

Consequences of Covid 19 - Behavioral approaches on the financial well-being, theoretical concepts

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Abstract

With many businesses unable to operate normally due to widespread government-imposed lockdowns, people confront a reshape of their financial behavior. In this article we review literature to analyze the theoretical foundations of financial well-being. The ongoing current worldwide recession worries about inadequate savings, consumerism and debt accumulation are all contributing to the increase in financial stress. We follow a qualitative-descriptive method based on a broad literature review and chronological analysis. This study will contribute to favor of establishing a theory of financial well-being to define, measure, and analyze it comprehensively. The creativity of this work lies in describing and contrasting several theoretical foundations together instead of addressing them separately. Our results are of interest to those involved in research about financial well-being, subjective well-being, and the economics of happiness.

Key words: financial well-being, Covid 19 - subject of well-being, economics of happiness, prospect theory, financial knowledges.

1. Introduction

A global coronavirus disease 2019 (COVID-19) has posed one of the greatest challenges to humankind within 75 years since World War Two (UNDP, 2020). Consequently, this fact has impacted the financial wellbeing of people. With many businesses unable to operate normally due to widespread government-imposed lockdowns, the concept how people spent their money was changed. The ongoing current worldwide recession worries about inadequate savings, consumerism and debt accumulation are all contributing to the increase in financial stress. The current economic downturn caused the financial pressures of households to increase (Kim & Garman, 2004; Weller & Logan, 2009). According to Molitor (2010), people were forced to adapt new behaviours regarding their financial administration habits. Financial health refers to how well financial systems presence in people's daily lives help them be resilient to unexpected changes in economic conditions and create opportunities to achieve their goals (Ladha et al., 2017). People generally see finance as anything that can be associated with the economic situation of the family. Thus, managing finances among individuals may result in satisfaction or dissatisfaction towards their financial situation, which is called financial well-being. Previous research regarding financial well-being has largely focused on factors such as financial stress, financial knowledge and financial behaviour. (Mokhtar, N.* and Husniyah, A. R.,2017)

2. Methodology

The purpose of this work is to analyse the theoretical foundations of financial well-being. The ongoing current worldwide recession worries about inadequate savings, consumerism and debt accumulation are all contributing to the increase in financial stress.

The literature review of our study: “Behavioral approaches on the financial well-being, theoretical concepts”, in its most comprehensive form includes a synthesis of qualitative findings stemming from qualitative research studies. (Onwuegbuzie, Collins, et al., 2010).

This work methodology can be defined as the branch of logic that deals with the principles of the formation of knowledge” (American Heritage Dictionary, 1993, p. 858) or as “a body of practices, procedures, and rules in a discipline or an inquiry”; also, as “a set of working methods” or “the study or theoretical analysis of such working methods” (p. 858).

The latest economic downturn caused the financial pressures of households to increase (Kim & Garman, 2004; Weller & Logan, 2009). It intends to propitiate reflection on its causes and effects, consequently contributing to the body of knowledge about general well-being, consumer behaviour, and the economics of happiness.

To meet this goal, we identify the theories that have given rise to its conceptualization and measurement. Subsequently, we question whether a theory of financial well-being is necessary and, if so, what its dimensionality should be. Simultaneously, we review the motivations that have led to its study. We conclude by justifying its importance both at the individual and collective levels, in the private and public spheres.

Financial well-being refers to how happy and satisfied individuals feel with their finances (Chatterjee et al., 2019; Van Praag et al., 2003). One of the first empirical works to analyze the relationship between happiness and income was developed by Easterlin (1974). He observed that, within different countries, people with higher income reported significantly higher levels of happiness than the population with lower income. However, this relationship was uncertain when comparing people of the same country at different moments.

In the United States of America, Easterlin (1974) noted that an increase in income over several years is not necessarily linked to a systematic increase in subjective well-being. This contradictory fact is known as the Easterlin paradox: the happiness reported by the population of different countries varies with income; however, an increase in income over time does not imply a proportional increase in happiness (Easterlin, 1974).

These findings were later corroborated by other authors (Antolini and Simonetti, 2019; Grimes and Reinhardt, 2019; Kaiser and Vendrik, 2019; Rojas, 2019), who clarified that income is related to subjective well-being and time plays a relevant role in this relationship. Additionally, other authors expanded these observations to give them a multifactorial dimension. For example, Oswald (1997: 1827) concluded that “in a developed nation, economic progress buys only a small amount of extra happiness,” or Diener et al. (2003: 213) who noted that “people might evaluate their material lives largely by judging how they compare with those around them”, based on their multidimensional nature which requires different measurement approaches.

