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Social Capital Impact on Economic Growth. Attempts at Econometric Identification[1]

„A man first has to reconcile themselves with another man, has to trust them, has to remain loyal to them and only then will they be able to manage earth resources cleverly and justly."

J. Tischner 2002, p. 113

Abstract

A typical growth model is expanded by the income inequality, trust or crime rate, which represent social capital.

The income inequality measure should be introduced to the labour productivity function in a non-linear way so that the optimal level of this inequality can be determined.

Results from labour productivity (GDP per capita) model confirm a negative impact of growing crime rates on economic growth in Poland. Over the years 1992-2001 labour productivity rose on average by 4.7% annually. Growth of crime rates was lowering labour productivity growth in those years by about 0.7% annually on average. This negative picture of the impact exerted by growing crime rates during the transformation period neutralises a stronger (1.4%) positive impact of privatisation.

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1. Introductory remarks

Social capital is an important factor of economic growth. It is defined as the degree of a society's organisation characterised by the network of organisations, norms and social trust that facilitate cooperation for mutual benefit. People drawn upon social capital to solve common problems (C. Sirianni, L. Friedland 1995). A similar definition is given by J. Kochanowski (2002) – social capital is „*a set ... of main values such as honesty and veracity, fulfilling obligations resulting from contracts and redeeming a promise made, reciprocity in relations with others and remembering one's duties*." E. Gracia (2002, p. 190) defines social capital as „*a society's ability to co-ordinate social entities within a common project. Such co-ordination ability may be based only on shared social values: on culture of common good*."

Typical entities forming social capital are considered to be neighbourhood associations, local and community organisations, sports clubs, trade unions, PTAs, church-related groups.

Social capital has been analysed since the mid-1980s by, for example, R. Putnam, J. Coleman, P. Bourdieu (C. Sirianni, L. Friedland 1995). Although J. Tischner (2002, p. 113 and 311) in the first edition of „The Polish Shape of Dialogue" in 1979 did not use the term 'social capital', he underlined the superiority of interhuman relationships over „*managing (by a man – J.J.S.) of earth resources*"[2].

E. Gracia (2002, pp. 190–191) points to the following factors having a destructive influence on social capital in Argentina, which seem to be characterising surprisingly well the situation in Poland:

- short horizon of activities as a consequence of political uncertainty; it serves protection of personal interests;
- deeply rooted culture of money instead of the culture of production;
- „*directing a society along principles of power and not authority; authority which arises from trust in legal leadership guided by the spirit of service for a society and avoiding lack of transparency allowing to hide actions oriented at personal or also group benefits*";
- consequently, a small respect for norms, laws and institutions;
- intensified distrust, which assumes that the government's or institutions' intentions are determined by one's own interest – the press has made it a leading topic frequently without appropriate foundations.

[2] Translations of this book into Italian, German and English appeared in the years 1981–1987.

On the basis of the so-called indices of participation R. Putnam has presented compelling evidence for the decline in social capital in the United States after the Second World War (C. Sirianni, L. Friedland 1995). According to F. Fukuyama the process of rebuilding social capital has been continued since the early 1990s (J. Kochanowski 2002).

It can be presumed that the climate of trust being favourable for social and economic development depends also on income inequality between the rich and the poor. Inequality of incomes has a boundary, which is difficult to define and beyond which exploitation appears. „*Whoever 'exploits' and abuses work harms that which is the most human in a man – the kind-heartedness of human will. ... Exploitation harms a man's good will in this way that it despises it, humiliates it, betrays it*" (J. Tischner 1992, p. 33, quoted after J. Filek 2003)[3]. J. Tischner believed that material exploitation existing in capitalism was supplemented by moral exploitation in socialism, which appears when work is detached from ethical goals. „*It severs social bonds permeating interhuman relationships with hostility and suspiciousness*" (for more information see: J. Gowin 2002, p. 276). Thus, exploitation cannot be reconciled with social capital and in this way it has a negative impact on development of the economy. We will present a concept of estimating the boundary of income inequality, beyond which economic growth becomes slowed down in point 2.

