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"MACROECONOMIC ASPECTS OF THE GREY ECONOMY – THE CASE OF MACEDONIA"?

ABSTRACT

Compared regionally, Republic of Macedonia has one of the highest levels of grey economy activity. According to some estimations, it accounts for about 40% of GDP. This high level of grey economy has a direct influence to the main economic indicators, categories and instruments for macroeconomic regulation: GDP value cannot be precisely measured, there are problems in formulating and realization of macroeconomic policy instruments (fiscal policy, monetary policy, social policy, foreign-trade policy), etc. Because of its high value, grey economy is challenging and serious danger for macroeconomic planning and regulation.

By using qualitative, descriptive, statistic and comparative methodologies, this research attempts to locate causes, consequences and the scope of grey economy in Republic of Macedonia. It also presents different ways for measurement of the size of grey economy in the Republic of Macedonia and understands the basic characteristics of the Macedonian case in order to present well-grounded policy recommendations.

The main finding (conclusion) of the paper is the fact that the grey economy in The Republic of Macedonia is a multifaceted phenomenon and the most efficient manner to remove the causes for the occurrence and presence of the grey economy is the improvement of the institutional frame in the country. There is a need for directly focused Government measures that would precipitate the integration of the grey economy in the formal sector, once the right conditions are put in place.

The recommendations that this paper promotes will head exactly in that direction. The main recommendation is directed towards activities and measures of the authorities for preventing and removing the reasons of grey economy appearance and punishment of the consequences of this national economy "evil". Another recommendation is for the Government to increase the speed for redefining (changing) its role on the market. Although there are noticeable signs that the situation has been changing, there is a need for widening the awareness of all business players for the necessity of playing by the rules as well as for enforcing the institutional framework, legal order, moral values and the motivators of the country's functional economy.

Key words: macroeconomics; grey economy; informal economy; formal economy; tax evasion

JEL classification:

E6 - Macroeconomic Policy, Macroeconomic aspects of Public Finance, and General Outlook

1. Introduction

The "grey" economy has a serious impact on the macroeconomic performance of the country. High levels of grey economy negatively affect the competitiveness of the formal firms due to unfair competition on the domestic market and regulatory burden. They also deter foreign direct investments, which contributes to lower capital inflows and productivity in the country. The grey economy directly affects other aspects of social life, such as level of crime, rule of law, social conflict, political instability, etc. In general, high grey economy has a direct influence to the main economic indicators, categories and instruments for macroeconomic regulation.

This paper attempts to locate causes, consequences and the scope of grey economy in Republic of Macedonia, as well as to estimate the level of grey economy in the Republic of Macedonia and understand the basic characteristics of the Macedonian case in order to present well-grounded policy recommendations.

The research is based on several methodologies: qualitative, descriptive, statistic, and comparative. Some study findings and recommendations come out from the survey (see appendix I) that was carried out on a sample of 1200 respondents.

During preparing this text a substantial amount of domestic and foreign research was consulted, but the analysis is mainly based on the author's own research because the grey economy has been his analytical preoccupation for a longer period of time.

The main finding of the paper is the fact that the grey economy in the Republic of Macedonia is a multifaceted phenomenon. It emphasizes the necessity for the government and its institutions to create different approaches for the creation, affirmation and implementation of the economic reforms, with the purpose of restoring the trust of the citizens in the institutions as components of a consistent, responsible and non-compromising country. The most efficient manner to remove the causes for the occurrence and presence of the grey economy is improvement of the institutional frame in the country. This means improvement of the relations between the government and the economy. The recommendations that this paper promotes will head exactly in that direction.

2. Problem Statement

The Gross Domestic Product (GDP) is the most significant macroeconomic indicator by which the total economic activity of a certain country is measured. According to a globally recognized definition, the GDP represents a sum of the value of all of the produced final goods and services during the period of one year. Its size is measured with the sum of the final spent goods and services in the four main sectors of the economy: households (C), enterprises (I), Government (G) and the foreign-trade sector (X - M), or I = I:

$$GDP = C + I + G + (X - M)$$

On the other hand, the GDP size can be measured as a sum of the expenses for the engaged inputs in the production: salaries (for the employees), interests (for the green credits), rents (for usage of a rented land) and revenues (for the entrepreneurs). On the total of these expenses the rate of the indirect paid taxes (VAT, excises) and the amount for the depreciation of fixed assets are added.

The result of the GDP measurement through both methods always has to be the same.

Measured like that, the GDP becomes the mirror of the national economy in aspect of its size, structure and growth, and it also represents indicator for international comparison of the domestic economy with the foreign economies.

Going through the numerous turbulent paths in the past 20 years of its transition, the Macedonian economy notes cycle changes in its development. Its GDP has mostly had negative changes, but it also experienced some modest positive changes in the period from 2003 to 2008 (the period before the world economic crises), when GDP started to note a significant real growth rate of 2,8%, 4,6%, 4,4%, 5,0%, 6,1% and 5,0%, for each year, respectively.

Most analyses show the fact that the GDP of the Republic of Macedonia (RM) would have noted significantly higher amounts and rates of real growth, if the transitional development cycle and the numerous shocks that the Macedonian economy had in the past 20 years not caused big structural disorders in the economy, and which were extremely manifested in the permanent growth of the number of unemployed people. Those people had to provide their existence in every possible way, primarily in the so-called informal sector, through inclusion in the different channels of the so – called "grey" economy.²

3. Definition of grey economy

What is grey economy?

There are various definitions that determine grey economy. It seems that the most dominant and most precise definition is the one which brings the grey economy in a tight connection with the officially measured GDP: *It encompasses all the unregistered production*

¹ Nenovski, T., *Macroeconomics*, University American College Skopje, 2010, p. 79.

