



UNIVERSITY OF WARSAW
FACULTY OF ECONOMIC SCIENCES

WORKING PAPERS

No. 5/2017 (234)

FINANCIAL EDUCATION AND FINANCIAL LITERACY IN GEN Y - ALTERNATIVE FORMS OF FINANCING

ANETA EWA WASZKIEWICZ

WARSAW 2017



Financial education and financial literacy in Gen Y - Alternative forms of financing

Proceedings of "Economic awareness and education - importance and measurement" conference.
Faculty of Economic Sciences, University of Warsaw, 9th December 2016

ANETA EWA WASZKIEWICZ
Warsaw School of Economics
e-mail: awaszkie@sgh.waw.pl

Abstract

This study was designed to assess knowledge and awareness of students of Polish economic universities in terms of forms of enterprise financing. Particular attention was focused on innovative forms of capital raising as crowdfunding due to its dynamic development in the world, but also crowdfunding seems to correspond to the needs of Generation Y as future entrepreneurs. The research hypothesis is that Polish Generation Y has only a theoretical knowledge of the sources of funding enterprises. Polish students, although they are proficient in new technologies, they do not know innovative capital raising on the Internet because they do not receive this knowledge at the university.

The quantitative research was conducted and designed to test knowledge of the forms of financing and knowledge of the development of innovative funding methods. The qualitative research was used to indicate the needs of Millennials as to the possibility of obtaining financial knowledge as well as the skills to use it.

The main findings demonstrated a gap in education for innovative methods of funding but also indicated recommendations for potential changes in the education of Generation Y.

Keywords:

crowdfunding, Generation Y (Gen Y), Millennials, p2p lending, financial literacy, financial education

JEL:

A14, A20, D12, D83, O33

DOI:

<https://doi.org/10.26405/WP/WNE/2017/234/005>

Working Papers contain preliminary research results.

Please consider this when citing the paper.

Please contact the authors to give comments or to obtain revised version.

Any mistakes and the views expressed herein are solely those of the authors.

1. Introduction

Financial literacy is the mix of one's knowledge, skill and attitude towards financial matters. In the last decade, the numbers of studies on financial literacy have increased significantly. It is the consequence of the recent financial crisis which has changed the functioning of financial markets but also revealed significant gaps in financial education of entire societies. Therefore, it has become an important measure of financial knowledge especially among the younger generation. It should be noted that Millennials today have a far more challenging reality than that faced by past generations because they must take on a greater responsibility for their financial decisions, such as investing in additional education, saving for a child's education, or planning for retirement. They must learn to respond to the rapidly changing financial reality. On the other hand, Generation Y or Millennials stand out with their new technological skills which the older generations lacked. They are active in all social media outlets and they incorporate IT innovation in all aspects of their lives. The virtual world (the Internet) is their natural environment, where they create relationships, express their opinions, looking for information and entertainment. However, does this mean that they perceive the virtual world as a place for their future work or conduct business? Do they recognize the opportunities to acquire funding for their projects online (on the Internet)? In this study we are trying to find the answer to those questions.

The analysis includes one of the areas of financial knowledge that are forms of enterprises' financing.

We assess financial knowledge and awareness of Polish students in economic universities in terms of methods of business financing. Particular attention is focused on innovative forms of capital raising as crowdfunding due to its dynamic development in the world, its influence on the SME sector, but also because crowdfunding seems to correspond to the needs of Generation Y as future entrepreneurs.

The research hypothesis is that Polish Generation Y has only a theoretical knowledge of the sources of funding enterprises. Polish students, although they are proficient in new technologies, they do not know innovative capital raising on the Internet because they do not receive this knowledge at the university.

This paper consists of three parts. The first part was devoted to the characteristics of generation Y and their attitudes towards the financial markets. Against this background we present the concept of crowdfunding as an innovative form of financing enterprises and also as a solution to Millennials problems in capital raising in their start-ups. The second part presents the results of quantitative and qualitative research. The aim of quantitative research was to assess the level of financial literacy in the Polish Generation Y in terms of forms of enterprise financing, and also to identify their knowledge about crowdfunding and other innovative lending forms. The qualitative research complemented the quantitative research and their purpose was to indicate the needs of Millennials in terms of acquiring financial knowledge. The last part of this paper is the presentation of problems for discussion.

This paper revealed the low level of financial literacy the Polish students especially for innovative forms of financing, and that their knowledge about running a business is theoretical and they have not practical skills. It means that current financial education in Poland does not take into account the characteristics and needs of Generation Y as future entrepreneurs in the digital financial world and also the dynamics of change in the financial markets.

