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IMPACT OF THE SHADOW ECONOMY ON INCOME DIFFERENTIATION IN TRANSITION COUNTRIES

One of the essential phenomena that accompany the process of economic transformation in post-communist countries is rapid growth in the size of the grey economy in economy as a whole. Although it is difficult to define the issue precisely, however, generally speaking it is an economic activity run outside the state registration and regulation, that is, not covered with taxation. This includes both legal activities that are not subject to taxation and illegal operations, such as criminal activities.

There are a lot of terms that are used to name the phenomenon. They are as follows: grey economy, black economy, underground economy, subterranean, second economy, shadow, informal, irregular, hidden, occult, parallel economy. All of them may be found in worldwide publications what means that the problem is permanent and exists in each economy (Krajewska 1998, p. 89). Differences refer to scale and forms of the phenomenon. It is estimated, that in the years 2000–2001 level of output produced in the underground economy in the OECD countries accounted for 19.7% of GDP and that 15.3% of population in working age was employed there (Schneider 2000). Size of the grey economy was relatively the lowest in Switzerland, Japan, the Netherlands, Germany, France and Great Britain (below 10% of GDP). In the European Union countries, the shadow economy is the most developed in Spain (25% of GDP) and in Greece (30%) (Herer, Sadowski 1996, p. 32).

In transition countries the shadow economy developed already in the preliminary stage of transformation process, amounting to 23.4% of GDP in the Central and Eastern Europe countries and to 32.9% in the former Soviet Union countries. On the turn of 2000 and 2001 the size of the grey economy in the countries of Central and Eastern Europe increased to 29.2%, while in the former Soviet Union countries to 44.8%, in some countries (Azerbeijan, Kazakhstan) exceeding even 60% of GDP (see Tab. 1).

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Table 1. The size of the shadow economy in transition countries

Transition countries	Size of the shadow economy (as % of GDP)		Employment in the shadow economy (as % of working age population)
	Average 1990–1993	Average 2000–2001	
Central and Eastern European Countries			
Bulgaria	27.1	36.4	30.4
Croatia	24.6	32.4	27.4
Czech Republic	13.1	18.4	12.6
Hungary	22.3	24.4	20.9
Macedonia	35.6	45.1	35.1
Poland	22.3	27.4	20.9
Slovakia	15.1	18.3	16.3
Slovenia	22.9	26.7	21.6
Average in Central and Eastern European Countries	23.4	29.2	23.3
Former Soviet Union Countries			
Armenia	40.1	45.3	40.3
Azerbaijan	45.1	60.1	50.7
Belarus	35.6	47.1	40.9
Estonia	34.3	39.1	33.4
Georgia	45.1	66.1	53.2
Kazakhstan	31.9	42.2	33.6
Kyrgyzstan	35.2	39.4	29.4
Latvia	25.7	39.6	29.6
Lithuania	26.0	29.4	20.3
Moldavia	29.3	44.1	35.1
Ukraine	29.4	51.2	41.2
Uzbekistan	22.1	33.4	33.2
Average in Former Soviet Union	32.9	44.8	37.1

S o u r c e: Schneider 2000.

There are some causes of rapid development of the shadow economy in transition countries:

1) high tax burdens that determine legal and physical persons to avoid taxation (in theory the argument is often explained with the use of the Laffer curve);

2) high social insurance contributions stimulating private employers, especially small ones to illegal employment (Ikiz 2000)[1];

[1] For example in Bulgaria a typical situation in small and medium enterprises is as follows: social contributions and taxes are paid on the basis of the minimum wage, while the remaining part of wage is paid unofficially. In 1999 the private sector produced about 65.3% of GDP and employed 63.3% of total employment, and insurance firms received only 50% of due contributions.

3) weak and ineffective system of tax administration-low exaction of taxes, low sanctions for avoiding taxes (not comparable with advantages), inefficient execution of penalties;

4) excessively bureaucratic, time-consuming administrative and legal regulations stimulating activities in the underground economy;

5) ineffective, corrupt government institutions and existence of ties between political parties and business that favour illegal economic activity;

6) weak banking system which often allows the financial sources for economic activity to come from illegal activities;

7) high unemployment rate and ineffective system of social security conducive to illegal employment;

8) low level of national income and big share of natural economy (especially in rural regions and small towns);

9) geographical location of some countries (international communication routes) favouring big, illegal transactions and border trade on a smaller scale (the so-called ants trading with alcohol and cigarettes).

