

MARIA PIOTROWSKA

Wroclaw University of Economics
Ul. Komandorska 118/120
53-345 Wroclaw
Poland

Email : mariap@credit.ae.wroc.pl
Tel. 48 71 3680-187

THE REDISTRIBUTIVE ROLE OF FISCAL POLICY IN TRANSITION COUNTRIES: THE CASES OF POLAND AND THE CZECH REPUBLIC

Introduction

There is a common opinion that extreme inequality of income, wealth, or opportunity is unfair and that efforts should be made to raise the incomes of the poorest members of society, there is, however, little agreement which strategies should be adopted to promote equity. Some countries have actively promoted the use of public resources to raise the incomes of those on the bottom tier of the income distribution. Others have concentrated on the top of the income distribution by levying highly progressive taxes. Yet others, fearing that policies targeting the poor may result in economic inefficiencies, have applied an indirect approach and they have decided to help low-income families by stimulating overall economic growth.

Recently most researchers have agreed that more equity would not dampen long-term growth but that it could indeed reinforce it. In the long run, the best way to help the poor is to empower them. Government spending on education, public health, and medical care can enable people to pull themselves out of poverty, simultaneously spending on these services plays genuinely positive role in the process of economic growth.

Researchers usually emphasise that the tax system is not an appropriate vehicle for carrying out major shifts in the income distribution. Social safety nets and well-targeted transfer programs are important means of softening hardships. Policies to promote equity should, however, be funded primarily by restructuring expenditures rather than by increasing government spending.

In spite of the differences in strategies, fiscal policy – taxation and spending – is still a government's most direct tool for redistributing income, in both the short and the long run.

The increase in income inequality has been most striking in the transition economies at the first steps of their economic reforms. The reasons responsible for an increase in income inequality and poverty covered: the emergence of unemployment; price liberalisation resulted in living cost increase; the liberalisation of wage-setting, and the emergence of a private sector, and possibilities to profit from open borders which caused earnings dispersion. Fiscal policy has counteracted the existence of poverty and limited income inequality to the different extent in particular transition countries.

The purpose of the paper is to present the effects of the different fiscal policy strategies on income and consumption inequalities. The comparative analysis covers the Czech Republic that can be a good example of the offsetting effect of fiscal policy on income inequality and Poland where fiscal policy has been based on the different principles.

The objectives of the paper address the following issues:

1. The redistribute effects of traditional fiscal policy, operating by raising taxes and increasing government expenditure, and the results of policy promoting equity only by well-targeted transfer programs.

2. The relationships between fiscal policy strategies and consumption inequality.

Methods and data

The method

The research was based on the method of analysing the effect of small changes in income sources on the inequality of income distribution and the effect of small changes in a commodity expenditure on consumption inequality. This approach was developed in: Lerman and Yitzhaki (1985, 1994), Stark, Taylor and Yitzhaki (1986) and Yitzhaki (1994) and used by the authors for analysing the distributional effects of the taxation reforms in USA (Lerman and Yitzhaki 1994), Israel (Yitzhaki 1994) and Romania (Yitzhaki 1997).

The method is based on the extended Gini coefficient (Yitzhaki 1983 and Chakravarty 1990) as a measure of income inequality. To calculate the Gini coefficient households must be ordered according to after-tax family income per individual from the lowest income to the highest income or according to total expenditures per individual also from the lowest expenditure to the highest one. In last case total expenditure is considered as a proxy for a permanent income and consumption. To take into account family size, each component of family expenditure, each component of family income and each tax as well as total after-tax income and total expenditure are divided by the number of equivalent adults in the household. The equivalence scale proposed by the OECD (1982) is used as the scale adjustment factor. For each household the number of equivalent adults is calculated as follows:

$$\text{number of equivalent adults} = 1 + 0.7 \cdot A + 0.5 \cdot C$$

where:

A - number of adults other than the head of the household

C - number of children in the age under 13

The use of the concept of expenditure (or income) per standard adult lets focus on the economic well-being of individuals.

