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Designing the image and the perception of the city and its' brand: the importance and impact of qualitative urbanistic elements

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DESIGNING THE IMAGE AND THE PERCEPTION OF THE CITY AND ITS' BRAND: THE IMPORTANCE AND IMPACT OF QUALITATIVE URBANISTIC ELEMENTS

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Abstract

Quantitative and qualitative elements define urbanism. They have an important role in the process of designing the image and the perception of the city and its brand. Modern cities evolve rapidly and compete intensely to project an attractive visual image and then link it to cultural and economic activities. Qualitative urbanism elements define the quality of living in a city and directly affect human perception of space. They produce feelings and generate attitudes. They strongly influence on the image and the perception of a city and its brand. Feelings of comfort come from a total perception of our environment and are the result of a synthesis of objective and subjective feelings. The purpose of this paper was to evaluate some important indicators of qualitative urban elements and evaluate them according to city residents' and city visitors' responses in Slovenia: context, accessibility, variety, readability, flexibility, visual suitability and diversity. Results represent their recognition of indicators that have the biggest (and the weakest) impact on designing the city and building perception of its brand: values, living conditions and environmental balance.

Key Words

City; perception; urbanism; city brand; qualitative urbanistic elements (QUE).

INTRODUCTION

Designing an image of a city is a process of composing several compatible and incompatible elements, each of them importantly influencing the perception of a city. As David Lynch (1960) explains in his introduction in book *Image of the City*: “At every instant in a city, there is more than the eye can see, more than the ear can hear, a setting or a view that is waiting to be explored. Nothing is experienced by itself, but always in relation to its surroundings, the sequences of events leading up to it, the memory of experiences”, city is a space that creates impressions and perception. Urbanism, the art of designing and organizing city space with its spatial solutions, has, besides architecture and nature itself, strong impact on city perception. Its solutions combine several elements that built the so-called *genius loci*.

Cities began to compete and therefore they began to create city brands. By using city branding, they want to build a better image and create a desired perception of the city by different stakeholders, especially residents and visitors. A city brand, similar to corporate brand, involves the arrangement and design of buildings, public spaces, transport systems, services, and amenities (Pompe, 2015). The role of urbanism is significant in the process of giving the city its unique form, shape, and character (Urban design, no date). This is where the spatial design is adding value to the city identity. They create perception and generates an attitude towards the city and its brand.

Quantitative and qualitative elements define urbanism. Qualitative elements/determinants define the quality of living in a city and directly affect human perception of space. They produce feelings and generate attitudes. That is why qualitative urbanism elements strongly influence on the image and the perception of a city and its brand. Several indicators define the qualitative urbanism elements but they do not have an equal impact on them.

THEORY

Urbanism and perception of a city

S. Reiter and A. De Herde (2005) explain: »In an increasingly urbanized society, the urban environment quality becomes one of the main targets of a sustainable development«, and proceed: »Cities’ sustainable development mainly depends on the capacity of the town planners to offer outdoor urban spaces with high environmental qualities. These enrich life experience downtown. « Š. Hribar et al. define, that »The urban cultural landscape as a living space offers goods at various levels and for various groups of people« (2018), what includes also the majority of city society: residents and visitors, who have their own expectations in terms of city goods (Hribar et al., 2015).

According to Franklin Obeng-Odoom, there is a long lasting debate (2017)

whether it is space that generates social relations (Lefebvre) or social relations that are conditioned by space (Harvey). On basis of these two definitions, Stavros Stavrides, author of the book *The city as commons*, suggests the following: “Common space is both a concrete product of collectively developed institutions of sharing and one of the crucial means through which these institutions take shape and shape those who shape them” (2016). Common space is where residents and other city visitors live, meet, work, communicate, relax, move around, educate, heal, produce, sell and consume cultural, emotional, and sensorial goods. A city is a complex and multifaceted entity, and so people seek to reduce this complexity to an image that allows them to understand and relate to the city (Castillo-Villar, 2016).

Sensory urbanism and perception of a city

People's sensorial experiences and understandings of their local environments are a result of sensory urbanism. It has a strong influential role of the senses in developing and affecting experience of the urban environment (Adams, et al., 2008). Sensory urbanism deals with qualitative urbanistic elements – factors, which creates human comfort in relation to public spaces and places and take a large part in the definition of a life quality offered to all citizens and city visitors. Urban public spaces need to be both, comfortable and attractive. They are the places where collective values are established. The feeling of comfort is the expression of an individual's wellbeing in a certain surrounding. The human perception system utilizes filters to analyze a space. It perceives only a few elements and just some of them are memorized. Individuals feel an immediate attraction or repulsion when discovering a place. Therefore, it is important to know which of them are more relevant. Feelings of comfort come from a total perception of our environment and are a result of objective and subjective feelings (Reiter & De Herde, 2003).

City brand as an emotional representative of the city

Brand has no physical existence. It is a creation of the human mind as a set of feelings, experiences and perceived values. Perceived values (benefits) may range from functional to psychological associations (Maurya, 2012). The associations, universal to the brand, are the name and the logo. In connection with city brand, Castillo-Villar (2016) point out: “The direct and indirect experiences that people have with their urban environment produce a set of representations and perceptions of the city. Therefore, there is a physical city and also a symbolic city built in the mind of every person”. The symbolic city is the city brand that is associated with the city name and logo. City brand image is the current stakeholders view about a city. It signifies what the city presently stands for. In addition, it is the overall impression in residents', visitors' and other stakeholders' minds, formed from all sources (Vanolo, 2008).

Urban icons

Elements of a physical city that are remarkable are urban icons, often defined as landmarks. They effectively contribute to the development of an authentic city brand as they link to local identity and express local uniqueness. Urban icons are elements of the urban space: buildings, monuments, natural elements, mobilization elements, parks and recreational areas. They are one of the main tools of city branding to promote a unique and distinctive image of the city (Castillo-Villar, 2016). Ethington and Schwartz (2006: cited in Castillo-Villar, 2016) explain that urban icons serve as visual symbols (single and repetitive) capable of transforming the complexity of the urban experience into knowledge and meaning through representational practice. Urban icons are important elements in the city branding strategies, especially in the transformation of the image of the city (Muratovski, 2012; Bouchon, 2014; Evans, 2015).

Urbanism's impact on perception of the city and its brand

In the twentieth Century, quantitative demands in urbanism got so far, that it was mostly agreed, that it is impossible to have too much open space (Spitthöver 1982, Ermer 1985, Selle 1999). The post-industrial society severely criticized this kind of quantitative thinking and implied new opinions of urban space and the importance of nature in cities (Schöbel, 2006). Open space has no absolute function and significance, but always merely relative qualities – relative to the coherence of the urban surroundings (Jacobs, 1961). “Speculative urban development», as written by Križnik, »often ignores the social importance of localities« (2018) what comprises also the perception that residents build in time.

Public spaces are crucial when discussed life quality offered to all citizens. They create sensory effects that affects human perception of urban environment where individual and collective values are built (Reiter & De Herde, 2003). A very revealing description of sensory urban engagement was published by Pallasmaa (2005: 40); he says: »I confront the city with my body ... I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me«. Feelings of comfort come from a total perception of our environment and are the result of a synthesis of objective and subjective feelings.

Modern cities evolve rapidly and compete intensely to project an attractive visual image and then link it to cultural and economic activities. Rehan (2014) says: “To create a sustainable urban image it is necessary to link the physical character of the city with the environmental, social, economic, and cultural aspects of the city.”, and continues: “Urban branding integrates social, cultural, economic, and environmental themes into the city“.

The theory, explaining that recall of a particular brand, enhanced by clear and meaningful associations related to the particular brand name (because each association represents a possible retrieval cue) is in certain situations countered by other theory that associations may cue competing brands and so produce interference (Maurya, 2012). This facts concern also city brands and associations with them are strongly influenced by cities' physical

evidences provided by urbanistic and architectural solutions. The more they are unique and the more they are contributing to the soul of the city (genius loci) better and stronger are the associations to the city brand.

Urban (city) branding

As concept, urban branding is more or less new. It is the process by which unique physical features of the city are defined, giving the urban space its essence. It is more than just the promotion of a positive image of the city, but it is the endeavor to change it into an urban experience (Rehan, 2014). As Helmy quoted in her doctoral theses (2008), branding of places and cities consist of two main elements: (1) placemaking or city building, a process that makes the place specifically advantageous or attractive and (2) place or city marketing, an effort to promote the place/city specific advantage". In addition Helmy (2008: 21) explain it even in more details: "Urban branding is more than a strategic and rationalized form of place promotion and marketing; It is about constructing and shaping an "urban imaginary", which is understood to be a historically based ensemble of representations drawn from architecture and street plans of the city ...". The urban (city) branding aims mainly to: (1) communicate city image to the rest of the world as a whole (media-generated image), (2) achieve competitive advantages regionally and internationally, and (3) strengthen the image and reputation of the city and its city identity (Helmy, 2008). City branding communicates main things that should people know about certain place (Unsworth, 2008).

Qualitative aspect of urbanism

Perception and affinity of local residents are critical factors when developing a strong and competitive city brand (Braun et al., 2013; Hudak, 2015, Castillo-Villar, 2016); thus, it is necessary to understand their relationship with urban solutions in designing urban space and place. Hence, the ultimate objective of this research is to inspire urban planner and designers for shaping and designing urban space in the way that is consistent with residents and visitors' rational and emotional values that they expect from the city.

The qualitative aspect of urbanism deals with the question of how a person perceives, perceives, and understands the complexity of space (Gosling & Mailand, 1984, cited in Nikšič, 2003). Gestalt (Gestalt, form, figure, image) are the first quality studies of urbanism where different authors treat qualitative categories as individual laws: proximity, similarity, form, contours, similar movements and experiences (Katz, 1951). Matej Nikšič (2003) describes the Bentley approach that defines the quality of space with determinants: permeability, diversity, readability, flexibility, visual appropriateness, wealth and personalization. According to Kaliopa Dimitrovska Andrews (2011), the qualitative urban elements are context, accessibility, diversity, readability, flexibility and visual suitability. The definition of Dimitrovska Andrews is the basis of the survey.

Qualitative urban elements (QUE)

Context in urban planning means the influence of historical development, the existing image of the city and its impact on space perception, planning status and the social and economic role of the site on the development of the image of the city. Context guides the design strategy and creates associations related to the town and the city brand what has fateful impact on the perception of the city and its brand. **Accessibility**, which in urbanism means access to urban physical structures (to facilities and services in them, to open spaces and activities in them), and products of the city. **Variety** creates different perceptions of the ambient on which spatial solutions affect strongly. The created atmosphere is the basis for residents' and visitors' well-being and feelings and creates the experience of the location. **Readability** of the urban space means the degree of recognition of the city and orientation in it. It depends on the physical forms and design of the city; those, based on the principles of diversity, accessibility and context, stand out. **Flexibility** illustrates the extent to which open urban structures meet the needs of residents, visitors and other stakeholders of the city. **Visual suitability** allows users to be aware of what is available for them within the city space, and the visible branding of the city makes them to perceive the city. The visual suitability in urbanism implies the need for colorfulness and diversity, the goals of which are recognition, the creation of the desired perception, quality associations, and numerous and high-quality points of contact (touch-points). Urbanism affects the creation of a visible interest, which increases the positive and desired perception of the city and its brand. **Diversity** helps to create unique points of contact for the city, their instant recall, and hip-hop, and the ability to remember. The result of urban diversity is the uniqueness and distinctiveness of the city, which significantly co-creates the city brand.

METHODS

The purpose of this paper is to research and evaluate important indicators of qualitative urban elements that have the impact on process of designing a city and building its perception. We evaluate their importance according to residents' and city visitors' responses. The results represent their recognition of indicators that have the strongest and the weakest impact on perception of the city and its brand: values, living conditions and environmental balance. We used a limited number of indicators, as the research is a test research to indicate deeper and more focused researches in the future.

Methodology - Conceptual Model

The research focus on the study of qualitative urban elements and their important indicators, relevant for the residents and visitors of a city. We research the following QUE: context, accessibility, diversity, readability, flexibility, visibility and diversity. The research is qualitative. We measure the variables by using an ordinal scale. The survey carried out electronically in the territory of Slovenia, with a focus on major Slovenian cities and their

surroundings. We obtain one-hundred and ninety-seven complete surveys (out of 271). Women in the structure of potential interviewees were dominant (62%), men were a good third (38%). Of those who answered the questionnaire, 40% were men and 60% were women. According to age, most responses (half) derived from the most active part of the population in the age group of 41 to 60 years. Forty percent of the responses were from the age group of 26 to 40 years. Out of the rest, approximately 10%, was given from the group of 18 to 25 years and 61 years or more. The smaller part of the respondents (17%) came from the countryside, with the majority being from the outskirts of towns (44%) or from the cities themselves (39%).

Within qualitative urbanistic elements, we designed indicators (claims) on basis of the residents and visitors expectations regarding life in the city. Their expectations, desires, experiences, observations and opinions are one of the essential foundations of profiling the personality of the city and thus the city brand. Respondents were: (a) residents of the largest Slovenian cities and (b) people living in the city's surroundings and in the countryside (visitors). Both clusters are equally important from the perspective of the perception of the city, since the comprehensive perception consists of different views of the questioned observers. In order to determine relevant resident and visitors' indicators, we selected a set of claims for each qualitative urban element (criterion). The questionnaires based on a five-point scale of responses and expressed their agreement or disagreement with the claims. Value 5 defined the answer "I totally agree", value 4 "I agree", value 3 "partially inferior", value 2 "I do not agree", and value 1 "I completely disagree".

RESULTS OF THE RESEARCH

Context

We were mainly interested in what the respondents think of the past-presence-future coexistence, the coexistence with nature, the conformity of urban components in relation to the inhabitants, and the impact of urbanism on the character of the parts of the city.

Of all the claims within the context element, the claim "*the heritage of the past gives the city an impactful character*" proved to be the most important, as 60% of all respondents fully agree with it and 35% agree with it. The total agreement is thus 95%. None of the demographic data (gender, age, residence) affected the responses. Recommendation for urban planners and city brand managers: If a city does not have any heritage, it is an opportunity to create it for the next generations.

The claim: "*architecturally harmonious buildings express respect for the city aesthetic outfit*" also stand out as an important indicator, as 72% of respondents agree with it (totally agree and agree), which proves how strong urbanism influences the perception of the city by the inhabitants and visitors, and how important it is for their personal expectations. We explain the claim "*architecturally harmonious buildings*" as the matching of architectural styles, complementarity with nature, and the alignment of altitude and volume

gauges. Recommendation for urban planners and city brand managers: Aesthetic and harmonious urbanistic + architecture solutions are must for a city that wants to be perceived as a respectful.

The respondents unite in more than a half (60% answered) that abandoned urban areas are not time shift, as they do not contribute in building the desire image of the city. A fifth of the respondents see in abandoned urban areas a mark of a certain time and does think they represent a negative element of the city. One fifth were undefined. A more detailed analysis showed the differences between the respondents. Older generations are more tolerant and more respectful of the past even if it looks neglected and disordered. Respondents over 61 years of age agree in 50% of cases that they are time-reminders, while respondents aged between 18 and 25 only in 40% claim the same. Urban residents (38%) are less tolerant of abandoned areas than those who live in rural areas (45%). Recommendation for urban planners and city brand managers: Abandoned urban areas can be a cultural and historical attraction.

It is interesting to note that the responses to the claim are "*outstanding architectural solutions that make the city attractive*" and "*modern spatial solutions and old architecture do not go together*" are more or less in line. Eleven percent of respondents disagree or do not at all agree that irregularity creates an attractive place, and 18% argue that modern urban planning and architectural heritage do not belong together. It is noticeable that there are significant differences between the lowest and the highest age group, what confirms the fact that the increase in age decreases tolerance for change and thus increases the agreement with the statement "*modern spatial solutions and old architecture do not belong together*". The female part of the population agrees with this claim stronger than the male part. Recommendation for urban planners and city brand managers: It is an opportunity to create two centers: historical town center and modern town center.

