Income level and income equality – factors of influencing each other or independent dimensions of economic system?

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Abstract

The article specifies connection between institutional factors and economic development by the instrumentality of econometric macro-analysis (based on cross data of 120 countries). Specially is under the analyze income distribution equality in connection with human capital and income level. Income equality as an indicator of society's social cohesion is relatively little correlated with economic freedom level, which allows consider them as independent factors of income level. The direct impact of those two institutional attributes (in case of human capital taken in constant level) proves to be different directions. If the impact of economic freedom is positive, then the regression coefficient of income equality remains moderately negative. Hereby we may say that in case of constant human capital level (and economic freedom) occurs with more equally distributed income its lower level. Besides it both institutional variables are important positive factors for development of human capital. Consequently of that appears strong indirect positive effect of those two factors on income level. Therefore the general impact of income equality turns out to be also statistically essentially positive – more equality added with human capital compensates possible negative direct effect with excess. The positive impact of economic freedom however duplicates in altogether.

On the base of empirically study we can define three relatively stable groups of countries with certain model of society and economy:

I. Latin-American model,

II. Anglo-American model of liberal societies,

III. Continental-European model and Nordic welfare societies.

Last two are observed as success models, which optimal reconcilement to its concrete historical-cultural peculiarities is essential target of each country. In the article the choices of Baltic Sea Countries in their transition period are also pointed out.

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Introduction

Economists have recognized the role of institutional factors in explaining economic development since the works by D. North. They determine the effectiveness of production factors (labor and capital). Poor institutions cause big transaction costs and X-ineffectiveness: production factors are not used in the best possible way.

However researchers have not come to an agreement on institutions which are the best in reducing X-ineffectiveness. Here compete two theoretical approaches. Liberal theorists emphasize motivational aspect of institutions viewing Schumpeterian inward individual success aims as the major developmental force, which is framed by mutual competition. Therefore is understandable, that economic freedom is raised to the main criterion of institutional quality. At that under the economic freedom is not kept in mind all-justifiability, but first of all transparency and stability of economic environment, which exclude unpleasant unexpectedness for investors. More socially oriented theoreticians, on the other hand, see individuals' non-market cooperation as the main factor of development and stress the importance of different networks as communication channels as creators of mutual trust. In general the social capital is considered as a developmental factor. Frequently the notion of social capital is also related to the concept of social cohesion, what in economical sense means moderate inequality in individuals' economic welfare.

Upon closer examination, the two aforementioned trends of thought are not contrary and include many points of contact, amongst others in question of equality. While, for liberals equality of opportunities is in uppermost and more socially oriented thought leads rather towards final results (income distribution), thus moderate inequality as welfare factor is also accepted in theory of social justice (Rawls 1971:303).

In the current article there primarily is tried to specify empirical connection between income level and human capital and main institutional attributes of economic system – economic freedom and social cohesion, distinguishing here innovatively direct and indirect (through the human capital) effects of institutional factors.

It is remarkable, that diversity of economic connections has become the object of special interests in recent years. The Nobel Prize in Economics given to Edmund Phelps in last year, who also has raised the question of institutional economic model dependency from society's cultural background besides his main works connected to inflation, supports relevancy of the topic (Phelps 2006).

The second objective is to examine opportunities for two dimensional classification of different countries economic models, where income distribution appears as independent attribute besides of income level. This is reasonable only in a case, if appears independency of those attributes or possibility to make them independent in the first phase.

At that we try to work with minimal number of indicators in order to get the best survey. For example we limit only with *Heritage Foundation* general indicator for description of economic freedom and Gini coefficient for social cohesion. For measurement of income level and human capital we will use corresponding indexes from the Human Development Report by the UN.

1. Factors of income level and their impact range

In researching the formation of the income level, we primarily use two 2005 databases: the Human Development Report offered by the UN[1] and *Heritage Foundation*'s (HF) economic assessments[2] (thereby, cross-data). Essentially, the data characterizes the situation with a two-year lag – in 2003.

Under consideration is the following connection:

(1) IL' = f(IE, EF, HC),

where

IL – income level (GDP *per capita*), what is measured by the income component of the human development index (apostrophe indicates predicted level from model);

HC – the level of human capital measured as a multiple of the education and health (life expectancy) components of the human development index (HC = e*h);

EF – the level of economic freedom, what is deduced as an inverse figure of the HF (v = 1.25 – 0.25*HF);

IE – the level of income equality, what is deduced from the inequality Gini coefficient (IE = 1- GINI).

That acquired indicators are all standardized at intervals (0;1). The empirical basic statistics of the data on 120 countries is presented in Table 1.Associated paired correlations are described in Table 2.

