THE MERITOCRATIC ELITE VERSUS THE COMMON MAN:

INCOME INEQUALITY IN THE AFFLUENT OECD COUNTRIES

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Abstract: The goal of this inquiry is to highlight the relationship between vested interests of the meritocratic elite and the deteriorating situation of the common man on the example of rising income inequality in the selected OECD countries over the past 30 years. Income inequality is growing despite the increase in labour productivity based on technological progress, which is proven by using the robust panel regression models. These findings could be explained by the effect of "extreme meritocracy" that describes a situation in which wages for "the working rich" is growing faster than their productivity, which is another term for wage stagnation for the middle-class workers.

Key words: Meritocracy, Middle class, Income inequality, Technological progress

JEL: B50, D63, I31

Introduction

Rising income inequality in the affluent economies over the last three decades is characterized by, at first glance, two not enough visible processes. The first process refers to wage polarization between sectors and jobs, which leads to a reallocation of the middle class towards the lower end of income distribution. The second one is the change in the composition of top incomes in the context that capital owners are being replaced by "the working rich". In the conditions of globalized economy and localized state intervention, these processes could be explained by the influence of technological progress that makes the existing institutional arrangements in the areas of labour market and welfare state obsolete. The result is

the weakening of the institutional power of the common man for shaping public policies that promote greater equality in the society.

Literature review

During the last three decades, the developed countries have been facing a decline of middle-class share in the income distribution (Atkinson and Brandolini 2013; Scott and Pressman 2014; Stiglitz 2015; Arestis and Gonzalez-Martinez 2016). At the same time, top capital owners are being replaced by top executives, "the working rich" at the top of the income hierarchy (Piketty 2005; Atkinson and Piketty 2007).

There are different explanations of this trend: technological development and automation (Acemoglu 2001; Autor and Dorn 2013; Davidson 2013; Josifidis and Supic 2016); globalization (Luongo et al. 2015; Milanovic 2016); government tax and spending policies (Pressman 2010); the expansion of managerial power (Van Essen, Otten and Carberry 2015) or declining trade unions and changes in social norms (Krugman 2008).

From a theoretical point of view, the concentration of income at the top of income distribution could be compensated by rising real incomes at the middle of income distribution. However, in reality there are a variety of complex channels by which increasing income concentration may be damaging to real income of middle-class. Thewissen, Stefan, et al. 2015 point out ten channels (from fuelling household debt and real estate bubbles, through entrenching the power of existing elites to protect their economic interests, to undermining the political and legal institutions and social trust), which had been discussed in the several papers and studies (for example: Stiglitz 2012, 2015; Cingano 2014; Ostry et al. 2014).

Meritocracy, as a mechanism behind the wealth of "the working rich", surely plays an important role in supporting the equality, but it seems that meritocracy is insensitive to its distributive consequences (Franzini, Granaglia and Raitano 2016), and capital accumulation by the "working rich" is likely to lead

the revival of top capital-incomes in the following generation (Piketty 2005). In this context, it is possible to recognize Thorstein Veblen's description of conspicuous behaviours of the rich (A Theory of the Leisure Class [1899]) in the contemporary capitalism. This is especially relevant in the distinctions Veblen made between wasteful profit-making and effective productivity (Banta 2009), as well as his recognition that what is good for the vested interests and the kept classes of the nation is not necessarily good for the ordinary life of "the common man" (The Vested Interest and the Common Man [1919]).

Our contribution to the literature could be recognized as an attempt to highlight the impact of technological progress and globalization on extreme meritocracy and the position of the common man.

Conceptual framework

Technological progress is unbalanced between sectors and jobs. Profits and high wages are concentrated in sectors intensive in knowledge and innovation, but not in workers[1]. The result is wage polarization between a relatively small number of workers in new sectors and a large number of workers in traditional sectors. Along with the polarization between sectors, there is polarization between jobs. Routine-intensive jobs are becoming increasingly vulnerable to automation and reallocation (outsourcing and off-shoring), while the relative importance of jobs intensive in non-routine tasks is increasing.

The negative effects of wage polarization are the most pronounced in the case of middle-class workers. Given jobs at the lower end of income distribution are more intensive in manual tasks compared to the

[1]According to McKinsey Global Institute (September 2015), asset-light, idea-intensive sectors accounted for 31 percent of the profits generated by Western companies in 2015, compared with 17 percent in 1999.

upper end of income distribution, reallocation of the middle-class workers is manifested to a greater extent in an increase in low-income employment than in high-income employment[2].

