

POVERTY, ECONOMIC FREEDOM AND THE SIZE OF GOVERNMENT IN THE EUROZONE

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Abstract

The aim of this paper is to investigate the connection between economic freedom and poverty, with a particular attention devoted to the size of government. We focus on 12 Eurozone countries in the period between 2000 and 2019. The common framework of these countries is the adherence to a policy model relying on competition, flexibility, and a non-active role of Government intervention in the belief that through economic freedom, the common currency is able to achieve prosperity and growth. We connect poverty with liberalization indexes released by the Fraser institute through a long run dynamic cointegrating technique. The general results tell us that we cannot reject the null hypothesis of a positive correlation between economic freedom and poverty. When considering the components of the economic freedom index related to the size of government, we find that the higher the sub-indexes, that is, lower is the government investments, consumption and top-marginal tax rates (on higher personal income), the higher the percentage of people living below the poverty threshold. Results support the conclusion that, at least in Eurozone countries, wider liberalization worsened the general living conditions, and that government intervention is an important tool to redistribute resources and reduce the income gap among individuals.

Keywords: Poverty; Economic freedom; Size of Government; Eurozone; Long-run dynamic panel data
Jel classification: I30, H50, P10, O52

1. Introduction

Since more or less 50 years, economic policy literature has moved from an interventionist vision, shaped by Keynesian theory, towards a position that sees the market and its correct functioning at the center stage of the analysis. The progressive consolidation of these positions has generated in subsequent years a paradigm known as neoliberalism. It relies on economic freedom as key for human progress. It is the premise of growth, as it increases entrepreneurial opportunity and GDP per capita. It is the source of prosperity, well-being for individuals and the “the proven cure for poverty” (Heritage foundation 2021, p.23).

Inside this framework, the government role is to reduce at minimum its direct activity and implement economic policies “that encourage greater entrepreneurship by empowering individuals and firms with more freedom of action” (Heritage foundation, 2022). The widespread belief is that, as economic freedom increases, poverty reduces but also as governments’ intervention expands private activity is stifled and adverse social effects are supposed to be generated.

The countries belonging to the Eurozone shared this neoliberal vision and focused on the construction of a common market based on competition, flexibility, and a non-active role of economic policy. The underlying idea was that through economic freedom, the common currency was supposed

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to be a sufficient condition to achieve prosperity and growth (Canale and Mirdala, 2019, Rothschild, 2009).

At the same time, European institutions perceive that, especially in times of crisis and in presence of systemic and persistent shocks (e.g. the 2007 financial crisis or the Covid-19 pandemic), economic freedom is not enough to overcome inequality and poverty. Following the Sustainable Developments Goals of the UN Agenda2030, the European commission through the EUROPE2030 recognizes as first goal the objective of “No poverty” is the first goal. However, despite the ever increasing attention and the awareness that inequality and poverty weaken trust in institutions it has been difficult in recent times to counteract the phenomenon: in the period 2005-2021, the number of people at risk of poverty rate, increased of about 7.1 million; in 2022, 95.3 million people in the EU were at risk of poverty or social exclusion equivalent to 21.6 % of the whole EU population. (Eurostat 2023).

Despite the phenomenon of increasing poverty and inequality is at the center of attention of the European institutions (see European Pillar of Social Rights elaborated by the European Commission, 2021), in accordance with the prevailing literature (Heritage foundation, 2021, 2023; Gwartney and Lawson, 2003) - the neoliberal model is still considered valid as economic freedom is perceived as the most effective instrument to achieve the objective of shared prosperity. Economic freedom, is a pillar of capitalist systems (Doucouliagos and Ulubasogluas, 2006) and ensures - through the respect of property rights, market competition, individual decisions about the production of goods and services and free international trade - the spread of individual well-being, economic progress and democracy around the world (Hanke and Walters, 1997; Heritage foundation, 2023; Lawson, 2022; Gwartney and Lawson, 2003; Tag and Degirmen, 2022).

In this context Government intervention should be circumscribed to the management of competition rules and to the production of specific public goods (such as defense or the administration of justice) as any kind of further intervention, and disproportionate increase of the size of public expenses reduces economic freedom and the room for action of private activity, which in turn is the main engine of growth and inequality reduction.

