensions and long-term financial planning. In this context, knowledge of key concepts such as interest, inflation, and risk diversification is essential to promoting financial security and preventing financial exclusion (Sticha & Sekita, 2023; Lusardi & Mitchell, 2014).

Financial literacy also entails an understanding of more complex and emerging issues, including the capacity to navigate financial innovations such as cryptocurrencies and digital investment platforms. As Sticha and Sekita (2023) observe, the increasing digitalisation of financial services demands that individuals be better equipped to assess both the opportunities and the risks associated with these products.

2.1.2. Definition of Fiscal Literacy

Taxation is commonly defined as the set of taxes in force and the corresponding legal provisions that enable the public treasury to assume responsibility for financing State expenditures. The tax system comprises the rules, principles, and mechanisms that regulate the levying and collection of public revenue, with the dual purpose of funding public expenditure and redistributing wealth within society (Pereira, 2023).

In this context, tax education emerges as a crucial instrument for reshaping the relationship between the State and its citizens. Insufficient knowledge of the tax system can distort taxpayers' perceptions and lead to inadequate decision-making, including non-compliance with tax obligations. When effectively implemented, tax education informs citizens of their responsibilities, reinforces trust in the system, and promotes greater transparency and fairness (Palma & Pita, 2015).

Furthermore, tax education plays a significant role in addressing tax fraud and evasion. Citizens who possess adequate knowledge of the tax system are more aware of the legal and social consequences of their actions, thereby contributing to a reduction in evasion (Palma & Pita, 2015). Saad (2014) notes that tax literacy is positively associated with compliance behaviour: the more informed individuals are about taxation, the more likely they are to meet their fiscal obligations appropriately. However, the author also observes that previous research reveals some inconsistencies, indicating that the impact of tax knowledge on compliance may vary and should be analysed in light of the broader legal and social context in which taxpayers operate.

2.2. Importance of Financial Literacy

The importance of financial literacy for both individual financial management and macroeconomic stability is widely acknowledged in the literature. Hastings et al. (2013) argue that financial literacy facilitates the understanding of essential concepts such as compound interest and investment diversification, knowledge that is directly linked to financial security and individuals' capacity to cope with crises. Without such understanding, individuals are more likely to make poor financial decisions, which can undermine personal well-being and, on a broader scale, negatively affect the national economy.

Bernheim et al. (2001) examined the relationship between formal financial education and saving behaviour in adulthood. Their findings indicate that individuals who received financial education during their school years exhibit higher savings rates than those without such exposure, suggesting that financial literacy acquired early in life has long-term benefits for economic stability. Van Rooij et al. (2011) investigated the influence of financial literacy on asset allocation among Dutch investors, concluding that individuals with higher literacy levels are more likely to invest in equities and diversify their portfolios. This behaviour increases returns and mitigates financial risk. Cole et al. (2014) assessed the impact of financial education policies on the financial behaviour of residents in the United

States. Their results show that government initiatives aimed at increasing financial literacy can contribute to reducing economic inequalities by promoting access to sound financial practices across different social groups. Such inclusion is vital for counteracting economic exclusion and fostering a more equitable and resilient society.

According to [Atkinson and Messy \(2012\)](#), individuals with higher levels of financial literacy tend to adopt more effective saving and investment practices, thereby strengthening the capital base of the economy and creating conditions conducive to sustainable growth. Responsible use of financial products not only enhances consumption and investment capacity but also contributes to building an economy that is less vulnerable to shocks. [Behrman et al. \(2012\)](#) further reinforce this connection, demonstrating that countries with higher levels of financial literacy possess more resilient and productive human capital. This, in turn, stimulates long-term investment, boosts labour productivity, and constitutes a key driver of economic development. Findings by [Klapper et al. \(2013\)](#) indicate that financially knowledgeable individuals are less likely to incur excessive debt and more inclined to engage in saving and investment practices, contributing to a more stable macroeconomic environment. Lower indebtedness reduces the economy's exposure to crises and facilitates adaptation to economic fluctuations.

In the Portuguese context, [Santos and Tavares \(2020\)](#) found that although overall levels of financial literacy are satisfactory, knowledge of financial risks remains insufficient. Their results show a positive relationship between general financial knowledge and risk awareness, largely determined by sociodemographic factors such as gender, education, and income. The authors underline the importance of strengthening financial education in schools to improve risk management capabilities.

[Fernandes et al. \(2014\)](#) further contend that financial literacy can reduce inequalities by expanding access to financial knowledge and investment opportunities. By enabling individuals from diverse social backgrounds to participate responsibly in financial markets, public literacy initiatives promote more inclusive and equitable economic growth, contributing to a less polarised society and a more balanced distribution of wealth.

The major financial crises of recent decades, including the 2008 global financial crisis and the European sovereign debt crisis, have highlighted the global need for improved financial literacy. These events illustrated how the absence of financial knowledge exacerbates both individual hardship, such as loss of savings and financial distress, and societal consequences, including economic instability and widespread unemployment ([Hastings & Mitchell, 2020](#)).

[Lusardi and Mitchell \(2014\)](#) argue that the 2008 crisis exposed widespread ignorance regarding complex financial products, such as subprime mortgages, which were central to triggering the global downturn. A lack of understanding led many to make misguided decisions, resulting in excessive indebtedness. [Klapper et al. \(2013\)](#) similarly note that, in the European sovereign debt crisis, limited knowledge of interest rates and loan conditions intensified financial difficulties, as individuals made harmful choices and accumulated unsustainable levels of debt. [Atkinson and Messy \(2012\)](#) observe that financially literate individuals are better able to avoid indebtedness and display greater resilience during periods of crisis.

[Cole et al. \(2011\)](#) emphasise that the ability to recover from economic shocks is strongly linked to personal financial stability and that financial education programmes implemented in the aftermath of crises significantly enhance financial resilience. [Hastings and Mitchell \(2020\)](#) add that the effectiveness of financial literacy initiatives depends on the extent to which they are adapted to the economic and cultural contexts of specific communities, a particularly relevant factor in times of crisis, when financial behaviour is often influenced by emotional factors.

2.3. Effects of Financial Literacy on Financial Behaviour

Greater financial and tax literacy contributes significantly to improved savings management, investment decision-making, and financial planning. [Lusardi and Mitchell \(2014\)](#) argue that managing savings is inherently complex, but financial knowledge simplifies decision-making processes and encourages saving behaviour. [Gale et al. \(2012\)](#), for example, examined whether financial education effectively increases household savings and explored how financial literacy affects the capacity to plan adequately for retirement. Studies such as [Song \(2020\)](#) and [Tavares et al. \(2020\)](#) demonstrate that low financial literacy negatively influences pension plan contributions, reinforcing the need for educational interventions.

Debt management constitutes a central dimension of financial literacy, as the ability to manage borrowing responsibly affects financial well-being and prevents persistent debt cycles. According to [Lusardi and Tufano \(2015\)](#), understanding spending behaviour and the consequences of borrowing is a complex yet essential task to avoid credit dependency, prolonged indebtedness, and financial schemes that threaten assets and long-term security. [Brown et al. \(2013\)](#) investigated the effects of financial education on short-term debt management, particularly in contexts where access to credit is encouraged. Their findings indicate that individuals with a stronger understanding of financial products, such as credit cards and short-term loans, are less likely to engage in consumer credit practices characterised by high interest rates that hinder repayment.

[Agarwal et al. \(2015\)](#) contend that financial knowledge also influences long-term indebtedness, particularly in the context of mortgage credit. Their research shows that financially informed individuals are better able to negotiate loan terms and interest rates owing to a more careful assessment of available options.

[Lusardi and Mitchell \(2014\)](#) emphasise that financial literacy plays a fundamental role in investment decision-making, enabling individuals to interpret financial products more effectively and select those that align with their economic circumstances and risk profiles. [Van Rooij et al. \(2011\)](#) show that individuals with higher levels of financial knowledge are more likely to participate in financial markets, diversify their investments, and avoid high-risk products that may compromise capital. With a clearly defined risk profile and investment plan, individuals are better placed to invest confidently in risk assets such as stocks and investment funds. [Guiso and Sodini \(2013\)](#) note that diversification of investment portfolios is essential to minimising the likelihood of significant losses, particularly during economic instability, while maximising returns.

