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## **INCOME MOBILITY IN THE SEE REGION: A COMPARATIVE ANALYSIS WITH THE EU COUNTRIES (\*)**

### **ABSTRACT**

*The aim of this paper is to revisit the broad researches performed on income mobility. To that end, first, we synthesize the commonly used concepts and corresponding measures in three classes, namely, movement, temporal dependence and equalization of incomes. Second, since the unit of analysis is country, we reformulate the mobility indicators to take into account the countries sizes. Third, in the empirical approach, we compare income mobility in the SEE (South-Eastern Europe) region and in the EU (European Union) countries over the 1990-2009 time period. The results suggest that, in the long-term, income mobility is greater in the SEE than in the EU. However, the opposite holds in the last decade. Moreover, income mobility is mostly a divergent process in the SEE region, whereas the EU experienced a convergent mobility. In addition, unlike the EU, income mobility has disequalized longer-term incomes in the SEE region throughout the period of study. Accordingly, these results can serve as a basis for decision-making in the field of regional development policies that are used in the process of European integration.*

**Key words:** *Income mobility, South-Eastern Europe, European Union*

**JEL classification:** *C00; O47; O52, O57*

### **1. INTRODUCTION**

It is well-established in the literature that income mobility is the movement between and within income distributions occurring over time (Schiller, 1977; King, 1983; Fields and Ok, 1996; 1999; among others). However, there is no clear consensus on how to measure this notion. In fact, as it is argued by Fields (2007), there are various concepts of income mobility, which gave rise to a large number of indicators. This diversity of approaches makes irrelevant all comparison between indicators capturing different concepts.

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The contribution of this paper is to offer a comprehensive presentation of income mobility from a comparative analysis. To this end, we synthesize the commonly used measures in three classes of concepts. The first one captures the *concept of income movement* (see Fields and Ok, 1996; 1999). This concept is interested in the income flux that takes place, and shows how stable or unstable incomes in a region. What lies behind this concept is the notion of absolute mobility while highlighting the individual gains/losses generated by income growth. The second concept is concerned with *temporal dependence/independence* between initial and final income distributions. This concept is based on the notion of correlation between present and past situations (see, among others, Hart, 1981; Atkinson, *et al.*, 1992; Glewwe and Nguyen, 2002). This line of research focuses on the relative notion of income mobility (see Shorrocks, 1978a). A related approach rests on a simple regression of the logarithm of the final income distribution on the initial one, and a value of the slope coefficient lower than one means that income mobility is higher among the poor countries than among the rich ones. The regression coefficient is so-called beta convergence (Barro and Sala-i-Martin, 1995). It is also arguable that the mobility in beta-sense is compatible with a rise or a fall in short-term inequality, i.e., sigma convergence (for more discussion, see Friedman, 1992; Quah, 1993). The third concept considers the mobility in terms of its potential to *equalize long-term incomes* (see Shorrocks, 1978b; Fabig, 1999; Fields, 2010). That is to say, the income mobility is judged by its capacity to reduce or, on the contrary, to worsen the inequalities between people. This concept appears as a mixture between absolute and relative notions of income mobility, and focuses on the long-term mobility outcomes.

The methodology considered in this paper aims to present, for each concept, a selected measures which seem, to us, to summarize the most commonly used mobility indices in the literature. The main objective of the analysis is to identify the existence of notable differences in income mobility between six countries in the South-Eastern Europe region (thereafter SEE6) and the countries of the European Union (thereafter EU27). The term 'income' is defined by the per capita GDP at constant prices. Furthermore, as our unit of analysis is country instead individual (i.e., household), which is the case in the majority of mobility studies, we reformulate the mobility indices to take into account the different sizes of countries. We use population level for weightings. One final methodological consideration is the time period employed, 1990-2009. As it is argued by Atkinson *et al.* (1992), the longer the observation period, the greater is the level of mobility. It is then more appropriate, especially in a comparative analysis, to assess the levels of income mobility in different sub-periods of time. Thus, the empirical illustration distinguishes between medium-term (10 or 11-years period), mid-long-term (16-years period) and long-term (20-years period).

The results show that the long run income mobility is greater in the SEE region compared to the EU27. These results are corroborated by all the indices and the concepts they measure. More importantly, the income mobility is a divergent process among countries in the SEE, whereas it is a convergent mobility which characterizes the EU27. In addition, unlike the EU27, income mobility has disequalized longer-term incomes in the SEE region. However, in the last decade, the results point out a noticeable deceleration in income mobility in the SEE region. This slowdown must be regarded as a signal of the risk of an aggravation of the inequalities, already fairly marked in the region (for more discussion, see El ouardighi and Somun, 2007; 2009). Accordingly, these results can serve as a basis for decision-making in the field of regional development policies that are used in the process of European integration.

