THE DILEMMA OF PRACTICAL AND GENERAL ACADEMIC EDUCATION CONSIDERING THE EFFECTIVENESS OF "FINANCIAL LITERACY" AND "FINANCIAL INCLUSION"

TOMASZ ZIELIŃSKI & BOŻENA FRĄCZEK
University of Economics in Katowice, Faculty of Business, Finance and Administration, Katowice, Poland, e-mail: b.fraczek@ue.katowice.pl.

Abstract One of the key issues resulting from the growing significance of finance is how it affects the society and how to cope with its negative implications. It can be demonstrated that some problems arising from financialization are of an educational nature. They can be referred to as the issues of "financial illiteracy" and "financial exclusion", making a part of the society unable to diagnose threats on the one hand and, on the other hand, making them unable to take advantage of new opportunities. The problem originates from an ineffective education in economics and finance relating to academic level of education as well. This gave rise to a discussion about the practical and general-academic model of university courses. The distinction between these two approaches has been reflected both in legal regulations and in the daily routine of academic education. The aim of the paper is to present some theoretical and empirical aspects of the abovementioned issues on the example of Poland.

Keywords:
financial literacy, financial inclusion, practical education, general-academic education, teaching methods.
Introduction

Contemporary economy, often referred to as the information economy, is characterized by the increasing ontological and epistemological complexity. The growing number of concepts and relations creates new areas which are impossible to be examined thoroughly. One of the phenomena that increase the complexity of modern economy is financialization, which limits sustainable development of economies. Despite the growing significance of finance in a market economy, the perception and understanding of these new phenomena is ambiguous. The theoretical discussion over financialization oscillates between the acceptance of natural evolution of the market economy towards the growing importance of financial sector on the one hand, and the warnings of the destructive role of finance in economic, social and ethical aspects of sustainable development on the other. The intangible, informative nature of finance made its rules completely different from the ones of the past when the value of money originated from its intrinsic value, and banks – institutions of public trust – made earnings mostly on the margin between the interest rates on loans and deposits. The schemes developed at that time, often recalled in economics textbooks nowadays, have become outdated. The phenomena of increased information asymmetry and information gap seem to affect the results of investment decisions even stronger than any financial measures and indicators. This leads to the number of adverse social phenomena. The wealth is increasingly concentrated in the hands of the richest. Only they can afford information management tools powerful enough to be able to gain competitive advantage. The others lose their ability to succeed. The phenomena of financial illiteracy and financial exclusion make an increasing part of the society unable to diagnose threats on the one hand and, on the other hand, make them unable to take advantage of the new opportunities. Doubtlessly, one of the reasons for this is the ineffectiveness of education in the area of economics and finance. Referring to academic level of education, it can give rise to a discussion about the practical and general-academic model of university courses.

The main purpose of the paper is to discuss the idea of empirical education involved in the process of promoting financial literacy of the society. In the first section, the phenomena of financial literacy and financial inclusion are presented as consequences of a growing information gap and the asymmetry of information. In the authors’ unanimous opinion, they all lead to unfavourable state of making a part
of the society unable to diagnose the threats and to take advantage of the new opportunities. The second section presents some philosophical aspects of the discussion over the gap between theoretical and practical cognition. In section three, selected aspects of legal implementation of empirical approach to higher education system in Poland in terms of financial literacy and financial inclusion are presented. Remarks given in the last section lead to our final conclusion that practical education could be a very powerful way of improving the effectiveness of the education as a whole. However, the uncritical abandonment of general academic approach can make us admittedly better in knowing the “how to do” something but, at the same time, it makes us unable to figure out the “why” and the “what for”.