The aim of this paper is to investigate the validity of these connections and to understand if economic freedom is the instrument to promote economic prosperity and fight poverty. We focus on 12 Eurozone countries in the period ranging from 2000 to 2019. The common framework of these countries is the adherence to a policy model focusing on the construction of a common market based on competition, flexibility, and a non-active role of economic policy. We connect monetary poverty to several indicators of economic freedom. Monetary poverty represents the percentage of people receiving an income below the threshold of the 60% of the equalized disposable income. The

economic freedom indicators are the liberalization indexes released by the Fraser institute. We consider both a general indicator capturing the degree of freedom as a whole and several sub indicators related to government presence within the economic activity (the overall size of government, public investments, public consumption) measured also through the presence of taxation on top incomes (top marginal tax rate). The empirical methodology relies on a dynamic panel data technique, allowing for the measuring, in a single equation, both the long-run relationship and the short-run speed of adjustment among variables. This approach, using the error correction form and therefore assuming a cointegrated relationship, delivers results that are considered to be consistent, even in the presence of the different dynamics of each country and even in presence of a reduced number of explanatory variables.

The general results lead us to reject the hypothesis that higher economic freedom itself leads to a reduction of poverty. We rather find a positive correlation between economic freedom and poverty. Moreover, analyzing the components of the economic freedom index (Area 1 Size of government), we find that governments intervention – mainly in government consumption and government investment – contribute to reduce the percentage of people living below the threshold of 60% equivalized disposable income. Finally, an increase of liberalization related to the presence of a high taxation on top incomes contributes to the increase of poverty. Results support the conclusion that, at least in Eurozone countries, wider (narrower) liberalization worsens (improves) the general living conditions, and that government intervention, also through a higher taxation on the richest, is an important tool to redistribute resources and reduce the income gap among individuals

The paper is organized as follows: section 2 recalls the alternative positions about freedom, government intervention and poverty; section 3 contains the empirical analysis. After a first description of data and insights on the phenomenon subsection 3.1 presents methodology and provides results. Section 4 concludes and derives policy indications.

2. Economic freedom, government intervention and poverty

According to the prevailing literature, economic freedom exerts its positive effect on individual well-being and personal income through economic growth (Dorion and Stratmann 2020, Apergis and Katsale, 2018; Piatek et al., 2013, Saccone and Migheli, 2022). A higher economic freedom increases business opportunity and through the strength of private initiative a sustained economic growth (De Haan and Siermann, 1998; Dawson, 1998; Nelson and Singh 1998; Carlsson and Lundström, 2002; Sturm and De Haan, 2001; De Haan et al., 2006; Williamson and Mathers, 2011, Burnie, 2021). In turn, higher economic growth leads to an increase in employment and GDP per capita and, consequently, to an increase of social mobility and a decline in poverty (Heritage foundation, 2023).

The mechanism through which economic freedom boosts growth goes through several channels. Institutions that safeguard property rights and economic freedom stimulate innovation and the growth of economic activity (Gwartney et al., 1999; and Gwartney and Lawson , 2004). Freedom can have both direct and indirect effects on growth: the direct effect is due to the increases in economic activity while the indirect effect is due to increases in private investment (i.e., physical capital), human capital and political stability (Doucouliagos and Ulubasoglu , 2006). Examining different institutional contexts around the world, the prevailing literature states that, differences in cultural, political, and economic structure of the society translates in different degrees of freedom and therefore in different degrees of growth and poverty rates (Acemoglu et al., 2005; La Porta et al., 2004). Economic freedom is the main pillar of democracy and via its effect on economic growth, avoids countries to fall in the so-called “poverty traps” (Aixalà and Fabbro, 2009, Saccone and Migheli, 2022).

However, several authors consider these positions to be weak since higher economic freedom is not necessarily associated to higher growth. Wage liberalization has no connection with GDP growth (Brancaccio et al. 2017) and is supposed to increase in-work poverty (Canale et al. 2022). Free capital mobility exposes single countries to financial markets sentiments and to sudden stops of capital flows that in turn increase interest rates and exert a negative impact on internal macroeconomic equilibrium (Stockhammer, 2022) and therefore on poverty (Weller and Hersh. (2004). Similar effects are detectable also in presence of trade liberalization, creating winners and losers both in advanced economies and developing countries, (Gómez-Ramírez, Padilla-Romo, 2023). These different aspects of liberalization, that characterizes the era of globalization, reduces the ability of single countries to manage autonomously economic policy unless they decide to give up democracy (Rodrick, 2011).

