

Term paper: GRA 5917 – Public Opinion and Input Politics

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Is inequality a political choice?

ABSTRACT: *Is economic inequality the result of conscious policy choices? Or are growing inequalities the inevitable by-product of international trade, economic growth, structural changes in the economy, demographic changes, or other factors outside the scope of politics? By examining the effects of non-political forces on government redistribution of income within 16 OECD countries in the 1980-2000 period, this paper concludes that although international trade appears to reduce redistribution, high degrees of unionization maintain a significant positive impact. Of the parameters included in this study unionization and international trade appears to have the strongest effects on government inequality reduction, statistically significant even when controlling for fixed country- and year effects (Linear Mixed Model analysis). However, the data is inconclusive with respect to government partisanship's effect on redistribution, and indicates that minority governments tend to reduce inequalities significantly more than majority governments. The paper ends with a remark about the need to separate empirical and normative arguments in studies of economic inequality.*

Introduction

The question of government's role in redistributing income is a deeply political issue, and it seems to represent the essence of the political left/right divide. In parallel to the normative political debate, views differ also on the practical aspects of redistribution; are substantial redistribution policies still viable in a globalized era? Have forces outside the scope of politics undermined governments' ability to reduce economic inequalities? Although normative conclusions will inevitably be drawn from such debates, the questions appear to be essentially empirical.

This analysis is an attempt to describe how factors exogenous to the political process may restrict or enhance government efforts to redistribute income. Importantly, the aim is to discuss whether policies to reduce inequalities are still viable in advanced industrial societies – not whether such redistribution is desirable.

Background: the ongoing debate

In his provocative *Conscience of a Liberal*, Paul Krugman (2007) argued that the rise in American income inequality since the 1970s is a result of conscious policy choices attributed to Republican *movement conservatives*. Krugman claims that the tax reforms, anti-union policies, and reduced public welfare spending enacted by the neo-conservative movement have reversed the effects of the egalitarian policies that were introduced by the New Deal. In other words, economic inequality is said to be a political choice that can be reversed.

From the other end of the political spectrum, the Cato Institute's Brink Lindsey (2009) has criticized Krugman for ignoring the effects of non-political structural changes in the economy, such as technological innovation, increases in international trade, and increased levels of labour market participation. According to Lindsey, increased gender and racial equality has brought about a greater competition in the labour market, while de-industrialization has increased demand for high-skilled labour. These forces, which Lindsey argues are actually symptoms of societal and economic progress, have had the unintended effect of increasing inequality.

In a sense, Krugman's writing on inequality, as well as Lindsey's response, is probably more politically than academically motivated. But although the two are politically opposed,

we should not confuse their ideological disagreements with a disagreement over facts. It seems that the two disagree on (at least) two levels: empirically and normatively. While Krugman believes that economic inequalities *can* and *should* be reduced by government interventions, Lindsey argues that governments probably *cannot* and definitely *should not* intervene to significantly reduce inequalities.

The same type of hurdling-together of normative and empirical argumentation is seen in the related debate of globalization and welfare regimes. Both proponents and opponents of increased international trade have long shared the perception of globalization as entailing a *race to the bottom* in welfare policies, arguing that strong welfare regimes cannot survive as international trade increases. While critics on the left frequently protest this perceived consequence of globalization, it has been welcomed by pro-globalists on the right. In contrast to the common wisdom, however, Dani Rodrik (1996) analyzed the empirical evidence and discovered a positive correlation between economic openness and public spending; globalization actually appears to increase government spending. Similarly, a more neutral assessment of the political and non-political forces affecting government reductions in income inequalities might provide important insights for reframing the political debate on redistribution.