Let y denote total family total expenditure (or total after-tax income) and x_i ($i = 1, \dots, n$) represents expenditure on specific commodities (or income component i). The extended Gini coefficient of total expenditure (or total after-tax income) can be calculated using the following formula (see Lerman and Yitzhaki, 1994, p.409)

$$G_y(n) = \{-n \operatorname{cov}(y, [1 - F_y(y)]^{v-1})\} / \mu_y \quad n > 1$$

where:

$G_y(n)$ - the extended Gini coefficient of total expenditure (or total after-tax income)

y ,

μ_y - mean income,

$F_y(y)$ - the cumulative distribution of y ,

$v > 1$ - constant representing inequality aversion.

The parameter v is determined by the researcher and lets reflect a relative preference for equality. As v goes from 1 to infinity the extended Gini index places increasing relative weight on inequality at the bottom part of the income distribution. If v is closed to 1, the extended Gini represents indifference to inequality. If v goes to infinity, the extended Gini represents a desire to maximise the income of the poorest

in society. If $\nu = 2$, the extended Gini represents the ordinary Gini coefficient, when inequality at the middle of the income distribution is mainly taken into account.

The analysis of the effect of marginal changes in expenditure components (or income sources) on inequality relies on the (Gini) income elasticity. The first step of the method is the source decomposition of the Gini coefficient, G_y , (derived in Lerman and Yitzhaki 1985). The effect of a particular expenditure component (or income source or a tax) on the Gini coefficient for total expenditure (or total after-tax income), G_y , can be presented as a following function see (Lerman and Yitzhaki, 1994, p.405):

$$G_y = \sum G_i R_i S_i$$

where:

G_i - the Gini (or extended Gini) coefficient of expenditure on commodity (or income source or tax) i ;

R_i - the Gini correlation between expenditure on commodity (or income source) i and the cumulative distribution of total expenditure (or after-tax income);

S_i - the share of expenditure on commodity (or income source) i in total expenditure (or after-tax income): if income source i is a tax, then $S_i < 0$.

The term $R_i G_i / G_y$ can be interpreted as the income elasticity of expenditure on commodity (or income source) i . The income elasticity is applied for analysing the impact of marginal changes in expenditure components (or income source) on income inequality measured by the extended Gini coefficient. The interpretation is as follows:

- for an expenditure on commodity i :

If the elasticity of expenditure on commodity $i > 1$, it means that the expenditure

on this commodity has the strong impact on consumption inequality;

- for a tax :

A tax is defined as progressive if an increase in the tax reduces the Gini coefficient of after-tax income. It means that the change in the tax affects the rich more than it affects the poor.

The progressivity (regressivity) of a change in the tax depends on whether the (Gini) income elasticity is greater or smaller than one. The impact of a change in a tax is treated as follows :

income elasticity = 1 indicates no effect on inequality;

income elasticity > 1 means that a tax on income source
reduces inequality; a tax is progressive;

income elasticity < 1 indicates a regressive tax.

- for a transfer :

Subsidies aimed at alleviating poverty are expected to have negative elasticities.

income elasticity < -1 indicates that a transfer is a well-targeted policy
instrument

income elasticity > 0 it means that a transfer completely lost its
effectiveness as an instrument of alleviating poverty

The income elasticity is applied to determine 1) the contribution of income sources to income inequality; 2) progressivity (regressivity) of the income tax; 3) the impact of an expenditure on any commodity on consumption inequality; 4) the efficiency of transfers in alleviating poverty.

The income elasticities enable to evaluate the impact of a marginal change in a tax (or a transfer) on income inequality and the impact of a marginal change in a commodity expenditure on consumption inequality. It is only required income inequality (or consumption inequality) to be measured by the extended Gini coefficient, and the evaluation to be restricted to marginal changes. Yitzhaki (1997, p.254) suggests that if a reform fails to change the structure of an economy, or if it does not change incomes (or expenditure) by more than 10 percent, an analysis based on margins is sufficient as a policy guide.

