



## The Size of SSE (Social and Solidarity Economy) and Income Distribution in the European Union: Implications for Developing Countries\*

**Chung Sik Yoo**

Yonsei University, Korea

**John Nunya Agbemenu**

Yonsei University, Korea

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The focus of this paper is to find some empirical evidence that an increase in the size of SSE actually contributes to the national economy in terms of income distribution. This task is confronted with some challenges. One is that we do not have a reliable statistical measurement capturing the size of SSE. This happens in part due to the delicate and rather slippery concept of SSE, but also the lack of concern and methodology on the part of member countries. EESC (2012) was an exceptional source for the research since it reports the relevant data needed for the analysis. This report was the starting point of our research. An interesting observation from our empirical research is that in a cross-sectional analysis, we find strong negative correlation between the size of SSE and bad income distribution, especially when we use volunteers as a proxy for the size of SSE. In the case of cooperative employment, the result is not clear enough. Another

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candidate for a proxy, the ratio of total employment in SSE, has consistently shown the positive correlation. One major implication is that socio-economic factors surrounding the economy may be more important for an expansion of SSE than deliberate policies directed for an increase in the size of the sector; SSE may be responding to bad income distribution. This means that people are motivated to participate in SSE movement under some circumstances imposing unfavorable consequences. Another implication is that volunteerism may be a very good sign for an improvement in income distribution. Policies toward SSE sector may be more productive when there is a need among people to participate, i.e., under unfavorable socio-economic circumstances. To find an empirical evidence for the reasoning is in the realm of our future research.

[Key Words: SSE, Income Distribution, Positive Correlation, EU]

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## I . Introduction

The type of development that brings broad-based improvements in human well-being without degrading the environment and causing social upheavals remained largely elusive to policy makers and development planners (Barakatt & Edwards, 2011). The global economic crisis since 2008 has made people feel that capitalistic and free market development does not always guarantee a happy solution in addressing the challenges of majority of the society (Battilana, Lee, Walker, & Dorsey, 2012; European Commission, 2013). Despite the recovery from the crisis, some economies still have high unemployment rates with vast disparities in income distribution, accompanied with the spreading of uncertainty among households and governments (United Nations, 2012). The financial crisis occurred not only due to objective factors in the development of the capitalist system but also by the failure of leaders to control and regulate large volumes of spending and misuse (Guogis, Smalskys, & Ferraz, 2012). Thus, most people are now interested in playing key roles in decisions that affect them, and they find

space in the social and solidarity economy to do so. One key characteristics of SSEs is that it has “no owners” or rather have a collective ownership, a feature that allows a lot stakeholders to be affiliated in one way or the other them (Crowley, Tercelli, & Haddad, 2011).

In academia and the business world the SSE (Solidarity and Social Economy) approach is seen as one of those alternatives proposed to mitigate against the ills of the state and market led economies (Fonteneau, et al., 2011). In addition to above characteristics, SSE builds trust and group cohesion, and is an approach to the economy with the factor “C” at its center that stands for cooperation, community spirit and collective initiative (Dash, 2014). This new paradigm that reshapes our economic experience and way of thinking has been pushed aside as inefficient and lacking conceptual and analytical instruments to support the idea. This situation may arise from the ambiguity of SSE measurement in the economy. International bodies such as the OECD, however, confirm that the third sector institutions or SSEs, are particularly relevant for communities that are affected adversely from economic restructuring and social changes driven mainly by the globalization process, (OECD, 2009; Economic Commission for Africa, 2010). Unfortunately, the concept is not always clearly defined, thus various researchers use as many approaches and definitions depending on their epistemological orientation of the discussion (Alter, 2007).

In their book for the ILO, Fonteneau et al (2011) defined SSE as a concept that refers to enterprises and organizations which produce goods, services and knowledge with a pursuit of economic and social aims and fostering solidarity (Fonteneau, et al., 2011). The EU, on the other hand, stresses a definition that emphasizes the behavior of the actors who are either from private or formal organizations comprising of both the business and market sector and the non-market sector. Such differences in definition make it much more challenging to measure their performance in society since it is sometimes uncertain if an organization belongs to this sector or not (European Commission, 2013). This paper, however, conceptualizes SSEs from ILOs definition focusing mainly on

cooperatives, mutual foundations and associations.

Much as this approach to development is laudable, the actual impact of SSEs on most nation-states is difficult to be ascertained, although there are numerous success stories of individual cases. Comparisons across countries are also limited due to lack of standard indicators on the size and outcomes of this sector. This paper sets up a basic model to measure SSEs and the extent to which they lead to distributive justice in European Union countries.