The data

There are many available measures of economic inequality. Among the more common are measures of wealth concentration within the richest groups in a society (most commonly the richest 1 or 5 percents), or the ratio of median income to the average income for the wealthiest fifth percentile (the 95/50 ratio). These and other measures are problematic, and statistics may be misleading when temporary fluctuations in peoples' wages, changes in the unit of measure (from households to individual wage earners) and other factors distort the measurement (Lindsey 2009). Also, as most measures of inequality relate to labour statistics such as wage levels, the presence of large groups permanently excluded from the formal labour market such as prison convicts (Western 2006) or a large informal economic sector will distort the statistical measures. Furthermore, a Norwegian study of consumption levels (Andersen 2008) has revealed a dramatic mismatch between household consumption and reported income, particularly among low-income households. The study suggested that standard poverty measures may systematically overestimate the numbers of people in low-income groups. In

sum, these difficulties imply that a combination of measures is needed to give a satisfactory description of economic inequality.

For this particular study I utilize Gini indices from the Standardized World Income Inequality Database (SWIID). The Gini index is a very crude measure of inequality, as it measures only deviation from perfectly equal income distribution. Values vary between 0 (perfect equality) and 100 (perfect concentration). This is the obvious weakness of the measure; changes in Gini indices do not reveal how different sub-groups within a population gain or lose from redistribution. Nevertheless, as this dataset contains measures of both pre- and post-tax inequalities, it should be well suited for describing government actions relating to inequality reduction. For this purpose, we can compute a measure of redistribution (coded `Ineq_red`), which reflects the reduction in inequalities, measured by the difference between pre-tax (gross Gini) and post-tax (net Gini) levels.

Other relevant data are sourced from the Comparative Political Data Set I, compiled by Armingeon et al. This dataset provides political, economic and demographic statistics on OECD countries in the period 1960-2006. Unfortunately the dataset is incomplete, and some countries have been omitted from the selection. In total, data from 16 OECD countries are compared.¹ Because the argument that governments no longer are able to significantly reduce inequalities rests on a number of factors specific to the present situation (de-industrialization, technological innovation, etc), the study is limited to the 1980-2000 period. For practical purposes, some of the variables have been re-coded or computed from other available measures.

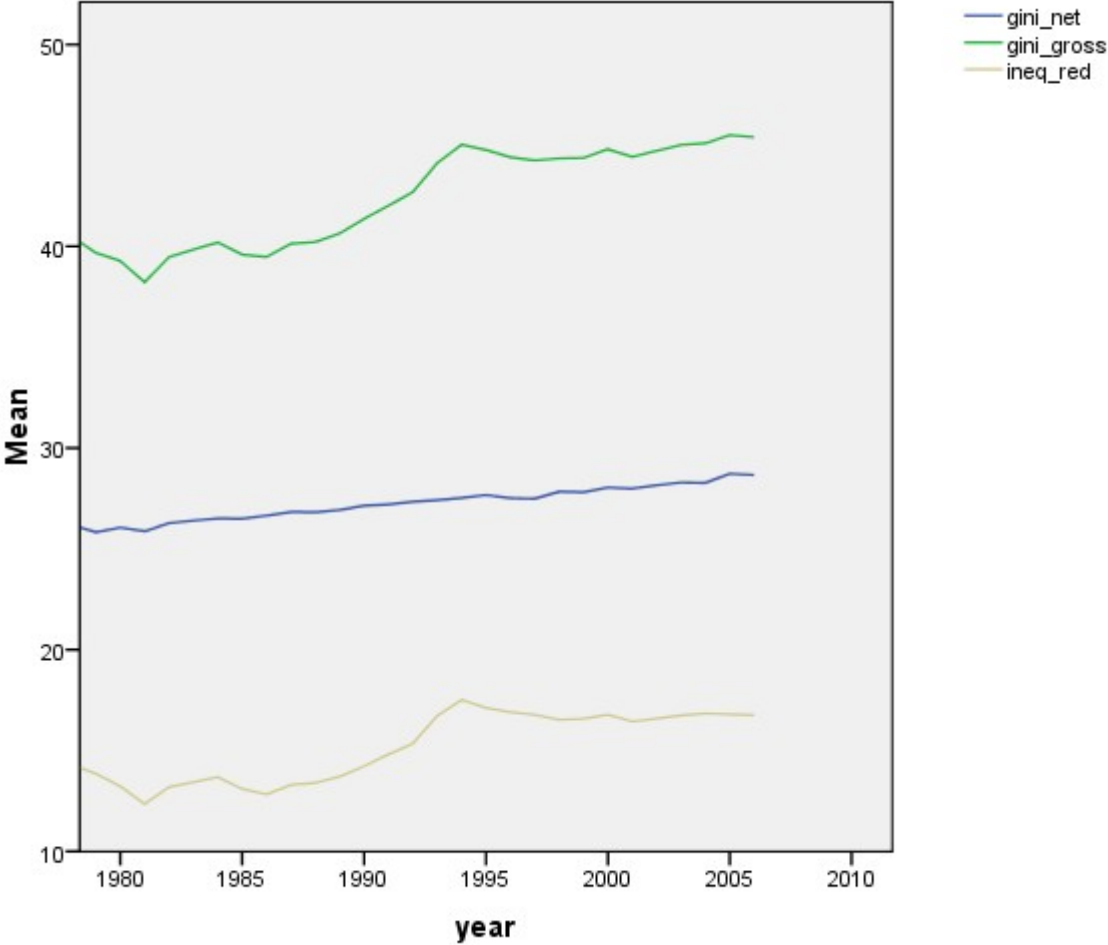
Increasing inequality – and increasing redistribution