² We are talking about the part of the economy which is not enclosed in the formal economy, because of which different authors define its existence in various ways: not registered, underground, non-measured, non-observed economy, shadow economy, black economy, etc. Generally, that part of the economy in Republic of Macedonia is referred to as grey economy, which, in the literature throughout the world has a different meaning.

activities (the ones that create added value), which ought to be a part of the national production.³

In order to determine the size of the grey economy as correctly as possible, as well as its rate in the GDP, we should bear in mind that: 1) we are talking about the added value, not about all the transactions which take part in the informal sector (for example, the capital revenues are not added value); and 2) the grey economy is not the same as tax evasion (nonpayment of or avoiding to pay taxes), because, paid or unpaid, the taxes represent a transfer, not an expense in the economic sense of the word.

4. Size, causes and consequences of grey economy

During the analysis of the macroeconomic aspects of grey economy and the possible solutions for its reduction (fighting), it is necessary to know its orientation size, the causes that it depends on, its influence on the different instruments for the implementation of the macroeconomic policy of the country and the consequences it would cause to the separate macroeconomic categories.

In the Republic of Macedonia there is a widely spread opinion that the grey economy (in different periods) has amounted between 40 and 50% of the GDP. The establishment of the "flat" profit personal tax and the "flat" personal income tax in 2007, the intensive fiscalization during the payment in the retail trade, as well as the more and more intensive usage of payment cards for execution of the payment function of money, created the possibility for the grey economy in 2007 to note downward tendency. The estimations ("Biznis", 2007) are that the grey economy is expressed on a level of 35-40% of the GDP. According to the last (2011) research of the Ministry of economy, the grey economy in the Republic of Macedonia during 2011 was around 30%. Still, even though significantly reduced, the size of the grey economy in the Republic of Macedonia continues to note scales that put the Republic of Macedonia on the top of the global ranking list.

The existence of such a high amount of the grey economy has a direct negative influence on the main economic indicators, categories and instruments for macroeconomic regulation: inadequately expressed GDP rate, problems in the conception and realization of the instruments for the country's macroeconomic policy regulation (the fiscal, monetary, social and foreign trade policy), etc. Mainly, four basic problems that the grey economy imposes can be located:

a. The number of unemployed and socially endangered persons is analyzed according to the official data from the State Statistical Office. However, their official number does not show what is the number of people that are involved in any kind of unregistered activities and get an appropriate compensation, which, also, is not registered anywhere. That imposes a dilemma whether the monetary and fiscal policies are too restrictive or the social policy is not too expansive. The analysis of the structure of the state budget of the Republic of Macedonia in the previous period shows that in average 1/3 of it is directed towards solving the social problems in the country during a parallel strong presence of the grey economy. In those circumstances, the instruments of the macroeconomic policy of the Republic of Macedonia have a small maneuvering space in order to stimulate the economic growth of the country more energetically.

³ Frey S. Bruno, Schneider Friedrich, *Informal and Underground Economy*, International Encyclopedia of Social and Behavioral Science, Amsterdam,: Elsevier Science Publishing Company, 2000, p. 2

- **b.** The second problem is conceived in the *high sum of evaded tax*, which the participants in the grey economy do not pay. That restricts the fiscal policy in the enhancement of its mechanisms for further tax facilitation of the economic subjects, lower debt to the public for providing means for covering the budget deficit (public debt) and enhancement of its development component, which would result with GDP incensement and incensement of the number of employed persons, reduction of the number of unemployed persons and social security users, and further reduction of the grey economy in the country.
- **c.** The high sum of cash in circulation, as one of the two substantial elements of the monetary mass in the country, composes the third problem. Its participation, regularly, moves around 50% of the monetary mass (M1), which determines a high monetary demand and a prevention of the commercial banks to act more efficiently on the financial market, which causes other consequences which will be addressed later in this text.
- **d.** The fourth problem (which was highly manifested in the Republic of Macedonia for a longer period of time in the past) is the fact that the grey economy, if we could put it like that, points to an "unhealthy" relationship between the Government and the citizens of the Republic of Macedonia. The citizens (tax payers) manifest(ed) the disaffection of their economic-social status by transferring to the grey economy, thus enhancing the previously mentioned problems.

All of this leads to enhancement of the marginal expenses for production of goods and services in the formal (regulated) sector, increase of their prices and reduction of the total regular offer of goods and services in the country and abroad, with a parallel increase of the unfair competition of the participants in the informal economy (the expenses for production and the prices of their products are lower than the ones in the regular sector) and increase of its desirability for all the participants in the economic transactions.

However, there are some positive elements of the grey economy that can be located. In a great part it is creating the employment in the country. Its lower income expenses condition a bigger labor demand. The grey economy reduces the social problems in the country, compensates the goods and services which the formal economy, because of higher expenses, is not able to offer on the market, increases the purchasing power of the population and prevents social disturbances of bigger dimensions.

Still, the empirical indicators confirm that the damage of the grey economy is much bigger than the benefit, and because of this, a permanent social action for its reduction is necessary.

The causes which condition and stimulate the grey economy are different. The unemployment has the strongest influence on its development. In the period from 1992 to 2010 the number of unemployed persons in the Republic of Macedonia almost doubled (from 180.000 to 321.000 citizens), causing high unemployment rate of around 31%.

The jobs that were previously lost and the lack of more energetic measures of the central government for the creation of new jobs forced those persons to enter the grey economy. That statement confirms the results of the performed survey, according to which the major part of the citizens think that the biggest problem they face is unemployment and poverty (73% of the interviewed) and that inability to satisfy their existential needs has the highest influence on the appearance of the grey economy (29%) and the bad economic situation in the country (27%). In a climate of economic degradation or country's stagnation, the grey economy serves as economic

and social shelter to those persons, offering them opportunities to make a living, but also for studying, lifelong learning, prequalification, etc. The existence of the numerous unregistered taxi drivers a considerable amount of time after the start of the transition confirms this fact in the best way possible.

In the past 20 years Macedonian economy has faced a strong development of the private sector and the small and medium size enterprises, with a parallel adoption of incorrect and often confusing *solutions in the economic legislative*, which highly influenced the accelerating size and dynamics of the grey economy in the country.

