Bulgarians Are On the Way to Modern Barter Exchange System (MBES).
An Expert Survey

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Abstract

This paper presents the results from an expert survey on the possibility of a modern barter exchange system (MBES) to be implemented in Bulgaria. MBES is an abstract theoretical construction which helps uncover the reasons why such schemes are successful in a number of countries with different social and cultural characteristics, while in Bulgaria this phenomenon is not popular. Sadly, the results show that there is no readiness for participation in MBES. It is seen mainly as a social structure but the expectations are that it would work as a business entity. The research has found that the idea behind MBES is inapplicable under certain conditions, such as those in Bulgaria with its typical characteristics of today. Even though the MBES models are usually successful in other countries, this is probably due to the fact that those are mostly socially mature (homogenous) societies in countries with a well-developed economic infrastructure.

Key words: modern exchance barter system, social currency design, Bulgaria

Implementation of a Modern Barter Exchange System in Bulgaria

The current exposition is a logical continuation of research concluding that *the nature of modern-day barter has a monetary basis* (Toncheva 2014). In this research every exchange is interpreted as containing a monetary relation due to the fact that it involves *a transfer of value*.

The modern barter exchange systems (MBES) usually start at a local level and have a limited implementation as a substitute for the official currency. They combine the possibilities of exchange within a small circle of participants at first but under certain conditions of their design and particular social conditions they have the potential to evolve into a means of payment accepted by a wider circle of economic agents.

In the practice around the world we can find many examples of **voluntarily organized, freely negotiated, community-based, non-cash exchange systems** herein covered by the common term **modern barter exchange system**.

Some comments on this topic can also be observed in Bulgaria. A similar system was organized in 2010, and later (in 2014) it was transformed into a closed barter club. Due to reasons of confidentiality, the information about it is not available. There is also information

about the establishment of another two systems but they were not successful. The first one did not start operating, the second one closed because it didn't receive enough support.

The overall lack of information on barter exchange systems in Bulgaria (and at the same time, their accelerated development in other countries) has inspired the scientific research project we are implementing, including the related expert survey.

Hypotheses

MBES practice has been evolving and covering an ever bigger part of the geographical map of Europe, which provides an objective reason for the need for making an experiment also in Bulgaria. The current survey seeks to establish the objective possibility for making this experiment and has been provoked by the main question, namely: **What are the reasons that make modern barter exchange systems be successful in a number of countries with different social and cultural characteristics while in Bulgaria this phenomenon is not popular?** To answer this question there have been many assumptions. One part of those is based on connections and dependencies derived from the world scientific fund and academic theorems, another part is based on experience verified empirically by various researchers, and a third part, though small, is based on intuitive assumptions resulting from reflections on the topic.

The following hypotheses have been checked:

1. The respondents with better education, both men and women, express different level of support for setting-up and operating of MBES in Bulgaria. This hypothesis is confirmed by the results but without statistical significance.

2. Those who are ready to participate should rather be the respondents with better education and those who have stated that they are better informed about the MBES phenomenon and barter money. This hypothesis has not been confirmed.

3. Those who are better informed about the topic of the research and have better education should rate the advantages of MBES higher. This hypothesis has been confirmed but again without the necessary level of significance. Its validity remains true only of the group of respondents.

Goals

1. To establish the conditions under which the modern barter exchange system would function successfully in Bulgaria;

2. To assess the possibilities of implementing this system in Bulgaria.

<u>Expected results</u>

1. Identifying the attitude of Bulgarian researchers, practitioners, banking experts, state officials and students regarding the implementation of modern barter exchange systems in Bulgaria.

2. Making an overview of the opinions of the respondents regarding the implementation of MBES in Bulgaria.

3. Disseminating the idea of the creation of MBES among leading banking experts, state officials, entrepreneurs and researchers.

<u>Specific questions to be addressed</u>

1. To what extent is MBES accepted in Bulgaria?

2. What are the attitudes towards participation in MBES?

3. What is the idea of the preferred MBES **design for the respective professional groups?**

4. What value system corresponds to the preferred MBS model in Bulgaria?

<u>Structure of the questionnaire</u>

Part A. Profile of the experts

Part B. Opinion overview of the implementation of MBES in Bulgaria

B1. Level of acceptance of MBES

B2. Attitude toward participation in MBES, including:

1. Reasons for supporting and participating in MBES

2. Reasons for rejecting the possibility for the respondents to support and participate in a private modern system of exchange without an official means of payment issued by the central bank.

B3. Vision of the MBES design.

The idea is ascertained through a survey of the conditions that would satisfy the participants. Those are the desired characteristics of a probable model that would be negotiated.

B4. Prerequisite values for the creation of MBES.