2. Generation Y on the financial innovation market

Many countries understand that financial ignorance carries significant costs. Consumers who fail to understand the concept of interest compounding borrow more and save less money (Stango, Zinman, 2009), spend more on transaction fees, run up bigger debts, and incur higher interest rates on loans (Lusardi, Tufano, 2009; Lusardi, de Bassa Scheresberg, 2013). Therefore, it is extremely important to educate young people who, through their decisions, will build the future of society and the economy, not only nationally but also globally.

Generation Y¹ refers to people born in 1980-2000 (Gurau 2012) who stand out with their new technological skills older generations greatly lacked. They are active on all social media outlets and incorporate IT innovation in all aspects of their lives. They are socially committed and open to team work more than the previous generations. They are more tolerant and open-minded when it comes to new solutions (Pew Research Centre, 2010; Debevec et al., 2013). Millennials are also described as “Digital Natives”. This expression was coined in 2001 by Prensky to depict a new generation of students who grew up with new technologies at hand and use the digital language of computer games, communicate via mobile devices and the internet and perform financial transactions on-line, much unlike the previous generation called X (Digital Immigrants) (Prensky 2001). Generation Y lives, breathes, works and plays using tools and products of the digital era (Lazorko 2015). And that's why today's Generation Y is in fact quite different than previous generations. The Internet is a global environment in which Generation Y has grown up in and where they spend their time and feel comfortable. But what is interesting, even among Millennials with high levels of education and income, who have nearly unlimited access to information, financial literacy is typically low. This is mainly due to the fact that Generation Y's knowledge of financial services mostly derives just from broadly-defined media such as online forums, social networking platforms, and financial blogs. Next, there are family and friends, and lastly universities (Harland Clarke HC, 2014; Polak 2014).

Analyzing financial literacy of Gen Y should keep in mind that this generation grew up during the greatest financial crisis of the last half-century. The financial breakdown of 2008 resulted in limited access to loans and credits, dropping profitability of investments as well as raising operational and systemic risks. To show their generation revolt they disliked the economic and political order and, less frequently than their predecessors, use banking services. At the same time they expect greater transparency and availability of financial service (Terry, 2015).

Millennials are also described as using the 7C model: connection, community, communication, creation, content, control and customization; this means that they stay in continuous contact with peers or even a social network and as a result, create a certain community where they want to impact the reality in which they live by sharing and controlling content among each other to create their own profile of a person, a product or a service (Karolczak, 2015). Could this series be extended with other ones – consciousness crowdfunding?

If we combine the features of Millennials, such as technological advancement with the opposition attitude towards the financial markets, it seems that alternative forms of financing correspond precisely to the needs of Generation Y. Crowdfunding (as the most important element of alternative finance (Waszkiewicz, 2016)) was born as a bottom-up initiative aimed at financing social and business projects and omitting banks (World Bank, 2013a). The Internet community was willing to provide finance for their favorite music band or local firm

¹ Generation Y (Gen Y) is also called the Millennials, those two names are used interchangeably in this paper.

in exchange for minor rewards (items or services). On the other hand, young people starting up new innovative businesses could never stand up to the required credit rating or bank's eligibility criteria – so then crowdfunding has become helpful and meets the needs of both supply and demand.

Crowdfunding is a form of public collection of money via an Internet platform, intended to provide finance for a given social or business project. As the name itself implies (crowd), the collection gathers a big number of people with the respective sums being rather minor without, however, bringing down the total value of the project (Kibry, Worner, 2014).

However, regardless of the perspective on it, crowdfunding has three basic elements (Tomczak, Brem, 2013; García, Estellés-Arolas, 2015), namely:

- the entity notifying a financial need for a certain concept or business;
- crowd of potential lenders, investors or donation givers; and
- an Internet platform used for communication purposes.

In specialist literature, there are four basic crowdfunding models distinguished (Dziuba, 2012; Ramos, 2014, EC, 2016a):

- **equity-based crowdfunding** (*investment-based crowdfunding*) – investors use a platform to give a sum and become the shareholders of a company (*equity model*) or buyers of its bonds (*debt*), thus supporting the implementation of a business project.
- **lending-based crowdfunding** (*peer to peer/p2p lending*) – a loan agreement is made between a borrower and lenders with a fixed price (interest) and fixed deadline.
- **reward-based crowdfunding** (*sponsorship crowdfunding*) – a form of pre-ordering where investors make payments to finance production of goods or services that they will get in exchange, however, the reward could be another item or service as well (for example, a meeting with the author, such as a musician or an actor).
- **donation crowdfunding** – a form of charity collection without rewards for investors.