## II. Empirical Model and Estimation

The flourishing shake of proposals and policy implications of recent literature defending the increasing share of SSE in the economy are in general, without much evidence backed up by real data. It is obvious and understandable that most of the works so far in the SSE sector have been based on qualitative research. It is claimed that quantitative research methods are not as effective as qualitative research methods in capturing and explaining the nuances and peculiarities of working practices in small businesses, (Curran & Blackburn, 2001). Much as this statement may be true, there is a strong demand for a movement toward quantitative methods since we need a more generalized empirical proof that expanding SSE sector is indeed valuable and meaningful. At least, we need to have an empirical support that an increase in the size of SSE actually has something to do with the indicators of development, like GDP growth and an improvement in income distribution.

Since there are too many variables to explain GDP growth, the focus is on income distribution. It is generally expected that if the size of SSE increases, income distribution will be improved. There are two empirical issues included in this testing. First, we should identify a proxy variable for measuring the size of SSE in the economy. Second, we need to estimate a performance measure in the economy, this, should have a strong correlation with the size of SSE. The former

constraint is more critical. A reliable data is only available for EU countries, based on survey conducted in 2010. They published the number of cooperatives and its employment compared to total employment, number of people active in voluntary social service, and mutual associations. Due to lack of adequate data to check the evidence, we focus on EU countries.

## 1. Empirical Model

A performance measure of the economy - a measure of income distribution- is selected for the dependent variable  $Y$ . Independent variables are i) some control variables  $X$  ii) a proxy variable capturing the size of SSE. Therefore, our empirical model is as follows.

$$1) Y_i = f(x_i, s_i)$$

$Y$  is a performance measurement of the economy, i.e., a measurement of income distribution like Gini coefficient or relative income share.  $X$  represents control variables, like GDP per capita, unemployment, agricultural share in GDP, trade openness, minimum wage, and income gap in the labor market.  $S$  is a proxy for the size of SSE, like employment share of the cooperative sector (the number of (formally) employed in the cooperative sector divided by total employment) or the size of voluntary associations (the number of registered volunteers divided by total population).

## 2. Data description

Due to the scarcity of data for this analysis, the main source is from a report entitled "The Social Economy in the European Union" which is report drawn up for the European Economic and Social Committee by the International Centre of Research and Information on the Public, Social and Cooperative Economy

(CIRIEC). Other data sources were the World Bank data and the European Statistics (Eurostats) sites.

Secondary data on relevant indicators such as the number of cooperative employment, volunteers in the SSE sector, GINI coefficient (disposable income) were collected and analyzed using a simple regression method. The main dependent variables were GINI and S90S10, which is ratio of the top 10% income earners divided by the bottom 10%. Several regressions were run using one dependent variable at a time with other explanatory variable.

### 3. Estimation

If the dependent variable is Gini, we may introduce control variables GDPpc (X), and macroeconomic variables like unemployment, agricultural share in GDP, trade openness (trade/GDP), and microeconomic variables like minimum wage or wage gap. Since we have a data constraint, we focus on the most effective control variables including GDPpc. Hence the basic model is:

$$ID = f(\text{GDPpc}, \text{GDPpc-sq}, \text{Unemp}, \text{size of SSE})$$

Due to data limitation, however, we introduce only three control variables following related literature, i.e.,  $\log(\text{GDPpc})$ , and  $[\log(\text{GDPpc})]$ -square, and unemployment rate. There are three candidate variables for capturing the size of SSE ; i) number of paid employment in the cooperative sector (divided by total employment) ii) total employment in SSE (divided by total employment in the economy) iii) number of volunteers (divided by total population). Candidate 1 is applying a narrow concept of SSE confining only to the cooperative sector, but an advantage of using this variable is that the number is relatively reliable. Total employment in SSE is a variable discussed in European Economic and Social Committee (2012). This number is favorable in the sense that it includes all the components (cooperative, mutuals, and associations) of SSE. Unfortunately,

however, many countries do not report some of the numbers in the list. This means that the total may be misleading since ‘unavailable’ category is treated as being “nonexistent”. The number of volunteers is included as a candidate variable since it can represent the social atmosphere toward SSE sector. For a dependent variable representing income distribution, we choose Gini coefficient. Since SSE is poorer people oriented, we may use another measurement of income distribution. For instance, we can use top 10 % share divided by bottom 10 % share as an income distribution index. The estimation results are as follows.