The focus is on the experience of the respondents as a basis for an assessment of the leading values in the modern Bulgarian society that influence the creation and evolution of MBES. There are two aspects of this assessment: current and desired condition. This group of questions aims at providing guidelines for modeling a possible future MSEB.

Survey methodology

This is an expert survey, not a sociological one. The choice was made based mainly on the fact that the phenomenon at hand is not popular among the Bulgarian economic agents. Therefore, the formulation of the questions is an important part of the survey (Nikova 2011). Our ambition was to provide a description of the advantages, disadvantages and the characteristics of systems that are working successfully in other counties. All questions are weighed equally, which makes the survey relatively objective.

The expert survey allows for obtaining relatively reliable results with the help of a considerably small number of respondents. We have invited leading experts in the respective fields who have proven that they are capable of making and implementing policies; of disseminating and organizing changes. Each of them has experience in managing some structure within the state administration and most have managed their own businesses. Even though each expert has been invited personally, the survey is anonymous.

The questionnaire consists of two parts.

The first part (Part A) is methodologically necessary. It contains a total of 10 questions with 18 components. It assesses the level of expertize of the respondents; their professional qualities: education, **experience**, level of responsibility, and engagement with the issues related to a possible future monetary system. The distinction in terms of sex is a usual practice. It allows for making conclusions about the distribution of opinions from a behavioral point of view (Ariely 2012, Hofstede 2001, Minkov 2007, Franova 2015)[1].

Question No. 9 aims at providing information on whether the respondents are situated in circumstances which are most commonly defined as reasons for the creation of an alternative currency (barter money) and for participation in a private exchange system (barter exchange system). These are mainly lack of cash and high level of mutual indebtedness,. The answers to this question will be examined together with those related to the support of MBES to see if there is a significant relation between them.

The second part (Part B) is the substantial part of the research. It is made up of four groups of questions intended to survey the following:

1. To what extent is the idea of the MBES phenomenon accepted in Bulgaria? (B1: question No. 11 with 16 components).

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[1] Experts in psychology claim that masculine behavior obeys the deeply rooted in the psyche rule of fight or flee, while feminine behavior is associated with support, empathy, mutual help.

2. What is the assessment of a predefined set of advantages and disadvantages of MBES? (B2: question No. 12 with 12 components offering ideas of the expected advantages of MBES, and question No. 14 with 30 components offering ideas of the expected disadvantages). Questions No. 13 and 15 are open-ended and are aimed at obtaining additional information about advantages and disadvantages that were not taken into account when making the questionnaire.

3. What would be the key components of a successful system in Bulgaria? This is assessed in Part B3 through questions No. 16 with 37 components and No. 17 – an open-ended question. The components are suggestions of existing characteristics of various models implemented in other countries. They have been classified and proposed in the questionnaire in order to assess to what extent the social and cultural traditions in Bulgaria support or reject each of them.

4. What value environment is prerequisite for the success of MBES? (B4 containing two questions No. 18 & 19, each having 30 components). The two questions in this section have the same components but differ in that the first surveys the opinion of the respondent regarding their assessment of the social and cultural environment in its currents state, and the second – in a desired state. The respondents have been asked to assign grades from 1 to 10 to the suggestions, 1 being the lowest level of importance, and 10 – the highest. The choice of this scale allows for an estimation of averages for each indicator and thus for making a classification of the indicators. For example, there is no highest value. A whole group of indicators are considered to be highly desirable, one of them being "To establish and develop variety as a whole" - 8.5. "To acquire scientific knowledge" and "To communicate" have been rated the same. On the other hand, "To manipulate" has the lowest rating – 4,4 (See details in Tables 4 and 5)

The questions in this part are going to be used for designing a possible new barter exchange system. The results from these questions show, on the one hand, which values are the most important ones, and, on the other hand, where the biggest **potential for change** is as per the difference between the current and the desired state of the environment.

The structure of the questionnaire allows for a repetition of the survey in particular professional groups by adding questions related to their specific issues. There is a will for that and the questionnaire will be made available to branch organizations such as the Association of Municipalities in Bulgaria, the Bulgarian Industrial Association, the Bulgarian Association of Business Clusters, trade unions, student councils, etc.

The data have been processed with the specialized program product SPSS which allows for a quick and easy verification and interpretation of the given hypotheses.

The data are mostly non-parametrical and even where they are in figures, due to the small number of responses we have used non-parametrical methods.

Expert survey procedure

1. Formulating hypotheses to answer the following: what could be the reasons for the lack of MBES in Bulgaria, and what are the conditions under which a MBES would be successful?

