Culture and financial literacy in South East Europe

Initial Analysis and Preliminary Policy Considerations

Countries from South East Europe have made important strides towards greater financial literacy of individuals and households, however, there is still a significant scope for improvement. This paper offers an initial analysis of the role of culture and its relation to financial literacy and formulates preliminary policy considerations in favour of effective financial education in the region. It also identifies some avenues for further research on culture and financial literacy, with the goal to enable more practical and implementation-oriented policy conclusions.

OECD

March 2023

Please cite as: OECD (2023), *Culture and Financial Literacy in South East Europe,* *https://www.oecd.org/financial/education/Culture-and-Financial-Literacy-in-South-East-Europe.pdf*

Foreword

This paper is part of the OECD/INFE Technical Assistance Project for Financial Education in South East European countries from the Constituency Programme of the Netherlands' Ministry of Finance. The Netherlands' Ministry of Finance provided the funding for this work.

The paper was prepared by Elena Miteva under the general supervision of Flore-Anne Messy and with analytical contributions by Chiara Monticone. It was edited by Liv Gudmundson.

Table of contents

FIGURES

TABLES

Executive summary

Countries in South East Europe (SEE) have made important strides towards greater financial literacy of individuals. However, there is still a significant scope for improvement across the region. Considering the current challenging economic context, countries from the region need to implement efficient and effective policies harnessing the full pallet of available approaches to bridge financial literacy gaps.

A growing body of literature demonstrates that it is important to take into consideration cultural dimensions in financial literacy policy formulation and implementation. This paper offers an initial analysis of the role of culture in financial literacy and how it could potentially be considered in designing financial education policies and initiatives in the region and beyond. It also recognises that much remains to be learned about cultural differences in attitudes towards money and the way in which these differences could be reflected in financial education.

To understand culture and its impact on financial literacy, the paper starts by examining the role of culture in comparison with other factors, namely the more frequently studied socio-economic, cognitive, personality and behavioural characteristics. It also highlights important traits of culture which affect its relation to financial literacy, including the long-term nature of culture, its homogeneity within a group of individuals, as well as its nature as beliefs, values, and norms. These traits underline the complexity of the relationship between culture and financial literacy, as well as the need for a long-term focus in policy making and implementation given that both culture and financial literacy take a long time to evolve.

This paper reviews research on cultural differences and financial literacy based either on aggregated cultural dimensions or on individual cultural components, including varying political views, different family structures, or attitudes toward savings, *inter alia*. It also discusses another stream of studies analysing specifically culture and financial decisions, such as those related to investment, insurance, and savings. Research also examines the culture-related differences in financial literacy between genders and between foreign- and native-born citizens. Studies of the relationship between financial literacy aspects and cultural dimensions most often rely on country cultural scores defined by the social psychologist Geert Hofstede. Hofstede's dimension scores reflect prominent preferences that distinguish countries (rather than individuals) from each other. This framework focuses on the following dimensions of culture: *(i)* egalitarian or embracing hierarchy (power distance), *(ii)* risk/uncertainty tolerant or intolerant (uncertainty avoidance), *(iii)* individualism versus collectivism, *(iv)* competitive and power-oriented or nurturing, *(v)* long-term versus short-term orientation, and *(vi)* satisfaction-oriented versus normative/" self-control" culture (indulgence versus restraint).

SEE cultural scores highlight a rather homogeneous regional culture characterised by strong intolerance to uncertainty (uncertainty avoidance), culture embracing hierarchy (large power distance), collectivist nature and pronounced propensity for self-discipline and self-control (or a propensity for restraint). To a somewhat lesser extent, as indicated by the available data most SEE countries may be characterised by their general tendency towards long-termism and a slightly more nurturing rather than competitive or power-oriented culture.

Based on these cultural characteristics and recent research on culture and financial literacy, this paper suggests some tentative considerations for policy makers and practitioners in the region, who could: *(i)* rely on the low tolerance for uncertainty and the pragmatic, long-term orientation in the region as an incentive to invest in financial literacy, *(ii) a*ddress the large power distance or more hierarchical nature of SEE societies by empowering their citizens financially, *(iii)* harness values of equality, solidarity, and quality of life as well as the regional collectivist traits in raising awareness of the benefits of financial literacy and in facilitating enrolment in financial education initiatives, and *(v)* focus on financial literacy to balance the regional propensity to restraint so that people in SEE could feel more empowered and less constrained by a perception that money tends to control their lives. Policy makers and stakeholders from the region could also focus on culture in the implementation of National Strategies for Financial Literacy, design of financial education initiatives with culture in mind and implement training of trainers catering to the cultural specificities of individuals. Going forward, financial education could also consider the potential acceleration of cultural change, due to globalisation, social network pervasiveness and other trends, which may foster certain cultural convergence with a potential greater effect on younger generations.

The paper also suggests avenues for future research, which could address some methodological issues identified in recent studies of culture and financial literacy. This could include further testing of culture measurement frameworks (dimension scores) to evaluate their robustness and validity, and to explain some ambiguous outcomes regarding their effect on financial literacy. Further analysis of the variation of culture at subnational level could be beneficial as nations are not always culturally homogeneous.

1 Introduction

Context

The OECD/INFE Technical Assistance Project on Financial Education in South East Europe

Ongoing policy dialogue at country and regional level in the framework of the OECD/INFE Technical Assistance Project on Financial Education in South East Europe (SEE) (referred to hereinafter as the project) highlighted the need to continue improving the effectiveness of financial education in order to achieve a tangible increase of financial literacy levels in the region.

Building on the OECD/INFE's internationally recognised expertise and longstanding commitment to advancing financial literacy, this five-year project aims to promote peer learning and knowledge sharing and encourage regional cooperation. Carried out in 2018 – 2022, the project benefitted from the financial support of the Netherlands' Ministry of Finance and its Money Wise platform.

Importantly, the objective of this project is to support SEE countries in their efforts to design and implement effective financial education initiatives, adapted to their specific needs and grounded in sound evidence. The overarching goal of the project is to support long-term financial well-being and resilience through financial education instilling sound financial knowledge, behaviours and attitudes among the populations of participating countries. Furthermore, financial education in the region should be as effective and efficient as possible to enable individuals to withstand the consequences from the COVID-19 pandemic followed by geopolitical challenges.

Culture and financial education in SEE

The OECD-INFE Survey of Financial Literacy of Adults in SEE (OECD, 2020[1]) published in the framework of the project, as well as insights from country-specific dialogue and fact-finding reveal a significant interest in the relationship between culture and financial literacy levels in the region.

In particular, partner countries are interested in certain cultural values, social norms, beliefs, and attitudes, which may have a significant impact on financial decisions and may lead to resistance to the messages conveyed by financial education interventions. A better understanding of the relationship between culture and financial literacy could facilitate the adaptations of current approaches to make them more effective in achieving aspired outcomes. In addition, it could usefully inform the design of new, impactful initiatives supporting sound financial decision-making, attitudes and behaviours of SEE nationals.

Objectives

This paper aims to analyse financial literacy at a regional level and its potential relationship with culture in Bulgaria, Croatia, Georgia, Moldova, Montenegro, the Republic of North Macedonia and Romania.

A focus on the interplay between culture and financial literacy dynamics could provide valuable insights for the design and delivery of financial education in the region. The exploration of the impact of culture is particularly timely insofar as most project countries are currently in the process of drafting or at the beginning of the implementation of their National Strategies for Financial Literacy, which could benefit from reflecting such insights.

Moreover, the relatively low levels of financial literacy in the region warrant a long-term commitment, strong political will, and impactful initiatives to help individuals and households achieve greater financial resilience and well-being. Taking into consideration innovative approaches, including a focus on culture insofar it can affect financial literacy, could be particularly beneficial. Moreover, changes in financial literacy informed by culture can take a long time. This emphasises the need for policy makers in the region to foster long-term co-operation and sustained action in favour of financial literacy together with all relevant national and regional stakeholders.

The evidence and analysis of this document focus on available international and country-specific research examining domestic cultural traits and their relation to financial literacy aspects. Existing measurements of culture along with recent research on culture and financial literacy are used to study this potential relationship and define some conclusions for effective financial education. The paper takes a qualitative approach in line with a reported growing interest in such analysis (Caprar et al., 2015[2]) and suggests some avenues for further research.

2 The role of culture in financial literacy

Questions about human motivations, decisions and behaviours, and the role of circumstances lie at the heart of social and behavioural sciences. These questions often relate to culture and social norms, which govern many aspects of people's lives. Often people who live in a particular country or region think and behave in similar ways, while people from another country or region can behave very differently. Culture help understand the reasons behind these specificities and individuals' actions more broadly.

Even though an unanimously accepted framework for empirical research is lacking, scholars are increasingly focusing on national culture to better understand its impact on certain aspects of individuals' financial literacy and their financial decisions. More broadly, their objective is to better grasp certain differences and similarities among countries. In such a context, a focus on the relationship between financial literacy and culture could shed more light on the levels of financial literacy in SEE. It could also facilitate the design and implementation of effective policies and financial education initiatives in favour of sound financial decision-making, financial resilience and financial well-being.

Against this backdrop, it is important to take culture into consideration in providing *financial education*. The latter is defined as: "*the process by which financial consumers/investors improve their understanding of financial products, concepts and risks and, through information, instruction and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being"* (OECD/INFE and G20, 2012[3]).

As regards financial literacy, the definition used for this paper draws on the OECD Council Recommendation on financial literacy, suggesting that *it "is a combination of financial awareness, knowledge, skills, attitudes and behaviours necessary to make sound financial decisions and ultimately achieve individual financial well-being* (OECD, 2020[4])". The definition of culture as a complex phenomenon is discussed in greater detail in the subsequent sections of this chapter.

Evidence reveals significant heterogeneity of financial literacy levels among individuals and across countries (OECD/INFE, 2020[5]). Financial literacy determinants have been studied with a view to explaining such differences as well as similarities. While explanations linked to demographic characteristics, socio-economic backgrounds and cognitive determinants are important, the literature has also pointed to the relevance of culture in explaining financial literacy variations. This section discusses socio-economic determinants and behavioural factors as they are often intertwined with culture in their impact. A separate section will discuss culture as a determinant of financial literacy.

Socio-economic characteristics

There is vast literature on socio-economic factors associated with financial literacy as they help shed light on the heterogeneity in financial literacy (Atkinson and Messy, 2012[6]). Significant socio-economic determinants, for example, include age, education, and gender differences. Other socio-economic determinants of financial literacy examined in recent research include individual income and wealth and financial socialisation which play a role in shaping financial knowledge, attitudes, and behaviours.

The role of age, education, gender differences and income

Evidence shows that financial literacy peaks at middle age and is lowest among the young and the elderly (i.e., following a hump pattern) (Lusardi and Mitchell, 2014[7]). However, while some evidence indicates that financial literacy declines with age in nationally representative panel studies, more research is required to distinguish age from cohort effects (Mitchell and Lusardi, 2022[8]). Senior individuals may also experience cognitive challenges and it appears that financial literacy could have a positive effect on financial decision making among people with lower cognitive function (James et al., 2012[9]).

Research suggests that education and experience can have a strong impact on financial literacy (Chen and Volpe, 2002[10]). Statistically significant differences are observed in research focusing on educational attainment and financial literacy levels, showing that more educated individuals are much more likely to answer financial literacy questions correctly (Lusardi and Mitchell, 2007[11]). Given that many financial decisions require the capacity to do calculations, research across countries has also studied numeracy skills and shown that they tend to be low. In addition, numeracy is particularly challenging for certain demographic groups, such as women, seniors and those with low education levels (Lusardi, 2012[12]).

In a global perspective, while the picture is complex, the literature provides robust evidence of a gender gap across countries with women scoring significantly lower in financial knowledge surveys than men (Hasler and Lusardi, 2017[13]).. Personal characteristics seem to explain some of the gap, however, a larger part may be due to the economic and social environment (Cupák et al., 2018[14]). In particular, women tend to have less “enthusiasm for, lower confidence and less willingness to learn about personal finance topics than men” (Chen and Volpe, 2002[10]). The literature also unveils a positive and strong link between women’s financial knowledge and the use of formal saving and borrowing instruments, having retirement savings, and the ability to come up with emergency funds, which have an important bearing on financial resilience and well-being (Hasler and Lusardi, 2017[13]; Bucher-Koenen et al., 2016[15]).

Some studies focus on the link between financial literacy and income. Higher financial literacy scores are likely to be displayed by individuals with higher levels of personal income and lower scores by those with lower incomes (The Social Research Centre, 2008[16]). Evidence also suggests that the spending and saving behaviours are more strongly associated with income rather than financial literacy. However, the investing behaviour depends on financial literacy rather than income (Ji Young Jung, 2015[17]). In addition, various empirical findings show that financial literacy increases with wealth (Guiso and Jappelli, 2008[18]). In particular, studies establish that wealth factors (e.g. investment held) have a positive impact on financial literacy since the acquisition of financial knowledge may be motivated by the need to manage own wealth (Delavande, Rohwedder and Willis, 2008[19]).

The importance of financial socialisation

Financial socialisation as a determinant of financial literacy, refers to the influence of informal learning (Gudmunson and Danes, 2011[20]). Indeed, social interactions in addition to formal learning play an important role in acquiring financial knowledge and in shaping financial attitudes and financial behaviours. People typically begin to build money habits, and adhere to norms and values during middle childhood through a process called financial socialisation. The habits and norms instilled in this process continue to develop through adolescence and affect many financial behaviours and habits in adulthood. The skills associated with habits and norms help a person decide what is desirable and possible financially and guide their day-to-day behaviours. This could range from decisions about indulging on a treat to how much to save in a retirement account (Consumer Financial Protection Bureau, n.d.[21]).

Related literature has focused on the role of family members and the school or work environment as socialisation agents. Parents play a central role as socialisation agents, especially for children of young age (Van Campenhout, 2015[22]). Their influence, in turn, depends on their socio-economic characteristics and in particular, their educational background and social class with working class parents often feeling unable to teach their children about financial matters.

Thus, it appears that financial literacy maybe associated with the socio-economic context of individuals, in addition to their individual socio-demographic characteristics. This is the conclusion of a study of adult financial literacy levels and their contextual factors in a number of Italian regions (Cucinelli, Trivellato and Zenga, 2019[23]). Similarly, a study of students in the French-speaking area of Switzerland who have a lower level of financial literacy than those in the German-speaking attributes this outcome, in part, to the socialisation role of parents[1] (Brown, Henchoz and Spycher, 2018[24]).

Psychological and behavioural factors

Psychological traits and financial literacy

Cognitive and personality characteristics and their impact on economic and social outcomes are being studied by a growing body of work (Almlund et al., 2011[25]). Research on the effects of cognitive traits and especially numerical abilities document positive effects on financial literacy thanks to a lower probability of over-indebtedness, greater sophistication in the use of financial products and overall positive relationship with financial literacy (Cole, Paulson and Shastry, 2012[26]) (Lusardi and Mitchell, 2014[7]).

Research also finds that personality traits are a significant predictor of educational and academic achievements (Chamorro-Premuzic and Furnham, 2008[27]). Based on a five-factor theory of personality (McCrae and Costa, 2008[28]) - including extraversion, agreeableness, conscientiousness, emotional stability, and intellect (openness to experience) - and the established link between personality traits and academic performance, research further focuses on the explanatory potential of personality characteristics as a determinant of financial literacy. Different studies document greater financial literacy levels of individuals characterised by higher intellect and internal locus of control (correlated with personality traits of agreeableness, conscientiousness, and openness) (Pinjisakikool, 2017[29]) as well as grit or diligence as a sub-facet of conscientiousness (Di Giannatale et al., 2020[30]).

Studies also find a significant correlation between financial literacy and both, cognitive abilities and personality characteristics such as the level of openness and conscientiousness (Peprah-Yeboah, Frejus and Fianko, 2018[31]), recommending “tailor-made financial education for individuals with different personality traits” and also additionally “aiming to improve the cognitive abilities of the beneficiaries”.

The relations between psychology and culture are complex and dynamic. Much of the recent research focuses on cross-cultural differences, the psychological processes contributing to the origins of culture, but also the influence of culture on psychological processes (Triandis, Malpass and Davidson, 1973[32]). In light of this complex two-way interaction, it could be difficult to distinguish between psychological and cultural traits as determinants of financial literacy. Thus, the effects of psychology and culture on financial literacy can take place simultaneously, which needs to be acknowledged and addressed to the extent possible in financial education initiatives.

Behavioural science and financial literacy

Behavioural science focuses on the way people think and behave, based on empirical evidence from a range of social sciences, such as economics, psychology, anthropology, pedagogy, sociology, and social marketing. Behavioural scientists have realised that many mistakes that consumers make are unpredictable and described them as random noise (Kahneman D., 2016[33])). However, certain behavioural biases can be the cause of actions that appear inconsistent or irrational, but are in fact, predictable across large portions of the population.

Behavioural insights play an important role in improving financial literacy thanks to a better understanding of the decision-making process of target groups, and may be used to help overcome biases and develop simple, sometimes low-cost, and effective investor education and financial literacy initiatives (IOSCO and OECD, 2018[34]). Combining traditional ways of teaching with new tools and simple, sometimes low-cost solutions harnessing behavioural insights may, thus, lead to better results in improving financial literacy (OECD, 2019[35]).

According to the mentioned 2018 report by IOSCO and the OECD (see also Box 2.1), behaviourally informed financial education typically takes the following directions: *(i)* changing the context to help people make better decisions and taking appropriate actions by using a choice architecture way to suggest decisions in wise directions; *(ii) i*nforming consumers about typical biases and teaching them mental strategies to avoid the possible negative effects by analysing issues more effectively and make decisions that are more informed.

Extensive research brings valuable evidence and suggests topics for further analysis to better capture the relation between cognitive biases, financial literacy and financial education. Some of the recent papers address, for example, the mitigation of myopic bias while teaching children about financial matters (Pitthan and De Witte, 2022[36]), behavioural-based explanations of underinsurance and the potential contribution of financial education to address this (Pitthan and De Witte, 2021[37]) and other issues, such as herding behaviour (Compen et al., 2022[38]).

Box 2.1. Financial education approaches harnessing behavioural insights

The joint IOSCO-OECD paper on “The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives” (2018) and the OECD paper on “Smarter Financial Education” (2019) contain a series of useful approaches to the use of behavioural insights, which are summarised as follows:

1. Rely on evidence and design financial education programmes considering the context: Whenever possible, quantitative and qualitative analysis should be carried out to understand current experiences, detect the main biases affecting the financial decisions under study, and identify where behavioural insights’ applications make sense. After understanding the context, policy makers ought to design tailored interventions and remember that simple is better.

2. Start small, evaluate rigorously and review initiatives regularly: Starting with a pilot stage may be a cost-effective manner of progressing to a full-blown solution. Ideally, interventions need to be evaluated experimentally (e.g., randomised control trials), or at least quasi experimentally against a control group, to identify their impact on behavioural responses accurately. Where an initiative is designed to be of wide-ranging benefit, it is important to test and assess responses of the intended target groups, possibly across geographical areas. Existing educational methods, means, services, and materials should be reassessed through a behavioural insights’ lens. It is important to examine all components of a policy or initiative critically and re-examine regularly. Evaluation, naturally, plays a key role in the review process.

3. Interact, learn, keep track and create thought leadership: The field of behavioural science is relatively new, especially in terms of its application to financial literacy and investor education. Organisations should seek to accumulate knowledge and experience through the available literature, partnerships, networks, events, and other institutions that have already used behavioural insights in their efforts. This is important in order to inform national stakeholders, develop understanding, and encourage acceptance of new approaches to supporting consumers and investors.

4. Consider combining traditional approaches and those based on behavioural insights: Applications of behavioural sciences (e.g. nudges) may be considered a complement to, rather than a substitute for, traditional delivery models of investor education and financial literacy. Programmes that combine behavioural insights and cognitive based approaches may be able to reach further.

5. Make financial educational content focused, straightforward and simple: Giving short and appropriate information to audiences is crucial to keep their attention and interest. The use of basic principles such as "rules-of-thumb" - taking advantage of the human tendency to use short, practical rules in the face of complexity - in the design of financial education content can help learners to take effective decisions more quickly. “Framing” of information could also be useful, as it involves influencing people’s judgment of an object or event by describing it in a positive or a negative manner, while its objective value remains constant. Salience and anchoring effects can help in nudging the decision-making of consumers in a desirable way by making aspects more striking than others or providing a basis on which to elaborate.

6. Make financial education programmes as personalised as possible: Offering financial education at teachable moments helps to ensure relevance and prompt action (e.g. when individuals receive salaries for the first time, apply for a loan, etc.). Raising awareness about personal biases may also contribute to a better self-control and sound decision-making. Teaching good "mental accounting techniques" and promoting immediate practice of skills learned are additional useful approaches for consideration. It is also noteworthy that digital means facilitate the delivery of behaviourally informed financial education in an easily accessible and potentially entertaining way. The use of existing behavioural frameworks, such as MINDSPACE (Messenger, Incentives, Norms, Defaults, Salience, Priming, Affect, Commitments and Ego) or EAST (Easy, Attractive, Social and Timely) could potentially improve the value of financial education programmes and their impact.

Behavioural insights, psychology and culture

Behavioural insights applied to financial decision-making are mainly studying irrational behaviours, derived from “cognitive imperfections or emotional influences” (Shefrin, 2002[39]), as well as the applications of heuristics or “rules of thumb”. Both cognitive biases and imperfections, as well as culture are considered relatively stable across individuals and time (Kahneman, 1979[40]) and assume that individuals are boundedly rational or often irrational unlike traditional economics’ notions of pure rationality.

Conversely, culture suggests the relevance of different behavioural patterns across groups of individuals (Breuer and Quinten, 2009[41]). Moreover, culture emphasises different drivers of individual behaviour, which do not imply irrationality but rather beliefs and values- or norms-based rationality (see definitions in the following sections of this chapter). Another key difference between behavioural insights and culture is the focus on individuals in the former and on groups of individuals in the latter. This is also relevant for the difference between culture and psychology or cognitive and personality traits of individuals. Cultural differences are characteristic for people within a given group compared to other groups.

While differences between psychological, behavioural, and cultural factors are important, it can still be challenging, on occasions, to disentangle rational reasons from irrational biases, or individual and cultural determinants of financial behaviours and decisions at the individual level. Thus, the effects of psychology, culture, behavioural biases, and heuristics on financial decision-making can take place simultaneously and enhance, decrease, or perhaps reverse their respective impacts (Ozal, 2018[42]). Moreover, the different perspectives provided by cultural, behavioural insights and psychology allow for a more granular approach to understanding financial decision-making.

Understanding and measuring culture

Defining culture

Culture and social norms govern many aspects of people’s lives, including their values, attitudes, and beliefs. In recent literature, the term ‘social norm’ is increasingly used as a synonym for ‘culture’. Social psychological and sociological theory has a long history of examining social norms (Elsenbroich and Gilbert, 2014[43]), including how individuals and social groups shape them (Marcus and Harper, 2014[44]).

The study of social norms builds on research from various disciplines, which have shaped its understanding and analysis through the years. Some key standpoints outlined in Table 2.1 could have a bearing on how the understanding of culture has evolved under the influence of different schools of thought considering the often interchangeably used terms of social norms and culture.

Table 2.1. Selected theoretical concepts shaping the understanding of social norms

Theoretical Position	Social Norms …
Positivism	… are the influence of individuals over each other … have strong causal status, coercing individual behaviour
Anti-positivism	… are behavioural patterns agents can conform or deviate from … are causes of social actions
Dialectical materialism	… are outcomes of property relationships
Functionalism	… are the regulatory patterns that ensure social order
Structuration	… are both motivation for and consequence of individual actions
Theory of practice	… are part of the ‘habitus’ into which people are socialised and become ‘doxa’ (beyond the limits of what can be challenged)
Socialisation theory	… are inculcated through socialisation in childhood and adolescence
Rational choice	…work through shame and guilt rather than reward and punishment

Theoretical Position	Social Norms …
Individualism	… are the result of iterated interactions of individuals
Game theory	… are Nash equilibria[2] in coordination games ... are situation frames triggering scripts of behaviour
Social convention theory	… are held in place by rewards and sanctions
Conformity studies	Individuals comply with norms because they wish to fit in with their group

Source: Corina Elsenbroich and Nigel Gilbert, Modelling Norms, 2014

A norm can be considered an expectation about how to act in a certain context (Almenberg et al., 2021[45]) and to be social, it needs to be shared and validated or enforced through approval or disapproval from others (Elster, 1989[46]). Thus, a social norm can be referred to as “what actions are regarded by a set of persons as proper or correct, or improper and incorrect” (Coleman, 1990[47]). While “norms” are often defined as specifying actions that are considered normal, typical, or average within a group of people, the term “culture” refers to attitudes and values in a given group. In recent literature, financial literacy is analysed mostly in relation to culture rather than to social norms, although it is not simple to disentangle the two concepts. This link between the two concepts is also visible in the below definitions of culture.