Interesting is the attitude to the claim "*a city that blends with nature is life friendly*" (to blend with nature means that it does not degrade the natural resources) for 51% of respondents agree with it, but 32% cannot really define themselves. Only 17% disagree with the claim. There is again a divergence of opinion among young people and the elderly, as the difference between the age group 61 years and over and the age groups 18-25 years is almost 30%, what means that young people are much less concerned about the nature and preservation of its resources. Recommendation for urban planners and city brand managers: With solution that incorporate more nature in urban space, younger inhabitants can recognize it as a living benefit.

Accessibility

The goal of exploring accessibility was to find out what are the respondents opinions about moving around the city by car or on foot, how they approach purchases, about parking spaces in the city, and whether certain interventions in public areas would increase the security of spending time on them.

The respondents clearly confirm that modern trends are important in the field of the functionality of the city and of concern for health. They agree that it is not only sensible to implement them, but also need an upgrade. As much as 81% of them agree or very much agree with the statement "*a modern city should make possible mobility without a car*", and even 82% confirm claim "*if I access city-services on foot, I do something for my health*". Recommendation for urban planners and city brand managers: Pedestrian/bicycle/kick scooter zone are the future of healthy urban life, thus this kind of zones are the future of suburban centers.

The claim that the "*modern city should allow for mobility without a car*" (81% of the concurrence) can be reasonably linked to the fact that "*public transport is the key to accessing important city points*" (only 6% of disagreements with this claim). A modest agreement (only 14% of the concurrence) with the claim "*everywhere in the city must exist possibilities for parking*", confirms that these claims are important. Recommendation for urban planners and city brand managers: Tram is a good solution for public transport.

Eighty-four per cent of respondents agree with claim "*if I access city-services on foot, I do something for my health*", and only 5% oppose it. Sixty per cent of respondents also agree with the statement "*I want to make the most urgent purchases on foot*". A more detailed analysis also shows that the need for movement is more prominent among those living in the city or in the suburbs than those who have a home in the countryside. Recommendation for urban planners and city brand managers: City center is a pedestrian area; shopping and entertaining possibilities belong to city center. Therefore, urban planners should examine the best possibilities of goods delivery to stores and restaurants.

About the safety in parks ("*it is safer if the parks have safety fence*"), the respondents have a different opinion, as less than half of them agree, that the parks should remain unsettled, a quarter of them waver in deciding whether this is important or not, and a good quarter considers them to increase park safety, if they were fenced. By fencing the park, access to this public area are limited. Most respondents believe that this would not contribute to the safety of time spent in them. Again there is the biggest difference in opinion among the youngest age group (18-25 years) and the oldest (61 years and over). The difference amounts to a total 30%, with a lesser need to ensure the safety of parks among youngsters. However, more women (about 10 per cent of the difference) agree which fencing the park for safety reasons (60% of the concurrence). Recommendation for urban planners and city brand managers: Fencing parks is not a solution for assuring safety in them. Parks should remain an open public space.

Variety

Variety contributes to the creation of a typical perception of the atmosphere, which results in the excitement of certain well-being and feelings, in short, in the experience of the location (Pompe, 2015). Variety as one of the desirable results of modern urbanism has a great influence on the mood and mental state of the inhabitants and visitors.

As many as 87% of respondents agree or completely agree with the claim: "*unique spatial solutions (parks, bridges, underpasses ...) are exciting*". Nearly eighty per cent confirm the claim "*the spatial design of city districts is a source of different perceptions and inspirations*". Recommendation for urban planners and city brand managers: A combination of rational (quantitative) and emotional (qualitative) aspects have to be considered when planning urban space.

The fact that the city actually affects the mood and mental state of the inhabitants and visitors confirms the high percentage of concurrence with the claim "*a city without noticeable features is a city without soul*" (72% of concurrence and complete agreement) and 57% of cases of affirmation for the claim "*a modern city is socially diverse*". Observational characteristics relate to the visual perception of architectural and urbanistic solutions of the city regarded from different social levels of respondents. Recommendation for urban planners and city brand managers: Genius loci can be an overall feature of the whole city but for cities are growing rapidly and inhabitants are becoming more and more different according to their lifestyles it is recommendable to give certain parts of the city their own local genius loci.

That variety is important confirm response to claims: "*an outstanding (unusual) building gives a mark to the part of the city in which it is located*" (79% of the concurrence or complete agreement) and "*the urban incursion roads should have their own specific appearance*" (63% of concurrence and complete agreement). Besides, they also prove that urbanism designs the city identity and thus the perception of the city brand. Its unique architectural solution defines an unusual building and stands out amongst others what often attracts attention. Each urban incursion road has the potential to create a unique appearance and thus become an important recognisability element. Recommendation for urban planners and city brand managers: If a city does not yet have an outstanding spatial solution, it is recommendable to plan it in order making a city unique.

Readability

Krejčí and Hradilová (2014) explain that "Spatial orientation in itself reflects the ability of people to read complex urban space and identify with the place". The basis of orientation and readability is mental mapping. In psychology, the term names the information maintained in the mind of an organism by means of which it may plan activities, select routes over previously traveled territories and more (Wikipedia, 2018). The creation of a mental map relies on memory and is a rough picture or sketch of urban space. David Lynch claimed (1960) that "Most often our perception of the city is not sustained, but rather partial, fragmentary, mixed with other concerns. Nearly every sense is in operation, and the image is the composite of them all." Readability in our research covers possibility of orientation, memorization and security in the city.

Of all the claims relating to the readability of the city, the most important for respondents is "*I memorize areas of the city in connection to typical buildings, markets, parks, monuments, bridges ...*" This directly confirms the strong influence of typical spatial solutions on the orientation in the city. The

level of agreement is extremely high (91%). The impact of the demographic characteristics of the population is negligible in this assertion; there is only a little difference in percentage among the female and male population. Women prefer good orientation more than men do. Recommendation for urban planners and city brand managers: It is always smart to consider orientation when planning some spatial reconstructions or building new ones.

Sixty-one per cent of respondents agreed or completely agreed with the statement "*I feel safe in the city, if I know exactly where at any time*". The residential location of respondents also does not affect substantially their answers to this claim. The consensus was stronger in the female population, which confirms the fact that safety is one of the most important values for them. Recommendation for urban planners and city brand managers: It is always smart to consider orientation when planning some spatial interventions for people feel safer when they have good orientation in a city.

Respondents agreed in 56% with the claim "*originally designed roundabouts are memorable city points*", in 46% of cases with the assertion "*without ecclesiastical bell-tower and memorable buildings, orientation would be difficult*", and in 39% of cases with the claim "*the colours of the facades are a great help in orientation*". The least unity is recorded in agreeing with the claim "*when I explain the path to a stranger, I prefer to route him to the crossroads*", which is confirmed by a different view of the crossroads as an orientation reference point. Recommendation for urban planners and city brand managers: Higher buildings, colorful solutions, roundabouts with unique decorations and originally designed crossings are something that inhabitants and visitors appreciate very much.

Flexibility - adaptability

Flexibility is the ability of a system to adapt or respond to changes in the environment. The flexible theory of urban planning suggests that planning should be dynamic and harmonious. The concept of flexibility in urban planning means the compatibility and adaptability of planning thought and planning system to the randomness market. It includes dynamics, coordination and diversity of the city (Xu & Zhang, 2013). Flexibility is the degree to which the shape and dimensions of the spaces around the buildings and the exterior of the buildings satisfy the needs of the inhabitants and other users of the space defined by their modes and frequency of operation (Dimitrovska Andrews, 2011). According to respondents' statements, there is a great influence of urbanism on the character of the city, its perception and comprehension, and thus on the city reputation and image of the city brand. Flexibility reflects the extent to which the city is able to adapt to the physical and spiritual needs of its inhabitants and visitors.

Claims that relate to the security and humanity offered by the city regulation were the most outstanding on flexibility. These claims are "*pedestrians provide safe access to shops, restaurants, cafes, museums ...*" (92% of concurrence); "*the city without slopes for the disabled is inhumane and obsolete*" (88% of concurrence) and "*enlightened parks allow me safe relaxation even in the evenings*" (79% of concurrence). Recommendation for

urban planners and city brand managers: Safety is a basic value for contemporary city life. Safety means many car-free spaces, no dark spaces and solutions for people with special need.

Arguments related to the future of cycling in cities and the freedom that this kind of movement permits also encountered a very positive response. At least two-thirds of respondents agreed with: "*the cycling city is the city of the future*" (69%), and "*large squares and broad roads impart a sense of freedom*" (66%). The respondents also claim that underground garages should replace parking lots in urban areas. From this we can conclude that the city with fewer cars would look more beautiful, more spacious and safer, which is confirmed by 71% of the assertions with the statement "*the parking lots have to be replaced with underground garages*". Recommendation for urban planners and city brand managers: Cycling is the future in all its forms and cars have to disappear from open urban spaces.

On average, those who live in the city or in the outskirts are more likely to agree with all the flexibility claims, but the rural inhabitants do not lag behind them. This is evident from the comparison of the answers to the claim "*the city without slopes for the disabled is inhumane and outdated*", with which the city's residents agree about 90% and the rural population in just over 80%. There are no obvious differences in responses between male and female populations. There are also no special differences in answers between different ages. Recommendation for urban planners and city brand managers: Every human needs ease and comfort for any activity in urban areas.

Visual suitability

Urban design in short is an art of designing places for people and is one of the important elements in urban planning. It concerns about the total visual effect of building masses, connections with people and places, creation of spaces for movements, urban amenities and public realm, and the process for improving the overall townscape (Urban Design Guidelines, 2015). Depending on what is important for the visual image of the city, what makes it aesthetic, nice and eye friendly, the questionnaires highlight the three areas where urbanism has a strong impact: maintenance of buildings, outdoor advertising and uninhabited spaces.

The respondents strongly agreed (91%) that "*outdoor advertising should not cover the city panoramas*". According to the outdoor advertising, we found the most significant differences in age of respondents. Generation over 61 years fully agree that outdoor advertising should not cover the city panoramas while "only" 60 per cent young, old from 18 to 25 years, agree with this claim. Women are slightly more inclined to avoid pollution by outdoor advertising. The location of residence does not affect the diversity of acceptance with this claim. Recommendation for urban planners and city brand managers: If advertising spaces are necessary then the advertising space solutions should be either, very unique and creative, or not dominating the city spatial solutions.

The respondents strongly agreed (92% of concurrence or complete agreement) that "*poorly maintained buildings pollute the image of the city*".

Younger generations do not see serious problems in the claim "*poorly maintained buildings pollute the image of the city*", as almost a quarter of them do not pay much attention to this issue. With an increasing age, the agreement with the claim grows and reaches 100% in the case of a generation older than 61 years. Recommendation for urban planners and city brand managers: Every urban space, built or open, need to obtain meaning. Even poorly maintained buildings can have meaning and purpose ("Metelkova" in Ljubljana).

The respondents agree or completely agree with the claim "*not built-up spaces create a bright and airy place*" in 80% cases. The highest differences in opinions are again among the age groups (for respondents aged over 61 years, more than 90%, and about 75% of respondents aged 18 to 25 years). Recommendation for urban planners and city brand managers: Every free urban space brings more "air to breath".

The importance of visual suitability is also demonstrated by the claim "*colour-balanced buildings create an aesthetic place*" (68% agree), while the statement "*the purpose of the building should be recognized by its facade*" has not proved to be important at all, and only 23% of respondents agreed with it while 40% opposed it. Half of respondents (42%) agree with the claim "*glazed front door gives the impression of openness*", but a fifth does not agree with it. Glazed entrances mean more to those who live in towns than to those who live in rural areas. This claim is the least important for the generations aged 41 to 60 years. Recommendation for urban planners and city brand managers: Using colors and versatile building materials makes a city aesthetics, enables ease of recognizing city particularities and creates feeling of openness.

Interestingly, only 4% of respondents agree with the statement "*the concrete jungle is again in trend*" while 88% disagrees with it, which reflects the need for a city to be harmonic with nature, airy and transparent, diversified and visibly suitable. Recommendation for urban planners and city brand managers: People hate concrete as a dominant material in urban area. Using other materials or making whatever combinations concrete with other materials are more inhabitants friendly.

Diversity

Already half a century ago, Jane Jacobs stressed diversity as an essential factor for liveability, economic growth, and attractiveness in cities (1961). Diversity of urban space means city places that are inclusive and offer a diverse range of experiences. Each locality can have its own unique character and qualities, can offer a rich range of experiences, facilities and services, meets different people's needs, including a diversity of housing types (Urbandesign, 2017). The concepts of diversity and variety are seemingly similar, but there is a significant difference between them. Variety means that one thing differs from another (leafy and coniferous forests), while diversity means a series of different things that can be find in distinctive dimensions of differentiation (leafy forests with various types of deciduous trees).

The convincing respondents' agreement with the claim "*urban environment is a source of thousands of inspirations*" indirectly reflects the importance of the city diversity. This is why the percentages of agreeing with claims are so high. Recommendation for urban planners and city brand managers: Smart urban planners and designers solutions are an ideal means for creating an inspiring city.

The respondents rejected the claim "*flowers on the windows belong to the countryside*" (72% disagree with it), thus emphasizing one of the opportunities that the inhabitants of the city can co-create and co-design urban environment. It was expected stronger opposition from the female population, which in disagreement surpassed the male part by about 20%, and the stronger disagreement among those living in rural areas (about 85%). Recommendation for urban planners and city brand managers: Combining urban solutions with nature makes the city alive and life friendly.

Extremely strong agreement (in both cases, 96%) was given to the claim "*street furniture (benches, bins, lamps ... co-create the image of the city)*", and "*diverse city centre invites people to visit streets, squares, embankments and parks*". Almost equally strong (91%) are agrees with the statement "*discovering new urban details is always inspiring*". Recommendation for urban planners and city brand managers: People feel inspired and relaxed in attractively designed and with comfortable street furniture equipped city squares, streets, embankments, parks and other open spaces if they are.

A very positive attitude is also reflected to the claims that "*markets and parks come alive with the help of interesting events*" (85%), "*horticulturally arranged crossings and roundabouts are aesthetic*" (82%) and "*many different social places in the city allow for a good socializing*" (72%). Certain differences in agreement occur between men and women. In the claim that "*markets and parks come alive with the help of interesting events*", women are more convinced (90%) than men (80%). Similarly applies to all other claims. Men are slightly more reserved, although their percentage of concurrence is still very high. Recommendation for urban planners and city brand managers: Every urban place can be attractive for different types of socializing what brings new meaning to traditional parts of a city (example: "Prostoroz – Ljubljana).

DISCUSSION

According to Lynch (1960), 'Structuring and identifying the environment is a vital ability among all mobile living beings. Many kinds of cues are used: the visual sensations of colour, shape, motion or polarization of light, as well as other senses such as smell, sound, touch, kinaesthesia, sense of gravity, and perhaps of electric or magnetic fields'. Perception (Rihtar & Zupančič-Strojan, 1996) is the foundation of the human psychophysical process of learning about the real environment. A place is recognisable is largely a matter of visual images: colours, architectural typology, natural elements

(Sepe, 2013). Urbanism plans, creates and maintains urban spatial environment.

The results of the research shows the most important QUE indicators and set out those that have the strongest influence on the perception of city. They researched claims significantly influence orientation in the city, the attractiveness of life, the performance of services, the possibility of spending spare time, the relaxed everyday living and the mobility in the city. They need to be in the spirit of the time and have to take into account trends. A meaningful mark in the perception of the city creates unique, fashionable and solutions in harmony with the preserved cultural heritage. Urbanism solutions creates recognizable landmarks of the city regarding it as a whole and/or as its parts, realizes its internal and external goals and co-shapes the city as a brand. Urbanism with its solutions has many possibilities to raise the perceptual level of the city, its brand and increase its reputation among the inhabitants and visitors.

