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Mountains on the move: recent trends in national and EU-wide income dynamics in old and new EU Member States

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Abstract

In European poverty research, poverty is usually measured with a poverty line defined as a percentage of the national median income. However, for grasping trends in social cohesion in the European Union (EU), and identifying options and pitfalls for social policy initiatives at the EU level, EU-wide income differences are at least as important as national income differences. Therefore, in this paper we document recent trends in national *and* EU-wide income poverty dynamics. We analyse to what extent household incomes have converged in the EU and how this has impacted upon poverty dynamics using both national and EU-wide poverty lines, before and during the current economic crisis. We pay particular attention to disentangling the contribution of both 'old' and 'new' EU Member States to EU-wide poverty dynamics. For doing so, we make use of four waves of EU-SILC data (2005-2011), the EU reference source for information on income and living conditions in Europe.

We find that poverty dynamics using national and EU-wide poverty lines have evolved very differently in the period 2005-2011. Whereas national poverty stagnated during 2005-2009, mainly due to substantial increases in median incomes, EU-wide poverty substantially decreased in the same period. In contrast, although income poverty has increased between EU-SILC 2009 and EU-SILC 2011 when measured with national poverty lines, the crisis seems to have halted, but not (yet) substantially reversed the convergence trend of the lowest incomes in the EU towards the EU-wide median income. Finally, we find that when the new Member States joined the EU in 2004, poverty measured with a pan-European poverty threshold was predominantly a problem of the Eastern European EU Member States, whereas by the end of the period EU-wide poverty is at least as much a problem of low incomes of part of the population living in the EU15.

Keywords: poverty, inequality, convergence, divergence, Europe, EU-SILC, social cohesion, EU

JEL codes: D31, O52, I32

1 Introduction

In European poverty research, income poverty is usually measured on the basis of a poverty line defined as a percentage of the national median income. In spite of its usefulness for identifying vulnerable groups in society and comparing long-term trends and differences across countries, this approach has been increasingly contested (for an in-depth discussion see Goedemé & Rottiers, 2011; Nolan & Whelan, 2011). Without discarding the underlying definition of poverty, some authors have argued that this poverty measure should at least be complemented with a yardstick that uses one common poverty line across all EU Member States, not necessarily because it would better capture poverty as such, but because it would better reveal cross-national differences in living standards, and better measure progress towards achieving greater social cohesion in the EU as a whole (e.g. Brandolini, 2007; Fahey, 2007). Of course, such a purpose could also be served by using the official EU indicator of material deprivation (cf. Guio, 2009), but this would obfuscate relevant EU-wide income dynamics, since income poverty and material deprivation do not correlate very strongly (for an overview of the debate, see Nolan & Whelan, 2011). Moreover, the issue of social cohesion became particularly relevant in light of the impact of the economic crisis. The latest report of the European Commission on *Employment and Social Developments in Europe* showed how the European social convergence witnessed until the economic turmoil was reverted thereafter (European Commission, 2013). As these patterns were assessed using national standards, an interesting complementary inquire is whether a similar situation is observed using a common EU-wide standard. Lastly, when it comes to the discussion about option and pitfalls of EU social policies, EU-wide income differences are at least as important as national income differences (cf. Goedemé & Van Lancker, 2009; Levy, Matsaganis, & sutherland, 2013; Vandenbroucke, Cantillon, Van Mechelen, Goedemé, & Van lancker, 2013). Hence, this chapter aims to contrast national and EU-wide *income* poverty dynamics in a cross-temporary perspective.

More in particular, we provide an update of changes in poverty on the basis of national and EU-wide poverty lines between EU-SILC 2005 and EU-SILC 2011, while paying particular attention to different income dynamics in the EU15 and the Member States that joined the EU since 2004. Given the relatively low level of living standards in the latter group of countries and previously documented strong EU-wide convergence in GDP and income levels (e.g. Heidenreich, 2013), the purpose is to show how this has affected national and EU-wide poverty figures both before and during the economic crisis.

In this paper we add to the literature in at least three ways. First of all, we give an up to date overview of poverty trends using both national and EU-wide poverty lines. For doing so, we expand on Decancq, Goedemé, Van den Bosch, and Vanhille (2014), who present an analysis of poverty trends between 2005 and 2009. Second, for the first time, we quantify the effect of changes in median incomes on poverty trends in the EU, estimating both the size of the effect and the associated statistical margin of error[1]. In other words, we quantify the impact of using a floating poverty line compared to one anchored poverty line and decompose the total change in poverty in an income effect and a poverty line effect. Third, we decompose EU-wide poverty trends by changes in the EU15 and the new Member states (NMS).

[1] To the best of our knowledge, such an exercise has not been undertaken so far.

The paper is structured as follows. In section 2, we briefly discuss some methodological issues that should be taken into account when interpreting the estimates presented in this paper. In section 3, we present first aggregate poverty trends for the EU as a whole, paying attention to (1) the overall distribution of incomes, (2) aggregate changes in poverty levels, (3) the impact of the enlargement to Bulgaria and Romania on total poverty in the EU, and (4) the effect of changes in median incomes on poverty. Subsequently, we discuss how differences in income dynamics in the EU15 and NMS have differently impacted upon total poverty in the EU, both in terms of average poverty measured with national poverty lines and in terms of poverty measured with an EU-wide poverty line. For doing so, we pay attention to (1) changes in the wider distribution of incomes in the EU15 and the NMS, (2) changes in poverty levels in both groups of countries, (3) changes in the share of both groups of countries in total poverty levels, and (4) the contribution of both groups of countries to overall poverty trends in the EU. The main findings of the paper are summarised in section 4.

2 Methodological notes

The analysis presented in this paper makes use of the EU-SILC data. EU-SILC consists of a random sample of private households in all EU Member States and several other countries and is the EU reference source for information on income and living conditions in the EU. In the large majority of participating countries, EU-SILC has a 4-year rotational panel design. In most countries, except for Ireland and the United Kingdom, income data refer to the year before the survey year[2]. In this paper, we analyse waves 2005 (version 5), 2007 (version 6), 2009 (version 4) and 2011 (version 2). Given that 2011 (version 2) data are lacking for Ireland, we use 2010 data (version 2) as a substitute for 2011 data for the latter country.

When analysing poverty, several dimensions can be distinguished (cf. Dewilde, 2004, 2008). Most important among these are the level of poverty, the composition of poverty, the depth of poverty, the severity of poverty, the accumulation of poverty over various spheres of life, and the time dimension. The level, depth and severity of poverty are easily captured with the so-called Foster-Greer Thorbecke (FGT) index (Foster, Greer, & Thorbecke, 1984, 2010), which can be decomposed easily[3]. The FGT index is calculated as follows:

$$P_\alpha(X) = \frac{1}{n}\sum_{i=1}^{n} max\left\{\left(\frac{z - x_i}{z}\right), 0\right\}^\alpha$$

In the analysis that follows, the vector *X* corresponds to equivalent disposable household income x_i for each of the n individuals in society. Equivalent disposable household income equals the sum of all after-transfer incomes of all household members, net of taxes and social contributions, divided by the modified-OECD equivalence scale of the household[4]. In this paper, we use 'income' and 'equivalent disposable household income' interchangeably. Incomes are top-bottom coded following

[2] In Ireland, the income reference period equals the twelve months preceding the interview, whereas in the United Kingdom current income is multiplied by 52 or 12 (depending on whether it has been recorded as a weekly or a monthly amount). For more information on EU-SILC, we refer to Marlier, Atkinson, Cantillon, and Nolan (2007), Iacovou, Kaminska, and Levy (2012) and Decancq et al. (2014).