Financial planning is a crucial element of financial stability and is one of the key areas financial literacy seeks to develop. The capacity to plan allows individuals and families to prepare for the future, accumulate assets, and mitigate exposure to risk. [Hastings and Mitchell \(2020\)](#) argue that financial knowledge contributes to financial stability by enhancing individuals' ability to define objectives, create emergency reserves, and invest more securely. [Hilgert et al. \(2003\)](#) identified a link between levels of financial literacy and sound financial planning practices, such as saving and expense management, both of which are crucial for long-term stability. Conversely, low financial knowledge tends to encourage irresponsible behaviours, including impulsive consumption, neglect of saving, and excessive reliance on credit. [Hira and Loibl \(2005\)](#) further demonstrate that increased financial knowledge enables better decision-making that supports long-term stability, asset accumulation, and overall financial well-being. Accordingly, effective financial planning is a vital pathway to economic security for individuals and families.

A further set of challenges relates to cultural, economic, and institutional barriers to financial education. According to the [OECD \(2005\)](#), these barriers are closely linked to entrenched behavioural patterns and institutional distrust, particularly in countries characterised by corruption and socioeconomic inequality. The lack of a planning culture

may be exacerbated by limited exposure to financial education in schools and the absence of adult-oriented programmes. [Lusardi and Mitchell \(2011\)](#) highlight that a lack of access to formal financial education leads to difficulties in dealing with complex economic decisions, with negative effects on individual well-being. The literature stresses that financial literacy should begin in early life; however, it is rarely integrated meaningfully into school curricula, especially in developing countries. Moreover, [Atkinson and Messy \(2012\)](#) note that many adults do not have the opportunity to address this deficit through continuing education programmes.

Another important factor is widespread distrust of governmental institutions and the financial system. [Kirchler \(2007\)](#) argues that such distrust directly influences individuals' willingness to participate in public programmes. In many cases, people do not perceive tangible benefits from participating in these initiatives, particularly when the public system is viewed as serving economic elites. This sense of distrust is deeply rooted in societies marked by corruption or institutional inefficiency.

[Czyzowski-Hahn \(2021\)](#) adds that economic barriers to financial inclusion are embedded in contexts of inequality. Economically disadvantaged populations face greater challenges in accessing basic financial services, which restricts their ability to participate actively in the economy. The absence of public policies directed at these groups perpetuates cycles of poverty and inequality, particularly in countries with substantial income disparities, exacerbating financial exclusion. [Demirgüç-Kunt et al. \(2018\)](#) observe that limited access to financial products such as bank accounts and credit reduces economic opportunities for marginalised populations. Financial exclusion in these communities is further intensified by the lack of adequate financial infrastructure and the scarcity of educational programmes focused on economic literacy.

[Bruhn and Love \(2014\)](#) argue that expanding financial services in low-income regions requires a combination of public measures and private initiatives, including digitalisation and system modernisation, alongside efforts to integrate the population into the use of these tools. However, these efforts are often constrained by insufficient technological infrastructure, which further limits their reach. Institutional barriers to the implementation of financial education initiatives are also associated with limited state coordination and bureaucratic complexity ([Crispim, 2021](#)). [Oliveira and Góis \(2018\)](#) and [Nogueira et al. \(2025\)](#) note that the absence of rigorous monitoring of results and the practical effects of public measures aggravates these institutional challenges. The lack of clear objectives and continuous oversight contributes to inefficiency and reduces long-term impact. These challenges underscore the need for joint efforts involving central and local government, private actors, and public service institutions to ensure that financial education measures are effectively implemented and produce the intended results.

2.4. Initiatives for Financial Literacy

The development of measures to promote financial literacy has grown over recent decades, with the State and other entities implementing various initiatives aimed at improving the population's financial knowledge. Historically, the Portuguese context has been characterised by initiatives led by banks and associations, which focused on promoting saving practices and responsible borrowing. However, these initiatives lacked integration into a broader public strategy and were not accompanied by specific impact metrics ([Banco de Portugal, 2019](#)).

Recognising this need, in 2011 the Portuguese government implemented the National Plan for Financial Education (PNFF), a partnership between the Bank of Portugal, the Securities Market Commission (CMVM) and the Insurance and Pension Funds Supervisory Authority ([Banco de Portugal, 2019](#)). The PNFF has stood out for its role in promoting

financial knowledge among various population groups in Portugal. It develops specific programmes for children and young people and promotes financial literacy as a fundamental right, similar to basic literacy ([Plano Nacional de Formação Financeira, 2021](#)). At the same time, it provides programmes aimed at adults and small and medium-sized enterprises. The results of the PNFF have been reasonably positive, especially among young people, although the impact among older and more economically vulnerable populations has been more limited ([Banco de Portugal, 2020](#)).

An important feature of these measures is the monitoring of their impact, something that was absent from past initiatives. The Bank of Portugal and its partners regularly monitor the effectiveness of the programmes implemented, using metrics such as savings rates and levels of over-indebtedness among different population segments. Despite this, the reach of these initiatives and their influence on the financial behaviour of the population remain insufficient, particularly in regions further away from urban centres, where accessibility is more limited ([Banco de Portugal, 2020](#)).

2.5. Conceptual Framework

The review of the literature highlights a complex interdependence between financial literacy, tax literacy, and public policy outcomes. Financial literacy refers to individuals' ability to understand and effectively use financial information to make informed decisions regarding saving, investment, credit, and long-term planning ([Lusardi & Mitchell, 2014](#)). Tax literacy, in turn, encompasses citizens' understanding of fiscal principles and obligations, which shapes their compliance behaviour and perceptions of fairness and trust in the tax system ([Saad, 2014](#); [Palma & Pita, 2015](#)).

Both dimensions are complementary: financial literacy enhances individuals' capacity to manage resources efficiently, while tax literacy reinforces their civic responsibility and engagement with the fiscal system. Together, they constitute critical elements of economic citizenship ([Kirchler, 2007](#)), influencing individuals' capacity to contribute to sustainable economic development and public welfare.

Public policy initiatives—such as national financial education strategies and tax awareness campaigns—act as exogenous drivers that shape levels of both financial and tax literacy ([Banco de Portugal, 2019](#)). Improved literacy levels, in turn, promote behavioural outcomes such as increased savings, responsible borrowing, voluntary tax compliance, and informed participation in the economy. These behaviours contribute to macro-level policy outcomes, including financial stability, fiscal sustainability, and social equity ([Cole et al., 2014](#); [Fernandes et al., 2014](#)).

Despite extensive research on financial literacy, few studies have integrated both financial and tax literacy within a unified framework to assess their joint implications for policy effectiveness. This represents a key research gap that the present study seeks to address by analysing how financial and fiscal knowledge jointly influence individual behaviours and perceptions of public measures in Portugal.

Accordingly, this study adopts a conceptual model in which financial literacy and tax literacy are both influenced by public policy initiatives and, in turn, affect financial behaviour, fiscal compliance, and broader public policy outcomes. This model provides a theoretical foundation for examining how knowledge and behaviour interact to support more inclusive and resilient economic systems.

Although prior studies have examined financial literacy, tax literacy, and public education policies separately, few have explored their joint dynamics within a single analytical model. The literature often treats financial and tax literacy as independent domains, neglecting the interactions between financial behaviour, fiscal compliance, and public policy design. Furthermore, there is limited empirical evidence regarding these

relationships in the Portuguese context, despite the implementation of the National Plan for Financial Education (PNFF) and ongoing fiscal education initiatives.

The present study seeks to fill these gaps by (1) developing an integrated conceptual framework linking financial and tax literacy to individual behaviour and policy outcomes, and (2) empirically analysing the factors associated with literacy levels and perceptions of public measures among residents in Portugal.

3. Methodology and Sample

The primary objectives of this research are to assess the levels of tax and financial literacy among Portuguese citizens, identify the factors that influence them, and evaluate individuals' perceptions of the effectiveness of existing public measures in this domain.