The income inequality issue can be analysed both on the local scale and the global scale. Lawrence R. Klein – the Nobel prize winner from the University of Pennsylvania said in 1976 that the greatest threat for the world and international economy was a growing disproportion between the rich North and the poor South. A quarter of a century later, after 11th September 2001, Jeffrey Sachs (2001) wrote about a devastation caused by global inequalities. „*America pays the price of its avarice by losing its security*"[4]. More and more arguments can be heard that social inequalities are not favourable for economic development. Meanwhile, a disproportion in incomes between the wealthiest and the poorest countries intensified rapidly from 20:1 in 1960 to 60:1 in 1989 (V. Desai, R.B. Porter 2002, p. 2 quoted after R. Piasecki 2002).

[3] J. Filek (2003) argues that *„... interpretation of freedom as a possibility of choosing good and doing it*" is completely absent in the economic field.

[4] What is meant here is also the way in which funds for developing countries are divided. A similar problem exists in transforming economies, in which costs of this transformation have to be incurred. V. Klaus has formulated 10 conditions for carrying out a strong transformation variant, which include a condition of evenly spread transformation costs (see: S. Gomułka 2002, pp. 11–12). Stronger socially, politically and economically groups benefited most from transformation in 1990, which can be interpreted as a lesson: morality does not pay and of corruption and crime growth destroy social capital (A. Applebaum 2002).

„*Social capital – are «key enablers» of innovation, mutual learning, and productivity growth, as important as physical and human capital*" (R. D. Putnam 2000, p. 325)). Since social capital is not easily measurable it has been introduced only since the beginning of the 1990s to econometric growth models. Hence, it is proposed that a typical growth model should be expanded by the income inequality, trust or crime rate, which represent social capital:

$$\dot{X}/L = \dot{A} + \beta\, I/X + f(N) \tag{1}$$

where:

X – production (GDP);
L – labour;
I – investments;
I/X – investment rate;
N – measure of income inequality, trust or crime rate;
A – total factor productivity; dots denote growth rates.

2. Income inequality and growth

The expression of social capital by means of income inequality seems to be the most interesting solution (www.worldbank.org/research/growth /dddeisqu.htm). Studies of the influence exerted by income inequality on economic growth were started by O. Galor and J. Zeira in 1993 (see: F.H.G. Ferreira 1999, p. 8).

There predominates by far a view about a negative impact of an initial inequality of incomes on the economic growth rate. The mechanism of this impact can be explained in the following way:

1) the poorer the median voter the higher the taxes, the stronger the political pressures on redistribution of incomes, and the bigger the disturbances (informal sector);
2) growth of income inequality leads to social and political conflicts;
3) poor people may not have the same chances in life as richer people and they may, thus, never quite realise their full productive potential, among other things, they do not get as good an education as that afforded by richer families or they cannot get loans to start up a business;
4) an employee's productivity is limited, as they cannot imagine their progressing above a certain level (see: T. Persson i G. Tabellini 1994, pp. 602–604; F. H. G. Ferreira 1999, pp. 9–13; O. Morrissey, J. Mbabazi, C. Milner 2002, pp. 5–7, 17).

According to some studies and, in particular, those concerning developed countries, income inequality can have a positive influence on economic growth in medium and short period (O. Morrissey, J. Mbabazi, C. Milner 2002, p. 7). A hypothesis allowing to reconcile these divergent findings is formulated in the final part of this point.

T. Persson and G. Tabellini (1994, pp. 607–608) stated that the initial income inequality could have an impact on the economic growth rate. The cross-section sample included 49 countries. They explained the mean growth in the years 1960–1985:

$$\dot{X/C} = -2.6 + 0.19\, N_m - 0.53\, X/C + 0.041\, PSCHOOL$$
$$(2.4)\quad (2.3)\qquad (3.1)\qquad (4.4)$$
$$\bar{R}^2 = 32.0\% \qquad S_e = 1.5$$

where:

$\dot{X/C}$ – mean annual GDP growth per capita in the period 1960–1985 (mean value in the sample: 2.1%),

N_m – share of personal incomes of a poorer 60% of population ca. 1965 (mean value in the sample: 13.3%),

X/C – initial GDP level in 1960 in thousand $,

PSCHOOL – share of children attending primary school in 1960 (mean value in the sample: 78.3%),

absolute values of t-Student statistics are given in brackets.