In “Does Culture Affect Economic Outcomes?” Guiso, Sapienza, and Zingales (2006[48]) define culture as “those customary beliefs and values that ethnic, religious, and social groups transmit fairly unchanged from generation to generation”. In their approach to culture, Guiso, et al., focus on temporal stability in identifying cultural elements, thus building on a concept developed earlier by Williamson (2000[49]) suggesting that culture is one of the elements of the more general “institutions of embeddedness” which operate in a long-term horizon[3].

Other definitions of “culture”, namely of “culture in economics”, characterise it as a process, delineated by the specificity of a human group in relation to other groups (Throsby, 2001[50]). The cultural homogeneity in a group could depend on social characteristics, such as age, religion, gender, social status, ethnicity, etc. This concept allows for fluidity and change and focuses on homogeneity (within a group) and heterogeneity (across groups), which lead to the identification of a “culture”. Culture can also be studied as an element of national differences and as a “global culture”, or an element of “world-wide homogenisation”. Such an approach illustrates the importance of cultural change and enables to differentiate between behaviours and their cultural determinants (Shiller, 1998[51]). As in the first definition, the empirical investigation of the relevance of culture for economic outcomes focuses on both its value and belief component[4].

A third definition introduces an important distinction between “constraining” and, “enabling” views (Smelser and Swedberg, 1994[52]). Thus, culture not only constrains, but structures and fosters behaviours, communication, decision-making, etc. (DiMaggio, 1997[53])[5].

In summary, for the purposes of this paper, we will bear in mind the following important traits of social norms and culture which could play a significant role when studying their relation to financial literacy aspects: their long-term nature, their link to institutions, their homogeneity within a group of individuals or a country, as well as their nature as beliefs, values and proper (correct) actions. These traits underline the complexity of the relationship between culture and financial literacy aspects, as well as the need to focus on the long term in policy making and implementation given that cultural changes take a long time.

To better understand the relationship of culture and financial literacy aspects, it would also be helpful to bear in mind the role of culture in economic development more broadly (see Box 2.2). Indeed, the literature highlights relevant links between culture and democracy experiences, institutions and their effectiveness, and the two-way relation between culture and economic development. Some of these approaches have been harnessed in the literature on culture and financial literacy, e.g., when studying cultural stereotypes in financial literacy (Bottazzi and Lusardi, 2020[54]).

Box 2.2. The role of culture in economic development

To better understand the relation between culture and financial literacy aspects, it is appropriate to investigate the relation between culture and economic outcomes. The discussion of the latter relation dates to the middle of the 20th century. Some of the first such studies link levels of social capital stemming from the period of the free city-states in the Middle Ages to the differences observed in the performance of Italian regions in modern times (Banfield, 1958[55]), (Putnam, Leonardi and Nanetti, 1993[56]). They consider that early democracy experiences in free cities, characterised by the provision of public goods and protection from aggression have instilled in their citizens stronger civic and cooperative behaviour persisting nowadays (Guiso, Sapienza and Zingales, 2016[57]).

Cultural specificities have been studied also from the point of view of the effectiveness of social institutions, such as the rule of law, corruption and democratic accountability (Licht, Goldschmidt and Schwartz, 2007[58]). Research also suggests a causal effect between values and institutions whereby well-functioning institutions are observed in countries or regions with "values consistent with generalised morality" (Tabellini, 2008[59]). A number of studies document the impact on economic development by focusing on culture as expressed by the literacy rate (Tabellini, 2010[60]) or by demonstrating that "better" cultural values have a "greater economic payoff" (Guiso, Sapienza and Zingales, 2006[48]).

Other researchers point to the importance of culture as measured by the World Values Survey for economic prosperity, especially if it is combined with economic freedom (Williamson and Mathers, 2010[61]). Furthermore, the literature suggests a two-way causality between culture and economic institutions (Gorodnichenko and Roland, 2017[62]) also arguing that a more individualistic culture leads to more innovation and to higher growth because of the social status rewards associated with innovation in that culture.

Measuring the impact of culture

Culture is not tangible; it is abstract and complex and therefore, its measurement is challenging. The research focusing on cultural differences behind the varying levels of financial knowledge and literacy has examined either specific cultural sets of values "aggregated" in so-called dimensions or individual cultural components, such as varying attitudes towards savings, political views or different family structures, *inter alia*.

Among the frequently used approaches to measuring culture are the so-called "dimensionalist" approaches trying to capture prominent cultural features relating to socio-historical variables. While there is no single cultural framework that is clearly conceptually and empirically superior to other theories (Vinken, Soeters and Ester, 2021[63]), there is a number of self-contained and tested "dimensionalist" cultural frameworks.

For example, the well-known frameworks of Hofstede, Inglehart and Schwartz on culture (see also the Annex to this section) take such a "dimensionalist" approach. Studies of the relationship between financial literacy aspects and culture using the latter approach most often rely on the country cultural scores of the social psychologist Geert Hofstede, while Schwartz' model is being applied in other circumstances, for example as related to trade and government spending (Ng and Lim, 2019[64]) and Inglehart's work is very influential in political science and sociology (Steenkamp and Geyskens, 2012[65]). Attempts to merge these three models could help to better understand how they are related to each other and could facilitate comparisons of the research results and underlying conclusions (Kaasa, 2021[66]).

Meanwhile, in this paper, the analysis is based on the conclusions of studies focusing on financial literacy aspects and culture mostly as measured using Hofstede's model, with references to relevant papers relying on other approaches. Although Hofstede's model has been widely used for cross-cultural studies of financial literacy, recent research suggests that its methodology would benefit from a thorough review (Minkov, 2018[67]).

Hofstede's cultural dimensions

In 1980, Hofstede defined the term "cultural dimensions" (Hofstede, 1980[68]) drawing on a statistical analysis of answers to survey questions about attitudes of IBM employee samples from 40 countries collected in the period 1967-73 and of Hofstede's executive students from 15 countries. In subsequent editions of Geert Hofstede's work, the database of scores has been extended to 115 countries with ratings last updated in 2015 (Koprowski et al., 2021[69])

According to Hofstede, culture is 'the collective programming of the mind that distinguishes the members of one group or category of people from others; it is formed from early childhood, and affects people's attitudes and values" (Hofstede, 2011[70]).

Based on the outcomes of the mentioned survey, Hofstede originally proposes four cultural dimensions which he subsequently completes by adding another two, as follows:

- **Power Distance Index** capturing the extent to which the less powerful tolerate power and inequality. High power distance index indicates a culture accepting inequity and power differences, encouraging bureaucracy, and high respect for rank and authority. Low power distance index indicates a culture encouraging flat organisational structures, decentralised decision-making, participative style of management, and emphasis on power distribution.
- **Collectivism versus Individualism** addressing the extent to which ties between individuals are loose or integrated into groups. Individualism indicates a greater importance placed on attaining personal goals (a person's self-image is defined as "I"). Collectivism indicates a greater importance placed on the goals and well-being of the group (a person's self-image in this category is defined as "We").
- **Femininity versus Masculinity** focusing on the (absolute and relative) degree of competitiveness and assertiveness between men and women, with greater variations observed among men (across countries) and much smaller variations among women. The characteristics of masculinity include: distinct gender roles, assertive, and concentrated on material achievements and wealth-building. Femininity is identified with fluid gender roles, modest, nurturing, and concerned with the quality of life.
- **Uncertainty Avoidance**, referring to the attitudes towards uncertainty and ambiguity. A high uncertainty avoidance index suggests a low tolerance for uncertainty with the unknown being minimised through strict rules, regulations, etc. A low uncertainty avoidance index indicates a high tolerance for uncertainty and lax rules, regulations, etc.
- **Restraint versus Indulgence** standing for a society that allows relatively free gratification of basic and natural human desires related to 'enjoying life and having fun'. It revolves around how societies can control their impulses and desires with indulgence indicating a society allowing relatively free gratification related to enjoying life and having fun and restraint indicating that a society suppresses gratification of needs and regulates it through social norms.
- **Short-Term versus Long-Term Orientation** considering the extent to which society views its time horizon. Long-term orientation shows focus on the future and emphasizes persistence, perseverance, and long-term growth. Short-term orientation shows focus on the near future and emphasises quick results and respect for tradition.

Recent research suggests that cultural differences measured in the 1960s and the 1970s still serve as a "good proxy of cultural differences today (Beugelsdijk, Maseland and van Hoorn, 2013[71]). They are, not surprisingly, used widely in research on culture and financial literacy aspects, as countries move along similar paths, despite certain average changes, which could be observed in some of its dimensions[6].

Using Hofstede's framework

Hofstede's dimensions are resisting the test of time and keep their explanatory potential to analyse and understand change. Although they were not developed based on theory, but inductively after the underlying data has been collected, recent studies cited in subsequent sections of this paper have also confirmed the relevance of Hofstede's cultural dimensions to financial knowledge / literacy.

The range of scores provided for Hofstede's dimensions is from 0-100 with 50 as mid-level. It is considered that a score under 50 is relatively low on a particular dimension scale. When a score is over 50, the country scores relatively high on the scale at hand. In the case of "Collectivism vs Individualism", a country / society with a low score under 50 is considered "Collectivist" and above 50 is considered "Individualistic". However, only in comparison to a country that scores 28 on this dimension will a country that scores 43 be viewed as being more individualistic. For a country that scores 64, the country scoring 43 will be viewed as less individualistic.

This is the case because according to Hofstede, "**culture exists only in comparison**", suggesting that country scores on the six dimensions are relative and societies are compared to other societies. This means that only in comparison to another country can one say that a country is, for example, individualistic. Such an approach would help avoid to the extent possible unnecessary stereotypes and assumptions.

Moreover, Hofstede's dimensions may not coincide fully with the reality or with societal perceptions of values and beliefs. Indeed, the underlying six Hofstede's dimensions offer different levels of aggregation of broad tendencies. When using these dimensions, it is also important to remember that they should not be confused with values and beliefs at individual level (Hofstede, 2011[72]) and with expectations that all individuals of the same countries exhibit the same values and behaviours.

Culture and its "macro-level" effects on financial literacy

Cognitive, socio-economic determinants and financial socialisation affect the financial literacy of individuals (micro-level effects), while cultural factors affect financial literacy of a population or sub-group of a population (macro-level effects). The literature on cultural factors and financial literacy, however, is still somewhat scarce and "much remains to be learned about the 'endowment effect' of cultural differences in attitude towards money" (Kahneman, 2011[73]).

Despite the relatively limited focus until now on financial literacy and culture, this relationship appears to be significant. At times, relevant research focuses specifically on culture, financial decisions and behaviours, for example, discussing culture and its relation to investment, insurance and savings.

Table 2.2. Selected research on financial literacy, financial decisions, and culture

Authors	Countries studied	Focus and outcomes
Agarwalla et al., 2015	India	Focus on urban young people showing that tradition for the head of family to make financial decisions leads to lower financial literacy of children.
Ahunov and Van Hove, 2019*	92 countries	Show that individualism and uncertainty avoidance help to explain financial literacy variations across countries. Find that financial knowledge is lower in countries where power distance is large. Advises against linking uncertainty avoidance unequivocally to higher financial knowledge.
Alessie, van Rooij and Lusardi, 2011	Netherlands	Focus on differences in financial literacy according to religion, showing that adherence to a certain religious group (Catholics, Protestants and others) does NOT lead to a greater financially literacy than that of others or of non-religious individuals.
Arrondel, Debbich and Savignac, 2013	France	A focus on the political and ideological spectrum in France suggests that centrist voters perform better in terms of financial knowledge than others.

Authors	Countries studied	Focus and outcomes
De Beckker, De Witte and Van Campenhout, 2020*	12 countries	Focus on financial literacy and uncertainty avoidance, showing that uncertainty-avoiding cultures have higher levels of financial knowledge, and that financial knowledge is lower for individuals in countries with a strong orientation towards individualism.
Garðarsdóttir and Dittmar, 2012	Iceland	Focus on materialism and financial well-being, showing that people with materialistic values have more financial worries, worse money-management skills and a greater tendency towards compulsive buying and spending.
He et al., 2020*	89 countries	Focus on culture and consumption showing that long-term orientation restrains people's consumption.
Hsu, 2016	United States	Focus on in individualistic societies, where more people prefer to manage their finances themselves and would thus be more likely to exhibit higher financial literacy levels.
Khenfer, 2022	United States and the UAE	Focus on how materialism shapes the effectiveness of financial education messages, their impact on saving and spending, and documents opposite country outcomes depending on the cultural background.
Kwok and Tadesse, 2006*	Anglo-Saxon, continental countries and Japan	Focus on market and bank-based financial systems, showing that individuals in uncertainty-avoiding societies would tend to invest using a financial intermediary or banks as they promise a more stable stream of returns
Lusardi, Mitchell and Washington, 2011	Germany, the Netherlands, Japan, Italy, New Zealand, Russia, Sweden and the US	Focus on the comparison of self-assessed and actual financial knowledge in eight countries. The comparative analysis shows, for example, that Japanese individuals self-assess their financial knowledge at low levels while American individuals self-assess their knowledge at higher levels.
Riitsalu and Fred Van Raaij, 2022*	16 countries	Focus on financial well-being suggesting that national culture correlates with future financial well-being.
Shoham and Malul, 2012*	54 countries	Focus on savings and uncertainty avoidance, suggesting that cultures that rank high on uncertainty avoidance will tend to have high savings rates to cope with unpredicted declines in income and wealth in the future.
Culture-related differences of financial literacy between foreign- and native-born citizens		
Brown, Henchoz and Spycher, 2018	Switzerland	Focus on students in the French-speaking area of Switzerland showing that they have a lower level of financial literacy than those in the German-speaking area; which is attributed to systematic cultural differences across the language groups.
Davoli and Rodríguez-Planas, 2020*	Immigrants to the US from 26 countries	Focus on patience, long-term orientation and risk-aversion in the country of ancestry and shows that they stand behind the association between financial knowledge in the US and the country of ancestry.
Fuchs-Schündeln, Masella and Paule-Paludkiewicz, 2019[	Immigrants to Germany and the United Kingdom	Focus on savings of second-generation immigrants to Germany and to the United Kingdom, showing that those coming from countries that put strong emphasis on thrift or wealth accumulation tend to save more.
Haliassos, Jansson and Karabulut, 2017	Migrants to Sweden	Focus on the financial behaviour of migrants and refugees to Sweden and shows that differences diminish with exposure to host country institutions.
Culture-related gender differences in financial literacy		
Bottazzi and Lusardi, 2020	Italy	Focus on the role of mothers, showing that it matters for the financial knowledge of girls and establishing links to the social and cultural environment in a historical perspective.
Davoli and Rodríguez-Planas, 2022*	Immigrants to the US from 27 countries	Focus on financial knowledge showing that the higher the degree of gender convergence in financial knowledge in the country of ancestry, the higher the financial knowledge of women in the US relative to their male counterparts.
Ooi, 2018*	28 countries	Focus on the financial literacy gender gap, showing that it is narrower in countries that are more masculine, long-term oriented, high in uncertainty avoidance, indulgent and gender egalitarian. Also suggests that thrift is a common trait of societies with long-term orientation.
Cultural impact on financial literacy as related to investment and insurance		
Beugelsdijk and Frijns, 2010*	26 countries	Focus on investment decisions, showing that individuals with high levels of uncertainty avoidance prefer the focus on stocks from their home country (positive home bias) and that negative home bias is characteristic for investors from countries considered more individualistic.
Chui and Kwok, 2007*	41 countries	Focus on insurance, showing that individuals make more use of life insurance in countries where citizens are on average more self-oriented (individualism) than group oriented, implying higher financial knowledge as the use of such products is complex.

Note:* The paper uses the so-called Hofstede's cultural dimensions described in detail in the section on Measuring the impact of culture.

In some of the research referred to in this section, the terms "financial literacy" and "financial knowledge" are used interchangeably. In fact, both culture and financial literacy are complex and it is very challenging to reach conclusive results if the focus is on all three elements of financial literacy as per the OECD definition. Papers tend to analyse only financial knowledge (even though they refer to financial literacy sometimes) and its relationship with culture. Indeed, financial knowledge is easier to apprehend through an objective test-based assessment, while financial behaviour and financial attitudes are based on subjective assessments (De Beckker, De Witte and Van Campenhout, 2020[74]).

Selected studies exploring the association of different aspects of financial literacy, financial decisions and culture are outlined in this section and are referred to later, across this paper (see Table 2.2).

Research of financial literacy and culture using a dimensionalist approach

Literature aiming to shed light on the relationship between financial literacy aspects, financial decision and culture focuses either on specific cultural components defined within cultural dimensions or on broader country cultural specificities. Examples of the former types of approaches follow. Most of these studies use the framework of Hofstede discussed in the previous section (see section Measuring the impact of culture).

Data analysis across several countries show that some cultural dimensions, such as individualism and uncertainty avoidance, help to explain variations in financial literacy aspects across countries (Ahunov and Van Hove, 2019[75]) (De Beckker, De Witte and Van Campenhout, 2020[74]).

A number of other studies, discussed in subsequent sections, focus on just one specific country as they analyse links between financial literacy and culture using cultural dimensions, such as individualism, power distance and long-term orientation (Agarwalla et al., 2015[76]) (Kwok and Tadesse, 2006[77]) (Shoham and Malul, 2012[78]).

Such a "dimensionalist" approach is used in a paper proposing a conceptual framework for the analysis of financial well-being. The study finds indications that national culture correlates with future financial well-being and more precisely with perceptions of having a financially secure future and meeting future financial goals (Riitsalu and Fred Van Raaij, 2022[79]), see Box 2.3.

Box 2.3. Culture and financial well-being

The authors of a 2022 paper on "Current and future financial well-being in 16 countries" analyse the effects of individual and contextual factors on financial well-being and explore their possible interaction. They observe income to be a significant predictor of both components of financial well-being, namely current and future financial well-being, while institutional settings are correlated with current financial well-being and national culture with future financial well-being.

This has important policy and practical implications. Instead of focusing on financial well-being, public and private sector stakeholders need to make a distinction between current and future well-being due to their different antecedents and clearly target one (e.g., reducing current money management stress) or the other (e.g., improving expected future financial security).

In their focus on the relation of financial well-being to national culture, the authors find more complexity than in its relation to individual factors. They conjecture that globalisation may render the evaluations of financial situation universal despite cultural or institutional contexts, as the reference point may have shifted from local to global consumers. This may be the case because, instead of comparing one's lifestyle to that of local peers, social media allow people to immediately see a wider range of lifestyles and compare themselves with members of aspirational and associative reference groups around the world.

However, the authors recognise that the diversity of consumers within and across countries remains significant and global messages may not be efficient for increasing financial well-being. Instead, they suggest that policy makers and private sector players need to focus on personalised communication considering not only the cultural context and financial situation of the consumer but also the consumer's life stage, personality, and lifestyle.

The authors also focus on the need for multi-faceted approaches and find that on occasions, instead of financial education or persuasion, financial well-being would benefit from changes in other policies, e.g., social policy. For example, based on Hofstede's model, this could be the case for low-income socio-economic groups, in more individualistic cultures in which the future seems less secure. Such individuals may benefit from social policy measures and from the development of supportive communities, which could have a positive impact on expectations for the financial future.

Source: Leonore Riitsalu, W. Fred Van Raaij, Current and Future Financial Well-Being in 16 Countries, 2022

Literature using a non-dimensionalist perspective

The following studies analyse the relationship between financial literacy aspects, financial decisions and culture focusing on broader cultural specificities, such as religion, political views or the development of a materialistic / consumerist culture.

A study, focusing on differences in financial literacy according to religion (Alessie, van Rooij and Lusardi, 2011[80]), shows that adherence to certain religious groups (Catholics, Protestants and others) does <u>not</u> lead to a greater financially literacy than that of others or of non-religious individuals.

On the contrary, research on the heterogeneity of financial knowledge in France finds a difference across the political and ideological spectrum suggesting that centrist voters (characterised in France by a so called "liberal" view of the economy) perform better than others (Arrondel, Debbich and Savignac, 2013[81]).

Research on the psychology of materialism in Iceland, focusing on the association of materialism and indicators of financial well-being, show that people with materialistic values have more financial worries, worse money-management skills and greater tendency towards compulsive buying and spending. It further shows that the amounts of debt, including mortgage, can be directly linked to materialism, controlling for income and money-management skills (Garðarsdóttir and Dittmar, 2012[82]).

A more recent study (Khenfer, 2022[83]) discusses how materialism affects financial education, its impact on saving and spending, and documents opposite country outcomes depending on the cultural background. For example, financial education messages tend to increase savings intention of US financial consumers, whereas Arab consumers (data collected in the United Arab Emirates) prefer spending in the presence of financial literacy messages as they feel more optimistic believing that acquiring financial knowledge and skills guarantees one's financial success.

Culture also appears to affect perceived financial knowledge, which differs depending on the country as do its actual levels (Lusardi, Mitchell and Washington, 2011[84]). The comparison shows, for example, that Japanese individuals self-assess their financial knowledge at low levels while American individuals self-assess their knowledge at higher levels.

Without a link to materialism, a study of attitudes towards debt and debt behaviour in Sweden (Almenberg et al., 2018[85]) associates social norms and debt. In addition, the paper highlights the importance of inter-generational transmission (See Box 2.4).

Box 2.4. Social norms and attitudes towards debt and debt behaviour

Research on attitudes toward debt and debt behaviour in Sweden adds social norms as a determinant of debt. The paper shows that those who report being uncomfortable with debt have considerably lower debt levels and in addition, being uncomfortable with debt is strongly correlated between parents and children.

Many societies have, or have had, salient social norms regarding borrowing and saving and these social norms have frequently been institutionalised. This history is reflected in language (for example, the words for "debt" often also mean "sin" or "guilt"), religion (e.g., condemning interest on loans), and culture through the ages. Governments and civil society have also been propagating such social norms through, for example, savings schemes or informational programmes targeted at adults as well as children.

Social norms are potentially closely linked to intergenerational transmission since parents play an important role in the internalisation of norms in children. In a family setting, norms may be enforced through direct sanctions from parents or siblings. The norm is said to be internalised when an individual has acquired the ability to generate some form of internal sanction when the norm is violated. Guilt, shame, or embarrassment may be important mechanisms for the internalisation of norms. A related interpretation is that the internalisation of norms may give rise to cognitive dissonance in the case of tension between material incentives and a social norm.

It also seems likely that culture matters for debt choices, given how comparable countries differ when it comes to credit arrangements. Differences in credit market development or tax rules are unlikely to fully explain large cross-country differences in the pervasiveness of mortgages, or why adjustable-rate mortgages are standard in some countries while fixed rate mortgages are the dominant form elsewhere, or why credit cards[7] are the dominant means of making card payments in some countries while debit cards dominate in others.

The authors also emphasise that social norms that discourage borrowing are not by definition good or bad. For example, people may underestimate the future debt burden associated with a loan, due to limited financial literacy or exponential growth bias, or succumb to temptation and incur debts in a time-inconsistent manner. In these cases, a social norm that causes them to take on little debt could be welfare improving. But social norms can also generate outcomes that are clearly less efficient from an economic point of view, e.g., by deterring talented people from investing in human capital, or by inhibiting consumption.

In addition, social norms are likely to adjust to changes in economic fundamentals, but the adjustment may be slow, giving rise to tension between new economic incentives and social norms inherited from the past. As a result, norm dynamics tend to be characterised by sudden shifts, or long periods of inertia accompanied by occasional large changes.