In addition to wage polarization, technological progress changes the nature of distributional conflict. Debates on inequalities move from functional to personal income distribution, i.e. from issues of class conflict to issues of wage determination. Capital owners are being replaced by "the working rich" at the upper end of income distribution while the interchangeability of workers, taking into account the possibilities of outsourcing and off-shoring, becomes the dominant criteria for wage determination.

Power in big corporations shifts from capital owners to CEOs. Increasing private, compared to the government, expenditure on R&D leads to an increase in profit margins based on innovations and to a reduction in a company's dependence on capital markets[3]. By replacing external with internal funds, capital concentration becomes less associated with the dispersion of ownership. It allows that company's interests (growth) to prevail over the interests of capital owners (dividends). As a result, share of "the working rich" labour-income is increasing, whereas the share of capital-income is stagnating in the composition of top income.

The mutual relationships among "the working rich" (from the choice of marriage partner, through collective decision-making in company boards to the choice of place of residence) lead to the formation of specific "meritocratic" elite. The result is a new income polarization between a small number of highly educated, well-positioned and networked elite and a large number of less specialized, less flexible, and, in

[2] It is estimated that percentage of medium and high routine employment in total manufacturing and services employment account for 69 and 61 respectively in the USA and the EU (Marcolin, Luca, Sébastien Miroudot, and Mariagrazia Squicciarini 2016).

[3] According to National Science Foundation, in 2014, 71% of total U.S. R&D performance was supported by business sector funding; universities and colleges accounted for 14%; the federal government 11% and non-federal government and other non–profit organizations 4% (September 2016: https://www.nsf.gov/statistics/2016/nsf16316/nsf16316.pdf)

every sense of the word, less networked workers (Josifidis et al. 2016). Given that marginal propensity to save is increasing along with income growth, capital-income share in total income for "the working rich" is rising over time, which contributes to diminishing differences between meritocratic and capitalist elite.

With growth of the labour-income share in top incomes, social tolerance for inequality is increasing as a result of illusion greater income mobility. Through the process of creative destruction, technological progress generated a critical level of competition between, as well as inside of, the social classes. Income inequality becomes less static and inherited as compared to the time when capital owners were wealthiest class. However, competition, as the basis of meritocracy, becomes less national and more internationally oriented. Income and status mobility is more pronounced in receiving (off-shoring and outsourcing) countries than in countries where technological innovations are generated. As a result of the illusion of greater income mobility, the common man gradually adopts conventions according to which rising income inequality is inevitable in globalized economy based on rapid technological development, causing the weakening of trade union power and slowing down institutional changes towards greater income redistribution.

Methodology

The hypothesis, based on the given conceptual framework, is that technological progress, in the conditions of globalization, is the most important factor of polarization of workers. The result is a shift of the focus of distributional conflict from functional to personal income distribution, and the erosion of institutional power of the common man. The hypothesis is tested on a sample of six affluent OECD countries[4], using the unbalanced panel data model. The data spans the period from 1980 to 2010.

The baseline model is:

[4] Australia, Canada, France, Italy, Spain, USA

$$LogMeritocracy_{it} = \beta_0 + \beta_1 LogGlobalization_{it} + \beta_2 LogTopTax_{it} + \beta_3 LogGrowth_{it} + \beta_4 D.LogTFP_{it} + \beta_5 LogProductivity_{it} + \beta_6 LogUnion_{it} + \beta_7 LogProductivity_{it} * LogUnion_{it} + \beta_8 LogHumCapital_{it} + \beta_9 Log\ HumCapital^2_{it} + u_i + D_t + e_{it}$$

Where subscript i stands for the cross-sections, t represents the time period. The dependent variable ($Meritocracy_{it}$) is extreme meritocracy expressed by share of labour-income in the top 1% of total income. The explanatory variables are divided into two categories: control variables and hypothesis variables. The control variables are: globalization ($Globalization_{it}$), top marginal income tax rates ($TopTax_{it}$) and economic growth ($Growth_{it}$). The variables used to test the hypothesis are: the rate of technological progress ($D.LogTFP_{it}$,), human capital ($HumCapital_{it}$), labor productivity ($Productivity_{it}$) and trade union density ($Union_{it}$). D_t and u_i - are time specific and country effects, respectively, and e_{it} is the idiosyncratic error term. Data sources, definitions and descriptive statistics are given in Table 1.

<Table 1>

Given the presence of cross-section (CS) dependence (Breusch-Pagan LM test: chi2 = 104,596), heteroscedasticity (Modified Wald test: chi2 = 2240.20) and autocorrelation (Wooldridge test F = 88.601), the model is estimated by using the PCSE estimator (Panel Corrected Standard Errors). The values for the variables taxes, globalization, economic growth, trade union density and human capital are lagged by one year. In this way, we control the delayed impact of the last four variables on the concentration of top labour-income, as well as potential endogeneity problems due to reverse causation in the case of taxes.