Low level of financial literacy and financial inclusion as consequences of information gap and asymmetry of information

Financial literacy can be defined in different ways. In this article, the concept of financial literacy includes basic financial knowledge, skills and financial awareness and confidence that affect attitude and behaviour to improve the financial decision-making and management in order to achieve financial well-being (Frączek, 2017; Monticone, 2018; OECD/INFE, 2013). Financial inclusion means the access to and the usage of basic financial products and services (e.g. banking accounts and payments, savings, credits/loans) which are offered to meet consumers’ financial needs and are offered at affordable prices and delivered in a responsible and sustainable way (Sarma & Pais, 2011; World Bank, 2019). The level of financial literacy and the level of financial inclusion are relatively low in the world. The results of substantial research conducted in many countries as well as at the international level confirm very different and at the same time unsatisfactory levels in both developing and the developed countries concerning this issue (World Bank 2012, 2015, 2018; World Bank Development Research Group & GFLEC, 2015). There are many factors influencing the level of financial literacy and financial inclusion. Considering the factors, the attention should be paid to both economic and non-economic factors as well as to those occurring both on the demand side and on the supply side. The hierarchy of factors is also important. The following factors are the most important factors influencing the level of financial literacy: income and level of education (Atkinson & Messy, 2012; Spataro & Corsini, 2013), gender (Berggren & Gonzalez, 2010; OECD/INFE, 2013), age (Atkinson, McKay, Collard & Kempson, 2007; Atkinson & Messy, 2012; Chen & Volpe, 1998), and cultural norms
and motivation (Mandell & Klein, 2007). A very similar set of factors can be listed in the case of financial inclusion. Basically, income is the most important factor of financial inclusion, which is understood as both disposable income of households an as the GDP / GDP per capita (Demirguc-Kunt et al., 2015; Diacon & Maha, 2015; Frączek, 2012). The other important factors are education (Frączek, 2017), gender (Gammage et al., 2017; Johnson, 2004; OECD/INFE, 2013), age (Frączek, 2017; Park and Mercado, 2015), cultural and social norms (Gammage et al., 2017) as well as many others.

Our literature review confirms that the factors on the demand side are more important (García-Herrero & Turégano, 2015). However, the factors on the supply side should not be ignored. The factors that require special attention are the information gap and information asymmetry. Financial institutions preparing products and services often, consciously or unconsciously, limit the transparency of information relating to their financial offers. This constitutes a key barrier to effective and informed participation in the financial market and influences the unsatisfactory level of financial inclusion. This improper information policy is a very wide problem regarding its relation to financial offers, which results in the lack or the limitation of information in the financial market and can threaten the development of the financial market and consumers’ financial well-being.

Considering the problem of information gap and information asymmetry from the perspective of financial inclusion, attention should be paid to these issues in the areas of capital allocation (savings) and borrowing money (credits/loans). Our literature analysis distinguishes the following forms of information gap:

A. In the area of capital allocation:

− concealing true information,
− providing partial, selective information,
− giving false information, and
− shaping the false image of the institution and its offers;

B. In the area of borrowing money:

− lack of basic information about the terms of lending products with the implication of real costs (e.g. lack of all elements of the costs),
− partial or misleading information (e.g. small amount of credit and low interest rates given as an example),
− not standardized information (e.g. different way of calculating the Annual Percentage Rate – APR),
− hidden information (e.g. about the consequences of earlier or late repayments),
− inaccurate information (the lack of information about the costs of loans and credits collateral), and
− ambiguity of information (e.g. about the costs).

More detailed examples of information gap and information asymmetry in both presented areas cover (Kordos, 2013; Rutkowska, 2006; Wiśniewski, 2012):

− unfair advertising and unreliable information about financial products and services – influencing financial decisions making,
− limited information about the structure of contracts relating to a financial instrument, containing illegal (abusive) clauses,
− lack of transparency in the process of creating, issuing and trading in financial instruments,
− limited information transparency regarding the financial condition of the financial instruments issuer,
− lack of independence and biased information provided by intermediaries and financial advisors,
− limited access to information on additional costs affecting profitability of investments, and
− false information and the manipulation of information.

All presented examples of information gap result in a difficulty of understanding and interpreting the nature of financial offers. In addition, the unreliable information policy of many entities acting on the financial market widens the information asymmetry between those people who may have access to confidential information (insiders) and the investors who do not have access to such information. The offers of financial institutions operating out of the supervised part of financial markets, e.g. financial pyramids or private lenders, are extreme examples of the information gap or the lack of information transparency on financial markets. These entities expose
financial consumers to the loss of their capital (Cantoni, 2009; Makusiewicz, 2014; Potocki, 2012; Radziwinowicz, 2012; Schiller, 2015). Despite many factors influencing the level of financial inclusion being recognised and despite the multifaceted development of financial market, there are still many households with limited (or none) access to the financial system. Even the accompanying financialization which results in the increasing role of finance in economic and social life and the expanding financial sector may not be sufficient to reach those people that are still not part of financial system.