Synthesis of the obtained results of the survey implies concrete directions for the urbanists. The most important findings are:

- Within the qualitative urbanistic element Context, the town's heritage is one of the key elements for the inhabitants and visitors. Most (80%) of the respondents see in the degraded city areas opportunity to arrange or rearrange them. Heritage and modern spirit are supposed to intertwine in cities, which gives freedom to urbanistic and architectural creativity.
- Within the element Accessibility, there are two exposed claims, one requires mobility without a car and the other, enable as many pedestrian movements as possible. They both conform to the modern and distinctive developmental trends of cities and reflect the advanced mentality of the inhabitants and visitors of the city. Linking pedestrian access to city services and shopping with health, also perfectly matches the trend that every individual wants to take care of their health, and that active movement (in our case walking on foot) allows this. Respondents expect a higher degree of safety in enclosed parks.
- Diversity is important for respondents and the fact that modern spatial solutions can also be warm and diversified (life-friendly) for different social types of residents and visitors, confirms the correct orientation of those urban planners who want to provide modern and advanced solutions in addition to functional solutions, which generate warmth, positive atmosphere and good mood. Most claims about the diversity of the city confirm the importance of: (a) urbanistic and architectural heritage, (b) attractive and outstanding modern buildings, and (c) typically arranged urban slopes. They significantly co-creates the character of the city.
- The city's Readability has proven to be one of the most important QUE, regardless of whether it is typical of buildings, bells, roundabouts, bridges, markets, parks ... The feeling, that the residents and visitors of the city always know where they are momentarily located, gives them a feeling security.

- Respondents are most closely linking Flexibility to security and eco-friendly mobility. Among other things, flexibility implies the future of city cycling and freedom, driven by easy and quick movement around the city by bicycle. It is also important that the parking lots move from urban areas into underground garages, which besides enabling more safety of cities provides friendly environment, cleaner air and releases more city space.
- Visible suitability is one of the most subjective urbanistic criteria. Nevertheless, it is necessary to highlight some of its elements that reflect the opinion of respondents on how these elements affect the city attractiveness, character and functionality. Outstanding issues are: maintenance of buildings, outdoor advertising and un-built spaces. In the latter, they see an opportunity for the city's maximum airiness. For the younger generation, the criterion of visible suitability is not as important as for the elderly, but it is important for everyone that the urban solutions are in harmony with nature what creates an airy, transparent and diverse city.
- The respondents' answers to the element Diversity explain how important it is for spatial planners to realize that every urbanistic move is not only a functional solution to certain spatial problems, but a step closer to the aesthetic and socially friendly city, which with its diversity, eliminates boredom, invites enjoying life in its places and inspires in thousands of ways.

MORE FINDINGS

An in-depth analysis of responses has further enabled the detection of both rational and emotional perceptions and among them those that have the strongest impact on the inhabitants and visitors' city perception. From the responses, it is possible to understand the perceptions that clearly reflect the attitude of the inhabitants and visitors to those elements of the city, which the urbanists are supposed to pay special attention. Unique, fashionable and in harmony solutions with the preserved cultural heritage have considerable weight on the perception of the city and have a key influence on the personality of the city's brand. They create a larger quantity of associations. Using the city brand in combination with urban solutions, the city is more consistently recognizable. Urbanism creates a city environment and gives it meaning, both for the city as a whole and for its individual parts. The more this environment is important and recognizable for its inhabitants and visitors, the more it is associative. From the point of view of the results of the research and in the context of the comparative treatment of the city brand and urbanism, this means that urbanism, with its solutions, encourages the memory and quick recall of the city brand, and creates the conditions for its perception and, consequently, its image. Table 1 shows the most outstanding rational and emotional perceptions.

Table 1: Significant rational and emotional perceptions derived from research

Rational perceptions	Emotional perceptions
Mobility ("A modern city should enable mobility without a car.")	Health ("If I access the services in the city on foot, I do something for my health.")
Memory ("I remember areas of the city because of its typical buildings, squares, parks, monuments, bridges ...")	Inspiration ("Urban environment is a source of thousands of inspirations.")
Equality ("A place without slumber for the disabled is inhumane and obsolete.")	Safety ("Walking zones provide safe access to shops, restaurants, bars, museums ...")
Image ("Outdoor advertising should not cover city panorama.")	Motivation ("Discovering new urban details always inspires.")
Furnishings («Street furniture (benches, bins, lamps ...) co-create the city's image.»)	Freedom ("The urban center invites a man to the streets, markets, embankments and parks.")
Socializing ("Many local bars and restaurants in the city provide pleasant socializing.")	Beauty, aesthetics ("Unique spatial solutions - parks, bridges, underpasses, etc. – exciting.")

Source: Own survey.

CONCLUSION

Urbanism influences the creation of various aspects of interest. Its final solutions and creations influence the perception of the city (Pompe and Temeljotov Salaj, 2014). An analysis of the results of the survey explains which qualitative elements of urban planning have a significant impact on the perception of the city and thus on the perception of the city brand. The importance of individual indicators within individual qualitative urbanistic elements vary. Inside them, the opinions of the respondents unequivocally showed what gives the greatest contribution to the quality of the city from the urbanism point of view. The key exposed properties derive from important aspects of influencing the urban environment on the quality of life in the city: car-free mobility, non-poisoned air, characteristic spatial and architectural solutions (landmarks), carefree orientation, advertising harmonious with spatial solutions and socialization opportunities. The observable weight of the research also gives rational and emotional values, derived from the answers. They emanates from the emotional perception of the city, and since most human decisions derive from emotions, it is important for urban planners to take, in addition to functional solutions, into account the psychological impact on the inhabitants and visitors of the city.

Recommendation

The most exposed, desired and today most sought-after rational and emotional values are mobility, memory, equality, image, furnishings,

socializing health, inspiration, security, motivation, freedom, beauty and aesthetics. The exposed values provide an insight for urban planners and designers, so they can structure and shape their solutions aligned primarily with the researched users' expectations and a vision of the development of the city.

Inter-sector cooperation is a wide source for further researches in the field of urbanistic planning and designing as well as for marketing and branding a city.

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THE EFFECT OF LIQUIDITY RISK ON FINANCIAL PERFORMANCE

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Abstract

This paper aims to study the impact of liquidity risk on the performance of banks in Kosovo, for a period of six years. The analysis is based on linear regression. Liquidity risk indicators refer to the ability of the bank to absorb the liquidity shocks, L2 - the ability of the bank to cope with a high liquidity demand in the short term and L3 - the ability of the bank to face liquidity risk in the presence of non-liquid assets, while return on assets ROA and return on equity ROE are the determinants of performance. The results show that there is a positive and significant relation between liquidity risk and performance of the banks and concluded that commercial banks in Kosovo could raise the level of performance by improving their ability to cope with the liquidity shocks risk, the short-term liquidity risk and the risk from the presence of large non-liquid assets.

Key Words

Performance of the banks; liquidity risk; commercial banks.

INTRODUCTION

The banking system plays an important role in economic development and financial stability of the country. Kosovo as a developing country during 2007 - 2008 had a rapid development in the banking sector, which contributed to the high level of competition (Luboteni, 2013). The banking system in Kosovo, after the war, is characterized by the entry of foreign banks into the market, which led to higher security of deposits and greater customer confidence. These two elements contributed the Republic of Kosovo to develop financial stability.

The structure of the financial system in Kosovo continues to be dominated by the banking sector, which represents 69.0 percent of the total assets. Foreign-owned banks also continue to dominate the banking sector, from ten licensed banks operating in the country, eight of them are foreign-owned. Foreign-owned banks in 2015, managed 90.1 percent of the total assets and claimed 92.5 percent of the total capital of the banking sector. Five of foreign-owned banks, have the country of origin Austria, Germany, Slovenia, Albania and Serbia, while three others have the country of origin Turkey. In the banking sector also operate two locally owned banks.

As a result of the last financial crisis in 2008, and changes in the banking system, commercial banks are faced with increased operating costs, which may have affected the quality of bank loans and the performance of the banking sector in Kosovo (Balaj, 2015).

Since banks are businesses that face high risks like that of liquidity, credit, etc., risk management is vital to maintaining their positions in such intense competition in this industry.

Investors when investing their money do not appreciate the highest capital ratio of the bank even though it has an impact on reducing the banking risk (Šustorova, Teply, 2014).

According to the Central Bank's report, the liquidity of banks in Kosovo is stable, a higher systematic liquidity can hinder the transmission of monetary policy and the development of financial markets.

In order to control and raise the performance of banks in Kosovo liquidity risk management is very important. Therefore the objective of this paper is to examine the impact of liquidity risk on the performance of banks in Kosovo. Definition of variables is done based on contemporary literature. Within the model as dependent variables we determined the return on assets (ROA) and return on shareholder's equity (ROE), influenced by liquidity indicators, in this case we have: L1 the ability of the bank to absorb the liquidity shocks, L2 - the ability of the bank to cope with a high liquidity demand in the short term and L3 - the ability of the bank to face liquidity risk in the presence of large non-liquid assets.

LITERATURE REVIEW

Performance of banks

Commercial banks are the main pillars in the maintenance of a stable economic and financial system, especially in developing countries, where bank loans have an important role in country's development (Lubeteni, 2006). Therefore we can say that the performance of banks is principal influencer of economic and financial stability of any country. Nowadays banking institutions have become more complex, main drivers of their performance remain income and efficiency (European Central Bank, 2010). Performance of banks includes profitability, liquidity, solvency, financial efficiency and repayment capacity (King'ang'ai, 2016). The report of European Central Bank states that bank performance represents the capacity of banks to generate sustainable revenues. This source sees profitability as first line of defense from unexpected losses, since, as each bank strengthens capital can also increase the benefits from investments and retained earnings.

Determinants of banks performance were investigated by author (Ongore, Kusa, 2013) who confirmed that the capital adequacy, asset quality and efficient management significantly affect the performance of commercial banks, on the other hand stated that liquidity has no significant effect on the performance of commercial banks. Research on the performance of banks also conducted authors (Singh, Tandon, 2012) who compared the performance of public bank (SBI), which is the leading bank in the public sector in India, with the second largest bank (ICICI) which is the leading bank in the private sector. The authors confirmed that the public bank (SBI) performs better and is healthier financially than private bank (ICICI), while in the context of the management of deposits and expenditures, private bank (ICICI) has managed more efficiently than public bank (SBI). Other researches on the determinants of bank performance were conducted by the authors (Heffernan, Fu, 2010), (Saliha, Abdessatar, 2011), (Tripathi, Meghani, Mahajan, 2014) and (Ayyappan, Sivaraman, Sakthivadivel, 2014) etc.

A very important element of the bank's performance is the capital structure. Author (Vătavua, 2015) researched the impact of capital structure on the performance of companies, by analyzing 196 Romanians manufacturing companies listed on the Bucharest Stock Exchange. He analyzed the relationship between performance of companies and capital structure. As representatives of the capital structure in the model he set long-term debt, short-term debt, total debt and total capital, while return on assets and return on equity as representative of performance. In the end he proved that the performance of Romanian companies is higher when they avoid debt and act based on capital.

Studies regarding the factors that influence the performance were conducted also by Muiruri, Ngari (2014). In their research about the impact of financial innovations in performance, they proved that financial innovations have had a major impact on the financial performance of banks. Based on the literature review we found that non-interest income also have a

link with the performance of banks, however more affordable link have interest income. An opposite relation between credit risk management and performance of the bank confirmed the author (Poudel, 2012) in his research "The impact of credit risk management in the financial performance of commercial banks in Nepal", which recommended that banks should not only formulate strategies to minimize the exposure of banks to credit risk, but also to increase profitability. Whereas author (Mondal, 2012) in his study suggested that the bank could increase its profitability through appropriately managing intellectual abilities.

Liquidity risk

The global financial crisis in recent years reminded that liquidity management is very important for the functioning of financial markets and the banking sector, so many authors dealt with the analysis of credit risk and the performance of banks. Although liquidity risk in many researches is considered as exogenous factor determining the performance of the bank, the author in his research "Banks liquidity risk and performance", considered liquidity risk as endogenous factor determining bank performance. Also authors (Rudhani, Ahmeti, Rudhani, 2016) in their research "The Impact of Internal Factors on Bank Profitability in Kosovo" treated liquidity risk as internal factor determining banks performance. They confirmed a negative correlation between liquidity risk and profitability of banks and concluded that commercial banks can increase their level of profitability by increasing the level of lending and other investments, while managing well their risks and liquidity.

Liquidity risk is treated as internal factor determining performance of the bank also by authors (Chen, Shen, Kao, Yeh, 2018) who confirmed a negative correlation between liquidity risk and performance of banks in the financial system based on market. The authors showed that causes of liquidity risk include components of liquid assets, dependence on external funding, supervisory and regulatory factors and macroeconomic factors.

Capital adequacy, interest rate loans, problematic loans and interbank transactions have a positive impact on the liquidity of banks, while negative impact on liquidity have inflation, business cycles and financial crises (Vodová, 2011).

Vodova (2013) in his research "Liquidity Ratios of Polish Commercial Banks" did an assessment on Polish banks' liquidity during the crisis, and proved that during this time only a few banks have funded their lending activity from deposits of their clients. Most banks have needed other sources of funding, such as loans from banks or other debt funds, such as the issuance of securities, which has increased their vulnerability.

Liquidity metrics and also best practices on measures against liquidity risk are focused on the use of liquidity ratios. From the literature we see that a liquidity metric is a ratio between liquid assets over total assets liquid assets to deposits ratio (Shen, 2001) and liquid assets over customer deposits and short-term financing (Kosmidou, 2005). The highest value of liquidity ratio makes the most liquid banks less vulnerable to failures.

Research shows that in addition to liquidity risk, the bank's performance is also affected from other factors such as market structure factors, supervisory factors and macroeconomic conditions.

METHODOLOGY

Sample

Sample for the econometric analysis includes secondary sources, such as balance sheet and income statement for the nine banks¹ which operate in Kosovo in the period 2010-2015 with a total of 47 observations. Banks that make up the sample of the paper are as follows: NLB Bank, Banka per Biznes, Turkiye Cumhuriyeti Ziraat Bankasi Kosovo, Banka Ekonomike, Raiffeisen Bank Kosovo, Procredit Bank, TEB SH.A, Banka Tregtare Kombëtare – Kosovo, Turkiye Is Bankasi. Data were obtained from annual reports, audit reports and financial statements of banks published on their official web sites.

Study of Variables

In this research were chosen two measures of performance as dependent variables. Return on assets (ROA), net income to total assets ratio, and return on equity (ROE), net income to total equity ratio (Ongore,O.V., & Berhanu Kusa,B.G., 2013). Whereas as liquidity risk metrics are used: L1 the ability of the bank to absorb the liquidity shocks, L2 - the ability of the bank to cope with a high liquidity demand in the short term and L3 - the ability of the bank to face liquidity risk in the presence of large non-liquid assets.

Description of variables

Performance metrics

ROA – the ratio of net income to total assets measures the ability of the bank or the efficiency of bank's management to generate revenues using its available capital;

ROE – the ratio of net income to equity measure the rate of return earned on invested funds using shareholders'.

While independent variables used in the model are liquidity metrics used by authors (Bilal, 2016) and (Vodová, 2011)

Liquidity risk metrics

L1 – the ratio between liquid assets (current assets or short-term assets) and total assets give us information about liquidity shocks - total absorption capacity of a bank. A high ratio means a greater ability of the bank to absorb shocks;

¹ In the analysis is not included only the bank which operates in northern Mitrovica, due to the impossibility of obtaining data.

L2 – the ratio between liquid assets (current assets or short-term assets) and liquid liabilities (current liabilities or short-term liabilities); this ratio measures bank's ability to withstand a high demand of short-term liquidity. A high ratio means that the bank is solvent in the short term;

L3 – the ratio between loans over deposits and current liabilities measures the relation between non-liquid assets and liquid liabilities. The higher the ratio less liquid the bank is.

Table 1: Summary of variables

Description	Symbol	Calculation method
Dependent variables		
Return on assets	ROA	Net income / total assets
Return on equity (capital)	ROE	Net income / total equity
Independent variables		
The ability of the bank to absorb the liquidity shocks	L1	Liquid assets / total assets
The ability of the bank to cope with a high liquidity demand in the short term	L2	Liquid assets / liquid liabilities
Liquidity risk in the presence of large non-liquid assets	L3	Loans / deposits & short-term liabilities

Source: Own survey.