<Table 2>

The robustness of the obtained results is checked by using several tests. The first test refers to the change in the model estimator. Taking into account the presence of CS dependence and that N<T more than 3 times, we employ the FGLS estimator (Feasible Generalized Least Squares) as an alternative to the PCSE technique (column 3). Second, we analyse what happens with the coefficient estimates when we exclude

the overly influential observations (column 4). The outliners are identified by employing DFBETA procedure (critical value: |DFBETA|>2/sqrt (N), where N is the number of observations). Third, the model is estimated on the basis of a three-year average instead of annual data (columns 5 and 6). Fourth, we re-estimate the model by excluding one country/year after another in order to check whether the results are driven by a specific country/year. The last test is based on the idea of using alternative measures for technological progress and globalization, as key explanatory variables. Instead of an index of globalization, we use the openness of economy (% of exports and imports in GDP) as a measure of globalization, while technological progress is expressed by different TFP measures (welfare-relevant TFP and TFP at current PPPs)[5].

Discussion

The obtained results (Table 2) are consistent with the theoretical predictions. Technological progress and globalization have positive, direct, and statistically significant effects on extreme meritocracy, whereas tax rates on top income are associated with the reduction in extreme meritocracy. The analysis of economic significance, based on standardized coefficients, shows that technological progress and globalization increase extreme meritocracy more than taxes on top incomes reduce extreme meritocracy. The economic growth has an expected positive sign, but this effect is not statistically significant.

The relationship between human capital and extreme meritocracy is nonlinear and convex. The minimum of the function is at the point where the value of the human capital index is 2.27. It implies that the increase in human capital first reduces extreme meritocracy, but after reaching a critical point (2.27) this effect is changed in the opposite direction. Since the number of observations in which the value of the human capital index is above the critical value is 9.3 times higher than the number of observations below the critical value (168:18), we can conclude that the changes in human capital in most cases has a positive effect on the extreme meritocracy.

[5] The results of the last two robustness test would be made available by the authors upon request.

<Figure 1>

The explanation of the link between trade unions and extreme meritocracy is based on the two assumptions. First, it is a conditional relationship in the sense that the impact of trade unions on top labour-income varies with changes in labour productivity. Second, the changes in labour productivity are a direct result of technological progress. As can be seen in the Figure 1, labour productivity growth weakens the effect of trade unions on reducing the concentration of top labour-income. The effect is statistically significant only in the interval in which the relationship between trade unions and the top labour-income is negative. It seems that "the working poor" and "the working middle" (workers with low and average productivity) continue to have a dominant role in shaping trade union activities, but their power is reduced with the strengthening power of "the working rich" (workers with high productivity).

An increase in the gap between "the working poor" and "the working middle" on the one hand, and "the working rich" on the other hand, shifts discussions about inequalities from functional to personal income distribution. Since the meritocratic characteristics of "the working rich" are disappearing with the accumulation of income, the balance between "creative" and "disruptive" potential of technological progress towards the elites could be seen as a key factor that will determine discussions about income inequality in contemporary capitalism.

Conclusions

The intention was to draw attention to the causes and the consequences of polarization of workers into "the working rich" on the one hand, and "the working middle" and "the working poor" on the other hand, as a noticeable trend in contemporary capitalism. The paper promotes an alternative approach, confirmed by robust econometric evidences, according to which technological progress does not only affect the dynamics of top labour-incomes, but also changes the nature of the distributional conflict.

Given the dominant share of routine-intensive jobs in total employment, technological progress could be treated as a factor that increases the labour productivity. At the same time, technological progress contributes to rising income inequality in the sense that the share of meritocratic elites in the top incomes is increasing, while the relative income of the middle-class workers is declining. Creative destruction of industries and jobs, inherent in technological progress, makes the existing income distribution less certain and hereditary, which creates the illusion of greater mobility for the common man, and shifts the debate on inequalities from functional to personal income distribution.