Household debt mediated through social norms also has relevance for policy makers. For example, policy makers wishing to stabilise aggregate household debt at a certain level may fail to make a large impact on behaviour. An alternative would be to target social norms directly, for example, through interventions to foster norms against (excessive) indebtedness. In this case, norm enforcement comes to rely increasingly on institutionalisation, and less on internalisation. This might be an effective way to affect economic outcomes. It is noted, however, that the welfare effects are likely to be ambiguous.

Source: Johan Almenberg, Annamaria Lusardi, Jenny Säve-Söderbergh, Roine Vestman, Attitudes Toward Debt and Debt Behavior, 2018

A focus on foreign- and native-born citizens

Studies of financial literacy aspects of different population groups highlight a difference between foreign- and native-born citizens, or between immigrants with different country of ancestry.

As regards household saving behaviour, for example, second-generation immigrants to Germany and to the United Kingdom, coming from countries that put strong emphasis on thrift or wealth accumulation tend to save more. These two cultural components also affect the saving behaviour of both first-generation immigrants and their children (Fuchs-Schündeln, Masella and Paule-Paludkiewicz, 2019[86]).

Another study of adults in the US, coming from 26 countries of ancestry, shows a strong association between their financial knowledge1 in the US and the financial knowledge level in their self-reported country of ancestry. A strong emphasis on patience, long-term orientation, and risk-aversion in the country of ancestry are among the cultural components behind the association between financial knowledge in the US and the country of ancestry. This association is also driven by financial knowledge "on risk diversification and interest compounding" (Davoli and Rodríguez-Planas, 2020[87])[8].

Similarly, a study of the financial behaviour of migrants and refugees to Sweden unveils differences across cultural groups and shows that differences diminish with exposure to host country institutions (Haliassos, Jansson and Karabulut, 2017[88]).

Another study finds that students in the French-speaking area of Switzerland have a lower level of financial literacy than those in the German-speaking area. This result is attributed to systematic cultural differences across the language groups with students in the German speaking region being more likely to receive pocket money at an early age and to have independent access to a bank account (Brown, Henchoz and Spycher, 2018[24]).

Gender differences in financial literacy and culture

The literature also focuses on gender differences in financial literacy aspects related to culture. Although gender differences are not so pronounced in SEE, they are particularly severe at a global level (Klapper and Lusardi, 2020[89]).

Combining PISA data (OECD, 2014[90]) with other indicators, research and analysis show that parental background, in particular the role of mothers, matters for the financial knowledge of girls. This role goes beyond financial socialisation insofar as it can perpetuate or change cultural stereotypes about gender roles in society. For example, having a mother who is a housewife is negatively associated with financial literacy, which implies that having a working mother significantly increases the financial literacy score of boys and girls (Bottazzi and Lusardi, 2020[54]). Furthermore, the literature establishes a link between the social and cultural environment in which girls and boys live and gender differences in a historical perspective, showing how stereotypes have been shaped throughout history with the transformation of the role of women in society (see Box 2.5).

Box 2.5. Cultural stereotypes in financial literacy: evidence from PISA

In a paper released in 2020, Laura Bottazzi and Annamaria Lusardi examine gender differences in financial literacy among high school students in Italy using data from the 2012 Programme for International Student Assessment (PISA). This research is linked to cultural stereotypes and the potential pressures of girls and boys to conform to stereotypical gender roles especially beginning in adolescence, which can shape how young people become financially literate. Families can be an important vehicle for perpetuating stereotypes, but stereotypes can also be rooted in history.

Gender differences in financial literacy are large among the young everywhere in Italy and are particularly severe in the South and the Islands.

First, combining the rich PISA data with other indicators, the paper finds that the role of the family and parental background - in particular the role of mothers - matter for the financial knowledge of girls in Italy. Data results indicate that the parental "role model" mainly affects girls and that the gender role model of mothers increases the daughters' financial knowledge score. The data also shows that girls who have a mother working specifically in finance have an advantage vis-à-vis other girls in their financial knowledge (fathers' carriers in finance seem to be much less consequential for boys).

Second, the analysis shows that the social and cultural environment in which girls and boys live plays a crucial role in explaining gender differences. Importantly, the paper determines that history plays a role by creating conditions favourable to the transformation of the role of women in society. Such conditions emerged with the development of medieval commercial hubs in Italy and the nuclear family structure consisting of parents and their children (one or more), typically living in one home residence. They ultimately shaped gender differences in financial literacy as well. One can observe higher financial literacy among youths in these regions today, and among girls as well.

The complex empirical work undertaken for this paper confirms the findings of previous studies but also advances the knowledge and understanding of the determinants of the gender differences in financial literacy, including the role of cultural stereotypes, families, and their historical background.

Source: Laura Bottazzi and Annamaria Lusardi, Stereotypes in Financial Literacy: Evidence from PISA, 2020

Using a large sample of US adults from 27 countries of ancestries, a recent paper finds that the higher the degree of gender convergence in financial knowledge in the country of ancestry, the higher the financial knowledge of women in the US relative to their male counterparts (Davoli and Rodriguez-Planas, 2022[91]). The outcomes of this paper underscore that gender differences in financial literacy aspects are socially constructed.

Another study, focusing on 28 countries, shows that cultural elements have a good explanatory power of gender differences in financial literacy (Ooi, 2018[92]). Drawing on Hofstede's framework (see section titled Hofstede's cultural dimensions), results suggest that the financial literacy gender gap is narrower in countries that are more masculine, long-term oriented, high in uncertainty avoidance, indulgent and gender egalitarian.

However, using data from India, research finds that the financial literacy gender gap in the country is not observable in matrilineal states in which the financial decision-making role is ascribed to women by culture and that women are more financially knowledgeable in matrilineal settings than in patriarchal ones (Rink, Walle and Klasen, 2021[93]).

Culture, financial investments, and insurance

Recent research has also focused on the role of culture in financial decisions, especially in terms of investment and insurance. It is at the same time acknowledged that investors' decision-making processes form as a result of the impact of numerous factors in addition to culture, for example, exchange rates, political affairs, sanctions, level of investing and financial knowledge (Petersen, Kushwaha and Kumar, 2015[94]).

As regards investment decisions, research provides a cultural explanation of the foreign bias in international asset allocation, focusing on risk attitudes. It appears that culture affects financial decisions insofar as individuals with high-level of uncertainty avoidance prefer the focus on stocks from their home country. This is often referred to as positive home bias.

On the contrary, negative home bias is characteristic for investors from countries considered more individualistic (Beugelsdijk and Frijns, 2010[95]). Consumer financial decision-making in countries with high uncertainty avoidance shows that individuals from such countries tend to use credit less.

In the field of insurance, consumers are considered more likely to respond according to their cultural prescriptions due to the uncertainty and ambiguity related to life insurance products. In this vein, research suggests that individuals make more use of life insurance in countries where citizens are on average more self-oriented (individualism) than group-oriented (Chui and Kwok, 2007[96]).

Limitations of recent research on culture and financial literacy aspects

The focus of this paper on financial literacy and culture in SEE contrasts with the prevailing quantitative approaches exploring the potential relationship of culture with financial literacy aspects. It takes a qualitative approach and analyses the outcomes of both, qualitative and quantitative research with different but often complementary focuses.

Importantly, this analysis has limitations in terms of comparability of the outcomes of quantitative research. This is the case for many reasons:

- For example, such papers focus on different countries, different types of respondents, different time periods, different questions, and modes of measurement.
- Some studies use dimensionalist approaches, while others are more focused on other parameters (e.g., language, historical development, religious or political background, etc.).
- On occasions, studies relying on data from different measurement frameworks for the same countries can yield different sets of results.
- Moreover, some conclusions stem from a country focus and others from cross-country analysis.
- Differences can also stem from the fact that some papers use OECD financial literacy data (De Beckker, De Witte and Van Campenhout, 2020[74]), (Ooi, 2018[92]), while others use different databases (Ahunov and Van Hove, 2019[75]), (Davoli and Rodríguez-Planas, 2020[87]).

In addition to these complexities, literature results are challenging to analyse given that often papers refer to financial literacy and financial knowledge interchangeably, as mentioned earlier. The focus on financial knowledge versus financial literacy is often determined by the fact that it relies on a test-based assessment. Moreover, from a methodological point of view, composite indicators present a number of challenges, such as potential double accounting or different assessment methods of their respective components (while all indicator components are treated in the same fashion).

Box 2.6. Potential avenues for future research on culture and financial literacy

Studies of financial literacy and culture discussed in this paper have sometimes yielded mixed results. Further research, including testing of culture measurement frameworks for robustness and validity would be very valuable going forward. Future studies of culture and financial literacy could, in particular:

- **Consider the value of a broad narrative review of the literature on culture as determinant of financial literacy and its potential policy implications**. Special attention could be paid on a more precise definition of the relationship between culture and financial knowledge or financial literacy, as it appears that the latter two terms are often used interchangeably. Such a differentiation would enable more accurate analysis and conclusions.
- **Address the limitations of existing frameworks for measuring culture by evaluating and comparing their potential to explain country differences in financial literacy**. Further research could focus on Hofstede's cultural framework which has been used the most in relation to financial literacy. The analysis could focus on the absence of a clear-cut correlation between financial literacy and some of Hofstede's cultural dimensions, as well as on some contradictory and / or ambiguous results of studies of the same cultural dimensions and their impact on financial literacy.
- **Study the reasons behind different financial literacy performance in societies with similar cultural characteristics.** For example, research shows that, with a few exceptions, geographic proximity is associated with cultural proximity (Minkov and Kaasa, 2021[99]), which does not always translate into similar financial literacy characteristics.
- **Further analyse the variation of culture at subnational level, as nations may not be culturally homogeneous.** For example, the cultural traits of immigrants or subgroups with a different linguistic, religious, or historical background, have an impact on financial literacy levels. It would be important to differentiate among such groups, as individuals born and raised in a country with parents originating from the country will be more deeply rooted in the national culture than someone just entering the country as an immigrant (De Beckker, De Witte and Van Campenhout, 2020[61]).
- **Explore the value of studying culture and its potential to help foster sustainable financial decision-making**. Future studies may also respond to the increasingly researched role of finance and financial literacy in sustainability (Salzmann, 2013[100]). While the core of the financial literacy domain is focused on personal finances, the societal context recognises that individual financial well-being is not only about personal or family money management and cannot be entirely separated from the rest of society (OECD, 2019[101]). A closer study of culture could help address sustainable financial decision-making challenges in association (to the extent possible) with the impact of social and behavioural/cognitive contexts (Nadler and Breuer, 2017[102]).
- **Monitor cultural dynamics and the trends that influence them** to identify and address their potential (positive or negative) impact on financial literacy (Harper, 2014[103]). Interaction among factors, such as globalisation, increasing access to education, and the rapid spread of information technology could shape culture and would need to be monitored and analysed to anticipate their impact on financial literacy.
- **Ultimately, focus future research on the potential definition of a conceptual framework to help address national culture and its relationship with financial literacy aspects**. Such

a framework would be particularly helpful if it could inform policymaking, the design and implementation of effective financial education strategies.

Source: OECD Analysis

The measurement frameworks of financial literacy (Hofsetede's, Schwarz' and Inglehart's) raise another set of methodological questions (see annex below). It would be beneficial to carry out further testing and comparisons of the soundness and robustness of the respective dimensions of each framework and their explanatory power (see Annex 2.A). for a discussion in greater detail).

Acknowledging these challenges, this paper does not attempt to improve analytical and methodological frameworks pertaining to culture. The paper thus analyses the implications of culture for financial literacy in SEE, it attempts to draw attention to some cultural characteristics in the region and to the examples of their potential impact on financial literacy as revealed in recent research.

On this basis, the paper also attempts to raise awareness of policy makers and other stakeholders from SEE that they need to consider these cultural traits as they consider other socio-economic and behavioural insights in their financial education approaches. They need to consider national characteristics as well as those of relevant sub-groups of individuals in multi-cultural countries and be mindful of the evolution of culture due to global trends.

Annex 2.A. Prominent frameworks for measuring culture

This annex provides more details on Schwartz' and Inglehart's frameworks even though Hofstede's dimensions have been used the most in analysing culture and financial literacy aspects. The objective is to illustrate further the complexity of addressing cultural characteristics to allow a deeper understanding of cultural values and beliefs.

Schwartz' cultural dimensions

Schwartz developed a theory of basic values, which are "concepts or beliefs, pertaining to desirable end states or behaviours, transcending specific situations, and holding meaning across countries" (Schwartz, 1992[97]).

Using 57 value questions, Schwartz surveyed teachers and students from 38 countries, and taking a dimensionalist approach like Hofstede, developed 6 value types. These include (i) conservatism, based on the values of security, conformity and tradition; (ii) intellectual and affective autonomy, or self-direction and hedonism; (iii) hierarchy (in roles); (iv) mastery, or self-assertion; (v) egalitarian commitment, or improving the welfare of others; and (vi) harmony (with nature).

All the items used by Schwartz can be viewed as personal values, while Hofstede and Inglehart also include various personal preferences, practices, attitudes and beliefs. Schwartz' value types were further simplified by considering the following three broad dimensions with two opposite poles:

- **Conservatism and autonomy**

  Conservatism encompasses key values for close-knit harmonious relationships, in which the interests of the individual are not viewed as distinct from those of the group. These values are primarily concerned with security, conformity, and tradition simplified definitions [as per (Chui, 2002[98])].

  Intellectual and Affective Autonomy: These are values are considered predominant in a society that views the individual as an autonomous entity entitled to pursue his or her own interests.

  Intellectual autonomy is related to self-direction and affective autonomy places an emphasis on stimulation and hedonism.

- **Mastery and Harmony**

  Mastery relates to self-assertion leading to the active mastery of the social environment. The active efforts of people to change their surroundings and get ahead of others are particularly valued.

  Harmony is related to harmony with nature.

- **Egalitarianism and hierarchy**

  Egalitarian Commitment is related to the transcendence of selfish interests and the values of voluntary commitment to help improve the welfare of other people.

  Hierarchy focuses on the legitimacy of hierarchical roles and resource allocation.

Inglehart and the World Values Survey

Professor Ronald Inglehart from the University of Michigan and his team are founders of the World Value Survey, a project, which grew out of the European Values Study, launched in 1981. In 1997, Inglehart analysed World Values Survey data that were demographically representative of the populations of 43 societies. Since, it has been operating in more than 120 world societies.

The World Values Survey[9] was also designed to cover basic values and motivations with a focus on investigating the potential change in values caused by economic and technological development. Theoretical and empirical analysis suggest similarities of Inglehart's model with other dimensionalist models with greatest resemblance to Schwartz' framework (Kaasa, 2021[66]).

Inglehart's analysis focused on two dimensions: traditional versus secular-rational authority and survival versus self-expression.

Traditional values emphasise the importance of religion, parent-child ties, deference to authority and traditional family values. These societies have high levels of national pride and a nationalistic outlook. On the contrary, societies with secular-rational values place less emphasis on religion, traditional family values and authority. According to Inglehart (Inglehart, 1997[99]), the traditional-secular/rational dimension illustrates the contrast between the importance of tradition, i.e., religion and family as opposed to secular-rational authority, i.e., the politics or rational organisations designed for efficiently in achieving impersonal goals. Inglehart explains that the traditional-secular/rational dimension is *inter alia* related to ascribed status (i.e. assigned rather than earned or chosen), sharing and social conformity versus individualistic striving. The traditional pole emphasises accepting and trusting authority passively while secular/rational pole has the opposite preferences, relating it to the contrast between obedience and participation.

Survival values place emphasis on economic and physical security and are linked with a relatively ethnocentric outlook and low levels of trust and tolerance. Self-expression values give high priority to environmental protection, growing tolerance of foreigners, gays and lesbians and gender equality, and rising demands for participation in decision-making in economic and political life. The survival-self-expression dimension's logic is closely related to Maslow's theory of human motivation. According to Inglehart, self-expression gains in importance after security (both physical and economic) is achieved. Security is associated with tolerance and interpersonal trust, while insecurity is conducive to fear of everything unknown. As regards the self-expression dimension, the emphasis is on self-realisation and meaningful work. It is also associated with the belief that scarcity could be overcome thanks to individual achievement; while the other pole focuses on economic and physical security above all other goals. This is also associated with feeling threatened by foreigners and ethnic and other types of diversity (Kaasa, 2021[66])).

Need for further research, tests and comparisons of existing frameworks to improve the measurement of culture

Table 2.A1. Simplified overview of the cultural dimensions of Inglehart, Schwartz, and Hofstede

Based on similarities

Inglehart	Survival		Traditional		Self-expression		Secular-rational	
Schwartz	Harmony	Conservatism	Embeddedness	Hierarchy	Mastery	Affective Autonomy	Intellectual Autonomy	Egalitarianism
Hofstede	Femininity	Uncertainty Avoidance	Collectivism	Power Distance	Masculinity	Uncertainty Acceptance	Individualism	Power closeness

Source: Anneli Kaasa, Merging Hofstede, Schwartz, and Inglehart into a Single System, 2021, 2021

Despite the differences among the three cultural models – Hofstede's, Schwartz' and Inglehart's - research has established similarities among their various dimensions.

Some studies have compared these sets of cultural dimensions, using mainly an empirical approach often based on correlation analysis. Research also provides empirical analysis of the usefulness of different sets of dimensions for specific research issues. Theoretical analysis to complement the work that has been done empirically is rather scarce and would be beneficial in the future, especially as the dimensions and their interpretations reflect a researcher's concept of the main issues facing societies

The above description of Inglehart's framework suggests potential links to the definitions of Schwartz' dimensions and to an extent to that of Hofstede, despite a much broader conceptualisation by Inglehart. Similarities are also observed between Hofstede's and Schwartz' frameworks. In comparing these two sets of measures, researchers conclude that "Hofstede's model is better explained by macro-economic variables while Schwartz' model is better accounted for by macro-social variables" (Gouveia and M. Ross, 2000[100]). This is in line with the observed use of Hofstede's model in the analysis of the relation between culture and financial literacy aspects. Further comparisons suggest that dimensions from different sets can overlap conceptually to a certain degree (Taras, Rowney and Steel, 2009[101]). A simplified approach to the comparisons of research using different sets of cultural dimensions is suggested in Table 2.A.1. in order to facilitate the understanding of the explanatory power of different models and how they are related to each other.

At the same time, the three cultural frameworks discussed in this paper exhibit "large differences, based on different theoretical reasoning, different methods, a different set of nations, different types of respondents, data from different historical periods, the comprehensiveness of the underlying sets of values, and the equivalence of these values in their meaning across cultures" (Schwartz, 1994[102]).

Further research to facilitate comparisons of the results of studies using different sets of dimensions as explanation of specific variables could yield significant value provided methodological issues do not prevent sound comparisons. In doing this, research could address criticism formulated in relation to these frameworks. This would shed new light on the soundness and robustness of each framework and potentially lead to confirming or improving their validity. In turn, this could potentially increase the explanatory power of these models, including of the relationship of culture with financial literacy aspects.

3 Implications for South East Europe

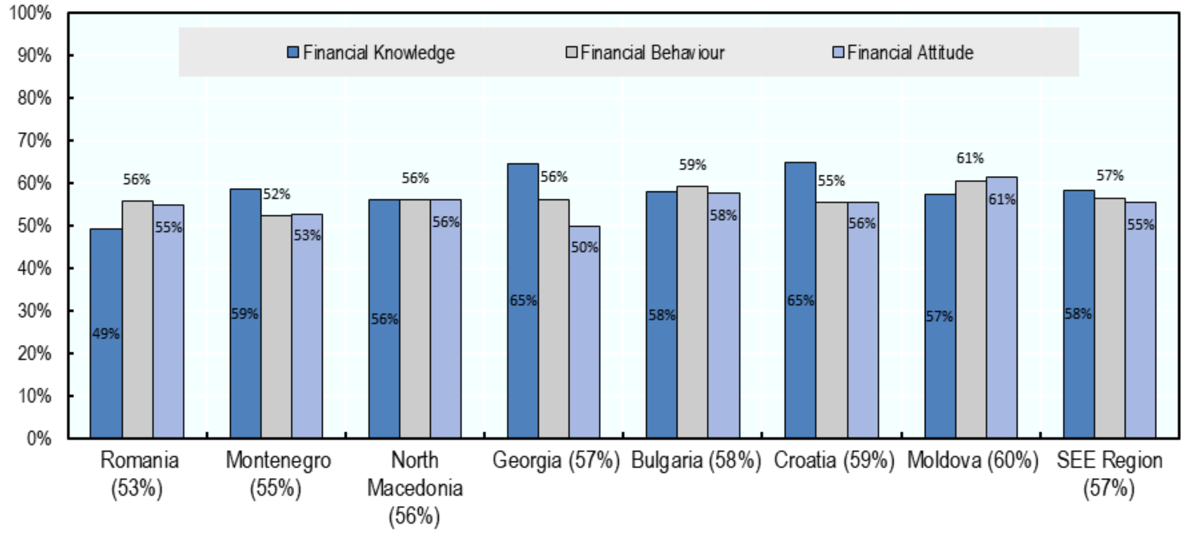
As discussed in the previous sections of this paper, there are many instances in which financial decisions and behaviours in a group of individuals are similar, or quite different, which can be explained to an extent by the underlying similar or varying cultural values and beliefs. This section will focus on financial education needs based on the financial literacy levels and characteristics in South East Europe and their potential links to cultural determinants. The likely associations of culture, financial literacy aspects and financial decisions in the region draw on research focusing on other countries. Carrying out quantitative research is beyond the scope of this paper. Against this background, the analysis suggests potential aspects of this relationship to analyse further and address in domestic policy discussions and approaches to financial education.

Financial literacy levels

The OECD Survey of adult financial literacy in South East Europe (OECD, 2020[1]) gathered information on each of the elements outlined in the OECD definition, namely financial knowledge, financial behaviour, and financial attitudes, thus allowing for the calculation of a globally comparable OECD financial literacy score for SEE countries. It further investigated financial inclusion and financial well-being elements. Financial resilience benefitted from special attention focusing on attitudes to active saving and behaviours related to the long term and aiming to avoid over-indebtedness. This section will remind of this evidence to help analyse the relations of financial knowledge or literacy (as relevant) with cultural factors.

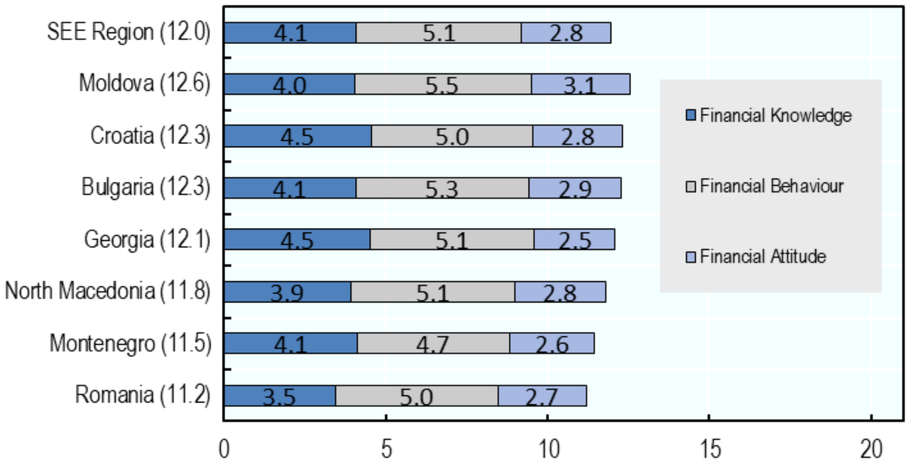
The results of SEE countries in terms of financial literacy are low overall. Adults in the region scored on average about 57% of the maximum possible financial literacy score[10] which is lower than comparable scores obtained through the same methodology from surveys of the EU and OECD economies (about 64% and 65% respectively). Moreover, according to the methodology used, the total possible score in financial literacy corresponds merely to basic financial literacy competencies. Against this background and considering the current challenging geo-political, sanitary and economic context, efficient and effective financial education harnessing the full pallet of approaches available, including cultural and behavioural insights, would be key.