The data

The data come from the 1994 and 1997 Family Budget Surveys (FBS) of the Czech Republic and Poland. For the Czech Republic, the data have been collected annually. In 1994 the Czech sample includes 2763 observations (households) and the 1997 survey covers 2609 observations. For Poland, only the monthly data are available. The Polish sample consists of 32085 households in 1994 and 31776 households in 1997. The samples were representative for the populations in each country. The 1994 samples represent the distributions in each countries after introducing the new system of taxation (personal income taxes, VAT and other indirect taxes) while the 1997 samples show the distributions after changes in the tax and transfer systems.

Findings

The extended Gini coefficient as a measure of income inequality was calculated for $\nu = 2$ to obtain the regular Gini. The greater ν , the more the impact on the poor is stressed. Two values of ν , (i. e. $\nu = 4$ and $\nu = 6$), were added to represent additional emphasis on low-income groups and one value of ν , ($\nu = 1.5$), to reflect the stress on groups at the top of the income distribution. The values of the extended Gini coefficient are showed in Table 1.

Table 1. Extended Gini coefficient of total after-tax income

	Gini parameter $\nu =$			
	1.5	2	4	6
The Czech Republic				
1994	0.136	0.209	0.336	0.388
1997	0.133	0.202	0.315	0.359
Poland				
1994	0.215	0.313	0.479	0.552
1997	0.225	0.324	0.488	0.558

Source: The author's calculations

Comparison of the regular Gini, $\nu = 2$, presented in the Table 1, with the regular Gini equal to 0.31 for the group of Nordic countries, which are the most egalitarian OECD economies (Commander, 1998, p.500), points out that income inequality in Poland was close to the level in Nordic countries while in the Czech Republic income inequality was significantly lower than in the most egalitarian

Western countries. In addition, in the Czech Republic income inequality tended to decline between 1994 and 1997 while in Poland it increased.

The difference in income inequality between these two countries was caused, to the significant extent, by the different fiscal policy strategies aimed at counteracting social costs of economic reforms. Traditional fiscal policy, operating by raising taxes and increasing government expenditures has been carried out in the Czech Republic, while in Poland policy promoting equity has been limited mainly to transfer programs.

Income tax

The findings for the Czech Republic point out that income taxes were progressive (Table 2). They reduced considerably income inequality. For example, taking into account only the regular Gini, in 1997 in the Czech Republic the 1% increase in after-tax income was associated with the 2.2 % increase in income tax. For the Czech the elasticities of income tax were almost independent of the extended Gini parameter, ν . In Poland the findings show that an income tax was neutral for the regular Gini coefficient, $\nu = 2$, (Table 2). It implies that in Poland an income tax was not an instrument used to lower income inequality while in the Czech Republic an income tax contributed considerably to the reduction in income inequality.

Table 2. Elasticities of income tax with respect to after-tax income

	Gini parameter, $\nu =$			
	1.5	2	4	6
The Czech Republic				
1994	2.144	2.189	2.198	2.161
1997	2.197	2.215	2.192	2.141
Poland				
	Gini parameter, $\nu =$			
	1.5	2	4	6
1994	0.949	0.995	1.059	1.076

1997 0.948 0.998 1.067 1.086

Source: The author's calculation

Transfers

Transfers are reported in the HBS of every country to the different extent. Only unemployment benefits and a child allowance were included in each data file. In the Polish HBS all other benefits were reported as one item called "other social benefits".

- *Unemployment benefits*

The ratio of an unemployment benefit to an average wage shows that the unemployment benefit system was more generous in the Czech Republic than in Poland (Table 3).

Table 3. The ratio of unemployment benefits to the average gross economy-wide wage

	Czech Republic	Poland
1994	26.2%	13.6%
1997	23.7%	13.4%

Source : Statistical Yearbooks of the Czech Republics and Poland, 1995, 1998.

Unemployment benefits tend to have lower income elasticity than other transfers because they only compensate for lost earnings. It means that the absolute values of elasticities can be less than 1.