A quantitative approach was adopted to analyse data on financial and tax literacy within a sample of the Portuguese population. Data were collected through a semi-structured questionnaire comprising both closed and open-ended questions, administered to residents of Portugal aged 18 years or older. A non-probabilistic convenience sampling method was employed to recruit participants who were accessible and available to respond to the survey.

Data collection was conducted between February and May 2025. The questionnaire was made available online and distributed via email and social media platforms to maximise outreach and sample diversity. Email invitations were sent through professional and academic networks, including university mailing lists and research-related associations. Additionally, the survey link was shared on LinkedIn, Facebook, and X (formerly Twitter), facilitating voluntary participation from residents across Portugal.

Responses that did not meet the inclusion criteria—specifically age (below 18 years), non-residency in Portugal, or lack of prior contact with the Portuguese financial and tax system—were excluded from the analysis. A total of 706 valid responses were obtained, ensuring substantial data robustness and enabling more consistent statistical analyses.

Although the use of a non-probabilistic convenience sampling method may limit the generalisability of the findings to the national population, this approach allowed for efficient data collection aligned with the specific objectives of the research, providing an initial, comprehensive understanding of financial knowledge and behavioural patterns among residents in Portugal.

The questionnaire was structured into six main sections: sociodemographic characteristics; levels of financial and tax literacy; experience with financial and tax education initiatives; perceptions of government policies; knowledge of social security and pensions; and financial habits and behaviours. This organisation facilitated the comprehensive and detailed collection of relevant data to understand financial and tax literacy in Portugal and to assess the impact of public measures in this field.

Data analysis was conducted using IBM SPSS Statistics 30. Statistical tests were applied primarily to identify patterns, associations, and significant differences between sociodemographic variables and levels of financial literacy, as well as respondents' perceptions of public policies and financial behaviours.

The methodology comprised two main phases. In the first phase, descriptive analyses were conducted using measures of central tendency and dispersion—such as means, medians, frequencies, and standard deviation—which were essential for characterising the sample and gaining an initial overview of the data. In the second phase, independent samples *t*-tests were employed to compare mean differences between distinct groups within the sample. This comparative approach proved particularly useful, revealing differences between groups—namely in relation to gender and age—with respect to levels of financial literacy and reported behaviours.

The non-probabilistic convenience sampling method allowed for efficient data collection and broad outreach. However, it inherently limits the representativeness of the sample. Indeed, the sample is characterised by a predominance of younger, urban, and highly educated respondents—over 70% of participants reported holding a higher education degree—which does not fully reflect the demographic composition of Portugal's population. This bias is a recognised limitation of online self-administered surveys, as participation tends to be higher among individuals with greater digital literacy and internet access. Nevertheless, this approach was considered appropriate for the exploratory nature of the study, particularly given its focus on individuals with some degree of engagement with financial and tax systems. Accordingly, the findings should be interpreted as indicative of broader trends rather than as representative estimates of the entire population.

4. Results

4.1. Description and Characterisation of the Sample

The final sample of the questionnaire consists of a total of 706 respondents. Regarding gender, the distribution was almost equal, with 49.3% identifying as female and 50.7% as male. As for marital status, 36% of respondents reported being single, 59.2% married/living together or in a civil partnership, 4.4% divorced, and 0.4% widowed.

With regard to age, respondents were grouped into age brackets: 11.2% are between 18 and 24 years old, 32.7% between 25 and 34, 33.4% between 35 and 50, 18.7% between 51 and 65, and 4.0% are over 65. The ages of respondents range from 18 to 83 years, with a mean of $\bar{X} = 39.5$ years and a standard deviation of $\sigma = 13.24$, reflecting moderate dispersion around the mean. This age range shows that the sample includes both young adults at the start of their professional lives and individuals at more advanced career stages or already retired. The use of digital means for data collection may explain the predominance of younger age groups.

In terms of education level, most respondents (72.5%) hold a higher education qualification: 37.1% have a Bachelor's degree, 32% a Master's degree or Postgraduate/MBA, and 3.4% a Doctorate. This figure is significantly above the national data, which indicates that in 2024, only 28.6% of the population over 15 years old had completed higher education. This deviation may have positively influenced the literacy levels observed. Additionally, 23.1% reported having completed secondary education (12th grade), and 4.4% have completed the 9th grade. It is also worth mentioning that around 31.9% of respondents obtained academic training in Management, Economics, Accounting, Finance, or related fields, while 68.1% had no training in these areas.

The analysis of the distribution of responses by district of residence shows a higher concentration of respondents in certain regions of the country. The districts with the highest representation were Porto (39.1%), Lisbon (12.2%), Coimbra (8.9%), Leiria (5.9%), and Aveiro (5.5%), likely associated with higher population density in urban areas along the Portuguese coast. The remaining districts show lower representation. Nonetheless, the diversity of responses allows for a broad view of the national reality, ensuring significant representativeness.

The analysis of respondents' professional occupation shows that 64.30% fall into the category of employees, reflecting the predominance of this group in the active population. Self-employed individuals account for 17.5%, while students, at 11.4%, indicate the participation of a younger population. Unemployed respondents make up 4.0% and retirees 2.8%, reflecting the inclusion of individuals outside the labour market or no longer professionally active, albeit in smaller numbers. In addition, the multiplicity of responses highlights the presence of situations such as working students or occasional self-employed service providers, showing the diversification of income sources.

The distribution of respondents' monthly net income shows that 49.7% earn between €1001 and €2000. They are followed by 18.7% with incomes between €500 and €1000, representing a group with lower wages. A further 12.5% earn between €2001 and €3000, corresponding to intermediate income levels. With less than 10% each, those earning below €500 or above €3000. These data reflect the predominance of intermediate incomes, but also salary diversity, with groups earning either lower or higher wages.

4.2. Statistical Analysis

As shown in Table 1, the majority of participants (37.8%) rated their knowledge of financial concepts as average (3 on a scale of 1 to 5), indicating a reasonable understanding of topics such as saving and investing. Around 34.9% considered their knowledge to be high (4), and 13.6% rated it as low (2), demonstrating the need to reinforce financial education. The mean score was $\bar{X} = 3.35$ and the standard deviation $\sigma = 0.955$, indicating that participants generally have a moderate to high level of knowledge of financial concepts. The relatively low standard deviation suggests concentration around the mean, with only slight variation in perceptions of the topic.

Table 1. Level of tax and financial knowledge.

On a Scale from 1 to 5:	Mean	Median	Mode	Standard Deviation	Very Low	Low	Medium	High	Very High
How would you rate your knowledge of financial concepts?	3.35	3	3	0.955	3.4	13.6	37.8	34.8	10.3
How would you rate your knowledge of fiscal/tax concepts?	3.15	3	3	0.983	4.1	21.1	39.2	27.1	8.5

Source: Own elaboration.

Regarding knowledge of tax concepts, most participants (39.2%) rated their knowledge as average (3). Around 27.1% considered their knowledge high (4), suggesting better preparation in this area. However, 21.1% classified their knowledge as low (2), highlighting the need to reinforce tax literacy among the population. Only 4.1% indicated no knowledge of the topic (1), which is positive but still reveals gaps that should be addressed in the future. The mean score was $\bar{X} = 3.15$ and the standard deviation $\sigma = 0.983$, suggesting that participants generally have a moderate level of knowledge of tax concepts. The standard deviation indicates considerable variation in responses, reflecting different levels of understanding among participants.

Concerning the main sources of knowledge, most participants reported having acquired most of their financial knowledge through self-learning (53.3%), showing a strong individual initiative in seeking information on these topics. Around 35.2% of respondents stated that they learned about finance and taxation in their job or workplace. Formal education also played a relevant role, with 34.3% indicating that they gained knowledge at school or university. Contact with family or friends was mentioned as a learning source by 31.6% of respondents, highlighting the importance of family interactions in financial education.

The media were cited by 29.5% of respondents, showing that communication channels play an important role in disseminating information. In contrast, public campaigns had very little influence, being mentioned by only 1.6% of participants, which underlines the need to rethink strategies to increase the reach and effectiveness of such measures.