In 2008, the French government commissioned economists Joseph Stiglitz, Amartya Sen, and Jean-Paul Fitoussi (2009) to identify gross domestic product constraints as an indicator of financial performance and social progress. In their report, Stiglitz et al. (2009) emphasized the opportunity to switch from an approach to measuring economic production to one about assessing people’s well-being.

To evaluate subjective well-being, Stiglitz et al. (2009) stated the following recommendations: emphasizing the perspective of home and family; considering income and consumption in conjunction with wealth; improving indicators to measure health, education, human activities, and the environment since the quality of life depends on the objective conditions and capacities of the population; using these indicators to integrate indexes, and employing objectives and subjective indicators of well-being.

These recommendations were formally considered in the measurement of well-being, starting in 2011, when the Organization for Economic Cooperation and Development (OECD, 2011) established the *Better Life Index* to measure and compare international social progress comprehensively.

Financial well-being is one of the components of this multidimensional indicator. It seeks to assess present and future domestic consumption possibilities, material well-being, and satisfaction with living conditions at home (OECD, 2011). Various authors had recognized it as an essential component of happiness or subjective well-being (Stiglitz et al., 2009; Van Praag et al., 2003). Besides, it has been associated with the achievement of some of the Sustainable Development Goals of the United Nations, which include (SDG1) No poverty; (SDG3) Good health and well-being; (SDG8) Decent work and economic growth; (SDG10) Reduced Inequalities; and (SDG16) Peace, justice and strong institutions (Fu, 2020; Le Blanc, 2015).

3. Consumption approach, relevance analysis and savings predisposition

Financial well-being is a state of being wherein a person can fully meet current and ongoing financial obligations, can feel secure in their financial future, and is able to make choices that allow them to enjoy life.

Based on consumer theory, financial well-being is referring to how people decide to spend money based on their preferences and budget. It can be framed within the analysis of utility and motivation for savings, enunciated by Modigliani and Brumberg (1954). They feel driven to save because of four primary reasons: contributing to the formation of a legacy for their descendants; achieving goals when their current and prospective incomes do not match their desired consumption levels; as a precaution, to get prepared to face an emergency; and for fear of uncertainty, which motivates them to constitute a reserve, usually of durable goods, so they can own, sell, or use it if necessary.

These reasons explain the conceptualization and measurement of financial well-being, applied to people under a focus on preferences, budget constraints, and time. One of the first comprehensive definitions of financial well-being was the proposal by the Office for Consumer Financial Protection Bureau (CFPB, 2017b: 6):

The scale for measuring structured financial well-being in two dimensions, time and freedom of choice, follows this definition. Both profile four essential components of financial well-being: exercising daily and monthly control of personal finances (short-term, limited freedom); having the ability to cope with unexpected financial impacts (long-term, limited freedom); working to achieve financial goals or fulfill dreams (long-term, broad freedom); and having the financial freedom to make decisions that contribute to the enjoyment of everyday life (short-term, broad freedom).

TABLE 1. Measuring financial well-being based on time and freedom of choice

	Present	Future
Security	Daily and monthly control of personal finances <i>Example: My finances control my life</i>	Ability to deal with unexpected financial impacts <i>Example: I'm concerned that the money I have or save won't last</i>
	Description: Cover expenses, pay bills on time, and not worry about whether there will be enough money for it.	Description: Have a backup system, family, or friends, if support is required; own personal savings; have insurance of various types; know that the lifestyle will not be affected, for example, if the car needs a repair or if the job is temporarily lost.

Freedom of choice	Financial freedom to make decisions that make it easier to enjoy life <i>Example: I am just getting by financially</i>	Achieving financial goals <i>Example: I am securing my financial future</i>
	Description: Have the financial capacity to indulge, for example, go out to dinner or go on vacation, or be generous with friends, family or community, and meet basic needs.	Description: Have a formal or informal financial plan, actively work towards goals such as saving to buy a car or home, paying off educational debts, or saving for retirement.

Source: Consumer Financial Protection Bureau (2017a, pp. 7, 23-24).