Figure 3.1. Components of overall financial literacy



Source: OECD/INFE Survey (2020)

Figure 3.2. Financial literacy scores

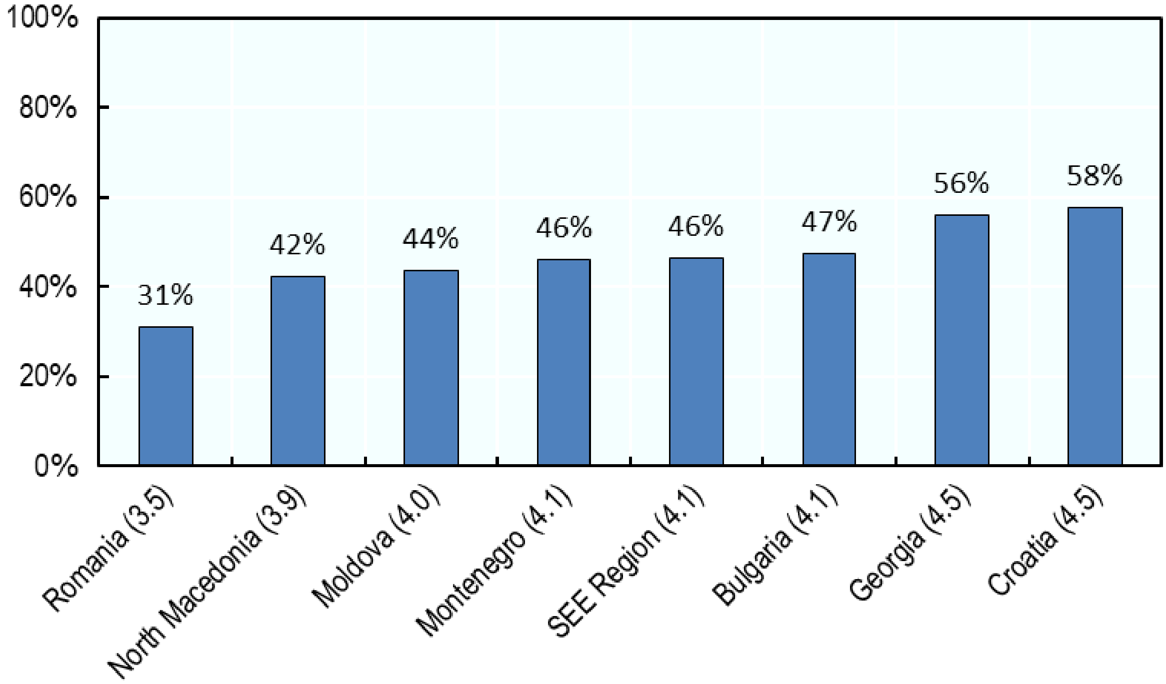


Source: OECD/INFE Survey (2020)

Financial knowledge

On average, SEE respondents answered correctly just over half of the financial knowledge questions. It appears that under half (46%) of the adults in this study achieved the minimum target score Figure 3.3. The lowest percentage of respondents to achieve the minimum target score was in Romania (31%), considerably lower than Croatia (58%) and Georgia (56%). Regarding self-reported financial knowledge, the most confident respondents were those from Croatia and Georgia.

Figure 3.3. Financial knowledge



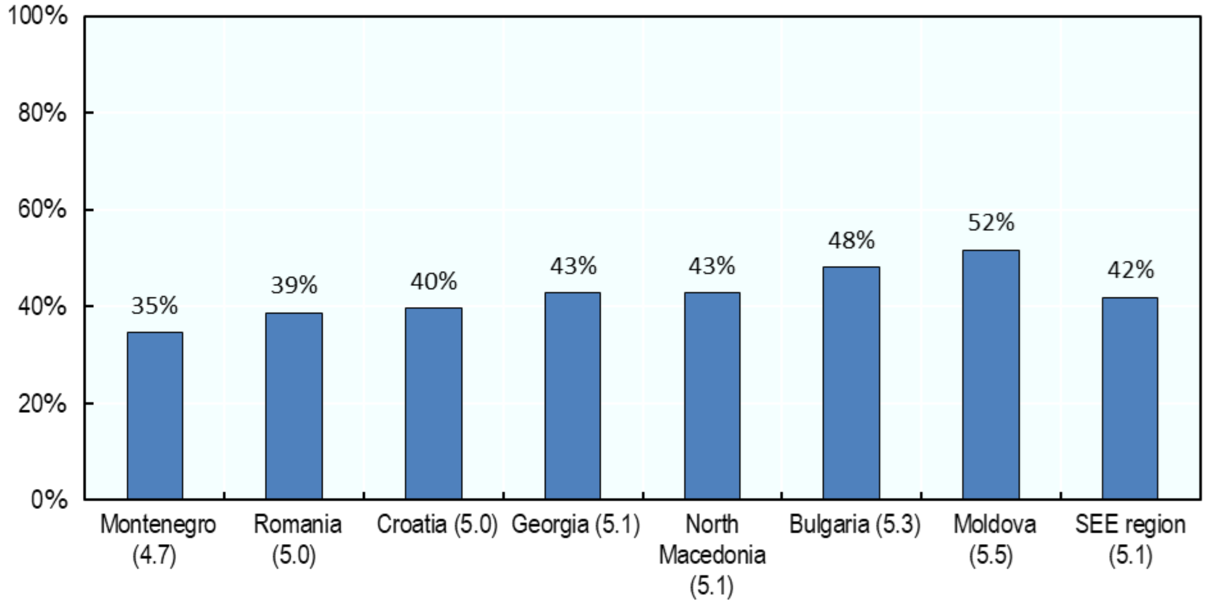
Source: OECD/INFE Survey (2020)

Financial behaviour

In terms of financial behaviour, on average under half of respondents (42%) reached the minimum target score across the 7 countries, ranging from 35% in Montenegro to 52% in Moldova Figure 3.4. There were also significant country differences about budgeting with adults in North Macedonia (72%), Moldova (69%), and Romania (68%) being most likely to have a budget. As regards financial control, the majority of respondents across the 7 countries carefully considered their purchases (average of 71%), a high percentage of adults (81%) reported paying their bills on time, and overall, respondents in most countries tended to be aware of their financial situation.

Figure 3.4. Achieving the minimum score on financial behaviour

Base: all respondents. % exhibiting at least 6 of the 9 behaviours. Average country-level score in parenthesis.



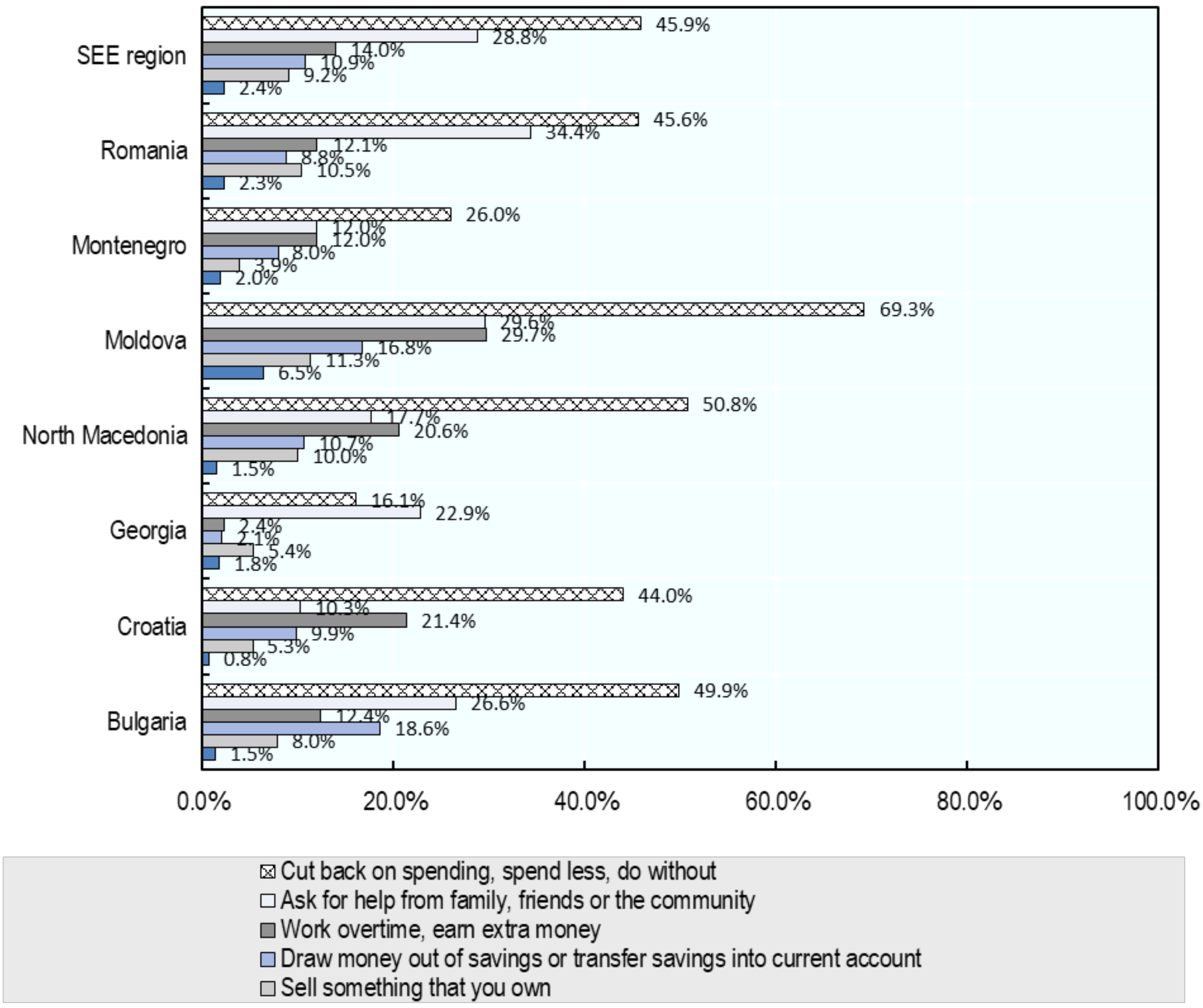
Source: OECD/INFE Survey (2020)

Financial resilience

Survey data shows that most of the active savers (55% across the 7 countries) were holding at least some of their savings in cash[11] and only about 1 in 5 people (22%) used savings accounts in banks. The SEE countries are also active savers with over two third (67%) of respondents who saved over the last 12 months. Combining the data on active saving with that on long-term goals suggests that in most countries, respondents were active savers but did not set long-term goals (on average 37% in the SEE region).

When asked about their capacity to make ends meet (Figure 3.5), across the 7 countries, almost half of the respondents (some 47%) reported that their income had not always covered their living costs[12]. In Moldova, this percentage was the highest (60%), while in Croatia it was the lowest (33%). The data show that to deal with a shortfall, people typically apply several approaches that do not involve borrowing from a bank or credit institution. Most people had cut back on spending (the highest percentage (70% was reported by Moldova and the lowest -16% - in Georgia). Close to one in three respondents (29% across the 7 countries) were able to ask family, friends, or the community for help.

Figure 3.5. Making ends meet



Source: OECD/INFE Survey (2020)

Retirement planning

Worryingly, a sizeable proportion of adults in the region (25%) responded they did *not* have confidence in their retirement plans. In terms of retirement plans, most of the respondents will rely on government provided pension schemes (some 75% of respondents on average in the region). Reliance on family and relatives is high – some 30% will rely on partners or spouses, while 25% plan to rely on children or other family members. Family reliance appears exceptionally high in Georgia (56% and 69% report that they plan to rely on partner and children respectively).

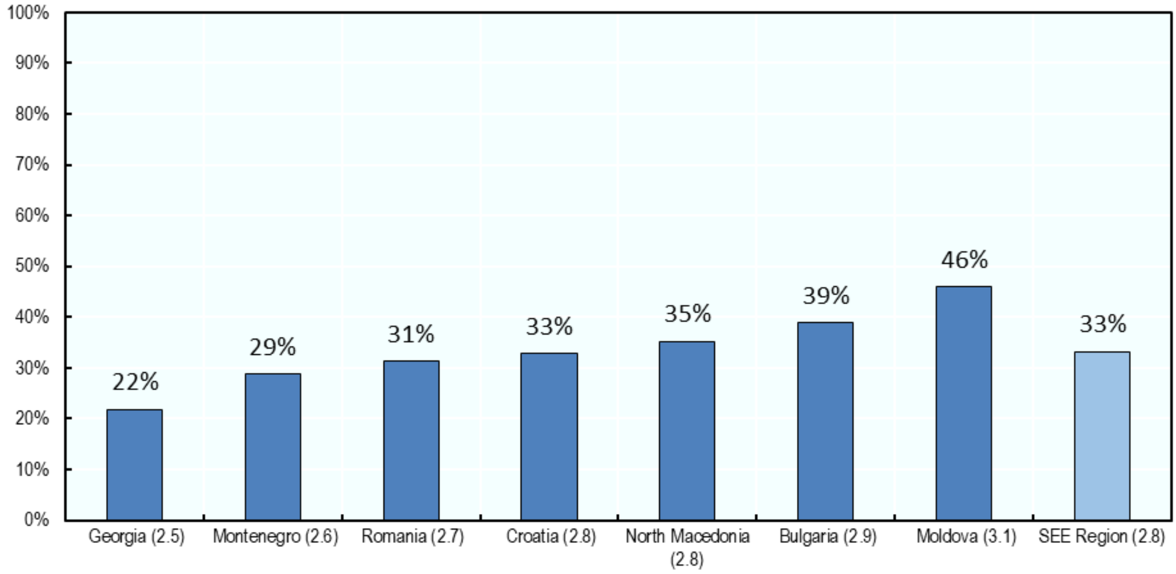
Trusted financial education source

Following the question on trust and consumer loyalty, the OECD toolkit enquires about what sources of financial education would be trusted by respondents. Responses suggest that a National or Central Bank of the country is the most trustworthy institution, with on average 34% of respondents pointing to this institution. Worryingly, the second highest response was “none”, suggesting limited trust in public but also private institutions in the region.

Financial attitudes

Even if an individual has sufficient knowledge and ability to act in a particular way, their attitude will influence their decision of whether to act. Figure 3.6 shows that relatively few respondents across the 7 countries had financial attitudes that would reinforce their overall financial literacy (33% achieved the minimum target score of 3; the average score being 2.8). In Georgia, just 1 in 5 people (about 22%) had such attitudes, rising to a maximum of 46% in Moldova.

Figure 3.6. Financial attitudes



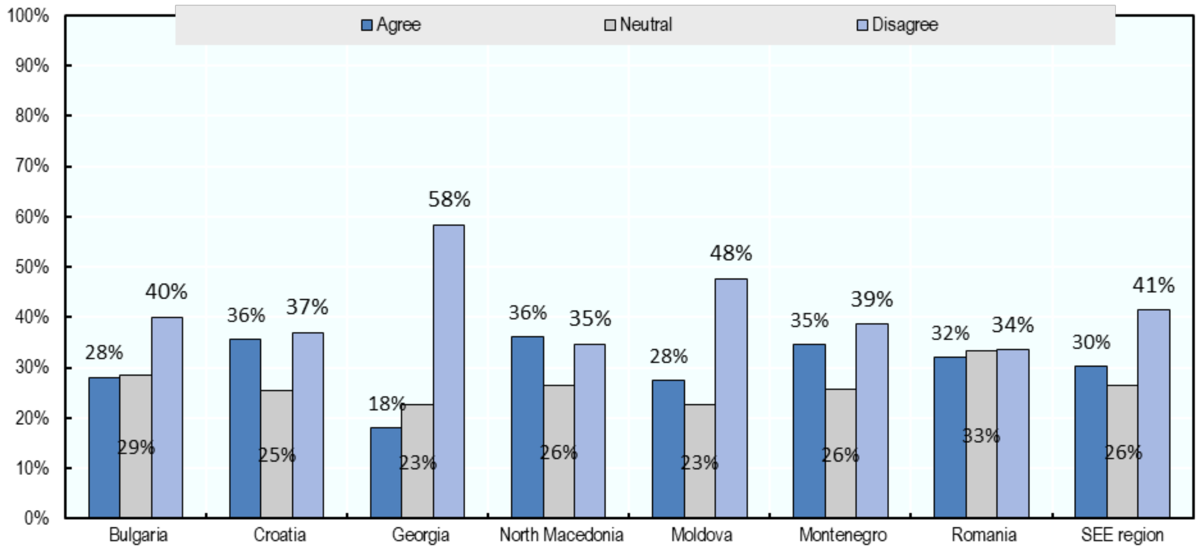
Source: OECD/INFE Survey (2020)

When asked to respond if they agree with the statement "I find it more satisfying to spend money than to save it for the long term", a neutral answer dominates. In response to the statement "I am prepared to risk some of my own money when saving or making an investment", one third (33%) of adults completely disagree, which points to some long-term views in the region (however, only 8% of adults in Romania disagreed with this statement). The most common response to the statement "Money is there to be spent" is complete agreement (some 40% on average across the region), suggesting the practical use of money is seen in the short term[13], rather than recognising it as a protection against future financial challenges.

Financial well-being

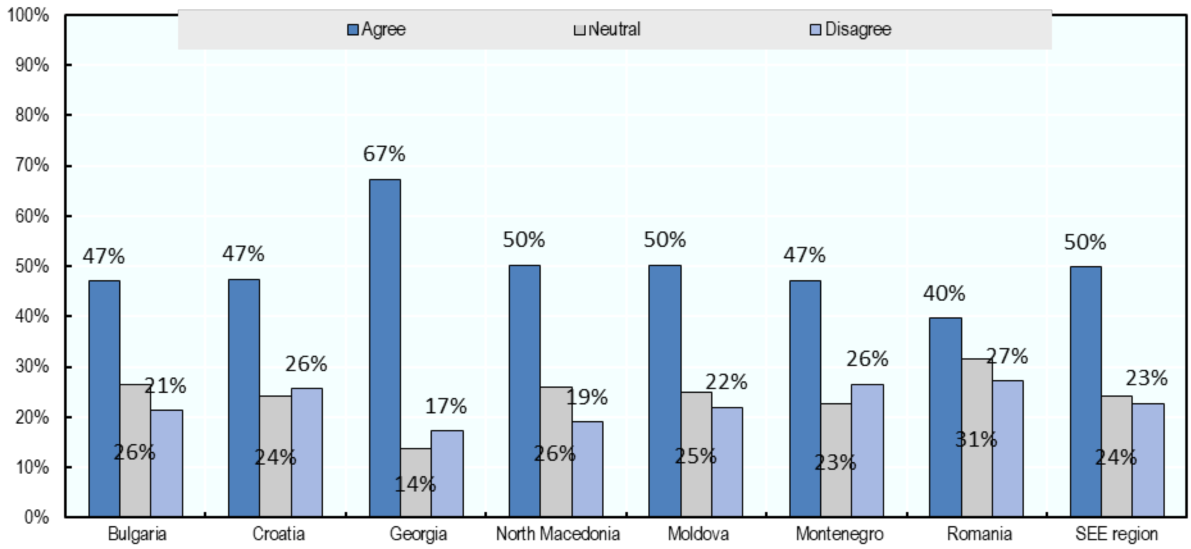
Elements of financial well-being[14] are identified by a series of questions and statements that seek to detect how respondents feel about their financial situation, how finances interfere with their life, how stressful their indebtedness is, and ultimately how easily adults can live their lives without worrying about money.[15] Respondents in SEE appear worried and stressed about their current financial situation, their ability to meet living expenses, and their ability to make their monthly income last (Figure 3.12). On average across the SEE region, some 41% of adults suggested they are *unsatisfied* with their present financial situation (highest dissatisfaction in Georgia with 58% of respondents). Similarly, adults consistently agreed with the statement that their finances limit their ability to do the things that matter to them. Some 50% on average in the region agree, and this grows to 67% in Georgia. Finally, just under half of respondents (49%) disagreed when asked whether they tended to have a short-term attitude (responding to the statement they tend to live for today and let tomorrow take care of itself).

Figure 3.7. "I am satisfied with my present financial situation"



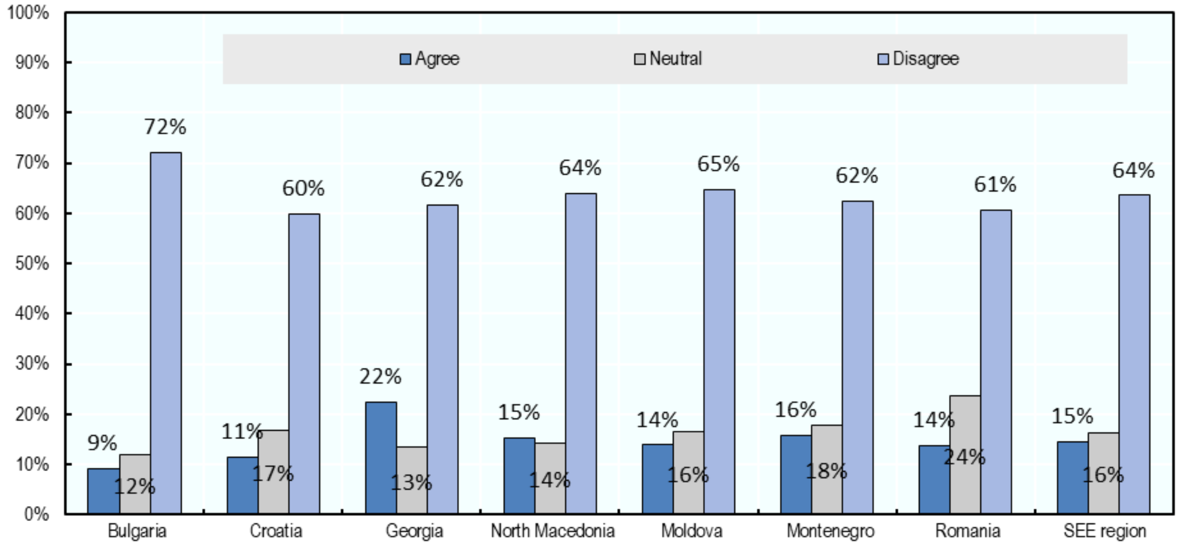
Source: OECD/INFE Survey (2020)

Figure 3.8. "My financial situation limits my ability to do the things that are important to me"



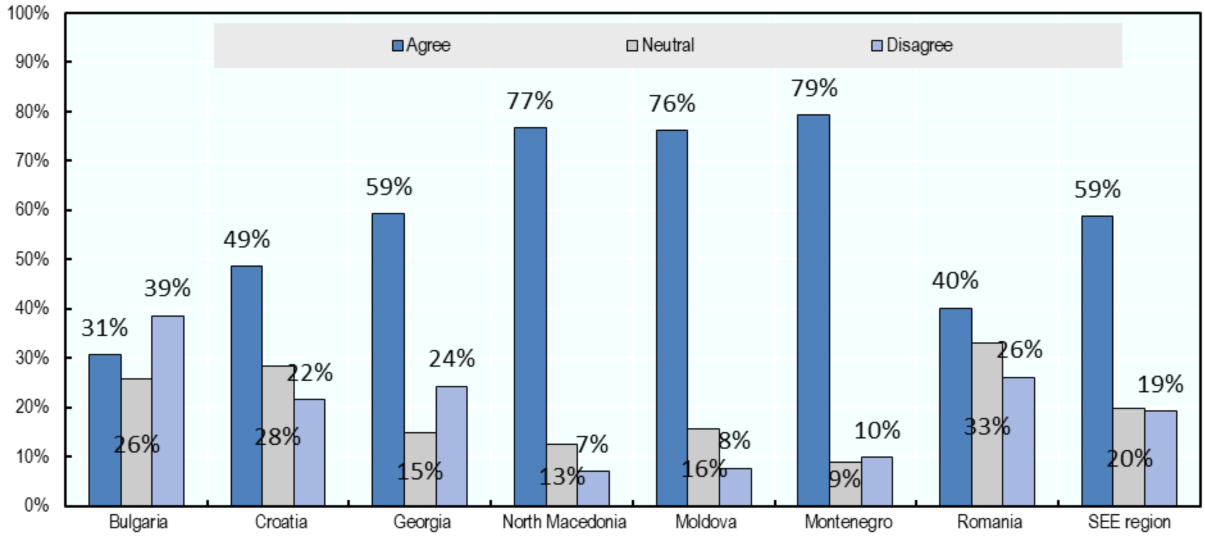
Source: OECD/INFE Survey (2020)