HYPOTHESIS OF THE STUDY AND ECONOMETRIC MODEL

The purpose of this study is to examine a significant relation between liquidity metrics and bank's performance metrics and the impact of liquidity risk on the performance of commercial banks in Kosovo.

In the framework of this study based on the research objective, we set up a hypothesis and three sub-hypotheses, which we will test through correlation and linear regression.

H1: Liquidity risk has a significant impact on the performance of banks in Kosovo.

Under this hypothesis, we have established three sub hypothesis as follow:

- The bank's ability to absorb the liquidity shocks has a significant link with the performance of banks in Kosovo;
- The bank's ability to withstand liquidity risk in the short-term has a significant relationship with the performance of the bank;
- The bank's ability to face risks from the presence of large non-liquid assets has a significant connection with the performance of the bank;
- In the econometric models established below, as dependent variables we defined the return on assets (ROA) and return on

shareholder's equity (ROE), influenced by liquidity indicators, in which case we have defined as independent variables: L1 the ability of the bank to absorb the liquidity shocks, L2 - the ability of the bank to cope with a high liquidity demand in the short term and L3 - the ability of the bank to face liquidity risk in the presence of large non-liquid assets.

First model: $Y1 = \beta_0 + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \mu$

Second model: $Y2 = \beta_0 + \beta_1 X1 + \beta_2 X2 + \beta_3 X3 + \mu$

Y1 = ROA (net income / total assets);

Y2 = ROE (net income / total capital);

$\beta_0 - \beta_3$ = the regression coefficient;

X1 = L1 (liquid assets / total assets);

X2 = L2 (liquid assets / short-term liabilities);

X3 = L3 (loans / deposits and short-term liabilities);

μ = standard deviation (coefficient of error)

THE RESULTS OF EMPIRICAL ANALYSIS

Before we present the results and confirmation of hypotheses, the following table presents the results of regression models one and two, through two indicators VIF and tolerance or F-test. F-test explains the relation between the independent variables through tolerance and VIF values. From the data presented in the table no.2 we see that the highest value of the VIF is 4,252, which is within norms because it is lower than 10, the lowest tolerance is 0.235, which is higher than 0.10 the lowest limit of allowed values. Since the values are within the permitted boundaries regression models I and II are acceptable, and confirmed that the independent variables L1, L2 and L3 do not have any correlation with each other.

Table 2: Impact of variance factor F-test

Model		Collinearity Statistics	
		Tolerance	VIF
1	(Constant)		
	L1	.235	4.252
	L2	.277	3.610
	L3	.727	1.375
Dependent Variable: ROE			
Dependent Variable: ROA			

Source: Own survey.

Tables 3 and 4 present the summary of first and second model through indicators R, R², R² adjusted and standard error. Based on results we see

that in the first model R value is 1000, the value of R² is 1000 and the value of R² adjusted is 1.000. If R² adjusted is presented in percentage we can conclude that 100% percent of changes in ROA is explained by the independent variables L1, L2 and L3. The same results are in the second model. When the adjusted R² is presented in percentage we can conclude that 100% of changes in ROE is explained by the independent variables L1, L2 and L3. From this outcome we can conclude that all the changes in the bank's performance could be explained by liquidity indicators.

Table 3: Summary of the first model

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000		.01300
Predictors: (Constant), L3, L2, L1					
Dependent Variable: ROA					

Source: Own survey.

Table 4: Summary of the second model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	.09475
Predictors: (Constant), L3, L2, L1				
Dependent Variable: ROE				

Source: Own survey.

Statistical values for each independent variables in the first model are shown in table no. 5. The results of Beta coefficient for the independent variables are: L1 = .004, L2 = .003 and L3 = 1.001. This shows that the highest impact on ROA, based on the amount of Beta coefficient, has L3, L2 then L1. On the other hand, the significance level, presented in the last column of the same table for the first independent variable L1 is 0.000, which means that it is less than $p < 0.05$. Significance level is 0.000 for L2 and L3 as well. From this result we can conclude that liquidity risk has a significant impact on ROA the same results had the other authors as well (Mariaa,P., & Eleftheriab,G., 2016), (Musembi,m.D., Ali,B., Kingi,W., 2016)(Rahman, A.N, & Saeed,H.M, 2015).

The results of the second regression model are shown in table no.6, where we can see that Beta coefficient for variables L1 is .018, L2 = .011 and L3 is 1.00. Based on the level of Beta coefficient we can conclude that the highest impact on ROE has variable L3 then two other variables L1 and L2. In this model, the values of significance level for independent variables L1 and L3 are 0.000, while for L2 is 0.012, which means that it is within the allowed values of $p < 0.05$, confirming that the risk of liquidity has a statistically significant impact in ROE. The same results had the other authors as well (Hakimi,A., & Zaghdoudi,K., 2017), (Chowdhury,M., & Zaman,Sh., 2018). Based on the regression results of the two models we can conclude that H:1 is confirmed, and that the liquidity risk has a significant impact on the performance of banks in Kosovo.

Table 5: Regression coefficients of the first model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.012	.005		-2.471	.018
	L1	-.124	.024	-.004	-5.138	.000
	L2	.007	.001	.003	4.816	.000
	L3	.101	.000	1.001	6.566	.000
Dependent Variable: ROA						

Source: Own survey.

Table 6: Regression coefficients of the second model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.176	.035		5.089	.000
	L1	-.671	.176	-.018	-3.820	.000
	L2	.028	.011	.011	2.624	.012
	L3	.115	.000	1.005	385.547	.000
Dependent Variable: ROE						

Source: Own survey.

Through the results of correlation we will test three sub hypotheses raised above. Based on the results of table no. 7, where performance of bank (ROA - return on assets and return on equity ROE) is set in relation with the bank's ability to cope with the liquidity shocks, we see that the significance level $p = 0.000$, which is less than 0.01 , meaning that there is a statistically significant relationship between bank's performance and L1. The value of the Pearson coefficient shows the strength of the correlation, and in the table no.7 we can see that the variable ROA is $r = 0.499$, while ROE is $r = 0.494$, which means that the performance of banks has a very strong correlation $r > 0.49$, and also from signs we understand that the relation between them is positive. The same results were the authors (Chowdhury, M., & Zaman, Sh., 2018). Through this we confirm the first hypothesis, which states that the bank's ability to absorb the liquidity shocks has a significant correlation with the performance of banks in Kosovo

Table 7: The correlation between the bank's ability to absorb the liquidity shocks (L1) with the performance of banks (ROA & ROE)

Correlations				
		L1	ROA	ROE
L1	Pearson Correlation	1	.499**	.494**
	Sig. (2-tailed)		.000	.000
	N	47	47	47
** Correlation is significant at the 0.01 level (2-tailed).				

Source: Own survey.

Table no.8 shows the relationship between the bank's ability to withstand liquidity risk in the short-term (L2) with the performance of banks (ROA and ROE). From the outcome of the correlation analysis we see that the significance level of return on assets and return on equity is $p=0.020$ and $p=0.019$ respectively, a result that is within the allowed value $p<0.05$, which shows that the link is significant and proves the second hypothesis, concluding that the bank's ability to withstand liquidity risk in the short-term has significant correlation with the performance of bank. On the other hand, Pearson correlation values for ROA and ROE are $r=0.341$ and $r=0.339$ respectively, which lead us to conclude that the return on assets, return on equity and the bank's ability to withstand liquidity risk in the short-term have average positive correlation. The same correlation was confirmed by the author by. (Vodová, 2011).

Table 8: The correlation between the capacity of banks to withstand the liquidity risk in the short-term (L2) with the performance of banks (ROA, ROE)

Correlations				
		ROA1	ROE1	L2
L2	Pearson Correlation	.341	.339	1
	Sig. (2-tailed)	.019	.020	
	N	47	47	47
* Correlation is significant at the 0.05 level (2-tailed).				

Source: Own survey.

Last but not least, is presented the relation between the bank's ability to face risks in the presence of large non-liquid assets (L3) and the performance of banks (ROA, ROE). Results from the correlation prove a strong connection and with high statistical significance between bank performance and the last indicator of liquidity risk L3. This correlation is confirmed through significance level $p=0.000$, where $p<0.01$ and $r=1$, confirming the last sub hypothesis c. The bank's ability to face risks in the presence of large non-liquid assets has a significant, strong and positive relationship, with the performance of banks. the same result was confirmed by the authors (Vodová, 2011).

Table 9: The correlation between the bank's ability to face risks in the presence of large non-liquid assets (L3) with the performance of banking (ROA, ROE)

Correlations				
		ROA	ROE	L3
L3	Pearson Correlation	1.000**	1.000**	1
	Sig. (2-tailed)	.000	.000	
	N	47	47	47
** Correlation is significant at the 0.01 level (2-tailed).				

Source: Own survey.

CONCLUSION

During the period 2010-2016 the impact of liquidity risk was statistically significant on the performance of banks in Kosovo, a result that met the first objective of this research.

Through the empirical analysis we concluded that three independent variables: the ability of the bank to absorb the liquidity shocks (L1), the ability of the bank to cope with a high liquidity demand in the short term (L2) and the ability of the bank to face risk in the presence of large non-liquid assets (L3), each tested individually, with the dependent variables on the performance of banks: return on assets (ROA) and return on capital (ROE), had a strong and significant link between them resulting in meeting the second objective set in this research. Positive correlation between the bank's ability to absorb liquidity shocks (L1) and the performance of banks confirms that the greater the ability of the banks to absorb liquidity shocks the higher the performance of the banks. Also a positive correlation with high statistical significance was confirmed between the bank's ability to withstand liquidity risk in the short term and the bank's ability to face risks in the presence of large non-liquid assets, with the banks' performance. This confirms that the higher the ability of banks to withstand liquidity risk in the short term and the risk from the presence of large non-liquid assets, the higher the performance of banks.

At the end, we can conclude that commercial banks in Kosovo can raise the level of performance by improving their ability to face risk from liquidity shocks, risk from high demand for short-term liquidity and the risk from the presence of the large non-liquid assets.

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RISK-TARGETED INTERNAL CONTROL SYSTEM THAT PROVIDES THE DETECTION OF ESTABLISHED RULES VIOLATION AND MISREPRESENTATIONS OF ACCOUNTING AND FINANCIAL DATA

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Abstract

Due to the economic changes of Russian Federation, internal control still retains its relevance. The article focuses on the need to improve the efficiency of the created internal control systems in the direction of managing risks of the established rules violations and accounting and financial data misrepresentations. Analysis of the concept of internal control from two methodological points of view allows defining internal control and further considering it as an independent system built into the process of corporate management. Incorporating risk management into the internal control process forms the concept of a risk-targeted internal control system. Following the integrated structure of internal control developed by COSO, the requirements and recommendations of the Russian regulatory legal acts, a model of a risk-oriented internal control system of a commercial organization, represented by an external and internal structure, is proposed. A key element of the internal structure of this system is risk assessment, which involves considering all the facts of economic life through the prism of risks. This allows the organization to develop internal control procedures for all risks of the established rules violations and accounting and financial data misrepresentations and depict them on the risk map. In the course of compiling the risk map, the process of identifying the risks of distortion of the facts of economic life by business processes was specified and an algorithm

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for the formation and its documentation was proposed. Our study contributes to the existing literature and allows to fill the gap in terms of the practical implementation of improving the system of internal control of commercial implementation, taking into account the modern requirements for its implementation.

Key Words

Internal control; internal control system; internal structure; risk of the established rules violations and accounting and financial data misrepresentations; risk map.

INTRODUCTION

The problem of forming an effective system of internal control in modern conditions is becoming increasingly relevant due to the fact that Russia still maintains a high level of economic crimes. According to the World Economic Survey for 2018 prepared by PwC, a significant increase in the number of Russian companies that faced economic crimes in 2016-2018 from 48% to 66% was revealed (PricewaterhouseCoopers, 2018). The high level of fraud in the areas of procurement, theft of assets, bribery and corruption, cybercrime, distortion of accounting data indicate a lack of effectiveness of internal control in Russian organizations. Therefore, there is a need to improve the efficiency of the created internal control systems.

When forming the internal control system, economic entities, striving to achieve the effectiveness of their activities, miss the goals of its organization - "preventing or detecting deviations from the established rules and procedures, as well as distortions of accounting data, accounting (financial) and other reporting" (Ministry of Finance of Russia, 2013).

In the course of its financial and economic activities, economic entities manage a large number of risks: inflation risks for products, raw materials and materials, technical and production risks, liquidity risk, credit and other risks. Meanwhile, non-reflection or incorrect reflection of business transactions in accounting, their valuation that does not meet the requirements of regulatory documents, reflection of non-existent assets and liabilities, as well as other risks, distort the accounting (financial) statements and create favorable conditions for the commission of illegal action and economic crimes.

This problem and its solution requires improving the functioning of internal control to increase the reliability of accounting information and the impossibility of committing illegal actions in the direction of managing risks of deviations from the established rules and distorting accounting and reporting data.

Explanations on the organization of internal control by Russian economic subjects are contained in the 2013 document of the Ministry of Finance of the Russian Federation "Organization and implementation by the economic

entity of internal control of committed facts of economic life, accounting and accounting (financial) reporting” (hereinafter ПЗ-11/2013) ” (Ministry of Finance of Russia, 2013), but they are generic. And in the scientific literature, the methodological aspects of the functioning of effective internal control, capable of excluding the possibility of committing illegal actions, are also given insufficient attention, therefore, there is still a need to develop its methodological tools.

The relevance of the organization of the internal control system is confirmed by the works of Russian scientists: A. G. Volkova, O. S. Glinskaya, S. A. Meshcheryakova, N. D. Pogosyana, I. S. Skorikova, V. P. Suytsa, L. A. Tchaikovsky, E. N. Chernyshova, A. D. Sheremet and others.

Internal control was studied from various points of view by Huefner R. J., Hermanson D. R., Smith J. L., Stephens, N. M., Fourie H., Ackermann S.

Huefner R. J. (2011) studied the weakness of internal control, while Fourie H. & Ackermann C. (2013) studied the effectiveness of the internal control system. Hermanson, D. R., Smith J. L., & Stephens N. M. (2012) conducted a study of how auditors determine the effectiveness of internal controls.

Many of the studies on internal control are based on the assessment of internal control: Fourie H. (2013), Hermanson D. R. (2012), Vijayakumar A. N., Nagaraja N. (2012), Brown N. C., Pott C., Wumpener A. (2014); Clinton S.B., Pinello A.S., Skaife H.A. (2014).

Kinney Jr, W. R. (2000), Rae K., Subramaniam N. (2008) and Arwinge Olof (2013) discuss the need for additional research within the framework of internal control, as it has long been viewed by organizations as an important tool for achieving their goals.

So, Kinney Jr, W. R. (2000), O'Leary C., Iselin E., & Sharma D. (2006), Humphrey C. (2007), Rae K., Subramaniam N. (2008) and Arwinge Olof (2013) emphasize the need for further research regarding the reliability and efficiency of its organization.

Thus, the lack of theoretical development in the scientific literature and the illumination in the regulatory legal acts of the methods of internal control predetermined the need for further development of scientific and methodological recommendations on the formation of a reliable and effective system of internal control.

The purpose of this article is to improve the methodological tools of internal control in the direction of the organization and functioning of a risk-oriented system of internal control of the committed facts of the economic life of an economic entity.

To achieve this goal it is necessary to solve the following tasks:

- propose a model of a risk-based internal control system of an economic entity;
- reveal the algorithm for the formation and documentation of the risk map of the probability of deviations from the established rules and the distortion of accounting and reporting data;
- specify the process of identifying the risks of distortion of the facts of economic life in business processes.

THE METHOD

The method of this work is based on a systems approach using various general scientific methods, such as: analysis, synthesis, deduction, induction, grouping, generalization, comparison, formalization and modeling. The theoretical basis of the study was the works of Russian and foreign scientists - economists, Russian legislative and regulatory acts on the organization of internal control in economic entities.