The remainder of the paper is organized as follows. Section 2 introduces the framework analysis and presents successively the three aforementioned concepts and their corresponding measures. Section 3 presents the empirical application and discusses the results. Section 4 concludes the paper.

## 2. INCOME MOBILITY: CONCEPTS AND MEASUREMENT

In what follows, we adopt the following notations. Let  $X = (X_1, \dots, X_N)'$  be the vector of initial per capita incomes defined for  $N$  countries, and denoting by  $\mu_X$  the mean income in the initial time. Likewise, let  $Y = (Y_1, \dots, Y_N)'$  and  $\mu_Y$  be the vector of final incomes and their mean, respectively. We use the miniscule letters  $x$  and  $y$  for the logarithm transformations of the vectors  $X$  and  $Y$ , i.e.,  $x = \ln(X)$  and  $y = \ln(Y)$ . Furthermore, since the unit of observation is country, this approach raises two issues. The first one is related to the different sizes of countries in the sample. Accordingly, we reformulate the income mobility measures to take account of countries' weights. Thus, the indicators that we will discuss are, in a sense, a generalized specification of measures commonly used in the literature. We use the population size for weights. In particular, the weight assigned to a country  $i$ , noted  $w_i$ , is defined by the ratio of its population level to the total population of all countries in the sample. The second issue comes from the weights themselves, which may affect the possible results. Indeed, the mobility implies a comparison of income distributions observed between two periods. It thus raises the question which periods, initial or final, must be retained for weightings. By comparing the sensitivity of the results according to the period choice, it is worth noticing that the results remain less sensitive if one uses the initial-weights or final-weights.

### 2.1. MOVEMENT CONCEPT

Fields and Ok (1996; 1999) systematize and discuss extensively some desirable properties for absolute income mobility measures. We synthesize their measures in the two following general specifications:

$$M_{ND}(X_i, Y_i, w_i) = \sum_{i=1}^N w_i |f(Y_i) - f(X_i)|, \quad (1)$$

$$M_D(X_i, Y_i, w_i) = \sum_{i=1}^N w_i (f(Y_i) - f(X_i)), \quad (2)$$

where the function  $f(\cdot)$  is a linear transformation of incomes. In particular, for a variable  $Z_i = \{X_i, Y_i\}$ ,  $f(Z_i) = Z_i$  in Fields and Ok (1996), and  $f(Z_i) = \ln(Z_i)$  in Fields and Ok (1999). Thus, the first specification, termed non-directional income movement by Fields and Ok, does not distinguish between upward or downward movements. That is to say, only the absolute values of the aggregate fluctuations of incomes are taken into account. By contrast, the second specification incorporates a welfare evaluation of the change in incomes between time periods. The measure is a directional income movement since it shows the sign income variations. Notice that Fields and Ok (1996; 1999) consider  $w_i = 1/N$  since the data used are longitudinal in which an individual has the same weight.<sup>3</sup> One of the principal characteristics of the indicators (1) and (2) is their decomposability into several sources,

<sup>3</sup> Fields and Ok (1996) derived another measure that one can easily obtain by considering  $w_i = (\sum_i^N X_i)^{-1}$ .

including, for instance, growth effect, re-ranking or exchange effect and inequality effect (e.g., see Van Kerm, 2004; Rodriguez *et al.*, 2008).

A country can experience a change of its relative position in income distribution even if the level of its income does not change. This can result from the incomes movement of the other countries in the sample. Thus, it is interesting to determine the extent of the absolute variations of the relative position of countries. The instability index<sup>4</sup> tracks changes in countries' shares over time. In particular, we derive the indicator of income instability by considering in (1)  $f(Z_i) = Z_i / \sum_i^N Z_i$  for  $Z_i = \{X_i, Y_i\}$ . By replacing  $w_i = 1/N$ , we obtain the index of shares movement suggested by Fields (2007).

## 2.2. TEMPORAL DEPENDENCE CONCEPT

The incomes movement informs us on the magnitude of the absolute changes that took place during a period of time. However, the movement concept does not necessarily imply either re-ranking or convergence. Thus, to shed more light on the movement process, it is essential to evaluate how much the present is related to the past.