The economic literature (Ikiz 2000) points at the following negative aspects of high share of the grey economy:

1) basic economic indicators such as level and dynamics of GDP, inflation, employment are distorted – the government does not posses reliable fundaments for rational economic policy;

2) unfair competition in relation to legally acting entities that have higher costs due to paying taxes and social insurance contributions;

3) higher budget deficit due to lower tax contributions;

4) higher interest rate, as in the conditions of low tax exaction the alternative forms of financing public spending are state bonds. Growing supply of bonds is accompanied by higher interest rates that increase demand for the bonds;

5) weak social security system as illegal workers do not pay social contributions;

6) negative social valuation of the government is not favourable for implementation of the reforms increasing efficiency of economic policy.

Mentioned above arguments on disadvantages of the underground economy live out of account one essential issue: deepening income differentiation and its social and economic consequences. The paper will especially focus on this aspect of the grey economy.

However, in order to avoid one-sided picture of the shadow economy, one should point at some positive aspects of its existence. Especially, the shadow economy contributes to (Ikiz 2000):

1) stimulation of economic growth due to lack of formal limits concerning production level;

2) increase of employment which improves situation on the official labour market;

3) growth in incomes of population what stimulates demand;

4) weakening or delay the social discontent resulting from low rate of economic growth, high unemployment, etc.

It should be underlined, however, that positive aspects of the shadow economy act effectively only in a short run. Dissemination of the grey economy may cause intensification of strong negative effects in a long run.

In literature of seventies and eighties on developed economies the arguments may be found that high taxes and high social transfers may increase the size of the grey economy. On one hand, there exist strong spurs for avoiding taxes, and high unemployment benefits incline to keep the status of the unemployed, on the other. Finally, high taxes and transfers lead to more equal distribution of incomes. However, it was also pointed that this may take place at the cost of growth of the size of shadow economy (Feige 1979; Frey, Pommerehne 1984). A hypothesis was even formulated that welfare state finds itself in extremely frustrating situation, as redistributing effects of tax policy lead to lover budget revenues, and this in turn threatens the existence of a welfare state concept (Streit 1984, pp. 109–119).

It is worth to mention that in transition countries a direction of relationships between taxes, social inequality and size of the shadow economy is different than in developed market economies.

Centrally planned economy was characteristic of low differentiation of incomes. It was criticised for lack of spurs for stimulating initiative, implementation of innovations and taking risky activities, which are driving forces of market economy. It was assumed then that growing differentiation of incomes would result in higher dynamics of the economy through stimulation of entrepreneurship, increase in labour productivity, implementation of technical and organisational progress.

Since the beginning of transition process the shadow economy has been growing rapidly, and the same refers to differentiation of incomes. American economists' empirical research points at strong correlation (0.76) (Rosser, Rosser, Ahmed 2000) between the size of shadow economy and the level of income differentiation measured with the use of Gini coefficient, as well as strong correlation (0.705) (Rosser, Rosser, Ahmed 2000) between changes in size of the grey economy and changes of Gini coefficient. The researchers also tried to find ties between the size of shadow economy and different variables in 18 transition countries. Synthetic results of the investigation are presented in Table 2.