The reforms of the transfers systems, introduced in each country, considerably improve a use of this transfer, in terms of income inequality. Specially in the Czech Republic unemployment benefits required to be better-targeted instrument. In 1994 there was a considerable difference in reducing inequality by this transfer, dependent of how much one is concerned with poverty. If low income groups were more stressed in the Gini coefficient (that is, $v = 4$ and 6), unemployment benefits

contributed less to the reduction in income inequality (Table 4). This rather strange tendency disappeared in 1997 when the impact of unemployment benefits on inequality became almost independent of a relative preference for equality. In general, unemployment benefits were not a very efficient instrument smoothing income inequality. Even in 1997 the absolute values of elasticities were considerably less than 1.

Table 4. Elasticities of unemployment benefits with respect to after tax income

Gini parameter, $\nu =$

The Czech Republic	1.5	2	4	6
1994	- 0.807	- 0.764	- 0.456	- 0.144
1997	- 0.619	- 0.614	- 0.596	- 0.660

Gini parameter, $\nu =$

Poland	1.5	2	4	6
1994	- 0.420	- 0.496	- 0.552	- 0.513
1997	- 0.728	- 0.857	- 1.016	- 1.015

Source : The author's calculation

Elasticities of unemployment benefits point at the considerable progress in a use of this transfer in Poland (Table 4). In 1997 unemployment benefits became a well-targeted instrument when the lower income groups were more stressed in the Gini coefficient (elasticities < -1 for $\nu=4$ and $\nu=6$). Moreover, taking into account that in Poland the ratio of unemployment benefits to the average wage was considerably lower than in the Czech Republic (Table3), improvement in supplying this benefit stimulated the reduction in income inequality.

- Family benefits

Before examining family benefits it is worth to focus on an income elasticity of family size. The negative elasticity means that a transfer whose allocation criterion depends on family size should be progressive. Poland represents a typical case, the elasticity of family size was negative and its absolute value was higher the more one is interested in low income groups, (this is, the higher v), Table 5. It implies that large families tend to concentrate in lower deciles. In the Czech Republic the income elasticity of family size was positive for all values of the Gini parameter, v , in 1994 and for $v=4$ and $v=6$ in 1997 (Table 5). It means that a decrease in income was accompanied by a decrease in family size.

Table 5. Elasticities of family size with respect to after tax income

Gini parameter, $v =$				
The Czech Republic	1.5	2	4	6
1994	0.027	0.102	0.104	0.163
1997	- 0.059	- 0.027	0.018	0.029

Gini parameter, $v =$				
Poland	1.5	2	4	6
1994	- 0.220	- 0.262	- 0.340	- 0.367
1997	- 0.229	- 0.278	- 0.370	- 0.407

Source: The author's calculation

In the Czech Republic there were a child allowance and a parental benefit. Until 1995 the child allowance was paid to all families with children, with the amounts depending on the age of the child. The parental benefits was paid to a non-working parent who cared for a child aged under three years, or under seven years, if the child was disabled. Since 1995 both the child allowance and the parental benefit

have been income limited. In Poland until 1995 the child allowance have been awarded to all children with the same amount. Since 1995 the child allowance have been also income limited.

➤ Child allowance

In Poland the child allowance, as a policy instrument, was much better targeted in 1997 than in 1994 (Table 6). In the Czech Republic the reform, which made the child allowance an income-tested benefit, completely changed the impact of this transfer on inequality (Table 6). In 1994 the child allowance did not reduce the differences in incomes, specially, if the more the poor were weighted, (for $v=4$ and $v=6$). Only in 1997 the child allowance contributed to lowering inequality but the more efficiently, the less emphasis on the poor. It was resulted from less concentration of large families at the bottom of the income distribution (see Table 5).

Comparison of the elasticities suggests that the child allowance reduced income inequality more considerably in Poland than in the Czech Republic, specially if the emphasis was put on the poor.

Table 6. Elasticities of child allowance with respect to after tax income

Gini parameter, $v =$				
The Czech Republic	1.5	2	4	6
1994	- 0.200	- 0.039	0.438	0.681
1997	- 0.964	- 0.944	- 0.804	- 0.754

Gini parameter, $v =$				
Poland	1.5	2	4	6
1994	- 0.187	- 0.232	- 0.281	- 0.276
1997	- 0.751	- 0.901	- 1.135	- 1.190

Source : The author's calculation

➤ Parental benefit

In Czech Republic the parental benefit was a very well-targeted instrument. All income elasticities of parental benefit are negative, with the absolute values higher than 1 (Table 9). Income limiting of eligibility made the parental benefit more efficient in smoothing inequality in 1997 than in 1994. Moreover, in 1997, the higher the efficiency, the more one is interested in the poor.