The scientific novelty consists in improving the methodological tools for organizing and operating a risk-based internal control system, highlighting and documenting business processes in the risk map of control procedures for minimizing risks of deviations from the established rules and distortion of accounting data and accounting (financial) reports.

DISCUSSIONS

The concept of internal control as a control exercised within an economic entity is identified with the concept of control. In the economic literature, these concepts are considered in inseparable connection with the management process from two methodological positions (Kondrashova, 2017, p. 26):

- as a complex function and an integral part of business management;
- as an independent management process and a holistic system.

In the framework of the first direction A. D. Sheremet and V. P. Suitz determines that “control is an important function of management, an integral part of the system of regulation of financial relations” (Sheremet and Suitz, 2014, p. 42).

S. A. Meshcheryakov believes that “control is a management function, which is a system for monitoring and checking the operation of an object in accordance with the management decisions made, and also allows to identify deviations for the intended purposes and take corrective measures if necessary” (Meshcheryakov, 2008, p. 6).

In the framework of the second direction A. G. Volkov and E. N. Chernyshov define that “control is a process ensuring compliance of a managed object with accepted management decisions and aimed at successful achievement of goals” (2011, p. 8), and N. D. Pogosyan notes that “control is a set of regular and continuous processes by means of which their participants in a legitimate form ensure the effective functioning of the public sector, as well as the activities of other economic entities, regardless of their form of ownership” (Melnik, Panteleev and Zvezdin, 2004, p. 12-13).

O. S. Glinskaya and I. S. Skorikova notes that “control is a systematic process aimed at identifying changes in actual versus planned performance of an organization, showing the feasibility of a chosen management strategy, allowing for timely corrective actions to be taken in order to achieve its objectives in order to obtain the maximum possible economic benefits” (2011, p. 259).

L. A. Chaykovskaya defines that “internal control is designed to ensure the fulfillment of the managerial function, being a complex system of measures, in terms of planning, accounting, economic analysis, organization of information, cash flow, and document flow” (2016, p. 170).

Bazmi N. A., Rehman M., Rehman C. A. (2016, p. 16) depict internal control as “a system within an organization designed to provide reasonable checks against the achievement of an organizational goal”.

Based on the foregoing, we will consider internal control in the widest sense — systemic, as an independent system built into the process of corporation management. The internal control system is a set of interrelated control procedures carried out to achieve the objectives of the organization and determine the compliance of activities with the established requirements.

MAIN PART

In 1985, the United States established the National Commission on Fraudulent Financial Reporting, known as the Treadway Commission (Treadway Commission), to investigate the causes of fraud in the financial statements and make recommendations for their suppression (Johnstone, Gramling and Rittenberg, 2014). Subsequently, the Committee for the Treadway Commission (COSO) was created under the direction of the Commission.

In 1992, COSO developed an integrated internal control framework. Graphically, it is represented by a cube, in the upper plane of which the columns (operations, reporting and compliance) are associated with five components — rows of the second plane and the general structure of the business (third plane) (Pfister, 2009). This structure has been widely recognized and is the most widely used throughout the world.

According to the structure (COSO, 2011), the internal control system consists of five main components related to seventeen principles, among which (Kondrashova, 2017, p. 31): control environment; risk assessment; control activities; information and communication; and monitoring.

This structure is also recognized in Russia. The PZ-11/2013, published in 2013 (Ministry of Finance of Russia, 2013), contains explanations on the organization and implementation by an economic entity (with the exception of organizations of the public administration sector) of internal control.

It also highlights five main elements of internal control:

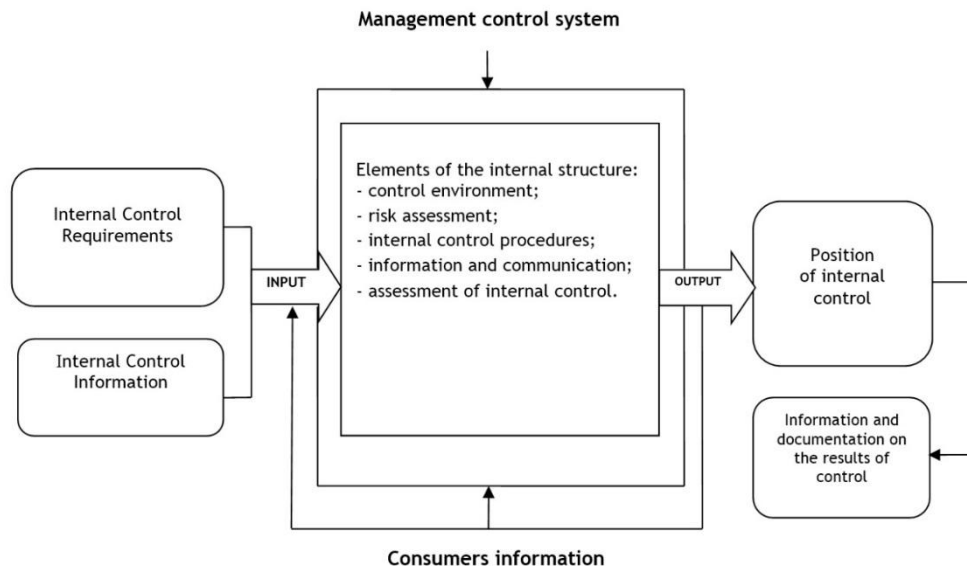
- control environment;
- risk assessment;
- internal control procedures;
- information and communication;
- internal control assessment.

Inclusion in the internal control process of managing risks of deviations from the established rules and distortion of accounting and reporting data forms the concept of a risk-oriented internal control system.

Based on our review of literature and Russian regulatory legal acts, a model of a risk-oriented internal control system can be proposed (Kondrashova, 2017, p. 29).

Visually, it is represented by an internal structure and external environment (Figure 1). The external environment of the system is “output”, “input”, “feedback” and “external environment”. The internal structure is the “black box”, the processing of the “input” to the “output”.

Figure 1: Model of corporate risk-targeted internal control system



Source: Own survey.

To achieve the goal of the internal control system, the “output” can be an administrative document on control (Regulations on internal control and documents on the results of its implementation). During the operation of this system, the result of the implementation of the administrative document will be information and documentation on the results of the control and monitoring of the internal control system.

The interdependence of the system and the external environment determines the principle of the “black box”, according to which the system forms its properties and manifests them only in the process of interaction with the external environment. In the course of its operation, it reacts to the effects of the external environment and develops. This communication will be carried out through the management process conducted by the management of a commercial organization.

The “input” will be the requirements for the mandatory implementation of internal control and the recommendations of the П3-11/2013 on the organization and implementation of internal control of the committed facts of economic life.

Requirements for the mandatory implementation of internal control in the economic entities of the Russian Federation are governed by the following norms:

- Art. 19 of the Federal Law dated December 06, 2011 No. 402-ФЗ “On Accounting”;
- Art. 87.1 of the Federal Law dated December 26, 1995 No. 208-ФЗ “On Joint-Stock Companies”;
- Art. 4, 7 of the Federal Law of 07.08.2001 No. 115-ФЗ “On Counteracting the Legalization (Laundering) of Criminal Proceeds and the Financing of Terrorism”.

Feedback components are customer claims, customer feedback and other factors. Feedback arises in case of non-compliance with the expectations of customers (users), reflected in the terms of contracts, due to non-compliance with these conditions or their changes. Inconsistencies should be resolved in the course of work on claims and complaints.

Internal structure - a set of interrelated elements. Ministry of Finance. According to the Ministry of Finance information, internal control is connected with the need to obtain confidence that the economic entity ensures the efficiency and effectiveness of its activities, the accuracy and timeliness of the accounting (financial) statements, compliance with the law when committing the facts of economic life and accounting. Its elements are: control environment, risk assessment, internal control procedures, information and communication, evaluation of internal control.

A key element of the internal structure of this system (Figure 1) is risk assessment - the process of identifying and analyzing risks.

“Risk can be defined as real or potential events that reduce the likelihood of achieving business goals ... Risk can be defined” (COSO, 2011, p. 14). That is, risk is the probability of events that prevent an organization from achieving its goals.

COSO, KPMG argue that risk management and control should be considered by enterprises as a means of maximizing opportunities and reducing potential losses associated with undesirable events (Pfister, 2009; COSO, 2011).

For the creation and reliable operation of this system, the leading role belongs to the leadership of a commercial organization. It should define and approve the control procedures, assign control functions for its implementation to specific employees. Internal control procedures are aimed at minimizing risks, therefore, first of all, the types of risks of deviations from the established rules and distortion of accounting and reporting data should be distinguished. Their characteristics will be presented in Table 1.

Table 1: The description of risks of the established rules violations and accounting and financial data misrepresentations

Kind of risk	Criteria	Description
1	2	3
Risk of incompleteness	Completeness	The risk that not all perfect facts are actually reflected in accounting
The risk of non-existent facts	Emergence and existence	The risk that reflected facts of economic life do not occur in the reporting period and do not relate to the organization's activities
Risk of non-existent rights and obligations	Rights and obligations	The risk that the property recorded in the accounting, the obligations of the organization and its property rights do not actually exist
Risk of inaccuracy assessment	Evaluation and distribution	The risk that revenues and expenses, assets and liabilities are reflected in the wrong value measurement in the relevant accounts and accounting registers
Data corruption risk	Submission and disclosure	The risk that accounting information is incorrectly disclosed and presented in the financial statements

Source: Own survey.

In the process of identifying risks in a particular organization, a map of the risks of distortion of accounting and reporting data is compiled. For this, first of all, it is necessary to collect information about all the facts of economic life and their combination. Using the example of a conditional organization, we systematize and distribute these facts across business processes and summarize these data in Table 2. The risk analysis of accounting and reporting data is distorted as part of the identified business processes.

Table 2: Systematization of the economic factors of Russian corporate life and their split by business processes

Business process	Account arrangement of the economic life factors	The number of factors of economic life, units		The volume of monetary turnover of the facts of economic life, mln. rub.	
		2018	2019	2018	2019
Finance management	66 "Calculation of short-term loans and borrowings" and 67 "Calculation of long-term loans and borrowings", 50 "Cash", 51 "Cost calculation accounts", 52 "Currency accounts", 55 "Special bank accounts", 57 "Transfers in transition"				
Cost management	20 "Primary production", 26 "General expenses", 44 "Sale expenses", 90.2 "Cost of sales", 91.2 "Other expenses"				
Procurement Management	60 "Calculations with suppliers and contractors"				
Other business processes	other accounts				
Total					

Source: Own survey.

According to Table 2, it is possible to identify the largest number of facts of economic life and the amount of monetary turnover that falls on a certain business process of a commercial organization in the previous and current year and conduct continuous monitoring of internal control over this business process.

Then, for each business process, a risk map of the facts of economic life in the organization is compiled (Ministry of Finance of Russia, 2013, paragraph 13.3) in the form of a table with a reflection of each fact of economic life or their combination, with the characteristics of risks and control procedures for their minimization. For example, according to the "Procurement Management" business process, which usually accounts for the largest amount of cash flow, it can have the form shown in Table 3 on Appendix.

The control procedures presented in Table 3 indicate that the use of internal control tools is possible through the introduction of an accounting computer program, since accounting is automated. In addition, internal control procedures include: reconciliation of data, verification of arithmetic calculations, verification of the correctness of specifying details and paperwork. To prevent the possibility of incorrect correspondence of accounts, reflection of non-existent facts of economic life and the related accounting entries allows the use of restriction, authorization and authorization tools in a computer program. The use of the above procedures allows you to prevent violations and abuses, and in identifying them simplifies the search for the perpetrators.

The position on internal control is the "way out" of the internal control system (Figure 1), it must be documented card of risks of deviations from the established rules and distortion of accounting and reporting data.

We recommend regularly assessing the performance of this system and continuous monitoring of internal controls on the risks of business processes with the highest turnover of operations and cash. This will allow the organization to reveal the specifics of the functioning of internal control to identify deviations from the established rules and procedures, prevent abuses and fully comply with the requirements of legislative acts.

CONCLUSION

Thus, the inclusion in the internal control process of managing risks of the established rules violations and accounting and financial data misrepresentations forms the concept of a risk-oriented internal control system. Risk-oriented corporate internal control system model has been proposed with the specification of the process of identifying risks considering economic life factors relation to business processes, an algorithm for generating and documenting the risk map of the established rules violations and accounting and financial data misrepresentations has been defined.

The proposed approach will improve the methodological tools of internal control in the direction of managing the risk of the established rules violations and accounting and financial data misrepresentations.

FINDINGS

The purpose of this article was to improve the methodological tools of internal control. The study examined the concepts of internal control and its interpretation from two methodological points of view. We can say that internal control is an independent system that is built into the process of corporate management as a set of interrelated control procedures that are carried out to achieve the goals of corporation and determine the compliance of activities with the established requirements.

Considering internal control from this point of view, and following the integrated structure of internal control developed by COSO, to the requirements and recommendations of Russian regulatory legal acts, a model of a risk-oriented corporate internal control system is proposed. It is represented by the external and internal structure, the connection between the elements of this system is revealed.

Some aspects that should be considered to ensure the effectiveness of the internal control system are highlighted: for its reliable functioning, the leading role belongs to the corporate management. It should determine and approve the control procedures, assign control functions for its implementation to specific employees; to officially specify them in corporate internal control regulations; regularly assess the performance of this system and continuously engage the business processes risks internal control with the highest cash flow.

The goal of this article has been achieved by defining a model of a risk-oriented corporate internal control system, specifying the process of identifying risks of the established rules violations and distortions of the facts of economic life by business processes, the algorithm for generating and documenting the risk map of the established rules violations and accounting and financial data misrepresentations. A key element of the internal structure of this system is the risk map, which involves consideration of all facts of economic life through the prism of risks, which allows corporation to develop internal control procedures for all risks of the established rules violations and accounting and financial data misrepresentations.

The proposed recommendations will allow the corporation to reveal the core of the functioning of internal control and to completely fulfill the requirements of legislative acts.

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APPENDIX

Table 3: The integrated risk map of the established rules violations and accounting and financial data misrepresentations corresponding to the “Stock Management” business process

Risk	Description	Control procedures
The risk of non-existent facts	Provision of fictitious services	Daily check of the availability of documents and correctness of registration details of documents
	Acquisition of non-existent rights, licenses	Daily check of the availability of documents and correctness of registration details of documents
	Relocation of inventories between warehouses during inventory	During the inventory to conduct automatic reconciliation of data
	Theft of inventories when leaving a warehouse	Restrict access to the warehouse of unauthorized persons
Risk of incompleteness	Reflect not all orders	Daily reconciliation of these documents and their reflection in the computer program, authorize access to the computer program
	When taking inventory is not considered surplus	Daily check of correctness of paperwork and their reflection in the computer program
	The reflection of the receipt or disposal of inventories is not in the reporting period	Verification and documentation of identified deviations
Risk of non-existent rights and obligations	Placing unauthorized orders	Limiting the possibility of entering into a computer program without specifying additional data by an accountant
	Issuance of guarantees and sureties	Limiting the possibility of entering into a computer program without specifying additional data by an accountant
Risk of inaccuracy assessment	Supply of goods, performance of work and provision of services at inflated prices	Confirmation of payment authorization by all responsible persons
	Creating regrading of inventories	Verification and documentation of identified deviations
Data corruption risk	All procurement accounting data is reflected in the accounting (financial) statements.	Modify the computer program so that at the end of each month the whole cycle of work on the processing of documents ends with the impossibility of making changes in the closed months

Source: Own survey.

FINANCIAL TECHNOLOGIES AS A FACTOR OF FINANCIAL INCLUSION OF WOMEN

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Abstract

The purpose of the paper is to study the use of financial technologies by women in the financial market of Tajikistan, to identify existing barriers and drivers for expanding opportunities through financial technologies to increase the level of financial inclusion of women in the Republic of Tajikistan. The main method of research is a sociological survey on the level of use of financial technologies in the Republic of Tajikistan. In addition, we used the methods of systematization, generalization and graphical presentation of the data to analyze the results of the survey. The levels of use of financial technologies by men and women were compared; it has been found that they vary significantly. In addition, there is a gap in the understanding and use of financial technologies depending on the place of residence (urban/rural). The expansion of digital financial services can, therefore, identify opportunities for continuation and challenges that need to be addressed in promoting women's financial inclusion and economic empowerment.