Table 2. The size of the shadow economy and other basic data on transition countries

Countries	SE	Δ SE	Gini	Δ Gini	Drop in production	Max. inflation	WEk	Dem.	Taxation	
									labour	capital
Belarus	15.0	–0.4	0.248	0.014	39.3	1,994.0	37	50	71	99.2
Bulgaria	29.4	6.7	0.340	0.110	27.4	338.8	73	83	57	93.5
Czech Rep.	17.2	11.2	0.239	0.035	21.4	52.1	90	92	69	85.2
Estonia	24.6	5.7	0.392	0.127	34.9	946.7	90	75	49	74.9
Georgia	62.2	37.7	0.560	0.270	74.9	8,273.5	37	33	–	–
Hungary	28.1	1.1	0.243	0.02	18.3	34.6	87	92	73	81.0
Kazakhstan	306	13.6	0.328	0.053	51.2	2,566.6	40	25	62	98.6
Kyrgyzstan	39.2	16.3	0.553	0.293	50.6	1,365.6	77	58	58	96.7
Latvia	32.6	19.8	0.270	0.018	52.0	958.2	80	75	55	80.0
Lithuania	30.2	18.9	0.348	0.100	61.1	1,162.6	83	83	53	94.7
Moldavia	36.8	18.7	0.360	0.111	60.6	2,198.4	57	50	37	97.2
Poland	15.8	0.1	0.310	0.045	17.8	639.6	87	83	62	84.0
Romania	16.9	–5.4	0.278	0.048	26.4	295.5	73	58	57	94.2
Russia	38.5	23.8	0.446	0.186	48.3	2,510.4	67	58	55	97.8
Slovakia	15.4	9.4	0.200	0.0	25.1	58.3	87	75	68	87.6
Slovenia	25.0	–1.7	0.251	0.036	16.8	246.7	83	92	63	92.6
Ukraine	41.8	25.5	0.330	0.098	52.1	10,155.0	27	58	63	99.3
Uzbekistan	9.8	–1.6	0.330	0.038	15.6	1,232.8	43	25	45	97.8

Explanations:

SE – size of the shadow economy as % of GDP in 1994

Δ SE – change in size of the shadow economy between 1989 and 1994 (in %)

Gini – Gini coefficient in 1994. The coefficient is between 0 and 1; the higher the value of the coefficient, the more unequal income distribution

Δ Gini – changes in Gini coefficient between 1989 and 1994

Drop in production – cumulated drop in the level of output between 1989 and 1994

Max. inflation – maximum annuall inflation after 1989 (in %)

WEk – economic liberty (liberalisation) coefficient – contained between 0 and 100; the higher the coefficient the higher level of libaralisation

Dem. – democracy of the system coefficient – contained between 0 and 100; the higher the coefficient the higher level of democracy

Labour taxation – effective marginal labour taxation rate (in %)

Capital taxation – effective marginal capital incomes taxation rate (in %)

Source: J. B. Rosser, M. V. Rosser, 2001.

Analysed countries may be divided into several groups taking into account the size of the shadow economy and other economic and social variables.

The first group consists of Czech Republic, Poland, Slovenia, Slovakia and Hungary. Drop in production connected with transition shock was relatively lower there, democratic processes are the most advanced, and macroeconomic stability is sustained. The size of the grey economy is relatively insignificant; from about 15% (Slovakia, Poland) to 25% (Slovenia) and 28% (Hungary). At the same time differentiation of incomes is low in the analysed countries (Gini coefficient accounts for from 0.31 in Poland to 0.2 in Slovenia). Effective marginal rate of labour taxation is amongst the highest in transition economies, while taxation of capital is relatively low.

Russia, Ukraine, Moldavia and Georgia create a group clearly different from mentioned above Central and Eastern European countries. Drop in production was very deep there at the preliminary stage of transition. The grey economy was developed, economic system was unstable, distribution of incomes more unequal and higher marginal taxation of capital (but with lower rate of labour taxation).

Bulgaria and Romania have been transforming their economies with a delay. Size of the shadow economy is similar to that in remaining European post-communist countries. In Romania the share of the grey economy was closer to that observed in Poland, but differentiation of incomes was not so high. In Bulgaria relatively larger size of the grey economy was accompanied by higher income differentiation. Labour and capital tax burdens were close to those existing in remaining transition economies of Central and Eastern Europe.