2. Formulating survey questions based on the hypotheses.

3. Making a questionnaire.

4. Choosing respondents. Choice criteria:

a) To guarantee a formally defined level of expertise and financial competence we have set the requirement for at least a Bachelor's Degree.

b) We have sought out respondents at expert or at least middle management position, that is, people who are capable of taking managerial decisions related to certain policies. Our assumption is that it is people with exactly such social and professional qualities who can introduce and impose changes and new models of behavior in a relatively natural way, without using special PR campaigns but solely from the position of their personal authority. The responding experts enjoy public confidence and we assume that if they support such an idea, a significant part of the society will follow them.

c) The better parts of the respondents have at least once taken up a high-level administrative post in a state or another public organization. In this way they have chosen in what position to give their answers.

d) The choice of prominent specialists also guarantees a middle or higher social and material status.

e) Our goal was to obtain a relatively even distribution in terms of sex, but we hardly achieved 34%.

5. Holding the interview.

a) Making contacts.

b) Presenting the project.

c) Discussing the benefits.

d) Sending and filling out the questionnaire.

6. Processing of the data for SPSS.

7. Developing statistical hypotheses for verification.

8. Verifying of the hypotheses.

9. Analyzing the results.

10.   Conclusions and formulating topics of discussion.

Overview of the results of the expert survey

1. To establish **the level of acceptance of MBES in Bulgaria** we have analyzed the answers to question No. 11 with 16 components. The separate sub-questions follow the logical framework of the survey and consistently check if and how well the respondents know the phenomena of: barter, money, exchange, private cash, barter money and barter systems (see Table 1).

Table 1. Level of acceptance of MBES in Bulgaria - Positive Attitudes to MBES

Descriptive Statistics				
level of acceptance of MBES in Bulgaria	N	(Mean)		(Std. Deviation)
		Value	(Std.	
	Statistic	(Statistic)	Error)	Statistic
I know the phenomenon of Barter	23	7,30	,501	2,401
I know the phenomenon of Money	23	9,09	,208	,996
I know the phenomenon of Exchange	23	8,39	,325	1,559
I know the phenomenon of Private Money	22	7,55	,504	2,365
I know the phenomenon of Barter Money	23	6,83	,558	2,674
I know the phenomenon of Barter Systems	23	6,70	,516	2,476
I'm informed about the existence of MBES	23	8,39	,461	2,210
I'm curious to learn more about MBES	23	8,52	,448	2,150
I agree about the usefulness of MBES for those who participate in them	23	8,65	,292	1,402
I agree that MBES are needed	23	7,83	,572	2,741
I firmly support MBES	22	7,41	,595	2,789
I want to participate in MBES	23	6,52	,612	2,937
I prefer to participate in MBES together with my current partners	23	8,13	,480	2,302
There is no place for MBES in Bulgaria	22	4,55	,711	3,334
I'm sure that MBESs exist in Bulgaria	23	6,43	,719	3,449
The phenomenon MBES is a financial innovation	23	7,26	,704	3,374
Valid N (listwise)	21			

1.1.   The highest average of recognition of a phenomenon is that of money (9.02) and the lowest recognition averages are those of barter money (6.83) and barter systems (6.7). We can sum up the recognition rates of this and other related phenomena by taking the average of the results for all 6 phenomena. It is 7.64, which shows that the respondents estimate their competence at about 76.4 %. This result is satisfactory. A total of 5 out of the

23 respondents have stated that they fully know all the phenomena. Their qualifications vary and we cannot conclude that this depends on their education.

1.2. The respondents show that they are well informed about MBES (8.39), they are quite curious to learn more about MBES (8.52), they agree about the usefulness of MBES for those who participate in them (8.65), and evaluate the need for MBES at 7.83, the level of support being at 7.41. The need for trust among the partners is confirmed (8.13). The low rating (4.55) of the statement that there is no place for MBES in Bulgaria also can be interpreted as a high rating of the need to have this experience.

1.3. The eagerness to participate in MBES is relatively low – 6.52 out of 10. This gives the future builders of MBES the task to create motivation for participation.

1.4. The question of whether MBES is a financial innovation is rated at 7.26, which is a border result and proves that t**he phenomenon can be analyzed with the tools of finance theory**.

We have come to the conclusion that the economic agents are not informed enough about the essence and the role of MBES but there is still room for an experiment whose success will depend to a very large extent on its design. The average rating of all statements showing familiarity with MBES is 7.47. This rating has the meaning of a **recognition index** and can be interpreted as roughly 74.7 % **recognition of the phenomena that make up the phenomenon of MBES**. These results do not yet reject the hypothesis of lack of familiarity as a cause for the lack of practice. In the future it would be good to study deeper precisely the question of what is recognized as a potential MBES.