The first indicator is interested in the change of countries' position in the income distribution. That is to say, the positional change of incomes occurs when countries change their ranks over time. A simple way to capture the re-ranking is to calculate the Spearman correlation coefficient. In particular, let  $r_X = (r_{X1}, \dots, r_{XN})'$  and  $r_Y = (r_{Y1}, \dots, r_{YN})'$  the ranks vectors of initial and final income levels, respectively. Spearman's mobility index is defined as follows:

$$M_S(r_X, r_Y, w) = 1 - \rho_S(r_X, r_Y, w), \quad (3)$$

where  $\rho_S(r_X, r_Y, w)$  is the population-weighted correlation coefficient of ranks. If incomes ranks do not change at all between time periods,  $\rho_S(\cdot) = 1$  and  $M_S(\cdot) = 0$ . On the contrary, in the extreme situation of a completely reversed re-ranking,  $\rho_S(\cdot) = -1$  and  $M_S(\cdot) = 2$ . This supposes that the richest countries in the initial time period would be the poorest in the final time period. The case where  $\rho_S(\cdot) = 0$  means that  $r_X$  and  $r_Y$  are completely uncorrelated. The major disadvantage of Spearman's mobility lies in the fact that the measure attaches importance to ranks of incomes instead of incomes themselves. Thus, in the case of no-re-ranking, the index shows the same things even if the relative positions of countries change.<sup>5</sup> Therefore, there is the need for an indicator highlighting this situation. This is what the next measure allows.

The second indicator tracks the degree of the dependence between the current and the past income distributions. A commonly used indicator is the  $\beta$ -convergence coefficient. In particular, there is  $\beta$ -convergence if poor economies tend to grow faster than the wealthy ones. This indicator can be easily derived as follows:

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<sup>4</sup> The index was initially devised by Hymer and Pashigian (1962), and it is extensively used to study the market structure in the industrial organization theory.

<sup>5</sup> Other approaches to analyse the positional changes, which we do not delve deeply in this paper, can be considered. For instance, the analysis of the transition matrices between states informs on how individuals shift among quantile of decile classes (see Shorrocks, 1978a; Jarvis and Jenkins, 1998). King (1983) derived a broad class of positional movement indices axiomatically. The Gini correlation, a mixture of the properties of Spearman and Pearson correlation coefficients (see Schechtman and Yitzhaki, 1999), is promising in the analysis of the positional mobility (see Wodon and Yitzhaki, 2005; Jenkins and Van Kerm, 2006; O'Neill and Van Kerm, 2008).

$$\beta(x, y, w) = \rho_H(x, y, w) \times \frac{\sigma(y, w)}{\sigma(x, w)}, \quad (4)$$

where  $\rho_H(x, y, w)$  is the population-weighted Pearson correlation coefficient.  $\sigma(x, w)$  and  $\sigma(y, w)$  are the standard deviations (population-weighted) of the initial and final income distributions, respectively. Thus,  $\beta(x, y, w) > 1$  means divergence, which implies an increase of income inequality, i.e.,  $\sigma(y, w) > \sigma(x, w)$ . By contrary, a convergence process among countries occurs when  $\beta(x, y, w) < 1$ . However, one cannot judge the evolution of income inequality (for more discussion, see Friedman, 1992). A third indicator which can be derived from (4) is the Hart mobility index:

$$M_H(x, y, w) = 1 - \rho_H(x, y, w). \quad (5)$$

Thus, in the situation of persistence which means that  $\beta(x, y, w) \equiv 1$  and  $\sigma(y, w) \equiv \sigma(x, w)$ ,  $M_H(\cdot) = 0$ . By contrast, Hart's index tends towards a value of 2 in the extreme situation of a complete re-ranking. It is noteworthy that the concept of temporal dependence or time independence (see Fields, 2010) necessarily implies income movement. Thus, the indicators discussed above make it possible to know if the movement has been accompanied by a positional change (e.g., Spearman's index) or if income growth has been higher among the poor (convergence process) or among the rich (divergence process). Nevertheless, one cannot conjecture about the income inequality. The next sub-section examines an important aspect of income mobility by showing which situation the mobility leads to.

### 2.3. EQUALIZER LONG-TERM INCOMES CONCEPT

The last notion of income mobility seeks to know how the income changes experienced by countries imply that the long-term inequality differs from the sub-periods inequalities (see, for more discussion, Jenkins and Van Kerm, 2009). This is what the concept of mobility as an equalizer of longer-term incomes treats. This approach is well-established in the literature (see, among others, Shorrocks, 1978b; Atkinson *et al.*, 1992; Jarvis and Jenkins, 1998), and it finds a renewed interest recently (see Fields, 2010). In this paper, we focus the analysis on two indicators which seem fairly representative of the equalizer long-term incomes concept.