[3] Some authors have extended the FGT index such that it can also capture the accumulation of deprivations over various spheres of life as well as the duration of poverty.

[4] The modified OECD equivalence scale attaches a weight of 1 to the first adult, 0.5 to all other household members aged 14 and over and 0.3 to all household members aged less than 14 years.

the 'LIS procedure'[5]. The poverty line (z) is equal to a percentage of either the EU-wide median equivalent disposable household income, or the median equivalent disposable household income of the country in which one lives. Finally, the parameter α allows for adjusting the degree of sensitivity to the distribution among the poor. In this chapter, the three most commonly used FGT(α) indices are considered, namely $\alpha = 0$; $\alpha = 1$ and $\alpha = 2$. By setting α equal to these three values, the FGT index refers to the incidence, the depth and the severity of poverty respectively. Please note that we normalise the poverty gap (that is, the difference between an income below the poverty line and the poverty line itself) by dividing it by the poverty threshold. This has the advantage of making the poverty gap cross-nationally comparable, but has the disadvantage to obscure in some cases the contribution of various groups to the total poverty gap. A more in-depth discussion of the various aspects of the FGT index and the measurement of poverty in the EU can be found in Decancq et al. (2014). Please note that if z is equal to a percentage of the national median income and α is equal to zero, the poverty measure corresponds to the so-called at-risk-of-poverty indicator, the most prominent of the EU indicators to monitor poverty and social exclusion in the European Union.

When calculating poverty on the basis of an EU-wide poverty line, it is necessary to make incomes comparable across countries. In this paper, we are not so much interested in income differences *per se*, but rather in differences in living standards and purchasing power. Therefore, all incomes have to be converted to the same currency, taking account of relative price differences across countries. We do so by using purchasing power parities (PPPs) for final household consumption as calculated by Eurostat[6]. The use of PPPs is not a perfect solution for making incomes cross-nationally comparable. For instance, they do not easily allow for a consistent comparison over time, as PPPs are (by necessity) constructed for a certain moment in time. Hence, when comparing incomes both cross-nationally and cross-temporally, we first convert incomes to 2004 values on the basis of country-specific harmonised consumption price indices. Subsequently we convert them into purchasing power standards using PPPs for 2004. Two other caveats when using PPPs should be kept in mind when interpreting the results. First, the basket of goods and services that is used for calculating the PPPs may be more representative for some countries than for others, which may lead to biased estimates of income levels and EU-wide poverty trends. Furthermore, they are not necessarily constructed on the basis of a basket of goods and services that reflects consumption patterns of low income groups and neglect within-country differences in price levels. Nonetheless, PPPs are the best tool available for making incomes cross-nationally comparable (for a more extensive discussion of the use of PPPs in poverty research, see Milanovic, 2005; Van Mechelen, Marchal, Goedemé, Marx, & Cantillon, 2011).

Given that EU-SILC consists of complex sample designs, standard errors calculated under the assumption of simple random sampling are strongly downwardly biased. However, sample design variables in the EU-SILC dataset are not complete and do not allow for taking full account of the sample design (cf. Goedemé, 2010, 2013a; Osier, Berger, & Goedemé, 2013). Therefore, we follow the recommendations by Goedemé (2013b) for making optimal use of the sample design information in the data, and have reconstructed sample design variables for all EU-SILC years between 2005 and

[5] Incomes are bottom coded at 1 per cent of the country-year specific average equivalent disposable household income and top-coded at 10 times median non-equivalised disposable household income. See Van Kerm (2007) for a discussion of the treatment of extreme income values in EU-SILC and Goedemé (2012) for their effects on the sampling variance of poverty estimates.

[6] PPPs can be downloaded from Eurostat's online database.

2011[7]. Unfortunately, sample design variables cannot be reconstructed in a consistent way across EU-SILC waves, so that it is not possible to calculate the covariance between two waves, which in many cases is not equal to zero given that EU-SILC has a rotational panel design. As a result, standard errors of changes over time can be expected to be over-estimated. In addition, except if mentioned otherwise, standard errors take account of the fact that the poverty line has been estimated on the basis of the data using the DASP module developed for Stata (Araar & Duclos, 2007; Duclos & Araar, 2007). As has been noted by several authors, the fact that the poverty line is estimated as a share of median income, which itself is an estimate on the basis of the data, can have a non-negligible effect on the sampling variance (Berger & Skinner, 2003; Preston, 1995).

3 Results

Poverty trends between EU-SILC 2005 and EU-SILC 2011 are discussed in two separate parts. In the first part, we elaborate on poverty trends for the EU as a whole. In the second part, we pay attention to poverty trends in the EU15 and the new Member States that joined the EU since 2004.

3.1 Poverty trends in the European Union

Poverty trends for the entire EU are summarised in Table 1 below. As we follow up on the study by Decancq et al. (2014), we make a distinction between the period 2005-2009 and the period 2009-2011. We look at six different poverty measures, for a wide range of poverty thresholds. Quite obviously, the choice for applying an EU-wide rather than a national poverty threshold makes the most important difference. Otherwise, changes in poverty as measured with a headcount measure are very similar to those recorded with the (squared) normalised poverty gap ratio.

The interpretation of poverty trends in the EU is somewhat tricky given the accession of Bulgaria and Romania to the Union in 2007. Unfortunately, data coverage does not allow us to construct a consistent time series that includes all current EU Member States. For the period starting in 2007 we can include Bulgaria and Romania in the analysis, and since EU-SILC 2009 we can in addition include Malta. As is explained in more detail below, with the accession of Bulgaria and Romania, poverty indicators increased substantially. However, post-2007 trends in poverty at the EU level are not dramatically changed if Bulgaria and Romania, and Malta for the two last years, are included in the analysis. Given that Croatia joined the EU only in 2013, we exclude the latter country from the analysis.

[7] The Stata do-files for reconstructing the EU-SILC sample design variables are available for download from http://www.ua.ac.be/main.aspx?c=tim.goedeme&n=95420.