Baltic States (Estonia, Lithuania and Latvia) set up the next group of countries. Progress in economic transition process as well as democratisation of social and political life there was comparable with that of Central and Eastern European countries. However, the shadow economy is bigger there and income differentiation has been growing quickly. There also exist some differences between mentioned countries. In Estonia the size of the shadow economy was the lowest (24.6%), but income differentiation was the highest (Gini coefficient accounted for 0.392). In Latvia income differentiation was lower (0.270), but the share of the grey economy amounted to 32.6% of GDP. Moreover, the countries introduced a tax reform based on proportional taxation of physical and legal persons and the same PIT and CIT rates (besides Lithuania). Effective marginal rate of labour taxation was significantly lower than effective marginal rate of capital taxation.

In the Central Asia countries a situation was differentiated. For example in Kyrgyzstan, where transformation process was evaluated as highly advanced, the share of the shadow economy in GDP was high (39.2%) as well as income differentiation (Gini coefficient of 0.553). In Uzbekistan, where progress in liberalisation and democratisation was evaluated significantly lower, the size of the grey economy was insignificant (9.8% of GDP) while differentiation of incomes was similar to that existing in the Central European countries.

The case of Belarus is totally exceptional and untypical. Small size of the shadow economy and relatively equal distribution of incomes accompany undemocratic and unreformed economic system.

The World Bank empirical research concerning differentiation of incomes in different regions of the world (Tab. 3) proves rapid grow in inequalities (measured with the use of Gini coefficient) in transition economies.

Table 3. Gini coefficients in some regions of the world

Regions and countries	Years	
Latin America	**1990**	**1999**
Argentina	0.501	0.542
Brazil	0.627	0.640
Bolivia	0.538	0.586
Chile	0.554	0.559 (2000)
Mexico	0.536	0.539
Caucasus and Central Asia Countries	**1987–1990**	**1996–1999**
Armenia	0.27	0.59
Georgia	0.29	0.43
Kyrgyzstan	0.31	0.47
Kazakhstan	0.30	0.35
Tajikistan	0.28	0.47
Turkmenistan	0.28	0.45
CIS Countries	**1987–1990**	**1996–1999**
Russia	0.26	0.47
Ukraine	0.24	0.33
Moldavia	0.27	0.42
Central Europe and Baltic Countries	**1987–1990**	**1996–1999**
Czech Republic	0.19	0.25
Hungary	0.21	0.25
Slovenia	0.22	0.25
Poland	0.28	0.33
Lithuania	0.23	0.34
Latvia	0.24	0.32
Estonia	0.24	0.37
European Union Countries	**Average in 1980**	**Average in 1990**
Sweden	0.20	0.23
Belgium	0.26	0.27
The Netherlands	0.24	0.25
France	0.28	0.28
Germany	0.27	0.28
Italy	0.31	0.35
Great Britain	0.29	0.31
Non-European OECD Countries		
USA	0.34	0.34
Canada	0.29	0.29
Australia	0.31	0.31

S o u r c e: The World Bank 2000, OECD 2001, ECLAC 2002, cited from: S. Golinowska, 2002.

In transition countries there is a growth in both income inequalities and activities the in shadow economy. However, defining the direction of relationships is not an easy task. On one hand, development of the grey economy leads to higher social differentiation, as:

1) economic entities do not pay taxes and social contributions so they have higher disposable incomes;

2) thanks to illegal activity and corruption a part of the society grows richer quickly, however often at the cost of growing impoverishment of the others;

3) lower budget revenues result in lower social payments and do not reduce disproportion of incomes;

4) in terms of high unemployment the workers' power is weaker (especially those employed in the shadow economy), as they accept worse working standard and lower wages.

On the other hand, one should take into account occurrence of a kind of feedback. Income inequalities, especially in connection with lack of macroeconomic stability favour development of the grey economy. Low social transfers and high unemployment make illegal employment easy, what turns into further impoverishment and pauperisation of the society.

Deepening unacceptable social inequalities leads to serious economic and social consequences (Golinowska 2002, p. 29). They are especially: poverty and social exclusion, pressure on growth in social payments causing the increase in taxes and contributions, limited possibilities of development of human capital and citizen's society, growth of aggressive behaviour and criminality, as well as occurrence of group social conflicts leading to reduction of stability of development and withdrawal the foreign capital (Golinowska 2002, pp. 30–31).