The first indicator is attributed to Shorrocks (1978b), according to whom the mobility is related to the concept of rigidity, i.e., income mobility is the opposite of rigidity. Thus, Shorrocks (1978b) defines income mobility as the process which leads to income equalization as the observation period is lengthened. He proposes the following measure:

$$M_{Sh}(X, Y, w) = 1 - R_{Sh}(X, Y, w), \quad 0 \leq R_{Sh}(\cdot) \leq 1, \quad (6)$$

where  $R_{Sh}(X_i, Y_i, w_i)$  measures the rigidity of incomes which depends on the levels of income inequality in short and long periods. In particular, let  $Z = X + Y$  the vector of the total incomes of initial and final periods, and let  $\mu_Z$  the mean income of  $Z$ . The rigidity index is defined as follows:

$$R_{Sh}(X, Y, Z, w) = \frac{I(Z, w)}{(\mu_X / \mu_Z)I(X, w) + (\mu_Y / \mu_Z)I(Y, w)}, \quad (7)$$

where  $I(\cdot)$  is a weighted cross-sectional inequality measure (e.g., Gini, Theil, etc.). In this paper, we use the standard deviation of the logarithm of per capita income. Thus,  $M_{Sh}(\cdot) = 0$  captures a situation of a complete rigidity of incomes. By contrast, the higher the value of  $M_{Sh}(\cdot)$ , i.e.,  $M_{Sh}(\cdot) \rightarrow 1$ , the greater is the income mobility.

The principal concern with Shorrocks' measure which has been underlined in the literature resides in the fact that  $M_{Sh}(\cdot)$  conveys any information about whether the mobility process is equalizing or disequalizing (Bénabou and Ok, 2001). Accordingly, Fields (2010) emphasizes that any measure of the equalizer long-term incomes must be negative in the case of a divergence process (i.e., the richest gets richer), positive in the case of convergence (i.e., if the richest gets poorer), and equal zero if incomes remain unchanged. Thus, Fields (2010) suggests the following measure:

$$M_F(X, Y, \bar{Z}, w) = 1 - \frac{I(\bar{Z}, w)}{I(X, w)}, \quad (8)$$

where  $\bar{Z}$  are the average incomes. Income mobility is qualified as equalizer long-term incomes if  $M_F(\cdot) > 0$ , and disequalizer long-term incomes if  $M_F(\cdot) < 0$ .

### 3. EMPIRICAL ANALYSIS

The empirical illustration addresses the per capita income mobility of the SEE region compared to the EU between 1990 and 2009. Table 1 lists countries in the two samples. The income definition is the GDP in PPPs (Purchasing Power Parities) at 2005 constant US dollars. The data on per capita GDP and population level are extracted from the GGDC database (GGDC, 2010). Notice that the data are not available separately for Serbia and Montenegro, but both as unit observation.

The 1990-2009 period experienced a more political instability, especially in the SEE region, during the 1990s. Thus, it is important to distinguish between sub-periods income mobility, and in the same time one must be careful when drawing conclusions on the degree of mobility in a short interval of time. We then adopted the following procedure. First, by considering 1990 as a base year, we have distinguished the patterns of income mobility in three time periods 1990-2000, 1990-2005 and 1990-2009. Hence, it is appropriate to refer to the three sub-periods as a medium-term (11-years), mid-long-term (16-years) and long-term (20-years) respectively. Second, we have varied the base years in order to compare the extent of change in income mobility between the first and the last decade. Thus, 1995 and 2000 have been chosen as two additional base years, and we have examined the situation in three sub-periods, namely 1995-2005, 1995-2009 and 2000-2009.

**Table 1. List of countries used in the empirical framework – 1990-2009**

South-Eastern Europe (SEE6)		European Union (EU27)		
Albania	Austria	Finland	Latvia	Romania
Bosnia-Herzegovina	Belgium	France	Lithuania	Slovak Republic
Croatia	Bulgaria	Germany	Luxembourg	Slovenia
Macedonia	Cyprus	Greece	Malta	Spain
Moldova	Czech Republic	Hungary	Netherlands	Sweden
Serbia and Montenegro	Denmark	Ireland	Poland	United Kingdom
	Estonia	Italy	Portugal	