The over burdening with taxes and contributions was one of the main instigators of the grey economy for a longer period of time. This was happening especially until 2007, during the progressive calculation of the personal income tax, when three tax rates were used (15%, 18% and 24%), depending on the amount of the realized income. In that tax system, the increased personal incomes mean an automatically increased tax burdening (the action of a so-called fiscal drug). The easiest way to avoid this is to report a lower realized income or executing an unregistered activity which does not require tax payment. Aware of those consequences, the Government of the Republic of Macedonia accessed the determination of a so-called flat profit tax and a flat personal income tax in 2007 and 2008, with the parallel reduction of their rates to 12% in 2007, and to 10% in 2008. The effect from those measures is already being felt: the tax payers are more aware on tax ethics, the fluctuation of means in the budget is amazingly getting higher, and the grey economy notes downwards values.

The next more significant cause for the strong presence of the grey economy is the *too* emphasized administrative regulation of the "business". Dozens of necessary licenses, decisions, certificates, long-lasting procedures for company registration, too numerous administration (the countries with the smallest administration and regulative on the labor market, such as USA, Japan and Switzerland, have the lowest values of grey economy) and other, distract the economic subjects from the formal, and direct them to the informal (unregistered, unregimented, not covered) sector of the national economy. The establishment of one-stop-shop system and the cutting-down on time for company registration to a maximum of three days, as well as the implementation of the concept of the government for the so-called "Regulatory guillotine" are all directed to the overcoming of that situation, with already visible effects in the domain of the transfer of the informal into formal economy.

In general we can say that grey economy in the Republic of Macedonia exists in a significant size which cannot be neglected during the determination of the GDP rate of the country and during the creation and implementation of its macroeconomic policy. Because of that, a very precise definition of statistical aspect (coverage of the registered activities) as well as of economic aspect (production scale that is realized in that part of the economy) is needed.

5. Scope of the grey economy

There are numerous causes for the different approaches of identification of the grey economy. That helps determine the size of the eroded taxes (???) and how fast and strong the market forces act and by that, how the size and structure of the GDP in the country is determined.

Many authors and institutions define the grey economy in different ways. This conditions different manners for determination of its presence. In this text its presence will be treated as in chapter three. All of the important economic activities in the Republic of Macedonia, which

because of different reasons cannot be statistically covered, and which have a direct influence on the determination of GDP and on the creation of the macroeconomic policy of the country, will be covered. Hereby, even though the internationally recognized system of national accounts SNA-93 also recommends the inclusion of the illegal (legally unacceptable) activities in the grey economy, in our case that term will not cover the illegal activities, such as the production and distribution of drugs, prostitution, human trafficking, trade with weapons, smuggling of goods, and others because of two reasons: 1) Those activities, according to law, are considered to be forbidden and punishable and their existence should be eliminated as much as possible; and 2) In the current period of the development of the Republic of Macedonia there are no possibilities for a close identification of the size and value of those activities.

According to the mentioned standard SNA-93, the grey economy in the Republic of Macedonia can be located in the following areas⁴:

- 1) Underground production: Execution of permitted activities which are being hidden from the public institutions with the aim to avoid tax or social security contributions payment. Those activities are highly present in the Republic of Macedonia, and mostly, they are present in the execution of activities from wholesale and retail, real estate trade, property rental, hotel and restaurant work, execution of craftwork (mechanics, repairing, etc.);
- 2) Deliberate misreporting. This is one of the most common and most important ways of presence of the grey economy in the Republic of Macedonia, which is also confirmed by the indicators of the performed survey. There is existence of misreporting of incomes or reporting higher expenses than the ones that really took place, with the purpose of avoiding or decreasing the amount that should be paid based on taxes, customs or social security contributions. The most common cases of this kind of grey economy in the Republic of Macedonia are reporting of lower salaries than the real ones (one part through a bank, and the other part in cash), hiring unregistered employees (the biggest part or 22% of the interviewed pointed out that this is the area where the grey economy is most present), execution of unregistered sales in trade, showing higher expenses than the real ones, not registering the total sales in the accounting books (smaller incomes), etc. For that purpose, very often those companies or individuals lead a double accounting, and only declare the accounting data they choose to the Public Revenue Office.

A notable phenomenon is the appearance of newly created small or medium size private enterprises in the Republic of Macedonia which do not register all of their executed transactions (payment and charging in cash or in kind, payment of salary in cash) or showing in their accounting books certain expenses that serve them for the realization of domestic expenses (usage of automobile, buying furniture, restaurant payment, travel expenses, etc.), and reporting them as intermediate expenses, and in this way reducing the principle for calculation and payment of taxes and contributions. In that manner, the entrepreneurs consciously report higher expenses, and, even, losses, in order to report a lower added value and by that a lower principle for payment of the various payments to the country and the employees.

⁴ United Nations Economic Commission for Europe, *Non-observed economy in national accounts (Survey of national practices)*, United Nations, Geneva, 2003, p 2-4.

Final consequences of those activities are: a) underestimated sales, salaries and contributions of the employees; b) overestimated intermediate consumption; c) payment of lower charges than the ones necessary in reality.

- 3) Unregistered units: The informal sector, usually, consists of small production units (mostly family units). They are not registered in the Central Register because they are not requested to do that with the appropriate legislative. Mostly they are established in the area of agriculture (production for their own needs), construction (building or reconstruction of buildings, houses, apartments, etc., where unregistered construction workers are hired individuals or groups), wall painting, service providing (accommodation and meals for tourists accommodated in rooms in buildings that are a private property), households with small domestic production (domestic handmade articles, woodcarving products, paintings, etc.), tailors, etc.;
- 4) Intentionally not registered units: Having the aim to avoid the payment of different kinds of payments, such as taxes, contributions, expenses for protection during work, etc., some enterprises or individuals intentionally do not register themselves in the Central Register or they do not register some part of their activity in order to realize the same purpose. In that case, their whole production or a certain significant part of it, is not registered (reported) and becomes a component of the grey economy. This group of the grey economy covers the unregistered mechanic workshops, print houses, transporters of goods and passengers, carpenters, shoe cleaners, technical support workers, grocery shops, etc. A typical one is the case of refusing the registration of the salesmen of different kind of products in the so-called green markets in the Republic of Macedonia, and because of this, almost the whole sale on those markets has a characteristic of grey economy, which is confirmed with the results of the survey (10% of the interviewed);
- 5) Performing activities which the companies are not registered for: In some cases the companies which are registered to perform a certain activity do not engage their selves in it, instead, they perform another activity which is not registered and for which they do not pay the appropriate fees based on taxes, customs, etc. In that way, a company can be registered as a healthcare club or a massage club, and work as a bordello; or a certain night club can perform unregistered gambling activities and not pay any kind of taxes for them;
- 6) Other uncovered activities: Very common, and with a significant influence on the grey economy size, are the activities which are defined as tips, payment of salaries and other contributions for the employees paid in cash, production of certain products (for instance furniture, knitting, clothing, cooked food) for one's own needs, giving lectures for training of pupils and students, money extortion, sale of all kinds of small goods on the car fairs, street sellers of different products (pretzels, musical tapes, shoe cleaners, nut fruit-sellers), goods bought abroad for which the customs tax has not been paid, etc.