With respect to the presented facts, financial education seems to be the rational way (tool) to increase the level of financial inclusion. Deficiencies of financial literacy and financial inclusion emphasize a very important role of financial education. Financial education may improve financial knowledge about the availability of various types of products or their features and may enhance the awareness of population about the access to financial offers. The process of financial education facilitates the consumers’ understanding of their rights and obligations and gives them a greater chance for making rational and informed financial decisions. In addition, in many cases, this encourages the changed attitudes and patterns of financial behaviours, which, at the same time, influence the increasing level of financial inclusion (OECD/INFE, 2013).

In most countries in the world (including Poland), the process of financial education covers formal and non-formal education (Kozup & Hogarth, 2008). A rich offer of activities includes the options for people of every age. Formal education is carried out according to a given set of laws and norms; therefore, it is an organized, systematic, structured and administered form of education. It usually uses a mono-directional methodology, which is rather poor, ineffective and not creative, because regardless of the number of students, the same methodology is usually adopted. Formal education in areas of finance realized at different levels (e.g. primary, secondary, etc.) is usually very poor. Therefore, it does not sufficiently support financial inclusion. Non-formal education seems to be more focused on students and their previously identified needs and possibilities. This form of education is intentional from the learner’s point of view and it gives the possibility of immediate practical application for the student’s personal and professional growth. The programmes of non-formal financial education may be also prepared and/or provided by governments, various public institutions, non-governmental
organizations as well as banks, stock exchanges and other stakeholders interested in and responsible for financial education of societies. Non-formal education is mostly non-compulsory and is addressed to the entire population, although particular programmes may be directed to a specific target group or level of school education. It may be seen as supplementary financial education, but its range and scale underline its highly significant role in financial education as a whole. Among many forms of non-formal education, the following options may be distinguished: educational programmes, projects, competitions, Olympic games, campaigns and many more. At the end, it is also worth mentioning that hands-on practice is sometimes qualified as being part of non-formal education and is referred to as informal (separate) form of education process. This type of education opens the discussion about the superiority of practical education over the general academic one. At the same time, this dilemma could be restricted to even more fundamental one, the one considering fundamentals of theoretical and empirical cognition.

**From theoretical towards practical cognition**

The dilemma of theoretical and practical cognition has accompanied humans from the origins of the epistemological trend in philosophy. At the very beginning of human history, several positions emerged considering various ways of studying:

- empiricism (sensualism), proclaiming fundamental role of experience (the Sophists, Epicurus);
- intuitionism, which assigned a cognitive role to the intuition reaching over empirical and theoretical knowledge (Heraclitus); and
- rationalism, stressing the autonomy and cognitive self-sufficiency of human reasoning (Parmenides, Plato).

There were also opinions that made knowledge dependent on non-cognitive factors (will, feelings, beliefs) and those that undermined the informative value of human cognition (subjectivism, scepticism, agnosticism, relativism). In Aristotle's opinion, the first objective of human cognition is being and not cognition itself, and that cognition is updated along with the experience of real, tangible particulars. The cause of cognition and its measure is the real being; therefore, theoretical reflection on cognition must not ignore it. Otherwise, it could lead to extreme attitudes such as reductionism (empiricism, rationalism, ecstatic intuitionism) or absurd (subjectivism,
scepticism, agnosticism, relativism). In *Metaphysics*, Aristotle refers in particular to the dilemma between empirical and theoretical knowledge. He claims that a man has a natural desire to know for the sake of cognition not just for action.

“For not only with a view to action, but even when we are not going to do anything, we prefer seeing (one might say) to everything else. The reason is that this, most of all the senses, makes us know and brings to light many differences between things.” (Aristotle, *Metaphysics*).

What makes a man superior to other species is just the ability to reason and create art.