Key Words

Financial services; gender aspect; financial inclusion; economic empowerment; technological integration.

INTRODUCTION

The rapid expansion of global interconnections between market participants and the networking effect in economic systems provide an opportunity to achieve significant financial and technological integration (Holloway et al., 2017). The inclusion of women in financial services has long been recognized as a key driver of women's economic participation and household well-being leading to more sustainable economic growth and social development, as well as more diversified financial systems. In particular, this was highlighted as early as 2013 at an international conference (Conference on expanding access to financial services for women, 2013) on expanding access to financial services for women. The conference was organized by the World Bank, the International Finance Corporation and the Ministry of Finance of the Russian Federation and took place within the framework of the spring session of the International Monetary Fund (IMF) and the World Bank Group. Conference speakers emphasized that increasing women's access to financial services contributes to poverty reduction. In addition, women in developing countries which include Tajikistan have lower levels of financial integration due to various legal, institutional, cultural and information barriers. Therefore, access to the necessary financial services will allow women and their families to increase their incomes, invest in education and health, and reduce their vulnerability during economic crises.

Table 1: Key indicators of access to economic opportunities

Indicator	Europe and Central Asia		Tajikistan	
	Men	Women	Men	Women
Level of participation in the labour market (% of population aged 15-64 years)	80	62	78	63
Unemployment (% of the labour force)	11.5	9.6	9.7	9.5
Youth unemployment (% of population aged 15-24 years)	17.7	12.4	21.7	22.4
Self-employed (% of employed men/women)	53	42	22	16

Source: National Bank of Tajikistan, 2017; United Nations, 2015.

Indeed, not all countries have the same level of financial inclusion of women and men. In the research area, the gender gap is particularly wide in developing countries.

Similar tendencies can be also observed in the Republic of Tajikistan, but it should be noted that at present the promotion of financial technologies (electronic payments, deposit servicing, crediting, and mobile and Internet banking, etc.) is not intensive enough in the country. This study aims to analyse the level of financial inclusion of women in order to identify the challenges and constraints of economic empowerment through financial technologies and instruments.

Table 1 presents key indicators of access to economic opportunities, which

demonstrate a significant gender gap (Table 1).

The analysis of the data presented in Table 1 shows that key indicators of access to economic opportunities in the Republic of Tajikistan are lower than in Europe and Central Asia. We believe that to overcome this situation, digital financial integration should be promoted; it shows great potential for overcoming many of the challenges faced by women in accessing and using financial services (World Bank, 2016).

LITERATURE REVIEW

Many researchers and analysts have identified financial technology as one of the factors that can lead to significant progress in addressing the challenges of poverty reduction and expanding financial integration over the next 15 years (Annibale, 2015; Staschen, Meagher, 2015; Toronto Leadership Centre, 2018).

According to World Bank research, over the past few years, financial inclusion has been increasing worldwide. According to The Global Financial Inclusion (Global Findex) for 2017, which demonstrates the behaviour and intensity of use of various financial services, 1.2 billion people of the world's population have opened bank accounts since 2011, including 515 million since 2014. Between 2014 and 2017, the proportion of adults having accounts in a financial institution increased from 62% to 69% worldwide. In developing countries, the figure rose from 54% to 63%. However, women in developing countries still have 9 percentage points less total number of bank accounts than men (World Bank, 2017).

Thus, despite the overall progress made in terms of financial integration worldwide, the gender gap has remained unchanged since 2011. The most promising ways to address this issue are: to support and expand women's financial participation (Workplace Gender Equality Agency, 2018); to implement various measures to reduce the gender gap by reducing the number of women excluded from the financial sector (Noland et.al, 2016); and to support women business leaders through their access to and use of financial services (Alliance for Financial Inclusion, 2016).

We can agree with the opinion that narrowing the gender gap in the course of financial integration can have a positive effect on consumption smoothing, reducing financial risks and costs, ensuring security, increasing savings and investment rates and expanding new business opportunities (Annibale, 2015). Women can contribute to economic growth not only by creating enterprises but also by managing their financial resources more effectively. Access to and use of various financial services not only enhance women's contribution to the national economy but also promotes women's autonomy, allows them to make better use of their personal and domestic resources and reduces their vulnerability to crisis situations and negative trends in the external environment. Ultimately, increasing women's financial inclusion can be an incentive for economic growth, reduction of inequality, business and social development.

MATERIALS AND METHODS

The research methodology is based on a systematic approach, which foundation now is a combination of the following tools: a sociological survey of women, as well as a comprehensive analysis of trends being a strategic analysis of the external environment for the implementation of financial technologies in the Republic of Tajikistan. Such a combination is effective in studying the structural problems of the gender aspect of the problems under study. During the sociological survey, 105 clients of financial institutions of the Republic of Tajikistan have interviewed: 35 clients of Alif Sarmoya microcredit and depository organization; 35 clients of Eshkhat Bank; 35 clients of Imon International microcredit and depository organization.

In the present study, probabilistic sampling has been used, as its objectives do not imply additional sampling quotas, as well as the formation of additional filters that exclude any representatives of the general population from the survey or imply the prevalence of any groups of the general population or the distribution of the sampling population in relation to any parameters of the general population.

The minimum sample size of 105 respondents was set in the survey. The sampling calculated on the basis of statistical analysis according to accepted formulas and data on the size of the general population indicates that the sample size used in the project is sufficient to ensure accuracy of $\pm 3\%$.

In order to understand the situation and identify potential problems, we conducted a study to determine the current state of financial technology in the Republic of Tajikistan. The study was commissioned by the Resource Research Center on Sustainable Development of Tajikistan through a survey of the population on this issue. Table 2 presents a plan of study on the extent to which financial technologies are used by women in the financial market of Tajikistan.

Table 2: Plan of study on the extent to which financial technologies are used by women in the financial market of Tajikistan

Study phase name	Study phase content
1. Study concept development	
1.1 Definition of objectives	The study objective is to obtain information on the level of use of financial technologies by women in the financial market of Tajikistan and to identify existing problems in order to develop recommendations to increase their financial inclusion
1.2 Problem identification	In order to achieve the study objective, it was necessary to determine potential development of financial technologies in the financial market of Tajikistan; <ol style="list-style-type: none"> 1. compliance of the proposed financial technologies with the demand of women in the Republic of Tajikistan; 2. problems of interaction in the gender context; 3. institutional problems and possible measures to overcome them
1.3 Formation of the working hypothesis of the study	The study is based on a probabilistic assumption that the prospects for the development of financial inclusion of women are related to the level of use of financial technologies in the Republic of Tajikistan, which is characterized by a level of awareness of women, compliance of proposed financial products with the demand for government initiatives

2. Selection of information sources	
2.1 Primary information	– Results of the survey of women-participants of the financial market in the Republic of Tajikistan
2.2 Secondary information	– Studies of foreign authors on the theme of the present study; – INTERNET resources
The process of obtaining and processing the data was carried out in accordance with the objectives of the study. Empirical data were obtained from a sample survey of women being consumers of financial technologies. The main working tools of the survey are specially designed questionnaires	
4. Analysis of information, conclusions, and recommendations	Traditional statistical methods are used to analyze the information obtained: comparisons, groupings, classifications. The results of the analysis are presented in the form of tables and diagrams. They should confirm the main working hypothesis of the study, serve as a basis for the formulation of conclusions and development of recommendations for the prospects of financial technology development in the Republic of Tajikistan
5. Execution phase	The study was conducted in September-December 2018

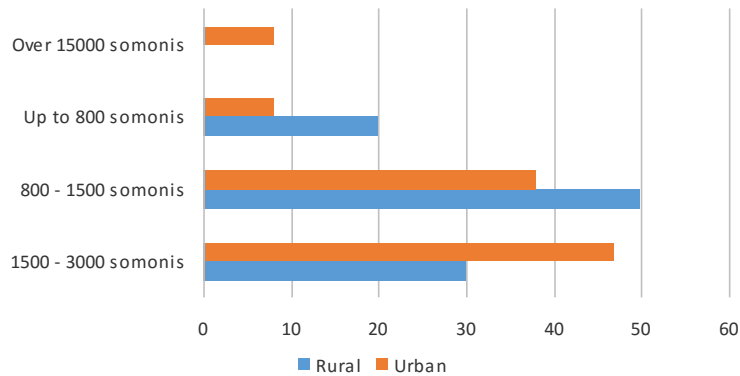
Source: Own survey.

1. **Socio-demographic characteristics of respondents:** gender, age, level of education, monthly income. This set of questions is aimed at determining the main socio-demographic characteristics of the sample.
2. **Awareness of financial technology.** This block of questions is aimed at revealing the respondents' awareness of what financial technologies are, what services are included in the group of "financial technologies", and what financial and technological companies the respondents are familiar with.
3. **Prospects for the use of financial technologies.** This block allowed us to determine the extent to which changes in the regulation and functioning of financial technologies can affect the use of financial and technological services by respondents; the answers will allow us to draw conclusions on the necessary areas of improvement of the financial sphere.

RESULTS

There were 13 women (32 percent) between the ages of 18 and 59 among the female respondents. According to the results of the survey, the largest number of female respondents are in the age groups from 30 to 44 years (35 people - 33% of the total sample) and 45-59 (33%), 18% - in the age group from 18 to 29 years, 17% of female respondents were over 60 years. The majority of the interviewed women live in rural areas - 65 people (62%). Most of the interviewed women (46%) living in urban areas have income from 1500 to 3000 somonis per month, 38% receive 800-1500 somonis monthly. In rural areas, the majority of respondents belong to the category of income from 800-1500 somonis (50%) (Fig. 1).

Figure 1: Distribution of respondents by income level and gender by place of residence

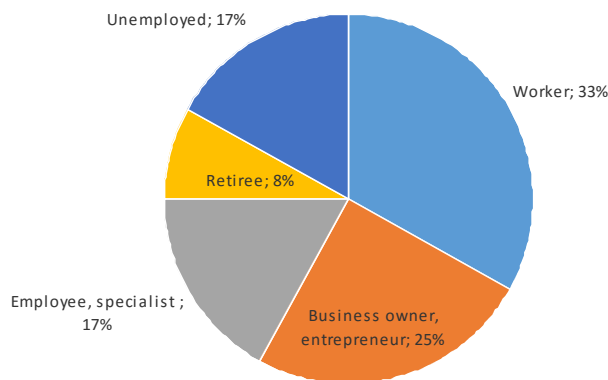


Source: Own survey.

As we can see, 100% of rural women have an income of up to 3000 somonis, and 8% of urban women receive more than 15000 somonis monthly. A comparative analysis of this indicator among women and men has shown that women's income level is lower, while only 7% of men are in the category with the highest income level over 15,000 somonis.

The distribution of urban women by type of activity is as follows: 38% classified themselves in the category "Worker" (five women), 31% in the category "Employees, specialists" (four), 15% in the category "Managers" (two women; there were 5 men in the category or 18%), and in the categories "Business owner, entrepreneur" and "Student", there was one woman each. The sectors from which there was one woman each are civil servants; IT sector, handicraft workers, construction workers, education workers, medical workers, and financial workers. The distribution of rural women by occupation is shown in Figure 2.

Figure 2: Distribution of rural women by occupation

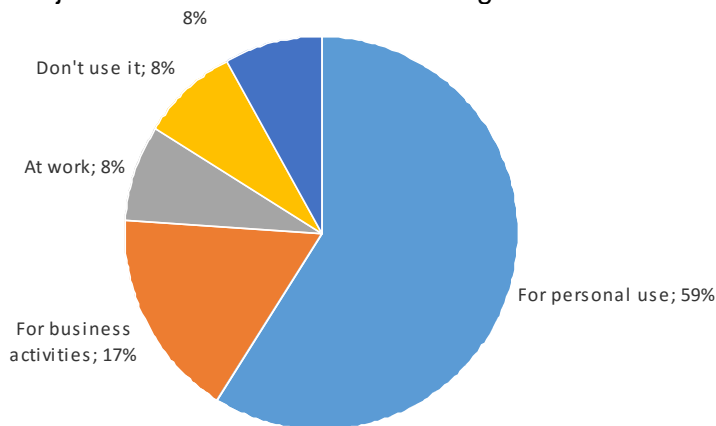


Source: Own survey.

As we can see, the largest number of women is in the "Worker" category, followed by "Business Owner, Entrepreneur", "Employee, Specialist", etc. The survey revealed deep penetration of the Internet among women living in urban areas, as 100% of respondents use the Internet at home, 92% use it at work, compared with 85% of men. In contrast, only 50% of women in rural areas use the Internet at work, and 75% at home. It seems interesting that almost all households have a TV (98 %) and a mobile phone (96 %), a refrigerator (69 %), but only 21 % of the rural women interviewed have a computer. And only an insignificant 2% of households have a bank account.

Answers to the questions on the awareness of the population about financial technologies made it possible to identify the main trends and characteristics of the general perception by women about the development in this sphere. Thus, it became clear that the majority of the interviewed women have never heard of the term "financial technologies": 15% of urban women and 58% of rural women, although only 8% of respondents answered the question on the use of financial technologies that they do not use them (Fig. 3).

Figure 3: The objectives to use financial technologies

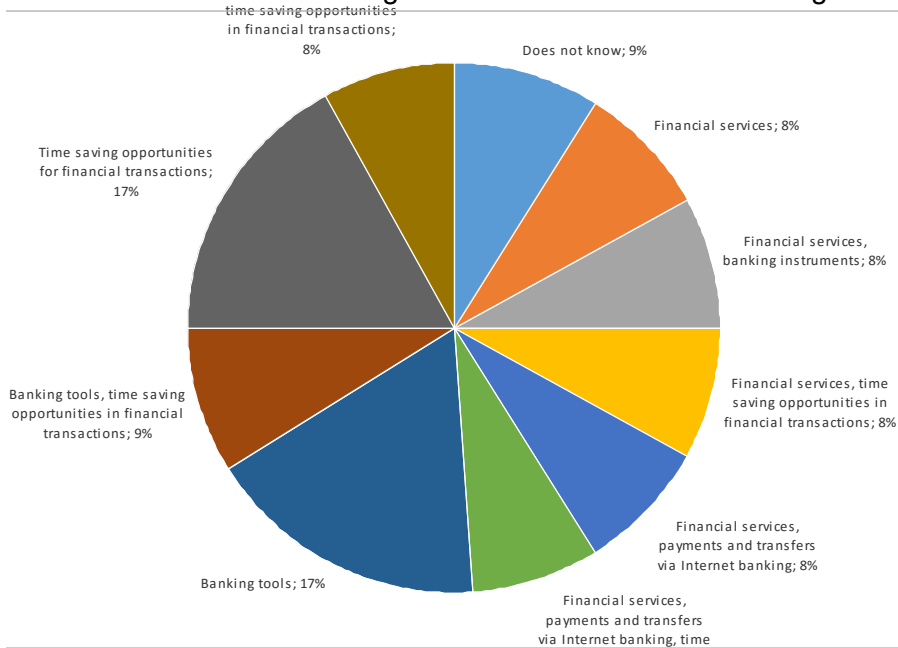


Source: Own survey.

These figures show that financial technologies are most often used for personal needs (59%), while 17% use them for an entrepreneurial activity or at work (8%). We believe that most women would be able to use digital financial services if they started their own businesses. This circumstance is very optimistic for the forecast of further development of the financial market in the Republic of Tajikistan.

It should be noted that regardless of their age and profession, during the interviews rural women showed a low level of knowledge about financial technologies: internet banking and electronic money transfer to the card is their entire vision and understanding of the term "financial technologies". Figure 4 presents a complete picture of women's understanding of the term "financial technology".

Figure 4: Women's understanding of the term "Financial Technologies"



Source: Own survey.