Crowdfunding has been developing very dynamically and is reaching record values of projects year after year. According to a report by Massolution, the global value of the crowdfunding sector in 2013 (based on the total value of implemented projects) was 6.1 billion USD. In 2014, it was 167% more at 16.2 billion. In 2015, the global crowdfunding sector reached 34.4 billion USD (Massolution, 2015).

The biggest crowdfunding market is North America (USA and Canada) where 2014 saw projects for almost 10 billion USD (9.46). The runner-up is Asia where the crowdfunding market grew by 320% in 2014 year by year and reached 3.4 billion USD. The European crowdfunding platforms managed to finance projects for 3.26 billion USD – the third biggest market in the world.

The success of crowdfunding should not only be related with the revolution of technology (internet) but also with certain changes occurring in demographics as well. The Millennium generation has entered the market and is referred to as the first high-tech generation (Norum, 2003), which unlike other generations, has two distinct features: mobile technology and on-line social networks. The main users of the internet come from Generation Y. In a global view, people aged 15-24 (Younger Millennials or YM) are 26.5% of Internet users while Old Millennials aged 25-34 (OM) make up 26.7% (Debevec et al., 2013). In Europe, there are 19.7% of YM and 23.5% of OM. People aged 55 or more make up 12.5% of the internet user population (Statista, 2016).

US market research has demonstrated that Generation Y is engaged with crowdfunding (47% respondents, 30% in generation X, 4% of seniors), mainly thanks to the transparency of transactions, the opportunity to control projects, product testing capacities and the ability to influence and develop products (Terry, 2015). For this reason Millennials are less eager to invest in shareholder crowdfunding and more in the sponsorship model. That trend has been confirmed in the Polish market where the sponsorship crowdfunding platform (polakpotrafi.pl) has the biggest following and includes mainly music projects (198 out of 1007), films, computer games (1123 out of 1007) and books (110 out of 1007) (Waszkiewicz, 2016). Notably, Generation Y is also more willing to engage in projects that are linked to values than high profits, and when choosing the shareholder in crowdfunding they look for projects that reflect social, political and environmental virtues. According to US Trust research, Millennials show high willingness to accept lower return on investment or higher investment risk in a company that shows positive impact on community and natural environment and are less likely to invest in companies which do not meet their social expectations regardless of high profits (Terry, et al. 2015). From the perspective of Generation Y as businesses, the alternative forms of project finance are perceived much better than the traditional banking system. Research of Western economies shows that Millennials are less willing to use bank loans because of lengthy procedures, bureaucracy and no influence on cost of credit (41% in Generation Y, 53% in Generation X). Another key factor is also feedback which businesses get thanks to crowdfunding platforms. Even if a project never gets implemented, its reviews or lack of interest from internet users still provide great market research (Oxera 2015).

However, it is worth noting that the commitment to crowdfunding requires more knowledge and greater financial awareness than in the case of a bank loan. From the point of view of the investor, the risk and profitability of the investment itself should be assessed. The borrower must estimate the value of the project, the value of the prize for sponsors; prepare a business plan to attract potential shareholders. This means therefore, that crowdfunding is used by people aware of the opportunities and threats but also able to identify their own financial needs.

In light of the above mentioned, one should ask whether Polish Generation Y is aware of the changes occurring in the financial market, and whether it knows the innovative forms of financing as just crowdfunding? Are they watching the growth of crowdfunding in the world, can we say that the Polish Millennials are ready to take part in this race?

3. Methodology

The survey-based research was conducted in Poland among students of the Warsaw School of Economics (SGH), Warsaw Technical University (PW), Bialystok Technical University (PB) and the University of Bialystok in June 2016. The main objective behind the research was to evaluate financial knowledge among Generation Y especially in alternative sources of business finance focusing primarily on crowdfunding. The research was expected to show that crowdfunding is a potential method of seeking finance for businesses especially for Generation Y who use the internet on a daily basis. The survey involved 310 students: 54% female and 43% male, with 95% of respondents aged 18-25, out of which 24% declared having a Bachelor's degree. The survey was divided into four parts: Part A was concerned with the use of the internet, Part B evaluated one's perspective on running a business and knowledge of business financing, Part C assessed knowledge about crowdfunding and p2p as the alternative source of business finance and part D focused on demonstrating the characteristics of the types of financing companies, indicated by the students (in part B). This was to demonstrate the gap between theoretical knowledge and its application in practice. The survey consisted of 24 questions, including open-ended and closed-ended questions with

multiple- and single-choice answers. The survey was introduced with a short discussion of the objective of the research