Table 2 presents the results for the first class income mobility, i.e., the movement concept. Columns 1 and 4 show the extent of movement of absolute incomes in SEE6 and EU27 respectively. As can be seen, for all sub-periods, the patterns of income mobility are higher in the SEE6 compared to the EU27 (see Figure 1, the continuous curves).<sup>6</sup> Looking at the situation in the medium-term and long-term, we observe no significant change for the SEE region, whereas the EU27 exhibits an upward rise of the non-directional movement index from 0.189 in the medium-term to 0.310 in the long-term (see the first part of Table 2). The results also indicate that the movement of absolute incomes decreased in the SEE6 region from 0.541 to 0.231 between the 1990s and the 2000s. The fall remains moderate in the case of the EU27. Columns 2 and 5 point to an interesting result. The long-term income growth rates, i.e., the aggregate change welfare, are negative for the SEE6 but positive for the EU27 (see Figure 1, the dashed curves). By contrast, the last decade shows the positive patterns, higher for the SEE region (i.e., 0.231) compared to the EU27 (i.e., 0.142). This finding is not surprising owing to the fact that the growth slowdown in the SEE region during the first half of the 1990s was accompanied by a strong recovery in the end of 1990s and the start of 2000s. Furthermore, the previous results are confirmed by the evolution of income instability (see Table 2, columns 3 and 6, and Figure 2). The indicator points out that the per capita incomes are more unstable in the SEE6 than in the EU27 in almost all sub-periods. Indeed, as it is shown in the bottom of Table 2, the instability is decreased in the SEE region from 0.208 in the first decade to 0.068 in the last decade. In contrast, the level observed in the 1990-2000 for the EU27 is the same as in the 2000-2009 period (i.e., 0.099).

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<sup>6</sup> In this figure and the following ones, the base year is 1990. Hence, each point  $t$  from 1991 to 2009 corresponds to mobility as measured between  $t$  and 1990.

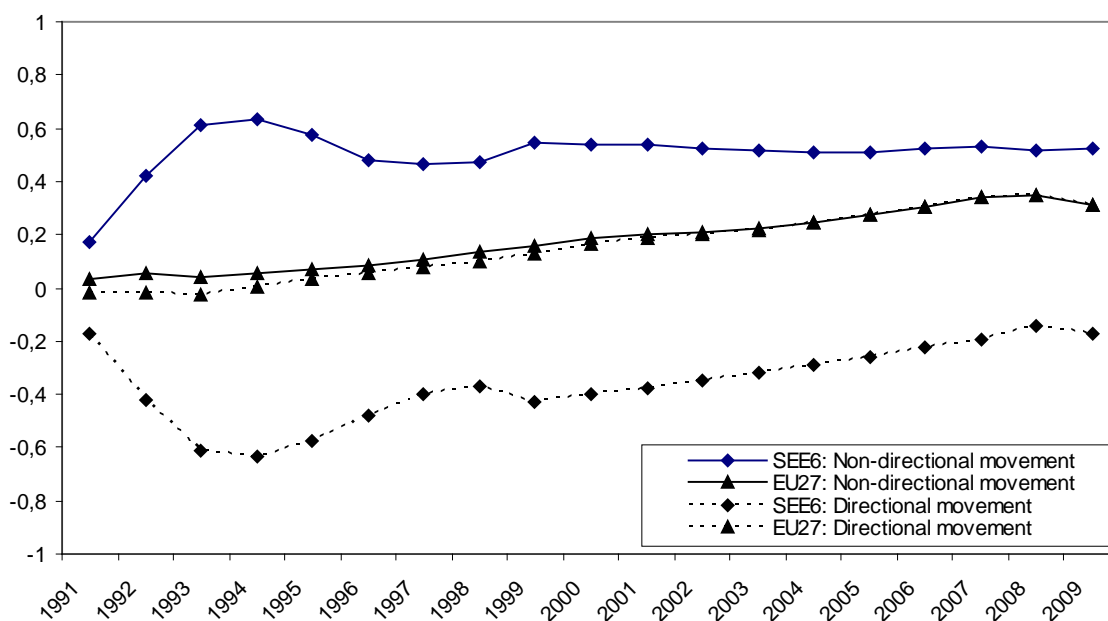
**Table 2. Income mobility: indicators of the movement concept**

	(1)	(2)	(3)	(4)	(5)	(6)
	SEE6			EU27		
	Non-directional movement	Directional movement	Instability index	Non-directional movement	Directional movement	Instability index
<i>Base year 1990</i>						
1990-2000	0.541	-0.400	0.208	0.189	0.166	0.099
1990-2005	0.511	-0.258	0.238	0.271	0.271	0.106
1990-2009	0.523	-0.170	0.236	0.310	0.310	0.120
<i>Base year 1995</i>						
1995-2005	0.317	0.301	0.163	0.239	0.239	0.117
1995-2009	0.389	0.389	0.183	0.277	0.277	0.136
<i>Base year 2000</i>						
2000-2009	0.231	0.231	0.068	0.142	0.142	0.099

Source: Authors' calculation.