Table 1: The evolution of poverty in the EU 27, an overview (EU-SILC 2005-2011)

Metric of well-being	Poverty line	FGT(0)		FGT(1)		FGT(2)	
		2005-2009	2009-2011	2005-2009	2009-2011	2005-2009	2009-2011
Equivalized household disposable income	40-70% of country-specific median income	=	↗	=	↗	=	↗
	40-70% of EU median income	↘	=	↘	=	↘	=

Notes: The depicted trends for the period 2005-2007/9 refer to the EU27 minus Bulgaria, Romania and Malta, thereafter to the EU27, see text for more details. Trends are evaluated with a statistical margin of error estimated with 90 per cent confidence, assuming the various EU-SILC waves are based on independent samples.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

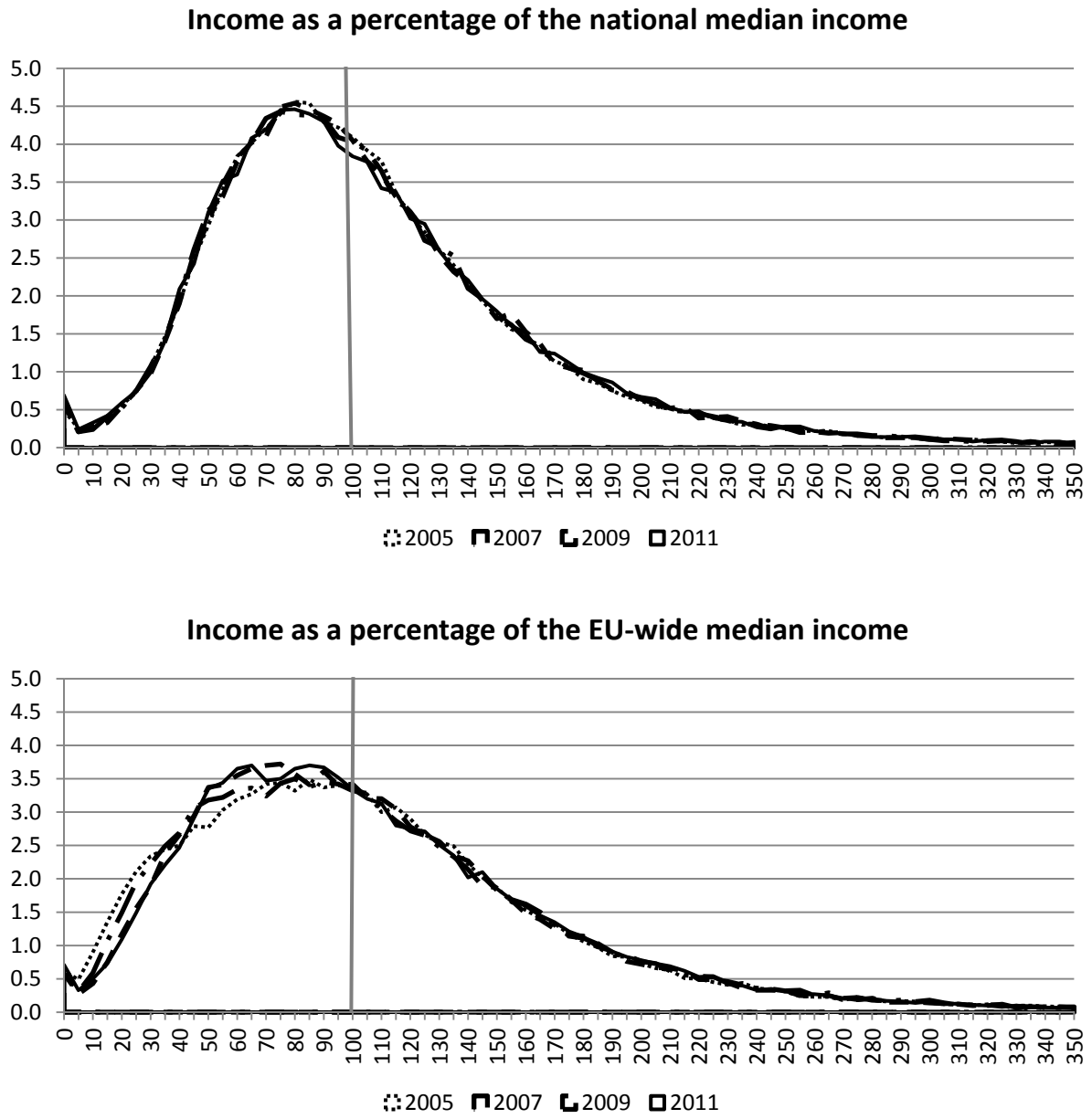
3.1.1 Changes in the wider income distribution

Before delving deeper into the observed trends, it is good practice to first have a look at the entire distribution of incomes. Figure 1 shows a relative frequency curve of equivalent disposable household incomes for the EU, excluding Bulgaria, Malta and Romania (for reasons explained above). In the upper graph, incomes are expressed as a percentage of the national median income in the respective years of the survey. In other words, 100 refers for every country and every year to the year- and country-specific median income. The graph could also be interpreted as the weighted average relative frequency distribution of all EU Member States. This is the relevant basis for comparison in the case of the at-risk-of-poverty indicator and relative inequality indicators such as the gini coefficient. In the lower graph, incomes are expressed as a percentage of the year-specific EU-wide median income, taking account of relative price differences between countries. This is the relevant basis for comparison in the case of poverty measured with an EU-wide poverty line. It depicts the EU income distribution as if it were one country. In both cases, the changes we observe over time are changes relative to the median income, which do not necessarily correspond to changes in real incomes (see below). From the graphs, several remarkable conclusions can be drawn:

- The EU-wide distribution of income is more dispersed than the average national distributions of income which are more condense just below the median. Nonetheless, its shape does not look fundamentally different.
- More dramatic changes have taken place in the EU-wide distribution of income than on average in the national-specific distributions of income, which appear not to have changed very much.
- As far as the national income distributions are concerned, the relative number of individuals with an income between 75 and 120 per cent of the national median equivalent household income has declined especially between EU-SILC 2009 and 2011, and increased slightly in the same period at the bottom and the richer part of the distribution. In contrast, the EU-wide

income distribution (excluding Bulgaria, Malta and Romania) 'lost weight' in the lower tail of the distribution (below 40 per cent of the EU-wide median) and became more condensed between 40 and 100 per cent of the median, in particular in the period 2005 and 2009. This is the opposite in timing and direction of the change in the national income distributions.

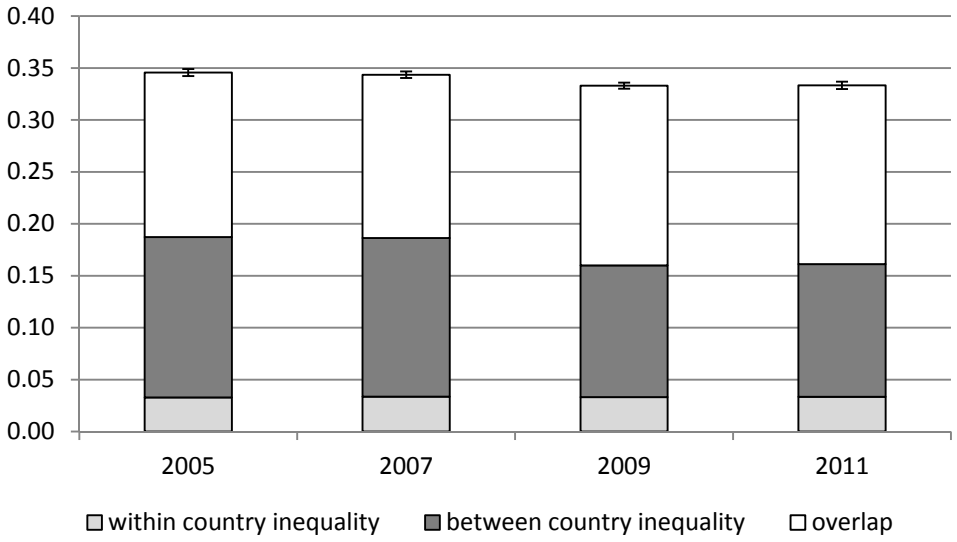
Figure 1: Relative frequency curve of equivalent disposable household incomes in the EU (excl. Bulgaria, Croatia, Malta, and Romania) in PPS, expressed as a percentage of the national median income and as a percentage of the EU-wide median income, EU-SILC2005-2011



Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

The changes in the EU-wide distribution correspond to a decrease in overall EU-wide income inequality as well as a decrease in the importance of between-country differences in income levels, as is illustrated in Figure 2. Over the entire period, the gini coefficient of the EU-wide income distribution decreased from 0.346 to 0.333 (excluding Bulgaria, Malta and Romania), in particular as the result of a decrease in between-country differences in income levels between EU-SILC 2007 and EU-SILC 2009.

Figure 2: Absolute contribution of within-country differences, between-country differences and the overlap to the total EU-wide gini coefficient, EU-SILC 2005-2011 (without BG, MT & RO)



Note: The graph includes 95% confidence intervals for total gini coefficient (that is, the sum of the three components).

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

3.1.2 Aggregate changes in national and EU-wide poverty in detail

Figure 3 shows the observed trends in more detail for poverty measured with a poverty threshold defined as a percentage of the national median equivalent household income. The graphs are drawn excluding Bulgaria, Malta and Romania from the analysis. For the period 2005-2009 the poverty headcount slightly increases between EU-SILC 2005 and 2007, at least for a poverty threshold between 50 and 60 per cent of the national median income, and declines between EU-SILC 2007 and 2009, which is significant with 90 per cent confidence for poverty thresholds between 42 and 60 per cent of the national median income. The changes are relatively small though, and do not exceed 0.5 percentage points, regardless the level of the poverty line. As an illustration, in the case of a poverty line at 60 per cent of the national median income, the total figure increases from 15.9 in 2005 to 16.2 in 2007 and back again to 15.9 in 2009. In contrast, these oscillations between EU-SILC 2005 and

2009 are not observable for the (squared) normalised poverty gap ratio[8]. As is also clear from the graphs, the increase in poverty between EU-SILC 2009 and 2011 is much more outspoken for the normalised and squared normalised poverty gap ratio. The relative increase between EU-SILC 2009 and 2011 ranges between 5 and 14 per cent in the case of FGT(1) and between 9 and 18 per cent in the case of FGT(2).

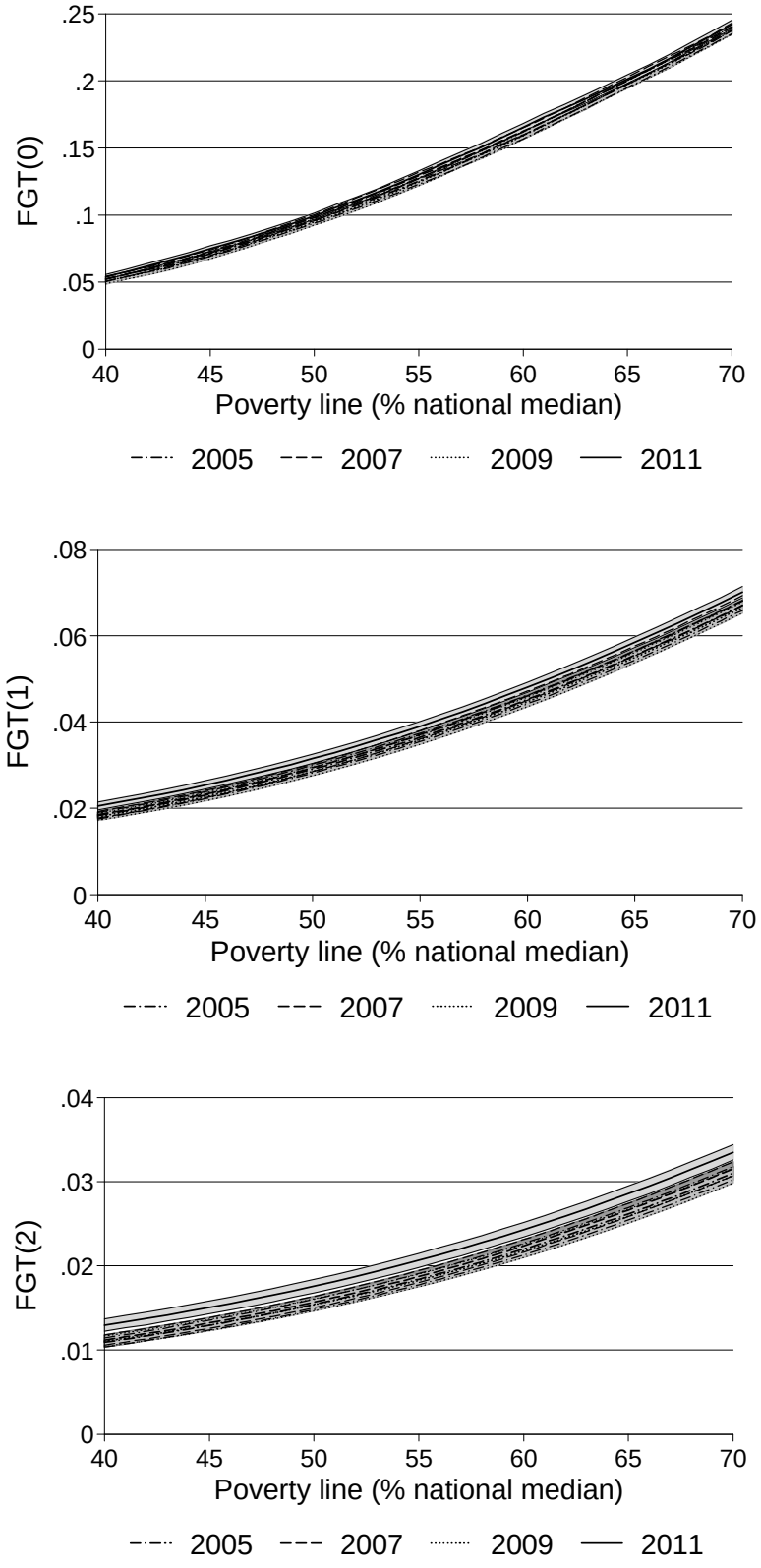
The observed trends are largely the same for the period 2007-2009 if we include Bulgaria and Romania and for the period 2009-2011, including also Malta. However, in the case of the poverty headcount and the normalised poverty gap ratio, the decrease in poverty between 2007 and 2009 is significant with 90 per cent confidence for nearly all levels of the poverty line between 40 and 70 per cent of the national median income. In the case of the squared poverty gap ratio a significant decrease between 2007 and 2009 can be observed for poverty lines of more than 55 per cent of the national median income. The size of the increase between 2009 and 2011 is for all three poverty measures slightly smaller if all 27 Member States are included in comparison with the estimations excluding Bulgaria, Malta and Romania.