2. In order to establish **the attitudes towards participation in MBES** we have analyzed the answers to questions No. 12 with 12 components and No. 14 with 30 components. Since the possible answers are given, ranging from *fully disagree* (1) to *fully agree* (5), we have transformed the overall rating into an index corresponding to the level of agreement in percentages (from 0 to 100). (See Table 2)

2.1. The first question is a control question on the understanding of the advantages of MBES. It averages at 8.55, which is very close to the rating of the advantages in the first part of the question (8.65) and is the highest rated of all the support conditions.

2.2. The statements that *MBES helps recover natural prices*, that *business risk is reduced*, and that *income and costs are linked and the difference (profit) is guaranteed in advance* are rated surprisingly low. Each one has scored 6.7. These results made us check the respondents' levels of education and preparation to participate in the survey. It's not found statistical significance.

2.3.   Question No.14 checks a certain number of assumptions about the reasons for the lack of MBES in Bulgaria. They are based on an analysis of existing systems and on the ideas of the author about the social and cultural characteristics of the predominant model of making business in Bulgaria. We have suggested the following reasons to be probable:

2.3.1.   Lack of homogeneity in society, which is <u>confirmed</u> by the results of the first question about the lack of partners who would understand the advantage of MBES (6.96).

2.3.2.   Significant differentiation in terms of width and depth of the division of labour, which is <u>confirmed</u> by the rejection of the statement that "we are producing everything that we need for our end product ourselves" (4.61).

2.3.3.   National and cultural values regarding the integrity between financial and commercial activities. With this subquestion our goal was to survey if and how far the respondents support the idea that money and exchange are organically related or rather the modern understanding that money does not depend on the economic activity and can easily exist apart from the economy by functioning mainly in the financial sector. Three questions <u>confirm</u> this assumption. These are: 1) there is no relationship between money and exchange – 3.81; 2) money exists mainly outside the exchange – 4.50; and 3) the existence of money does not depend on the economic activity – 5.62.

2.3.4.   The assumption that access to the internet and the free use of a technical device and/or connection are a reason to refuse to participate in MBES has been <u>confirmed</u>. This has been verified with the help of two questions rated at 6.67 and 5.50.

2.3.5.   The hypothesis that there is a traditional attitude of non-acceptance because of lack of a legal framework (6.1) or because such schemes are fraudulent (4.87) or illegal (4.48) has been partially <u>rejected</u>.

2.3.6.   It has been <u>confirmed</u> that avoiding insecurity has a relatively high importance (7.33) as well as risk avoidance (7.05).

2.3.7.   The lack of free time for new projects (6.30) and free cash (6.20) as reasons for non-participation have been <u>confirmed</u>. Another reason is the probability of the need for new administrative activities (7.24). Whether the interest for new projects (its lack can be seen from the rate of 4.48) can be compensated is a question of a subsequent survey.

2.3.8.   Lack of popularity is also <u>confirmed</u> as a reason (6.19).

2.3.9.   The reason that the phenomenon is not discussed by state bodies and institutions has been <u>rejected</u> (4.48).

2.3.10.   It is <u>confirmed</u> that the currency used is mainly Bulgarian leva (9.33), which is stable and is applied as local currency within the Eurozone.

2.3.11.   Foreign currency is not used often in commercial relations (6.29).

2.3.12.   The disapproval of change in price rations is <u>confirmed</u> once again. The disapproval of the fact that the emergence of new price ratios is possible has received a surprisingly high rating (6.19). This points us to a confirmation of the rule that after the comfort zone is established, even if it is not the most desirable condition, changes are avoided.