“The animals unlike a man live by appearances and memories, and have but little of connected experience; but the human race lives also by art and reasoning.” (Aristotle, *Metaphysics*).

Hence, a question of the importance of experience in human life seems apt. Does experience play an important role in human life? Is the experience itself a cognition?

“An experience seems pretty much like science and art, but really science and art come to men through experience. (...) For to have a judgement that when Callias was ill of this disease this did him good, and similarly in the case of Socrates and in many individual cases, is a matter of experience; but to judge that it has done good to all persons (...) this is a matter of art.” (Aristotle, *Metaphysics*).

Aristotle then puts forward the theoretical cognition over the empirical one, and those who can reason are appreciated more than those who derive their knowledge from experience only.

“We think that knowledge and understanding belong to art rather than to experience, and we suppose artists to be wiser than men of experience (...); and this is because the former know the cause, but the latter do not. For men of experience know that the thing is so, but do not know why, while the others know the ‘why’ and the cause.” (Aristotle, *Metaphysics*).
Nowadays, the term *knowledge* is being often replaced by *information*. Information becomes a commodity having an intrinsic commercial value. When teaching our students, we often restrict ourselves to filling their brains with succeeding gigabytes of information. Facing the moral dilemma "to have or to be" (Fromm, 2013), we rather make them have more information instead of them being wiser. Ultimately, we compete with Google's search engine supplying new data and forgetting that knowledge and wisdom are not just information but also the ability to analyse, interpret and use it in action.

Is then experience such a bad thing? Even being so critical of *empirical knowledge*, Aristotle himself admits:

“With a view to action experience seems in no respect inferior to art, and men of experience succeed even better than those who have theory without experience. The reason is that experience is knowledge of individuals, and actions and productions are all concerned with the individual. If the physician has the theory without the experience, and recognizes the universal but does not know the individual included in this, he will often fail to cure.” (Aristotle, 2018).

Today, living in the highly commercialized and financialised world, we need to be more pragmatic despite respecting ancient philosophy. As economists, we have to accept that in order to maximise cognition, the reduction of such adverse phenomena as financial illiteracy and financial exclusion could be obtained by a proper combination of the three constituents: the fundamental information, the experience and the reasoning. The main task of a university teacher is to achieve balance between them. Only then will the university graduate be not only efficient in standard activities but also remain creative and open-minded to new phenomena, concepts and solutions.
Selected aspects of legal implementation of empirical approach to higher education system in terms of financial literacy and financial inclusion – a case of Poland

The dilemma of empirical and general academic education has existed in legal regulations for several years now. The widely emphasized goals of the education policy are to:

1. discourage mass participation in higher education by promoting appropriate student-to-staff ratios;
2. push forward greater internationalisation by applying appropriate financial incentives (the algorithm for the distribution of State-budget subsidies) and institutional arrangements (the establishment of the National Agency for Academic Exchange); and
3. intensify activities encouraging quality enhancement. (Higher Education in Poland).

In recent years, ensuring a closer link between the programmes offered and labour market needs has become a particularly important objective of higher education policy. Its implementation caused the institutional duality of Higher Education Institutions (HEIs). Until 2005, HEIs were divided into higher education schools\(^1\) and schools of higher vocational education\(^2\). They were established and operated on the basis of separate legislation (1990 Higher Education Act, and 1997 Act on Schools of Higher Vocational Education respectively). The 2005 Law on Higher Education, which repealed the legislation previously in force, made a distinction between university HEI\(^3\) and non-university HEI\(^4\). This distinction remained in force also in the amendment to the Higher Education Act passed in 2018 (The Law of HE&S, Art.14.1). Today, a HEI can become a university HEI only if it conducts scientific activities and has the scientific category A+, A or B+ in at least 1 scientific or artistic discipline. A university-type HEI is authorised to award doctoral degrees. It offers first-cycle programmes leading to a Bachelor's degree, second-cycle or long-cycle programmes leading to a Master's degree, and doctoral programmes. A non-