Answers to the question "What do you think about financial technologies?" showed a rather primitive view of women about this financial instrument. Unlike men, most of them, or 69%, believe that these are financial services, 31% - payments and transfers via Internet banking. Men have shown a greater knowledge of the issue pointing out that financial technologies save time in financial transactions. That is, there is a need for in-depth educational work among women about the benefits of financial technologies and the potential impact of its use on economic empowerment. This is confirmed by the answers to questions about knowledge of specific types of financial technologies. Thus, 38% of the interviewed women are practically not familiar with all the terms listed in the question, except for one or two; 31% of respondents answered that all the terms are familiar, some of them are not clear to them, 8% are familiar with all the listed terms, and 23% of women have never heard of them at all.

It should be noted that women are aware of the types of organizations that can provide or are providing financial technologies. The majority of respondents (43%) believe that banks can provide financial technologies through branches and internet banking, 21% admit that financial technologies can be provided by microfinance institutions and 13% - by payment systems. Similar responses were received among men. According to respondents of both genders, the most popular are Eskhata Bank and MDO IMON International, that is, those financial institutions that work in the field of electronic payments. Besides, those organizations are large companies known in the market, while smaller organizations were little known to the respondents.

An interesting question is the level of trust of the population in the

traditional banking system: the results of the survey showed that none of the women surveyed do trust at a level of 100% or 90%, 23% - trust at a level of 80%, and a half of those surveyed (51%) trust at a level of up to 50%. On average, trust in the banking sector is 59.1 %, which indicates a lack of trust, while 46 % of women are completely unfamiliar with the legal framework governing financial technologies (70 % of men). In addition, the survey revealed that women assess the level of understanding of the customers' needs in financial services by the banking sector less positively than men; the average level is 48.3%, which is a negative trend that limits the development of financial technologies in the Republic of Tajikistan.

When asked about the disadvantages and advantages of financial technologies, women explained that the key point in choosing a banking institution for them is the competence of staff - 26%, technical accessibility - 17%, recommendations of friends and acquaintances - 11%. Assessment of the level of satisfaction with the activities of the banking sector organizations (quality, accessibility, convenience) showed that in general, 69% of respondents are satisfied with the financial services provided, 8% of respondents assess the quality of financial institutions as high, and 15% are not satisfied with their work. The level of satisfaction of women is lower than that of men. It is worth noting that 31% of the interviewed women are not satisfied with the competence of the staff of financial institutions, 23% - are not satisfied with the cost of financial technologies, 23% believe that the price does not correspond to the quality of financial services, 31% are not satisfied with the level of simplicity and accessibility, which indicates the need to improve the quality of financial technologies and financial literacy of women. Similar results were obtained in the process of answering the question on the assessment of the level of satisfaction with financial technologies in general.

The most frequent problems called by respondents were communication problems (Internet), technical problems, delay/transfer/cancellation of financial transactions. 92% of women respondents said they were satisfied with the level of availability and accessibility of additional financial services provided by banking institutions (availability of a personal account, SMS-information, etc.). 63% consider themselves satisfied with the level of information security when using financial technologies and 17% were not satisfied with the level of information security.

DISCUSSION

The results of this study show that the level of use of financial technologies in the Republic of Tajikistan is not high enough, although it continues to grow annually. A large number of financial market participants at the national and regional levels, as well as various international organizations, have helped to reduce the gap in access to finances.

Many women remain dependent on their husbands, and about one in three married women from developing countries do not control household spending on large purchases (The world's women 2015: trends and

statistics, 2015). Only one in ten women does not consult with family members about how their own income should be spent. In addition, women often have limited opportunities for education, employment, property and land acquisition, an inheritance of assets and control over financial resources in general.

Globally, only 58% of women are clients of formal financial institutions, compared to 65% of men (Demirguc-Kunt et al., 2014). This gender gap is even greater between men and women in emerging markets, with the largest gap of 18 percentage points in South Asia. Providing low-income women around the world with effective and affordable financial instruments to borrow money, make payments and manage risk is critical to both women's empowerment and poverty reduction. However, the way to increase women's financial participation depends on the establishment of a more comprehensive gender-responsive financial system that takes into account the specific demand and supply-side barriers faced by women supported by a comprehensive regulatory environment. These barriers range from something as basic as the lack of assets to ensure loan repayment to more structural constraints such as account opening requirements that discriminate against women (Meleshkina, 2016).

At the same time, greater financial integration of women requires a more effective gender-responsive financial system that takes into account the specific supply and demand barriers faced by women. Also relevant is the need to improve the regulatory and legislative environment. It is also important to recognize that broader social constraints related to public authorities, the interaction between households, and the social status of women limit the broader impact of financial inclusion on women's economic empowerment. It is essential to recognize these limitations in order to ensure financial inclusion, which can have a transformational impact in this area.

Various measures can be used to overcome these barriers, and it is important that financial institutions take them into account when designing inclusive financial services. Positive measures include the collection of gender-disaggregated data for the development of individual value propositions oriented on women needs, and gender-sensitive intellectual products; the staff training to provide expertise, the provision of advisory services on financial training and education to women, and the development and expansion of women social networks.

CONCLUSIONS AND PROPOSALS

Summarizing the conducted study, it is possible to draw a conclusion that today the level of use of financial technologies by women in the Republic of Tajikistan is not high enough and is characterized by a significant gender gap. This appears to be a very negative trend, the elimination of which is indispensable for increasing women's financial inclusion. It should be noted that financial opportunities and financial literacy for women may be less pronounced in relation to digital financial services than in relation to traditional financial services, given the technical nature of digital access (use

of mobile phones for transactions, use of computer applications).

At the same time, we should not forget about rural women of the Republic who participated in the survey. Rural areas, where the majority of Tajik women live and work, have limited channels for the dissemination of financial technologies. In order to expand the use of financial technologies, it is necessary to improve the efficiency of regulation of this sphere, financial literacy, and information security; banks and the state should provide economic incentives, etc. This will allow not only realizing their own preferences and interests but also to diversify the business sector and open new opportunities for women. The fact is that the inclusion of women in the use of financial technologies is a key driver of their participation in the economy and household well-being. This leads to more sustainable economic growth and social development, as well as more diversified financial systems.

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MEASURING CUSTOMER SATISFACTION IN THE E-SERVICE MARKET

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Abstract

The purpose of this paper is to evaluate the level of satisfaction of e-service customers through identification of gaps between customer expectations and the degree to which such expectations are met by providers of online services. Towards this end the e-servqual method was employed, which enabled the measurement of customer expectations as to the quality of key aspects of online services relative to the actual degree to which customer expectations were met. This survey shows how respondents perceive the quality of online services and their preferences in this respect. Based on the seven dimensions of the e-servqual scale, i.e., contact, efficiency, reliability, fulfilment, privacy, responsiveness, compensation (Parasuraman, 2013), the present author proposed her own measures of e-services quality.

Key Words

E-servqual; customer satisfaction measurement; quality of e-services.

INTRODUCTION

Today's business world is focused on customer satisfaction and understanding how to satisfy customers in the long run. The identification of customer satisfaction determinants is becoming a strong need among managers and represents the main topic of interest in scientific literature on marketing. Adequate recognition of attributes of e-services quality, analysis of e-customers' expectations as well as their effective management contribute to the building of a positive corporate image (Vu Minh Ngo, 2015). Over the past three decades attempts have been made to recognise the best practices in the area of qualitative measurement of e-services (Asher, 1988; Dotchin & Oakland, 1994; Xie et al., 1998; Wisniewski, 2001; Candido & Morris, 2001). In 2001 Zeithaml and other researchers, building on the service quality investigation method (Servqual) that they proposed earlier, developed e-service quality measures that serve to evaluate the functionality of Internet services. They created their model in a three-stage process comprising an exploration groups phase as well as an empirical data collection phase and a data analysis phase. A smooth and efficient system for customer satisfaction measurement affects planning and implementation of corporate strategy and plays a key role in the management process. It is believed that in theory and in practice, the recognition of the importance of measuring customer satisfaction came with Garlin's popular maxim: "what cannot be measured, cannot be managed" (Garvin, 1993). If a company wants to develop and achieve their expected market position, it should undertake actions based on cause and effect relationships with regard to customers and their satisfaction, and then it should plan adequate methods for the measurement of such actions in order to enable detailed analysis of their results (Niemiec et al., 2016). Such actions should base on a detailed definition of the company's best customers as well as their requirements and behaviours. The identification of elements that affect customer satisfaction will enable the transformation of a company into an ally and mentor who takes care of its customers' interests. In this way, the company will satisfy the material and emotional needs of all its customers to a higher degree (Rudawska, 2005).

The purpose of this paper is to evaluate the level of customer satisfaction with e-services through identification of gaps between customer expectations and the degree to which such expectations are met by online service providers. In order to carry out this task the e-servqual method was employed.

Logistic Aspect of Electronic Commerce

At the end of the 1990's the sale of goods over the Internet in Poland was perceived as an innovation. The dominant reason for uncertainty linked with online shopping was the lack of customers' trust in e-services and difficult access to the Internet. Satisfaction was not fully attained because the majority of customers did not know their needs and were not aware what could be expected from a virtual service provider (Gajewska, 2009). Now, however, statistics show a significant change in this respect. Poland belongs

to those countries where online shopping is becoming increasingly common and its popularity is growing virtually by the hour (GUS [Polish Central Office of Statistics], 2018). The growth of online shopping is also bolstered by logistics which plays the main role in building a high standard of e-services and consumer satisfaction. J.T. Mentzer, D.J. Flint and G.T.M. Hult (2001) draw special attention to the principle of "7R" which takes into account important elements of logistic services and is based on the provision to a specific buyer of the right product in the right time, at the right place, of the right quality, in the right quantity and at the right cost (Mentzer et al., 2001). In order to be able to apply this principle, first of all one needs a database of customer preferences and requirements. Companies that do not measure the quality of their e-services will not be able to deliver the right elements that contribute to customer satisfaction. As years go by, more and more logistic operators provide services that so far belonged to the courier sector. The most popular options include: placement of transport orders by customers using an application or a browser (web booking), monitoring of order fulfilment (web tracking), electronic confirmation of parcel delivery and transmission of the attached documentation by email, creating KPI reports, i.e. reports on corporate goal realisation measurement. These multiple purpose tools, when rightly introduced and tailored to a company's requirements, enable the remote management of parcels from any place in the world (Spychalski, 2012) and thus ensure the right quality of e-services.

Data collected by GUS indicate that over 14 million people in the age bracket 16-74 (48% of total population) shopped online (within the past 12 months) in Poland in 2018. In the years 2013-2018 the percentage of people ordering or buying goods or services over the Internet was growing cyclically. In this period this number increased by 14 percentage points. Compared to 2017 the highest increase in the number of Internet shoppers was recorded in the 16-24 age group (by nearly 7 percentage points). In the years 2013-2018 men shopped online more often than women. It was recorded that in 2017 holders of higher education qualifications bought online more than other shoppers (76%). In 2018 the highest percentage of EU citizens shopped online (60%). Unfortunately Poland is 12 percentage points behind the EU in this respect (GUS, 2018).

CUSTOMER SATISFACTION WITH E-SERVICES

The natural environment of a business are its stakeholders, among whom customers play the most important role. It is for them that enterprises exist and the market position of organisations depends on their satisfaction. If a company wants to stay ahead of its competitors, it must maximise its customer satisfaction. In online commerce customer-satisfaction may be even more important than in traditional commerce because the retention of loyal customers in the e-services market is more difficult than in traditional commerce (Hazlina et al., 2011). In order to convert a prospect into a loyal customer dedicated to a company operating in virtual reality, it is necessary to ensure regular measurement of expectations to gain information about

customer preferences and needs which should be properly satisfied to generate customer satisfaction, which is the most important value for any company. Customer satisfaction contributes to building emotional links that translate into loyalty which is vital for business longevity (Ward et al., 2007). Loyalty is understood as a frequency of selecting by the customer of a specific brand over other brand she/he used in a certain area as well as recommending that brand to other potential users (Verhoef, 2003).

MEASURING E-SERVICE QUALITY WITH THE E-SERVQUAL METHOD

L. Berry and A. Parasuraman, who focused on the psychological aspects of service quality measurement, developed the Servqual Method, which is believed to be one of the main milestones on the way to measure customer satisfaction precisely (Allen, 2004). The crux of this method is the representation of the difference between quality expected by the customer and the actual level of service quality offered by the company (Baki et al., 2009).

In the years 2000-2002 V. Zeithaml, A. Parasuraman and A. Malhotra developed the e-servqual (e-SQ) scale which was an upgraded version of the servqual scale for electronic services. The e-servqual scale consists of seven dimensions (Parasuraman, 2013):

- efficiency: refers to easy entry into the seller's website, finding information with the least effort on the part of the customer,
- reliability: refers to operating mechanisms of the Internet domain, especially its accessibility and functioning in a convenient way for the customer,
- fulfilment: refers to keeping promises presented on the website, consistency of real products with their descriptions and delivery of products in accordance with delivery guidelines,
- privacy: refers to the security of personal data of customers and the availability of known and proven payment methods,
- responsiveness: means ability to adjust to customer's needs and provide knowledgeable answer to each question,
- compensation: refers to a compensation in case of problems, e.g. order cancelation by the server,
- contact: various variants of direct encounters with employees.

The first four dimensions determine the core of the service and the next three dimensions refer to customer recovery. They are of great importance where customers have questions or experience problems as a result of service faults, e.g. payment error on a shop's website (Parasuraman, 2013).

In the e-servqual method, analysis of e-services quality, is based on the discrepancy between customer expectations regarding e-service quality and their perceptions of actual e-service. The e-SQ model enables assessment to what degree an Internet service allows the customer to:

- shop efficiently,
- receive products and services in the right time,

- make a payment and respond to potential problems by applying satisfactory solutions created by the service provider.

Considering functionality of the seven dimensions according to which customers assess e-service quality, one may obtain the following results (Draپیńska, 2011):

1. Delivery < expectations \implies lack of satisfaction, discomfort (-)
2. Delivery = expectations \implies satisfaction, neutral (0)
3. Delivery > expectations \implies delight, emotional satisfaction (+)

Service quality is measured by calculating the difference between actual service perception and an ideal (desired, expected) level of service quality. This also enables us to define the gap between expectations and service perception.

METHODOLOGY EMPLOYED IN AUTHOR’S RESEARCH

The purpose of investigating the quality of online shopping experience was to analyse quality gaps between e-customers’ perception of e-services and their expectations in this respect. For the purpose of this study a questionnaire was prepared with 35 statements grouped according to seven dimensions (Table 1). The measuring scale was based on Parasuraman’s paper entitled “Finding Service Gaps in the Age of e-Commerce.” (Parasuraman, 2013).

The investigation of e-services quality in the city of Szczecin was carried out by means of a survey of 400 respondents using the e-servqual questionnaire. Women dominated among the respondents of whom 40% were male and 60% were female. Almost half of the respondents had a higher education (47%). Of the remaining respondents 32% had secondary education, whereas only 8% and 3% had basic vocational education and primary education, respectively. The largest age group were people at the age of 31-45 (44%). Respondents also included younger people in the 18-30 age bracket (26%), older people ranging from 46 to 60 years (19%) as well as senior citizens above the age of 60 (9%).

Since the respondents came from Poland, where five-point scale is usually used, it was decided that Likert’s scale (Voutilainen et al., 2016) would be applied for the convenience of respondents and for ease of completing the survey. Therefore, the respondents were asked to give answers using a scale from 1 to 5, where 1 stands for very bad, 2 – bad, 3 – average, 4 – good, 5 – very good.