Higher economic freedom means also a reduced presence of government within the economic activity (Cervellò -Royo et al., 2023; Bjornosson and Foss, 2008). This position is coherent with the theoretical transformation occurred since the '70 when the active role of fiscal policy in sustaining aggregate demand, investments and accumulation of capital was progressively abandoned. Fiscal policy and the way of financing it, is transformed in just a cause of instability and an obstacle to private economic activity. These conclusions are based on the Ricardian-equivalence theory Barro (1974) and the further extension of the so-called Keynesian effects of non-Keynesian fiscal policies (Giavazzi and Pagano,1990) according to which a reduction of public expenditure leaves room for private activity boosting permanent national income upward (Alesina and Ardagna, 2010,2012; Bargawi and Cozzi, 2017). The recent crises have reopened the debate assigning a renewed role to fiscal policy especially in presence of systemic shocks. Keynesian theory – as it is well known - points out the fundamental role of government fiscal policy in boosting economy activity, especially during declining macroeconomic conditions (Christiano et al., 2011; DeLong and Summers,2012; IMF,

2010; Blanchard and Leigh, 2013, Nyasha and Odhiambo, 2019, Häge, 2003). The same results are confirmed by Loizides and Vamvoukas (2005), who claim that the size of government is positively correlated with economic growth. Sanchez et al., (2022) come to similar results, stressing how the size of government contributes directly to economic development because of the central role of aggregate demand (Skott, 2021) It deserves to be underlined the work of Fatas and Summers (2016), who questioned the general validity of the Ricardian equivalence, providing support to the idea that the presence of public expenditure is necessary to sustain permanent income. Entering the renewed debate about the efficacy of fiscal policy, authors have been investigating on the relation between the dimension of public expenditure and poverty. Ball et al. (2013), finds that in 17 OECD countries, fiscal consolidation has distributional effects by raising inequality, decreasing wage income shares and increasing long-term unemployment. Agnello and Sousa (2014) similarly finds that in 18 OECD countries in the period 1970–2010 a greater income inequality is associated with a reduction of public expenditure. The Eurozone results goes in the same direction. Fiscal retrenchments necessary to comply with fiscal parameters caused an increase of poverty and inequality (Canale and Liotti, 2019, 2021, Darvas et al., 2014; Crettaz, 2011, 2015), especially in peripheral countries (Kaplanoglou and Rapanos, 2018, Matsaganis and Leventi, 2014a).

In the attempt to estimate the sign of the connection between freedom, size of government and through the intermediation of the level of economic activity on poverty, the next paragraph is devoted to present the empirical estimations.

3. Empirical analysis

The empirical model is built to check the connection between economic freedom and poverty with particular regard to the dimension related to the presence of the public sector within a country. The sample contains twelve Eurozone countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxemburg, the Netherlands, Spain, and Portugal. The time span goes from 2000 to 2019. The first yearly observation corresponds to the birth of the EMU and to the first yearly release of the Economic freedom index and its sub indicators (previously they were collected every five years). The year 2019 is the last available observation before the COVID-19 crisis, when the policy rules completely changed to counteract both supply and demand systemic shock. We choose to restrict the empirical investigation to these 12 Eurozone countries because of their simultaneous introduction of the common currency, the contemporaneous adoption of policy principles and the homogeneity of economic structures.

The dependent variable is Monetary Poverty (MP). It is the share of the total population with an equivalised disposable income below the at-risk-of-poverty threshold of 60% of the national

median equivalised disposable income after social transfers and is available on Eurostat database (<https://ec.europa.eu/eurostat/web/main/data/database>).