\(^*\)\(1\) szkoła wyższa (pl)
\(^*\)\(2\) wyższa szkoła zawodowa (pl)
\(^*\)\(3\) uczelnia akademicka (pl)
\(^*\)\(4\) uczelnia zawodowa (pl)
university HEI, referred to as a school of higher vocational education⁵, conducts education taking into account the needs of the socio-economic environment and is obligated to offer first-cycle degree programmes. It may also offer second-cycle or long-cycle programmes leading to a Master’s degree, but is not authorised to award doctoral degrees or offer doctoral (third-cycle) programmes. In addition to the level of the study, there is also a distinction of fields, modes (full-time and part-time study programmes) and profiles (academically-oriented and practically-oriented programmes). Academically-oriented programmes consist of modules relating to research fields conducted by a given HEI and ensure that more than half of the curriculum, as defined in ECTS, covers courses that enable students to gain more in-depth knowledge. Practically-oriented curricula consist of modules designed to develop students’ practical skills and social competences and ensure that more than half of the curriculum, as defined in ECTS, covers practical courses developing such skills and competences (The Law of HE&S, Art.64.1). As for higher vocational schools (non-university HEI), only practically-oriented programmes are eligible (The Law of HE&S, Art.15). To be authorised to offer programmes of any profile, university-type and non-university HEIs are required to comply with the same rules laid down in the Regulation of the Minister of Science and Higher Education of 27 September 2018 on Studies (The Regulation, 2018). This regulation lays down a number of requirements concerning a curriculum and defines technical and organizational conditions to ensure proper quality of education. For practical studies, the university must provide sufficient conditions for students to perform empirical activities. Therefore, distance learning techniques can, for example, be used only complementarily (The Regulation, 2018, Par.12.2). Legal regulations regarding higher education impose also requirements on the competence and experience of academic teachers (The Law of HE&S, Art.73.1). For general – academic programmes, at least 75% of class hours are taught by academic teachers employed at this university as their primary place of work. For practical programmes, there is only 50% class hour requirement to be taught by this category of teachers. It is assumed that practical skills instruction can be also provided by people who have gained their competences and professional experience outside higher education (Eurydice, 2018). The HEI may also conduct studies in cooperation with an entity other than HEI (The Law of HE&S, Art.61). In particular, degree programmes of a practical profile may be provided by HEI in cooperation with commercial

⁵ wyższa szkoła zawodowa (pl)
enterprises. Such programme may have the status of dual studies (The Law of HE&S, Art.62). Then, the organization of courses is specified in a written agreement concluded between a HEI and a commercial enterprise specifying:

- the option for courses, particularly of a practical nature, to be taught by employees of commercial enterprises;
- the participation of commercial enterprises in the development of curricula;
- the manner in which funding for programmes is to be provided by commercial enterprises;
- learning outcomes of such programmes; and
- the manner of execution of practical placements and internships.

Mandatory internships are widely recognized as positively correlated with employment ratios. Promoting internships is a successful strategy to bridge theoretical knowledge and practice resulting in enhanced graduate employability (Silva et al., 2015). According to Polish regulations, internships are mandatory for practical programmes. The novelty of the law on higher education extended the length of the internship to 6 months for the first-cycle studies and to 3 months for the second-cycle studies (The Law of HE&S, Art.67). Also, the diploma thesis can be recognised as an important supplement to practical training. Writing a diploma thesis and passing a final exam based on it is a prerequisite for completing studies and obtaining a diploma of graduation in the case of second-cycle studies and uniform master's studies (The Law of HE&S, Art.62). As for the first-cycle studies, writing a diploma thesis and passing a final exam becomes compulsory only if it is required by the study programme. The diploma thesis is considered to be a means of presenting an independent development of the students who can demonstrate their general knowledge and skills in a given subject, field, level and profile of studies. In the case of practical studies, it may be of an applicative nature, prepared and implemented in consultation with the business partner. The concept of the thesis can be established during the student’s internship.
Conclusion

Growing contribution of practical education seems to be a reasonable response to the intensifying social phenomena of financial illiteracy and financial exclusion. Undoubtedly, a strong incentive to promote the idea of empirical education is its economic usefulness. The pervasive commercialization of various aspects of human life demands that the evaluation of the efficiency of education is based on the criterion of its utility and practicality in everyday life. Krzyk (2015) states: “My criticism of the education system comes from the fact that it has uncritically accepted the language of economics. Knowledge has become a commodity, a student has become a client, and each of us is a human capital”. The usefulness of education is perceived mainly as a guarantee of being able to quickly find a well-paid job. Only very few students are interested in knowing for the sake of cognition. As a result, pursuing quick answers to our practical questions, we are losing a wider perspective of the problem.