Measured both by net and gross Gini indices, economic inequality in the OECD countries appears to have increased steadily since 1980 (see Figure 1). The average pre-tax income inequality has risen from a Gini index of 39,3 in 1980, to 44,8 in 2000. Post-tax inequalities have also risen: from 26,0 in 1980, to 28,0 in 2000. At the same time, it appears that governments have been more committed to redistribution policies; the average reduction in

¹ The selection includes Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Sweden, Switzerland, and United Kingdom.

Gini-measured inequality rose from 13,3 in 1980, to 16,8 in 2000. Obviously, there is substantial variation among the OECD countries, in terms of both pre- and post-tax inequalities, as well as with regards to inequality reduction. Denmark and Sweden consistently score higher on redistribution, while Belgium and France (particularly in the early 1980s) score lower.

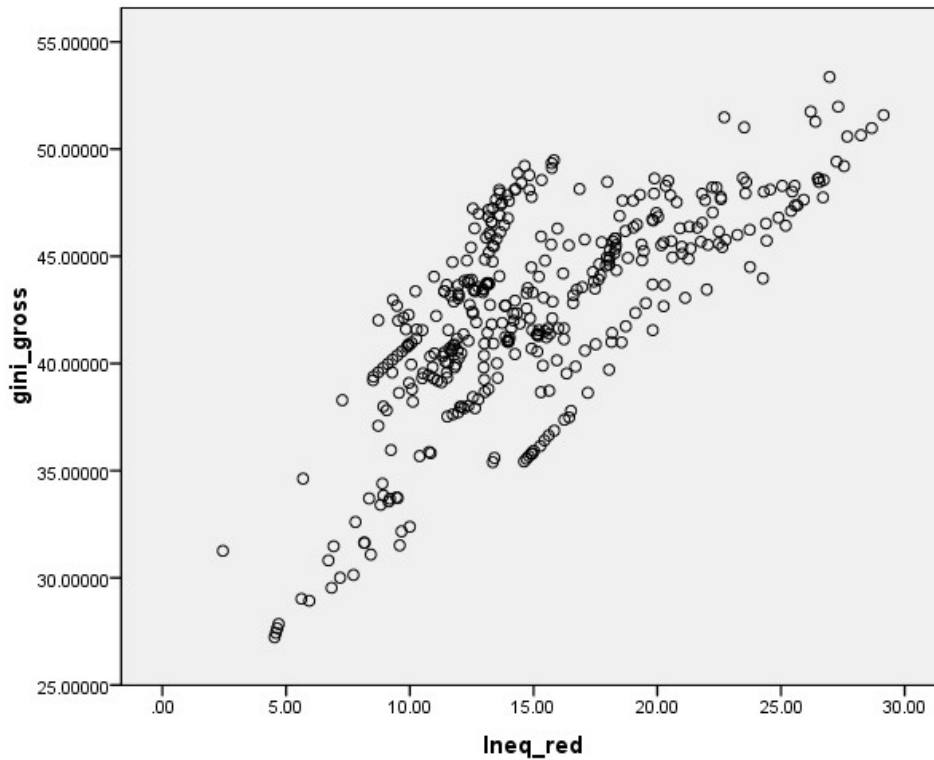
Figure 1: Income inequality (Gini index), OECD average 1980-2006