The quantitative results were expanded on qualitatively in the form of in-depth interviews with 15 students. They were asked about a definition of financial knowledge, to determine the level of their own financial knowledge, how they use the financial skills which they have acquired at the university in practice and how they evaluate the Polish educational system especially at university. The main purpose of that part of the research was to identify the strengths and weaknesses of financial education at university but also to disclose the needs of Gen Y in this field.

4. Research results

The survey involved 310 students: 54% female and 43% male, with 95% of respondents aged 18-25, out of which 24% declared having a Bachelor's degree.

In the first part of the survey, the respondents answered a question concerning frequency and extent of their use of the Internet. It is obvious and certain that this social group uses the internet and spends 3-4 hours daily (64%) mainly on entertainment but also on: games, films, music (76%), extra knowledge needed during studies (73%) and communication (68%). Only 4% of the respondents use the internet for on-line banking or shopping.

These results were expected and this confirmed the digitalization of Generation Y.

In the second part of the survey, the students were asked whether they expected to or already run their own business, and if yes, then what type of business would that be and how would they finance their current or future businesses? The aim of this part of the survey was to assess the financial knowledge of students on basic issues related to starting a business and preparing them to run the company as well as determine if Generation Y can indicate crowdfunding as the method of financing as early as at the stage of planning one's business.

Only 39% of respondents plan to open a business including 57% a service company or 39 % business in sales, 15% indicated industry². A company that would merge physical presence and on-line business was declared by 47% and an internet-only business by 12% out of the potential operators of businesses. The low percentage of respondents who want to run their own business online is an intriguing result in light of the fact that the surveyed generation uses web services. They know the power of the internet and are aware of the impact of information on there because, for example, they write opinions about the products and services (games) they use. But the most worrying is the low percentage of students who want to start their own business (only 39%). What does this indicate? Are the students of the economic universities prepared to run their company? This is confirmed by qualitative research, where students spoke about the lack of skills that would enable setting up their own business.

The answers to the question of capital to start a business are also interesting. The start-up amount was declared mainly at a level of 25-50 thousand PLN (35%), but such funding to come primarily from their own savings (64%). As 66% of the respondents are unemployed, this is a surprising result. However, research shows notably that Generation Y is largely dependent on their parents, including financial links (Goldman Sachs), and so this result could

² This does not sum up to 100 because it was possible to select two or more answers.

be interpreted with a view to the demographic shift. As a source of funding business students indicated also sponsoring (43%) and bank loans (43%).

Table 1. Results of Generation Y – To start the business

Question	Result
1B . Do you intend to start a business?	
YES	39%
NO	61%
2B. What kind of type of business do you plan to start	
Trade company	15%
Industry company	6%
Service company	22%
3B. What kind of form of business do you want to operate?	
Internet-only business	5%
Traditional form	17%
Merge physical presence and on-line business	18%
4B. Indicate the sources to raise funds to start your business?	
Savings	64%
Family loan	18%
Bank credit	43%
Leasing	9%
Sponsor/ investor	43%
Other	5%
5 B. What amount of funding you need to start your company (the estimates)?	
To 1 000	0%
1 000-5 000	8%
5000-10 000	20%
10 000-25 000	25%
25 000-50 000	35%
Other	9%

Source: student survey

These responses should be at this point combined with the fourth part of the study where we asked the respondents to describe familiar sources of business. The questions included both respondents who wanted to start a business as well as others who were not planning on any business of their own.

A bank loan was the most frequent answer (40%), followed by EU subsidies or government aid (35%), and then their own resources (18%). For this research, the answer was 6% for crowdfunding. 47 respondents indicated that the basic characteristic forms of financing are “simplicity and accessibility”, 37 students selected “reliability and credibility”, 27 people selected “low cost”, while 12 people chose “speed in access to capital”. These results indicate that students have financial knowledge but only theoretical. In practice, bank credits are unavailable and expensive for small innovative start-ups in Poland, and grants from the EU are not an easy and convenient form of financing enterprise.

The third part of the survey was concerned with knowledge of alternative methods of financing a business and was aimed at demonstrating what Generation Y knows about innovative sources of finance and from where. The results were interesting because when given the following question: What are the alternative forms of financing? Almost half of the respondents indicated internet platforms. However, only 31% of the respondents were familiar with the name of crowdfunding and 22% with p2p-lending.