Besides this kind of analytical classification of the resources of the grey economy in the Republic of Macedonia, for the statistical needs of the country, and at the same time for the formulation and implementation of the measurements of the macroeconomic policy of the country, an important issue is the distribution of that phenomenon through sectors. Generally, the grey economy is mostly notable in the trade, industry, agriculture, foreign trade and tourism. The previous classifications refer to, and the empirical data (as they come out of the survey)

very much confirm that the grey economy is mostly present in the area of trade. This is not surprising information, if we have in mind that in the whole past period of transition of the country the private initiative (small, medium sized enterprises and individual traders) was mostly present in trade and some servicing activities. The industry, because of the need of its restructuring (privatization, closing of whole or parts of some capacities, capacities sanction), reduced, and in some areas lost the dominant position in the economy, so the opportunities and the size of its activity in the frames of the grey economy are present in a significantly lower range than in trade. But, the situation can be drastically changed in the upcoming period when consolidation of the commercial area is expected. In the past period more, but nowadays a lot less, the grey economy was present in the foreign-trading relations of the country. It was particularly manifested in the part of import of goods and services where the delivering of the necessary documentation either was(is) avoided, or there were/are double invoices during what, only the one with the lower amount was(is) presented to the authorities in-charge, in order to pay lower customs and tax payments to the country. The development of tourism in the country in the past few years enhances the forms of the grey economy in that commercial area. Finally, even though maybe the biggest area of appearance and action of the grey economy is the area of agriculture, significant changes do not happen in that area when we consider the relative participation in the grey economy, because in that sphere, meaningful structural changes has been happened.

According to this, the range of the grey economy is miscellaneous and wide. That fact creates serious problems during the analysis of that phenomenon, which can be mainly divided into: a) Impossibility of its precise definition and location, and also a possibility for some important part of the grey economy not to be covered with the determined methodological approach; b) dependence of the models for calculation of the grey economy on, obviously present or necessary presumptions for measurement of its size. The Macedonian statistics, and with it also the macroeconomic policy, are facing such problems.

6. Measurement of the size the grey economy in the Republic of Macedonia

The macroeconomic interest for the grey economy is oriented in two directions: 1) Measurement of its size as a relative co-relation with the official GDP and 2) Finding ways and undertaking measures for transferring the grey economy into the official economy. Activities in the second direction will be much easier after the sources of the grey economy will be identified, and its size will be measured, at least approximately.

Measuring the grey economy is not a simple thing. It is especially hard in the countries in transition, such as the Republic of Macedonia, where the major part of the market activities are performed by the numerous new small and medium size enterprises and traders – individuals, where this measurement is much harder to be accomplished than in big enterprises.

In theoretical analyzes and in statistical practices different methods for the measurement of the grey economy are used. Generally, there are three⁵ approaches in order to realize that purpose.

6.1. Direct approach

 $^{^{\}rm 5}$ See more in Frey S. Bruno S., Schneider Friedrich, 2000, p. 3-6

The most simple, and at the same time, most unsafe way to measure the size of the grey economy is performing survey research among the economic subjects where that phenomenon is supposed to be present. The different surveys of that kind refer to the many difficulties for the estimation of the size of the grey economy. Therefore, a part of the interviewed enterprises or individuals avoid giving answers or give incomplete answers to the questions asked. The surveys do not always cover all of the possible participants in the grey economy, and the numbers that figure are too approximate.

Another direct way to measure the grey economy size is to control the tax refund or the payment of social security contributions that the Public Revenue Office executes. In that case the total work of the enterprises is controlled and their real values are discovered. The weakness of that system for measurement of the grey economy is conceived in its stringency to solely tax or contributions (un)payment. Since the tax evasion has a redistributive character, its measurement has a small relevance for the "grey" economy measurement in its definition given in the chapter three of this paper.

Therefore, those two methods do not encompass all the grey activities and cannot measure the development of the grey economy for a longer period of time. But those two direct methods can be very useful while providing information for the activities that are comprised with the term grey economy and for the structure of the persons that are active participants in that phenomenon.

6.2. Indirect approach (measurement of differences)

The definition and different modalities of the grey economy presence refer to the possibilities for its measurement through the identification of the differences that occur between the official and unofficial statistical indicators and in different markets:

- **a.** For a more accurate determination of the size of the national economy (system of national accounts), the authority responsible for the statistics in a certain country, with the implementation of the available instruments, measures and standards, makes an effort to determine as much as possible the part of the grey economy. That approach, with the tendency of a continuous improvement and adaptation to the international standards (OECD, 1997), is also used by the State Statistical Office of the Republic of Macedonia. Therefore, that institution has developed methodological solutions for:
 - data harmonization for the deliberately unregistered producers;
 - data harmonization for the producers that are not obligated to register; and
- harmonization of the registration of lower values in production by the registered enterprises.