Following the analysis of knowledge levels, questions were included focusing on participants' experiences with this topic. Based on the responses to the question about participation in tax/financial education programmes promoted by government authorities, the overwhelming majority (95.9%) had never taken part in such programmes, while only

4.1% reported having participated at some point. Among those who did, 20.4% considered the experience very unsatisfactory, 9.3% rated it unsatisfactory, 25.9% satisfactory and 14.8% very satisfactory, suggesting a range of perceptions regarding the quality and impact of these programmes.

Regarding the adequacy of information provided by government measures, most participants considered it insufficient. Around 80.9% rated it as very insufficient or insufficient, indicating that the strategies currently adopted are not considered adequate by the resident population. Only a small minority of 2.3% considered the information sufficient and 1% very sufficient.

On the question assessing knowledge of taxes and tax deductions (Table 2), most participants (37.4%) rated their knowledge as average. Around 25.1% considered their knowledge high, while 24.4% rated it low. Only 7.9% rated their knowledge very high, and 5.2% stated they had no knowledge. The mean score was $\bar{X} = 3.06$ and the standard deviation $\sigma = 1.009$, reflecting a relatively wide distribution of responses.

Table 2. Assessment of tax and financial education.

On a Scale from 1 to 5:	Mean	Median	Mode	Standard Deviation	Very Low	Low	Medium	High	Very High
How often do you request invoices with a tax identification number for tax deductions?	3.88	4	4	1.026	3.3	8.8	13.5	45.9	28.6
How would you rate your knowledge of taxes and tax deductions?	3.06	3	3	1.009	5.2	24.4	37.4	25.1	7.9
How would you rate the sufficiency of information provided by the government to educate citizens on tax and financial matters?	1.77	2	1	0.867	46.6	15.9	15.9	2.3	1.0

Source: Own elaboration.

The question on who usually fills in the income tax return was included to identify participants' reliance on external help or their autonomy in the tax filing process. The majority of respondents (53%) complete their IRS return independently. Around 27.6% prefer to use an accountant or tax professional. A further 14.4% rely on family/friends to complete it, while only 0.4% use the tax authority's support service.

After analysing participants' level of knowledge and experience with tax and financial education, it becomes relevant to understand their perception of public policies in this field, to assess respondents' awareness of government initiatives and their opinion on their adequacy and effectiveness in promoting financial literacy in Portugal. In addition, the study seeks to identify which government measures are considered most effective, as well as the most appropriate communication channels for disseminating such measures.

The results show that most participants are not aware of these initiatives, as only 28.2% reported knowing about existing measures. This high percentage of unawareness shows that government initiatives are not being adequately publicised among the population.

The results obtained through the questionnaire show a largely negative perception of the sufficiency and effectiveness of government policies promoting financial and tax literacy, as shown in Table 3. Regarding the adequacy of current policies, most participants rated them as very insufficient (31.0%) or insufficient (39.7%), totalling 70.7% of responses with negative perceptions. Only 8.7% considered the policies sufficient. The mean score

was $\bar{X} = 2.02$ and the standard deviation $\sigma = 0.846$, indicating a distribution concentrated in the lower ratings.

Table 3. Effectiveness of government policies.

On a Scale from 1 to 5:	Mean	Median	Mode	Standard Deviation	Very Low	Low	Medium	High	Very High
To what extent do you believe that current government policies are sufficient to promote financial literacy?	2.02	2	2	0.846	31.0	39.7	26.8	1.8	0.7
What is your opinion on the effectiveness of government policies in promoting fiscal and financial literacy?	2.01	2	2	0.874	32.7	38.0	26.5	1.7	1.1

Source: Own elaboration.

Similarly, regarding the effectiveness of government policies in promoting financial and tax literacy, the trend remained negative, as most rated the policies as very ineffective (32.7%) or ineffective (38.0%), representing a total of 70.7% unfavourable assessments.

To understand which measures are considered most effective in promoting financial literacy in Portugal, participants were asked about their preferences. The results show that the most valued measure is the inclusion of financial education in schools, chosen by 88% of respondents. In addition, training programmes for adults were indicated by 52.1%, highlighting the need for initiatives targeting different age groups. Free access to financial counselling was mentioned by 44.1%, while public awareness campaigns and tax incentives had lower support, with 38% and 34%, respectively.

Continuing the analysis, the most suitable channels for disseminating these policies were also assessed. The results show that schools and universities (75.6%) are considered the most effective channels for spreading information on financial literacy, followed by television/media (57.1%) and social media (56.2%). Government websites (31.7%) and local public services (30.9%) received less emphasis, while digital influencers (22.9%) and newsletters (20.8%) were the least selected options.

Financial preparedness for retirement and perceptions of the sustainability of the public pension system are topics of great relevance, especially in light of current and future demographic and economic challenges. It is therefore necessary to assess confidence in the system and the adequacy of the strategies adopted to ensure financial stability after active working life.

Responses to the question on contributions to a public pension scheme show that a vast majority of respondents (84.4%) are currently contributing to a public system, whether Social Security, Caixa Geral de Aposentações or another, while only 15.6% said they are not contributing, mainly students who have not yet entered the labour market.

Regarding participants' level of knowledge of the Social Security system, most rated their knowledge as average (43.2%), while 26.9% indicated low knowledge (Table 4). Only 5.1% considered themselves very well informed. Regarding financial preparation for retirement, the data indicate a perception of insecurity, as most participants rated themselves as little or not at all prepared (46.6%), while only 4.3% reported feeling very prepared. Dissatisfaction is even more evident in the question on the adequacy of pension system benefits. Most participants considered current benefits very insufficient (34.2%) or insufficient (37.4%), totalling 71.6% negative responses. Only 5.9% gave sufficient or very sufficient ratings, showing that the perception of inadequacy is widely shared.

Table 4. Perception of the social security system and retirement.

On a Scale from 1 to 5:	Mean	Median	Mode	Standard Deviation	Very Low	Low	Medium	High	Very High
How would you assess your level of knowledge about the Social Security system in Portugal?	3.02	3	3	0.947	5.8	21.1	43.2	24.8	5.1
How financially prepared do you feel for your retirement?	2.57	3	3	1.130	21.7	24.9	32.0	17.1	4.3
How would you evaluate the sustainability of the public pension system?	2.03	2	2	0.889	30.6	41.4	23.4	3.4	1.3
Do you consider that the current pension system benefits in Portugal will be sufficient to cover your needs in retirement?	2.02	2	2	0.940	34.2	37.4	22.5	4.3	1.6

Source: Own elaboration.

Finally, on the sustainability of the public pension system, the results were likewise negative. Most participants considered the system unsustainable, totalling 72% negative perceptions, reinforcing the widespread view that the pension system faces significant structural challenges.

Still regarding retirement planning, most participants stated that they have never tried to find out how much they need to save for retirement (53%), while 39.9% said they have an approximate idea and only 7.1% know the exact amount, showing a gap in financial planning for retirement.

Most participants (36%) also believe that their financial situation in retirement will be better than it is now, while 23.2% expect it to remain the same. However, 25.6% believe their financial situation will be worse, and 7.2% believe it will be much worse. Only 7.9% expect significantly better conditions. These results reveal a mix of optimism and concern, reflecting uncertainty about financial stability in retirement and the capacity to maintain their current standard of living.

As for the main financial preparation strategies for retirement, most participants (59.8%) said they contribute to the public Social Security system or another scheme. Other popular approaches include making investments (47.7%), saving through term deposits or Savings Certificates (45.6%), and subscribing to Retirement Savings Plans (39.7%). However, 13.3% of respondents reported having no plan for retirement, which may indicate a lack of knowledge or adequate financial planning.

Regarding confidence in making financial decisions, the data show that most participants (64.3%) feel confident in making decisions, while 35.7% said they do not. The results suggest that while most respondents feel secure in their financial choices, a significant portion still faces difficulties or uncertainty in this area.