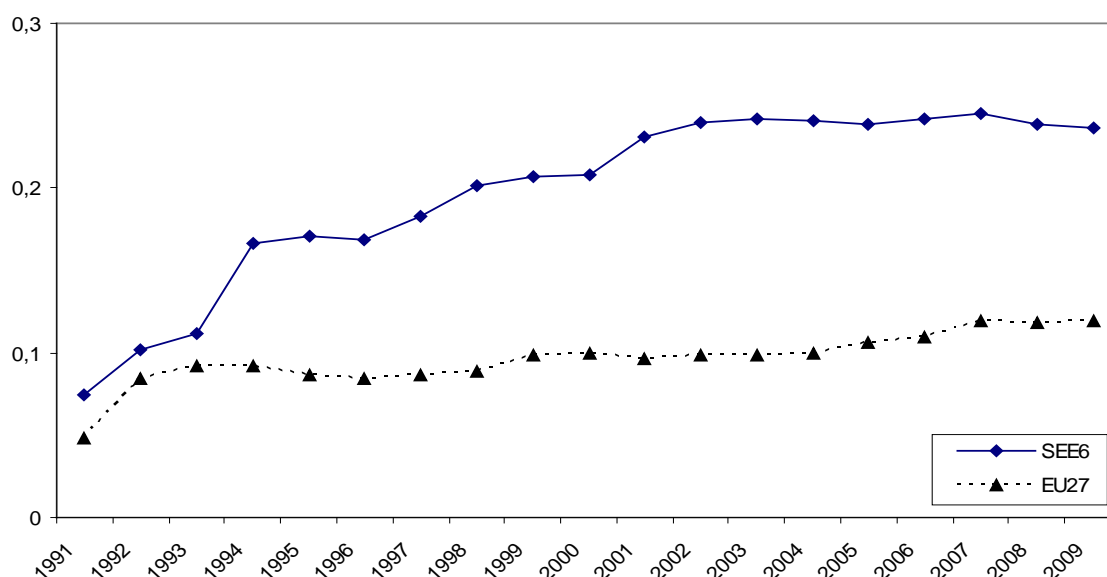
Notes: all measures are initial population-weighted. See Section 2 for details on sample and indicators definitions.

**Figure 1. Income mobility in the SEE and the EU, 1990-2009: Directional and Non-directional movements**





**Figure 2.** Income mobility in the SEE and the EU, 1990-2009: Instability index



The results of the temporal dependence of incomes are presented in Table 3. The results are quite clear. Indeed, the Spearman mobility indices suggest little incomes positional change in the two samples of countries (see columns 1 and 3). Albeit the re-ranking is slightly more marked in the case of the SEE6, the positional change stopped during the 2000s. More importantly, one can note a convergence process of incomes among countries of the EU27, but a divergence process among SEE countries. The estimated parameters of (unconditional) convergence are greater than one for the SEE6 in all sub-periods (see column 2). The reverse holds for the EU27. As a result, the weaker mobility process shown by the Hart indices (see columns 3 and 6) is explained by the fact that the inequality has outweighed the convergence effect (see Figure 3).

**Table 3. Income mobility: indicators of the temporal dependence concept**

	(1)	(2)	(3)	(4)	(5)	(6)
	SEE6			EU27		
	Spearman's index	Beta converg.	Hart's index	Spearman's index	Beta converg.	Hart's index
<i>Base year 1990</i>						
1990-2000	0.181	1.185	0.076	0.044	1.054	0.039
1990-2005	0.181	1.270	0.061	0.067	0.886	0.045
1990-2009	0.181	1.292	0.065	0.085	0.749	0.071
<i>Base year 1995</i>						
1995-2005	0.118	1.137	0.030	0.060	0.819	0.031
1995-2009	0.118	1.158	0.032	0.081	0.699	0.049
<i>Base year 2000</i>						
2000-2009	0.0	1.073	0.005	0.033	0.722	0.019

Source: Authors' calculation.

Notes: all measures are initial population-weighted. See Section 2 for details on sample and indicators definitions.