Figure 3.9. "I have too much debt right now"



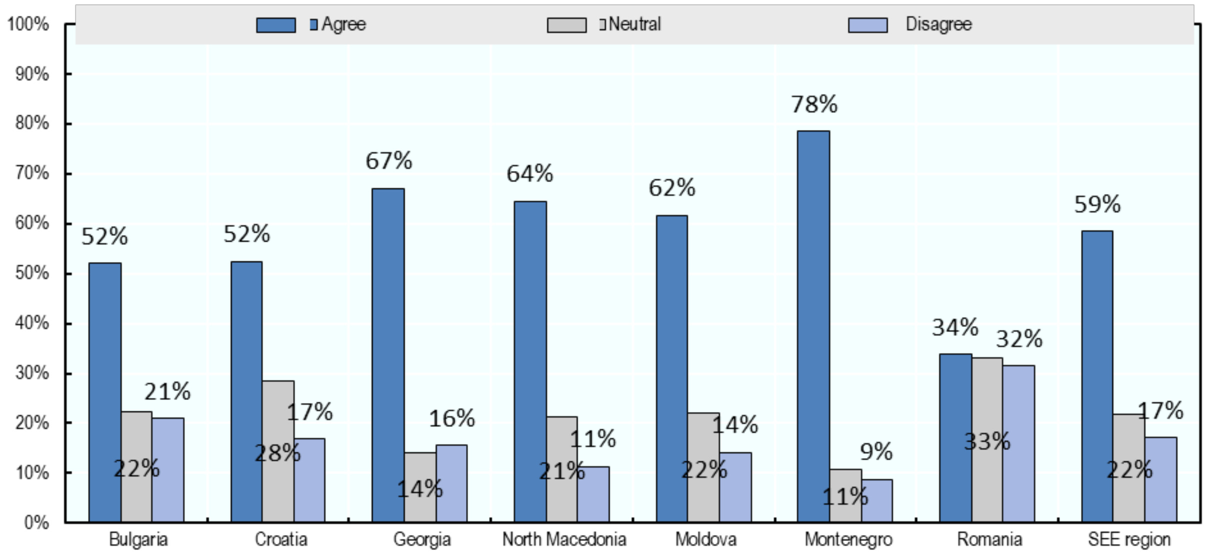
Source: OECD/INFE Survey (2020)

Figure 3.10. "I tend to worry about my normal living expenses"



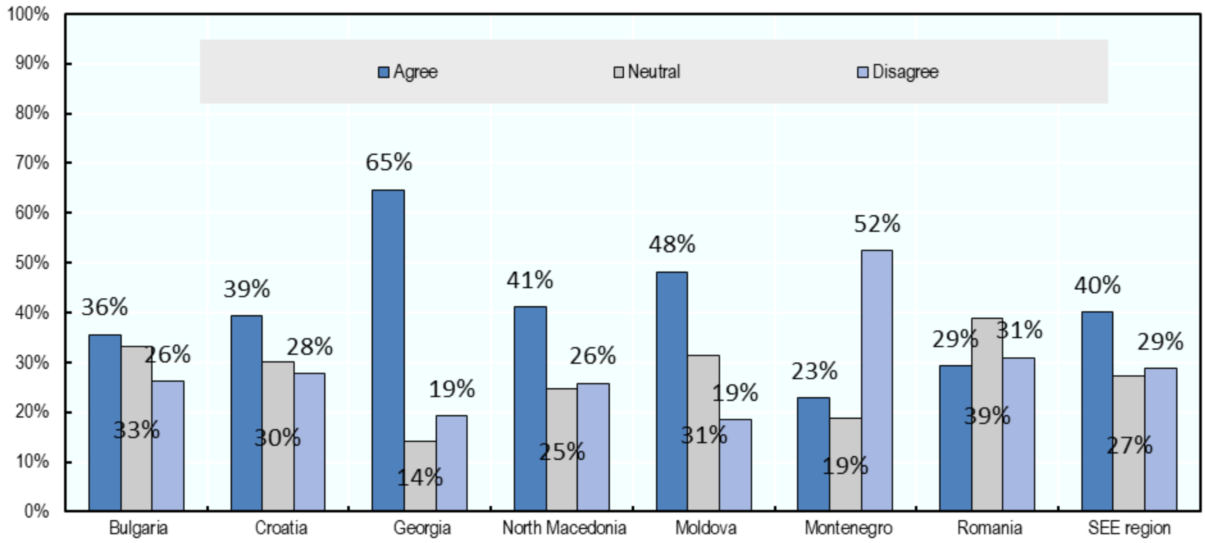
Source: OECD/INFE Survey (2020)

Figure 3.11. “My finances control my life”



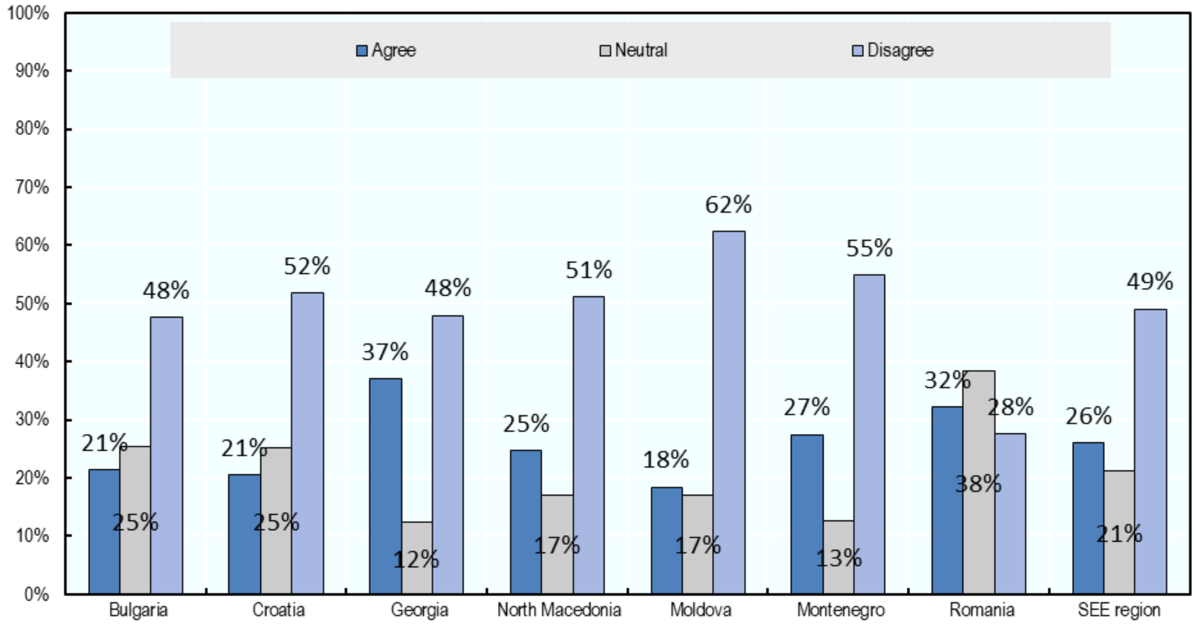
Source: OECD/INFE Survey (2020)

Figure 3.12. “I am concerned that my money won’t last”



Source: OECD/INFE Survey (2020)

Figure 3.13. "I tend to live for today and let tomorrow take care of itself"



Source: OECD/INFE Survey (2020)

Cultural scores of South East European countries

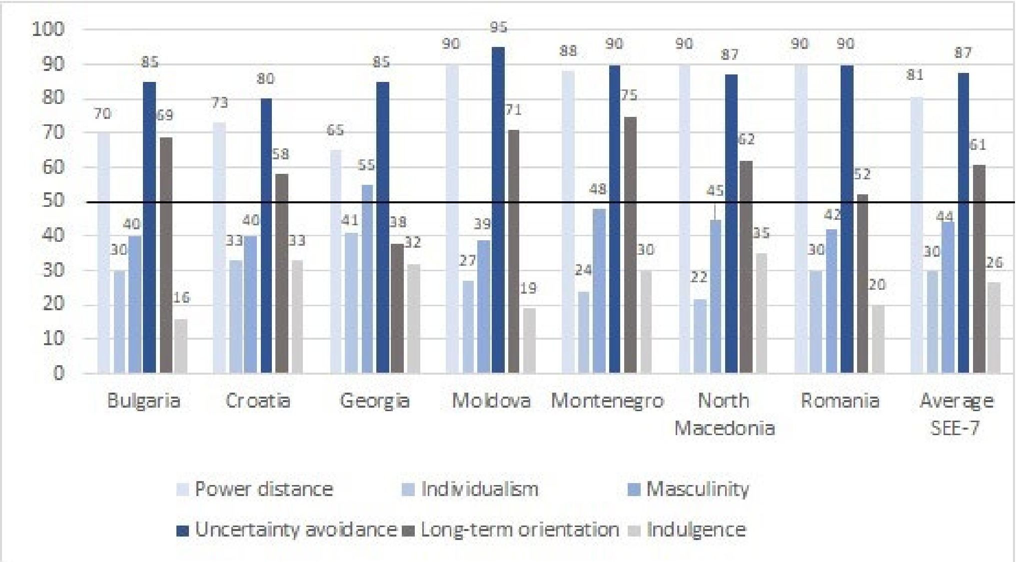
This section focuses on the differences among project countries from SEE based on Hofstede's six dimensions (6-D) discussed earlier in this paper (see chapter two) and the country scores available in this database titled Hofstede Insights (www.hofstede-insights.com/country-comparison/), which was last updated in 2015 (Koprowski et al., 2021[69]). This initial analysis of the cultural traits prevailing in the seven SEE countries, based on Hofstede's cultural dimensions, is qualitative and touches on the extent to which they could potentially explain the financial literacy characteristics revealed in the OECD/INFE Financial Literacy Survey of Adults in SEE (2020[103]).

Figure 3.14. Hofstede's Cultural Dimensions

Egalitarian	**Low power distance**	**PDI**	**High power distance**	Embraces hierarchy
Collectivist	**Collectivism**	**INV**	**Individualism**	Individualistic
Nurture	**Femininity**	**MAS**	**Masculinity**	Power
Risk tolerant	**Low uncertainty avoidance**	**UAI**	**High uncertainty avoidance**	Risk intolerant
Traditional	**Short-term orientation**	**LTO**	**Long-term orientation**	Prepare for future
Normative	**Restraint**	**IND***	**Indulgence***	Satisfaction

Note: * According to Hofstede (2011), this dimension is known from literature on "happiness research"
Source: Hofstede, Geert, Dimensionalising Cultures: The Hofstede Model in Context, 2011

Figure 3.15. Hofstede: the 6-D culture scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/

As discussed in the second chapter, the range of Hofstede's scores is from 0-100 with 50 as mid-level, where there is no clear-cut cultural tendency observed. It is considered that a score under 50 is relatively low on a particular dimension scale and vice versa. In the case of "Collectivism vs Individualism", a country / society with a low score under 50 is considered "Collectivist" and above 50 is considered "Individualistic". According to the 6–D cultural framework of Hofstede, SEE countries appear to be characterised the most by strong uncertainty avoidance, high power distance, and low indulgence scores (Figure 3.15). This is the case on average and separately for each country from the region, except Georgia where a slight tendency towards masculinity is observed. Georgia differs also with its short-term oriented score, whereas all other countries are long-term oriented.

Figure 3.16. SEE: Outcomes based on Hofstede's Cultural Dimensions

SEE-7	Av. score 81 (scores from 65-90)	PDI	High power distance	Embraces hierarchy
SEE-7	Av. 30 (from 22-41)	INV	Collectivism	Collectivist
SEE-6*	Av. 44 (from 39-55*)	MAS	Femininity	Nurture
SEE-7	Av. 87 (from 80-95)	UAI	High uncertainty avoidance	Risk intolerant
SEE-6*	Av. 61 (from 38-75)	LTO	Long-term orientation	Prepares for future
SEE-7	Av. 26 (from 16-35)	IND	Restraint	Normative

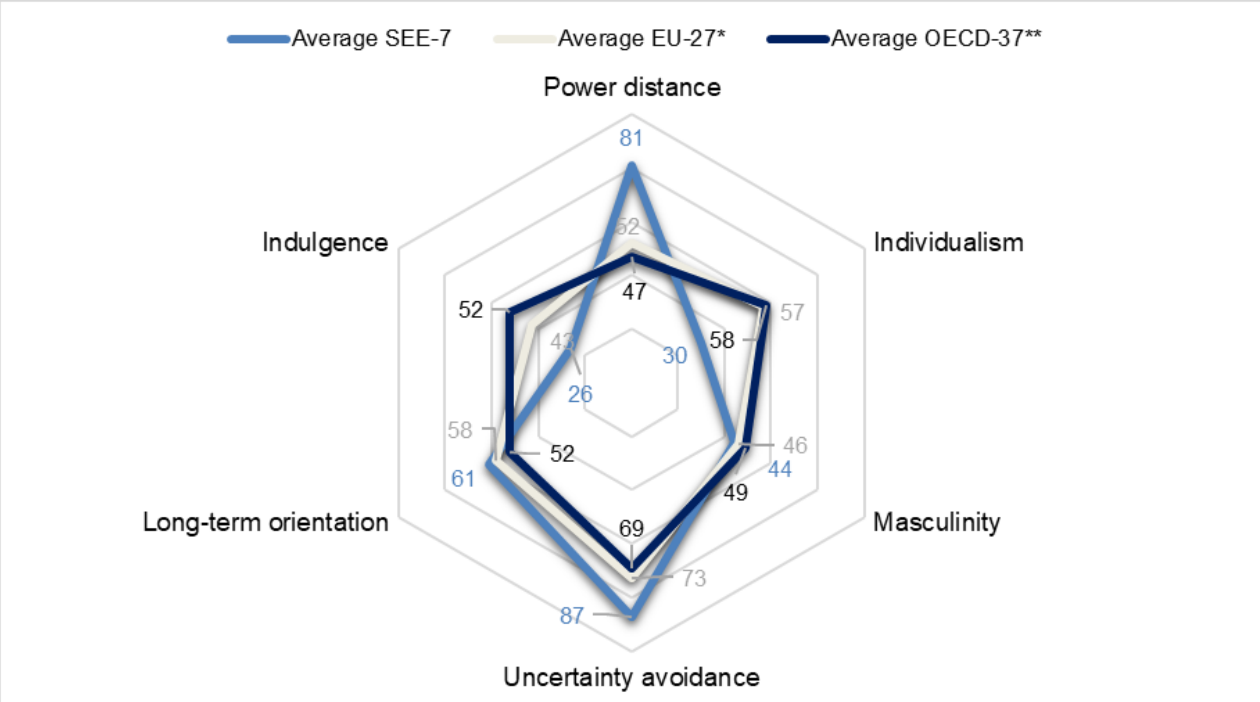
Note: * Without Georgia
Source: Author calculations based on Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/

The three dimensions, namely collectivism/individualism, masculinity/femininity, and long-term/short-term orientation, seem to be relatively less characteristic cultural traits of (most) SEE economies. In this respect, the Hofstede scores for SEE suggest a tendency towards more collectivist societies (i.e., individualism score under 50), very slightly tilted towards nurturing with an average score of 44 (with the exception of

Georgia, where the score is very slightly masculine/power oriented with an average of 55) and a tendency to restraint (low average indulgence score of 26).

Figure 3.17 offers a comparison between the average cultural scores of SEE countries versus the averages in EU and OECD countries. The OECD and EU countries exhibit similar average scores and in both settings – in EU and in OECD countries – the variations per country and per dimension are significant. The scores of SEE countries are much more homogeneous in terms of averages, but also by country and dimension. Even if the focus in SEE is on a smaller number of countries, the homogeneity of SEE cultural scores seems to be quite pronounced.

Figure 3.17. Hofstede: comparison between SEE, EU and OECD country scores



Notes: * Data lacking for all dimensions but indulgence for Cyprus.
** Data lacking for Costa Rica about long-term orientation and indulgence, and for Iceland about power distance, individualism, masculinity and uncertainty avoidance.
Source: Author calculations based on Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/

The biggest differences of the respective average scores for SEE on the one hand and EU / OECD countries on the other, concern as follows:

- power distance (respectively high in SEE with an average of 81 and low in EU and OECD countries, respectively with averages of 52 and 47),
- individualism (i.e., SEE societies are collectivist with an average score of 30, while EU and OECD country averages are higher respectively at 57 and 58, suggesting more individualistic societies with higher preference for a loosely-knit social framework) and
- indulgence (SEE being highly restrained societies with an average of 26, compared to EU countries, which have a much lower tendency towards restraint with an average of 43, while OECD countries exhibit a slight tendency towards indulgence with an average score of 52).

There is also a significant difference between the scores in SEE and EU / OECD countries regarding uncertainty avoidance, however in all the three of them, average scores suggest high uncertainty avoidance (the highest preference for avoiding risk and uncertainty is in SEE with a score of 87, followed by the EU and OECD with average scores of 73 and 69 respectively).

The scores for long-term / short-term orientation and especially masculinity / femininity suggest greater similarities in SEE, EU and OECD countries.

Uncertainty avoidance

The most pronounced cultural dimension for all SEE countries at hand, apart from North Macedonia appears to be **uncertainty avoidance** (**UAI).**

According to the Hofstede Insights database, the score on uncertainty avoidance measures the way in which societies tackle the fact that the future is unknown and position themselves, i.e. if they attempt to have some control over future events or just let them happen. The unknown is often a source of anxiety and the extent to which individuals in a culture feel negatively affected by ambiguity or uncertainty the beliefs and institutions that they create to cope are reflected in the score on uncertainty avoidance (see Table 2.1).

Even though some of the general cultural traits characteristic for uncertainty avoidant countries are not very prominent everywhere across the region, it can be expected that SEE societies are overall in line with the points from the description in the second column of Table 2.1. For example, countries with strong uncertainty avoidance traits tend to maintain inflexible codes of belief and behaviour and lower tolerance of unorthodox behaviour and ideas (also innovation may be resisted). Rules are reassuring in such societies; work can have an overwhelming place in people's lives and security is an important element in individual motivation.

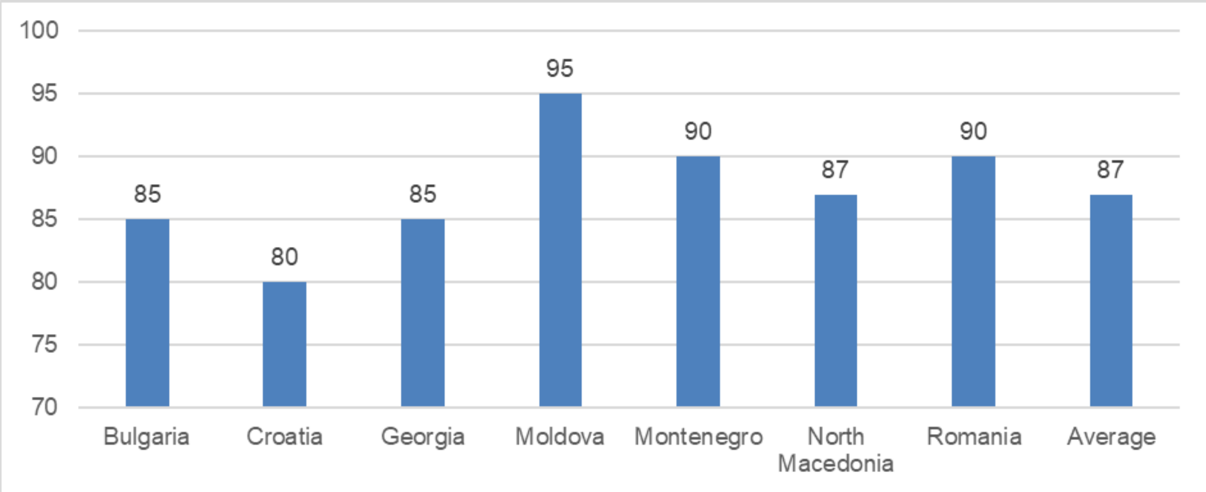
Table 3.1. Ten differences between weak- and strong- uncertainty avoidance societies

Weak Uncertainty Avoidance	Strong Uncertainty Avoidance
The uncertainty inherent in life is accepted and each day is taken as it comes	The uncertainty inherent in life is perceived as a continuous threat that must be fought
Ease, low stress, self-control, low anxiety	High stress, emotionality, anxiety, neuroticism
High scores on subjective health and well-being	Low scores on subjective health and well-being
Tolerance of deviant persons and ideas: what is different is curious	Intolerance of deviant persons/ideas: what is different is dangerous
Comfortable with ambiguity and chaos	Need for clarity and structure
Teachers may say "I don't know"	Teachers are supposed to have all the answers
Changing jobs is not a problem	Staying in jobs even if disliked
Dislike of rules – written or unwritten	Emotional need for rules, even if not obeyed
In politics, citizens feel and are seen as competent towards authorities	In politics, citizens feel and are seen as incompetent towards authorities
In religion, philosophy and science: relativism and empiricism	In religion, philosophy and science: belief in ultimate truths and grand theories

Source: Hofstede (2011) In terms of **uncertainty avoidance,** Moldova leads the way with a score of 95, followed by Montenegro (90), Romania (90) and North Macedonia (87), then Bulgaria (85) and Georgia (85) with Croatia coming last (80).

According to Figure 3.18, with an average of 87, there is very high preference for avoiding uncertainty across the SEE project countries.

Figure 3.18. Uncertainty avoidance scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/.

Even if it comes second after power distance in North Macedonia, the score difference with the first indicator is of 3 percentage points. Similarly, for Romania, uncertainty avoidance (90) has the same score as power distance. This emphasises the importance of uncertainty avoidance as a cultural trait for all SEE countries at hand.

Power distance

Power distance (PDI, see Table 3.2) appears to be the second key cultural trait in SEE countries according to Hofstede's 6-D framework with an average score of 81.

Hofstede defines power distance as the extent to which the less powerful members of institutions and organisations within a country expect and accept that power is distributed unequally. With a high average score of 81, power holders in SEE countries would be expected to be distant in society. Individuals in such societies (see Table 3.2) tend to accept a hierarchical order, the fact that power holders may have more benefits than the less powerful members of society and place great importance on status symbols.

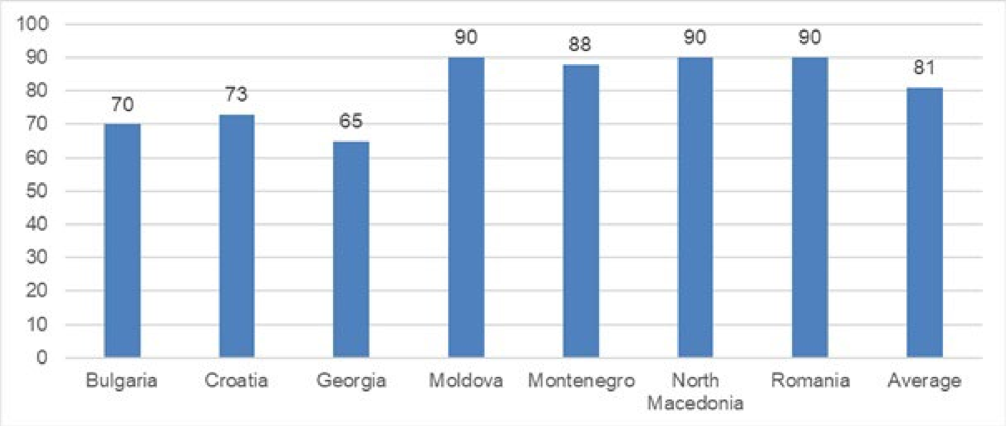
Table 3.2. Ten differences among small- and large- power distance societies

Small Power Distance	Large Power Distance
Use of power should be legitimate and is subject to criteria of good and evil	Power is a basic fact of society antedating good or evil: its legitimacy is irrelevant
Parents treat children as equals	Parents teach children obedience
Older people are neither respected nor feared	Older people are both respected and feared
Student-centered education	Teacher-centered education
Hierarchy means inequality of roles, established for convenience	Hierarchy means existential inequality
Subordinates expect to be consulted	Subordinates expect to be told what to do
Pluralist governments based on majority vote and changed peacefully	Autocratic governments based on co-optation and changed by revolution
Corruption rare; scandals end political careers	Corruption frequent; scandals are covered up
Income distribution in society rather even	Income distribution in society very uneven
Religions stressing equality of believers	Religions with a hierarchy of priests

Source: Hofstede, Geert, Dimensionalising Cultures: The Hofstede Model in Context, 2011

Moldova, North Macedonia and Romania "lead the way" in terms of large power distance with a score of 90, very closely followed by Montenegro (88). The remaining three countries, Croatia, Bulgaria and Georgia have significantly lower scores in a comparative perspective, respectively of 73, 70 and 65.