The results on current financial well-being reveal a moderate perception, with a mean of 3.19 and a standard deviation of 0.914 (Table 5). Most participants rated their financial well-being as 3 (42.4%), while only 5.7% gave the highest score (5), suggesting that although there is balance, there is still room for improvement in the population’s financial well-being.

Regarding the habit of saving part of the monthly income, a positive trend emerges, with a mean of 3.84, indicating that saving is a relatively established practice. Almost 39% of respondents reported saving frequently, while only 4.4% reported saving rarely or never. However, the habit of investing part of the monthly income shows greater dispersion, with a mean of 2.85 and a standard deviation of 1.414. The distribution of responses shows that

23.4% do not have the habit of investing, while only 18.1% report investing very frequently, reflecting the extremes between those who adopt investing as a financial strategy and those who do not.

Table 5. Participants’ financial perception and habits.

On a Scale from 1 to 5:	Mean	Median	Mode	Standard Deviation	Very Low	Low	Medium	High	Very High
How often do you have the habit of saving part of your monthly income?	3.84	4	5	1.167	4.4	9.2	23.4	24.2	38.8
To what extent do you believe the financial education you received has impacted your financial decisions?	3.34	3	4	1.287	11.8	13.6	25.6	26.5	22.5
How would you assess your current level of financial well-being?	3.19	3	3	0.914	4.1	16.0	42.4	31.9	5.7
How often do you review or adjust your personal budget?	2.90	3	3	1.062	10.5	23.2	39.4	19.7	7.2
How often do you have the habit of investing part of your monthly income?	2.85	3	1	1.414	23.4	20.1	22.7	15.7	18.1
To what extent have government policies or financial literacy programmes influenced your investments?	1.81	1	1	1.032	53.8	21.4	16.6	6.8	1.4

Source: Own elaboration.

Respondents show a strong preference for low-risk investments, with term deposits being the most chosen option (53%), followed by Savings/Treasury Certificates (37.6%) and Retirement Savings Plans (36.3%), reflecting a strategy focused on security and the long term. ETFs (33.9%) also have significant uptake, suggesting some diversification. In contrast, only 22.8% invest in individual stocks and 14% in cryptocurrencies, indicating a lower risk tolerance. Investment funds (16.3%) and real estate (18.5%) show moderate participation, while commodities (4.1%) are the least explored category. These results suggest a predominantly conservative investor profile, prioritising financial stability over more volatile assets.

The main obstacles to saving and investing identified are a lack of disposable income (57.4%) and fear of financial risks or losses (47.5%), suggesting difficulties in allocating part of their budget for investment and concern over potential losses of their savings. Economic uncertainty (42.8%) also emerges as a relevant factor, reflecting concerns such as inflation and a possible economic recession.

As can also be seen in Table 5, the influence of government policies and financial literacy programmes on investment decisions was considered very low, with an average of only 1.81. Most participants (53.8%) indicated that these initiatives did not have a significant impact on their investment decisions. Reviewing and adjusting the personal budget appears to be a regularly adopted practice, with an average of 2.90. About 39.4% of participants reported occasionally reviewing their finances, while only 7.2% reported reviewing them frequently.

Finally, the impact of financial education on financial decisions was relatively positive, with an average of 3.34. Approximately 48.7% of participants gave high ratings, indicating

that the financial education they received had a significant impact on nearly half of the respondents.

Let us now examine how certain factors, such as the level of financial and tax literacy, saving frequency, monthly income, gender, and age, among others, are interconnected and mutually influence one another. This approach will allow the identification of behavioural patterns and statistically significant differences between groups, aiming to deepen the understanding of the impact of financial literacy on the daily economic habits and decisions of the Portuguese population.

In the relationship between the habit of saving and the propensity to invest, it is observed that individuals who save infrequently also tend to invest with low or no regularity. As saving frequency increases, there is a significant growth in investment activity, indicating a direct relationship between these two financial behaviours. It can be concluded that the habit of regular saving tends to serve as a driver for investment, enhancing the profitability of savings.

When analysing investment frequency between males and females, significant differences in investment practices are observed. The median investment frequency for males is 3, reflecting a higher propensity to invest, in contrast with females, whose median is 2 on the scale. Moreover, males show greater variability in investment practices, whereas females exhibit more homogeneous and possibly more conservative behaviours. These findings suggest that men are more likely to invest frequently, while women tend to focus more on saving, which can guide tailored communication measures and strategies for different profiles.

The *t*-test analysis for equality of means between genders reveals statistically significant differences in some variables (Table 6). Males also demonstrated a higher level of knowledge in both tax concepts ($\bar{X} = 3.26$) and financial concepts ($\bar{X} = 3.56$) compared to females ($\bar{X} = 3.03$ and 3.14, respectively), indicating that gender can be a differentiating factor in understanding essential topics in financial and tax literacy.

Table 6. *t*-Test for Mean Differences—Gender.

	Levene’s Test for Equal Variances		<i>t</i> -Test for Equal Averages	
	<i>t</i> -Test (<i>p</i> -Value)	Male	Female	<i>t</i> -Test (<i>p</i> -Value)
Knowledge of tax concepts	0.556	3.26	3.03	0.002 ***
Knowledge of financial concepts	0.680	3.56	3.14	0.001 ***
Sufficiency of information provided by the state	0.347	1.75	1.79	0.553
Knowledge of taxes and tax deductions	0.734	3.15	2.97	0.013 **
Invoices with taxpayer identification number	0.344	3.94	3.81	0.083
Sufficiency of current government policies	0.343	1.97	2.06	0.195
Effectiveness of government policies	0.661	1.98	2.03	0.388
Knowledge of Social Security	0.963	3.03	3.01	0.819
Financial preparedness for retirement	0.945	2.78	2.36	0.429
Sufficiency of the Public Pension System’s benefits	0.136	2.14	1.89	0.256
Sustainability of the Public Pension System	0.001	2.12	1.94	0.180
Current level of financial well-being	0.300	3.36	3.01	0.001 ***
Frequency of saving	0.217	3.90	3.78	0.180
Frequency of investing	0.151	3.15	2.54	0.001 ***
Influence of measures on your investments	0.673	1.80	1.81	0.831
Frequency of personal budget adjustments	0.748	2.94	2.86	0.357
Impact of financial education on financial decisions	0.817	3.41	3.28	0.203

Source: Own elaboration. Note: statistical significance—1% = ***; 5% = **.

Another relevant finding concerns investment frequency, which also showed statistically significant differences, with males recording a higher mean ($\bar{X} = 3.15$) compared to females ($\bar{X} = 2.54$), possibly reflecting a greater male predisposition to take risks or seek opportunities to maximise their capital. Regarding the current level of financial well-being, men also reported a significantly higher mean ($\bar{X} = 3.36$) compared to women ($\bar{X} = 3.01$).

In the study of the relationship between financial literacy and respondents' educational level, it is generally observed that financial literacy tends to increase with higher levels of education. Most individuals with higher education demonstrate moderate to high knowledge, with a significant number reporting the highest levels on the scale. In contrast, those with only a 9th-grade education show lower knowledge, mostly concentrated at levels 2 and 3 on the scale.

Additionally, the data collected for the Master's/Graduate/MBA and Bachelor's groups show a similar trend, with a predominance of the highest levels of financial knowledge. On the other hand, respondents with secondary education exhibit more variation in knowledge levels, but still lower than those with higher education, suggesting that educational attainment is positively associated with a perception of greater understanding of financial concepts. This demonstrates that formal education plays a crucial role in developing financial literacy.

The relationship between monthly net income and saving frequency reveals a clear trend: as net income increases, so does the frequency with which individuals save (Table 7). Respondents with lower incomes are mostly concentrated at the lower levels of the saving frequency scale (1 to 3), whereas those with higher incomes show a distribution skewed toward the upper levels of the saving scale, suggesting that greater financial availability facilitates a more consistent saving habit. Furthermore, the data indicate that income brackets above €2000 per month exhibit a strongly established saving practice, with more than half of respondents reporting the highest frequency levels on the scale. This finding aligns with economic theory principles and highlights the need for greater efforts to encourage saving, particularly among lower-income groups.

Table 7. Relationship between monthly net income and saving frequency.