Table 1. The fundamental statistics on the income levels and its factors

	IL	*IE*	*EF*	*HC*	*e*	*h*
Average	0.67	0.60	0.41	0.58	0.80	0.68
Median	0.68	0.62	0.39	0.66	0.87	0.76
Standard variance	0.19	0.10	0.14	0.26	0.20	0.21
Minimum	0.28	0.29	0.13	0.05	0.16	0.12
Maximum	0.99	0.75	0.73	0.91	0.99	0.95

Source: compiled by the authors

Table 2. The correlation matrix of income level and its factors

	IL	*IE*	*HC*	*e*	*h*	*EF*
IL	1.00					
IE	0.34	1.00				
HC	0.85	0.50	1.00			
e	0.77	0.36	0.88	1.00		
h	0.78	0.51	0.95	0.72	1.00	
EF	0.73	0.25	0.61	0.49	0.56	1.00

Source: compiled by the authors

Generally all the indicators under examination are mutually positively correlated – in wealthy countries the human capital is larger, economic freedom higher and income distribution more equal. At the same time, the following facts are also obvious:

[1] http://hdr.undp.org/statistics/data/

[2] http://www.heritage.org/research/features/index/

- Economic freedom is more closely connected to income level than human capital (0.73>0.61), which allows for the assumption of a positive partial correlation (connection assuming equal human capital);
- On the other hand, the indicator of income equality is significantly less closely tied to income level (0.34<0.50), which rather indicates a negative partial correlation;
- The integration of education and health into one indicator of human capital is meaningful because the correlation of the combined indicator with income level is stronger than with either component separately (0.85>0.78);
- The positive correlation between economic freedom and equality is minimal (0.25), which allows them to be considered as relatively independent factors.

Econometric analysis enables an examination of the effects of factors that interest us on income level to decompose. At that we can differentiate between the direct, indirect and general effects of the factors. The direct effect is based on the assumption that all other variable that are inserted into the regression equation are constant. The indirect effect concerns the impact of factors through each other. The direct and indirect effects together form the general effect of the factor. The general effect of factors can be found in regression equation, which only contains the factors that interests us. The direct effect appears from equation, into which other factors have also been inserted. The difference between direct and general effect characterizes an indirect effect appearing by way of other factors.

We will illustrate the aforementioned with an impact analysis of economic freedom and income equality. In the examination of indirect impact we will confine only to the impact achieved through human capital. The mutual impact of freedom and equality may be discarded here due to their limited correlativity. We will examine two income level linear models (Table 3). The model (1) contains besides freedom and equality also human capital as an independent factor, but not the model (2).

Table 3. Income level regression connections on the factors (t-statistics in parentheses)

Model	Intercept	IE	EF	HC	Determination Coefficient (%)
1	0.28 (5.4)	-0.16 (-1.8)	0.46 (6.2)	0.52 (11.9)	79.5
2	0.09 (1.2)	0.31 (2.7)	0.96 (10.8)		55.0

Source: compiled by the authors

Primarily the results indicate that the assumptions based on the correlation matrix were confirmed. In the model (1), which shows institutional factors *ceteris paribus* impacts, is economic freedom regression coefficient positive (0.46) and statistically significant. On the other hand, the influence of income equality tends to be negative (-0.16), although the statistical significance is not as convincing as with economic freedom. Statistically more relevant is entirely income level connection (0.52) with human capital and whole model enables to describe 79.5% of income level variation.

In the second model (2) the effect of both institutional factors is positive and statistically relevant, even though the equation explains only 55% of total variation of income level. Both income equality, as well as economic freedom proves to advance countries income level. Therefore, it seems at least that a discrepancy develops with

the model (1) concerning the effect of equality. The negative effect of equality here is replaced as an absolute value an even greater positive effect. The effect of freedom has also changed significantly – the positive effect has essentially doubled.

The difference is related to the effect of freedom and equality on human capital. Empirical connection between human capital and the factors that are interesting to us is following:[3]:

HC' = -0.37 + 0.91*IE + 0.98*EF

Model (1) ignores that connection and characterizes the effects of freedom and equality in the case of constant human capital. On the other hand, model (2) contains also indirect effects of institutional factors – those formed through human capital.