We must mention that this approach, in most cases, represents the usage of a system of presumptions, because of the insufficient precision of the available data and incomplete coverage of separate sectors (agriculture, construction), which leads to the statement that this measuring method of the grey economy gives lower (more incorrect) results compared with the other approaches, and primarily, compared with the method for measuring the size and differences that appear on the money market.

b. The persons who work in the informal sector usually spend more than their officially reported income. In countries with a strongly developed IT and record-keeping system, it is

possible to confirm that difference on individual's level and on aggregate level. But, in the Republic of Macedonia where this kind of record-keeping is just now starting to be established, it is very hard to find those differences. Besides, even when having the most sophisticated systems for the determination of those differences, serious mistakes or mistakes that cover the financial transactions which have nothing to do with the grey economy are possible (for example, taking consumer loans or spending heritages, gifts, etc.)

c. The next field of measuring is the labor market. The increase of the official unemployment rate, mostly, is a result of the aggravated economic situation the country. At the same time, it is an indicator for the increased engagement of the individuals and legal entities in the informal sector. The surveys of the State Statistical Office for the number of unemployed persons in the Republic of Macedonia and the official number registered in the Employment Service Agency of the Republic of Macedonia, vividly confirm this fact. Namely, the frequent surveys show that the number of unemployed (end of 2010) in the country is around 295.000 persons, while the number of reported persons, who are seeking for jobs, is around 321.000. While, the occasional surveys, show that around 70.000 persons are reported to be unemployed with the aim in that way to provide their health insurance, or to receive, even though it is minimal, financial social aid, of around 3.000 MKD (50 EUR) a month. At the same time, those persons have provided unofficial working engagement such as self-employment, or are employed by other employers where they get financial payment in cash which is not registered. Finally, on the numerous calls and announcements for hiring workers to do seasonal jobs, a very small number of officially unemployed persons apply, because they are already working at other places.

It is unofficially estimated, that around 40% or 140.000-150.000 of the officially unemployed persons in the Republic of Macedonia are employed in the unofficial sector. This means that the real number of unemployed persons is around 20% to 25% (200.000 to 220.000 persons). By undertaking the appropriate measures, such as high financial punishments for the employers, which are foreseen in the new Labor Law in the Republic of Macedonia, that difference can be expected to be significantly reduced, and by this a significant part of the informal economy will be made legal.

d. The fourth area of recognizing certain differences as a way of measurement of the grey economy is the money market. A main presumption for the implementation of this approach for measurement of the grey economy is that the payment of its transactions is usually done in cash.

According to the author of this paper⁶, the biggest stimulator of the grey economy in the Republic of Macedonia is the high amount of money in circulation (in country recognized simply as "cash"). Many indicators confirm that the coefficient of money in cash according to the expenses in labor is much higher in the grey than in the formal economy.

According to the National Bank of the Republic of Macedonia data, the average participation of cash in the money mass of the country in the past 10 years (2001-2010) was 44%, achieving occasionally 55.82% (at the end of 2001). The absolute size of cash in the Republic of Macedonia during 2011 was 19 billion MKD. That means that in the cash registers of enterprises and institutions, and in the pockets of citizens, on a daily basis there are around 310 million euro!? The comparing indicators show the fact that for longer period of time the

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 $^{^6}$ See more in Nenovski, T., $\it Economic \ clearing \ up, \ Nampress, 2008, p.11-20$

Republic of Macedonia noted a record level of money in circulation in global frames. The main factor that imposes that condition is the grey economy. Why is this so?

Cash is a strong stimulator of the grey economy because it provides its owner with anonymity during the execution of payment transactions. Those payments are momentary and they end at the same moment and they cannot be tracked for the purpose of estimation of the eventual illegality of the appropriate payment transaction.

There is a mass emergence of avoiding the payment of the obligations among the economic entities in the Republic of Macedonia, because of the lack of judicial protection of the trustees, lack of efficient mechanisms and instruments for inquiries reimbursement, but also in order to avoid the obligations towards the country (taxes) and towards the employees (social security contributions). This conditions a big part of the transactions to be paid immediately, in cash. In the same direction function the big number of (commonly, deliberately) blocked gyro accounts of the enterprises, and in this situation, they find their way out in the reimbursement of the inquiries and payment of the obligations in cash.

The big possibility for money "laundering" has a strong impact on the high extent of cash, through payment in cash from depositary, non-residential or other types of accounts, as a special way to avoid the punitive consequences from operating in the area of grey economy.

Finally, another characteristic of the Republic of Macedonia is that the high amount of money in circulation also creates the significant decrease of the inflation rate, which occasionally crosses over to deflation, as well as the long maintenance of the fixed foreign exchange rate of the Macedonian denar. This imposes increase of the money demand (cash) and their maintenance and usage in order to do different financial transactions for a longer period without having risk for cut-down of their nominal value.

In our opinion, the size of the grey economy is reflected in the size of cash. The smaller amount of cash, the smaller proportions of the grey economy. This means that cash does not answer the question what is the absolute size of the grey economy, but it is a strong indicator for estimation of its dynamics. The weakness of this approach for measurement of the grey economy is perceived in the fact that in the Republic of Macedonia there is a high level of economy "euroization", therefore its quantity, and with that, its influence on the grey economy can be hardly determined.

e. The newest approach to grey economy measurement through the system for measuring differences is perceived in the differences of the inputs, and especially in the measurement of the differences of electric energy consumption. The meaning of this approach is in the calculation how much electric energy would be normally spent for the production of the national income. The surplus of spent electric energy indirectly leads to a calculation of the production in the grey economy. The advantage of that approach is that it employs easily accessible and quite accurate indicators. On the other hand, its weakness is perceived in the fact that not all activities that the grey economy covers use electric energy.

A general problem of all the previously mentioned approaches for measurement of the differences as a base for measurement of the grey economy is that we must presume that in a certain year the country did not have grey economy. Otherwise, how could we determine the appropriate differences in its expenses?