Monthly Average Income		Savings' Frequency					Total
		Very Low	Low	Medium	High	Very High	
Less than 500€	Frequency	7	9	18	14	17	65
	Percentage	10.77%	13.85%	27.69%	21.54%	26.15%	100%
500€–1000€	Frequency	12	24	25	37	34	132
	Percentage	9.09%	18.18%	18.94%	28.03%	25.76%	100%
1001€–2000€	Frequency	10	29	92	79	141	351
	Percentage	2.85%	8.26%	26.21%	22.51%	40.17%	100%
2001€–3000€	Frequency	2	1	18	26	41	88
	Percentage	2.27%	1.14%	20.45%	29.55%	46.59%	100%
More than 3000€	Frequency	0	2	12	15	41	70
	Percentage	0.00%	2.86%	17.14%	21.43%	58.57%	100%
Total		31	65	166	172	275	706

Source: Own elaboration.

The analysis of the relationship between respondents' age and their level of financial literacy reveals a highly heterogeneous distribution. Knowledge levels, measured on a scale from 1 to 5, are represented across all age groups without a consistent trend. This suggests

that both younger and older individuals can exhibit varying levels of literacy, indicating that age alone does not significantly influence the population’s financial knowledge.

The results of the *t*-test for equality of means between age groups above and below the average age (39 years) identify statistically significant differences in several variables (Table 8). Saving frequency shows a significant difference, being higher among younger individuals ($\bar{X} = 4.06$) compared to older ones ($\bar{X} = 3.59$), suggesting a greater propensity among younger people to adopt regular saving practices.

Table 8. *t*-Test for Mean Differences—Age.

	<i>t</i> -Test (<i>p</i> -Value)	Levene’s Test for Equal Variances		<i>t</i> -Test for Equal Averages
		<39 Years Old	≥39 Years Old	<i>t</i> -Test (<i>p</i> -Value)
Current level of financial well-being	0.023	3.21	3.17	0.551
Frequency of saving	0.307	4.06	3.59	0.001 ***
Frequency of investing	0.001	2.95	2.74	0.560
Influence of measures on investments	0.186	1.77	1.84	0.361
Frequency of personal budget review	0.014	2.81	3.00	0.021 **
Impact of financial education on financial decisions	0.188	3.34	3.35	0.889
Sufficiency of information provided by the state	0.786	1.67	1.88	0.001 ***
Knowledge of taxes and tax deductions	0.024	2.96	3.17	0.005 ***
Invoices with taxpayer identification number	0.022	3.75	4.02	0.001 ***
Knowledge of tax concepts	0.067	3.05	3.26	0.004 ***
Knowledge of financial concepts	0.791	3.38	3.32	0.479

Source: Own elaboration. Note: statistical significance—1% = ***; 5% = **.

Additionally, older respondents demonstrate greater knowledge of taxes and tax deductions, as well as general fiscal concepts, reflecting accumulated life experience in fiscal matters. Another variable with a statistically significant difference is the perception of the sufficiency of information provided by the State ($p = 0.001$), with a higher average among individuals aged 39 or older (1.88 vs. 1.67). On the other hand, variables such as current financial well-being, investment frequency, and perception of the impact of financial education did not show statistically significant differences between the groups.

Regarding investment instrument preferences by gender, it is also possible to identify relevant differences in risk profiles and strategies adopted by each gender. Overall, females demonstrate a stronger inclination toward more conservative financial products, such as Time Deposits (28.94%), Retirement Savings Plans—PPR (18.56%), or Savings/Treasury Certificates (17.76%).

On the other hand, males show a greater predisposition for diversification into investment products associated with higher risk levels. This preference is observed in the choice of ETFs, representing 17.30% of male responses versus only 9.78% of female responses. The same applies to Individual Stocks (11.80%), Cryptocurrencies (7.47%), and Commodities (2.49%), indicating that men, in general, are more inclined toward investment strategies with higher risk and volatility, but also with the potential for greater financial returns.

Thus, it can be concluded that gender plays a significant role in financial product choices, making it relevant to consider these differences when designing financial education and literacy strategies to better align with the needs and risk profiles of each group.

In summary, it was observed that factors such as saving frequency, financial literacy level, net monthly income, and educational attainment maintain statistically significant relationships among themselves, demonstrating that financial decisions do not occur in isolation but rather reflect a set of interdependent factors.

From the results, it is possible to highlight, for example, that individuals with a stronger saving habit also tend to have a greater propensity to invest, and that financial literacy levels are positively associated with available income and educational attainment. On the other hand, relevant differences were observed between genders regarding the choice of financial instruments, and between age groups regarding the degree of retirement preparedness, reinforcing the need for financial literacy measures that are segmented and tailored to the different social realities and individual profiles.

5. Discussion

5.1. Discussion of the Results

The research conducted in this study made it possible to draw a set of conclusions that highlight not only the current level of tax and financial literacy among the Portuguese population but also their practices, perceptions, and needs regarding personal financial management and public measures in this domain.

The results reveal a positive association between saving habits and investment behaviour. Individuals who save regularly are more likely to allocate resources to financial investment products. This correlation, confirmed through tests of association between variables, indicates a statistically significant relationship between the frequency of saving and the frequency of investment.

This finding is consistent with the work of [Hilgert et al. \(2003\)](#), who demonstrate that habitual saving is often associated with greater attention to personal financial planning and risk management. Similarly, [Van Rooij et al. \(2011\)](#) show that individuals with greater financial knowledge feel more comfortable participating in financial markets, particularly through investments in equities or other complex instruments ([Lusardi & Mitchell, 2014](#)).

Respondents who plan and monitor their expenses also tend to invest more frequently, suggesting that personal financial organisation contributes to better financial behaviours and decision-making. These results underscore the importance of educational strategies that go beyond merely promoting saving, encouraging the practical application of previously acquired knowledge ([Lusardi & Mitchell, 2014](#)).

The results also indicate a positive relationship between educational attainment and financial literacy. This aligns with the conclusions of the [OECD \(2014\)](#), which highlights the strong association between levels of education and financial literacy, recognising formal education as a key factor in the economic and financial empowerment of citizens.

The data further show that individuals with lower educational attainment, particularly those without secondary education, face greater difficulties in understanding financial topics and the functioning of the tax system. This limits their capacity to plan for the future and make informed decisions, making them more vulnerable to inadequate financial practices ([Atkinson & Messy, 2012](#)).

With regard to gender, the results reveal significant differences between men and women in financial behaviour, particularly in the area of investment. Men report a higher frequency of investment in higher-risk financial instruments, while women show a preference for more conservative products. This pattern is in line with [Guiso and Sodini \(2013\)](#), who argue that individuals with greater financial knowledge tend to assume higher levels of risk, making men statistically more likely to participate in volatile markets. Additionally, [Lusardi and Mitchell \(2014\)](#) note that women, being more conservative in their decisions, demonstrate more prudent financial behaviours and stronger loss aversion.

These findings highlight the need for public measures that incorporate a gender perspective, promoting inclusive approaches that challenge stereotypes, encourage the participation of both genders in the financial system, and strengthen confidence.

The analysis of responses regarding government measures in financial and tax literacy reveals a critical perception among participants. Most respondents consider state efforts in this field to be scarce, poorly structured, and inadequately publicised. There is a perceived disconnect between the measures implemented and the population's real needs. The majority of respondents have not had direct contact with initiatives promoted by public entities, indicating the clearly limited reach of such measures.

Retirement planning was another topic addressed in the study. The data reveal a high level of uncertainty regarding the future sustainability of the pension system, which, combined with the lack of planning among many citizens, represents a significant potential risk. The limited use of complementary savings and investment instruments for retirement underscores the need for awareness campaigns and incentives to encourage long-term saving.

5.2. Recommendations

Drawing on the literature reviewed and the results obtained, it is evident that public policies must be reinforced to address existing knowledge gaps and promote greater citizen autonomy. The six proposals outlined below encompass both structural and community-based measures, with short, medium, and long-term impact. They integrate dimensions such as compulsory school education, lifelong learning, institutional communication, digital innovation, and territorial adaptation of interventions.