The indirect effects of equality and freedom on the income level by promoting the level of human capital can be found using two comparable methods – as an interval of general and direct effects[4] or as a product of regression coefficients in the effect chain:

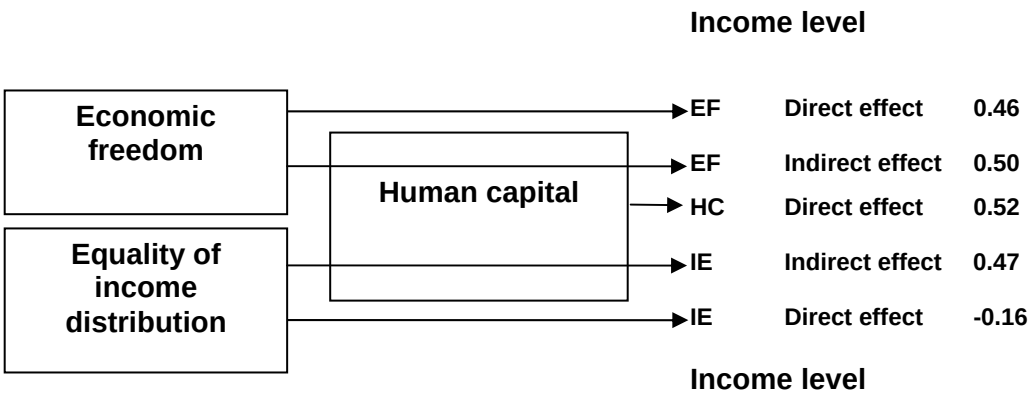
1) IE indirect effect: 0.31 – (-0.17) = 0.91*0.52 = 0.47
2) EF indirect effect: 0.96 – 0.56 = 0.98*0.52 = 0.51

In the case of indirect effects there are significantly positive effects on income level, which

a) in general, totally neutralize the negative direct effects of equality, and
b) essentially double the positive effects of freedom.

Figure 1 illustrates received results.

Figure 1. Direct and indirect effects of income level factors



Source: compiled by the authors.

Naturally, the positive effect of equality and freedom on human capital and the indirect effect on economic development accompanying it are not automatic. This is still a stochastic connection. Therefore, direct effects should also be kept in mind. Based on the example of equality, one can say that only if the equalization of income in the specific country is truly accompanied by the improvement of human capital (education, health), can one generally ignore the accompanying negative direct effects. In this case, one can say that the rise of the human capital's capability to

[3] t-statistics of the regression coefficients accordingly -3.6; 7.7 and 5.4 and corrected determination coefficient 49%.
[4] Effect in model (2) – effect in model (1)

generate economic welfare compensates for the decrease in motivation in the society accompanying equalization.

2. Robustness analysis of the model

Insofar as especially the direct connection of income equality on income level stays in the border of statistical reliability is reasonable to examine the robustness of this connection separately. For that purpose there has been done estimation of the model separately for poor and richer countries data from the total aggregated set. Both groups included 60 countries. In the case of poor countries the income level index stayed in the interval 0.28-0.68 and in the group of richer countries in the interval 0.68-0.99. Best in terms of income level amongst the poorer countries were Belarus and Ukraine, but weakest in richer countries' group were Bosnia-Herzegovina and Turkmenistan.

Table 4. Direct and indirect effects of institutional factors on income level in poor and rich countries

Factor	Poor countries		Rich countries		All countries	
	Direct effect	Indirect effect	Direct effect	Indirect effect	Direct effect	Indirect effect
EF	0.12	**0.24**	**0.42**	0.12	**0.46**	**0.50**
IE	**-0.24**	**0.36**	0.11	0.16	-0.15	**0.46**

Source: compiled by the authors

Appears that general (average) negative direct effect of income distribution equality accrue only from group of poor countries. There the connection (-0.24) is statistically significant (t-statistic above 2). At the same time is also even considerable larger indirect positive effect through the human capital. The income distribution has modest positive connection on income level both as directly as well through the human capital in the case of richer countries. The first of them may be related with the equalizing effects of welfare society.

In terms of economic freedom effect the difference between poor and rich countries is lesser, but not nonexistent. In poor countries, the main channel for economic freedom effect is increase of human capital and rise of income level through it. But in rich countries exactly the direct effect is greater. Altogether both effect channels prove to be more or less of equal value.

3. Classification of countries on income equality and relative income level base

Insofar as the connection between income level and income distribution (on the assumption of constant human capital) proved statistically irrelevant and non-robust, then the two factors may observed as two independent indicators of the concrete country's societal order. This certainly in case, if in prior eliminate the effect of difference in human capital. Then is possible to divide observed countries into four groups, according to income level (IL) and income equality (IE) relative level compared to the originating level of human capital predictable level or with norm (Table 5).