T. Persson and G. Tabellini (1994, pp. 615–616) present also a two-equation model of GDP growth rate per capita and the investment rate:

$$\dot{X/C} = -2.8 + 0.31\, I/X - 0.46\, X/C - 0.005\, PSCHOOL \qquad (2)$$
$$(1.6)\quad (1.6)\qquad (1.9)\qquad (0.2)$$
$$\bar{R}^2 = 19.2\% \qquad S_e = 1.9$$

$$I/X = 0.96 + 0.58\, N_m - 0.02\, X/C + 0.14\, PSCHOOL$$
$$(0.2)\quad (1.9)\qquad (0.03)\qquad (4.2)$$
$$\bar{R}^2 = 51.1\% \qquad S_e = 5.3$$

where:

I/X – mean investment rate in the years 1960–1985.

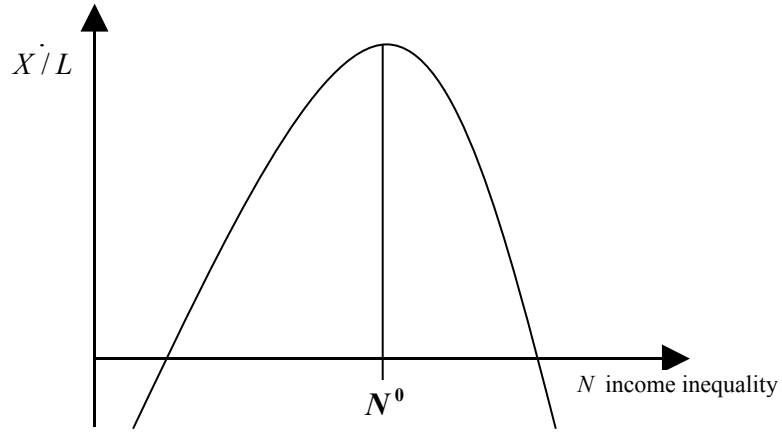
It proved impossible to introduce to equation (2) simultaneously the investment rate and the variable describing income inequality $N_{m.}$

As it is said in the appendix the relation between the growth rate and the investment rate should be described by means of a non-linear function, for instance, a polynomial or a logistic function. This can explain quite insignificant the parameter with the investment rate and a negative estimation of the constant term in equation (2). If we interpret the constant term as the rate of neutral technical progress, its negative value should be considered erroneous.

The other reservation concerns a hypothesis about a linear, negative influence exerted by income inequality on economic growth. In our opinion a small income inequality would be a suppressing motivation to work more efficiently. Increasing income inequality, which was too small during the initial period, will be releasing – in our opinion – labour productivity growth.

The income inequality variable should be introduced to the labour productivity function in a non-linear way so that the optimal level of this inequality can be determined.

Figure 1. Labour productivity growth rate as an income inequality function N



Source: own idea.

This function can have a parabolic shape. Due to the fact that negative growth rates are generally not observed, its course in the vicinity of N axis is very uncertain. There can be also postulated here functions with a normal distribution, which would require a non-linear estimation.

P. Rotengruber (2003) claims that a special type of social capital – political capital dominates in the post-communist societies. Those who have this capital protect their power by maintaining superiority over those socially weaker. It is in the interest of the socially stronger to restrict abilities and wishes of the weaker to form horizontal bonds and, thus, restrict in this sense the freedom of the socially weaker. Trust and social capital become a rationed good.

L. Zienkowski (2002, pp.168–169) presents a similar view saying that depoliticisation of the economy did not take place in the process of reforms and there exist formal and informal relationships between the polity and the economy.

The optimal income inequality N^0 can be achieved as a result of an impact exerted by the socially stronger, on the one hand, and the State and trade unions, which should represent social interests of the weaker, on the other hand.

If the real level of income inequality is lower than the optimal one, the role of trade union and the government's activities in this field should be weakened. If the income inequality level is higher than the optimal one the role of trade unions and the government's protective and welfare activities should be strengthened. The other situation seems to be more likely in the light of P. Rotengruber's arguments and L. Zienkowski's opinions (2002, pp. 165–167).

We think that there are certain chances for estimating the optimal income inequality econometrically and rather for each country separately, as it is quite probable that the optimal income inequality level varies in particular countries due to cultural differences and traditions.

3. Trust and growth

Social capital is defined also as the degree of trust between people, which was introduced directly to the growth model by P.J. Zak and S. Knack (2001)[5]. Trust creates favourable conditions for co-operation, achievement of every goal set by co-operating people for themselves[6].