The students got their knowledge of crowdfunding mainly from the internet (77%), and only 24% from their schools. Notably, when asked about a definition, the respondents had various concepts of crowdfunding and, in some cases, even specified names of Polish and foreign crowdfunding platforms. P2p lending was linked more with the sharing economy which was described as “*economy of sharing things where partners of equal rights exchange goods or payments*” and explained in rather literal terms as lending of goods or money “from person to person”.

Table 2. Results of Generation Y – Crowdfunding research

Question No.	1	2	3	4	5
1. Have you heard about crowdfunding?					
Yes	31%				
No	66%				
2. What was your source of information about crowdfunding?					
Internet	77%				
school/university	24%				
friends	14%				
other	5%				
3. Would you use crowdfunding as a source of finance?					
Yes		16%			
No		7%			
Not sure		11%			
4. YES, I would use crowdfunding, because:					
because I am not eligible for a bank loan			10%		
because it is easier			22%		
because I will get the appropriate amount			22%		
because it is more profitable			29%		
because I can verify feedback			73%		
other			8%		
5. NO, I would not use crowdfunding, because:					
because I can get a bank loan easier				10%	
because it is difficult				76%	
because it is risky				38%	
because it is expensive				10%	
because I have no Internet access				0%	
other				10%	

Source: student survey

Unfortunately, the above results were expected, but it means that universities in Poland does not provide knowledge on innovative forms of financing. This is worrying, because the crowdfunding was added to the tasks of the Capital Market Union (CMU) in the Investment Plan for the EU known as “the Junkers plan” (EC, 2016; Europa EU, 2015). However, legislative actions in the years 2014-2015, are only the result of the dynamic development of crowdfunding since 2008.

A summary of the above shows that Generation Y in Poland uses the Internet mainly for entertainment or studying. This generation does not perceive the Internet as a location for

their business – it is surprising when we consider that this generation looks for information on-line and spends 4 or more hours per day on the Internet. This means that they do not feel confident enough to run a business and do not have appropriate financial competence.

It is also interesting that the Generation is widely unemployed (66%) but would finance their own business with savings expected at a level of 50 thousand PLN. This reflects the description of the generation found in specialist literature which calls it highly dependent on parents. This also indicates that they do not understand the mechanisms of the financial markets.

They are able to indicate the basic form of financing very well, but through describing the characteristics of these forms they have demonstrated theoretical and not practical knowledge. When starting up a new business Generation Y in Poland is hoping for money from their families or bank loans.

We found out that over half of the respondents were not familiar with crowdfunding. Students who knew mechanism crowdfunding perceived it rather as an additional and back-up source of finance which is not linked to exclusion from the banking sector or unavailability of other forms of financing. For Generation Y it is rather a marketing tool which enables presentation of a concept to a wider community and the related feedback. P2p lending is not known to Generation Y in Poland. These results are really surprising because crowdfunding is developing on the Internet, which is a well-known environment for the Generation Y. Besides crowdfunding we can even get small amounts for the financing of business projects and required technological advancement. Research in this area also revealed that the Polish universities do not teach about innovative forms of financing.

The qualitative study which was to complement the quantitative research primarily aimed to identify the needs of Gen Y in terms of financial knowledge, and in particular their skills to starting your own business. The quantitative study included interviews with 15 students.

Students were asked about a definition of financial knowledge, how they use the financial skills, which they have acquired at the university, in practice and how they evaluate the Polish educational system especially at university. The main purpose of that part of the research was to disclose the needs of Gen Y in this field but also identify the strengths and weaknesses of financial education at university.

Students defined financial literacy as an awareness and understanding of how financial markets work, what mechanisms control the markets, and also concepts and issues related to financial accounting, banking and the broadly understood financial markets. Such knowledge is needed to make their financial decisions.

In the interview, the students stressed that at their universities the professional level of knowledge is high, but the students have to supplement it. This leads to mainly using internet sources like specialized financial portals, publications, websites, and forum. Everyone agreed that in university they primarily receive theoretical knowledge, which they cannot use in practice, *"we know the theories of economics, but we do not understand the mechanism of calculating taxes and filling in a PIT form"*. Therefore, all emphasized the need for apprenticeships. Furthermore, what is worth to note is that the respondents do not expect practitioners to teach them, but those students want to go to companies, and they train "the practice" in reality.