As can be observed from Figure 4, if we measured poverty with an EU-wide poverty line, poverty levels are generally higher. For instance, the poverty headcount reached 23 per cent in 2005 with an EU-wide poverty line at 60 per cent of the median income, whereas it was only about 16 per cent with poverty lines equal to 60 per cent of the national median income. At the same time, poverty trends look very different. In contrast to poverty measured with national poverty lines, we observe a decrease between 2005 and 2009, and no significant change between EU-SILC 2009 and 2011, except for lower levels of the poverty line in case of the (squared) normalised poverty gap ratio. While decreases are already observable for lower levels of the poverty line between 2005 and 2007, the most important decrease is realised between EU-SILC 2007 and EU-SILC 2009 with decreases between 1 and 1.8 percentage points in the case of the poverty headcount. Similar trends can be observed if Bulgaria, Malta and Romania are included in the calculations. However, the slight increase between 2009 and 2011 observed for lower levels of the poverty line in the case of the (squared) poverty gap ratio are not significant if the latter three countries are included in the calculations.

Over the entire period, the decline in EU-wide poverty is quite substantial. For a poverty line between 40 and 50 per cent of the EU-wide median, the decrease in the poverty headcount is about three percentage points, gradually decreasing to about one percentage point for a poverty line at 70 per cent of the EU-wide median income. Similar year-to-year trends can be observed for the (squared) normalised poverty gap ratio, but in these cases over the entire period the gains have been largest at higher levels of the poverty line.

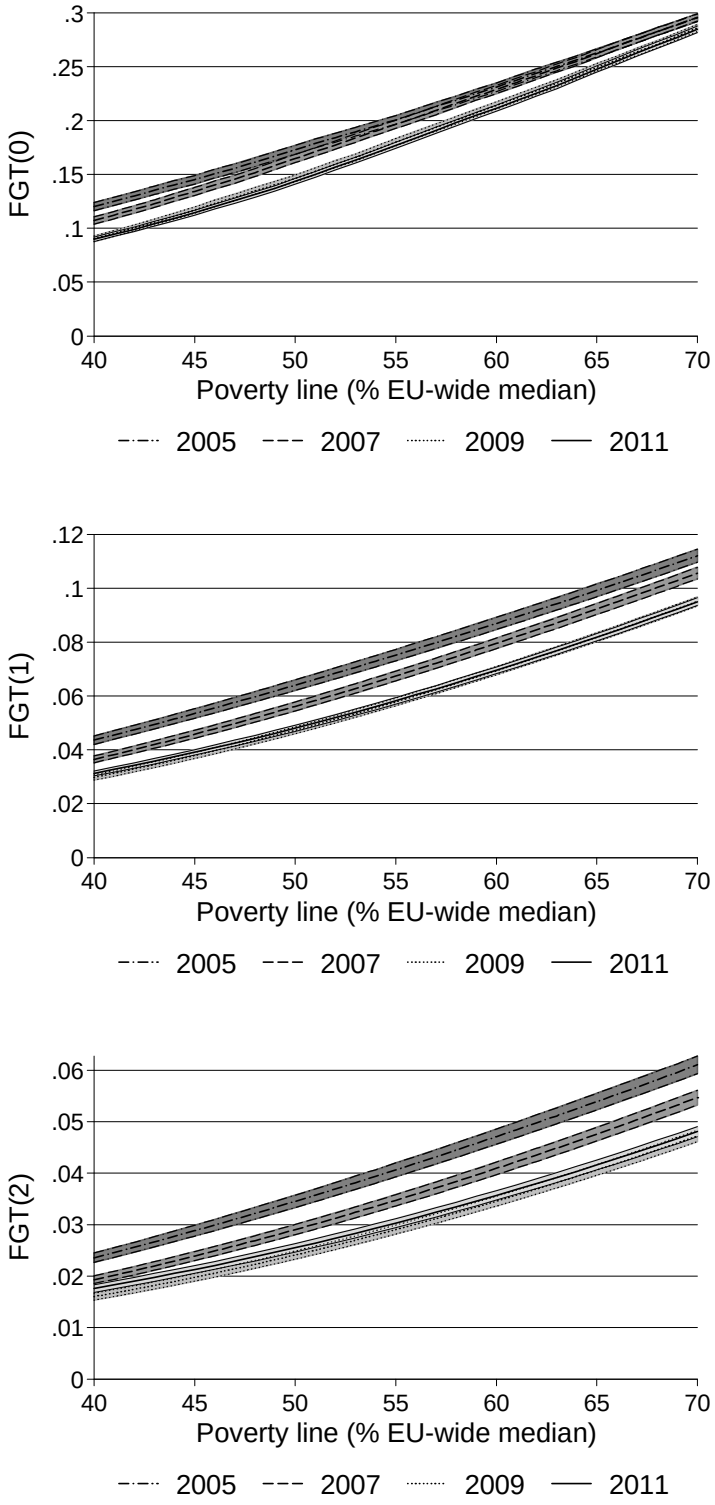
[8] As an exception, at higher levels of the poverty line we can observe a decrease in FGT(1) between 2007 and 2009. Given the existing doubts about the quality of the German EU-SILC data, especially during the first years of EU-SILC (Frick & Krell, 2011; Goedemé, 2013b), the analyses for the period 2005-2009 were run with and without Germany. To some extent, the poverty standstill when applying a threshold as a percentage of the national median income is driven by German data. Excluding Germany from the analysis, poverty declines significantly: at 60 per cent of national median income, the total percentage of EU citizens at risk of poverty drops by just under a percentage point (from almost 17 to just over 16 per cent). Even though, in percentage points, this change may seem rather small, it amounts to approximately 3.2 million fewer Europeans in poverty. Similar qualifications hold for the (squared) normalised poverty gap ratio.

Figure 3: Poverty trends in the European Union (without BG, MT and RO), EU-SILC 2005-2011 with the poverty threshold set as a percentage of the national median equivalent disposable household income (95% confidence intervals)



Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations.