Table 1: Measuring scales used to measure the satisfaction of e-services customers

Rating		1	2	3	4	5
Efficiency						
1	Short website loading time					
2	Clear descriptions of various elements (e.g. buttons, fields) facilitating use of the website					
3	Ease of navigation					

4	Smooth order placement						
5	Visibility of results of consecutive operations, e.g. order fulfillment stage, delivery waiting time, refund of payment into bank account						
Reliability							
6	Company stability (positive opinions on the Internet)						
7	Prices lower than in traditional shops						
8	Various payment methods						
9	Delivery speed						
10	Technical advice						
Fulfillment							
11	Products delivered match descriptions on seller's website						
12	Precise delivery time						
13	Timely refund of payment into bank account						
14	Free delivery (no hidden costs)						
15	Free return (no hidden costs)						
Privacy							
16	Personal data protection						
17	Payment return only to owner's account						
18	Secure logging to user account						
19	Order confidentiality guarantee						
20	Proven and known payment methods						
Responsiveness							
21	24/7 response to enquiries						
22	Customisation						
23	Employees' knowledge about offered services						
24	Employees' response to customers' suggestions						
25	Aligning lowest prices of products and services						
Compensation							
26	Compensation for failure to deliver on time						
27	Discount coupons sent to compensate for technical problems						
28	Approval of complaints						
29	Option to return damaged products for up to 24 months						
30	Ability to regain a discount coupon in case of order return						
Contact							
31	Clear and accurate answers						
32	Problem-free telephone connection with the customer service department						
33	Speed of service and problem solving						
34	Sufficiently long conversation with the customer service department						
35	Various communication options: chat, Wechat, e-mail, telephone,						

Source: Own survey.

ANALYSIS OF SURVEY RESULTS

An analysis of the obtained results enabled the identification of quality gaps in e-services and showed that customer expectations were not fully met in all areas subject to analysis. Diagram 1 shows the assessment of customer expectations and their perceptions of analysed dimensions.

The first dimension presented in Diagram 1 (efficiency) shows high expectations of customers (4.76) and perception-wise received the highest score (4.14) out of all dimensions. The gap of (-62) (Diagram 2) between expectations and the assessment of e-services quality indicates that customers had minor reservations regarding the quality of e-services, i.e. time taken by the website to download, easy to understand descriptions of website's elements (e.g. buttons, fields facilitating navigation and use of the website), efficient order placement, ability to view current activities of the service provider (e.g. order processing stage, delivery waiting time, refund of payments into customer's account, delivery information), stability of e-company, accepted payment methods, prices lower than in traditional shops or technical support.

The second dimension presented in Diagram 1 is responsiveness. This dimension refers to the ability to respond to customer's individual needs, provide an efficient service and a minimum response time to customer's question and adjust offerings to quickly changing customer preferences. Customer expectations were high in this area and scored 4.51 points as compared to 3.33 points (Diagram 1) given for perceived quality. The gap between expected and perceived quality is (-1.18) (Diagram 2), which indicates that customer expectations were fulfilled to a small degree. One reason for such a big gap may be the fact that customers received formulaic emails without complete answers to their enquiries. It should be underlined that improvement in this area depends both on the soft skills of employees and the management of the e-company who should implement an efficient information system focused on areas where customers receive tailored responses. The management should also consider additional training for employees in written and oral communication. This should help employees respond to customers' queries in a manner closer to their expectations. The research described in this paper leads to the conclusion that employees of e-businesses lack thorough knowledge about the services they offer. This may result from the fact that the management responsible for the corporate website tend to fulfil quickly changing consumer needs and modify promotions and the accompanying information on e-shops' websites without communicating such updates to their customer service department. The lack of established communication procedures leads to chaos in information circulation.

The third dimension of e-service quality presented in Diagram 1 is reliability. Analysis of collected data indicates that customer expectations are high in this area (4.66) whereas assessment of actual service quality appears to be low (3.30). This may be caused by additional fees for express delivery. Free delivery is usually offered for a standard delivery time of up to 5 working days. Long waiting times for a delivery may adversely impact the

perception of the service by customers. It is often the case that an extra charge of up to 50 PLN needs to be paid for a delivery within up to two days which for a customer may be too expensive relative to the price of the item ordered. Our survey shows that the gap between expectations and perception is quite significant (-1.36) (Diagram 2).

The next dimension of e-service quality assessment is privacy (Diagram 1). Customer expectations in this respect are high (4.54). Low assessment of perceived e-service quality (3.15) indicates that customers have doubts whether their personal data is really protected from processing by third parties. Unfortunately, it still happens that credit card numbers are stolen to perform illegal financial transactions. In order to reduce the gap between perceptions and expectations (-1.39) (Diagram 2) in this area companies need to develop specialist security software and simultaneously make e-customers more aware about the functionality of such security mechanisms.

“Contact” is the next dimension of quality presented in Diagram 1. This item refers to various possible forms of communication between customer and e-companies as well as precise answers to customer enquiries. Customer expectations (4.59), among others, refer to problem-free telephone connections, problem solving speed and telephone conversations that should be as long as the customer needs and not shortened by customer’s interlocutor. The low assessment of the perceived quality of this dimension (3.19) may result from the tendency of employees to shorten their telephone conversations with customers. This is caused by time limits imposed on employees by their employers. Such guidelines aim at cost reduction. Employees are forced to keep conversations with customers as factual and concrete as possible. This situation often leads to greater dissatisfaction of the customer and a feeling of not being understood. Hence the gap between expectations and perceptions of (-1.40) (Diagram 2). The results of the survey allow us to conclude that these are all important elements during the first contact with the customer. With regard to this dimension sufficient time devoted to conversation is the crucial element that shapes customer’s perception of service quality. The management trying to reduce the perception/expectation gap in this area should pay attention to the quality, and not the sheer number of conversations conducted with customers.

In Diagram 1 the dimension “contact” is followed by “compensation”, which was of great importance for the respondents. Customer expectations regarding compensation were rated at almost 5 points (4.71) (Diagram 1). This result was caused, among other things, by the high expectations of customers with regard to compensation for problems arising during the shopping process. Customers rated their perception of quality of this aspect of service as low as (2.67) which may be connected with the lack of company actions to remedy problems. While using e-services customers may experience a number of inconveniences such as errors in payment transactions; a double block of funds on their credit cards; disconnection from the website during payment; the product being sold out and the lack of possibility of ordering again; delivery of damaged/used products; delivery of a product that does not comply with the photograph presented on the website; delivery to a wrong address; personal data theft; late refund of

payment; incorrect information on the website, e.g. expired promotions. There are many inconveniences related to e-services. Therefore, it is very important to undertake remedial actions to reduce the expectation/perception gap of (2.04) (Diagram 2). Companies that admit their faults and send discount coupons or customised offers to make up for their mistakes have the chance to rebuild relationships with customers and transform their negative experience into long term cooperation.

The last dimension in Diagram 1 is “fulfilment”. This aspect of service is most important for respondents and was rated at (4.90). Such a high score may have been caused, among other things, by high customer expectations regarding keeping promises made by companies on their websites. High customer expectations combined with a low score for customer perception of actual service quality (2.42) (Diagram 1) result in the biggest expectations/perceptions gap (-2.48) (Diagram 2). In order to reduce this gap companies should focus their strategy on free, speedy and precise delivery. By keeping promises presented on their websites and other communication channels, companies will fulfil the main needs of e-consumers and thus will increase their chances of winning loyal customers who are the highest value in any organisation.

Based on conducted empirical research we can determine the main factors that affect e-customer satisfaction. Each factor submitted to analysis in this survey within the framework of 7 key aspects of e-services was rated by 400 respondents. Attributes having the greatest influence on customer satisfaction are presented graphically in Diagram 3. Considering e-customer expectations it can be said that quality criteria rank as follows (in the order from least to most important):

- 90% respondents found free return to be most important for them,
- 92% respondents found punctual refund of payment into the bank account to be most important for them,
- 95% respondents found free delivery to be most important for them,
- 97% respondents found compliance of products delivered with their description on the website to be most important for them,
- 98% respondents found a precise delivery time to be most important for them.

The decisive majority of factors that have major influence on e-customer satisfaction (Diagram 3) belong to the “fulfilment” dimension. They refer to punctual refund of payments into the bank account, lower prices than in traditional shops, free delivery and return (no hidden costs), compliance of products delivered with their descriptions on seller’s website and precise delivery time. Companies should pay particular attention to fulfilment of their promises regarding punctual delivery. Failure to comply with information placed on a seller’s website puts the company in a bad light and may lead to loss of clients who use e-services. Quality assurance systems that require measurement of e-customer satisfaction are an important element that helps companies in such efforts.

SUMMARY

The interest in e-services is growing year by year which means that expectations of e-customers will also be growing (Gus, 2018). Therefore, companies should make use of instruments which enable the measurement of customer satisfaction and which will be the basis for developing an effective corporate strategy. Due to the dynamic development of e-service market the expectations customers had a few years ago are now out of date. Therefore, it is important that customer satisfaction measurements are conducted regularly, taking into account fast changing expectations of e-customers. Only the rightly selected instruments for satisfaction measurement will help determine on what companies should focus. Many tools designed for services quality measurement are not adjusted to the unique dimensions of online e-services quality. Investigating the satisfaction of e-services customers is a huge challenge in terms of the employed methods due to the virtual environment in which such services are provided.

Summing up the results of the research, it can be said that for e-customers the most important determinants are those that refer to the logistic process, and particularly to precise delivery time. Collected data indicates that the biggest perception/expectation gap found referred to delivery time. Unfulfilled expectations of customers may result from the fact that at the time of order placement customers receive too imprecise information about delivery time which may range from 2 to 5 working days. This is a wide time bracket and after order placement customers cannot plan an exact delivery date. Sometimes e-companies offload their responsibilities regarding order tracking onto the shoulders of logistic operators which are their partners. Companies should focus on the improvement of logistic services, which are strongly linked with customer satisfaction in the e-services market.

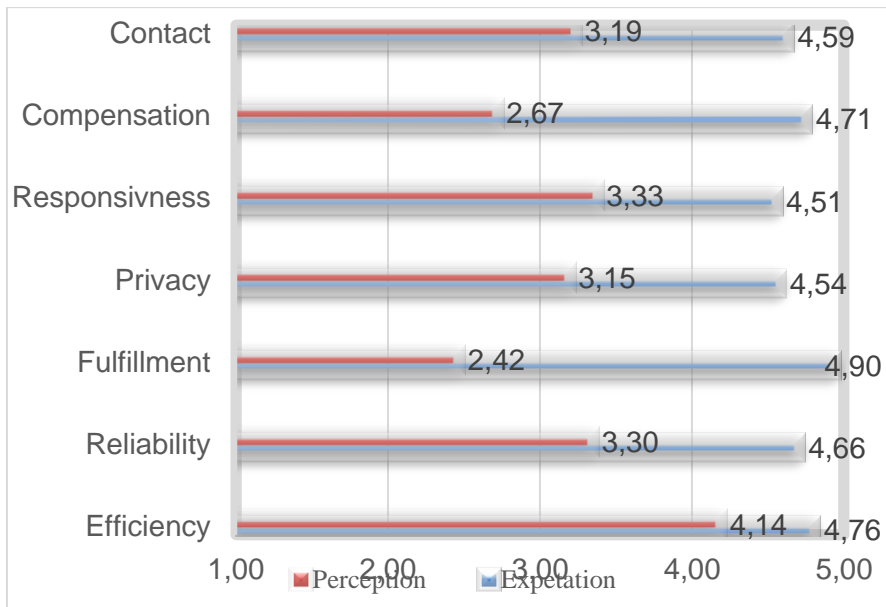
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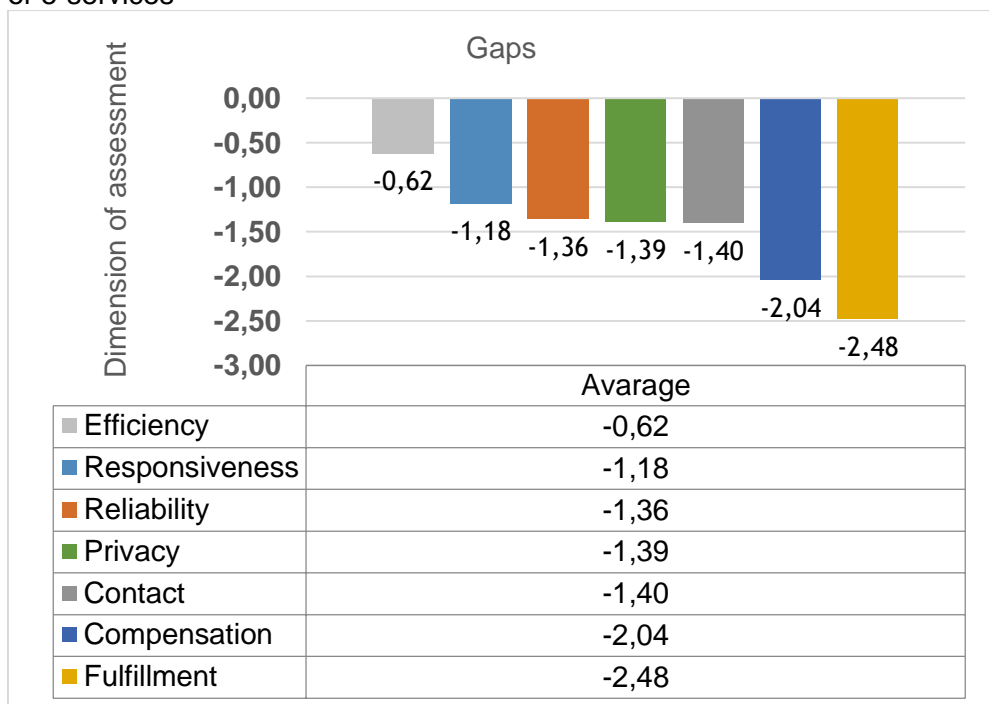
APPENDIX

Diagram 1: Assessment of expectations and perception of e-services



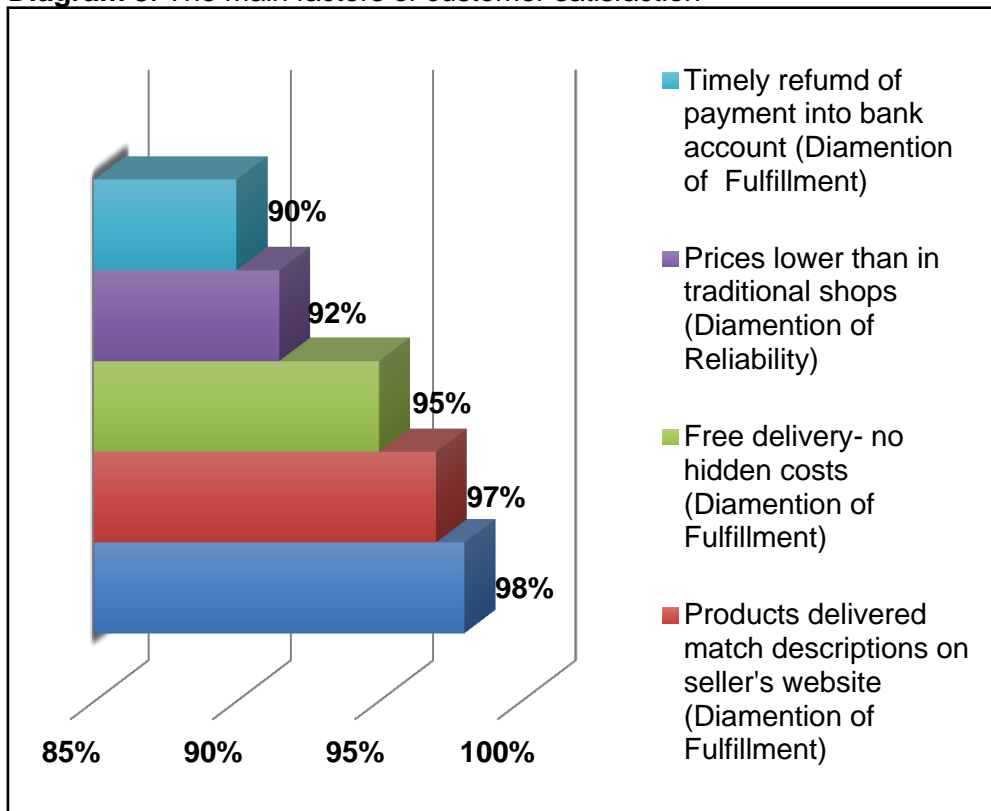
Source: Own survey.

Diagram 2: Evaluation of the gap between expectations and the perception of e-services



Source: Own survey.

Diagram 3: The main factors of customer satisfaction



Source: Own survey.