„*A man is a creature, which needs some hope to live*" writes J. Tischner (2002, p. 110) and he distinguishes hopes directed towards God, towards other people and towards the world of objects, things, matter. „*The Christianity attempted to show in different ways the priority of an interhuman hope before a hope to control the earth's forces and elements. A man has to reconcile*

[5] The authors add that trust should be linked positively with a subjective well-being.

[6] Examples derived from medicine are, particularly, convincing. Namely, a doctor enjoying a patient's trust can cure by their presence or by placebo.

themselves with another man first, has to entrust them, has to remain loyal to them and only then will a man be able to control the earth's resources wisely and justly. The one who chooses the opposite way can easily become a thief of another person's goods." (J. Tischner 2002, p. 113)[7]. This direction of work on the human hope "*... was realised wherever a fight was fought for a respect for human conscience, for harmony in a nation, for unity in a family*." Trusting another man is the basis of social capital.

P.J. Zak and S. Knack (2001) analyse the general equilibrium model with a principal (investor) – agent (broker) structure (or more generally for example, employers and employees, retailers and consumers, creditors and debtors, and insurers and insured). The authors show that a broker's cheating is more likely (and trust therefor is lower) when the social distance between agents is bigger, formal institutions are weaker, sanctions against cheating are ineffective and the investors' wages are lower.

P. J. Zak and S. Knack (2001, p. 306) formulate five hypothesis on the basis of a theoretical general equilibrium model:

1. Higher trust increases investment and growth;
2. Homogeneous societies exhibit higher trust, and thereby investment and growth;
3. Egalitarian distributions of income enhance trust, and thereby raise investment and growth;
4. Discrimination lowers trust, reducing investment and growth;
5. There is a low-trust poverty trap.

These hypotheses were largely confirmed by results of estimations of several econometric models, with one of them being presented below.

The point of departure were results of public opinion polls carried out on a representative sample in 32 countries. Respondents were choosing one of two statements: „most people can be trusted" or „you can't be too careful in dealing with people." 32.2% of respondents chose the first statement (values range from a low of 5.5% in Peru to a high 61.2% in Norway[8].

Zak and Knack (2001, p. 308) estimated the following model of per capita income growth (mean income in the years 1970–1992) using the ordinary least squares method:

[7] This can explain, for example, a great importance attached to a successful family life when recruiting top managers.

[8] The authors add that trust defined in such way proved to be correlated strongly with a variable describing the number of wallets that were 'lost' and subsequently returned with their contents intact.

$$\dot{X/C} = 1.1 + 0.14\, I/X - 0.20\, X/C - 0.09\, SCHOOL - 0.024\, pI + 0.045\, Trust$$
$$(1.5)\quad (4.4)\qquad (2.0)\qquad (1.0)\qquad (3.0)\qquad (2.6)$$
$$\overline{R}^2 = 57.0\% \qquad S_e = 1.1$$

where:

$\dot{X/C}$ – mean per capita income growth rate in the years 1970–1992 (average of 1.9% in the analysed countries),
X/C – initial level of per capita income in 1970, in thousand $,
I/X – mean investment rate in the years 1970–1992,
pI – prices of investment goods in percentage points of prices of these goods in the United States,
SCHOOL – mean number of schooling years for people over 25 years of age,
Trust – trust, percentage of respondents agreeing that "most people can be trusted," 1981, 1990–1991, 1995–1996,
absolute values of t-Student statistics are given in brackets.

Consequently, growth of trust by 10 percentage points would increase the annual per capita income growth rate $\dot{X/C}$ from 1.9% to 2.4% (by about 0.5%). It is synonymous with increasing mean economic growth dynamics in the analysed countries by about quarter.

The variable *Trust* proved to be significant in the investment rate equation. P.J. Zak and S. Knack (2001, p. 309) claim on the basis of the above equation that trust coefficient decreases somewhat investment rates but remains significant, and it may also influence growth by other channels besides investment.