⁷ Ott Katarina, *The Underground Economy in Croatia*, Institute of Public Finance, 2002, Zagreb, Republic of Croatia, p. 9

6.3. Estimation of the tax evasion

The size of the grey economy can be measured up to a certain level by estimation of the extent of tax evasion. The increase of burdening of the economic subjects with taxes and social security contributions will probably lead to a tax evasion increase. The reverse relation, of course, is always valid. The reduction of the rates of profit tax and personal income tax, as well as of a part of the social security contributions during 2007 and 2008, contributed to a significant decrease of the tax evasion in the Republic of Macedonia, which is manifested with a high increase of incomes in the central budget, bringing it to a level of unplanned and unwanted surplus in certain periods of that year. Those realizations, are, probably the reason for the major part of the citizens (38% of the ones participating in the survey) to positively evaluate the activities of the current Government of the Republic of Macedonia in the direction of grey economy reduction. However, during the implementation of that approach, we should always have in mind the fact that tax evasion can be caused by and be a result of the inadequate legal frame, administrative barriers, low quality public services, incredibility of the judicial system, etc.

Obviously, there is no unique safe method for measurement of the grey economy. Because of this, a combination of different approaches and methods for realization of that purpose is necessary, because the measurement of the grey economy is not only a problem of the coverage of the national accounts, but it is an extremely important macroeconomic problem as well, which, if not treated adequately, may lead to many wrong analyzes and ways of implementation of the macroeconomic policy of the country. Because of that, the grey economy should be permanently measured, especially because of the fact that the Macedonian economy is dynamically changing.

7. Recommendations for reduction of the size of the grey economy and its transfer into the formal economy

The previous analysis confirmed that the grey economy represents a challenge, but also a serious risk for the macroeconomic planning and regulation. That imposes the following dilemma during the determination of the activities of the institutions in charge for the reduction of the presence of that phenomenon: a) Increase of the punishments for the participants in the grey economy; b) Determination and tolerance of the optimal size of the grey economy that has a net present price for the economic policy of the country; c) Undertaking no actions and leaving the grey economy develop by itself; d) Abandoning or modifying the policy that generates grey economy. The final solution seems to be the most acceptable in theory and in practice.

a. Since the objective is to reduce the presence of the grey economy in the country, the main recommendation of this research is to direct the activities and measures primarily to stopping and removing the causes, and afterwards punishing the consequences of that phenomenon. Directly connected with that one is also the recommendation by which the Government of the Republic of Macedonia redefines (changes) its role on the market. Even though (in the last 3-4 years) we can notice serious signs that the situation is changing, still it is necessary to broaden the awareness of all the participants in the economic sector for the sake of respect for the regularity and the defined rules of the game, in the direction of enhancement of

⁸ Ibid, p. 13

the institutional frame, judicial arrangement, the moral values and the stimulators of the economic functions in the country.

- b. The multi-dimension of the issue, empirically confirmed with the research results, emphasizes the necessity for the government and its institutions to create a different approach for the creation, affirmation and implementation of the economic reforms, with the purpose of restoring the trust of the citizens to the institutions as components of consistent, responsible and non-compromising country. Only under these circumstances the citizens will be able to identify with the new liberal values, and not feel them as imposed from the "upper" levels, and consequently see the guilt for the failure of the transition process in the Republic of Macedonia in them.
- c. The most efficient manner to remove the causes for the occurrence and presence of the grey economy is improvement of the institutional frame in the country. This means improvement of the relations between the government and the economy. In order to realize that purpose, the government must improve the laws and remaining regulatory solutions more intensively than the way it is done up to now in certain areas of the economy: a new Law on labor relations is adopted, which introduces high punishments (8.000 Euros for the legal person and 500 – 1.000 Euros for the manager), if unregistered employees are found working in the corresponding trade company; a new Law on payment transactions is adopted, by which the possibilities for usage of the payment instruments such as cash, assignation, compensation etc. are eliminated (known as "payment with calculation"), in the case when the gyro account of the economic subject is blocked, and with that the possibility of payment of the obligations based on taxes and social security contributions by using those instruments in order to avoid (completely of partially) is eliminated; implementation not with a reduced, but at the contrary, with an enhanced intensity of the current project "regulatory guillotine" (many studies show the positive relation between the grey economy and the intensity of economic regulation), further enhancement of the regulation of the cash payments and consumptions through intensifying the fiscalization process everywhere possible, and obviously very necessary (for example on the green markets); permanent regulation wherever possible of the additional jobs of persons who, besides the regular one, have additional professional engagements (like the case of the medical doctors); capacity building of the Customs Service with the purpose of stopping further forms of grey economy on the big scale as it was in the previous period; energetic implementation in practice of the newly adopted Law for prevention of money laundering; enhancement of the controlling measures and punishments against the persons who act in unregistered (unreported) forms, but also punishments against the inspectors and custodians, who ease the previously mentioned deviant phenomenon, etc.
- d. The strong presence of the grey economy in the Republic of Macedonia can be vigorously reduced by the reduction of one of its biggest stimulators: the presence of money in circulation. That can be done in many manners⁹: by increasing the usage of payment cards and other ways of non cash payment, such as checks and bills of exchange; establishment of a universal payment card (adopted by all the users of the payment transactions), which will play the role of electronic money, that with the new Law on payment transactions are introduced as the newest financial instrument in the Macedonian economy; reduction of the legal opportunities (cashbox maximum) for withdrawing and usage of cash, as well as limitation of the possibilities for executing different kind of payments in cash (buying agricultural products, extending credits in cash, etc.).