The temporal dimension refers to the assumption that a person can reach financial well-being at present without compromising his or her future. The freedom of choice dimension ranges from maintaining strict spending control to ensure covering current or future needs and the freedom to consume worry-free and achieve financial goals.

a. the model of limited rationality: - from economic knowledge to financial well-being:

Over the past four decades, different public policies, especially in more developed economies, have given citizens greater responsibility for the procurement of some social protection services that were previously the exclusive competence of the State (Kempson et al., 2017). Two examples of how people have had to increase their participation in individual and family decision-making, forecasting, and financial planning due to these changes (Hoffmann and Plotkina, 2020) are the hiring of specialized health insurance and retirement savings management are; Nam and Loibl, 2021). Governments' concern to ensure shared social security services was initially focused on having a better-prepared population to meet these responsibilities. The importance of financial education increased due to market development and demographic, economic, and public policy changes (OECD, 2005). The Consumer Financial Protection Bureau (2015) recognized that the purpose of financial literacy must be financial well-being.

The study of financial literacy and its relationship to financial well-being emerged in the late 1990s and early 2000s in response to the need for better understanding the mechanisms that drive people to pursue an economically sound behavior (Kempson et al., 2017). Most of the studies of these years addressed financial literacy as a synonym with financial knowledge, and this as the result of financial education (Ambuehl et al., 2017; Compe et al., 2018; Consumer Financial Protection Bureau, 2015; Fernandes et al., 2014; Ingale and Paluri, 2020).

It is assumed that more financially educated consumers contribute more to market operation efficiency. By assessing the risk-performance ratio, they become promoters of competitiveness, and by demanding products appropriate to their needs, they propitiate innovation in financial services; additionally, they are more likely to save and invest than less financially educated people (OECD, 2005). The relationship between financial education and consumer welfare follows a fairly rational logical line, which the OECD (2005) summarized as follows:

Financial education can contribute to consumer well-being by helping them become better informed about financial products and services. Becoming financially better informed involves, first, acquiring information (i.e., determining where to find the information and getting hold of it) and, second, processing this information (i.e., understanding the information and using it to make better informed financial decisions, including those about investment and retirement savings). Rational consumers will acquire and process information as long as the marginal costs of doing so are less than the perceived marginal benefits of this information. Thus, reducing these costs will encourage consumers who have not already done so to seek information about investments and encourage those who already have some financial understanding of investment to acquire more. (p. 36)

This reasoning is based on Simon's theory of limited rationality (1955). It assumes that the homo economicus follows a rational behavior based on a model containing the following elements: a set of alternatives or courses of action; a subset of those alternatives that are considered; an estimate of possible future states as a result of choosing an alternative; a utility function that assigns values to the possible results of one's choice; information about which results will occur if an alternative is chosen; and information about the probability of obtaining a specific result after selecting an alternative.

This set of elements requires that rational human beings meet certain difficult-to-reach specifications, for example, that before making any decision, they accurately evaluate each of the alternatives, predict all their possible consequences, order them consistently with their forecasts, and assign specific probabilities to those uncertain events and their results (Simon, 1955). About these difficulties, poorly addressed in practice, Simon (1955) notes that the rational behavior model is limited by human capacities and the availability of information.

The limited rationality approach and the subjective well-being precepts mentioned in the previous section suggest that the study of financial well-being through financial knowledge is possible if several conditions are met. These include that human beings seek to maximize happiness, that their happiness can be increased if their financial well-being improves, and that their financial well-being improves if they are financially educated. Also, it is required that information is fully accessible at a reasonable price and that people possess the knowledge, skills and desire to use that information in financial decision-making.

Some empirical studies consigned the relationship between financial knowledge and financial well-being. For example, Mende and van Doorn (2015) discussed how specialized counseling could catalyze consumer financial literacy, improve their credit ratings, and reduce their financial stress. Furthermore, Hampson et al. (2018) noted that by motivating the clients of service companies to engage in healthy financial behaviors, it is possible to increase their satisfaction and improve their financial well-being. Moreover, Chu et al. (2017) studied the effect of financial literacy on investment performance at the domestic level.

However, a person with a high level of financial knowledge may choose to rest the weight of their economic decisions and behaviors on their attitudes and preferences, not just cognitive skills (OECD, 2005). When people fail to maintain a consistent economic behavior, it is usually assumed that they lack information, the knowledge to understand it, or the skills to leverage it (Roa García, 2013).