Table 7. Elasticities of parental benefit (for a child below 3 years) with respect to after-tax income

		Gini parameter, $v =$			
The Czech Republic	1.5	2	4	6	
1994	- 1.240	- 1.297	- 1.240	- 1.116	
1997	- 1.511	- 1.712	- 2.121	- 2.243	

Source : The author's calculation

- Other social benefits

In the Czech Republic there have been supplied the *state compensation benefit*, depending on income and a number of children, and the *supplementary benefit* given to households with income below the subsistence level. Both of them were very well-targeted instruments, however, the emphasis was shifted from the supplementary benefit in 1994 to the state compensation benefit in 1997 (Tables 8 and 9). The absolute values of elasticities of the state compensation benefit are very high and they point at this transfer as one of main instruments in reducing inequality (Table 9). The housing rent contribution had also the large impact on reducing inequality in 1994 (Table 10). The absolute value of the elasticity of this transfer was higher than 10 when one was interested in the lowest income group. Even if such a strong support to the poor could be accepted from the inequality point of view, it

seems to be doubtful whether it should be so strong when the stress was put on the rich (the elasticity was equal to -3.493 for $v=1.5$). It is beyond all questions, supplying this subsidy was to be excessively expensive. In 1995 a new housing contribution was introduced, replacing the old one which depended on the amount allowed for housing costs in the calculation of the subsistence minimum. The amount of the new housing benefit has been means tested. The test has depended on the relationship between household income and the subsistence minimum.

Table 8. Elasticities of state compensation benefit¹ with respect to after-tax income

Gini parameter, $v =$				
The Czech Republic	1.5	2	4	6
1994	- 1.617	- 1.771	- 1.948	- 1.940
1997	- 2.226	- 2.639	- 3.711	- 4.353

Source : The author's calculation

Table 9. Elasticities of supplementary benefit² with respect to after-tax income

Gini parameter, $v =$				
The Czech Republic	1.5	2	4	6
1994	- 1.538	- 1.852	- 2.812	- 3.415
1997	- 1.279	- 1.333	- 1.356	- 1.371

Source : The author's calculation

Table 10. Elasticities of housing rent contribution with respect to after-tax income

Gini parameter, $v =$				
The Czech Republic	1.5	2	4	6
1994	- 3.493	- 4.480	- 7.878	***** ³

Source : The author's calculation

¹ State compensation benefit depends on income and a number of children

² Supplementary benefit for households below the subsistence level

³ The value of elasticity must be less than -10 because the programme does not give a figure

Unfortunately, in the Polish HBS other social benefits were presented in one item, which covered birth, upbringing, death, sickness, care, maternity, family and nursing benefits. An analysis of elasticities of such a big aggregate can only show a general tendency (Table 11). In general, there was a progress in supplying "other social benefits" between 1994 and 1997. The income elasticities became negative in 1997, pointing out that "other social benefits" influenced inequality to decrease, however, their impact was weak.

Table 11. Elasticities of other social benefits with respect to after tax income

Poland	Gini parameter, $v =$			
	1.5	2	4	6
1994	0.189	0.149	0.026	- 0.025
1997	- 0.243	- 0.342	- 0.584	- 0.685

Source : The author's calculation

- Pensions

In general, a pension is not a transfer alleviating poverty but a source of income. Its income elasticity should be positive. For Poland the income elasticities of pensions were positive and a little higher than 1 only if the poor were stressed (Table 12). It means that pensions, as the source of income, had the small impact on an increase in inequality. For the Czech Republic the elasticities of pensions looked like the elasticities of a transfer that was a very well-targeted policy instrument, not like the elasticities of an income source. The elasticities of pensions were strongly negative. The Czech pension system has been very effective in lowering inequality. Pensions have not been taxed in the Czech Republic and they have been valorised several times. Garner and Terrell (1998), using Gini decomposition analysis for 1989

and 1993 also found that the protection of pensioners' incomes was particularly effective in the Czech Republic.