Table 5. Division of countries by income level (wealth) and income distribution equality relative level

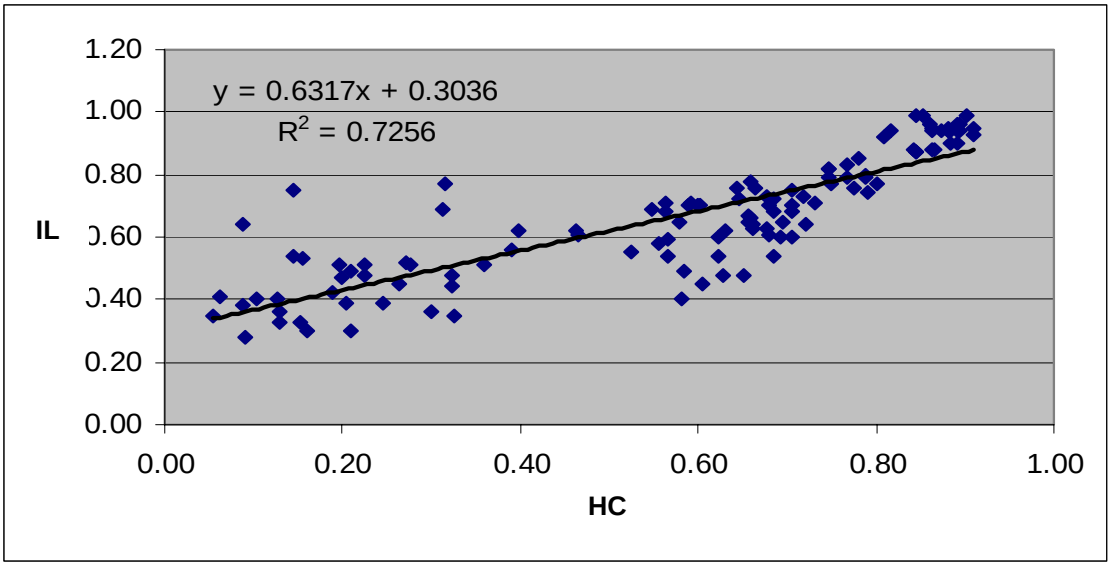
Income equality Income level	Below the norm	Above the norm
Below the norm	Poor and unequal	Poor but equal
Above the norm	Rich but unequal	Rich and equal

Source: compiled by the authors.

In order to make countries equal in terms of income level and income distribution we eliminate from both the difference of the effect of human capital at first. We start from connection between income level and human capital (Figure 2).

The connection between income level and human capital is rather close – mutually is described approximately 73% from variation. Visually is warranted also proximity of the connection to a linear.[5]

Figure 2. Income level connection with human capital

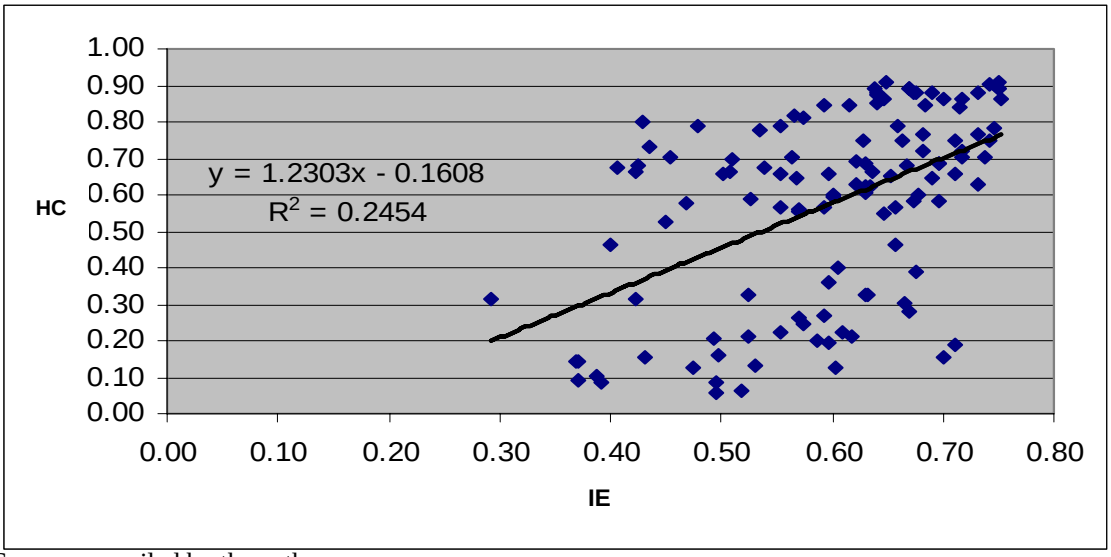


Source: compiled by the authors.

Income distribution is also significantly connected with human capital, whereby increase in income equality causes also human capital increase (Figure 3). Still the determination coefficient here is only 25%.

[5] At the same time the data distribution is not one-peaked at least on the base of human capital, it means nor hereby also normal. In the current research this deviation however is ignored, because the hypothesis in content for differentiation of subgroups is missing.