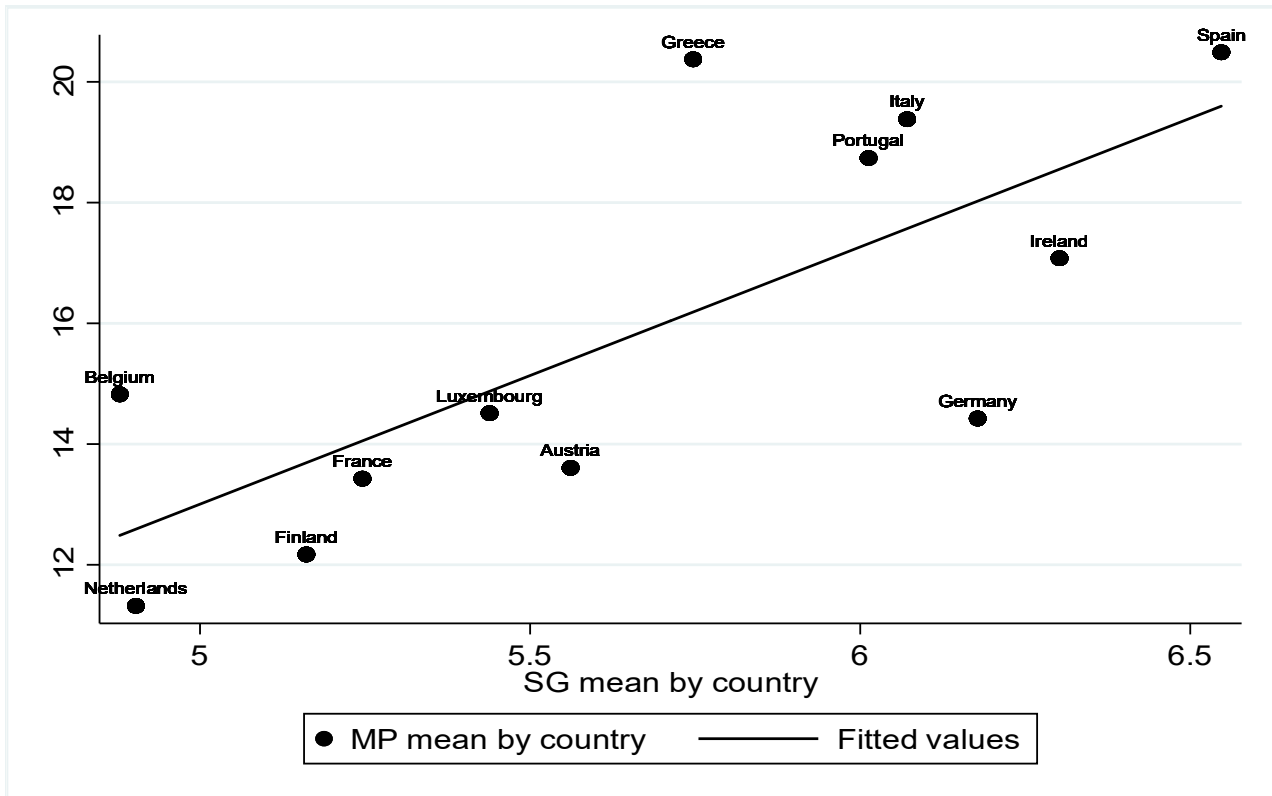
Data about economic freedom were retrieved from the Fraser Institute <https://www.fraserinstitute.org/economic-freedom/dataset> whose mission is to detect, communicate and promote the degree of economic freedom of all countries in the world in the strong belief that it is the basis for development, growth and poverty reduction. The general degree of freedom (EF) is measured by an indicator obtained as a simple average of several sub indicators referred to: Size of Government (Area 1); Legal System and Property Rights (Area 2); Sound Money (Area 3); Freedom to Trade Internationally (Area 4); Regulation (Area 5). The indicators used as explanatory variables are the general indicator of freedom and several indicators related to the size of government. In particular: 1) the Economic Freedom index (EF) ranges from 0 to 10. The higher the index the greater is the degree of freedom in each country. 2) The index detecting the Size of Government (SG) that similarly to the general indicator ranges from 0 to 10: the greater the index the lower is the presence of government inside the economic activity. This second indicator is the simple average of a number of sub-indicators dedicated to specific components of the public budget. In order to investigate in depth, the role of public expenditure in affecting poverty, we extracted further relevant sub indicators of the Area 2: 3) Government Consumption (GC), that measures general government consumption spending as a percentage of total consumption, 4) Government investment (GI), that measure government investment as a share of total investment. The ranking from 0 to 10 of these last three indicators is assigned according to the amount of expenditure for these items of the public balance. The current expenditure in percentage of GDP is normalized using minimum and maximum values individuated at world level throughout the whole-time span and then multiplied by 10. Finally, we use the 5) Top marginal tax rate (TMTR). The higher the marginal tax rate and the lower the personal income on which it is applied, the lower is the degree of freedom related to this component of the revenues of the public sector. It is noteworthy that an increase of this last index may detect higher freedom both if tax rate reduces – given the income threshold – and if the income threshold increases – given the top marginal tax rate. We exclude from our analysis the indicator related to transfers and subsidies because of its direct effect on the reduction of poverty of this kind of public expenditure.

Initial examination of the behaviour of the connection between monetary poverty and the index of freedom related to the size of government can be useful to obtain a straightforward picture of the connection proposed.

Looking to the Figure 1, it is detectable that the higher the average index related to the size of government the higher the monetary poverty rate. Countries with fewer resources to counteract

poverty and with uncertain economic conditions lay above the fitted line (for example, Greece, Italy, or Portugal), while countries with a stronger macroeconomic environment lay below the fitted line.