More than half of the respondents indicated that after graduation they are not prepared to start and run a business here and would need support from family or friends. Universities do not teach about the current financial problems, they do not give knowledge about modern solutions and do not use new technology. After all, for Gen Y it is essential to use new

technologies not only in classes but also as a tool for communication and collaboration. In addition students suggested that internet platforms would be very useful for mutual communication of students and lecturers as well as teamwork especially that student would like to see teachers more as partners and advisors in search of knowledge rather than only as those presenting their own level of knowledge or experience.

During the course, they expect to exchange views and opinions, which are only possible in small groups; however, they also need the involvement of lecturers. It is a completely different point of view then from previous generations, and it discloses specific needs of Millennials. Students expect that their study period will prepare them for employment, and yet first year students already know that the acquired knowledge will not be able to be used in practice *"because it already does not apply in practice, or is not at the university of tools that will allow for hands-on learning practical"*. They do not need knowledge for knowledge; they want the skills which they can use in their careers.

Compared to foreign scientific centres, students pointed out first of all that they acquire general theoretical economic knowledge and lack precise specialization. Several people pointed out that theory should be for students who want to develop a career in science, and the remaining students should rather train than teach. They also noted the lack of ability to obtain other skills than just sheer financial literacy. There are not enough classes required to obtain soft skills, e.g. public presentations or negotiations, as practiced abroad.

In conclusion, it therefore must be noted, that generation Millennials expect to use these tools from the education system, they know well that is the Internet and mobile technology. However, at the same time, students point out the need to have a mentor who will help them understand financial reality. This is typical of this generation; a sense of connection is also important in the learning process, hence the desire to work together and in small groups. A modern system of financial education should also be based on practices for gaining the ability to use gained knowledge outside the university, but also on the acquisition of soft skills.

Polish universities and education systems can offer students the knowledge, understood as financial concepts and theories, at a fairly high level, however does not allow the acquisition of financial skills and soft skills needed to run a company.

The Polish education system does not correspond to the needs of Generation Y, which we can define in the model 7C (*connection, community, communication, creation, content, control, and customization*). There is no work in groups, lack of implementation of joint projects, lack of communication with teachers, insufficient encouragement of creativity during the courses, all of which result in students' dissatisfaction with the "teaching wholesale" as it is not suitable for 21st century financial skills. We can't attach another "C" here like Crowdfunding because Polish Generation Y is not familiar with this form of financing, and is not aware of the possibility of obtaining financing through the Internet. This means that the study confirms the research hypothesis is that Polish Generation Y has only a theoretical knowledge of the sources of funding enterprises. Polish students, although they are proficient in new technologies, do not know innovative capital raising on the Internet because they do not receive this knowledge at the university.

5. Discussion

The conducted research concerning the financial knowledge of Generation Y in Poland, especially for innovative forms of financing, shows necessary trends in the Polish education system and also indicates areas for further research on financial education.

Firstly, it should be noted that the present system of education at universities is not responding to the needs of Generation Y. Working in small groups, with the support of teachers as tutors, classes based on solving real problems and the use of ICT tools are the main elements necessary to change Polish Generation Y. While this generation has the basic knowledge in the typical forms of financing, it does not have the financial skills and understanding of mechanisms of functioning even if the credit market. Generation Y will be the new businesses entering the market within a few years, but they do not intend on owning the company. They only need to acquire knowledge and experience by taking jobs in corporations. This is a disturbing signal indicating a low level of an entrepreneurial young generation but also a lack of preparation for doing business by Polish universities. We learn the definitions and theories, but no skill sets even though they are documented in the syllabus of financial courses.

Polish Generation Y as potential entrepreneurs also able to prior to the decision regarding the form of capital and again, as this research showed a high level of financial knowledge does not guarantee conscious and healthy financial decisions. In Poland, Generation Y perceives bank loans (and EU subsidies) as the chief source of finance for businesses. However, notably 66% of the surveyed members of Generation Y remain unemployed and only 4% use electronic banking or e-commerce services, and then their knowledge of availability and costs of loans and EU subsidies is theoretical only.

In terms of innovative financing the small groups of respondents who are interested in crowdfunding get their knowledge from the internet (77%). It means that there is an educational gap on the part of schools and universities in the field of innovative financial solutions. Yet universities should be pioneers in providing the latest innovation knowledge in finance. Knowledge of the crowdfunding concept and its methods is important because it is a source of finance for SME but could be used at any stage of developing a firm. With that in mind, it seems purposeful that the European Commission has already taken actions to support initiatives that provide knowledge about crowdfunding. In addition, the research conducted by the European Commission shows that the alternative sources of finance are the main stimulant of economic growth and to a certain degree enable independence of the SME sector from the bank sector.