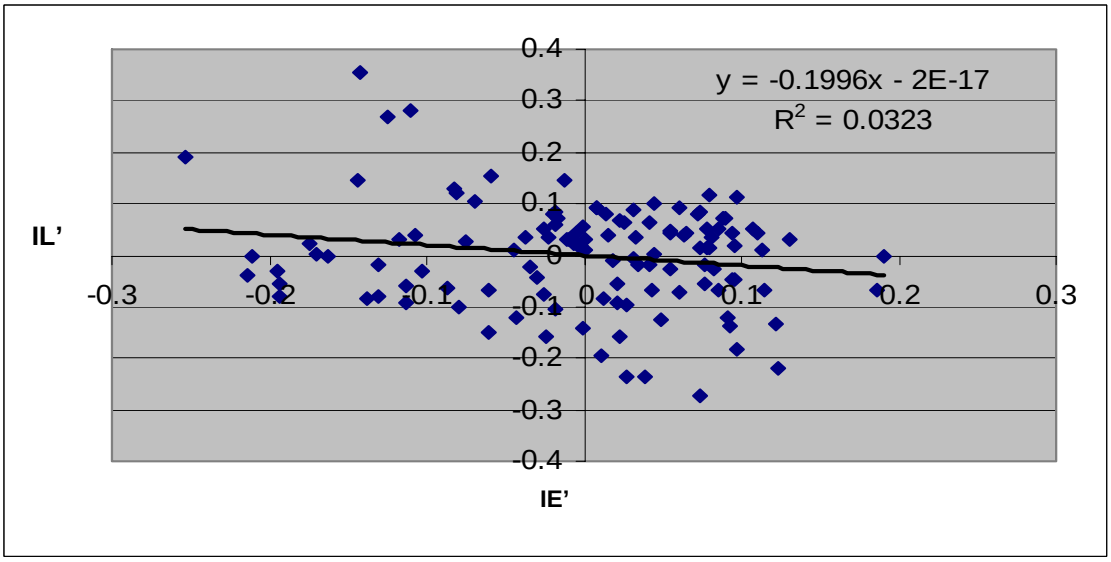
Figure 3. Connection between human capital and income equality



Source: compiled by the authors.

As following we observe already part correlation between income level and income equality (on the assumption of equal human capital). The corresponding deviations from regression line are in the Figure 4. Here appears expected weak negative correlation, whereby the regression coefficient (*ca* -0.2) is close to the result in the model (1). The determination coefficient is still only 3%.

Figure 4. Connection between income level and income equality on the assumption of constant human capital



Source: compiled by the authors.

It is remarkable that countries divide into quadrants on Figure 4 relatively evenly (see Annex 1 and Table 6). Still most countries (36) belong to the group that we can consider relatively rich and also with equal income distribution at the same

time. This is contradiction to the negative part correlation.[6] At the same time the number of countries, where incomes are low and also unequally distributed, is smallest (23). Therefore the deviation direction is same in 59 countries, what makes one less than number of countries, which have different direction deviations. In the case of last mentioned countries the distribution between two possible options is steadier. The number of countries, which are relatively poor, but with equal income distribution was 31, and rich, but unequal was 30. Such weak (part) correlation and relatively even distribution of countries by deviation, allows keep relative wealth and equality not as much to each others influencers as for few related dimensions (indicators) of social and economical systems of concrete countries.

Table 6. Number of countries grouped by income level and relative level of income distribution

Income equality Income level	Below the norm	Above the norm
Below the norm	23	31
Above the norm	30	36

Source: compiled by the authors.

If we try practically explain the division of countries into different quadrants, then appears quite clear and far from random structure. Joint denominators are in the following Table 7. In the Annex 1, there are corresponding countries given in bold font. At that is also shown division by absolute income level separately in all the quadrants. Poor are here considered the countries, which belong to the lower part of the tabulation list, and rich these, which belong to the upper part.[7]

Table 7. Typology of countries by income level and relative level of income equality

Income equality Income level	Below the norm	Above the norm
Below the norm	Latin-American countries	Former socialist countries
Above the norm	Anglo-American liberal countries	Continental-European countries

Source: compiled by the authors.