**Figure 3.** Income mobility in the SEE and the EU, 1990-2009: Inequality and Convergence

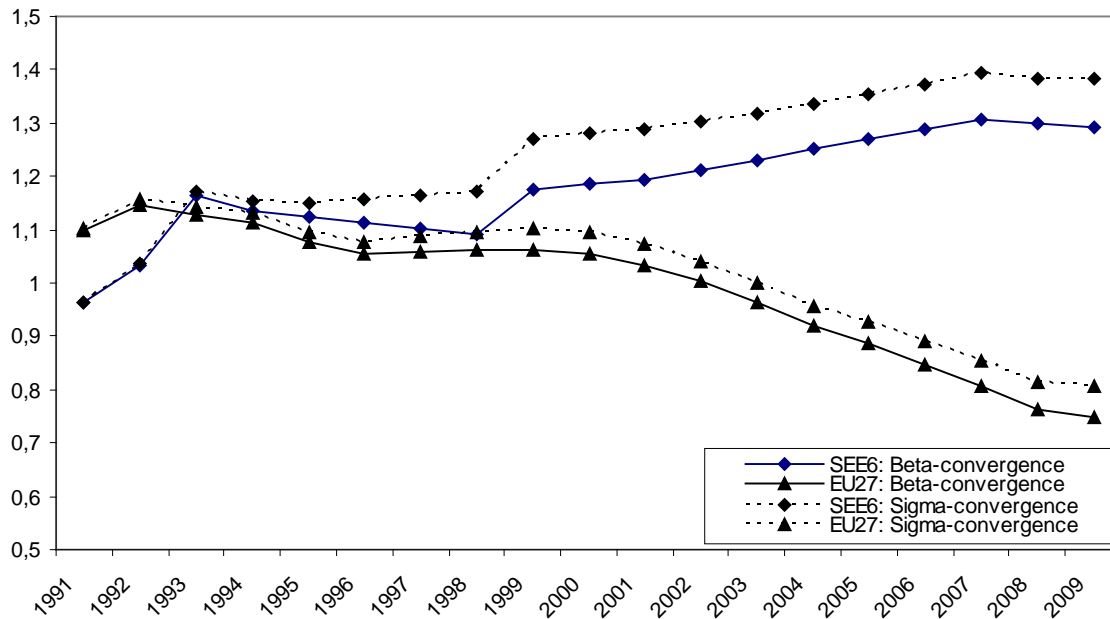


Table 4 presents the results for the third class of income mobility, namely, the mobility as an equalizer of longer-term incomes. Before examining the results of Shorrocks' and Fields' indices, columns 1 and 4 show the ratios of end-level and starting-level of income inequality. As we can see, the ratios remain greater than one in the SEE region, meaning that the income inequality among countries persists. In contrast, a decrease trend was observed among the EU countries (see also Figure 3, the dashed curves). Looking now at the results of the mobility indicators as an equalizer process, two striking findings emerge. First, income mobility was disequalizing long-term incomes in the SEE region, but it was equalizing incomes in the EU27 (see Figure 4). Second, in the last decade, the disequalizing process of income mobility slowed down in the SEE region, whereas the equalizing process is still higher in the EU.

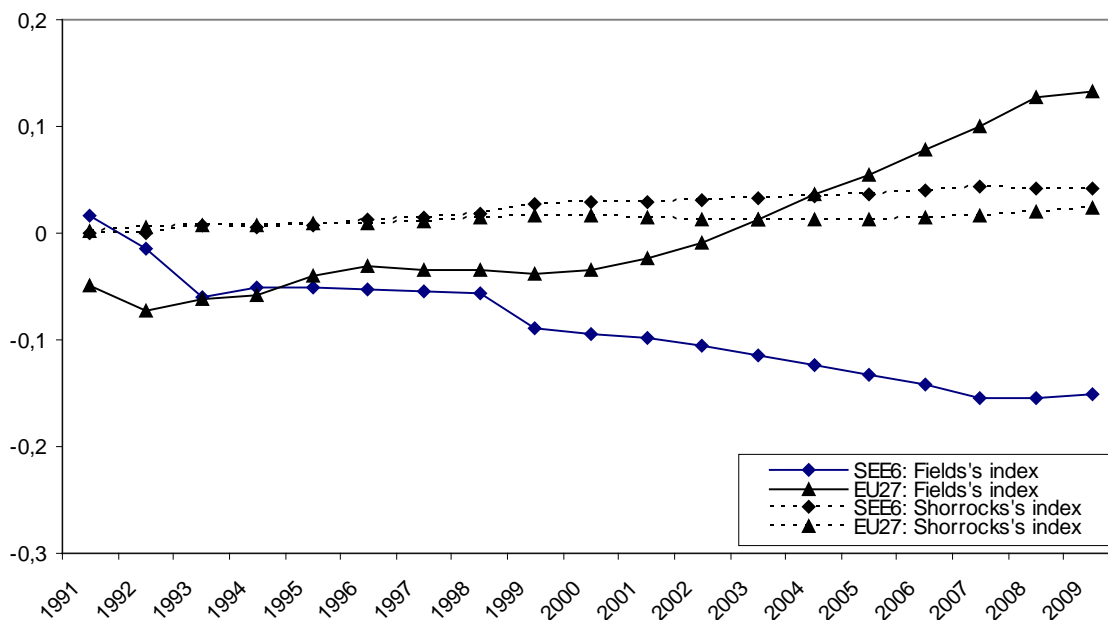
**Table 4. Income mobility: indicators of inequality and equalizer long-term incomes concept**