(i) Integration of Financial Literacy into Mandatory School Curricula

The study's findings reveal substantial gaps in citizens' knowledge of core topics such as taxation, savings, the social security system, and investment products. This deficit justifies the development of a robust, structured curricular programme addressing these themes and integrating financial literacy into both public and private school education.

Portugal remains below European benchmarks in key areas such as financial competence and digital skills, failing to guarantee essential capabilities for adult life. Embedding financial literacy in school curricula is therefore crucial for preparing future generations and contributes directly to the European 2030 targets, including reducing school failure and strengthening technical-scientific competencies (European Commission, 2024).

According to the [Direção-Geral da Educação \(2024\)](#), some cross-curricular approaches already exist in subjects such as Citizenship and Development. However, current practices remain optional, fragmented, and lack systematic evaluation. It is therefore recommended that financial literacy be implemented as a mandatory subject or as structured modules, with content tailored to each educational cycle and increasing in complexity according to student age.

In July 2025, the Government proposed a reformulation of the Citizenship and Development curriculum to make it more structured and oriented towards essential competencies for adult life. Financial literacy will be mandatorily integrated across all education cycles, with collaboration from entities such as the CMVM and higher education institutions to ensure a specialised and practice-oriented approach ([Direção-Geral da Educação, 2025](#)). Alongside teacher training, mechanisms for monitoring and assessing learning outcomes should be established, using formal evaluation tools and medium-term behavioural indicators to reinforce this as a measure of active and long-term citizenship.

(ii) Creation of Adult Training Programmes

Given that a substantial share of the Portuguese adult population did not have access to structured financial and tax education, developing free continuous training programmes is a priority. Evidence shows that many citizens, particularly employees, unemployed individuals, and retirees, struggle to understand fundamental concepts such as tax deductions,

retirement planning, investments, and debt management, increasing their vulnerability to unsustainable financial practices.

These programmes should be promoted by the State, involving entities such as the IEFP, the Bank of Portugal, and the Tax and Customs Authority, potentially in partnership with universities, municipalities, and third-sector organisations. Content should be adapted to participants' needs and delivered in multiple formats—face-to-face (e.g., training centres and parish councils), online (via open-access platforms and interactive modules), and blended—ensuring greater accessibility, particularly for those with geographic or mobility constraints.

Evaluating programme effectiveness is essential, both in terms of knowledge acquisition and behavioural change. This may include satisfaction surveys, pre- and post-training assessments, and longitudinal tracking. Continuous training is thus a key pillar in promoting financial inclusion and mitigating inequalities in access to economic information, contributing to a more informed and resilient society.

(iii) Development of Public Awareness Campaigns

A significant proportion of respondents reported a lack of awareness of existing programmes, revealing a disconnect between government initiatives and their intended audiences. Regular, comprehensive public awareness campaigns are therefore needed, framing financial knowledge as both a right and a cross-cutting dimension of citizenship.

These campaigns should be practice-oriented and highlight concrete benefits for daily life. They must employ accessible language, visually appealing materials, and content adapted to different sociodemographic profiles. Digital platforms and social media are particularly relevant for engaging younger audiences.

(iv) Creation of Accessible and Interactive Digital Platforms

In a context where technology plays a central role, digitising educational resources constitutes a strategic intervention. The development of public, free, accessible, and user-friendly digital platforms responds directly to the autonomy gaps identified in the study.

These platforms should provide practical tools and adopt an interactive, personalised approach suited to different literacy levels and age groups. Resources may include mobile applications, videos, simulators, and educational games, promoting autonomous and progressive learning. Key features should include clear language, intuitive design, and universal accessibility. Personalised support, such as tutorials, guidance tools, and reminders of sound financial practices, should be integrated to foster sustained engagement.

Collaboration between public institutions, universities, and technology companies or start-ups can support the development of innovative educational resources, including those using artificial intelligence or gamified e-learning environments.

(v) Partnerships with Banking and Professional Sector Entities

The promotion of financial and tax literacy should not rest solely with the State. It should involve multiple societal actors, including banks, insurance companies, and professional associations. Partnerships with the banking sector help democratise access to information and reduce perceived distance between individuals and the financial system.

Direct contact with financial products, such as mortgages, consumer credit, investments, or retirement savings, can foster more transparent and responsible interactions. Interinstitutional cooperation promotes a coordinated and integrated approach to financial education, benefiting citizens, increasing trust, and reinforcing the stability and transparency of the economic system.

(vi) Regionally Personalised Education

Policy strategies must consider existing regional disparities in Portugal concerning access to information, economic capacity, and sociodemographic characteristics. It is therefore recommended that educational programmes be tailored to the specific realities of each district and autonomous region.

Content and teaching methods should be adapted accordingly—for example, for rural populations with lower educational attainment, urban areas with greater socio-economic diversity, or regions with high levels of unemployment and indebtedness. Implementation should take place through local centres, using in-person and practical sessions suited to community needs. In regions affected by geographic isolation, digital platforms with interactive content and local technical support can promote greater inclusion.

With these proposals, we intend to stimulate the debate around the public policies that should be implemented or reinforced in order to increase tax and financial literacy. It is not the objective of this paper to provide a quantitative assessment of the costs of the proposed actions.

6. Conclusions

This article has provided a comprehensive understanding of the opportunities and challenges associated with promoting financial literacy in Portugal. Although financial and tax literacy remains a relatively recent topic within the Portuguese academic landscape and empirical studies in the national context are scarce, this research sought to contribute to the advancement of knowledge in this field. The study systematised fundamental concepts of financial and fiscal literacy and complemented them with a practical perspective.

This work therefore contributes to strengthening scientific production, with relevance both at an academic level and for institutions responsible for promoting financial literacy among the population. Beyond its quantitative and statistical dimensions, the study also examined the socioeconomic factors that influence financial behaviour among residents of Portugal. By critically analysing the effectiveness of current public measures, it was possible to reflect on the role of education in cultivating citizens who are more financially responsible and aware.

The research underscores the importance of addressing the continuous process of financial empowerment and emancipation. The ability to manage personal and family finances emerges as an essential aspect of citizenship, with direct implications for the quality of life and well-being of families. This integrated perspective, linking knowledge and behaviour, should inform the development of public policies that are structured, accessible, and tailored to the diversity of the population.

Through the applied methodology and the range of analyses conducted, the study examined various sociodemographic variables that influence individuals' financial behaviours. The proposed practical recommendations, grounded in both statistical evidence and theoretical reflection, reinforce the potential impact of this research on the design of more effective and sustainable financial education strategies.

Based on the study's findings and the broader economic and social context, several opportunities emerge for advancing financial literacy research in Portugal. The first recommendation concerns the implementation of longitudinal studies to monitor citizens' financial literacy over time and to evaluate the long-term impact of public measures on the financial behaviours of different generations. Additionally, it is important to examine the effectiveness of programmes targeting vulnerable populations, who often have limited access to financial information and face higher exposure to economic risks. Research focused on these groups can inform the design of strategies better suited to their specific needs. Consequently, existing programmes, particularly those promoted by public entities, should be systematically evaluated, considering their content, methodology, and effectiveness in

fostering behavioural and attitudinal change, thereby enhancing the quality and reach of these initiatives.

It is also crucial to investigate psychosocial factors influencing financial decision-making, such as confidence, risk perception, emotions related to consumption, and individual beliefs about money. Understanding these dimensions allows for a broader, interdisciplinary approach to financial literacy. Finally, conducting international comparative analyses can contextualise the Portuguese experience with that of countries at varying levels of economic development, providing valuable insights for defining best practices and reinforcing Portugal's alignment with financial literacy strategies promoted by international organisations such as the OECD and the European Union.