Taking into account the scientific research on financial knowledge, to a significant extent, they relate to a measure of the level of knowledge and financial awareness on the basis of three questions in the area (the Big three): interest rate, the real rate of return and risk diversification. It is extended by a further two questions (the Big Five): stuff in mortgage interest and valuation of bonds. However, as Friedline indicated (Friedline et al. 2015), conducted the study does not ask about financial satisfaction and show only the skills, e.g. calculation of interest rates, or risk diversification. This means that well educated Millennials do not have to make good financial decisions. Therefore, research should measure not only the ability of calculation, for example, the risk of changes in exchange rates, but additionally whether respondents understand what affects the volatility of the exchange rate and how this knowledge can influence their financial decisions and quality of life.

In conclusion, it should be noted that research and discussion about the level of financial education, and thus financial literacy will be only an intellectual pastime if the recommendations arising from such work will not be implemented. Therefore, the most important question is whether, even if we identify the needs of Gen Y in terms of knowledge and financial education, is it possible to make changes such as wider use of ICT tools, implementing business in the educational process and the involvement of the scientific community?

References

Reference to a journal publication:

Debevec, K., Schewe, Ch. D., Madden, T.J, Diamond, W.D., 2013. Are today's Millennials splintering into a new generational cohort? Maybe! *Journal of Consumer Behaviour* 12, 20–31.

Dziuba, D.T., 2012. Rozwój systemów crowdfundingu – modele, oczekiwania i uwarunkowania. *Problemy Zarządzania* 10, 3 (38), 83 – 103.

García, J. L., Estellés-Arolas, E., 2015. Crowdfunding: A Study of Present Creative Trends and Institutional Reaction. *International Journal of Business and Economics* 14 (2), 131-144.

Gurau, C., 2012. A Life-Stage Analysis of Consumer Loyalty Profile: Comparing Generation X and Millennial Consumers. *Journal of Consumer Marketing* 29 (2), 103-113.

Lazorko, K., 2015. Sharing as an Aspect of Customer Behaviour of Digital Natives in Poland. *Club of Economics in Miskolc. TMP* 11 (2), 31-36.

Norum, P. S., 2003. Examination of Generational Differences in Household Apparel Expenditures.

Stango, V., Zinman, J., 2009. Exponential Growth Bias and Household Finance, *The Journal of Finance*, 64(6), 2807-2849.

Tomczak, A., Brem, A., 2013. A Conceptualized Investment Model of Crowdfunding, in: *Venture Capital. An International Journal of Entrepreneurial Finance* 15 (4), 335-359.

Waszkiewicz, A. 2016. Finance Alternatives - Electronic Financial Innovation and Economic Growth. *Acta Universitatis Lodzianis. Folia Oeconomica* 2(319), 135-152.

Reference to a website:

de Bassa Scheresberg, C., Lusardi, A., 2013 Gen Y Personal Finances: A Crisis of Confidence and Capability Report. FILENE RESEARCH INSTITUTE http://gflec.org/wp-content/uploads/2015/01/a738b9_b453bb8368e248f1bc546bb257ad0d2e.pdf (accessed 02.09.2016).

EC European Commission 2016. Communication from The Commission To The European Parliament, The Council, The European Central Bank, The European Economic And Social Committee And The Committee Of The Regions Capital Markets Union - Accelerating Reform, EC Brussels, 14.9.2016 Com(2016) 601 Final2016; Europa EU, http://ec.europa.eu/finance/capital-markets-union/docs/building-cmu-action-plan_en.pdf (accessed 25.10.2016)

EC European Commission, European Commission Staff Working Document. 2016a. Crowdfunding in the EU Capital Markets Union, Brussels, SWD(2016) 154 final. http://ec.europa.eu/finance/general-policy/docs/crowdfunding/160428-crowdfunding-study_en.pdf (accessed 15.10. 2016).

Europa EU, 2015. The Juncker Plan for Investment in Europe - What is the EFSI? http://europa.eu/rapid/press-release_IP-15-5420_en.htm; (accessed 15.09. 2016).

Friedline, T., West, S., 2015. Financial Education is Not Enough: Millennials May Need Financial Capability for Healthy Financial Behaviors AEDI Working Paper 02-15 Center on Assets, Education, and Inclusion The University of Kansas <https://aedi.ku.edu/sites/aedi.ku.edu/files/docs/publication/Working-Papers/WP02-15.pdf> (accessed 05.10.2016).