Some academics warned of the fragility of the rational behavior model when explaining the relationship between financial literacy and financial well-being. Some of them attribute this weakness to the asymmetry in the information generated by shifting the weight of financial decisions to the consumer to discharge the state from its social protection obligations (Willis, 2009). Another explanation refers to the risks posed by the individual's overconfidence and the limits on his or her cognitive abilities (Roa García, 2013). There was, then, a need to broaden the definition of financial literacy to include awareness, knowledge, skills, and behaviors that facilitate sound financial decision-making and eventually contribute to financial well-being (Atkinson and Messy, 2012).

b. Relation of financial attitude with financial well-being: prospect thesis

Early studies on financial well-being emphasized a psycho-emotional perspective linked to financial satisfaction. Joo and Grable (2004) highlighted the role of financial attitudes, especially risk tolerance, as a determining factor in individual financial satisfaction. A couple of years later, Prawitz et al. (2006), after interviewing financial education experts from the United States of America, built one of the first instruments to measure financial satisfaction, financial stressors, feelings of well-being, financial behaviors, and the impact of decisions.

Prospect theory is one of the theoretical contributions that have been used to analyze the relationship between personality traits, financial attitude, and financial well-being. It aims to describe individual decisions in risk scenarios and contrast rational model predictions with actual consumer choices (Kahneman and Tversky, 1979). According to this theory, "individuals are not always rational in the face of uncertainty" (Fisher and Montalto, 2010: 93).

Prospect theory explains some of the contradictions to the model of limited rationality through three effects (Kahneman and Tversky, 1979). First, people tend

to ponder greater weight secure choices over those that are only likely (certainty effect). On the contrary, when all options are adverse, people prefer to take a risk rather than choosing the safe path (reflection effect). Finally, when the context in which options are presented changes, it can influence the decision maker's preferences (framework effect).

Prospect theory states that people tend to keep a mental record of their results in separate accounts and that the money in these accounts is not fungible, i.e., it is not easily replaceable or interchangeable. With this principle, a pay increase is not a substitute for affection nor a health improvement. This theory also states that families with fewer economic resources tend to develop very short-term budgets, while those with more resources tend to budget for much longer terms (Fisher and Montalto, 2010; Thaler, 1999). "Consumption in one period is not based on lifetime income, but is evaluated based on a reference point, or the level of income a household is accustomed to" (Fisher and Montalto, 2010: 93).

Behavioral economists were the first to recognize a potentially significant gap between financial knowledge and behavior, as well as the multifactorial nature of its causes (Kempson et al., 2013). Among the main psychological traits affecting financial decision-making, we find the perspective for temporal orientation, the aversion to loss, overconfidence, herding, social pressure, the tendency to confirm preconceived data, and inertial attitudes (Kempson et al., 2017). For example, patience in the short and long term and risk aversion are directly related to financial well-being, regardless of financial knowledge (Nyström and Romberg, 2017). A person with negative attitudes towards the long term is less likely to save; similarly, someone who prefers to spend now rather than prepare for the future is less likely to have an emergency financial fund or make far-reaching temporary plans (Atkinson and Messy, 2012).

Prospect theory has helped explain some of the essential features of financial well-being, especially its forward-looking orientation and the role of context in consumer preferences. Moreover, Brügggen et al. (2017) emphasized the difference between financial satisfaction and financial well-being to help better understand their characteristics. While the former refers to being satisfied with the current financial situation, the second refers to a person's ability to achieve a desired financial situation both now and in the future.

c. Institutional doctrine: The effect of context on financial well-being

Over the past decade, the multifactorial nature of financial well-being have been identified by researchers in academic and public institutions. Their attention focused on financial capacities, i.e., the set of knowledge, skills, attitudes, and motivations that drive consumers to act economically rationally (Kempson et al., 2013) and the context of decisions.

According to Fu (2020), these capabilities seek to explain the interdependencies between financial literacy, access to formal financial products (financial inclusion) and the structural characteristics of the environment in which consumers are immersed. Traditionally, financial inclusion has been associated with banking, electronic money management, and the use of formal financial services; a positive relationship has been assumed between it and financial well-being (Gubbins, 2020). The diversity of factors involved in these interdependencies led policy financial education and inclusion policy designers to adopt an institutional approach that aims to regulate behavior and not so much to promote behavioral change (Fu, 2020; Kempson et al., 2017).