I. Countries, which are relatively poor and also have unequal income distribution at the same time.

Here first of all belong practically all **Latin-American** countries.[8] At that their characterization is not influenced at all by the fact, where do they belong in terms of absolute wealth, into the first half of the world (for example Chile and Argentina) or the second half (Bolivia and Honduras). Of course, backlog country by country is different by both dimensions. For example, in Argentina the income level almost corresponds to the human capital level, but the indicator of income equality should be *ca* 16 percentage points (pp) bigger. However, in Bolivia the income equality stays under the expected result only 4 pp, but income level even 12 pp at the same time. All

[6] In the case of very strong negative connection should practically exist only relatively poor, but equal countries and relatively rich, but unequal countries.
[7] Into both sides belong 60 countries, income index limit is 0.68. See also robustness analysis.
[8] Guatemala is only excluded.

in all the deviations from prognosis of income level and distribution stay here quite modest – only in Brazil and Chile the negative deviation from prognosis of income equality exceeds shortly 20 pp. Concisely these countries are characterized by incapability of using duly their existing human capital in economic life. Other countries belonging to this group is rather random. From larger countries, for example China and Nigeria belong to this group, but with modest deviations. Here may added, that just African countries are most heterogeneous in their location on particular scheme, be divided almost equally into all quadrants.

II. Countries, which are relatively rich and have equal income distribution at the same time.

Here are situating most **Continental-European** welfare countries, in front Norway and Switzerland, which in addition to relative richness in terms of human capital are characterized also by absolute wealth. Japan and Canada belong to this group as well. At the same time here deviations from expected income level and income distribution stay even smaller than in Latin-American countries, mostly below 10 pp. Countries in this group have also the best accordance between human capital and income attributes. Nevertheless also some slightly poorer countries belong to particular quadrant. From one side, belong here the Central-European transition countries, which have followed gradual reform way (Slovenia, Czech Republic and others, from Baltic countries Lithuania). From the other side, also more stable Moslem countries (especially Northern-African Arabic countries) are situating in this quadrant and also interestingly enough Russia and Kazakhstan. Last perhaps is explained by circumstance, that relative wealth is here connected rather with natural resources than human capital.

III. Countries, which have relatively equal income distribution, but are poor at the same time.

Differently from above mentioned two **CIS** countries, the other members of this commonwealth belong just to this quadrant. Even more, many other former partly or totally socialist countries accrue to this group, especially those, what are characterized by longer or shorter development lag (for example Bulgaria, Romania and interestingly also Latvia and Poland). In all these countries relatively equal income distribution has remained, but at the same time they have not economically realized existing human capital so far. Just here form largest deviations from expected income level – for example in Tajikistan 27 pp, in Moldova and Kyrgyz Republic 24 pp. In group of wealthier countries, here the interval of course is limited only by some pp. In terms of income equality they are ahead from expected up to 10 pp. This kind of situation cannot be considered as very stable. Part of observed countries obviously can overcome the economic backwardness supported by existing human capital, but this backlog also may preserve on the background of insufficient incentives (suitable example is Cuba).

IV. Countries, which have relatively unequal income distribution, but are rich.

Mainly this last group is formed by so-called **Anglo-American liberal** countries – from New-Zealand to United States, but also Singapore and Hong Kong[9]. Interestingly belong to this quadrant also Southern-European countries (Italy, Greece,

[9] It is well-known, that these two countries are steadily leading different economic freedom competitiveness lists.

Portugal, also Israel). Here the deviations between real and expected income indicators do not form very considerable, staying in10 pp limits. Only United States and Ireland can generate 15 pp higher than predicted income level. Apparently it is related with other specific factors including historical features of these countries. Of course, we cannot ignore the fact that Estonia belongs to this group as well, its income index is 4 pp higher from human capital successive prognosis, when the income distribution equality is practically on the expected level – backlog less than 0.5 pp. Therefore Estonia does not differ much from II group core countries.[10]

As whole, there would not be enough from liberal and post-socialist countries to form noticeable medium (weak) negative part correlation between income equality and income level, and to exceed reverse impact of Latin-American and welfare countries. Big input gave here certain **post-colonial developing countries**, first of all Zimbabwe, Lesotho, Swaziland, Namibia, Botswana and South-African Republic. In all these countries exceeds income level predictable more than 10 pp, in Botswana even 35 pp. At the same time, these countries are characterized by relatively very high inequality (at least – 10 pp, in Namibia even 25 pp). These countries are more or less related with former apartheid regimes and from that is received deceitful socio-economical inheritance – relative wealth with relative inequality. The development dynamics is not clear also here – is there taking place leveling with economic impoverishment or is possible to preserve relative wealth and overcome inequality gradually. It is possible to point out, that negative part correlation disappears between income level and income equality, when we remove the data of 6 mentioned countries from the observation. However, here should be added, that certainly does not appear also contrary connection – equalizing the income does not bring higher income level as usual, when it is not accompanied by increase in human capital accordingly.

4. Position of Baltic countries by relative income level and equality

As we have seen from above, three Baltic countries belong to the three different groups of countries on the base of analysis. This fact is illustrated by the Figure 5, where we can see, that the differences between those countries are essential. If we add to this analysis more countries from each quadrant, which are typical to particular quadrant, and get a wider context, then we see that three Baltic countries are quite similar to each other (see Table 8 and Figure 6).