Table 2 Level of acceptance of MBES in Bulgaria - Negative Attitudes to MBES

Descriptive Statistics					
We have no interest to participate in modern private system of exchange without the legal tender because:	N	Mean		Std. Deviation	
	Statistic	Statistic	Std. Error	Statistic	Index
we have no partners who understand the benefits from using it	23	3,48	,320	1,534	6,957
we produse everything we need/use	23	2,30	,323	1,550	4,609
there is no relationship between money and exchange	21	1,90	,257	1,179	3,810
money exists mainly outside the exchange	20	2,25	,339	1,517	4,500
the existence of money does not depend on the economic activity	21	2,81	,363	1,662	5,619
we haven't got a proper technical device	21	3,33	,354	1,623	6,667
we haven't got reliable access to the internet	20	2,75	,369	1,650	5,500
we don't want to take part in new projects	21	2,62	,320	1,465	5,238
there is no a legal framework	21	3,05	,362	1,658	6,095
such schemes are fraudulent or illegal	23	2,43	,280	1,343	4,870
we prefer to avoid insecurity	21	3,67	,270	1,238	7,333
we prefer to avoid risk in such a systems	21	3,52	,306	1,401	7,048
we don't interesting from new projects	21	2,24	,300	1,375	4,476
we have no free time for new projects	20	3,15	,335	1,496	6,300
we have no free cash for new projects	20	3,10	,332	1,483	6,200
there is no popularity of such a systems	21	3,10	,316	1,446	6,190
the phenomenon is not discussed by state bodies and institutions	21	2,24	,316	1,446	4,476
we don't have any luck of cash	21	2,62	,288	1,322	5,238
usualy the currency we usefor trading is mainly Bulgarian leva	21	4,67	,199	,913	9,333
usualy the currency we usefor trading is mainly foreign currency	21	3,14	,318	1,459	6,286
we don't have products which we can exchange without cash	21	2,81	,273	1,250	5,619
such schemes are appropriate for small businesses only	20	2,40	,285	1,273	4,800
such schemes are appropriate for farmers only	21	2,24	,284	1,300	4,476
such schemes are appropriate for freelancers only	21	2,14	,278	1,276	4,286
even though we have excess capacity we will not exchange it on barter	21	2,14	,270	1,236	4,286
the liquidity will be reduced	21	2,05	,263	1,203	4,095
our trade relations will be complicated	21	3,19	,264	1,209	6,381
there is a need for new administrative activities	21	3,62	,253	1,161	7,238
new price ratios will be appeared and they are not desirable	21	3,10	,275	1,261	6,190
our market opportunities wil bel limitted because the contracts reduces flexibility	21	2,48	,281	1,289	4,952
Valid N (listwise)	18				

Our conclusion is that the respondents rate relatively high the suggested advantages of MBES, they are inclined to support the operation of MBES but would rather not participate,

mainly due to the need for changes related to additional activities, insecurity and forthcoming changes.

3. The third important task of the survey is to see what is the **vision of the MBES design preferred by the respective professional groups**. The question has been formulated as follows: "We would participate in a modern private barter exchange system only if:.... " and we have given 37 answers (see Table 3). The respondents have been asked to rate the degree to which they agree with each statement on a scale of 5 possibilities: fully disagree, partly disagree, I cannot say, partly agree, and fully agree. As a result of the responses, the preferences for the possible design can be described as follows:

3.1.　　　Main goal – profit (6.26); in contrast to the main goal being social (7.18), and the standard error cannot compensate for the difference. This means that MBES is seen mainly as a social structure.

3.2.　　　Cooperation and unlimited liability are preferred, rated at 6.00 each, rather than a limited liability structure – 5.33.

3.3.　　　A hierarchically managed structure is preferred (8.36) rather than a decentralized one (4.95).

3.4.　　　Participation of natural persons is very well accepted – 7.04. This points us to some mixed form of MBES (people and businesses).

3.5.　　　 There is a clear preference for a backed means of payment (8.10) rather than fiat money (4.42).

3.6.　　　There is a clear preference for turning the means of payment into cash (8.73)

3.7.　　　There is a desire to have access to credit (7.14)

3.8.　　　There is a desire to receive assistance, including for commercial activities (8.10), accounting/legal advice (7.64), and financial assistance (7.82).

3.9.　　　The idea of the system functioning as a closed club with a limited access has not received much support (6.0).

3.10.　　　There is no opinion on whether MBES should be limited only to a local activity (5.27), while there is a preference for developing it on a larger scale: national (7.14) or international (7.62).

3.11.　　　There is a clear preference for exchanging various products within the system (8.29).

3.12.　　　To cover the expenses, an insignificant priority is given to commissions on the purchases (6.45), and on sales (6.40), which proves that the respondents understand that in this model the purchases and sales are equivalent and equal. The difference as a whole falls

within the statistical error. The options whereby there is an entrance fee (6.00) and a subscription fee (5.80) have also received some support.

3.13.　　The possibility to apply interest is clearly rejected (4.10) but demurrage[2] is supported (6.00).

3.14.　　Network marketing is an acceptable way of organizing growth and income distribution (6.29), and support for taking part in the profit of the system is even higher (6.67).

3.15.　　The preferences for the commission to be paid fully by barter money (6.27) or by legal tender (6.19) are close.

3.16.　　One of the most important characteristics is the possibility to leave the system at any moment (9.18). This feature, together with the growth of the system (9.43) can be qualified as the most desirable. Adding the support for inheriting and transferring property (8.38), the desired design reminds a **contemporary capital structure**. This is further backed by the desire to turn the MBES into a public company (9.43).

3.17.　　The need for the system to be a member of an international organization is also important (7.24).

The enumerated basic characteristics can become the basis for developing an institutional and structural design of an MBES which the participants should agree on. It would be a challenge to make an experiment of an MBES on the territory of a selected community. Thus, the conclusions we have come to as theoretical assumptions will be tested in practice.