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TABLES AND FIGURES

Table 1. Description of Variables

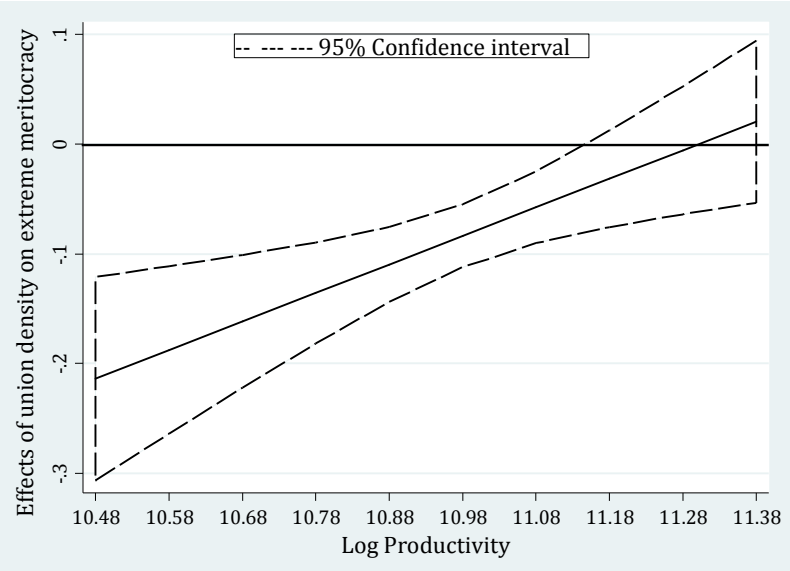
Name	Source	Description	Obs.	Mean	Std. Dev.	Min	Max
Meritocracy	The world wealth and income database	Top 1% income composition-Wages, salaries and pensions	176	54.46	9.39	30.61	68.5
Globalization	The QoG Standard dataset 2016.	Index of Globalization	186	75.66	8.38	50.07	88.79
Top Taxes	Comparative Income Taxation Database	Top marginal income tax rates	186	46.14	12.41	27.13	72
Growth	Comparative Political Data Set 1960-2014.	Real GDP growth (% change from previous year)	186	2.41	1.95	-5.51	7.25
TFP	Penn World Table 8.1	Total Factor Productivity (constant national prices)	186	0.98	0.08	0.74	1.19
Productivity	Penn World Table 8.1	GDP/employment	186	60397.77	11926.41	35876.61	91693.83
Union	Comparative Political Data Set 1960-2014.	Net union membership as a proportion wage and salary earners in employment	185	24.43	12.68	7.55	49.81
Hum Capital	Penn World Table 8.1	Human capital index	186	2.94	0.43	2.08	3.62

Table 2. Determinants of Extreme Meritocracy

VARIABLES	(1) PCSE Baseline	(2) PCSE StdBeta	(3) FGLS Baseline	(4) PCSE DFBETA	(5) PCSE Av.(3 yr)	(6) FGLS Av.(3 yr)
TFP	0.914**	4.918***	1.059*	1.043***	2.586*	2.101*
	(0.456)	(2.451)	(0.573)	(0.266)	(1.324)	(1.151)
Taxes	-0.0909*	-0.489**	-0.125***	-0.0922***	-0.0310	-0.0790
	(0.0489)	(0.263)	(0.0332)	(0.0326)	(0.0501)	(0.0539)
Productivity	-1.623***	-1.738***	-1.648***	-1.394***	-1.363***	-1.437***
	(0.299)	(0.321)	(0.216)	(0.263)	(0.244)	(0.358)
Union	-2.942***	-0.448***	-2.681***	-2.037**	-1.714**	-2.598**
	(0.975)	(0.078)	(0.751)	(0.877)	(0.821)	(1.288)
Productivity#Union	0.260***	0.278***	0.237***	0.179**	0.151**	0.232**
	(0.0887)	(0.094)	(0.0681)	(0.0795)	(0.0744)	(0.117)
Growth	0.00673	0.0362	0.0120	0.000123	-0.0083	-0.00670
	(0.00897)	(0.048)	(0.0120)	(0.00624)	(0.0102)	(0.00976)
Globalization	0.266***	1.434***	0.543***	0.697***	0.929***	0.645***
	(0.0873)	(0.469)	(0.0987)	(0.0894)	(0.179)	(0.216)
Human capital	-5.156***	-27.743***	-4.956***	-4.297***	-5.411***	-4.819***
	(1.241)	(6.679)	(0.723)	(0.618)	(1.262)	(1.310)
Human capital^2	3.161***	17.006***	3.022***	2.674***	3.239***	2.916***
	(0.602)	(3.241)	(0.346)	(0.300)	(0.606)	(0.634)
Constant	22.99***	6.371***	22.13***	18.36***	17.26***	19.22***
	(3.181)	(3.501)	(2.445)	(3.027)	(2.937)	(3.972)
Time Fixed Effects	Yes	Yes	Yes	No	No	No
Country Fixed Effects	Yes	Yes	Yes	No	Yes	Yes
Observations	155	155	155	127	59	59
Number of states	6	6	6	6	6	6

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
Source: Authors' calculation (2016). STATA 14 software.

Figure 1. The Conditional Marginal Effects: The Impact of Trade Unions on Extreme Meritocracy



Source: Authors' calculation (2016). STATA 14 software.