“If our ideas seem smaller nowadays, it’s not because we are dumber than our forebears but because we just don’t care as much about ideas as they did. In effect, we are living in an increasingly post-idea world - a world in which big, thought-provoking ideas that cannot instantly be monetized are of so little intrinsic value that fewer people are generating them and fewer outlets are disseminating them” (Gabler, 2011, para. 4).

By shaping the path of practical education in our academic programmes, we must therefore constantly ask ourselves about the purpose of undertaken actions. Otherwise, we can remove some problems, but instead create the new ones.

“There is the retreat in universities from the real world, and an encouragement of and reward for the narrowest specialization rather than for daring - for tending potted plants rather than planting forests” (Gabler, 2011, para. 6).
Good education should ensure that in the future a man will be capable of not only answering the question of how to profitably invest their money but also what is the objective of their life and why the wellbeing is so important to us. Practical education can help us but it can also turn us back from a right path. It is up to us to choose which way to go.

References

Aristotle. (2018). Metaphysics, Global Grey, translated by D. Ross (1924). Kindle eBooks.
Atkinson, A., & Messy, F. (2012). Measuring Financial Literacy: Results of the OECD / INFE Pilot Study, OECD, Working Papers on Finance, Insurance and Private Pensions, No. 15. Paris: OECD Publishing, pp. 446-448.
Atkinson, A., McKay, S., Collard, S., & Kempson, E. (2007) Levels of Financial Capability in the UK, “Public Money & Management”, 27(1), 29–36.
Berggren, J., & Gonzalez, R. (2010). Gender difference in financial decision making - A quantitative study of risk aversion and overconfidence between the genders, Umeå University, 44. Bachelor Thesis. Retrieved from: http://www.diva-portal.org/smash/get/diva2:324378/FULLTEXT01.pdf
Cantoni, C. J. (2009). A Brief History of Ponzi Schemes, Journal of American Physicians and Surgeons, 14(1), 24-25.
Chen, H. & Volpe, R.P. (1998). An Analysis of Personal Financial Literacy among College Students. Financial Services Review, 7(2), 107-128.
Demirgüç-Kunt, A., Klapper, L., Singer, D., & Oudheusden, P. (2015). The Global Findex Database 2014, Findex Notes No. 2014-2. Washington, DC.
Diacon, P.E., & Maha, L.G. (2015). The Relationship between Income, Consumption and GDP: A Time Series, Cross-Country Analysis. Procedia Economics and Finance, 23, 1535-1543.
Eurydice (2018). The System of Education in Poland. Retrieved from http://czytelnia.frse.org.pl/media/The-system-of-education-in-poland-2018-calosc.pdf
Frączek, B. (2012). Analiza czynników wpływających na oszczędzanie i inwestowanie gospodarstw domowych, „Studia Ekonomiczne / Uniwersytet Ekonomiczny w Katowicach”, 122, 87-98.
Frączek, B. (2017). Edukacja finansowa jako determinanta wzrostu włączenia finansowego. Podejście zintegrowane, [Financial education as a determinant of the increase in financial inclusion. Integrated approach], Wydawnictwo Uniwersytetu Ekonomicznego w Katowicach [Publishing House of the University of Economics in Katowice], 266.
Fromm, E. (2013). To have or to Be? Bloomsbury Academic.
Gabler, N. (2011). The Elusive Big Idea. The New York Times, August 13.
Gammage, S., Kes, A., Winograd, L., Sultana, N., Hiller, S., & Bourgault, S. (2017). Gender and digital financial inclusion: What do we know and what do we need to know? International Center for Research on Women. Retrieved from https://www.icrw.org/wp-content/uploads/2017/11/Gender-and-digital-financial-inclusion.pdf.
García-Herrero, A., & Turégano, D.M. (2015). Financial Inclusion, Rather than Size, Is the Key to Tackling Income Inequality, Working Paper No. 15/05. Madrid: BBVA Bank.
Johnson, S. (2004). Gender Norms in Financial Markets: Evidence from Kenya. World Development, 32(8), 1355-1374.
Kordos, I. (2013). Dorady finansowi niezależni tylko pozornie. Retrieved from http://www.bankier.pl/.
Kozup, J., & Hogarth, J.M. (2008). Financial Literacy, Public Policy, and Consumers’ Self-Protection—More Questions, Fewer Answers. Journal of Consumer Affairs, 42(2), 127-136.
Krzyk, J. (2015). Profesor Tadeusz Sławek: Nasz świat zmieni się i pozytywnie, Gazeta Wyborcza, 13 października.
Makusiewicz, P. (2014). Piramidy finansowe, „Zarządzanie i Finanse”, no. 4.
Mandell, L., & Klein, L.S. (2007). Motivation and financial literacy. *Financial Services Review, 16*(2), 105-116.