<table 1> The size of SSE and Income Distribution: Cooperative Employment<sup>1)</sup>

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	5.916	28.530		.207	.838
	lnGDP	1.715	2.633	.159	.651	.524
	Coop_TotEmp	-.021	.057	-.079	-.379	.710
	unemp10	.518	.208	.610	2.487	.024*

a. Dependent Variable: 2010 GINI

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	
	B	Std. Error	Beta			
1	(Constant)	11.404	17.020		.670	.512
	lnGDP	-.632	1.571	-.097	-.402	.693
	Coop_TotEmp	.059	.034	.361	1.746	.099
	unemp10	.166	.124	.324	1.333	.200

a. Dependent Variable: S90S10

The table shows that there is a negative, but insignificant correlation between a proxy variable for the size of SSE (i.e. number of cooperative employment

1) GDPpc-square is omitted since it is not our concern to explain income distribution per se, and this inclusion does not contribute to the explanatory power of the model.

divided by total employment) and Gini coefficient<sup>2)</sup>. But if we use relative income share of top10 % to bottom 10 % as a measurement of income distribution, we find a significant positive correlation between the two variables. The result shows that cooperative employment as a proxy may be negatively associated with Gini, but positively related with the relative share.

To explore the relationship in more detail, we may use the ratio of total employment in SSE to total employment in the economy. The following is the result of this regression.

<table 2> The size of SSE and Income Distribution: Total Employment in SSE  
Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.634	23.619		.196	.847
	lnGDP	1.650	2.168	.153	.761	.457
	unemp10	.531	.171	.625	3.106	.006*
	empTot2010	.000	.000	.472	2.759	.013*

a. Dependent Variable: 2010 GINI

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.341	17.187		.369	.717
	lnGDP	-.143	1.578	-.022	-.091	.929
	unemp10	.219	.124	.428	1.763	.096
	empTot2010	6.016E-5	.000	.316	1.531	.144

a. Dependent Variable: S90S10

These results show that as the size of SSE increases, income distribution is

2) We tried several different models for control variables, like agricultural share in GDP, trade openness, minimum wage, wage income gap, just to name a few. However, GDPpc and Unemployment rate are found to be very effective control variables and including other variables, due to data limitation, does not improve the empirical results. Hence estimation results of other models are not reported here.



becoming worse. Of course, this does not mean that a larger size of SSE causes a bad income distribution. It only shows that they have a positive correlation.

To check the relationship between the size of SSE and income distribution more carefully, we run a regression using another proxy variable for capturing the size of SSE, i.e., the ratio of volunteers among total population.

This result is summarized in the following table.

<table 3> The size of SSE and Income Distribution: Volunteers

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.631	25.975		-.101	.920
	lnGDP	2.991	2.449	.277	1.221	.239
	unemp10	.384	.193	.452	1.986	.063
	volpop	-16.945	8.391	-.442	-2.019	.060

a. Dependent Variable: 2010 GINI

Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.119	16.161		.007	.994
	lnGDP	.872	1.523	.134	.572	.575
	unemp10	.121	.120	.236	1.006	.329
	volpop	-12.420	5.221	-.538	-2.379	.029*

a. Dependent Variable: S90S10

As can be seen from these two tables, the ratio of the number of volunteers among population has a strong negative correlation with bad income distribution. The coefficients are negative and significant.

In summary, we find the following observations.

- 1) Cooperative employment as a proxy has an ambiguous effect on income distribution; it is found to improve Gini but the statistical significance is weak. Its effect on relative income share is positive (meaning worsened income distribution) and significant.
- 2) Total employment in SSE as a proxy shows a strong positive correlation with both income distribution indices, meaning that its expansion hurts income distribution.
- 3) The ratio of the number of volunteers among population has a strong and significant negative correlation with income distribution indices, meaning that its expansion improves income distribution.

### **III. Implications and Concluding Remarks,**

The focus of this paper is to find some empirical evidence that an increase in the size of SSE actually contribute to the national economy in terms of income distribution. This task is confronted with some challenges. One is that we do not have a reliable statistical measurement capturing the size of SSE. This happens in part due to the delicate and rather slippery concept of SSE, but also the lack of concern and methodology on the part of member countries. EESC (2012) was an exceptional source for the research since it reports the relevant data needed for the analysis. This report was the starting point of our research. Due to data limitations, however, we can only introduce most undisputable control variables, not comprehensive of course, which may discourage the importance of our regression results. A major interesting observation from our empirical research is that in a cross-section analysis, we find strong negative correlation between the size of SSE and bad income distribution, especially when we use volunteers as a proxy for the size of SSE. In the case of cooperative employment, the result is not

clear enough. Another candidate for a proxy, the ratio of total employment in SSE, has consistently shown the positive correlation. This finding should not be interpreted too seriously, since the data is, in a sense, flawed; many countries actually did not report important statistics and they are treated as being “nonexistent”.