One of the main limitations of this study lies in the use of a non-probabilistic convenience sample collected online. The resulting sample overrepresents younger, urban, and highly educated individuals, which may introduce selection bias and restrict the generalisability of the findings to the overall Portuguese population. However, given the exploratory nature of the research and its focus on individuals with active engagement in financial and tax matters, this methodological choice enabled efficient data collection and ensured that respondents possessed sufficient familiarity with the subject. Future research could address this limitation by employing probabilistic sampling methods or mixed recruitment strategies to enhance representativeness and cross-validate the results obtained in this initial study. Additionally, further research could directly assess individuals' financial literacy levels, following Lusardi and Mitchell's Big Five or another established methodology. Finally, future research could extend this analysis through cross-country comparisons to examine how financial and tax literacy interact under different policies and institutional contexts and study cross-effects between education, occupation, income and region.

In an era characterised by financial complexity and rapid digital innovation, financial literacy is no longer a luxury but a fundamental skill and a basic right. Empowering citizens with solid financial knowledge is therefore a matter of social justice and economic cohesion.

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References

- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. D. (2015). Financial literacy and financial planning: Evidence from India. In *Financial literacy and the future of financial inclusion* (pp. 91–126). Palgrave Macmillan.
- Atkinson, A., & Messy, F.-A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study. In *OECD working papers on finance, insurance and private pensions* (no. 15). OECD Publishing. [[CrossRef](#)]
- Banco de Portugal. (2011). *Plano Nacional de Formação Financeira 2011–2015*. Banco de Portugal.
- Banco de Portugal. (2019). *Plano Nacional de Formação Financeira: Relatório de atividades 2018*. Banco de Portugal.
- Banco de Portugal. (2020). *Relatório de impacto da formação financeira em Portugal*. Banco de Portugal.
- Behrman, J. R., Mitchell, O. S., Soo, C. K., & Bravo, D. (2012). How financial literacy affects household wealth accumulation. *American Economic Review*, 102(3), 300–304. [[CrossRef](#)]

- Bernheim, B. D., Garrett, D. M., & Maki, D. M. (2001). Education and saving: The long-term effects of high school financial curriculum mandates. *Journal of Public Economics*, 80(3), 435–465. [\[CrossRef\]](#)
- Brown, M., Van der Klaauw, W., Wen, J., & Zafar, B. (2013). Financial education and the debt behavior of the young. *Review of Financial Studies*, 26(9), 2490–2522. [\[CrossRef\]](#)
- Bruhn, M., & Love, I. (2014). The real impact of improved access to finance: Evidence from Mexico. *The Journal of Finance*, 69(3), 1347–1376. [\[CrossRef\]](#)
- Cole, S., Paulson, A., & Shastry, G. K. (2014). High school curriculum and financial outcomes: The impact of mandated personal finance and mathematics courses. *Journal of Economic Studies*, 30(4), 487–504. [\[CrossRef\]](#)
- Cole, S., Sampson, T., & Zia, B. (2011). Prices or knowledge? What drives demand for financial services in emerging markets? *Journal of Finance*, 66(6), 1933–1967. [\[CrossRef\]](#)
- Crispim, A. K. d. S. L. (2021). Sinergia entre políticas de educação fiscal e financeira no Brasil: Uma análise comparativa. *Revista Ibero-Americana de Humanidades, Ciências e Educação*, 8(3), 150–162.
- Crzybovski-Hahn, J. (2021). Barreiras culturais e sociais na educação financeira: Um estudo sobre o impacto da exclusão financeira em populações vulneráveis. *Revista Brasileira de Educação Financeira*, 10(2), 45–62.
- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2018). *The global fintech database 2017: Measuring financial inclusion and the fintech revolution*. The World Bank. [\[CrossRef\]](#)
- Direção-Geral da Educação. (2024). *Investir na educação para a literacia financeira em Portugal*. Ministério da Educação.
- Direção-Geral da Educação. (2025). *Estratégia Nacional de Educação para a Cidadania: Consulta Pública (julho 2025)*. Ministério da Educação.
- European Commission. (2023). *Eurobarometer survey reveals low levels of financial literacy across the EU*. Directorate General for Financial Stability, Financial Services and Capital Markets Union.
- European Commission. (2024). *Action 7—Empowering citizens through financial literacy (capital markets union 2020 action plan)*. European Commission.
- Fernandes, D., Lynch, J. G., Jr., & Netemeyer, R. G. (2014). Financial literacy, financial education, and downstream financial behaviors. *Management Science*, 60(8), 1861–1883. [\[CrossRef\]](#)
- Gale, W. G., Harris, B. H., & Levine, R. (2012). *The effects of financial education in the workplace: Evidence from a survey of employers*. Brookings Institution.
- Guiso, L., & Sodini, P. (2013). Household finance: An emerging field. In *Handbook of the economics of finance* (pp. 1397–1532). Elsevier.
- Hastings, J., Madrian, B. C., & Skimmyhorn, W. L. (2013). Financial literacy, financial education, and economic outcomes. *Annual Review of Economics*, 5(1), 347–373. [\[CrossRef\]](#)
- Hastings, J., & Mitchell, O. S. (2020). How financial literacy and impatience shape retirement wealth and investment behaviors. *Journal of Pension Economics and Finance*, 19(1), 1–20. [\[CrossRef\]](#)
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Federal Reserve Bulletin*, 89, 309–322.
- Hira, T. K., & Loibl, C. (2005). Understanding the impact of employer-provided financial education on workplace satisfaction. *Journal of Consumer Affairs*, 39(1), 173–194. [\[CrossRef\]](#)
- Houston, S. J. (2010). Measuring financial literacy. *The Journal of Consumer Affairs*, 44(2), 296–316. [\[CrossRef\]](#)
- Kirchler, E. (2007). *The economic psychology of tax behaviour*. Cambridge University Press.
- Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. *Journal of Banking & Finance*, 37(10), 3904–3923. [\[CrossRef\]](#)
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance*, 10(4), 509–525. [\[CrossRef\]](#)
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, 52(1), 5–44. [\[CrossRef\]](#)
- Lusardi, A., & Tufano, P. (2015). Debt literacy, financial experiences, and overindebtedness. *Journal of Pension Economics and Finance*, 14(4), 329–365. [\[CrossRef\]](#)
- Nogueira, M. C., Almeida, L., & Tavares, F. O. (2025). Financial Literacy, Financial Knowledge, and Financial Behaviors in OECD Countries. *Journal of Risk and Financial Management*, 18(3), 167. [\[CrossRef\]](#)
- OECD. (2005). *Improving financial literacy: Analysis of issues and policies*. OECD Publishing.
- OECD. (2013). *Financial literacy and inclusion: Results of OECD/INFE survey across countries and by gender*. OECD Publishing.
- OECD. (2014). *Financial education for youth: The role of schools*. OECD Publishing. [\[CrossRef\]](#)
- Oliveira, J., & Góis, R. (2018). A eficiência institucional e a educação fiscal no Brasil. *Revista Brasileira de Administração Pública*, 52(4), 871–894.
- Palma, C., & Pita, M. (2015). Para uma política de educação e cidadania fiscal. *Revista de Finanças Públicas e Direito Fiscal*, 8, 29–62.
- Pereira, M. H. (2023). *Fiscalidade* (7th ed.). Almedina. ISBN 978-989-40-0961-0.

- Plano Nacional de Formação Financeira. (2021). *Plano Nacional de Formação Financeira 2021–2025*. Banco de Portugal.
- Saad, N. (2014). Tax knowledge, tax complexity and tax compliance: Taxpayers' view. *Procedia—Social and Behavioral Sciences*, 109, 1069–1075. [[CrossRef](#)]
- Santos, E., & Tavares, F. (2020). The level of knowledge of financial literacy and risk of the Portuguese. *International Journal of Euro-Mediterranean Studies*, 13(1), 91–116.
- Song, C. (2020). Financial illiteracy and pension contributions: A field experiment on compound interest in China. *The Review of Financial Studies*, 33(2), 916–949. [[CrossRef](#)]
- Sticha, A., & Sekita, S. (2023). The importance of financial literacy: Evidence from Japan. *Journal of Financial Literacy and Wellbeing*, 1, 244–262. [[CrossRef](#)]
- Tavares, F., Santos, E., Tavares, V., & Ratten, V. (2020). The perception and knowledge of financial risk of the Portuguese. *Sustainability*, 12(19), 8255. [[CrossRef](#)]
- Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449–472. [[CrossRef](#)]

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