Therefore pensions have not been used to lower income inequality in Poland while in the Czech Republic they very effectively reduced the differences in incomes.

Table 12. Elasticities of pensions with respect to after tax income

Gini parameter, $\nu =$				
The Czech Republic	1.5	2	4	6
1994	- 2.027	- 2.413	- 3.201	- 3.453
1997	- 1.580	- 1.818	- 2.136	- 2.061

Gini parameter, $\nu =$				
Poland	1.5	2	4	6
1994	0.671	0.771	0.929	0.974
1997	0.672	0.787	0.963	1.013

Source : The author's calculation

The differences in fiscal policy strategies have been reflected not only in the different levels of income inequality in the Czech Republic and Poland but they have also affected consumption inequality (measured by the extended Gini coefficient of total expenditure) in these countries, Table 13. Consumption inequality was higher in Poland than in the Czech Republic in both years considered in the research. In Poland it tended to rise between 1994 and 1997 while in the Czech Republic it remained almost intact. It seems that the reduction in income inequality was too small in this country (see Table 1) to result in the decrease in consumption inequality.

Table 13. Extended Gini coefficient of total expenditure

	Gini parameter $\nu =$			
	1.5	2	4	6
The Czech Republic				
1994	0.143	0.220	0.353	0.409
1997	0.152	0.228	0.354	0.405
Poland				
1994	0.207	0.304	0.460	0.522
1997	0.219	0.317	0.474	0.536

Source: The author's calculations

In the Czech Republic the transfer system has been much more efficient in reducing the income differences than in Poland. There have been supplied the very-well targeted transfers, like the state compensation benefit, the supplementary benefit, the housing rent contribution and the parental benefit, that have not been offered in Poland. In addition, pensions have considerably contributed to the reduction in income inequality in the Czech Republic. Fiscal policy aimed at the protection of lower-income groups has caused that the basic needs have been met better in the Czech Republic than in Poland.

Food meets one of the basic need and, therefore, there should not be a significant differentiation in the income elasticities of food among countries on the similar level of development. In the Czech Republic, however, the income elasticities of food are considerably lower than in Poland (Table 14). Moreover, in the Czech Republic the elasticities are almost independent of the emphasis put on the different part of the income distribution, (the elasticities are almost similar for all Gini parameters, ν) while in Poland the elasticities increase when the more one cares about the poor. The results show that food is a commodity much more open to all in the Czech Republic than in Poland.

Table 14. Elasticities of food with respect to total expenditure

		Gini parameter, $\nu =$			
The Czech Republic	Percentage of average expenditure per capita	1.5	2	4	6
1994	21.4%	0.244	0.245	0.237	0.230
1997	19.7%	0.219	0.229	0.245	0.258

		Gini parameter, $\nu =$			
Poland	Percentage of average expenditure per capita	1.5	2	4	6
1994	39.9%	0.477	0.521	0.596	0.626
1997	36.0%	0.413	0.459	0.535	0.567

Source : The author's calculation

Another relevant difference in meeting the basic needs was revealed with regard to housing. There was a considerable difference in the income elasticities of rent between the Czech Republic and Poland (Table 15). In former the elasticities were below 0.2, while in Poland they were close to 1 for low income groups.

Table 15. Elasticities of rent with respect to total expenditure

		Gini parameter, $\nu =$			
The Czech Republic	Percentage of average expenditure per capita	1.5	2	4	6
1994	2.1%	0.151	0.116	0.038	0.013
1997	2.3%	0.178	0.185	0.160	0.142

		Gini parameter, $\nu =$			
Poland	Percentage of average expenditure per capita	1.5	2	4	6
1994	1.9%	0.687	0.770	0.909	0.962
1997	2.7%	0.690	0.771	0.905	0.953

Source : The author's calculation

The similar results were obtained regarding the expenditure on central heating and hot water (Table 16).