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[2] The idea is borrowed from Silvio Gesell (Gesell 2007).

Table 3 Vision of the MBES Design

Descriptive Statistics					
We agree to participate in MBES only if:	N	Mean		Std. Deviation	
	Statistic	Statistic	Std. Error	Statistic	Index
The main goal is profit	23	3,13	,297	1,424	6,26
The main goal is social or ecological	22	3,59	,243	1,141	7,18
the system is settled as limited liability structure	21	2,67	,279	1,278	5,33
the system is settled as UNlimited liability structure	21	3,00	,316	1,449	6,00
the system is settled as ccoperation	22	3,00	,279	1,309	6,00
the system is hierarchically managed	22	4,18	,204	,958	8,36
the system is decentralized managed	21	2,48	,335	1,537	4,95
позволява се участието на физически лица	21	3,52	,273	1,250	7,05
Participation of natural persons is allowed	19	2,21	,271	1,182	4,42
the currency is backed by real value	20	4,05	,246	1,099	8,10
the currency is NOTbacked by real value /fiat money/	19	2,21	,321	1,398	4,42
the means of payment can be turned into cash	22	4,36	,214	1,002	8,73
credit is allowed	21	3,57	,289	1,326	7,14
we have asistance for our commercial activities	21	4,05	,201	,921	8,10
we have asistance for our accounting activities and legal advices	22	3,82	,284	1,332	7,64
получаваме финансово консултиране	22	3,91	,207	,971	7,82
the system is closed club with a limited access	21	3,00	,301	1,378	6,00
the system is local	22	2,64	,276	1,293	5,27
the system is national	21	3,57	,272	1,248	7,14
the system is international	21	3,81	,255	1,167	7,62
products in the same sector are exchanged	21	2,24	,266	1,221	4,48
products in different sectors are exchanged and intersector connections are being created	21	4,14	,221	1,014	8,29
cost recovery - by entrance fees	21	3,00	,316	1,449	6,00
cost recovery - by subscriptions for a certain period	20	2,90	,307	1,373	5,80
cost recovery - by incomes fees	22	3,23	,294	1,378	6,45
cost recovery - by sells fees	20	3,20	,304	1,361	6,40
interest rate is used	21	2,05	,288	1,322	4,10
demurrage (rate) is used	22	3,00	,316	1,480	6,00
the system is developing by network (multilevel) marketing	21	3,14	,318	1,459	6,29
we are partners in the profit	21	3,33	,287	1,317	6,67
commissions to be paid fully by barter money	22	3,14	,304	1,424	6,27
commissions to be paid partially by barter money	21	3,10	,266	1,221	6,19
we can leave the system at any moment	22	4,59	,157	,734	9,18
the assets can be sold, inheriting and transferring	21	4,19	,245	1,123	8,38
the system is a member of international network	21	3,62	,305	1,396	7,24
the system can grow	21	4,71	,122	,561	9,43
the system can be turn into public company	21	4,05	,244	1,117	8,10
Valid N (listwise)	17				