This institutionalist approach assumes “that policies to improve financial well-being should focus on financial market structures and supporting institutions, rather than narrowly target individuals’ financial literacy or financial inclusion” (Fu, 2020: 1). In the case of financial capacities, the term institutions refer to public policies, programs, and initiatives that aim to configure the products offered by the financial sector, which will impact consumers’ lives (Fu, 2020).

Governments have implemented mechanisms that force organizations to apply coercive isomorphic changes to their structure and processes (DiMaggio and Powell, 1983). These organizations are typically the ones that make up the financial sector, and it is through them that the state implements social change. According to the principles of institutional theory, “organizations that incorporate societally legitimated rationalized elements in their formal structures maximize their legitimacy and increase their resources and survival capabilities” (Meyer and Rowan, 1977: 352). Financial institutions that adopt financial inclusion policies, by strengthening their legitimacy, will increase their chances of survival.

The economic, social, and environmental policies promoted by supranational institutions also inspire isomorphic processes. The World Bank acknowledges that financial inclusions are vital in reducing poverty and improving prosperity (World Bank, 2018). This progress at a national level affects the Sustainable Development Goals (Fu, 2020; Le Blanc, 2015; World Bank, 2018).

Over the past decade, financial well-being has gained importance as an ulterior end, beyond financial literacy, financial inclusion, and financial capacity building. The ultimate objective of financial inclusion should not remain to optimize the use of financial products or public access to formal financial markets but to maximize the financial well-being of the population, subject to consumer protection mechanisms (Gubbins, 2020). Financial inclusion then becomes a means to contribute to people’s financial well-being. Increasing the degree of financial inclusion is a necessary but not a sufficient condition to achieve financial health (Grohmann et al., 2018; Ladha et al., 2017).

4. Conclusions

A diversity of concepts and measurements focus primarily on financial satisfaction and their contribution to overall well-being (Brüggen et al., 2017). Recently, criteria have converged to establish a more extensive definition and more accurate measurements (Brüggen et al., 2017; Fu, 2020; Kempson et al., 2017). Financial well-being analysis is fundamental to advance in the study of the well-being, consumer behavior, and the economy of happiness.

Four decades ago, the subjective self-reported financial perceptions efforts were the main indicator to define and evaluate financial well-being.

In this article, different theoretical models applied to the study of financial well-being have been described. These theoretical frameworks divergences give rise to future research topics, three of which are discussed below.

A branch of this research derived at building financial well-being indicators. Research models have gone from subjective approaches applied to specific groups to general models designed for developed economies. Testing their validity in other contexts and building new schemes for emerging economies are two of the tasks needed to consolidate progress in measuring financial well-being.

The second line of research stems from applying these metrics to the evaluation of public policies aimed at improving overall well-being and, especially financial well-being of the population. By analyzing the theoretical foundations applied to the conceptualization, measurement, and analysis of financial well-being, this work helps guide this assessment. Some countries that have implemented financial inclusion and financial education policies require establishing a baseline to evaluate their results.

At the same time, this evaluation should serve as the background to estimate the contribution of these and other public policies to achieving the Sustainable Development Goals.

The third line of research resulting from this work concerns the conceptualization, measurement, and impact of financial well-being in the business climate. One of the trends in corporate social responsibility is to procure employees' financial well-being, not only to increase productivity but also to provide an organizational environment attractive to talent (Frank-Miller et al., 2019). Work in this area is incipient and is considered very useful.

In general, financial well-being contributes to raising people's quality of life, improving interpersonal relationships, emotional well-being, and happiness. In the organizational field, financial well-being strengthens the trust, image, and reputation of institutions and companies; and in the social sphere, it promotes economic growth and sustainable development (Brüggen et al., 2017). When experiencing widespread financial well-being, consumption is encouraged, demand

for government assistance decrease and a comprehensive state of social welfare is fostered (Sacks et al., 2012).