Figure 1. Size of Government index and Monetary Poverty in the Eurozone



To strengthen the analysis, beside to the economic freedom and the components of Area 1 - Size of Government, we introduce as control variables other indicators capturing the general macroeconomic conditions in each country: 6) the per capita GDP (PC_GDP) accounting for the level of development and the average income in each country regardless of the distribution of income. The higher the per capita income, the lower should be the monetary poverty rate (Kis et al., 2015). 8) the inflation rate (INF) detecting the demand and/or supply pressure on the average growth of prices and therefore on real income. They are both retrieved from the Eurostat database (<https://ec.europa.eu/eurostat/web/main/data/database>).

The inclusion of these control variables allows to account for their connection with poverty, and together with the long run cointegrated technique reinforce the results.

3.1 Methodology and results

The empirical strategy aims at testing the existence of a linear relation between poverty and economic freedom both in general and in relation to the size of government. The methodology adopted is a subset of dynamic panel data techniques and assumes the form of the pooled mean group (PMG) estimator. This relies on cointegration and the error correction form (EC) and is considered to be consistent for estimating dynamic heterogeneous panels, as the long-run dynamics is assumed to be equal across groups, while in the short run the process of adjustment may vary across the panel members (Pesaran et al., 1997, 1999; Blackburne and Frank, 2007). It detects the possible presence of a stable relationship even in the presence of a reduced number of explanatory variables and different dynamics in each country.

The long-run equation is described by:

$$MP_{i,t} = \alpha_i + \lambda_i MP_{i,t-1} + \beta_{i,0} IF_{i,t,j} + \beta_{i,1} IF_{i,t-1,j} + \gamma_{i,0} X_{i,t} + \gamma_{i,1} X_{i,t-1} + \varepsilon_{i,t} \quad (1)$$

where i indicates the country and t time. MP is the poverty indicator and IF is the indicator of freedom with the subscript j is referred to the different indicators chosen, i.e., general freedom, size of government, government consumption, government investment and top marginal tax rate. X is referred to the control variables and ε is the error term. The error correction equation describing the short-run speed of adjustment is:

$$\Delta MP_{i,t} = \phi_{i,j} (MP_{i,t-1} - \vartheta_i - \vartheta_{1,i,j} IF_{i,t,j} - \vartheta_{2,i} X_{i,t}) - \beta_{i,1} \Delta MP_{i,t} - \gamma_{i,1} \Delta X_{i,t} + \mu_{i,t} \quad (2)$$

It is easy to verify that ϑ_i , $\vartheta_{1,i,j}$ and $\vartheta_{2,i}$ are the long-run coefficients calculated as a weighted average of the coefficient of the independent variables. Parameter $\vartheta_{1,i,j}$ for the long run and $\beta_{1,i}$ for the short run are the parameters to be estimated in the model. Parameters $\phi_{i,j}$ are the errors correction speed of adjustment. They have to be significant and $-1 < \phi_{i,j} < 0$ must hold. The value and significance of coefficients $\phi_{i,j}$ is of the utmost importance since it confirms the validity of the proposed empirical model: it shows that, in the long run, the dependent and independent variable converge toward a common path and that their difference in trend is progressively decreasing over time. Table 1 presents the results.

Table 1. Economic Freedom, size of Government and Monetary poverty in the Eurozone: PMG estimation results

Variables	(1)	(2)	(3)	4)	(5)
Long run					
EF	3.532*** (0.222)				
SG		2.066*** (0.259)			
GI			1.503*** (0.240)		
GC				2.402*** (0.197)	
TMTR					0.659*** (0.306)
INF	-0.702*** (0.221)	-0.492*** (0.210)	-0.922*** (0.235)	-0.694*** (0.258)	-0.212*** (0.193)
PC_GDP	-0.477*** (0.065)	-0.832*** (0.063)	-0.390*** (0.081)	-0.0731*** (0.032)	-0.664*** (0.035)
Short-run					
$\phi_{i,j}$	-0.173*** (0.050)	-0.167*** (0.041)	-0.088*** (0.037)	-0.125*** (0.045)	-0.173*** (0.048)
ΔEF	0.368 (0.693)				
ΔSG		0.464 (0.699)			
ΔGI			-0.201 (0.324)		
ΔGC				0.179 (0.332)	
$\Delta TMTR_e$					0.039 (0.124)
ΔINF	0.0326 (0.026)	-0.0146 (0.022)	0.020 (0.027)	-0.034 (0.022)	-0.012 (0.018)
ΔPC_GDP	-0.019 (0.061)	-3.28e-03 (0.117)	0.018 (0.097)	-0.085 (0.116)	-0.113 (0.082)
Constant	0.842*** (0.227)	4.931*** (0.961)	1.530*** (0.556)	1.387*** (0.515)	5.805*** (1.405)
Observations	228	228	228	228	228
Countries	12	12	12	12	12
<p>Note: EF is the general economic freedom index, SG is the general indicator related to the size of government articulated in GI index for government investments, GS index for government consumption and TMTR index for top marginal income tax rate. ***, **, and * reject the null at 1%, 5% and 10% respectively: Standard errors are presented below the estimated coefficients</p>					