As shown in Figure 1, the relatively large increases in pre-tax inequality appear to have been significantly softened by redistributive policies. Even though pre-tax inequalities rose quite sharply in the 1986-1994 period, net inequality increased only marginally.

Also, the SWIID data indicates that redistribution is larger in countries with greater pre-tax inequalities. Figure 2 illustrates the strong positive relationship between pre-tax Gini-measured inequalities and inequality reduction:

Figure 2: Pre-tax inequalities and redistribution



From this, it is clear that the data tells a different story than other inequality measures. For instance, by measuring the ratio of wage levels of the 9th and 1st decile in income distributions, Erling Barth and Karl Ove Moene (2008a, 2008b) have found that societies with larger pre-tax equality actually have more substantial redistribution. This effect has been labelled *the equality multiplier*. However, the SWIID data suggests the exact opposite; that societies with greater pre-tax disparities have a higher rate of redistribution. Interestingly, it is the Nordic countries that score highest on measured *inequality reduction*, with pre-tax Gini indices consistently above OECD average. This should serve as a reminder of the uncertainties and difficulties related to measures of economic equality.

Do right-wing governments increase inequality?

Krugman's claim can be summarized in the following: right-wing governments increase economic inequality. And in fact, a simple Ordinary Least Squares (OLS) regression indicates that governments where right-wing parties hold a larger share of cabinet posts (measured by

Armingeon’s estimate *Gov_right*,² a measure of cabinet composition weighted by days in office) tend to have a lesser degree of inequality reduction. Cabinets where right-wing parties hold all posts are estimated to reduce Gini-measured inequalities by 2,443 points less than pure left-wing cabinets. The results are summarized in Table 1:

Table 1: Simple OLS regression

	Initial estimate
Variable	Coefficient (Std. dev)
(Constant)	16,165*** (.366)
Right_cabinet	-2.443*** (.694)
T	209
R2	.031
Note:	
*** denotes significance at the 1 % level,	
T denotes the number of observations	

Although this does indicate that right-wing parties impose less redistributive policies than left-wing parties, the initial model is too crude to be of much analytical use. Non-political forces such as demographic and economic indicators are not included in the estimation, and by restating the problem to control for these factors we significantly reduce the estimated effect of governing party (Models A1, B1 and C1, see Table 2). Interestingly, controlling for minority governments (Model B1) further diminishes this effect, and indicates that minority governments tend to produce significantly more redistribution than majority governments.

However, these three models draw on annually measured levels of inequality and economic performance, and changes in these values are not likely to be very substantial from one year to the next. This means that the strength and significance of the estimated effects may be overstated. To control for this, all variables are recoded to country-specific average values of five-year intervals (1980-85, 1986-90, 1991-95, 1996-2000) and two new models are estimated (Models D2 and E2).³ The findings are summarized in Table 2, and will be discussed in the following section.

² Armingeon’s estimate has been re-coded from percentage to proportion (divided by 100)

³ The variable *Minority* (indicating a one- or multiparty minority government) is a dummy variable, and it makes little sense to compute a five-year average measure, this measure is excluded from Models D2 and E2.