References

- Ambuehl, S., Bernheim, D., and Lusardi, A. (2017). Financial Education, Financial Competence, and Consumer Welfare, NBER Working Papers Public Economics No. 20618. Cambridge, Massachusetts: NBER. <https://doi.org/10.3386/w20618>
- Antolini, F., and Simonetti, B. (2019). The Easterlin Paradox in Italy, or the Paradox in Measuring? Define Happiness Before Investigating It, *Social Indicators Research*, Vol. 146, No. 1–2, pp. 263–285. <https://doi.org/10.1007/s11205-018-1890-7>
- Atkinson, A., and Messy, F. (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 No. 15. Washington, DC: OECD. <https://dx.doi.org/10.1787/5k9csfs90fr4-en>
- Brüggen, E.C., Hogreve, J., Holmlund, M., Kabadayi, S., and Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda, *Journal of Business Research*, Vol. 79, pp. 228–237. <https://doi.org/10.1016/j.jbusres.2017.03.013>
- Chatterjee, D., Kumar, M., and Dayma, K.K. (2019). Income security, social comparisons and materialism: Determinants of subjective financial well-being among Indian adults, *International Journal of Bank Marketing*, Vol. 37, No. 4, pp. 1041–1061. <https://doi.org/10.1108/IJBM-04-2018-0096>
- Chu, Zh., Wang, Zh., Xiao, J.J., and Zhang, W. (2017). Financial Literacy, Portfolio Choice and Financial Well-Being”, *Social Indicators Research*, Vol. 132, No. 2, pp. 799–820. <https://doi.org/10.1007/s11205-016-1309-2>
- Compe, B., De Witte, K., and Schelfhout, W. (2018). The Role of Teacher Professional Development in Financial Literacy Education: A Systematic Literature Review”, *Educational Research Review*, Vol. 26, pp. 16–31. <https://doi.org/10.1016/j.edurev.2018.12.001>
- Despard, Mathieu R., Ellen Frank-Miller, Sophia Fox-Dichter, Geraldine Germain, and Matthew Conan. (2020). Employee financial wellness programs: Opportunities to promote financial inclusion?, *Journal of Community Practice*, Vol. 28, No. 3, pp. 219–233. <https://www.tandfonline.com/doi/full/10.1080/10705422.2020.1796878>
- Diener, E., Scollon, C.N., and Lucas, R.E. (2003). The evolving concept of subjective well-being: the multifaceted nature of happiness, *Advances in Cell Aging and Gerontology*, Vol. 15, No. 3, pp. 187–219. https://doi.org/10.1007/978-90-481-2354-4_4
- DiMaggio, P.J., and Powell, W.W. (1983). The iron cage revisited institutional isomorphism and collective rationality in organizational fields”, *American Sociological Review*, Vol. 48, No. 2, pp. 147–160. [https://doi.org/10.1016/S0742-3322\(00\)17011-1](https://doi.org/10.1016/S0742-3322(00)17011-1)
- Easterlin, R.A. (1974). Does Economic Growth Improve the Human Lot? Some Empirical Evidence”, (in: Abramowitz et al.-Ed., *Nations and Households in Economic Growth: Essays in Honor of Moses Abramovitz*), Academic Press Inc., Stanford, California, pp. 89–125. <https://doi.org/10.1016/B978-0-12-205050-3.50008-7>
- Easterlin, R.A. (2001). Subjective well-being and economic analysis: a brief introduction, *Journal of Economic Behavior and Organization*, Vol. 45, No. 3, pp. 225–226. [https://doi.org/10.1016/s0167-2681\(01\)00143-3](https://doi.org/10.1016/s0167-2681(01)00143-3)