One challenging observation to note is that the number of volunteers (divided by population) has a strong negative correlation with bad income distribution. This may imply the relative importance of this sector as a means of improving income distribution. One interrelation may be that as higher percentage of people are involved in volunteer activities; more people will be open to an idea of cooperation and help, leading to a better income distribution.

Another observation in need of careful explanation is the reason why more relevant proxy variables like cooperative employment and total employment in SSE do not show the expected result. These variables show either weak statistical result or wrong signs. This may come from reversed causation (i.e., bad income distribution encourages people to be more involved in SSE activities) or improper data quality. This result, however, should not be interpreted as saying that policies *expanding* the size of SSE per se is meaningless. A limitation of our research is that we only cover a cross-sectional data for developed countries. If panel data is available, we may find more fruitful and meaningful results that may be different from our observation. It also should be emphasized however, that SSEs may be useful for employment protection under economic crisis and a stabilizer of a national economy when the country is hit by unsecured risks. These potential contributions of SSE should be explicitly modeled and appreciated in our future research.

Finally, what are the implications for the developing countries? One major implication is that socio-economic factors surrounding the economy may be more important for an expansion of SSE than deliberate policies directed for an increase

in the size of the sector; SSE may be responding to bad income distribution. This means that people are motivated to participate in SSE movement under some circumstances imposing unfavorable consequences. Another implication is that volunteerism may be a very good sign for an improvement in income distribution. Policies toward SSE sector may be more productive when there is a need among people to participate, i.e., under unfavorable socio-economic circumstances. To find an empirical evidence for the reasoning is in the realm of our future research.

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## EU에서의 사회적 경제의 규모와 소득분배: 개발도상국에 주는 시사점

유정식  
연세대학교

John Nunya Agbemenu  
연세대학교

이 연구는 사회적 경제의 규모와 소득분배의 관계를 EU 자료를 활용하여 분석하고 있다. 사회적 경제의 성과에 관한 개별 사례 중심의 연구는 많이 발견할 수 있지만 국가별 자료를 활용한 연구는 자료의 한계 때문에 찾아보기 어렵다. 이 연구는 공통의 척도를 통해 국가간 사회적 경제 규모를 측정하는 자료로 거의 유일하게 제공된 EU의 자료를 활용하여 사회적 경제 규모가 그 성과지표로서의 소득분배에 미치는 영향을 실증적으로 분석하고 있다. 한정된 자료하에서 얻은 결과이지만 i) 자원봉사 인구 규모를 사회적 경제규모의 대리변수로 보는 경우 사회적 경제의 규모가 커질수록 소득분배가 좋고 ii) 협동조합 고용인구의 비중을 사회적 경제규모의 대리변수로 삼았을 때 사회적 경제가 소득분배에 미치는 영향은 분명하지 않으며 iii) 사회적 경제에 고용된 총고용인구의 비중을 사회적 경제의 대리변수로 볼 때 사회적 경제 규모가 커질수록 소득분배가 나쁘다는 것이다. 자료 자체와 관련된 논란이 있긴 하지만 이러한 분석을 통해 한 가지 중요한 시사점을 얻을 수 있다. 사회적 경제는 어느 사회가 처해 있는 사회경제적 환경에 반응하여 나타날 수 있기 때문에 반드시 수요측면을 고려해야 하며 이를 활성화하는 공급측면에서의 사회정책을 추구할 때 맹목적으로 사회적 경제의 규모를 키우는 것에 관심을 갖기보다는 매우 조심스럽게 접근해야 한다는 것이다.

[주제어: SSE, 소득분배, 긍정적 상관관계, EU]

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First Author(제1저자): **Chung Sik Yoo** is a Professor of Economics, College of Government and Business, Yonsei University. After writing his dissertation at U.C. Berkeley with a microeconomic application of neoclassical political economy models, he published several books including “Korean Model: Dynamic Korea and Pot-like Temper” (coauthored) “Korean Model II: A Political Economy of Education and School Ties” (coauthored) and academic papers like “Influence Competition model of Migration”, “Greening Transportation Fleets” in some renowned international and domestic journals. His recent research focus is on applying social economy models to Korea, with a special emphasis on the methodology to evaluate the performances of social economic institutions. (e-mail: yooec@yonsei.ac.kr)

Co-author(제2저자): **John Nunya Agbemenu** is a doctoral student of Global Public Administration, Yonsei University. He has finished his MA degree at Yonsei University under the sponsorship of KOICA with a thesis on inclusive growth in developing countries.