The first thing to observe is that the speed of adjustment $\phi_{i,j}$ or the way the variables reach the long-run equilibrium is negative, greater than -1 and highly significant in all the proposed models. Whatever the model and or the indicator, in the long run the degree of freedom is positively correlated with monetary poverty, so that the higher(lower) the degree of freedom, the higher (lower) the share of the whole population living with an income below the threshold of the 60% equivalized disposable

income. Going into details, it is observable that the general index of freedom EF has a coefficient of 3.532*** and the SG index related to the amount of public expenditure, whatever the destination is 2.066***. The positive coefficient means that, as government consumption falls, monetary poverty increases. The same result is confirmed also for the other subcategories of expenditure (for GI it is 1.503***, for GC it is 2.402***). The range of the coefficient depends upon the different effectiveness of the public expenditure on personal income. In fact, the general expenditure is supposed to increase, through the Keynesian multiplier, directly the national income, while the coefficient of GI registers the fact that public expenditure in investment takes longer to unfold its strategic effects on each country industrial structure. Finally, the coefficient of the TMTR index is smaller (0.659***) since it cannot be distinguished if the increase (reduction) of the index is due to a change in the marginal rate of taxation or to a change in the income bracket to which it applies. When examining the coefficients of the control variables in the long run, the one describing the effect of real GDP growth rate (PC_GDP) is always negative confirming the negative connection of the average living standards on poverty. The inflation coefficient deserves a further reflection: it is negative, so denying that an increase in inflation increases – as the prevalent theory tells us – poverty. However, the time span under examination is for the first 8 years a period of very low inflation and for the remaining years of negative rates of prices growth because of the prolonged effects of the financial and sovereign debt crisis. Therefore, it reveals that a very low inflation is – as Keynes told us - a stimulus to economic activity, while declining prices is a signal of deteriorating macroeconomic condition.

If we exclude the coefficient of the constant term, nothing can be said about the dynamic of adjustment in the short run, as the coefficients are not significant. This is due to the heterogeneity of panel members and their non-uniform dynamics in the adjustment path. However, the validity of these results – despite partial and for a limited time span - are preserved by the fact that variables are cointegrated, it always holds that $-1 < \phi_{i,j} < 0$, and the coefficient of the main variables of interest are always positive. The results seem to suggest that the increase of liberalization increases the number of poor both if we look at the general phenomenon and in particular, to the reduced presence of the public sector inside the economic activity.

4. Conclusions

Mainstream neoliberal theory claims that a higher economic freedom can contribute to poverty reduction via its positive effect on economic growth. Neoliberalism states also that, a necessary condition to have higher economic growth is to limit public expenditure. When the size of government increases, the

room for private action reduces and economic freedom declines. Therefore, a size of government going beyond guaranteeing competition rules, damages economic growth and increase poverty.

The European policy framework relies on a neoliberal paradigm as economic freedom is considered to be the main pillar to grant growth and convergence across countries. It is perceived as a necessary support for the efficient working of a market economy in a globalized world. In the absence of economic freedom, the economic system produces below its potential level and the capital accumulation is compromised. Liberal economies have small size governments, as the excess of public expenditure financed through the issuing of public debt crowds-out public investments and produces financial instability. The growth effects of economic freedom should generate a trickle-down effect and reduce poverty.

However, our empirical investigation for 12 Eurozone countries in the time span 2005-2019 support the existence of a different connection. An increase of economic freedom as well as a reduced size of government increases poverty threatening to compromise the “efficient” market working through the potential weakening of social cohesion and the reduction of trust in institutions. In contrast, government intervention should be considered an useful tool that help society to achieve fundamental social aims, such as, the contrast to poverty, without which freedom of choice is difficult to realize.

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