- Easterlin, R.A. (2004). The economics of happiness, *Daedalus*, Vol. 133, No. 2, pp. 26-33. <https://doi.org/10.1162/001152604323049361>
- Fernandes, D., Lynch, J.G., and Netemeyer, R.G. (2014). Financial Literacy, Financial Education, and Downstream Financial Behaviors, *Management Science*, Vol. 60, No. 8, pp. 1861–1883. <https://doi.org/10.1287/mnsc.2013.1849>
- Foa RS, Fabian M, Gilbert S (2022) Subjective well-being during the 2020–21 global coronavirus pandemic: Evidence from high frequency time series data. *PLoS ONE* 17(2): e0263570. <https://doi.org/10.1371/journal.pone.0263570>
- Fisher, P.J. and Montalto, C.P. (2010) “Effect of saving motives and horizon on saving behaviors. *Journal of Economic Psychology*, Vol. 31, No. 1, pp. 92–105. <https://doi.org/10.1016/j.joep.2009.11.002>
- Ghazali, M. S., Syed Alwi, S. F., Abdul Aziz, N. N., & Hazudin, S. F. (2020). Pathway to Financial Well-being: A review on the role of psychological factors. *Environment-Behaviour Proceedings Journal*, 5(13), 55–61. <https://doi.org/10.21834/e-bpj.v5i13.2063>
- Grimes, A., Reinhardt, M. (2019). Relative Income, Subjective Wellbeing and the Easterlin Paradox: Intra- and Inter-national Comparisons. In: Rojas, M. (eds) *The Economics of Happiness*. Springer, Cham. https://doi.org/10.1007/978-3-030-15835-4_4
- Grimes, A., Reinhardt, M. (2019). Relative Income, Subjective Wellbeing and the Easterlin Paradox: Intra- and Inter-national Comparisons. In: Rojas, M. (eds) *The Economics of Happiness*. Springer, Cham. https://doi.org/10.1007/978-3-030-15835-4_4
- Grohmann, A., Klühs, Th., and Menkhoff, L. (2018). Does financial literacy improve financial inclusion? Cross country evidence”, *World Development*, Vol. 111, pp. 84–96. <https://doi.org/10.1016/j.worlddev.2018.06.020>
- Gubbins, . (2020). The prevalence and drivers of financial resilience among adults: Evidence from the Global Findex, https://fsdkenya.org/wp-content/uploads/2020/11/Report_Global-Financial-Resilience-Paper_Kenya.pdf [Accessed 26.4.2021]
- Hampson, D.P., Ma, S.(S). and Wang, Y. (2018), “Perceived financial well-being and its effect on domestic product purchases: An empirical investigation in Brazil”, *International Marketing Review*, Vol. 35 No. 6, pp. 914-935. <https://doi.org/10.1108/IMR-12-2017-0248>
- Hoffmann, A.O.I., and Plotkina, D. (2020). Why and when does financial information affect retirement planning intentions and which consumers are more likely to act on them?, *Journal of Business Research*, Vol. 117, pp. 411-431. <https://doi.org/10.1016/j.jbusres.2020.06.023>
- Ingale, K.K. and Paluri, R.A. (2022), “Financial literacy and financial behaviour: a bibliometric analysis”, *Review of Behavioral Finance*, Vol. 14 No. 1, pp. 130-154. <https://doi.org/10.1108/RBF-06-2020-0141>
- Joo, Sh., Grable, J.E. An Exploratory Framework of the Determinants of Financial Satisfaction. *Journal of Family and Economic Issues* 25, 25–50 (2004). <https://doi.org/10.1023/B:JEEI.0000016722.37994.9f>
- Kahneman, D., and Tversky, A. (1979) “Prospect theory: an analysis of decision under risk”, *Econometrica*, Vol. 47, No. 2, pp. 263–291. https://doi.org/10.1142/9789814417358_0006
- Kaiser, C.F., Vendrik, M.C.M. (2019). Different Versions of the Easterlin Paradox: New Evidence for European Countries. In: Rojas, M. (eds) *The Economics of Happiness*. Springer, Cham. https://doi.org/10.1007/978-3-030-15835-4_2
- Ladha, T., Asrow, K., Parker, S., Rhyne, E., and Kelly, S. (2017). Beyond Financial Inclusion: Financial Health as a Global Framework, <http://www.centerforfinancialinclusion.org/storage/documents/FinHealthGlobal-FINAL.2017.04.11.pdf>, [Accessed 26.4.2021]
- Mokhtar, N.* and Husniyah, A. R, (2017). Determinants of Financial Well-Being among