Table 16. Elasticities of central heating and hot water with respect to total expenditure

		Gini parameter, $\nu =$			
The Czech Republic	Percentage of average expenditure per capita	1.5	2	4	6
1994	2.5%	0.235	0.233	0.234	0.249
1997	2.5%	0.224	0.246	0.274	0.294

		Gini parameter, $\nu =$			
Poland	Percentage of average expenditure per capita	1.5	2	4	6
1994	3.6%	0.803	0.915	1.101	1.167
1997	3.4%	0.767	0.888	1.098	1.176

Source : The author's calculation

The expenditure on housing contributed to consumption inequality in Poland, specially, when the emphasis was put on the poorest. While in the Czech Republic it did not stimulate consumption inequality because the housing rent contribution and the state compensation benefit had the offsetting impact on the expenditure distribution.

Conclusions

The different fiscal policy strategies carried out in the Czech Republic and Poland over the first years of the transition process resulted in the differences in income and consumption inequalities that tended to become deeper (table 17).

Table 17. Differences in income inequality and consumption inequality between the Czech Republic and Poland

	Gini parameter $\nu =$			
	1.5	2	4	6
Income inequality				
1994	0.079	0.104	0.143	0.164
1997	0.112	0.122	0.173	0.199
Consumption inequality				
1994	0.064	0.084	0.107	0.113
1997	0.147	0.089	0.120	0.131

Source: Tables 1 and 13

In the Czech Republic fiscal policy was aimed at the protection of the low-income groups. The traditional strategy was used, the high progressivity of income taxes together with the developed transfer system. The results were satisfied, income and consumption inequalities were low and income inequality even tended to decrease. Poland, in contrary to the Czech Republic, decided that the tax system was not an appropriate vehicle to reduce income inequality and therefore only transfers should be use to promote shifts in the income distribution. However, the transfer system did not cover the well-targeted instruments that could effectively alleviate poverty. The progress in supplying two standard transfers, the unemployment benefit and the child allowance, was not be able to counteract the

increasing income inequality. As a consequence, the basic commodities were much less open to all in Poland than in the Czech Republic.

It seems the Polish governments silently assumed that the increase in income and consumption inequalities should be accepted as a cost of the transition process. This assumption, however, is not appropriate. If income inequality is a source of political pressure it can lead to slowing down economic reforms. People can be dissatisfied with reforms even when output grows and unemployment declines. Pressure groups can arise and try to slow down the process of reform. It seems that recently such a situation has taken place in Poland.

References

Chakravarty, S. R. (1990), Ethical social index numbers. Berlin: Springer-Verlag.

Commander S., (1998), The impact of transition on inequality, *Economics of Transition*, Vol. 5(2).

Lerman, R. and S. Yitzhaki (1994). „ A note on the calculation and interpretation of the Gini index.” *Economics Letters*, 15.

----- and ----- (1985). „ Income inequality effects by income source: A new approach and application to the U.S.” *Review of Economics and Statistics*, 67(no.1)

Stark, O., J. E. Taylor and S. Yitzhaki (1986). „ Remittances and inequality.” *The Economic Journal*, 96.

-----, ----- and ----- (1988). „ Migration, remittances and inequality: A sensitivity analysis using the extended Gini index.” *Journal of Development Economics*, 28.

Garner T.I. and K. Terrell, (1998), A Gini decomposition analysis of inequality in the Czech and Slovak Republics during the transition, *Economics of Transition*, Vol. 6(1).

Yitzhaki, S. (1982). „Relative deprivation and economic welfare.” *European Economic Review*, 17.

----- (1983). „On an extension of Gini inequality index.” *International Economics Review*, 24.

----- (1994). „On the progressivity of commodity taxation.” in Wolfgang Eichhorn (Ed), *Models and measurement of welfare and inequality* . Heidelberg: Springer-Verlag.

----- (1997), The effect of marginal changes in prices on income inequality in Romania. *Research on Economic Inequality. Inequality and taxation. Vol.7*, JAI Press INC, London.

Yitzhaki, S. and J. Slemrod (1991). Welfare dominance: An application to commodity taxation. *American Economic Review*, 81.