Table 2: Regression analyses, effects on inequality reduction

	Model A1	Model B1	Model C1	Model D2	Model E2
Variable	Coefficients (Std. dev)	Coefficients (Std. dev)	Coefficients (Std. dev)	Coefficients (Std. dev)	Coefficients (Std. dev)
(Constant)	-3,326 (4,232)	-1,586 (4,667)	37,431*** (9,22)	-3.385 (9,303)	87,264 (65,008)
Open_GDP	-.038*** (.011)	-.039*** (.012)	-.037* (.022)	-.045* (.023)	-.280* (.153)
Elderly	.959*** (.140)	.897*** (.152)	.345* (.207)	1,107*** (.304)	-.555 (1,136)
Prop_service	.098* (.059)	.097 (.062)	-.165* (.095)	.174 (.120)	-.891 (.651)
Labour_participation	-.067 (.072)	-.075 (.076)	.080 (.066)	-.155 (.145)	.087 (.510)
GDP_growth	.072 (.120)	.042 (.124)	.023 (.048)	.317 (.492)	.276 (.748)
Unemployment	.040 (.082)	.044 (.088)	.066 (.067)	.008 (.190)	-.566 (.524)
Union_rate	.177*** (.022)	.164*** (.023)	.114** (.046)	.175*** (.044)	.371 (.304)
Right_cabinet	-.856 (.688)	-.963 (.715)	-.266 (.289)	-.265 (1,17)	2.792 (2,798)
Minority	-	1,537** (.668)	-	-	-
Fixed effects	No	No	Yes	No	Yes
T	209	197	209	46	46
R2	.605	.612	N/A	.647	N/A
Note: Models marked 1 draw on annual measures, and 2 from five-year country-specific averages.					
*** denotes significance at the 1 % level, ** at the 5 % level, and * at the 10 % level.					
T denotes the number of observations					

First of all, the more detailed analysis indicates that economic globalization may have lead to less redistribution of income within the OECD countries. In all estimated models increasing levels of international trade, measured by imports and exports as percentage of GDP (*Open_GDP* annual in Models 1 and five-year averages in Models 2), is estimated to have a negative effect on the level of income redistribution. The effect is statistically significant at the 10 % level even when applying Linear Mixed Model regressions controlling for fixed country- and year-effects (meaning that the model controls for exogenous shocks which affect all countries simultaneously in a given year, as well as country-specific factors that make single countries perform particularly different from others), and maintains its' significance when comparing both annual measures and five-year intervals. Also, the effect appears to be stronger when measurements are recoded to five-year average values (-.045 and -.280 in models D2 and E2, respectively). This seems to suggest that the gains from

globalization are not evenly distributed, and that openness to trade enhances economic disparities within countries.

Much of the current research on welfare policies is concerned with the impact of demographic changes. World Bank economist Branko Milanovic (1999: 12) has argued that as an ageing population would lay claim to more public spending (pensions and increased health spending) less is likely to be available for redistribution. And in so far as demographic changes do affect inequalities, it should be by reducing pre-tax inequality (as a population increases its share of pensioners, with relatively small variations in income, the pre-tax level of inequality is expected to decrease). Counter to this argument, my own analysis suggests that demographic change may actually have a positive effect on inequality reduction; that ageing populations are correlated with more redistribution of income. Models A1 and B1 suggests that a one percentage-point increase in share of population over 65 years (*Elderly*) of age should increase redistribution of income by a factor of .959 or .897, respectively. The somewhat weaker effect estimated in Model C1 (.345) is statistically significant at the 10 per cent level, even when controlling for fixed country- and year-effects. Furthermore, Model D2 indicates that the effect is particularly strong (1,107, significant at the 10 per cent level) when factors are measured as five-year average values. Obviously, these two phenomena may be merely parallel developments, and need not be causally related. Nevertheless, it is interesting to note that the analysis does not suggest that redistribution policies become any less viable as the population ages.

Structural changes in the economy may be another decisive factor for redistribution policies. Lindsey argues that de-industrialization has increased the demand for high-skilled labour, thereby diminishing governments' ability to reduce inequalities. The service sector is characterized as a "superstar economy" in which *skill-biased technical change* (SBTC) implies that marginally more skilful employees receive dramatically higher wages. And because highly skilled workers can greatly improve companies' profitability, these workers claim proportionally higher wages (Lindsey 2009: 7-8). This argument does seem reasonable, but my own analysis is inconclusive about the relationship between increasing shares of service sector-employment (*Prop_service*) and redistribution policies. While Model A1 indicates a statistically significant positive effect of de-industrialization on inequality reduction, Model D2 finds the opposite. The other models do not estimate any significant statistically effects. In sum, it seems that we cannot conclude about the relationship between de-industrialization and redistributive policies.