- Public Employees in Putrajaya, Malaysia, Journal homepage: <http://www.pertanika.upm.edu.my/>
- Mende, M., and van Doorn, J. (2015). Coproduction of Transformative Services as a Pathway to Improved Consumer Well-Being: Findings From a Longitudinal Study on Financial Counseling”, *Journal of Service Research*, Vol. 18, No. 3, pp. 351–368. <https://doi.org/10.1177/1094670514559001>
- Meyer, J.W., and Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony, *American Journal of Sociology*, Vol. 340, No. 2, pp. 340–363. https://security.ufpb.br/gets/contents/documentos/meyer_rowan_teorias_institucional.pdf
- Modigliani, F., and Brumberg, R.H. (1954). Utility Analysis and the Consumption Function: An Interpretation of Cross-Section Data, (in: Modigliani, F.-Ed., *The collected papers of Franco Modigliani* Vol. 6, 3–45), Boston, Massachusetts, Rutgers University Press.
- Oswald, A.J., (1997). “Happiness and Economic Performance”, *Economic Journal*, Vol. 107, No. 445, pp. 1815–1831. <https://doi.org/10.1111/j.1468-0297.1997.tb00085.x>
- Prawitz, A.D., Garman, E.T., Sorhaindo, B., O’Neill, B., Kim, J., & Drentea, P. (2006). InCharge Financial Distress/Financial Well-Being Scale [Database record]. APA PsycTests. <https://doi.org/10.1037/t60365-000>
- Roa García, M.J. (2013). Financial education and behavioral finance: new insights into the role of information in financial decisions, *Journal of Economic Surveys*, Vol. 27, No. 2, pp. 297–315. <https://doi.org/10.1111/j.1467-6419.2011.00705.x>
- Rojas, M. (2019). The economics of happiness: how the Easterlin paradox transformed our understanding of well-being and progress, *The Economics of Happiness*, Springer, Cham, Switzerland. <https://doi.org/10.1007/978-3-030-15835-4>
- Sacks, D. W., Stevenson, B., & Wolfers, J. (2012). The new stylized facts about income and subjective well-being. *Emotion*, 12(6), 1181–1187. <https://doi.org/10.1037/a0029873>
- Seeley, E. (1992). Human needs and consumer economics: the implications of Maslow’s theory of motivation for consumer expenditure patterns, *Journal of Socio - Economics*, Vol. 21, No. 4, pp. 303–324. [https://doi.org/10.1016/1053-5357\(92\)90002-O](https://doi.org/10.1016/1053-5357(92)90002-O)
- Shefrin, H.M., and Thaler, R.H. (1988). The Behavioral Life-Cycle Hypothesis, *Economic Inquiry*, Vol. 26, No. 4, pp. 609–643. <https://doi.org/10.1111/j.1465-7295.1988.tb01520.x>
- Simon, H.A. (1955). A behavioral model of rational choice, *Quarterly Journal of Economics*, Vol. 69, No. 1, pp. 99–118. <https://doi.org/10.2307/1884852>
- Stiglitz, J.E., Sen, A., and Fitoussi, J.P. (2009). Report by the Commission on the Measurement of Economic Performance and Social Progress, https://www.economie.gouv.fr/files/finances/presse/dossiers_de_presse/090914mesure_perf_eco_progres_social/synthese_ang.pdf [Accessed 15.04.2021]
- Thaler, R.H. (1999). Mental accounting matters, *Journal of Behavioral Decision Making*, Vol. 12, No. 3, pp. 183–206. [https://doi.org/10.1002/\(SICI\)1099-0771\(199909\)12:3<183::AID-BDM318>3.0.CO;2-F](https://doi.org/10.1002/(SICI)1099-0771(199909)12:3<183::AID-BDM318>3.0.CO;2-F)
- Van Praag, B.M.S., Frijters, P., and Ferrer-i-Carbonell, A. (2003). The anatomy of subjective well-being”, *Journal of Economic Behavior and Organization*, Vol. 51, No. 1, pp. 29–49. [https://doi.org/10.1016/S0167-2681\(02\)00140-3](https://doi.org/10.1016/S0167-2681(02)00140-3)
- Williams, F.L., Haldeman, V., and Cramer, Sh. (1996). Financial concerns and productivity, *Journal of Financial Counseling and Planning*, Vol. 7, No. 4, pp. 147–156. <https://www.researchgate.net/profile/Sheran-Cramer/publications>

- Willis, L.E. (2009). Evidence and Ideology in Assessing the Effectiveness of Financial Literacy Education, *San Diego Law Review*, Vol. 46, No. 2, pp. 415–458. <https://digital.sandiego.edu/sdlr/vol46/iss2/5/>
- World Bank (2018). Financial Inclusion, <https://www.worldbank.org/en/topic/financialinclusion/overview> [Accessed 26.4.2021]
- Xiao, J.J., and Anderson, J.G. (1997) “Hierarchical financial needs reflected by household financial asset shares”, *Journal of Family and Economic Issues*, Vol. 18, No. 4, pp. 333–355. <https://doi.org/10.1023/A:1024991304216>
- Xiao, J.J., and Noring, F.E. (1994) “Perceived saving motives and hierarchical financial needs”, *Journal of Financial Counseling and Planning*, Vol. 5, No. 1, pp. 25–45. <https://www.researchgate.net/publication/228605847>
- Xiao, J.J., and O’Neill, B. (2018) “Mental accounting and behavioral hierarchy: Understanding consumer budgeting behavior”, *International Journal of Consumer Studies*, Vol. 42, No. 4, pp. 448–459. <https://doi.org/10.1111/ijcs.12445>