4. There is a lot of research on the influence of the cultural model on socio-economic phenomena based on social group values (Smith 1812, Ariely 2012, Hofstede 2001). A good illustration of that is the scheme of Hofstede regarding the manifestation of culture on a deeper psychological level, where the values are in the core of all rituals, heroes and symbols combined in different practices. (Hofstede 2001). This is why we have assumed that the
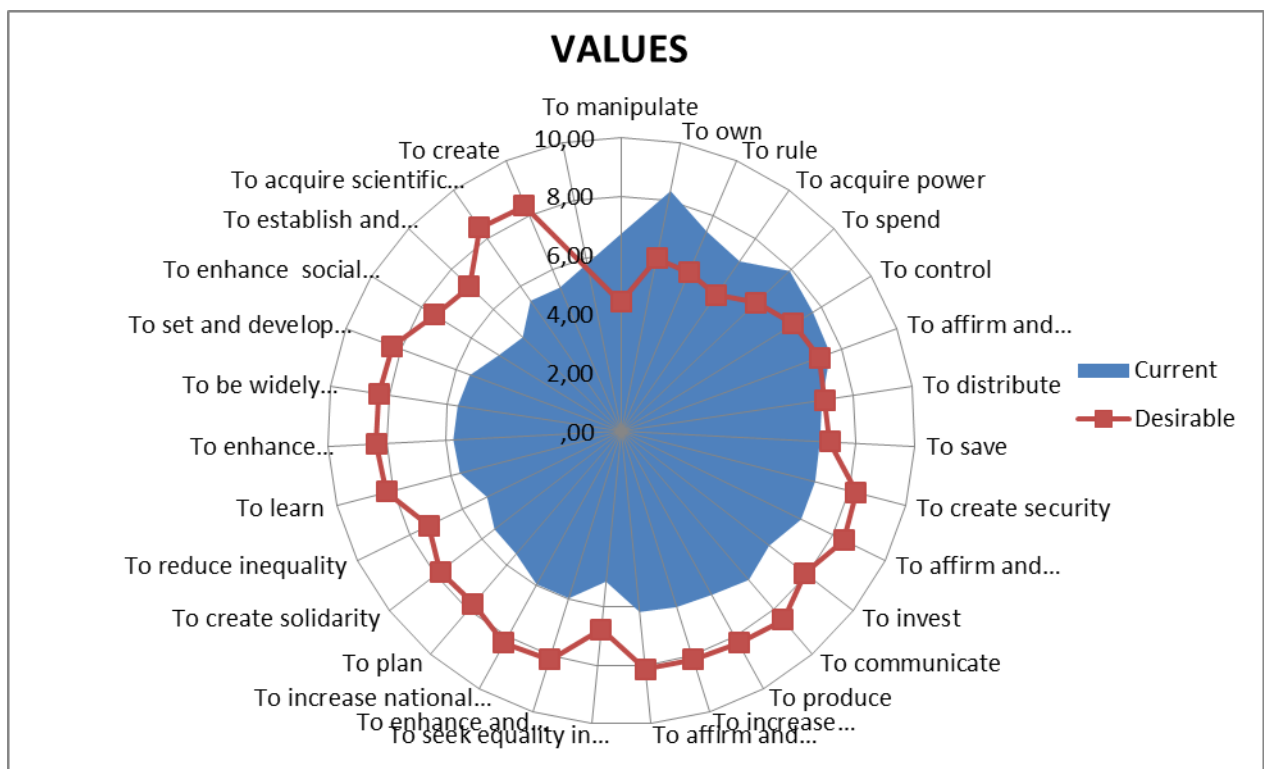
definition of key values to assess the current state and to establish the desired state will help the experiment of introducing MBES in Bulgaria.

The survey should show **what value system corresponds to the desired design of MBES in Bulgaria**. This task is addressed by question No.18 in comparison to No. 19. Both questions propose the same values. The difference is that the first one checks the assessment of the current state, and the second – that of the desired state (see Table 4).

We consider the resulting difference in the assessment of the current and the desired states to be **a generator of and potential for change**. The biggest differences in the averages of the same values signal the biggest potential for change.

There is a widespread idea that cultural characteristics can be viewed also as a basis for institutional preconditions for the emergence and development of social phenomena (Hayek 1997), and, as S. Moscovici rightly claims, sociology should be based on psychology (Moscovici 2008).

Chart 1. Prerequisites Values for the Success of MBES

The distribution of the results of the survey on the chart clearly demonstrates how the averages of the desired state are almost always outside the line of the current state averages. The following values are an exception: to manipulate, to own, to rule, to acquire power, to spend, to control, and to affirm and develop individuality. In the last indicator there is no

considerable difference, and in the rest we do not have a statistical significance of the results. The differences in *to manipulate* and *to own* are considered to be very important for the environment and these results are statistically significant.

A coincidence is found also in *to distribute* and partially in *to save*.

The biggest difference is observed in *to create, to enhance social cohesion, to establish and develop state institutions, to set and develop moral and ethical standards*, and *to acquire scientific knowledge*. For all of them there is a positive difference of 50% and 60%, which is statistically significant.

The Chart 1 shows also the exact values that would motivate participation in MBES.

The statistical significance of the results has been estimated using the Wilcoxon method. It confirms that the better part of the differences have statistical significance.

Table 4 Prerequisites Values for the Success of MBES

VALUES	Current	Desirable	Change in %
To manipulate	6,73	4,40	-35%
To own	8,35	6,00	-28%
To rule	7,39	5,87	-21%
To acquire power	7,05	5,65	-20%
To spend	7,91	6,35	-20%
To control	7,68	6,90	-10%
To affirm and develop individuality	7,59	7,20	-5%
To distribute	6,91	7,00	1%
To save	6,77	7,10	5%
To create security	6,82	8,26	21%
To affirm and develop the diversity	6,82	8,45	24%
To invest	6,36	7,90	24%
To communicate	6,67	8,45	27%
To produce	6,36	8,25	30%
To increase disposable Incomes	6,27	8,15	30%
To affirm and develop the learning	6,18	8,15	32%
To seek equality in rights	5,14	6,79	32%
To enhance and develop the family	5,95	8,15	37%
To increase national income	5,95	8,25	39%
To plan	5,50	7,75	41%
To create solidarity	5,45	7,80	43%
To reduce inequality	5,09	7,30	43%
To learn	5,68	8,25	45%
To enhance knowledge	5,73	8,35	46%
To b**e widely applied scientific achievements**	5,64	8,35	48%
To set and develop moral and ethical standards	5,50	8,32	51%
To enhance social cohesion	4,90	7,50	53%
To establish and develop government institutions	4,64	7,15	54%
To acquire scientific knowledge	5,41	8,45	56%
To create	5,32	8,35	57%