Another vital part of Lindsey's argument is that "[c]hanging attitudes about the role of women in society have also served to open up competition in the labor market." (Lindsey 2009: 13). The argument is that increased competition in the labour market has made redistribution significantly more costly. In my own analysis this effect is estimated by *Labour_participation*, a measure of total labour force as percentage of population aged 15-64, but the data provides no conclusive predictions about this relationship. Estimates range from .087 to -.155, and none of the effects are statistically significant.

The effect of economic growth (*GDP_growth*) on redistribution policies is also difficult to predict, and the data assembled for this analysis is inconclusive about the effects. Although all the models estimate a small positive effect of growth on redistribution, the standard deviations are too large to provide any conclusions. One possible logical explanation for a positive effect of growth on redistribution could be that as economic growth increases all citizens' income the tolerance level for redistributive taxation is also raised. Nevertheless, the estimated effects are weak and insignificant and do not indicate any substantial relationship between growth and redistribution.

Similarly, unemployment levels are in no apparent relation to inequality reductions. Four of the estimated models predict a weak positive effect of unemployment on redistribution, while Model E2 predicts a substantial negative effect. However, none of the estimates are statistically significant, and it is impossible to draw any substantial conclusions about this relationship. In previous studies unemployment has been found to have a statistically strong, although short-term positive effect on public tax and transfer levels, while the long-term effect has been found to be insignificant (Franseze 2002: 85, 124). My own analysis does not indicate any significant impact of unemployment levels.

Lastly, it appears that collective wage bargaining by labour unions has a positive effect on redistribution of income. In a study of macro-economic policies in advanced industrial societies, Franzese (2002) observed a strong positive relationship between unionization and public tax- and transfer levels, suggesting that strong unions not only reduce pre-tax inequalities, but actually increase the scope of public redistribution policies. Similarly, the centrality of labour unions in the Nordic welfare model is well known, and Barth and Moene (2008a) have argued that the compression of pre-tax incomes invoked by strong unionization, combined with an already significant redistributive regime, composes a *multiplier effect* that further increases redistribution. Although the SWIID data indicate that pre-tax inequalities are

actually quite substantial in the Nordic countries, my own analysis indicates that unionization (*Union_rate*: net union membership as percentage of total labour force, computed from Armingeon et al.) has a relatively strong positive effect on inequality reduction. The annually measured estimates range from .114 to .177, and are statistically significant at the 5 percent level even when controlling for fixed country- and year-effects (Model C1). However, the effect does not appear to be statistically significant when applying Linear Mixed Model regressions on five-year average values (Model E2, estimated effect of .371). The overall impression is still that unionization appears to increase governments' redistribution of income.

After controlling for these non-political forces, Krugman's claim that right-wing governments increase economic inequality seems difficult to support. Although the estimates in Models A1, B1, C1 and D2 are negative – indicating that governments with a larger proportion of right-wing cabinet members will produce smaller reductions in Gini-measured inequalities – the estimated effects are not statistically significant. The standard deviations of all estimates are too large to support any clear conclusion. To further blur the picture, the Linear Mixed Model regression in Model E2, which draws on five-year average values and controls for fixed country- and year-effects, actually estimates a positive relationship between right-wing governments and inequality reductions. In sum, this analysis seems to suggest that government partisanship is not a significant determinant for the levels of redistribution in OECD countries. This corresponds well with previous studies (Franzese 2002, Borge & Rattsø 1997) which have concluded that government partisanship has little statistical significance for tax- and transfers level or public sector growth.