Figure 4: Poverty trends in the European Union (without BG, MT and RO), EU-SILC 2005-2011 with the poverty threshold set as a percentage of the EU-wide median equivalent disposable household income (95% confidence intervals)



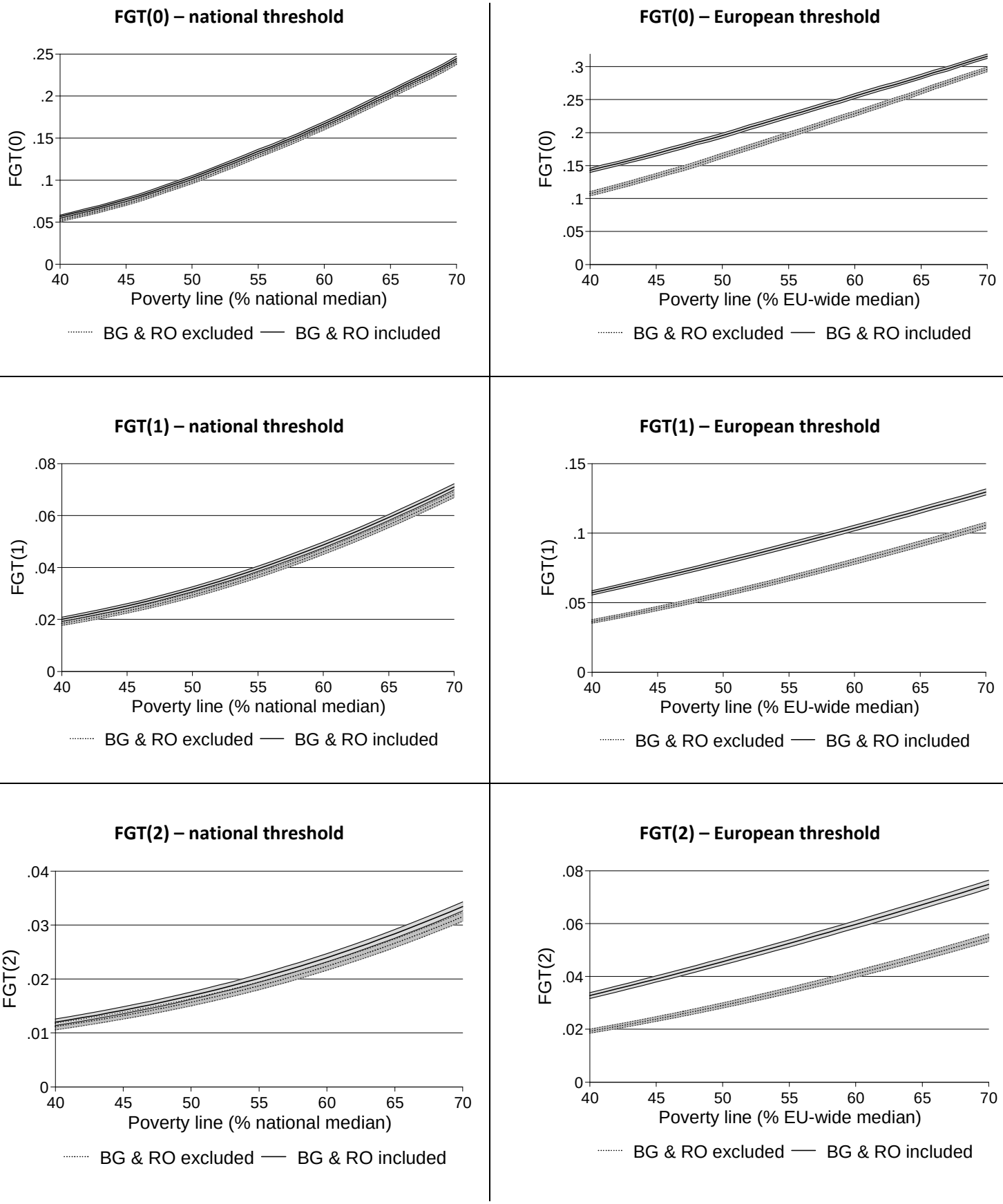
Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

In sum, we observe that, initially, the crisis led to a decrease in national relative poverty, while an increase of poverty can be observed between 2009 and 2011 when the crisis endured and the effects of austerity measures gained momentum. The picture is quite different if we look at 'poverty' with an EU-wide poverty line. In that case we observe that until the crisis hit with full force the EU, EU-wide poverty was on the decline, with the lowest EU-wide incomes picking up and converging towards the median. However, since EU-SILC 2009, this process of convergence has stagnated.

3.1.3 The effect of the enlargement to Bulgaria and Romania

The overall trends in national and EU-wide poverty are not very different if Bulgaria and Romania are included in the analysis. However, the inclusion of Bulgaria and Romania causes a one-off increase in poverty levels, for the entire range of poverty lines. This is especially so in the case of poverty measured with an EU-wide poverty line, but it is also the case for poverty measured with the poverty line set as a percentage of the national median income. This is further illustrated by the graphs below. For instance, in the case of the poverty headcount with a poverty line set at 60 per cent of the national median income, poverty measured with EU-SILC 2007 increases from 16.2 to 16.7 per cent of the EU population. If the poverty line is set to 60 per cent of the EU-wide median income, the poverty headcount increases from 22.9 to 25.9 per cent of the population. Independently of the way in which the poverty line is defined, the increase in poverty is even larger in the case of the (squared) normalised poverty gap ratio.

Figure 5: The effect on poverty of including Bulgaria and Romania in the analysis, EU-SILC 2007



Source: EU-SILC UDB 2007, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

3.1.4 To what extent are poverty trends driven by shifting poverty lines?

The poverty line is allowed to change over time as it is calculated as a percentage of the median income. Consequently, one may wonder what would have happened if we had kept constant the bundle of goods and services that could be bought with an income at the level of the poverty line. This is somewhat a shaky exercise, as it depends on the reliability of consumer price indices to capture inflation of a relevant basket of goods and services for people living on an income below the poverty line, even though consumer price indices are based on average consumption patterns in the population. The exercise is even more problematic in the case of EU-wide poverty, which adds the difficulty of comparing income levels simultaneously across countries and across time (cf. Milanovic, 2005, pp. 12-15). As explained previously, in order to make income data comparable across time and countries, we first converted all incomes to 2004 prices using Eurostat's harmonised indices of consumer prices, and subsequently converted these incomes into purchasing power standards with 2004 PPPs[9].

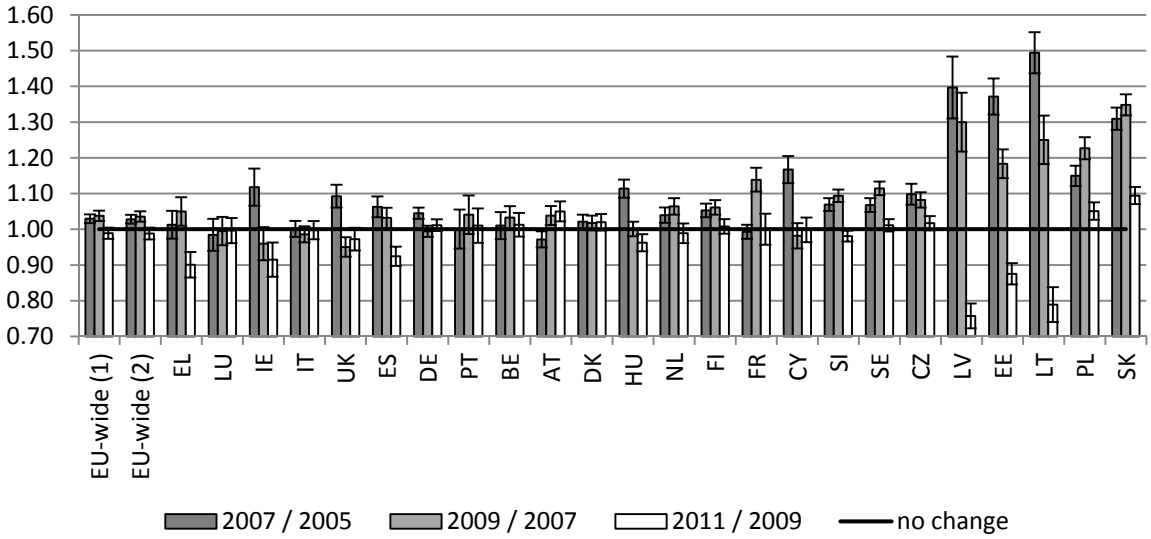
For poverty measured with poverty lines defined as a percentage of the national or EU-wide median income, real growth in median incomes equals real growth in the poverty line. From Figure 6 it can be seen that in most countries median incomes grew, or did not change significantly between EU-SILC 2005 and 2007, as well as between EU-SILC 2007 and 2009. In contrast, in seven countries median incomes declined significantly (and in some countries quite dramatically so), between EU-SILC 2009 and 2011. On average[10], national median incomes grew with about 6 per cent between 2005 and 2007, with about 5 per cent over the subsequent two years, and declined with about 1 per cent over the last two years of observation. Over the entire period, national median incomes increased on average with about 11 per cent. The cross-national differences in growth of median incomes are very large. Between EU-SILC 2005 and EU-SILC 2011 in Greece median incomes declined in real terms with about 4 per cent, whereas at the other extreme, in Slovakia median incomes grew in the same period with about 93 per cent. Changes in the EU-wide median income were somewhat more modest. Over the first 4 years, the EU-wide median income grew with about 7 per cent in total, after which it declined with about 1 per cent.