Table 5 Prerequisites Values for the Success of MBES

Wilcoxon Signed Ranks Test	Z	Asymp. Sig. (2-tailed)
To own	-2,767[a]	,006
To spend	-1,483[a]	,138
To invest	-2,306[b]	,021
To control	-1,440[a]	,150
To distribute	-,385[b]	,700
To produce	-1,824[b]	,068
To save	-,829[b]	,407
To learn	-3,142[b]	,002
To create	-2,989[b]	,003
To rule	-1,776[a]	,076
To manipulate	-2,206[a]	,027
To plan	-2,455[b]	,014
To communicate	-2,083[b]	,037
To reduce inequality	-2,091[b]	,037
To increase national income	-2,418[b]	,016
To increase disposable Incomes	-2,170[b]	,030
To enhance knowledge	-2,849[b]	,004
To enhance social cohesion	-2,418[b]	,016
To seek equality in rights	-1,879[b]	,060
To create solidarity	-2,306[b]	,021
To create security	-1,969[b]	,049
To acquire power	-1,818[a]	,069
To affirm and develop individuality	-,070[b]	,944
To affirm and develop the diversity	-2,385[b]	,017
To enhance and develop the family	-2,375[b]	,018
To enhance knowledge	-2,400[b]	,016
To establish and develop government institutions	-2,953[b]	,003
To set and develop moral and ethical standards	-2,736[b]	,006
To acquire scientific knowledge	-3,017[b]	,003
To be widely applied scientific achievements	-3,048[b]	,002

A well-known example is the success of Argentina in the field of the so called social currencies (Powell 2002). Researchers found out that the main group of activists are women. This made us formulate two additional hypotheses:

1.	Women should rate higher than men the values that encourage social interaction, such as *to reduce inequality, to create solidarity, to create security, to enhance and develop the family*, which has been confirmed also by the check-up with the Mann-Whitney statistical method.

2.	Men should give more importance only to values providing for competitiveness, such as *to manipulate*, and *to acquire power*, but the difference has not been confirmed by the statistical check-up.

3.	The goal that men would support should be profit, while women should support socially oriented activities. This assumption has proved correct to some extent because the difference in the averages confirms it but it is not statistically significant.

For the rest of the answers we have found out that there is no statistical significance of the difference in terms of sex. The application of Hofstede's methodology also shows that society in Bulgaria has predominantly masculine behavior (Franova 2015, Minkov 2007).

Discussion of the conclusions

The survey has led us to the following more significant conclusions:

1.	In Bulgaria the phenomenon of MBES is familiar and supported but the readiness to participate in such a system is low.

2.	MBES is seen mainly as a social structure but the expectations are that it would work as a business unit.

3.	The answers given vary depending on the qualities of the experts but it cannot be claimed that these differences are valid for the society in Bulgaria. We have found that among the qualities of the respondents the most important one is the practical experience. A broader and more detailed survey is needed, aimed mostly at economically active persons in practice.

4.	The common opinion about the recognized advantages and disadvantages of MBES has been confirmed.

5.	We have found some significant areas in which respondents express a wish for a greater importance of certain values. This part of the questionnaire generates the largest potential for development of the project and for a possible experiment on the territory of Bulgaria.

The success of the research consists mostly in that it is the first of its kind and it gives guidelines for a more large-scale survey with a more detailed assessment of the conditions for introducing MBES in Bulgaria. At the moment, while still processing the results, the survey keeps giving us answers that will be processed later and the statistical test will be run again. Three new assumptions have emerged from the results of the current survey:

1) The MBES design is not universal and it is inapplicable under certain conditions, for example in Bulgaria with its typical characteristics of today.

2) To implement an idea such as the MBES it is necessary to have certain social, cultural and economic features of the society, which come mostly from the tradition of possession and from a set of production relations, including a sustainably large share of small

and medium-sized businesses, active entrepreneurship, and a cooperative model of thinking. In this regard, the so called social money may develop *mostly* as a result of already established social and economic relations in the environment it emerges from.

3) MBES models are successful mostly in socially mature (homogenous) societies and in countries with a well-developed economic infrastructure.

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