Lastly, it appears that electoral strength may actually be a stronger determinant of redistribution levels than government partisanship. Model B1, controlling for both governing parties and non-political factors, estimates that minority governments reduce Gini-measured inequalities by 1,537 points more than majority governments. The effect is statistically significant at the five per cent level. The underlying mechanism might be similar to the logic suggested by Borge and Rattsø (1997) that weaker governments need to appease a wider range of constituents to ensure re-election, while majority governments have the political capital to withstand pressures from special-interest groups. As minority governments tend to have larger public spending, this spending appears to effectively reduce Gini-measured inequalities.

Although this analysis has suggested that government partisanship is less important than openness to trade, levels of unionization and government strength, a note of caution seems to be required. My attempt to isolate political choice from forces exogenous to the political process is relatively unproblematic for many of the independent variables (GDP growth, demographic change, unemployment rates), but two of the most significant determinants of redistribution – openness to trade and levels of unionization – are not as clearly non-political. First of all, to the extent that right-wing parties are in favour of more free trade, government partisanship may in fact have an indirect effect on economic inequality. And similarly, to the extent that left-wing governments lead more union-friendly policies, an indirect effect of partisanship may be contained also in this variable. In fact, the notion that Republican policies have consciously sought to reduce unionization levels is vital to Krugman's argument (2007: 149-152) that equality is a political choice. And in contrast to this, Lindsey argues that the declining rate of unionization is simply the result of greater growth in non-unionized sectors (2009: 16-17). Again, this seems to emphasize how difficult it is to separate empirical and normative arguments when studying economic inequality.

Conclusion

In this paper, I have presented the forces that appear to restrict and enhance redistribution policies. By measuring redistribution as difference between Gini-measured inequalities before and after taxes and transfers, the analysis indicates that although pre-tax inequalities have risen in the OECD countries since 1980, governments appear to have lead more substantial redistribution policies.

The analysis of the non-political forces that affect redistribution has indicated that openness to trade has the most significant negative effect, while unionization levels have a significant positive effect. When controlling for these forces government partisanship does not appear to have any significant effect on redistribution. In fact, the electoral strength of governments appears to be quite decisive – suggesting that minority governments lead more substantial redistribution policies than majority governments. From this, the analysis emphasizes the difficulties of separating political and non-political forces in studies of economic inequality.

Litterature

Andersen, Arne S. 2008. "Lever de med tynn lommebok «over evne»?", *Samfunnsspeilet* 2008 (3). Available at URL: <http://www.ssb.no/ssp/utg/200803/05/> [Accessed 08.06.09]

Armingeon, Klaus, Marlène Gerber, Philipp Leimgruber, Michelle Beyeler. 2008. *Comparative Political Data Set 1960-2006*, Institute of Political Science, University of Berne.

Barth, Erling & Karl Ove Moene. 2008a. *The Equality Multiplier*, ESOP Working Paper. Available at URL: http://www.esop.uio.no/research/working-papers/the_equality_multiplier.pdf [Accessed 25.03.09]

Barth, Erling & Karl Ove Moene. 2008b. "Likhet og åpenhet", *Tidsskrift for velferdsforskning* 11 (1), pp 5-16.

Borge, Lars-Erik & Jørn Rattsø. 1997. "Local government grants and income tax revenue: Redistributive politics in Norway 1900–1990", *Public Choice* 92, pp. 181-197. Kluwer Academic Publishers.

Franzese, Robert J. 2002. *Macroeconomic Policies of Developed Democracies*. Cambridge University Press: Cambridge.

Krugman, Paul. 1997. *Conscience of a Liberal*. New York: W. W. Norton & Company.

Lindsey, Brink. 2009. *Paul Krugman's Nostalgianomics: Economic policies, social norms and income inequality*. Cato Paper. Available at URL: <http://www.cato.org/pubs/wtpapers/Nostalgianomics.pdf> [Accessed: 25.03.09]

Milanovic, Branko. 1999. *Do more unequal countries redistribute more? Does the median voter hypothesis hold?* World Bank Policy Research Working Paper No. 2264

Rodrik, Dani. 1996. *Why do more open economies have bigger governments?* NBER Working Paper # 5537. National Bureau of Economic Research.

Western, Bruce. 2006. *Punishment and inequality in America*. Russell Sage Foundation Publications, New York.