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⁹ See more in Nenovski T., *Economic Mirror*, Nam, Skopje, 2002, p. 177-180.

e. In the upcoming period there must be a feeling established in the general public that the tax system is stable and that the tax burdening gets lower and lower, as a result of already reduced rates for certain taxes. At the same time, the practical results of the institutions in-charge (Public Revenue Office, Customs) must build an impression that the probability and possibility for discovering and appropriate punishment of the tax evasion are big. The central government should keep and enhance the current aggressive campaign through the media for the consequences from the substantial presence of the grey economy. Almost certainly, those activities will lead to the increase of the general public awareness of the audience for the need of tax payment and creating anti-heroes for the ones that do not do that.

f. There is no analysis of the grey economy which does not confirm that its reduction is possible by increasing the country's capacity for increase of the extent and quality of the public services. That imposes the need of organizational enhancement, efficiency, qualification and collaboration between the separate authorities and bodies of the central government, reduction of the influence of the central government to economy, rationalization of the public consumption, improvement of the public sector quality (including the further necessary reforms in pension and health system), cutting down of public administration, etc. Generally, we are addressing the need of improvement of the relations between the state and its citizens in all possible forms.

g. To all of these measures and activities for fighting the grey economy, the general impression of the establishment of a lasting and sustainable economic growth of the country must be added, and with that, the reduction of unemployment, the improvement of the standard of living and the increase of the tax ethics of the population, which will lead to a drastic reduction of the currently excessively high rate of grey economy in the Republic of Macedonia.

h. The analysis and the results from the field survey showed¹⁰ that the unreported and unregistered jobs are the main source of grey economy in the Republic of Macedonia. That means that the recommendations and measures for grey economy reduction which are mentioned in this research, as well as other research of the economic policy, should primarily be oriented in that direction. The following forms of action could significantly locate and extend the coverage of the grey economy (which will lead to a more precise determination of the GDP rate of the country), together with the usage of appropriate preventive – instructional and punishment measures in order to reduce the presence of the grey economy in the country:

- Enhancement of the controls in the activities (areas) that this research locates as most intensive, regarding the presence of grey economy;
- Follow-up of the already initiated activities of the State Statistical Office for extension of the coverage of that phenomenon and adjustment of the separate official indicators (components of the grey economy) with additional information, evaluations and estimations for the presence and effects of the additional work of persons already employed: seasonal work, short-time work, work of individuals from time to time, etc.);
- During the evaluation of the coverage and size of the grey economy, the data that the Public Revenue Office obtains regarding the size of the achieved results of the enterprises should be used more intensively than until now, and they should be included or used to correct the already included sizes of the economic indicators in the country;

¹⁰ Bogov, D., *Hidden economy in F.Y.R. of Macedonia and its treatment in the statistical office*, Statistical Office of Republic of Macedonia, 2002.

- Based on the indicators obtained with the previously mentioned procedures, the institutions in-charge should execute a theoretical calculation of the size of the value added tax that the subjects obligated by law should pay to the central budget. Based on that, they should have to make approximate estimations for the size of the newly created value in the country and for the areas where that value is created but officially not presented and where in the future the measures should be directed (control and punishment measures) in order to fight for maintaining and enhancing the current aggressive campaign of the central government through the public information means on the consequences from the great presence of the grey economy;
- The statistical system for calculation of GDP should be changed by adding elements that will increase its coverage and with that its authenticity. The efforts that the State Statistial Office makes in that regard, with a more frequent usage of the OECD methodology for grey economy coverage, should continue to improve. In that direction, the official statistics, besides the well-known direct and indirect approaches for the realization of the desired activity (extension of the areas the grey economy covers), should also import new approaches in that function. The usage of the approach for the spent electric energy, even though is not all-embracing and completely competent, would be a good method for location and evaluation of the major part of the grey economy;
- The further activities of the statistical and controlling institutions should, as much as possible, locate and estimate the amounts of the payments in cash and in kind production for their own needs, size of the tips which become a routine in Macedonian economy etc;
- Finally, for easier following and comparison of the presence of the grey economy, it is necessary to unify its definition and presence according to the internationally recognized definitions and criteria in the Republic of Macedonia, like the one of OECD.

Besides the measurement of the added value size of the economy of the Republic of Macedonia, the recommendation to change the concept of presence and measurement of the grey economy is of essential importance for the way that in the future the monetary, fiscal, foreign – trade and social policy will be managed. In other words, the determination and the way of management the macroeconomic policy in the country depends on the as measurement of the grey economy, as precise as possible. Its significant presence, as it happens in the development period of the country, leads to over - or underestimation of the (anti)inflation effects of the monetary and fiscal policy and the effects from the measures for reduction of the unemployment rate in the country.

8. Conclusions

The grey economy represents a significant part of the Macedonian economy. There are different reasons that cause and stimulate grey economy. The strongest influence comes from the high unemployment in the country, confusing legal decisions, great administrative business regulation, intensive private business sector development and other.

Because of its high value, grey economy is challenging and serious danger for macroeconomic planning and regulation. Knowing that the present Government of the Republic

of Macedonia has identified grey economy as one of the important areas that require action. Among the envisaged activities of the government for addressing this issue were:

- amnestying all businesses that have operated without being reported and paying taxes if they register in a previously defined time frame;
 - reducing various taxes paid by businesses;
- simplification of the procedures for obtaining licenses and permits through the Regulatory Guillotine process;
 - simplification of procedures in the Public Revenue Administration, etc.

What the program of the Government lacks is direct measures. Namely, the above listed planned activities indirectly affect grey economy activities and put in place conditions for its integration in into the formal sector. However, there is a need for directly focused measures that would precipitate the integration of the grey economy in the formal sector, once the right conditions are put in place. The recommendations of this research are exactly in that direction.

The main recommendation is directed towards activities and measures of the authorities for preventing and removing the reasons of the appearance of grey economy and punishing the consequences of this national economy "evil". The government has to increase the speed for redefining (changing) its role on the market. Finally, there is a need for widening the awareness of all business players for the need of respecting the regularity and playing according to the rules, as well as for enforcing the institutional framework, legal order, moral values and the motivators of the country's functional economy.

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Appendix I: General distribution "The public on grey economy"

- SURVEY RESULTS -

1) WHAT ARE THE BIGGEST PROBLEMS THAT MACEDONIA IS FACED WITH?

1. Unemployment and poverty	73%
2. Grey economy	8%
3. Corruption in public institutions	10%
4. Security of the citizens and crime	4%
5. Interethnic problems	1%
6. I don't know	4%

2) IN WHAT WAY DO YOU GET INFORMED ON THE GREY ECONOMY PROBLEM?