Figure 3.19. Power distance scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/.

Long-term orientation

Long-term orientation (LTO, see Table 3.3) appears to be a relatively less pronounced cultural characteristic of the SEE countries at hand according to Hofstede's data with an average regional score of 61.

According to Hofstede, this dimension describes how every society must maintain some links with its own past while dealing with the challenges of the present and future, and societies prioritise these two existential goals differently. Countries with a short-term orientation are referred to as "normative societies". They are described as preferring to maintain traditions and norms, while considering change in society with distrust. Long-term oriented societies tend to take a pragmatic approach, encouraging thrift, savings and investment, as well as effort for educational attainment as a way to prepare for the future.

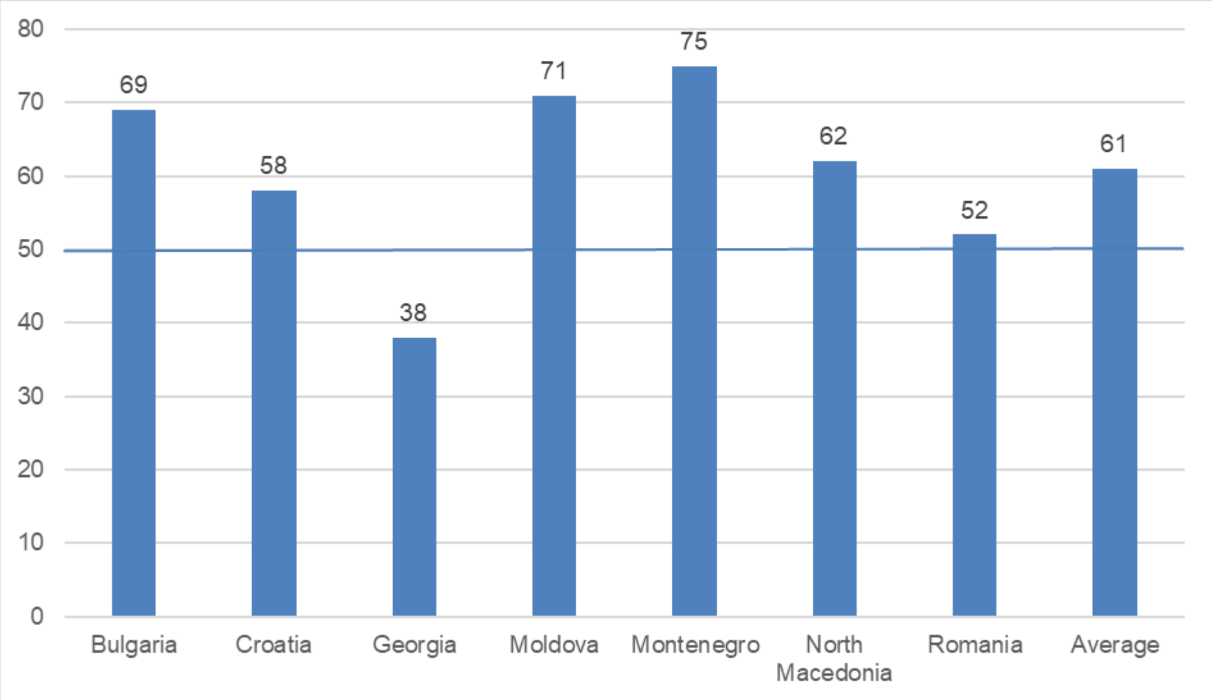
Table 3.3. Ten differences between short- and long-term orientation

Short-Term Orientation	Long-Term Orientation
Most important events in life occurred in the past or take place now	Most important events in life will occur in the future
Personal steadiness and stability: a good person is always the same	A good person adapts to the circumstances
There are universal guidelines about what is good and evil	What is good and evil depends upon the circumstances
Traditions are sacrosanct	Traditions are adaptable to changing circumstances
Family life guided by imperatives	Family life guided by shared tasks
Supposed to be proud of one's country	Trying to learn from other countries
Service to others is an important goal	Thrift and perseverance are important goals
Social spending and consumption	Large savings quote, funds available for investment
Students attribute success and failure to luck	Students attribute success to effort and failure to lack of effort
Slow or no economic growth of poor countries	Fast economic growth of countries up till a level of prosperity

Source: Hofstede (2011)

With an average score of 61 in LTO, most countries from the region seem to be relatively long-term oriented with a pragmatic culture. This would also mean that individuals in such countries tend to adapt traditions to changed conditions, exhibit a strong propensity to save and invest, and perseverance in achieving results. Long-term orientation is most characteristic in comparative terms for Montenegro (75), followed by Moldova (71) and Bulgaria (69). North Macedonia (62), Croatia (58) and Romania (52) follow with a significant difference, while Georgia comes last with a score of only 38 or as a short-term, normative society.

Figure 3.20. Long-term orientation scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/.

Masculinity / femininity

Masculinity / femininity (see Table 3.4) appears to be another relatively less pronounced cultural characteristics on Hofstede's 6-D framework.

Table 3.4. Ten differences between feminine and masculine societies

Femininity	Masculinity
Minimum emotional and social role differentiation between genders	Maximum emotional and social role differentiation between genders
Men and women should be modest and caring	Men should be and women may be assertive and ambitious
Balance between family and work	Work prevails over family
Sympathy for the weak	Admiration for the strong
Both fathers and mothers deal with facts and feelings	Fathers deal with fact, mothers with feelings
Both boys and girls may cry but neither should fight	Girls cry, boys do not; boys should fight back, girls should not
Mothers decide on number of children	Fathers decide on family size
Many women in elected political positions	Few women in elected political positions
Religion focuses on fellow human beings	Religion focuses on God or gods
Matter-of-fact attitudes about sexuality; sex is a way of relating	Moralistic attitudes about sexuality; sex is a way of performing

Source: Hofstede, Geert, Dimensionalising Cultures: The Hofstede Model in Context, 2011

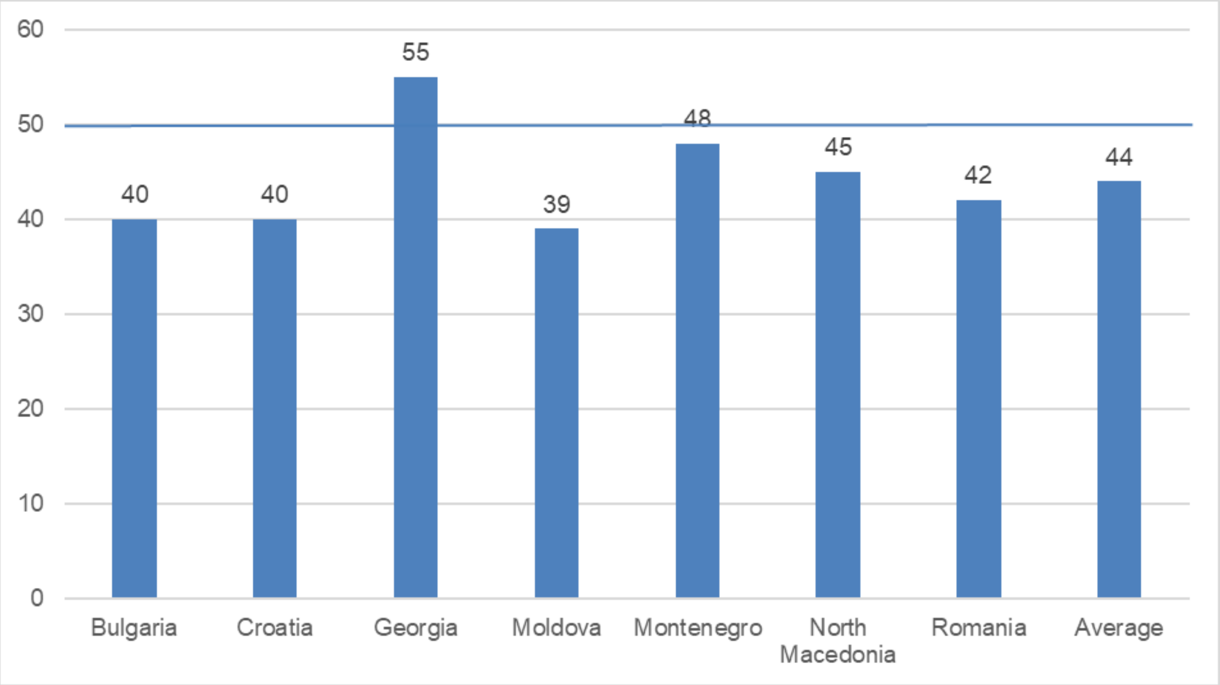
Hofstede defines masculine societies as those scoring over 50 on this dimension, which indicates that the society will be driven by competition, achievement and success, with success being defined by the winner / best in field.

A low score in this dimension suggests that the society at hand is characterised by a feminine culture and is centred around values, such as caring for others (nurturing) and quality of life, rather than power-oriented, competitive values. Quality of life rather than standing out from the mass is the sign of success. People in such societies tend to be motivated more by liking what you do rather than aspiring to be the best.

With an average score of 44, SEE countries score relatively low on this dimension, making them moderately feminine societies, which according to Hofstede, value equality, solidarity, quality in their working lives conflict resolution by compromise and negotiation.

All SEE countries tend to be slightly feminine societies apart from Georgia where masculinity is slightly more pronounced with a score of 55. Montenegro (48) comes next, followed by North Macedonia (45), Romania (42) Bulgaria (40), Croatia (40) and Moldova (39).

Figure 3.21. Masculinity/femininity scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/.

Individualism / collectivism

Individualism (see Table 3.5) seems to be another relatively prominent cultural characteristic among the six dimensions, with an average score of 30.

According to Hofstede, this dimension reflects the degree of interdependence a society maintains among its members (whether people´s self-image is defined in terms of “I” or “We”). The archetype of individualist society is characterised by people looking after themselves and their direct family, while in collectivist societies people are taken care of by groups in exchange of loyalty.

Table 3.5. Ten differences between individualistic and collectivist societies

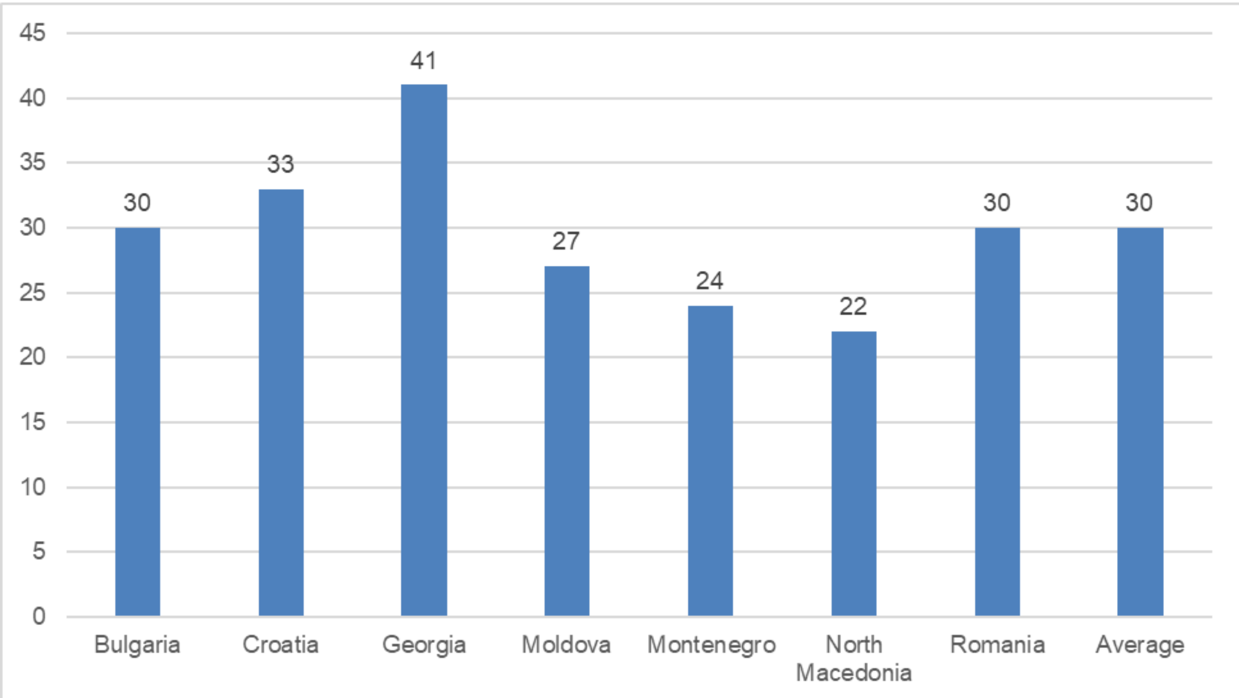
Individualism	Collectivism
Everyone is supposed to take care of him- or herself and his or her immediate family only	People are born into extended families or clans which protect them in exchange for loyalty
"I" – consciousness	"We" –consciousness
Right of privacy	Stress on belonging
Speaking one's mind is healthy	Harmony should always be maintained
Others classified as individuals	Others classified as in-group or out-group
Personal opinion expected: one person one vote	Opinions and votes predetermined by in-group
Transgression of norms leads to guilt feelings	Transgression of norms leads to shame feelings
Languages in which the word "I" is indispensable	Languages in which the word "I" is avoided
Purpose of education is learning how to learn	Purpose of education is learning how to do
Task prevails over relationship	Relationship prevails over task

Source: Hofstede, Geert, Dimensionalising Cultures: The Hofstede Model in Context 2011

With an average of 30, SEE countries appear to exhibit a collectivist culture, which according to Hofstede's framework would mean that individuals nurture early integration and close, long-term commitment to a cohesive 'in-group' with responsibility for its fellow members. Loyalty may override other societal rules and offence would lead to loss of face.

In terms of collectivism, Georgia (41) appears to be the least collectivist society in the region according to Hofstede's scores. It is followed by Croatia (33), Bulgaria (30), Romania (30) and Moldova (27). The most collectivist societies in the region, according to the scores appear to be Montenegro (24) and North Macedonia (22).

Figure 3.22. Individualism/collectivism scores for SEE countries



Source: Hofstede Insights (accessed in 2022), [www.hofstede-insights.com/country-comparison/.](www.hofstede-insights.com/country-comparison/)

Indulgence / restraint

Another significant cultural dimension for SEE countries seems to be **restraint** (see Table 3.6) with a mean score of 26 i.e., very similar to the score for individualism/collectivism. Hofstede defines this dimension as the extent to which people try to control their desires and impulses, based on the way they were raised. Relatively weak control is called indulgence and relatively strong control is called restraint and cultures described as indulgent or restrained. The low regional average score of 26 indicates a culture of dominant restraint with a tendency toward cynicism and pessimism and little emphasis on leisure and gratification. The shared perception of society is that people's actions need to be restrained by social norms and indulgence is somewhat wrong.

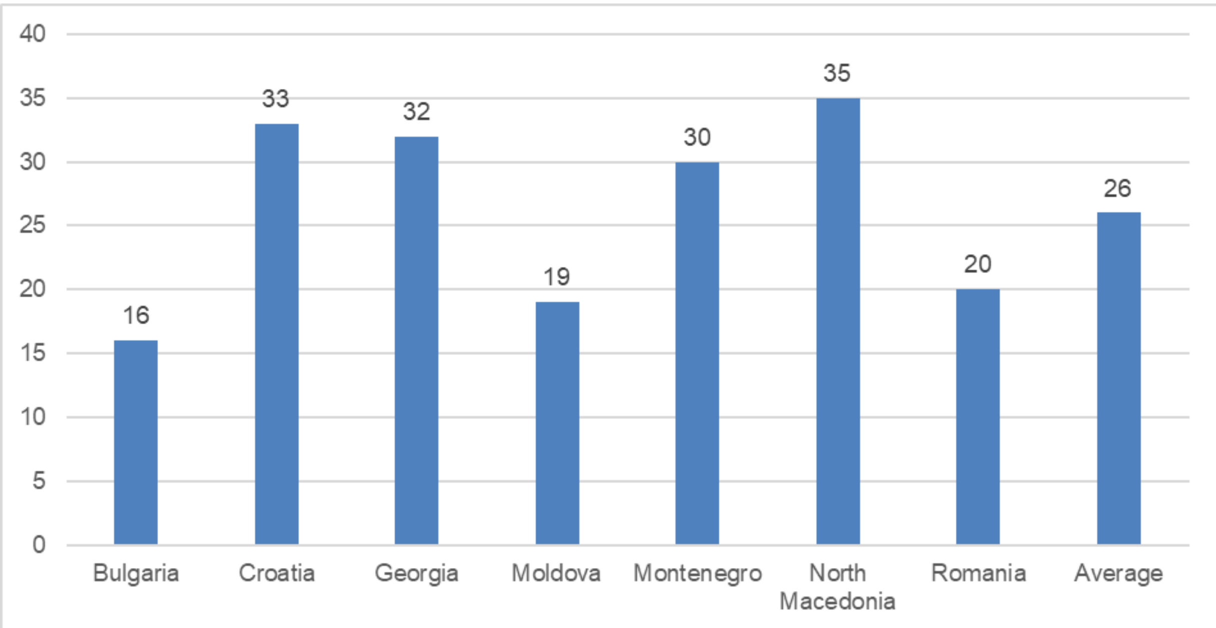
Table 3.6. Ten differences between indulgent and restrained societies

Indulgence	Restraint
Higher percentage of people declaring themselves very happy	Fewer very happy people
A perception of personal life control	A perception of helplessness: what happens to me is not my own doing
Freedom of speech seen as important	Freedom of speech is not a primary concern
Higher importance of leisure	Lower importance of leisure
More likely to remember positive emotions	Less likely to remember positive emotions
In countries with educated populations, higher birth-rates	In countries with educated populations, lower birth-rates
More people actively involved in sports	Fewer people actively involved in sports
In countries with enough food, higher percentage of obese people	In countries with enough food, fewer obese people
In wealthy countries lenient sexual norms	In wealthy countries stricter sexual norms
Maintaining order in the nation is not given high priority	Higher number of police officers per 100 000 population

Source: Hofstede, Geert, Dimensionalising Cultures: The Hofstede Model in Context, 2011

From a country-specific perspective, Bulgaria (16) comes across as the most restrained society, followed by Moldova (19) and Romania (20). The other countries are somewhat distanced, as follows: Montenegro (30), Georgia (32), Croatia (33) and North Macedonia (35).

Figure 3.23. Indulgence/restraint scores for SEE countries



Source: Hofstede Insights (accessed in 2022), www.hofstede-insights.com/country-comparison/.

Culture and financial literacy insights for SEE countries

According to OECD data (2020[1]), SEE countries are generally characterised by relatively low scores of financial knowledge, financial behaviour and financial attitudes. In terms of financial resilience, almost half of SEE respondents to the above OECD Survey reported that their income had not always covered their living costs. Over two thirds of respondents are active savers.One in four adults in the region does not have confidence in their retirement plans and reliance on family and relatives is high. Respondents also see the practical use of money in the short term, rather than recognising it as a form of protection against future financial challenges. Responses to financial well-being questions appear especially unfavourable for SEE citizens, suggesting that almost 60% of individuals in the region are worried about meeting their current expenses and agree that money tends to control their lives.

In terms of culture, according to the 6–D cultural framework of Hofstede, the SEE countries discussed in this paper appear to be characterised the most by strong uncertainty avoidance, large power distance, a restrained culture and a collectivist nature. The SEE Hofstede scores also suggest a tendency towards more long-term orientation, and nurturing culture (except Georgia). However, the latter two dimensions, namely nurturing culture and long-term orientation seem to be less characteristic cultural traits of (most) SEE economies given their scores.

This section analyses the financial knowledge / literacy and cultural characteristics in SEE countries against the background of relevant studies. It aims to compare the extent to which their results are in line with what can be observed in the region and provide some indications as to how financial education initiatives could reflect cultural traits.

The research used to illustrate various aspects of these links does not focus on the region and thus it could only suggest likely implications which need to be tested and explored further. Given the diversity of potential impacts on financial literacy, it is important to avoid oversimplifications and to treat the determinants of financial literacy in their complex interactions. Moreover, further qualitative and quantitative research on culture and its relation to financial literacy aspects, specifically in SEE, could be useful to inform future policy discussions in the region.

Low tolerance for uncertainty as an incentive to invest in financial literacy

Uncertainty avoidance (UAI) refers to the tolerance of societies for uncertainty and ambiguity. UAI is related to anxiety and distrust in the face of the unknown, as well as ambiguity and unstructured situations. It also relates to the wish to have defined customs and rituals and know the truth. Scores indicating high preference for uncertainty avoidance across SEE countries, according to findings of related studies, suggests that individuals in the region have a lower appetite for risk. In such a setting, “investment in financial literacy”[16] is seen as a way to ensure that they are resilient in the event of unexpected events. This could be consistent with a propensity of SEE individuals to seek advice when necessary and participate in initiatives which improve financial literacy, if other conditions are met, such as for example trust in financial advisors and providers of financial education.

In line with Hofstede’s avoidance construct (see Table 2.1) and finance research (Kwok and Tadesse, 2006[77]), individuals could cope with uncertainty by avoiding the formulation of autonomous judgements. It appears that this may lead to negative consequences, as shown in the study of Kwok and Tadesse, suggesting that individuals in uncertainty-avoiding societies would be less tolerant of, for example, fluctuating security prices and would tend to invest using a financial intermediary or use banks for their savings as they promise a more stable stream of returns. Consequently, data analysis suggests that countries with a strong uncertainty avoidance culture tend to be associated with a bank-based financial system. The outcomes of this study are in line with the experience of SEE countries at hand which are characterised by bank-based financial systems.

However, the results of the analysis of financial literacy aspects and uncertainty avoidance differ across studies. A first set of studies does suggest that this cultural trait is associated with higher levels of financial knowledge:

- Recent research based on a standardised sample of individuals from 12 countries by De Beckker, De Witte and Campenhout (2020[74])[17] investigated whether the degree of uncertainty avoidance can explain variations in financial knowledge, using Hofstede's dimensions and OECD data (2016[104]). The study by Davoli and Rodriguez-Planas (2020[105]) also achieves similar results using 2014 national-level Standard & Poor's Ratings Services Global Financial Literacy Survey (Leora Klapper, Annamaria Lusardi and Peter van Oudheusden, 2015[106]). More concretely, the authors of these studies link uncertainty-avoiding cultures with higher levels of financial knowledge based on the evidence they have analysed.
- Another study (Ooi, 2018[92]) focusing on the explanatory potential of national culture on the gender gap in financial knowledge, argues that in strong uncertainty avoidance societies, both women and men tend to save a lot, and perhaps women even more so due to longer life expectancy and other challenges they may face in life, which motivate them to invest in increasing their financial knowledge. This is considered to be a way to minimise their discomfort with uncertain situations. Using OECD/INFE data from 28 developed countries, the results of the study suggest a narrower gender gap in financial knowledge in countries that score high on uncertainty avoidance. Consistent with the findings of the two studies cited above, such countries could be expected, *ceteris paribus*, to exhibit higher aggregate levels of financial knowledge compared to countries where men invest more in increasing their financial knowledge than women.

The conclusions of these three papers would be consistent with a cultural propensity of SEE countries to nurture their financial knowledge to avoid uncertainty, which bodes well for financial education initiatives. Going forward, financial education stakeholders could harness this cultural trait, following this logic, by emphasising the importance of sound financial knowledge, financial behaviours and financial attitudes and the ways in which they could shield individuals from uncertainties.

In addition, the conjecture of research focusing on 54 countries (Shoham and Malul, 2012[78]) suggests that "cultures that rank high on uncertainty avoidance will tend to have high savings rates to cope with any unpredicted decline in income and wealth in the future". This is based on the higher gross savings rates in the studied countries as a proportion of GDP.