Table 8. Relative income level and equality (differences of human capital eliminated) in selected countries (deviations from prognosis %)

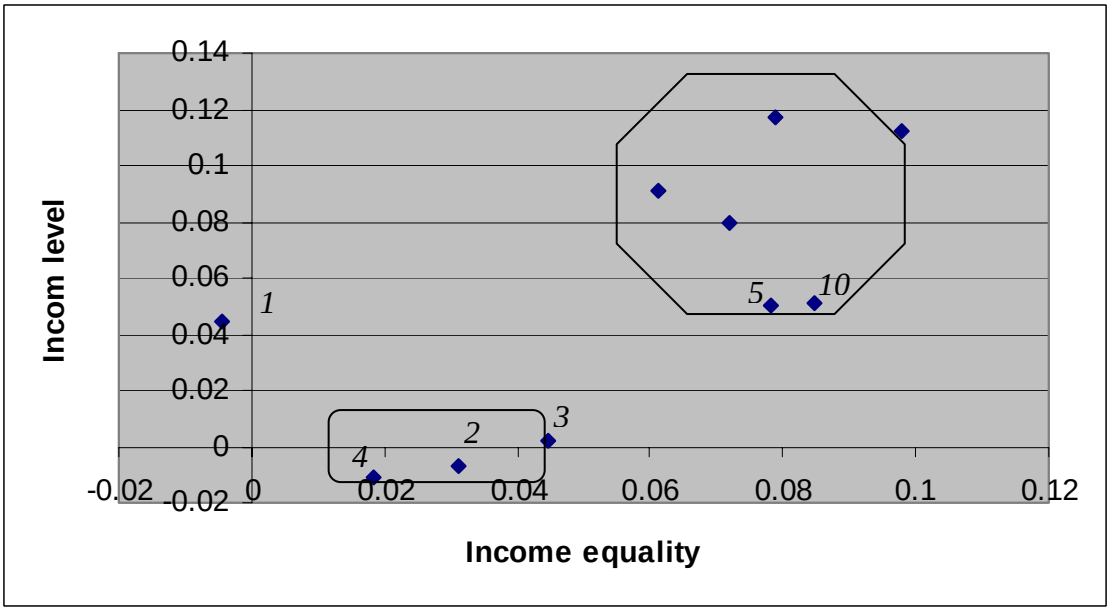
Country	*IE%*	*IL%*
1. Estonia	-0.44	4.46
2. Latvia	3.12	-0.66
3. Lithuania	4.47	0.23
4. Poland	1.85	-1.09
5. Russian Federation	7.83	5.01
6. Germany	6.12	9.06
7. Finland	7.18	7.98
8. Denmark	9.78	11.23

[10] Newsworthy should be cluster analysis in particular case, which is going to wait next researches.

9. Norway	7.89	11.73
10. Sweden	8.49	5.11
11. United States	-5.98	15.33
12. Argentina	-16.25	-0.09
13. Georgia	1.11	-19.57
14 South Africa	-12.45	26.69

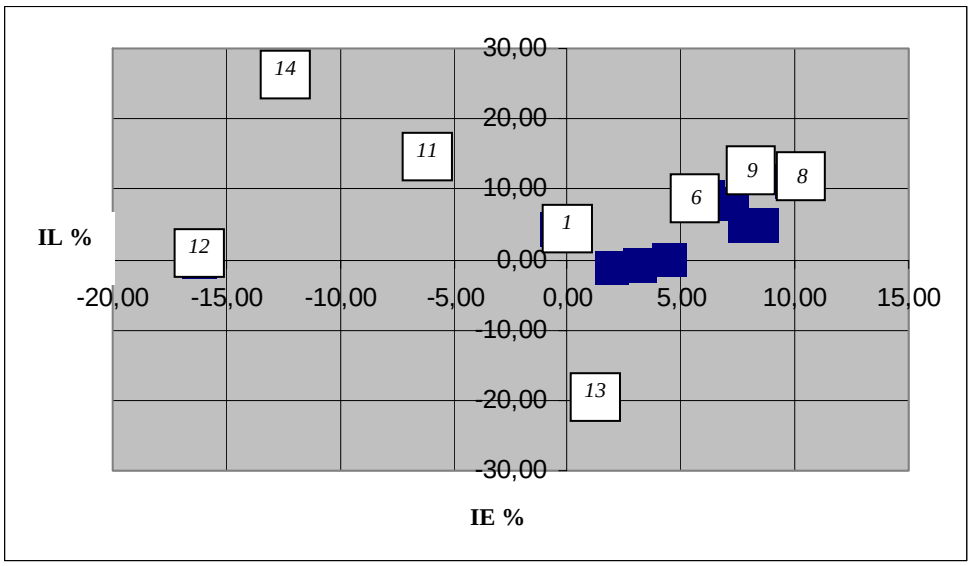
Source: compiled by the authors.