These real increases in median incomes have a non-negligible effect on poverty trends in the EU. In Figure 7 and Figure 8 we estimate the impact of changes in median incomes by decomposing the total change of poverty in an income effect and a poverty line effect. The first figure uses national poverty lines and the second an EU-wide one. The income effect is calculated as the change in poverty if the poverty line had been kept constant in real terms. The poverty line effect is calculated as the difference between poverty with a poverty line as a percentage of current median incomes and poverty calculated with a poverty line kept constant in real terms.

[9] The results are not very different if we first convert incomes to 2010 prices and subsequently apply 2010 PPPs.

[10] These are population-weighted averages.

Figure 6: Inflation-corrected growth in national and EU-wide median equivalent disposable household incomes, Two-yearly ratio of median equivalent disposable household incomes, EU-SILC2005 – EU-SILC 2011



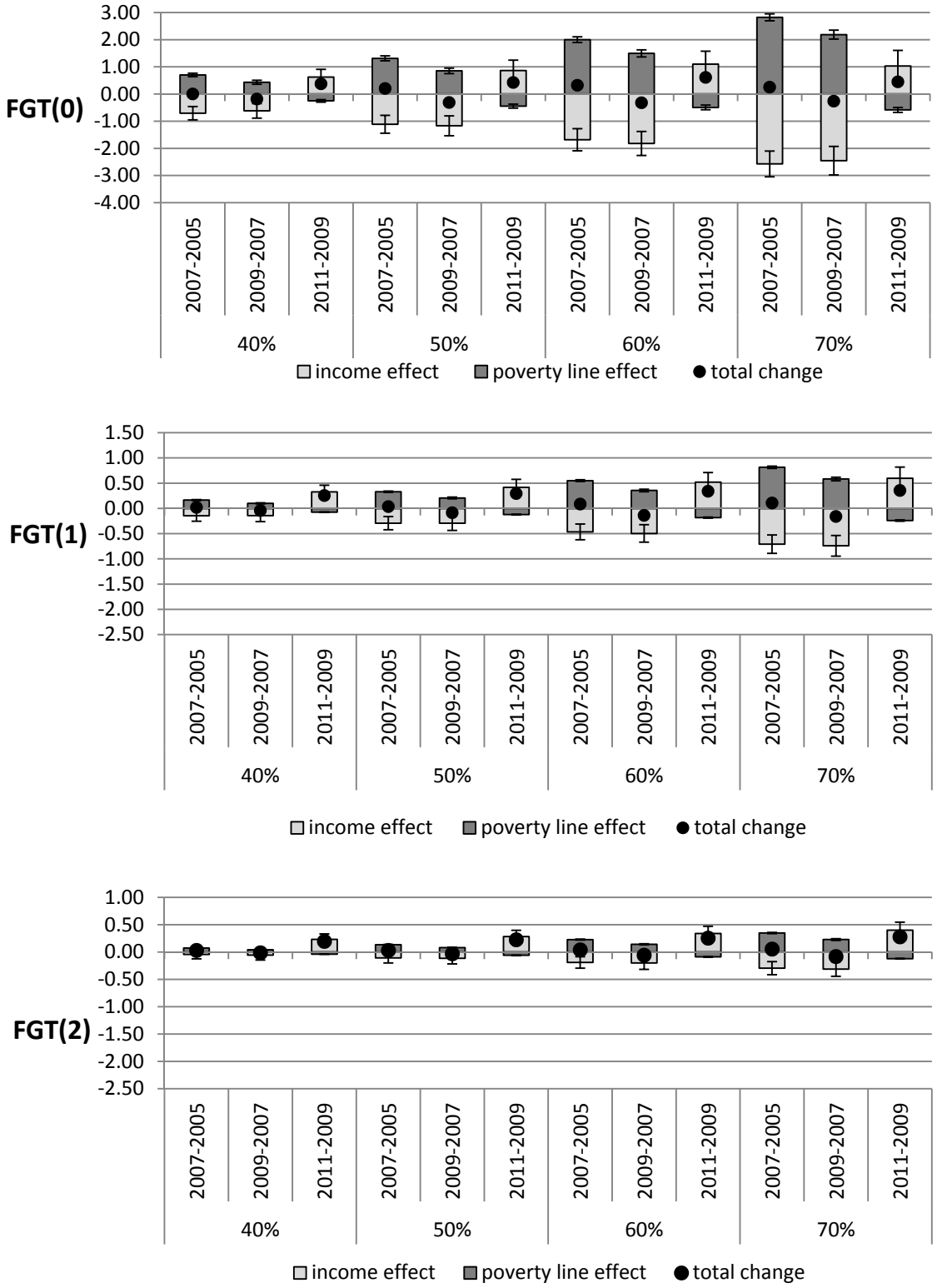
Note: Except for the EU estimates, countries sorted by total growth between EU-SILC 2005 and EU-SILC 2011. The graph shows 95% confidence intervals. EU-wide (1) utilises PPPs 2004 and EU-wide (2) PPPs 2010.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption and harmonised indices of consumer prices from Eurostat's online database.

For the period EU-SILC 2005-2007 and EU-SILC 2007-2009, with poverty lines fixed as a percentage of the national and the EU-wide median incomes[11] of the first of every two years, poverty would have decreased significantly, in particular at higher levels of the poverty line. However, with national thresholds the decreases were compensated by an increase in poverty as a result of the increase in the poverty line in proportion to real income growth of median incomes. On the contrary, using an EU-wide threshold, the poverty line effects were not enough to counterbalance the income effects and, as a result, poverty decreased. Between EU-SILC 2009 and 2011 the opposite occurred using both national and EU-wide poverty lines: real (median) incomes and poverty lines declined (although not statistically significantly for EU-wide measures) and, as a result, poverty would have increased even more than it did if the poverty line had been kept constant in real terms. However, in the case of poverty measured with national poverty lines, the effect of the decreasing poverty line was insufficient to fully compensate for the (larger) decrease in real incomes at the lower tail of the income distribution. Importantly, these graphs show that even in relatively short periods of time, poverty line effects can be quite substantial.