1. Media	62%
2. Friends and relatives	14%
3. Colleagues at work	4%
4. Personal experience	14%
5. I am not informed on this phenomenon	5%

3) IN WHICH AREA IS THE GREY ECONOMY MOSTLY PRESENT:

1. In construction	12%
2. In agriculture	5%
3. In industry (textile or other)	14%
4. Piracy and counterfeited good	18%
5. Import - export	18%
6. Bazaars	19%
7. Other	4%
8. I don't know	10%

4) IN WHICH OF THE FOLLOWING AREAS IS THE GREY ECONOMY MOSTLY PRESENT?

1. Buying products on the green bazaars	10%
2. Buying products on the auto - bazaars	4%
3. Sale of goods by street sellers	11%

1%
16,5%
9%
10%
22%
6%
1%
7%

5) WHAT AFFECTS MOSTLY THE OCCURENCE OF THE GREY ECONOMY?

1. The impossibility for the citizens to satisfy their existential needs	29%
2. Dysfunction of the legal system	21%
3. The bad economic situation of the country	27%
4. The low punishments for the participants in the grey economy	9%
5. The lack of moral values	2%
6. The problems which emanate from transition	6%
7. I don't know	6%

PLEASE, WITH A GRADE FROM 1 TO 5, ESTIMATE THE RESPONSIBILITY OF EACH OF THE FOLLOWING IINSTITUTIONS ON THE EXISTANCE OF THE GREY ECONOMY IN THE REPUBLIC OF MACDONIA. HAVE IN MIND THAT THE GRADE 1 INDICATES THE LOWEST RESPONSIBILITY, WHILE THE GRADE 5 THE HIGHEST?

6) CUSTOMS

1. One	9%
2. Two	13%
3. Three	23%
4. Four	26%
5. Five	29%

7) MARKET INSPECTORATE

1. One	8%
2. Two	13%
3. Three	25%
4. Four	28%
5 Five	26%

8) POLICE

1. One	9%
2. Two	16%
3. Three	33%
4. Four	27%
5. Five	15%

9) JUDICIARY

1. One 12% 2. Two 14% 3. Three 19% 4. Four 26% 5. Five 29%

10) LABOR INSPECTORATE

1. One 8% 2. Two 13% 3. Three 25% 4. Four 27% 5. Five 27%

11) PUBLIC REVENUE AUTHORITY

1. One 7% 2. Two 13% 3. Three 28% 4. Four 23% 5. Five 29%

12) ACCORDING TO YOUR OPINION, IN THE FOLLOWING TWO – THREE YEARS, THE GREY ECONOMY IN THE REPUBLIC OF MACEDONIA WILL:

1. be reduced 29%
2. will be increased 19%
3. will stay the same 34%
4. I don't know 18%

13) HOW CAN THE CITIZENS HELP IN THE REDUCTION OF THE GREY ECONOMY SIZE?

Report the participants in the grey economy to the authorities in charge
 To avoid buying products for which a fiscal receipt is not given
 The citizens are not obligated to help, it is a problem of the state
 Other
 I don't know

14) HOW OFTEN DO YOU BUY PRODUCTS FROM THE GREY ECONOMY?

1. On a daily basis	35%
2. Two to three times a week	22%
3. Once a week	15%

4. Two to three times a month	17%
5. I never buy products from the grey economy	11%

15) IF SOMEONE WOULD EMPLOY YOU IN THE GREY ECONOMY AND NOT REGISTER YOU AS EMPLOYED WHAT WOULD YOU DO?

1. Report the employer to the inspection authorities	20%
2. I would keep silent, because the most	
important thing is to keep my job	48%
3. I would quit my job and seek for another	15%
4. I don't know	17%

16) WHAT SHOULD BE DONE IN ORDER TO REDUCE THE GREY ECONOMY?

1. To increase the taxes	0%
2. To reduce the taxes	4%
3. To create new jobs	32%
4. To raise the salaries	11%
5. To impose high punishments	10%
6. To provide economic reforms and growth of production	16%
7. Better functioning of the state authorities	
(police, judiciary, inspection)	20%
8. Nothing can be done	2%
9. I don't know	5%

17) DOES BUYING GOODS WITHOUT A FISCAL RECEIPT PROVIDE FACILITATE THE DEVELOPMENT OF THE GREY ECONOMY?

1. Yes 86% 2. No 14%

18) DOES THE COUNTRY STIMULATE THE GREY ECONOMY IN GENERAL?

1. Yes 57% 2. No 43%

19) THE GREY ECONOMY REPRESENTS UN - FAIR COMPETITION TO THE FORMAL ECONOMY (TO THE COMPANIES WHICH WORK LEGALLY AND REPORT THEIR INCOME)

1. Yes 86% 2. No 14%

20) DOES THE GREY ECONOMY IMPOVERISH THE COUNTRY?

- 1. Yes 84% 2. No 16%
- 21) IS THE COUNTRY EFFICIENT IN THE REPRESSION OF THE GREY ECONOMY?
- 1. Yes 36% 2. No 64%
- 22) DOES THE PREDOMINANCE OF THE PRIVATE SECTOR INCREASE THE GREY ECONOMY?
- 1. Yes 50% 2. No 50%
- 23) SHOULD THE COUNTRY BE MORE TOLERANT ON THIS PHENOMENON?
- 1. Yes 25% 2. No 75%
- 24) DO THE ACTIVITIES OF THE CURRENT GOVERNMENT LEAD TO
- Grey economy increasement
 Grey economy reduction
 Nothing is changing
 I don't know
- 25) WILL THE ENTERANCE OF THE REPUBLIC OF MACEDONIA IN THE EUROPEAN UNION CONTRIBUTE FOR THE REDUCTION OF THE GREY ECONOMY?
- 1. Yes 74% 2. No 26%

26) SHOULD THE GREY ECONOMY BE SANCTIONED AS A PENALTY ACT?

1. Yes	54%
2. No, because in these days it is the only way to survive	32%
3. I don't know	14%

27) IF THE INCOMES IN YOUR HOUSEHOLD ARE INSUFFICIENT HOW DO YOU COMPENSATE THE DEFICIT?

	 I decrease the consummation I buy products in the informal market I perform additional unregistered activities Other 	45% 20% 23% 2%
D. LUOH I KHOW	4. Other 5. I don't know	2% 10%