	(1)	(2)	(3)	(4)	(5)	(6)
	SEE6			EU27		
	Inequality	Shorrocks's index	Fields's index	Inequality	Shorrocks's index	Fields's index
<i>Base year 1990</i>						
1990-2000	1.282	0.029	-0.095	1.096	0.017	-0.035
1990-2005	1.352	0.037	-0.132	0.927	0.014	0.053
1990-2009	1.382	0.042	-0.150	0.805	0.024	0.133
<i>Base year 1995</i>						
1995-2005	1.171	0.013	-0.089	0.846	0.011	0.096
1995-2009	1.197	0.015	-0.107	0.734	0.021	0.167
<i>Base year 2000</i>						
2000-2009	1.078	0.003	-0.042	0.736	0.014	0.152

*Source:* Authors' calculation.

*Notes:* all measures are initial population-weighted. See Section 2 for details on sample and indicators definitions.

**Figure 4. Income mobility in the SEE and the EU, 1990-2009: Equalizer long-term incomes concept**



#### 4. CONCLUSION

This paper contributes to studies of income mobility in two manners. On the one hand, the commonly used concepts and measures in the literature have been synthesized in three classes. The first class captures the concept of income movement. What lies behind this concept is the notion of absolute mobility by assessing the gains/losses generated by income growth. The second concept is concerned by temporal dependence/independence between income distributions. This concept is based on the notion of correlation between present and past situations. The third concept considers the mobility in terms of its potential to equalize long-term incomes. On the other hand, the empirical illustration comes to fill a vacuum on the extent of income mobility in the SEE region during the last two decades.

The main results from the three different classes of income mobility are as follows. (i) Income mobility is higher in the SEE region compared to the EU. (ii) The income mobility is essentially a divergent process among the SEE countries, whereas it is convergent process in the EU case; (iii) The long-term income is equalizing in the EU but disequalizing in the SEE region. All in all, it is noteworthy that after a greater instability during the 1990s, income mobility has considerably slowed in the SEE region in the last decade.

From political economy perspective, the slowdown in income mobility observed in the 2000s can reflect economic, political and social changes of the environment in the region. Within countries, it can also express a situation of efficiencies in allocation and production, a restricted opportunity, etc. Accordingly, further research is needed in order to identify the explanatory factors of the deceleration of income mobility in the SEE region.

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## **MOBILNOST PRIHODA U REGIJI JUGOISTOČNE EUROPE: KOMPARATIVNA ANALIZA SA DRŽAVAMA EU**

### **SAŽETAK**

*Cilj rada je ponuditi pregled istraživanja mobilnosti prihoda. U tu svrhu smo prije svega saželi često korištene pojmove i odgovarajuće mjere u tri grupe, odnosno, kretanje, vremenska ovisnost i izjednačavanje prihoda. Nakon toga, s obzirom da je jedinica analize država, reformulirali smo indikatore mobilnosti kako bismo u obzir uzeli veličinu država. Zatim, u empirijskom pristupu uspoređujemo mobilnost prihoda u zemljama jugoistočne Europe (SSE) i u EU u periodu od 1990-2009. Rezultati ukazuju da je, dugoročno gledano, mobilnost prihoda veća u jugoistočnoj Europi nego u EU. Ipak, u posljednjem je desetljeću bilo obrnuto. Osim toga, mobilnost prihoda je uglavnom divergentan proces u zemljama jugoistočne Europe, dok EU bilježi konvergentnu mobilnost. Povrh svega, za razliku od EU, u zemljama jugoistočne Europe mobilnost prihoda pokazuje neujednačene dugoročne prihode tijekom cijelog analiziranog perioda. Stoga ovi rezultati mogu poslužiti kao temelj za donošenje odluka vezanih za politike regionalnog razvoja koje se koriste u procesu europske integracije.*

**Ključne riječi:** Mobilnost prihoda, Jugoistočna Europa, Europska Unija  
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