Monticone, C. (2018). *Financial literacy in CIS and at the Global Level*. OECD-Russia Global Symposium “Advancing financial literacy globally: implementation and innovation”, 4-5 Oct 2018, Moscow, 11. Retrieved from https://www.oecd.org/da/fin/financial-education/Russia-FinEdu-2018-Session2.pdf

OECD/INFE. (2012). *High Level Principles on National Strategies for Financial Education*, OECD/INFE, 1-20.

OECD/INFE. (2013). *Financial literacy and inclusion. Results of OECD/INFE survey across countries and by gender*, 14.

Park, C. & Mercado, R. (2015). *Financial Inclusion, Poverty, and Income Inequality in Developing Asia*, ADB Economics Working Paper Series, No. 426. Manila: Asian Development Bank (ADB).

Potocki, M. (2012). *Piramidy Finansowe. Sprawdź, jak skończyli ich twórcy*, „Dziennik Gazeta Prawna” z 7 sierpnia 2012 r., dodatek „Biznes”

Radziwinowicz, W. (2012). *Rosyjski arcyoszust Mawrodi, twórca finansowych piramid, włączył się do walki z opozycją*, „Gazeta Wyborcza” z 23 października 2012 r.

Rutkowska, E. (2006). *Konsument w stosunkach umownych z bankiem*, KBKE e-biuletyn, No. 4. Retrieved from http://www.bibliotekacyjfrowa.pl/.

Sarma, M., & Pais, J. (2011). *Financial Inclusion and Development*, *Journal of International Development, 23*(5), 613-628.

Schiller, J. (2015). *Avoid Financial Fraud*. Charleston SC: CreateSpace.

Silva, P., Lopes, B, Costa, M., Seabra, D., Melo, A., Brito, E., & Dias, G. (2015). Stairway to employment? Internships in higher education. *Higher Education, 72*, 703-721.

Spataro, L., & Corsini, L. (2013). *Endogenous financial literacy, saving and stock market participation*, MPRA, Paper No. 44342.

The Law of 20 July 2018 on Higher Education and Science (Journal of Laws of 2018 item 1668).

The Regulation of the Minister of Science and Higher Education of 26 September 2016 on the conditions for the provision of degree programmes.

The Regulation of the Minister of Science and Higher Education of 27 September 2018 on studies (Journal of Laws 2018 item 1861).

World Bank. (2019). *Financial inclusion*. Retrieved from http://www.worldbank.org/en/topic/financialinclusion/ overview#.

Wiśniewski, M. (2012). *Wartość wykupu polis życiowych z Ubezpieczeniowym Funduszem Kapitałowym*, „Wiadomości Ubezpieczeniowe”, 2.

World Bank. (2012). *The Little Data Book on Financial Inclusion*. Washington, DC: The World Bank Group.

World Bank. (2015). *The Little Data Book on Financial Inclusion*. Washington, DC: The World Bank Group.

World Bank. (2018). *2018 The Little Data Book on Financial Inclusion*. Washington, DC: The World Bank Group.

World Bank, World Bank Development Research Group & GFLEC. (2015). *S&P Global FinLit Survey*. Washington: The World Bank Group.