Goldman Sachs Global Investment Research, 2014. Millennials coming of age. <http://www.goldmansachs.com/our-thinking/pages/millennials/> (accessed 14.06.2016).

Harland Clarke (HC), 2014. Generation WhY, Answering the Call for Financial Literacy , Marketing Service Report <https://insight.harlandclarke.com/wp-content/uploads/2014/03/HC-GenY-FinancialLiteracy-WhitePaper.pdf> (accessed 15.10.2016).

Karolczak, K. 2015. Pokolenie C-nowa generacja konsumentów. Magazyn Online Marketing Polska. <http://o-m.pl/artykul/277/pokolenie-c-nowa-generacja-konsumentow.html> (accessed 06.06.2016)

Kirby, E., Worner, S. 2014. Crowd-funding: An Infant Industry Growing Fast. Staff Working Paper of the IOSCO Research Department. SWP.3/2014. The International Organization of Securities Commissions IOSCO. <http://www.iosco.org/research/pdf/swp/Crowd-funding-An-Infant-Industry->

Lusardi, A., Tufano, P., 2009. Debt Literacy, Financial Experiences, and Overindebtedness, National Bureau of Economic Research, Working Paper no 14808. <http://www.nber.org/papers/w14808.pdf> (accessed 14.10.2016)

Massolution, 2015. Crowdfunding Industry Report. http://reports.crowdsourcing.org/?route=product/product&product_id=54. (accessed 04.10.2016)

Oxera Consulting ,2015. Benefits of online platforms. Research prepared for Google. [http://www.oxera.com/getmedia/84df70f3-8fe0-4ad1-b4ba-d235ee50cb30/The-benefits-of-online-platforms-main-findings-\(October-2015\).pdf.aspx?ext=.pdf](http://www.oxera.com/getmedia/84df70f3-8fe0-4ad1-b4ba-d235ee50cb30/The-benefits-of-online-platforms-main-findings-(October-2015).pdf.aspx?ext=.pdf) (accessed 05.06.2016).

Pew Research Center, 2010. Millennials: Confident. Connected. Open to Change. Pew Research Center Report Series: the Millennials. <http://www.pewsocialtrends.org/files/2010/10/millennials-confident-connected-open-to-change.pdf>. (accessed 05.06.2016).

Polak, M., 2014. Polish experience in the implementation of national information and educational program, Conference materials, Inter-regional conference “improving financial literacy: Best practice and Perspectives, Volgograd September 8-9. <http://www.slideshare.net/edunews/financial-literacy-in-poland-2014> (accessed 10.2016)

Prensky, M., 2001. Digital Natives, Digital Immigrants MCB University Press, Vol. 9 No. 5, October. <http://www.marcprensky.com/writing/Prensky%20%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf> (accessed 11.06.2016).

Ramos, J., 2014. Crowdfunding and Role Managers in Ensuring the Stability of Crowdfunding Platforms. European Commission JRS Scientific and Policy Reports. <http://ftp.jrc.es/EURdoc/JRC85752.pdf> (accessed 11.06.2016).

Statista.(2016). Number of internet users worldwide from 2005 to 2016. Retrieved from <https://www.statista.com/statistics/273018/number-of-internet-users-worldwide/>.(accessed 11.10.2016).

Terry, H. P., Schwartz, D., Sun, T., 2015. The Future of Finance, Part 3. The Socialization of Finance, Goldman Sachs Global Investment Research. www.planet-fintech.com/file/1670619.(accessed 11.04.2016)

Waszkiewicz, A., 2016. Crowdfunding - an alternative form of financing enterprises in Poland? Conference materials University of Social Science in Poland. Warsaw.

World Bank Group, 2013a. Crowdfunding's Potential for the Developing World, Report. <http://www.infodev.org/crowdfunding>. (accessed 11.06.2016).

World Bank, 2013. Making Sense of Financial Capability Surveys around the World. A Review of Existing Financial Capability and Literacy Measurement Instruments. Washington. <http://responsiblefinance.worldbank.org/~media/GIAWB/FL/Documents/Misc/Financial-Capability-Review.pdf> (accessed 11. 06.2016).



FACULTY OF ECONOMIC SCIENCES
UNIVERSITY OF WARSAW
44/50 DŁUGA ST.
00-241 WARSAW
WWW.WNE.UW.EDU.PL