- In this vein, the OECD SEE Survey (OECD, 2020[1]) documents active savings behaviours in the region, showing that, on average, two thirds of respondents saved over the last 12 months. Given the strong uncertainty avoidance scores of SEE countries and their active savings behaviour, policy makers could harness the discomfort with uncertainty by promoting savings as a pre-condition for greater resilience and increased financial well-being. Such financial education initiatives would be particularly timely given today's economic situation, which requires greater financial resilience and could be considered a teachable moment. However, given the current financial hardships facing individuals globally, and in the region, their savings levels may not increase in the short term and the effects of such financial education initiatives could be observed in the medium to long term.
- To effectively foster savings behaviours, policy makers also need to address informality and build trust in the financial systems, as only 1 in 5 SEE Survey respondents used savings accounts in banks. Using behavioural insights to foster savings could be explored along with a differentiation of the approaches addressing the needs of specific socio-demographic groups (i.e., senior citizens need lesser focus on savings) in designing financial education initiatives. Given the low risk tolerance levels of SEE countries, this cultural trait could be harnessed in designing initiatives to promote insurance services as well.

However, the link of financial knowledge levels with uncertainty avoidance cultures is complex. Indeed, at this moment, uncertainty avoidance has not led to high financial knowledge scores in any of the SEE countries, contrary to the findings of the mentioned papers. For example, according to other studies, the link of financial knowledge levels with uncertainty avoidance cultures is not as clear cut as in the research discussed earlier.

- Against this background, Ahunov and Hove advise against unequivocally linking uncertainty avoidance countries with higher financial knowledge (Ahunov and Van Hove, 2019[75]). More specifically, the direction of the impact of uncertainty avoidance is considered ambiguous as investments in stocks and bonds would regularly require informed decision-making and potentially higher levels of financial knowledge in countries with market-based financial systems i.e., countries associated with lower uncertainty avoidance culture according to Kwok and Tadesse (cited earlier).

Large power distance and need to financially empower individuals

Large power distance (see Table 3.2) is related to a perception of inequality as regards power distribution. It can be defined as the extent to which the less powerful members of organisations and institutions (like family) accept and expect unequal power distribution. This dimension is thought to have appeared with the advent of large-scale societies, in which it is important to accept the leadership of powerful entities in order to function. Until the emergence of large societies, individuals would know their group members and leaders personally.

Further to the analysis of a 92-country sample, the work of Ahunov and Hove (2019[75]) cited earlier finds that financial knowledge is lower in countries where power distance is large. The same conclusion results from research on urban young people living in families with low financial literacy in India (Agarwalla et al., 2015[76]). This is explained based on the Indian tradition for the head of a family to make all key financial decisions, which would result in a lack of incentives for other family members to improve their financial knowledge.

This research is in line with the current relatively low levels of financial literacy in SEE countries. The implications of such analysis for financial education in the region would suggest a need to further underline the importance for individuals to take financial matters in their own hands without waiting for an authoritative figure to manage finances. An emphasis on the multiple benefits of financial literacy since a very young age, and its empowering consequences at all stages of life would be particularly helpful. Moreover, in today's financial landscape, many financial choices require individual decisions and have individual consequences (e.g., individualisation of retirement choices). Focusing financial education also on parents, given their prominent role in financial socialisation, to build financial knowledge and fostering sound financial behaviours and attitudes as an example for their children, could also play a key role going forward.

Harnessing a pragmatic, long-term oriented culture in financial education

Long-term orientation (Table 3.3) deals with change and suggests a pragmatic culture. In a long-term-oriented culture, the basic notion about the world is that it is in flux and preparing for the future is always needed. A high score in this dimension would show an ability to adapt tradition easily to changing conditions, along with a strong propensity to save and invest, thriftiness, and perseverance in achieving results. In a short-time-oriented culture, the world is essentially as it was created, so that the past provides a moral compass, and adhering to it is morally good, which suggests a more normative than pragmatic culture. People in such societies exhibit great respect for traditions, a relatively small propensity to save for the future, a focus on achieving quick results and viewing societal change with suspicion.

A link between long-term orientation and financial knowledge has been established in the study of Davoli and Rodriguez-Planas (Davoli and Rodríguez-Planas, 2020[107]). It focuses on adults in the US, coming from 26 countries of ancestry, showing a strong association between their financial knowledge in the US and the financial knowledge level in their self-reported country of ancestry. An emphasis on long-term orientation (LTO) in the country of ancestry lies behind the association between higher financial knowledge in the US and higher financial knowledge in the country of ancestry.

This finding could be explained by a greater likelihood of people with LTO to invest in gaining financial knowledge because of the fact that they value preparing for the future. This is in line with findings of other studies as well. Namely, Rong He (2020[108]) shows that LTO restrains people's consumption, while Ooi (2018[92]) argues that thrift is a common trait of LTO societies where people typically have more savings and funds available for investment. Similarly, another study (Shoham and Malul, 2012[78]) conjectures that individuals who value planning for the future would have higher saving rates which would impact future wealth[18].

In contrast to research, the current overall financial literacy levels in the SEE region tend to be low. In particular, the OECD Survey for SEE has yielded mixed results in terms of short and long-term attitudes of individuals towards their money (OECD, 2020[103]). However, the high scores of SEE countries in the long-term dimension of Hofstede's cultural framework could provide a good basis for cultivating financial literacy through effective financial education initiatives. As with uncertainty avoidance, long-term orientation in most SEE countries could in particular be harnessed in financial education initiatives fostering active savings behaviours as a precondition for greater financial resilience, including retirement savings.

Linking values of equality, solidarity, and quality of life to greater financial literacy

According to this dimension (Table 3.4) SEE countries could be considered as **relatively nurturing** societies focusing on working in order to live, striving for consensus, valuing equality, solidarity and quality in their working lives. According to Hofstede, compromise, flexibility and a focus on well-being tend to be favoured in such societies. Based on the respective scores, these traits are less valid for Montenegro (48), which is very close to the "equilibrium" and also for Georgia (55), which tilts slightly towards a society in which individuals would tend to be driven more by competition (wanting to be the best), achievement and success then in the other countries discussed in this paper. With such scores, Georgia and Montenegro tend to be a bit of both nurturing and achievement oriented societies.

Multiple and sometimes opposite conjectures could be made with respect to this dimension and financial literacy.

- In competitive/achievement oriented societies it is mostly men who are assigned the roles of decision maker, breadwinner, and even family planner. In view of the premise that acquiring financial knowledge may be costly and requiring a decision by individuals or households to invest in financial literacy (Lusardi, Michaud and Mitchell, 2017[109]), one would expect that men would tend to invest in financial literacy more than women and play a stronger role in financial decision-making in competitive/achievement oriented societies.
- This is also in line with the findings of Agarwalla et al. (2015[76]), who refer to the Indian tradition for the head of a family to make all key financial decisions and suggest that this would result in a lack of incentives for other family members to improve their financial knowledge.

Other studies yield outcomes going in the opposite direction, as follows:

- The findings of Ooi (2018[92]) suggest that in competitive/achievement oriented societies, both men and women are more assertive and competitive (albeit women less so than men). This would cause both, men and women to invest in their financial literacy. In this vein, the overall conclusion is that the financial literacy gender gap tends to be narrower in more masculine societies, which would also suggest that they would exhibit higher overall financial literacy levels.
- Furthermore, using data from India, research finds that the financial literacy gender gap in the country is not observable in matrilineal states[19] in which the financial decision-making role is

ascribed to women by culture and that matrilineal women are more financially knowledgeable than patriarchal women (Rink, Walle and Klasen, 2021[93]).

There is another line of reasoning used in the literature.

- Some researchers focus on the greater likelihood of individuals in more feminine societies to invest in life insurance given their greater sensitivity to the needs of their dependents (Chui and Kwok, 2007[96]). Given the relative complexity of life insurance products, this would suggest that people in feminine societies may tend to invest more in financial literacy.
- The study of gender stereotypes in financial literacy in Italy (Bottazzi and Lusardi, 2020[54]) also establishes a relation between higher financial literacy in regions which have historically supported the empowering of women in society.

Considering the ambiguous nature of the relation between nurturing/competition oriented societies and financial literacy according to the literature, it would be challenging to make meaningful conclusions for financial education in SEE. However, the relatively nurturing culture of most SEE societies may be used in formulating financial education messages in order to appeal to their sensitivity to the needs of their dependents and their households more broadly. The values oriented to greater quality of life according to the SEE cultural scores (as a characteristic of nurturing societies) could also be harnessed in financial education.

Balancing individualistic and collectivist traits in favour of financial literacy

Hofstede defines this dimension (Table 3.5) as the extent to which people feel independent, versus their being interdependent as members of larger wholes. Individualism is not considered as egoism, but rather as reflecting the acceptance of individual choices and the expectations of individual decisions. Conversely, collectivism means that one’s place in life is determined by the society and that people know their place in life[20].

For this cultural trait, the association with financial literacy is not clear-cut:

- The logic stating that in individualistic societies, more people would prefer to manage their finances themselves suggests that they are, therefore, more likely to exhibit higher financial literacy levels (Hsu, 2016[110]).
- In the same direction go findings (Chui and Kwok, 2007[96]) showing that in individualistic societies, due to “unavailable social support and security network”, individuals need to resort to insurance products to safeguard the welfare of their dependants. Consequently, given that life insurance products and services are abstract, complex, and entail uncertain future benefits, their use would imply higher financial literacy levels. In short, for these reasons, countries with individualistic cultural traits would tend to invest more in financially literacy.

The opposite outcome is observed in other studies:

- Recent research points out (De Beckker, De Witte and Van Campenhout, 2020[74]) that financial knowledge is lower for individuals in countries with a strong orientation towards individualism. In countries promoting individualistic behaviour, people are less inclined to seek financial advice given their overconfidence.

In the absence of unequivocal quantitative outcomes, it is difficult to formulate straightforward policy recommendations. However, it is important to be aware of how countries score on this dimension in order to craft messages addressing potential over-confidence, stressing the importance of financial advice, the role of insurance and the importance of financial knowledge, and sound attitudes and behaviours in case of absence of “support and security networks”.

As regards SEE, the outcomes of the former studies are in line with the current relatively low levels of financial literacy in SEE countries and their overall tendency to a culture of collectivism. Financial education could build on this trait and focus on the importance of nurturing self-reliance as a prerequisite for greater financial resilience and well-being. A focus on insurance, as well as savings levels (including for retirement) would help cultivate self-reliance in mitigating potential challenging financial situations or shocks.

As regards SEE nature of collectivist societies and the absence of over-confidence, policy makers could harness this trait in, for example, developing further opportunities for unbiased advice. More generally, this trait bodes well for the enrolment of individuals in financial education initiatives which would boost their capacity to improve the financial well-being of their families.

Focusing on financial literacy to balance restraint and promote financial well-being

Indulgence (Table 3.6) stands for a society that allows to indulge in enjoying the good things in life. In an indulgent culture, it is good to be free and to follow one's impulses and the society allows relatively free gratification of basic and natural human desires related to enjoying life. On the contrary, in a restrained society, the predominant feeling is that life is hard, and duty, as opposed to freedom, is the normal state of being.

Against this background and bearing in mind that individuals need personal investment to acquire financial literacy, indulgent cultures where leisure is greatly valued would face higher opportunity costs to do so and might thus have lower financial literacy levels.

On the other hand, research cited earlier highlights that gender roles are loose in indulgent cultures placing emphasis on freedom, and hence women and men may be both motivated to invest in their financial literacy (Ooi, 2018[92]). Evidence from OECD countries cited in the latter paper suggests that the financial literacy gender gap is effectively lower in high indulgence countries, which would suggest generally higher financial literacy levels in indulgent societies.

Given limited research, it would be challenging to formulate potential implications for financial education based on the restrained societies in SEE. Financial education could be instrumental in this respect as it leads to greater financial literacy of societies, which would enable people in SEE to feel more empowered and less constrained by a perception that money tends to control their lives (OECD, 2020[103]).

4 Conclusions

Preliminary policy considerations relevant for South East Europe

Countries from SEE have made important strides towards greater financial literacy of individuals and households. However, the relatively low levels of financial literacy in the region and the current **challenging socio-economic situation warrant a renewed effort in favour of financial literacy**, when more may need to be achieved with less. In this light, a strong political will and effective initiatives will be of the essence to help individuals and households achieve greater financial resilience and well-being.

Against this background, a **focus on the relations between culture and financial literacy dynamics could potentially add value in the design and delivery of financial education in the region.** Drawing on the research discussed in this paper, it appears that public and private sector actors and the broader civil society in SEE could potentially achieve more compelling results if their financial education initiatives take into consideration the role of culture.

Moreover, a **long-term commitment to financial literacy in SEE would reflect the fact that change in culture and financial literacy alike takes a long time** and incremental transformation is unlikely to show tangible results in the near future. More specifically, to close financial literacy gaps, SEE stakeholders could focus on the effect of adverse cultural beliefs/values, together with behavioural biases and socio-economic characteristics in crafting and implementing financial literacy policies.

More concretely, the cultural traits of SEE countries identified using Hofstede's cultural dimensions suggest potential opportunities to harness culture in financial education. For example, policy makers and stakeholders could:

- **Rely on the low tolerance for uncertainty in the region as an incentive to invest in financial literacy**. Financial education stakeholders could emphasise the importance of sound financial knowledge, financial behaviours and financial attitudes and the ways in which they could shield individuals from uncertainties. This cultural specificity could also support efforts to foster active savings behaviours. However, policy makers would also need to address informality and build trust in the financial systems, as only 1 in 5 SEE Survey respondents used savings accounts in banks (OECD, 2020[103]). Given the low risk tolerance levels of SEE countries, this cultural trait could be harnessed in designing initiatives to promote insurance services as well.
- **Address the hierarchical culture of SEE societies by empowering their citizens financially.** This is consistent with an opportunity to capitalise on this cultural trait by further underlining the importance for individuals to take financial matters in their own hands without waiting for an authoritative figure to control or tell them how to manage their finances. An emphasis on financial literacy from a very young age, and its empowering consequences at all stages of life would be particularly helpful. Focusing financial education also on parents, given their prominent role in the financial socialisation of children, could also play a key role in their future financial empowerment.
- **Harness the pragmatic, long-term orientation in project countries to foster SEE financial education**. As with uncertainty avoidance, the long-term orientation of SEE countries could be relied upon in financial education initiatives fostering active savings behaviours (including

retirement savings), recourse to insurance and other relevant financial products and services. This could be a precondition for greater financial resilience as well.

- **Link values of equality, solidarity, and quality of life to greater financial literacy.** The propensity towards a nurturing culture in SEE could be consistent with the formulation of financial education messages emphasising the potential of financial literacy to improve the capacity of SEE citizens to take good care of their dependents and their households. The feminine cultural values oriented to greater quality of life could also be harnessed in financial education insofar as they are linked to financial well-being.
- **Balance individualistic and collectivist traits in favour of financial literacy.** Similarly, a tendency to collectivism in SEE bodes well for the enrolment of individuals in financial education initiatives, which would boost their capacity to improve the financial well-being of their families. Financial education in the region could, in addition, balance this cultural trait by a focus on the importance of nurturing self-reliance as an additional prerequisite for financial resilience and well-being. A focus on insurance, as well as savings levels (including for retirement) would help cultivate self-reliance in mitigating challenging financial situations or shocks. Policy makers could also financially empower individuals to decrease dependence on social and family circles, for example, by prompting financial institutions to develop further their financial advisory services.
- **Focus on financial literacy to balance restraint and promote financial well-being**. Considering the combination of low levels of financial well-being and low propensity for indulgence in the region, this may be an opportunity to balance restraint by instilling greater financial literacy, which could provide space for some indulgence. Financial education would enable the people in SEE to feel more empowered and less constrained by a perception that money tends to control their lives (OECD, 2020[94]) which could help moderate their propensity for restraint.

Potential broader avenues for discussion and action in SEE based on these findings could include the following:

- Consider focusing on culture in future discussions of the goals and overall design and implementation of National Strategies for Financial Literacy. This could be done in stages.

  First, it would be important to **raise awareness** of public and private stakeholders in financial education about national cultural differences and cultural specificities (national or of different segments of the population, where relevant).

  Second, national working groups or committees could engage in discussions about the benefits of designing specific **initiatives (including digital), which take into consideration cultural aspects in financial education**.

  Third, the impact of such initiatives would need to be **monitored and reported** within national working groups on financial education with follow-up actions based on the outcomes.
- **Ensure that a focus on culture is mindful of the potential cultural heterogeneity of a given country**. The research referred to in this paper suggests the particular importance of being aware of cultural specificities in countries with a culturally diverse population due to historical, religious and language differences.
- **Tailor financial awareness campaigns to the cultural characteristics of the region** as they are related to the way in which individuals and households perceive the need for and their attitudes towards financial education.
- **Raise awareness of the relevance of culture in financial literacy training of teachers, financial advisors and other "train the trainers" programmes.** Understanding culture and its relation to financial literacy could help customise training programmes to cater to the cultural specificities of individuals and households and potentially increase their enrolment in financial education programmes.

Tentative general conclusions

A growing body of literature demonstrates that financial literacy can be deeply rooted in a country's culture and that it is important to consider cultural dimensions in financial education initiatives. This paper takes a qualitative approach to the analysis of culture and financial literacy and acknowledges that research until now has yielded some mixed results.

This suggests that further testing of culture measurement frameworks and their underlying methodologies for robustness and validity would be very valuable going forward. Special attention could be paid to a more refined investigation of the relationship between culture and financial knowledge or financial literacy, as it appears that the latter two terms are often used interchangeably. Such work could provide more practical lessons for financial literacy policy making and implementation considering cultural specificities.

This paper shows that despite outstanding methodological questions, research on culture and its relationship with financial literacy provides relevant insights for policy makers and other stakeholders who could consider some tentative conclusions, as follows:

- **Foster long-term commitment.** Considering the relation between culture and financial literacy, it appears that change could be difficult to observe in the short term as culture, "by its very nature is hard to act upon" (Raccanello and Sundaram, 2019[111]). This is an additional consideration in favour of the widely acknowledged need for a long-term commitment to financial education and robust financial literacy programmes necessary to achieve impact.
- **Take cultural factors into consideration together with socio-economic and behavioural factors in tailoring financial education programmes**: the literature also emphasises the complex relations among the factors affecting financial literacy and their intertwined character. Therefore, the impact of culture needs to be analysed together with such factors when assessing performance and designing/implementing financial education programmes.
- **Consider implementing multi-faceted policies** (Ahunov and Van Hove, 2019[75]). In this respect, financial education may increase its impact if it is complemented by other policies. For example, social policies may yield greater effect under specific circumstances, e.g., for individualistic cultures and for low-income population groups (Riitsalu and Fred Van Raaij, 2022[79]), which could pave the way for more effective financial education delivery at a subsequent stage.
- **Consider cultural traits as they evolve.** Financial education going forward needs to consider the potential acceleration of cultural change, due to globalisation, social network pervasiveness and other trends. Indeed, social media lead to increased awareness, for example, of different lifestyles with potential influence from reference groups around the world. This may foster certain cultural convergence with a potential greater effect on younger generations.

References

Hofstede Insights Website, https://hi.hofstede-insights.com/organisational-culture-transformation-package. [116]

10th Annual Joint Conference of the Retirement Research Consortium (ed.) (2008), *Preparation for Retirement, Financial Literacy and Cognitive Resources*, http://crr.bc.edu/wp-content/uploads/2008/08/2_2.pdf. [19]

Agarwalla, S. et al. (2015), "Financial Literacy among Working Young in Urban India", *World Development*, Vol. 67, pp. 101-109, https://doi.org/10.1016/J.WORLDDEV.2014.10.004. [76]

Ahunov, M. and L. Van Hove (2019), "National culture and financial literacy: international evidence", *Applied Economics*, Vol. 52/21, pp. 2261-2279, https://doi.org/10.1080/00036846.2019.1688241. [75]

Alesina, A. and P. Giuliano (2015), "Culture and Institutions", *Journal of Economic Literature*, Vol. 53/4, pp. 898-944, https://doi.org/10.1257/jel.53.4.898. [115]

Alessie, R., M. van Rooij and A. Lusardi (2011), *Financial Literacy, Retirement Preparation and Pension Expectations in the Netherlands*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w17109. [80]

Almenberg, J. et al. (2018), "Attitudes Toward Debt and Debt Behavior", https://doi.org/10.3386/w24935. [85]

Almenberg, J. et al. (2021), "Attitudes towards Debt and Debt Behavior*", *The Scandinavian Journal of Economics*, Vol. 123/3, pp. 780-809, https://doi.org/10.1111/sjoe.12419. [45]

Almlund, M. et al. (2011), *Personality Psychology and Economics*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w16822. [25]

Arrondel, L., M. Debbich and F. Savignac (2013), "Financial Literacy and Financial Planning in France", *Numeracy*, Vol. 6/2, p. 8, https://doi.org/10.5038/1936-4660.6.2.8. [81]

Atkinson, A. and F. Messy (2012), "Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study", *OECD Working Papers on Finance, Insurance and Private Pensions, OECD Publishing*, Vol. 15, https://www.oecd-ilibrary.org/finance-and-investment/measuring-financial-literacy_5k9csfs90fr4-en. [6]

Banfield, E. (1958), *The Moral Basis of a Backward Society. Glencoe, IL: The Free Press* | *socialcapitalgateway.org*, https://www.socialcapitalgateway.org/content/book/banfield-e-c-1958-he-moral-basis-backward-society-glencoe-free-press. [55]

Beugelsdijk, S. and B. Frijns (2010), “A cultural explanation of the foreign bias in international asset allocation”, *Journal of Banking & Finance*, Vol. 34/9, pp. 2121-2131, https://doi.org/10.1016/j.jbankfin.2010.01.020. [95]

Beugelsdijk, S., R. Maseland and A. van Hoorn (2013), “Are Hofstedees Culture Dimensions Stable Over Time? A Generational Cohort Analysis”, *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.2336893. [71]

Bottazzi, L. and A. Lusardi (2020), *Stereotypes in Financial Literacy: Evidence from PISA*, NBER Working Paper Series, http://www.nber.org/papers/w28065. [54]

Breuer, W. and B. Quinten (2009), “Cultural Finance”, *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.1282068. [41]

Brown, M., C. Henchoz and T. Spycher (2018), “Culture and financial literacy: Evidence from a within-country language border”, *Journal of Economic Behavior & Organization*, Vol. 150, pp. 62-85, https://doi.org/10.1016/j.jebo.2018.03.011. [24]

Bucher-Koenen, T. et al. (2016), “How Financially Literate Are Women? An Overview and New Insights”, *Journal of Consumer Affairs*, Vol. 51/2, pp. 255-283, https://doi.org/10.1111/joca.12121. [15]

Caprar, D. et al. (2015), “Conceptualizing and measuring culture in international business and management: From challenges to potential solutions”, *Journal of International Business Studies*, Vol. 46/9, pp. 1011-1027, https://doi.org/10.1057/jibs.2015.33. [2]

Chamorro-Premuzic, T. and A. Furnham (2008), “Personality, intelligence and approaches to learning as predictors of academic performance”, *Personality and Individual Differences*, Vol. 44/7, pp. 1596-1603, https://doi.org/10.1016/j.paid.2008.01.003. [27]

Chen, H. and R. Volpe (2002), *(PDF) Gender Differences in Personal Financial Literacy Among College Students*, Financial Services Review, https://www.researchgate.net/publication/285358406_Gender_Differences_in_Personal_Financial_Literacy_Among_College_Students. [10]

Chui, A. and C. Kwok (2007), “National culture and life insurance consumption”, *Journal of International Business Studies*, Vol. 39/1, pp. 88-101, https://doi.org/10.1057/palgrave.jibs.8400316. [96]

Chui, C. (2002), *EconPapers: The Determination of Capital Structure: Is National Culture a Missing Piece to the Puzzle?*, Journal of International Business Studies, 33, https://econpapers.repec.org/article/paljintbs/v_3a33_3ay_3a2002_3ai_3a1_3ap_3a99-127.htm (accessed on 29 April 2022). [98]

Coleman, J. (1990), *Foundations of Social Theory*, , Cambridge, MA: Harvard University. [47]