These authors (2001, p. 315) present also a model with Gini income inequality coefficient (S.M. Kot 2000, pp. 114–116), which is significant if the variable *Trust* does not appear in the model. These variables proved to be correlated, however the variable expressing trust dominates in explaining growth over the variable expressing income inequality. Thus, trust should be considered, particularly, important when establishing the hierarchy of means allowing to accelerate economic growth

P. J. Zak and S. Knack (2001, pp. 311–314) were also interested to find out what trust depends on. They analysed in different combinations such factors as GDP per capita, mean number of schooling years, property rights index (including, for instance, bureaucracy, severity of government corruption, the rule of law, risk of governmental repudiation of contracts, and risk of expropriation of investments, Gini coefficients: income inequality or land ownership

inequality, ethnic homogeneity, economic discrimination, contract enforceability, corruption index and investor rights. Among eight presented variants the biggest number of non-significant evaluations of parameters can be found in the case of GDP per capita and mean number of schooling years, as these variables are closely correlated (correlation coefficient equals 0.81). However, GDP per capita is more strongly correlated with trust (0.68) than the mean number of schooling years (0.29).

4. Crime and growth

Unfortunately, an appropriately long time series of Gini income inequality coefficient or trust coefficient are not available for Poland at present. R. D. Putnam (2000, p. 348, p. 360) discovered a negative correlation between social capital and crime and income inequality coefficients. On the other hand, P. Fajnzylber, D. Lederman, N. Loayza (2002) confirmed for a group of countries a positive influence of income inequality (Gini coefficient) on crime (homicides and robberies). That is why we will use the crime index instead of income inequality to express social capital indirectly.

Disturbances in interhuman relationships or between a man and an institution diminish trust and, thus, the potential of social capital. These disturbances can be incompatible or not with the binding rule of law. Those being incompatible with law can be next divided into those detected or reported and remaining ones. Statistics register reported or detected disturbances in interhuman relationships as crime, which can represent the entirety of disturbances in interhuman relationships only if it constitutes a stable part of this entirety.

L. Zienkowski (2002, pp. 165–167) confirms that the transformation period led in Poland to an increased income inequality[9]. In comparison with the EU countries this inequality is relatively high in Poland. However, L. Zienkowski thinks that a priority should be an absolute growth of incomes with a limited correction of the social policy leading to the reduction of disparities only below the income distribution median. He justifies that by a motivating impact of high incomes as well as their positive influence on savings, investments and exports, as well as checking the brain drain. The studies carried out by P. Fajnzylber, D. Lederman, N. Loayza (2002), to which we refer in the next point, show that growth of income inequality leads to

[9] The survey was carried out on the sample of 30,000 households (for more information see: L. Kudrycka, M. Radziukiewicz 2000).

growth of crime and, it in turn, slows down economic growth. It makes the accuracy of L. Zienkowski's proposals questionable.

4.1. Impact of income inequality on crime

P. Fajnzylber, D. Lederman, N. Loayza (2002) confirmed a positive impact of income inequality (Gini coefficient) on crime (homicides, thefts and robberies) on the sample of 34 countries and 102 observations[10]. The estimations were carried out by the generalised method of moments (GMM):

$$\ln cr = -3.6 - 0.17\ \dot{X} + 0.32 \ln Xpc + 0.10\, N + 0.15\, Edu$$
$$(1.54)\quad (3.10)\quad (1.80)\qquad\qquad (2.81)\quad (1.90)$$

where:

cr – crime rate (number of thefts and robberies in relation to population number),

$\dot{X}$ – GDP growth rate,

Xpc – GDP per capita,

N – Gini income inequality coefficient,

Edu – mean years education for adults,

absolute values of t-Student statistics are given below estimations.

Growth of Gini coefficient by one percentage point causes that the crime coefficient rises by about 10%.

4.2. Impact of crime on growth

The impact of rising crime rate on economic growth will be examined using the following logistic model (see: point 3 of the next article):

$$\dot{X} / L = \dot{A} + a/(1 + b\, e^{-c(I/X)/[(d - I/X)]}) + f(N)$$

which was estimated by means of non-linear estimation methods for Poland in the years 1967–2001:

[10] The authors present several equations and we make reference to one of them. The sample size includes 136 observations for 45 countries.

$$\dot{X}/L_{0-1} = \underset{(4.7)}{2.8} + \underset{(3.7)}{7.0} / (1 + 21.5\, e^{-1.07*(I/X_{0-1})/(0.365-I/X_{0-1})}) - \underset{(1.9)}{0.007}\, inflation_{-1} +$$
$$+ \underset{(2.2)}{0.12}\,(prog_{-2} - prog_{-4}) - \underset{(3.9)}{0.15}\,\dot{cr}_{0-1} - \underset{(10.0)}{8.8}\,u7982 \qquad S_e = 1.42 \tag{3}$$

where:

X/L – labour productivity index in Poland (GDP in constant prices per one employed person) 1990 = 100,

$\dot{X}/L_{0-1}$ – labour productivity growth rate, mean from present year and previous year in percentage points,

I/X_{0-1} – investment rate (decimal fraction), mean rate from present year and previous year,

inflation – growth rate of prices of consumer goods and services in relation to previous year, in percentage points,

$\dot{cr}_{0-1}$ – growth rate of crimes confirmed in completed preparatory proceedings, mean value from present year and previous year,

prog – degree of industry privatisation, work force in private sector in relation to total work force,

$prog_{-2} - prog_{-4}$ – increment of privatisation degree lagged by two or three years,

u7982 – dummy variable, 1 in the years 1979–1982, 0 in the remaining years.

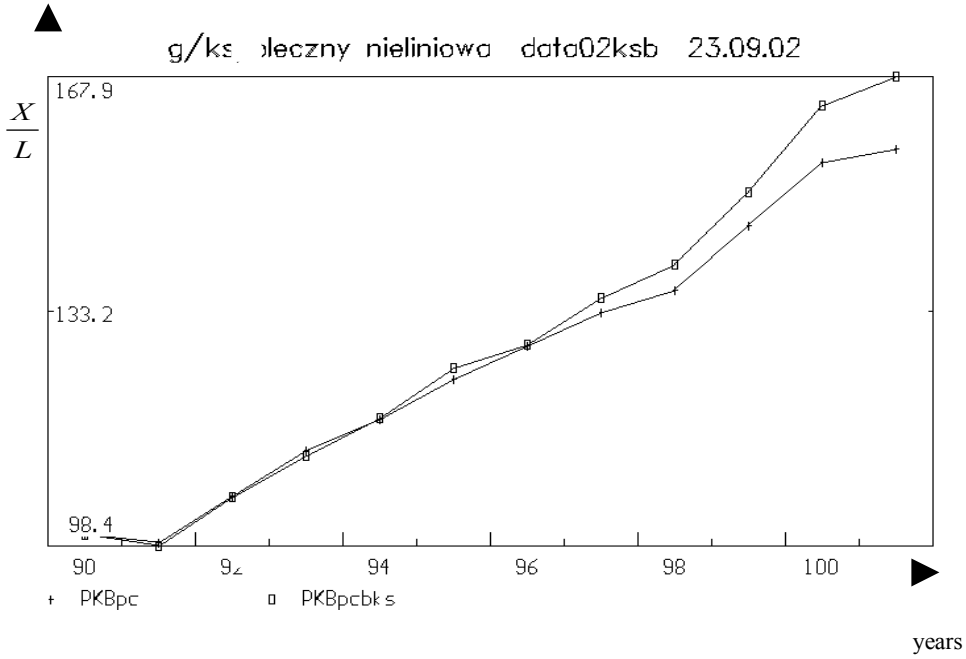
Estimation of labour productivity elasticity in relation to the variable characterising crime is very significant[11]. It can be said on the basis of model (3) that 1% growth of crime leads to a drop in labour productivity by 0.15–0.16%.

A negative impact of a growing crime rate on GDP growth per one employee in the years 1991–2001 is shown in Figure 2.

The estimation results show that the lines of real and potential labour productivity are situated very close to each other. Growth of crime observed in the years 1997–2001 caused that GDP per one employee in 2001 was lower by about 6.9% (lower line) than its value which could have been achieved if crime rates had not risen between 1997 and 2001. It means that the economy moved back in its development by one year of rapid growth or two years of moderate growth (a little over 3%).

[11] This estimation is similarly significant in the linear model in relation to parameters estimated by the simple least squares method (see: equation 4 in the next article). The fit measured by the mean residual error is slightly better for the logistic function.

Figure 2. Impact of growing crime rate on GDP growth per one employee, 1991–2001



Source: own estimations based on model (3).