In literature evaluating the progress of economic reforms in transition countries an attention is usually paid to threatens connected with rapid development of the shadow economy, especially in a context of negative impact on the level of budget revenues and danger of deepening budget deficit (Johnson, Kaufmann, Shleifer 1997). Relationship between the level of tax rates and development of entrepreneurship is pointed at, and lowering tax burdens in transition countries is postulated (Mitra, Stern 2002). However, Rossers' investigation indicates that impact of tax burdens on the size of the shadow economy is not so obvious as it is usually suggested.

Baltic States' experiences do not prove the next myth. Progressive personal income taxation is often treated as essential factor stimulating development of the grey economy. Advocates of proportional tax bank on increase of budget revenues and reduction of the shadow economy. However, in Baltic States budget revenues are relatively low and the shadow economy and income inequalities higher that for example in the Wysehrad Group countries, where taxes are progressive (Krajewska, Krajewski 2003, pp. 171–182).

On the turn of eighties and nineties the so-called Washington Consensus became a trial of creation a framework for the role of the state in the economy. The World Bank, the International Monetary Fund and other influential international institutions traced out a direction of economic policy leading to breakdown the stagnation and acceleration of economic growth. The key areas constituted privatisation, deregulation, liberalisation of trade, restrictive fiscal policy, tax reform (widening tax basis and lowering tax rates) and creation the conditions for free inflow of direct foreign investments (Williamson 1993).

Experiences from the second half of nineties such as global financial crisis, drop in the rate of economic growth, deepening technological gap and widening income differentiation between rich and poor countries create a need for different view at the Washington Consensus instruments. The role of legal and institutional system, competition, expenditures on education and science and fair distribution in stimulation of economic growth is more and more clearly seen. A characteristic thing is that leading international organisations, enriched with experiences from transition economies, are precursors of new thinking and are not afraid of serious changes in their opinions that previously became fundaments of the Washington Consensus (Kołodko 1999, pp. 119–140). It is worth to cite views of the World Bank and the IMF concerning distribution of incomes. In "World Development Report 1996" the authors underline that "definition of social consensus will be a key factor for succeeding transformation in a long run, as comparative analyses in different countries prove that societies with high property-income inequalities are as a rule less stable in political and social aspects; they are also characteristic of lower rate of investments and growth" (Kołodko 1999, p. 133) Michel Comdessus, a chief of the International Monetary Fund, has a similar opinion: "At the moment we know that bigger cake is not enough. The way of its distribution is the same important as dynamics of development (Kowalik 2002, p. 129)".

According to J. E. Stiglitz, in developing countries privatisation, liberalisation and stabilisation are not enough for ensuring long-term growth of the economy. A consensus on the reforms is necessary. Reforms should not be adapted from outside, as they do not guarantee success. Institutional changes are important, but redistribution of incomes is important as well (Stiglitz 2001, p. 2).

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WPŁYW SZAREJ STREFY NA ZRÓŻNICOWANIE DOCHODÓW W TRANSFORMUJĄCYCH SIĘ GOSPODARKACH

We wszystkich transformujących się gospodarkach szybko rośnie udział szarej strefy w gospodarce. Rośnie także zróżnicowanie dochodów. Trudno jednak określić kierunek zależności między tymi zjawiskami. Z jednej strony, rozwój szarej strefy gospodarki prowadzi do wzrostu zróżnicowania dochodów, z drugiej jednak nierówności dochodowe, zwłaszcza powiązane z brakiem stabilizacji, sprzyjają rozwojowi szarej strefy. Niski poziom świadczeń socjalnych i wysokie bezrobocie sprzyjają wzrostowi zatrudnienia w szarej gospodarce, co z kolei pogłębia nierówności i prowadzi do pauperyzacji społeczeństwa.

Szara strefa jest w literaturze z reguły analizowana z punktu widzenia uszczuplania dochodów budżetowych (z powodu unikania podatków). W artykule nacisk jest natomiast położony na społeczne konsekwencje rozwoju szarej strefy oraz zagrożenia dla kontynuacji prorynkowych reform w transformujących się gospodarkach.