Cole, S., A. Paulson and G. Shastry (2012), “Smart Money: The Effect of Education on Financial Behavior”, *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.1317298. [26]

Compen, B. et al. (2022), “How to elicit and cease herding behaviour? On the effectiveness of a warning message as a debiasing decision support system”, *Decision Support Systems*, Vol. 152, https://doi.org/10.1016/j.dss.2021.113652. [38]

Consumer Financial Protection Bureau (n.d.), *Financial Habits and Norms*, https://www.consumerfinance.gov/consumer-tools/educator-tools/youth-financial-education/learn/financial-habits-norms/. [21]

Cucinelli, D., P. Trivellato and M. Zenga (2019), “Financial Literacy: The Role of the Local Context”, *Journal of Consumer Affairs*, Vol. 53/4, pp. 1874-1919, https://doi.org/10.1111/joca.12270. [23]

Cupák, A. et al. (2018), “Decomposing gender gaps in financial literacy: New international evidence”, *Economics Letters*, Vol. 168, pp. 102-106, https://doi.org/10.1016/j.econlet.2018.04.004. [14]

Davoli, M. and N. Rodriguez-Planas (2022), “Culture, Gender, and Financial Literacy”, *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.4114598. [91]

Davoli, M. and N. Rodríguez-Planas (2020), *Culture and Adult Financial Literacy: Evidence from the United States*, IZA-Institute of Labour Economics, http://www.iza.org. [87]

Davoli, M. and N. Rodríguez-Planas (2020), *Culture and Adult Financial Literacy: Evidence from the United States*, http://www.iza.org. [105]

Davoli, M. and N. Rodríguez-Planas (2020), *Culture and Adult Financial Literacy: Evidence from the United States*, http://www.iza.org. [107]

De Beckker, K., K. De Witte and G. Van Campenhout (2020), “The role of national culture in financial literacy: <scp>Cross-country</scp> evidence”, *Journal of Consumer Affairs*, Vol. 54/3, pp. 912-930, https://doi.org/10.1111/joca.12306. [74]

Di Giannatale, S. et al. (2020), “The role of cognitive and personality characteristics in timely microcredit repayment: Evidence from a survey conducted by Provident, Mexico”, *Ensayos Revista de Economía*, Vol. 39/1, https://doi.org/10.29105/ensayos39.1-1. [30]

DiMaggio, P. (1997), *Culture and cognition*, Annual Review of Sociology, https://www.annualreviews.org/doi/abs/10.1146/annurev.soc.23.1.263. [53]

Elsenbroich, C. and N. Gilbert (2014), *Modelling Norms*, https://books.google.fr/books?id=4dVEAAAAQBAJ&printsec=copyright&redir_esc=y#v=onepage&q&f=false. [43]

Elster, J. (1989), “Social Norms and Economic Theory”, *Journal of Economic Perspectives*, Vol. 3/4, pp. 99-117, https://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.3.4.99. [46]

Fuchs-Schündeln, N., P. Masella and H. Paule-Paludkiewicz (2019), “Cultural Determinants of Household Saving Behavior”, *Journal of Money, Credit and Banking*, Vol. 52/5, pp. 1035-1070, https://doi.org/10.1111/jmcb.12659. [86]

Garðarsdóttir, R. and H. Dittmar (2012), “The relationship of materialism to debt and financial well-being: The case of Iceland’s perceived prosperity”, *Journal of Economic Psychology*, Vol. 33/3, pp. 471-481, https://doi.org/10.1016/j.joep.2011.12.008. [82]

Geert Hofstede (n.d.), *Country Comparison Graphs*, n.d., http://geerthofstede.com/country-comparison-graphs/ (accessed on 13 February 2023). [117]

Gorodnichenko, Y. and G. Roland (2017), "Institutions and the Wealth of Nations Yuriy Gorodnichenko and Gerard Roland NBER Working Paper No", *The Review of Economics and Statistics*, http://www.nber.org/papers/w16368. [62]

Gouveia, V. and M. Ross (2000), "Hofstede and Schwartz's models for classifying individualism at the cultural level: Their relation to macro-social and macro-economic variables", *Psicothema, 12*. [100]

Gudmunson, C. and S. Danes (2011), "Family Financial Socialization: Theory and Critical Review", *Journal of Family and Economic Issues*, Vol. 32/4, pp. 644-667, https://doi.org/10.1007/s10834-011-9275-y. [20]

Guiso, L. and T. Jappelli (2008), "Financial literacy and portfolio diversification", *EUI Working Papers* 31, https://www.researchgate.net/publication/23636584_Financial_literacy_and_portfolio_diversification. [18]

Guiso, L., P. Sapienza and L. Zingales (2016), "Long term persistence", Vol. Journal of the European Economic Association 14-6, 1401–1436 |, https://www.socialcapitalgateway.org/content/paper/guiso-l-sapienza-p-zingales-l-2016-long-term-persistence-journal-european-economic-ass. [57]

Guiso, L., P. Sapienza and L. Zingales (2006), "Does Culture Affect Economic Outcomes?", *Journal of Economic Perspectives*, Vol. 20/2, pp. 23-48, https://doi.org/10.1257/jep.20.2.23. [48]

Haliassos, M., T. Jansson and Y. Karabulut (2017), "Incompatible European Partners? Cultural Predispositions and Household Financial Behavior", *Management Science*, Vol. 63/11, pp. 3780-3808, https://doi.org/10.1287/mnsc.2016.2538. [88]

Hasler, A. and A. Lusardi (2017), *The Gender Gap in Financial Literacy: A Global Perspective | 1 The Gender Gap in Financial Literacy: A Global Perspective*, http://www.gflec.org. [13]

He, R. et al. (2020), "The effect of culture on consumption: A behavioral approach", *Journal of Asian Economics*, Vol. 67, p. 101180, https://doi.org/10.1016/j.asieco.2020.101180. [108]

Hofstede, G. (2011), "Dimensionalizing Cultures: The Hofstede Model in Context", *Online Readings in Psychology and Culture*, Vol. 2/1, https://doi.org/10.9707/2307-0919.1014. [70]

Hofstede, G. (2011), "Dimensionalizing Cultures: The Hofstede Modelin Contex", https://doi.org/10.9707/2307-0919.1014. [72]

Hofstede, G. (1980), "Culture's consequences. International Differences in Work-Related Values", *Beverly Hills, CA: SAGE Publications*, p. 327, http://books.google.com/books?id=Cayp_Um4O9gC&pgis=1. [68]

Hsu, J. (2016), "Aging and strategic learning: The impact of spousal incentives on financial literacy", *Journal of Human Resources*, Vol. 51/4, pp. 1036-1067, https://doi.org/10.3368/JHR.51.4.1014-6712R. [110]

IOSCO and OECD (2018), *The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives*, http://www.oecd.org. [34]

James, B. et al. (2012), “The Impact of Health and Financial Literacy on Decision Making in Community-Based Older Adults”, *Gerontology*, Vol. 58/6, pp. 531-539, https://doi.org/10.1159/000339094. [9]

Ji Young Jung (2015), *The effects of financial literacy and income on financial behaviors*, Conference: American Council on Consumer Interests, Clearwater Beach, Florida, https://www.researchgate.net/publication/307856538_The_effects_of_financial_literacy_and_income_on_financial_behaviors. [17]

Kaasa, A. (2021), “Merging Hofstede, Schwartz, and Inglehart into a Single System”, *Journal of Cross-Cultural Psychology*, Vol. 52/4, pp. 339-353, https://doi.org/10.1177/00220221211011244. [66]

Kahneman D., R. (2016), *Noise: How to Overcome the High, Hidden Cost of Inconsistent Decision Making*, Harvard Business Review, https://hbr.org/2016/10/noise. [33]

Kahneman, D. (2011), *Thinking, fast and slow*, New York: Farrar, Strass and Giroux. [73]

Kahneman, D. (1979), “Prospect Theory: An Analysis of Decision under Risk”, *Econometrica*, Vol. Vol. 47, No. 2/No.2, pp. 263-291, https://www.uzh.ch/cmsssl/suz/dam/jcr:00000000-64a0-5b1c-0000-00003b7ec704/10.05-kahneman-tversky-79.pdf. [40]

Khenfer, J. (2022), “How Materialism Shapes the Effectiveness of Financial Literacy Messages: A Cross-Cultural Perspective”, https://doi.org/10.1111/apps.12370. [83]

Klapper, L. and A. Lusardi (2020), “Financial literacy and financial resilience: Evidence from around the world”, *Financial Management*, Vol. 49/3, pp. 589-614, https://doi.org/10.1111/fima.12283. [89]

Koprowski, S. et al. (2021), “National Culture and Corporate Social Responsibility”, *Review of Business Management*, Vol. 23/3, pp. 488-502, https://doi.org/10.7819/rbgn.v.23i3.4115. [69]

Kristin M. Kuntz, S. (2002), *Non-normative and pro-social conformity: A study of rural and urban differences*, University of Wisconsin, https://www.uwlax.edu/globalassets/offices-services/urc/jur-online/pdf/2002/kuntz_and_gunderson.pdf. [113]

Kwok, C. and S. Tadesse (2006), “National culture and financial systems”, *Journal of International Business Studies*, Vol. 37/2, pp. 227-247, https://doi.org/10.1057/palgrave.jibs.8400188. [77]

Leora Klapper, Annamaria Lusardi and Peter van Oudheusden (2015), “Financial Literacy Around the World: Insights from the S&P’s Ratings Services”, https://gflec.org/wp-content/uploads/2015/11/3313-Finlit_Report_FINAL-5.11.16.pdf?x70470. [106]

Licht, A., C. Goldschmidt and S. Schwartz (2007), “Culture Rules: The Foundations of the Rule of Law and Other Norms of Governance *”, *Journal of Comparative Economics*, Vol. 35/4, https://www.researchgate.net/publication/222432287_Culture_Rules_The_Foundations_of_the_Rule_of_Law_and_Other_Norms_of_Governance. [58]

Lusardi, A. (2012), *Numeracy, financial literacy, and financial decision-making*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w17821. [12]

Lusardi, A., P. Michaud and O. Mitchell (2017), “Optimal Financial Knowledge and Wealth Inequality”, *Journal of Political Economy*, Vol. 125/2, pp. 431-477, https://doi.org/10.1086/690950. [109]

Lusardi, A. and O. Mitchell (2014), “The Economic Importance of Financial Literacy: Theory and Evidence”, *Journal of Economic Literature*, Vol. 52/1, pp. 5-44, https://doi.org/10.1257/jel.52.1.5. [7]

Lusardi, A. and O. Mitchell (2007), “Baby Boomer Retirement Security: The Roles of Planning, Financial Literacy, and Housing Wealth”, *Wharton Pension Research Council Working Papers*, https://repository.upenn.edu/prc_papers/570. [11]

Lusardi, A., O. Mitchell and G. Washington (2011), “Financial Literacy around the World: An Overview”, https://doi.org/10.3386/W17107. [84]

Marcus, R. and C. Harper (2014), *Gender justice and social norms - processes of change for adolescent girls*, https://odi.org/en/publications/gender-justice-and-social-norms-processes-of-change-for-adolescent-girls/. [44]

McCrae, R. and P. Costa (2008), “The five-factor theory of personality”, *The five-factor theory of personality in n O. P. John, R. W. Robins, & L. A. Pervin (Eds.), Handbook of personality: Theory and research* The Guilford Press, pp. 159-181, https://psycnet.apa.org/record/2008-11667-005. [28]

Minkov, M. (2018), “A revision of Hofstede’s model of national culture: old evidence and new data from 56 countries”, *Cross Cultural & Strategic Management*, Vol. 25/2, pp. 231-256, https://doi.org/10.1108/CCSM-03-2017-0033. [67]

Minkov, M. and A. Kaasa (2021), “A Test of the Revised Minkov-Hofstede Model of Culture: Mirror Images of Subjective and Objective Culture across Nations and the 50 US States”, *Cross-Cultural Research*, Vol. 55/2-3, pp. 230-281, https://doi.org/10.1177/10693971211014468. [114]

Mitchell, O. and A. Lusardi (2022), “Financial Literacy and Financial Behavior at Older Ages”, *SSRN Electronic Journal*, https://doi.org/10.2139/ssrn.4006687. [8]

Ng, S. and X. Lim (2019), “Are Hofstede’s and Schwartz’s values frameworks equally predictive across contexts?”, *Review of business management*, Vol. 21/1, pp. 33-47, https://doi.org/10.7819/rbgn.v0i0.3956. [64]

OECD (2020), *Financial Literacy of Adults in South East Europe*, https://www.oecd.org/financial/education/Financial-Literacy-of-Adults-in-South-East-Europe.pdf. [103]

OECD (2020), *OECD/INFE Financial Literacy Survey of Adults in South East Europe*, OECD Publishing, Paris, https://www.oecd.org/finance/Financial-Literacy-of-Adults-in-South-East-Europe.pdf. [1]

OECD (2020), *Recommendation of the Council on Financial Literacy*, https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0461. [4]

OECD (2019), *Smarter Financial Education Key lessons from behavioural insights for financial literacy initiatives*, https://www.oecd.org/financial/education/smarter-financial-education-behavioural-insights.pdf. [35]

OECD (2014), *PISA 2012 Results: Students and Money (Volume VI): Financial Literacy Skills for the 21st Century*, PISA, OECD Publishing, Paris, https://doi.org/10.1787/9789264208094-en. [90]

OECD/INFE (2020), *OECD/INFE 2020 International Survey of Adult Financial Literacy*, https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf. [5]

OECD/INFE (2016), *International Survey of Adult Financial Literacy Competencie*, OECD Publishing, Paris, http://www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf. [104]

OECD/INFE and G20 (2012), "OECD/INFE High-level Principles on National Strategies for Financial Education", https://www.oecd.org/finance/financial-education/OECD-INFE-Principles-National-Strategies-Financial-Education.pdf. [3]

Ooi, E. (2018), "Does national culture explain the gender gap in financial literacy?". [92]

Ozal, M. (2018), "Behavioral Finance and Stock Market Investing. The Importance of National Culture", *GRIN Verlag*, https://www.grin.com/document/995227. [42]

Peprah-Yeboah, A., W. Frejus and E. Fianko (2018), "Financial Literacy of Undergraduate Students: Do Personality Traits and Cognitive Ability Matter?", *International Journal of Accounting and Financial Reporting*, Vol. 8/4, p. 533, https://doi.org/10.5296/ijafr.v8i4.14012. [31]

Petersen, J., T. Kushwaha and V. Kumar (2015), "Marketing Communication Strategies and Consumer Financial Decision Making: The Role of National Culture", *Journal of Marketing*, Vol. 79/1, pp. 44-63, https://doi.org/10.1509/jm.13.0479. [94]

Pinjisakikool, T. (2017), "The effect of personality traits on households' financial literacy", *Citizenship, Social and Economics Education*, Vol. 16/1, pp. 39-51, https://doi.org/10.1177/2047173417690005. [29]

Pitthan, F. and K. De Witte (2022), *Improving financial literacy by mitigating behavioural biases. A causal mediation analysis on the effects of behavioural-based financial education. 1*. [36]

Pitthan, F. and K. De Witte (2021), *Puzzles of insurance demand and its biases: A survey on the role of behavioural biases and financial literacy on insurance demand*, Elsevier B.V., https://doi.org/10.1016/j.jbef.2021.100471. [37]

Princeton, N. (ed.) (1997), *Modernization and Postmodernization: Cultural, Economic, and Political Change in 43 Societies*, Princeton University Press, https://doi.org/10.1177/0038038599033003019. [99]

Putnam, R., R. Leonardi and R. Nanetti (1993), "Making democracy work : civic traditions in modern Italy", p. 258, https://press.princeton.edu/books/paperback/9780691037387/making-democracy-work. [56]

Raccanello, K. and M. Sundaram (2019), "BRICS: financial literacy and financial inclusion", *Regiones y Desarrollo Sustentable, Vol. 18*, https://core.ac.uk/download/pdf/235261899.pdf. [111]

Reuter, C. (2011), *A Survey of Culture and Finance*, Finance 2011/1 (Vol. 32), https://www.cairn.info/revue-finance-2011-1-page-75.htm. [112]

Riitsalu, L. and W. Fred Van Raaij (2022), "Current and Future Financial Well-Being in 16 Countries", *Journal of International Marketing*, Vol. 2022/3, pp. 35-56, https://doi.org/10.1177/1069031X221095076. [79]

Rink, U., Y. Walle and S. Klasen (2021), "The financial literacy gender gap and the role of culture", *The Quarterly Review of Economics and Finance*, Vol. 80, pp. 117-134, https://doi.org/10.1016/j.qref.2021.02.006. [93]

Schwartz, S. (1992), "Universals in the Content and Structure of Values: Theoretical Advances and Empirical Tests in 20 Countries", in *Advances in Experimental Social Psychology, Advances in Experimental Social Psychology Volume 25*, Elsevier, https://doi.org/10.1016/s0065-2601(08)60281-6. [97]

Shefrin, H. (2002), *Beyond Greed and Fear*, Oxford University Press, https://doi.org/10.1093/0195161211.001.0001. [39]

Shiller, R. (1998), *Human Behavior and the Efficiency of the Financial System*, National Bureau of Economic Research, Cambridge, MA, https://doi.org/10.3386/w6375. [51]

Shoham, A. and M. Malul (2012), "The role of cultural attributes in savings rates", *Cross Cultural Management: An International Journal*, Vol. 19/3, pp. 304-314, https://doi.org/10.1108/13527601211247062. [78]

Smelser, N. and R. Swedberg (1994), "The Handbook of Economic Sociology, Second Edition", *Princeton University Press*, https://www.jstor.org/stable/j.ctt2tt8hg. [52]

Steenkamp, J. and I. Geyskens (2012), "Transaction cost economics and the roles of national culture: a test of hypotheses based on Inglehart and Hofstede", *Journal of the Academy of Marketing Science*, Vol. 40/2, pp. 252-270, https://doi.org/10.1007/s11747-011-0266-1. [65]

Tabellini, G. (2010), "Culture and Institutions: Economic Development in the Regions of Europe", https://academic.oup.com/jeea/article/8/4/677/2295864. [60]

Tabellini, G. (2008), "Presidential Address: Institutions and Culture on JSTOR", *Journal of the European Economic Associa...*, Vol. 6/2/3, https://www.jstor.org/stable/40282643?seq=1. [59]

Taras, V., J. Rowney and P. Steel (2009), "Half a century of measuring culture: Review of approaches, challenges, and limitations based on the analysis of 121 instruments for quantifying culture", *Journal of International Management*, Vol. 15/4, pp. 357-373, https://doi.org/10.1016/j.intman.2008.08.005. [101]

The Social Research Centre (2008), "ANZ Survey of Adult Financial Literacy in Australia", https://www.anz.com.au/content/dam/anzcomau/documents/pdf/aboutus/2008-adult-financial-literacy-survey-full-results.pdf. [16]

Throsby, D. (2001), "Economics and Culture", *Cambridge University Press*, http://www.cup.org. [50]

Triandis, H., R. Malpass and A. Davidson (1973), "Psychology and Culture", *Annual Review of Psychology*, Vol. 24/1, pp. 355-378, https://doi.org/10.1146/annurev.ps.24.020173.002035. [32]

U. Kim, I. (ed.) (1994), *Beyond individualism/collectivism: New cultural dimensions of values.*, Sage Publications, Inc. [102]

Van Campenhout, G. (2015), "Revaluing the role of parents as financial socialization agents in youth financial literacy programs", *Journal of Consumer Affairs*, Vol. 49/1, https://go.gale.com/ps/i.do?id=GALE%7CA409831989&sid=googleScholar&v=2.1&it=r&linkaccess=abs&issn=00220078&p=AONE&sw=w&userGroupName=anon%7E732f88c5. [22]

Vinken, H., J. Soeters and P. Ester (2021), "Comparing Cultures", *Comparing Cultures*, https://doi.org/10.1163/9789047412977. [63]

Williamson, C. and R. Mathers (2010), "Economic freedom, culture, and growth", *Public Choice*, Vol. 148/3-4, pp. 313-335, https://doi.org/10.1007/s11127-010-9656-z. [61]

Williamson, O. (2000), "The New Institutional Economics: Taking Stock, Looking Ahead", *Source: Journal of Economic Literature*, Vol. 38/3, pp. 595-613. [49]

Notes

[1] This paper also associates the difference in financial literacy levels to cultural differences, which are discussed in subsequent sections.

[2] A situation where moving to better outcomes for anyone will require that both (or all) parties change: no one can improve their position unless others change strategy too

[3] Alesina and Giuliano call these definitions "empirical" as they combine values and beliefs in the same definition (Alesina and Giuliano, 2015[115]). Theoretical definitions focus on culture as beliefs about the consequences of one's actions, but where these beliefs can be manipulated by earlier generations or by experimentation. These two interpretations are not mutually exclusive as values and beliefs interact with each other and with social institutions, thus generating different beliefs.

[4] Despite the increasing number of contributions to the literature on culture and economic outcomes since the 1950s, economists have devoted limited attention to disentangling the mentioned two components of culture.

[5] DiMaggio concludes that economics itself can be seen as a "cultural system", which has been recently transposed to finance in what is becoming known as the social studies of finance (Reuter, 2011[112]).

[6] Average increases could be observed in Individualism versus Collectivism and Indulgence versus Restraint, as well as a reduction in Power Distance (Beugelsdijk and Frijns, 2010[95]).

[7] The role of culture as regards credit card use is often referred to in anecdotal evidence. It seems more socially acceptable to carry debt in the United States than in other countries. However, structural reasons also come to play given that many citizens of the United States use credit cards to pay for substantial medical expenses, which could be covered by social security systems in other countries. However, research and analysis does not always differentiate between the different uses of credit, charge and debit cards, and it is therefore, difficult to make conclusions about the role of cultural values and beliefs.

[8] This paper also uses Hofstede's framework described the previous section.

[9] Based on the above dimensions, Inglehart and the German political scientist Christan Welzel created the so-called World Cultural Map with the first set of values on the y-axes and the second one, on the x-axes. Moving upward on this map reflects the shift from traditional values to secular-rational ones and moving rightward reflects the shift from survival values to self-expression values. The SEE country scores are not very clear-cut for all countries. For example, in this map, Bulgaria is clearly in the upper left quadrant suggesting a culture of secular-rational and survival values. Moldova appears in the same quadrant with a survival culture but with a mixed score for traditional/secular-rational values. Georgia can be found in the

lower left quadrant, suggesting a culture of traditional and survival values. Romania, Montenegro and North Macedonia have mixed cultural values. So is Croatia, although it appears in the right upper quadrant, close to the limit with the other quadrants, meaning that its culture very slightly tilts towards secular-rational and self-expression values.

[10] The OECD Survey of adult financial literacy in South East Europe mentioned earlier explains the framework for measuring financial literacy and attributing respective scores on pages 10 – 11, and in each section focusing on the specific financial literacy components discussed in the paper.

[11] Based on the following question: 'In the past 12 months have you been [personally] saving money in any of the following ways, whether or not you still have the money?'

[12] Based on the question 'Sometimes people find that their income does not quite cover their living costs. In the last 12 months, has this happened to you, personally?'

[13] It is also possible that respondents interpreted this as a more factual statement such as 'money is required for spending'.

[14] The selection of questions presented in this chapter do not represent a definition of financial well-being.

[15] The US Consumer Financial Protection Bureau has developed a methodology of measuring financial well-being, which has inspired some of the questions used in the OECD Toolkit. The full methodology and associated definitions are available here: https://www.consumerfinance.gov/data-research/research-reports/financial-well-being-scale/.

[16] For an overview of the literature suggesting that financial literacy is a form of investment in human capital see (Lusardi and Mitchell, 2014[7]).

[17] In this paper, the authors restrict their research to the financial knowledge aspect of financial literacy.

[18] Future orientation is in fact a cultural dimension of the classification of the Global Leadership and Organisational Behaviour Effectiveness Project, so called GLOBE Project classification. It is, however, similar to Hofstede's long-term orientation.

[19] Matrilineal are the states in which ancestral descent is traced through maternal instead of paternal lines.

[20] With a metaphor from physics, people in an individualistic society are more like atoms flying around in a gas while those in collectivist societies are more like atoms fixed in a crystal.