In the years 1992–2001 labour productivity was increasing on average by 4.7% annually. As it can be seen from equation (3) growth of the crime rate in those years was reducing labour productivity growth by about 0.7% annually. This negative picture showing the impact exerted by growing crime rates in the transformation period neutralises a stronger, positive impact of privatisation. Over the years 1992–2001 intensifying privatisation was raising the labour productivity growth rate on average by about 1.4%. The transformation of social and economic systems is accompanied by processes accelerating and slowing down economic growth. We managed to reveal a negative impact of crime and a positive impact of privatisation in model (3). The latter effect is linked by J. Tischner (2002, p. 113) with decrease of moral exploitation.

The importance of crime rate will appear to be bigger if allowances are made for its impact on investments:

$$I/X = \underset{(62.8)}{0.225} + \underset{(5.6)}{56.3}(\dot{X}/L_{0-7})^3 - \underset{(3.1)}{0.13}\,\dot{c}r_{-1-4} - \underset{(4.9)}{0.031}\,U6771 - \underset{(5.2)}{0.040}\,U9295 \qquad (4)$$

$$R^2 = 86.5 \qquad DW = 1.10 \qquad S_e = 0.01$$

where:

$(\dot{X}/L_{0-7})^3$ – mean rate of GDP growth per one employee from present year and seven previous years raised to the third power,

$\dot{cr}_{-1-4}$ – growth rate of crimes confirmed by completed preparatory proceedings, mean value for previous year, two, three and four years ago,

U6771 – dummy variable, 1 in the years 1967–1971, 0 in the remaining years,

U9295 – dummy variable, 1 in years 1992–1995, 0 in the remaining years.

Growth of crime rates by 1% produced a year later a drop in the investment rate by about 0.13%. Similar drops in the investment rate were recorded after two, three and four years. The overall effect of declining investment rates in four successive years amounted, thus, to about 0.52 percentage points.

It can be seen that the crime rate, by means of which we are trying to reflect the operation of social capital, exerted a direct influence on economic growth and also on investments lowering their rate. It can be attributed to the impact of crime on the business activity risk, which is, particularly, important when taking long-term investment decisions.

5. Final remarks

The forms of social capital expression such as trust, loyalty, solidarity or low crime rates diminish transaction costs and increase economic effectiveness. Social capital stimulates innovation, education and self-education, as well as labour productivity growth, and it is as important as physical or human capital (see: R. D. Putnam 2000, p. 325).

Since 1993 economists and econometrists have been devoting many of their publications to the impact exerted by social capital on economic growth. Their research findings published in numerous articles, as well as findings of own studies allow to confirm the importance of social capital explicitly enough

for economic life participants, who attach a small importance to social and ethical factors, to doubt the correctness of such stance.

According to studies carried out by P. J. Zak and S. Knack 10% growth of trust would increase the annual growth rate of per capita income from 1.9% to 2.4%, which means acceleration of the mean economic growth dynamics in the analysed countries by about one-fourth.

Our studies confirm, on the other hand, a negative impact of growing crime rates on economic growth in Poland. Labour productivity rose on average by 4.7% annually. Growth of crime rates was lowering labour productivity growth in those years by about 0.7% annually on average. This negative picture of the impact exerted by growing crime rates during the transformation period neutralises a stronger positive impact of privatisation. Over the years 1992–2001 growing privatisation was raising the labour productivity growth rate on average by about 1.4%.

Finally, we will try to outline an optimistic scenario of achieving the labour productivity growth rate of around 7% annually. Equation (3) allows to state that this scenario would be feasible provided the following assumptions were fulfilled:

- investment rate of 27% annually (and, thus, higher by about 3 percentage points from that observed in the years 2000–2001);
- checking crime increase (it was increasing in the years 2000, 2001 by about 10%, which was lowering the economic growth rate by about 1.6% annually);
- growth of the economy's privatisation degree (industry) on average by 2.5 percentage points annually (it will allow to increase the labour productivity growth rate by about 0.7%);
- maintaining inflation at a low level (1–2% annually).

The first two assumptions are very difficult to fulfil, which makes it equally difficult to realise this scenario.

A positive impact of trust and a negative impact of crime on economic growth can be considered to be confirmed to a large extent. On the other hand, a negative impact of income inequality seems to be highly probable. Therefore, we think that econometric studies of the impact of social capital and trust on economic growth should be continued.

Bibliography – see pp. 183–184 of next article.