Figure 5. Relative income level and equality (differences of human capital eliminated) in Baltic countries (%, deviations from prognosis)



Source: compiled by the authors.

Figure 6. Relative income level and equality (differences of human capital eliminated) in selected countries (deviation from prognosis %)



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Summary

The article specified connection between institutional factors and economic development by the instrumentality of econometric macro-analysis (based on cross data of 120 countries). Specially was under the analyze income distribution equality in connection with human capital and income level. Income equality as an indicator of society's social cohesion was relatively little correlated with economic freedom level, which allowed consider them as independent factors of income level. The direct effect of those two institutional attributes (in case of human capital taken in constant level) proved to be different directions. If the impact of economic freedom was positive, then the regression coefficient of income equality remained moderately negative. Hereby we can say that in case of constant human capital level (and economic freedom) occurs with more equally distributed income also its lower level. Besides it both institutional variables are important positive factors for development of human capital. Consequently of that appears strong indirect positive effect of those two factors on the income level. Therefore the general impact of income equality turns out to be also statistically essentially positive – more equality added with human capital compensates possible negative direct effect with excess. The positive effect of economic freedom however duplicates in altogether.

More focused study showed relatively heterogeneity set of observed countries and described connections between income distribution and level stayed slightly robust. Practically forms the important negative part-correlation between income equality and its level on the base of poorer countries' data at the first place. In richer countries this connection dispersed. At the same time, remains the positive indirect effect through the human capital. Also proved to be relatively robust the positive direct and indirect effect of economic freedom on income level.

In the study appeared also these groups of concrete (mainly the poor) countries, which caused the negative part-correlation between income level and income equality. Here are two following groups of countries:

1) the relatively big group of transition countries, where during the system exchange has not been accompanying consistent liberalization, and occurred economic recession is not duly reflected in income distribution; and
2) the relatively small group of post-colonial countries, where still are in place relatively high economic development level and large inequality inherited from apartheid regimes.

Both groups are clearly practical (temporal) and their possible development may go by three main ways, which are empirically defined as three relatively stable groups of countries (with certain model of society and economy) in the current study :

I. Latin-American way, where insufficiency in social mobility and cohesion does not allow to realize the human capital duly for economic development (in average income level);

II. Anglo-American way of liberal societies, where relative inequality in incomes sustains pressure and motivation for economic development and mobility in society makes possible to realize it;

III. Continental-European and Nordic welfare society' ways, where development factors evolve besides of competition forces or even instead of them ever more the resources connected to social capital.

Last two models are particular as success models, which optimal reconcilement to its concrete historical-cultural peculiarities is essential target of each country.

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Annex 1. Division of countries by income level and relative level of income equality

Income equality / Income level	Below the norm		Above the norm	
	Poor	Rich	Poor	Rich
Below the norm	Sierra Leone Malawi Mada-gascar Zambia Nigeria **Bolivia** **Honduras** **Nicaragua** Armenia **Ecuador** Philippines **Paraguay** China **Salvador** **Venezuela** **Peru**	**Columbia** **Panama** **Brazil** **Uruguay** **Costa Rica** **Chile** **Argentina**	Tanzania Ethiopia Guinea-Bissau Yemen Kenya **Tajikistan** Rwanda Nepal **Moldova** Uganda **Kyrgyzstan** Laos **Uzbekistan** **Mongolia** **Cambodia** **Georgia** **Vietnam** Indonesia **Azerbaijan** Sri Lanka Jamaica Jordan **Albania** **Ukraine** **Belarus**	**Bosnia** **Macedonia** **Romania** **Bulgaria** **Latvia** **Poland**
Above the norm	Mali Central-Africa Gambia Zimbabwe Lesotho Guatemala Swaziland	Turkmenistan Namibia Dominican Republic Turkey Iran Thailand Botswana Mexico Malaysia South-Africa Trinidad and Tobago **Estonia** Portugal Greece Israel **New-Zealand** **Singapore** **Hong Kong** Italy **Great Britain** **Australia**	Niger Mozambique Burkina Faso Senegal Mauritania Cameroon Guinea Pakistan Ghana India Egypt Morocco	Algeria Kazakhstan Tunisia Russia Croatia **Lithuania** **Slovakia** **Hungary** **Czech Republic** South-Korea **Slovenia** **Spain** **Sweden** **Belgium** **Finland** **France** **Germany** **Japan** **Holland** **Austria** **Canada**

		Ireland **USA**		**Denmark** **Switzerland** **Norway**

Source: compiled by the authors.