[11] As is the case for changes in EU-wide median incomes, results do not change much using either PPPs 2004 or 2010; therefore, we opted for presenting results only using the former.

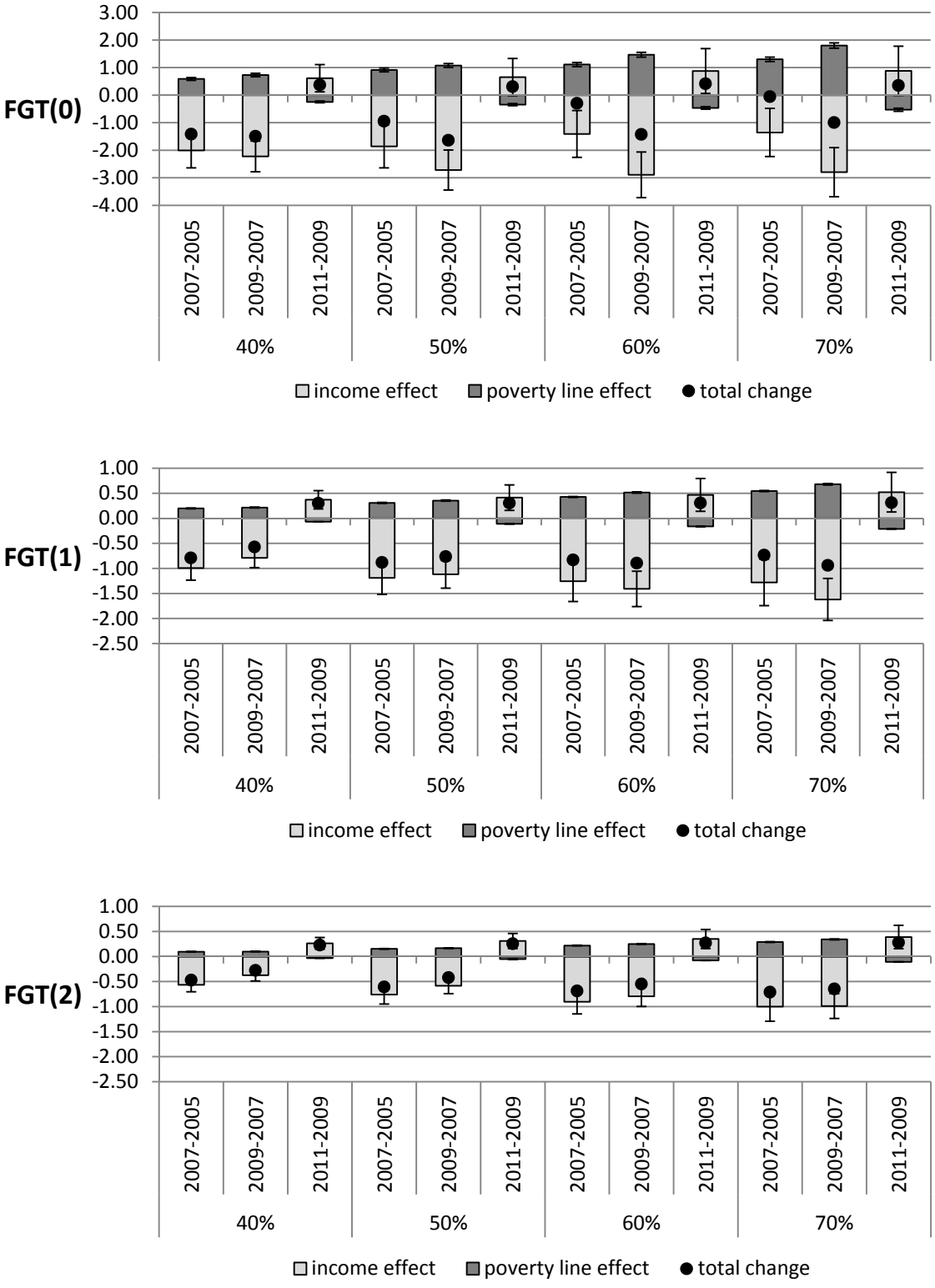
Figure 7: Contribution of real changes in the poverty line to overall poverty trends in the EU, EU-SILC 2005-2011



Note: EU27 minus Bulgaria, Malta and Romania. 95% confidence intervals do not take account of the fact that the poverty line has been estimated on the basis of the data.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption and harmonised indices of consumer prices from Eurostat's online database.

Figure 8: Contribution of real changes in the EU-wide poverty line to EU-wide poverty trends in the EU, EU-SILC 2005-2011



Note: EU27 minus Bulgaria, Malta and Romania. 95% confidence intervals do not take account of the fact that the poverty line has been estimated on the basis of the data.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption and harmonised indices of consumer prices from Eurostat's online database.

Even though difficult to observe from the graphs, the total change in FGT(0) depicted in Figure 8 differs from what can be seen from Figure 4. In the latter case we observed for the last period a slight (non-significant) decrease in EU-wide poverty (excluding Bulgaria, Malta and Romania), whereas in Figure 8 the total change is slightly above zero. This is because there is no straightforward way to convert incomes into a currency which is comparable across time and space. In contrast to what one may think intuitively, the rate of inflation in comparison with the EU-wide average inflation rate as measured with consumer price indices is in some countries substantially different from the rate of inflation in comparison with the EU-wide average as embedded changes in PPPs (and expressed in price level indices). This is because the (national) weights assigned to various goods and services in order to estimate consumer price indices are different from the (international) weights used to estimate PPPs. Together with fluctuations in exchange rates, this explains why changes in EU-wide poverty measured on the basis of year-specific PPPs is different from EU-wide poverty measured on the basis of incomes converted to a base year using harmonised consumer price indices and PPPs of the base year. In fact, to make the full decomposition, changes in EU-wide poverty should be decomposed in an income effect, a poverty line effect and what we may call a 'PPP-effect'. The latter is equal to the difference in the total change shown in Figure 8 and the change as depicted in Figure 4 and below in Figure 13.

3.2 Changes in the EU-wide income distribution: 'old' versus 'new' member states

An important part of the changes that have taken place with regard to the EU-wide income distribution, is undoubtedly associated with different income dynamics in the countries that have joined the EU since 2004. Therefore, in this section we pay particular attention to the decomposition of poverty by two groups: the 'old' EU15 Member States and the Member States that joined the EU in 2004 (NMS). As in the previous section, we first depict the main changes in the entire distribution of income. Subsequently we analyse in more detail the differences in poverty dynamics using both national and EU-wide poverty lines. In the third subsection we show the important changes in the composition of poverty if poverty is decomposed by these two groups. Finally, in subsection 4 we try to quantify the contribution of the two groups of countries to the total change in poverty.

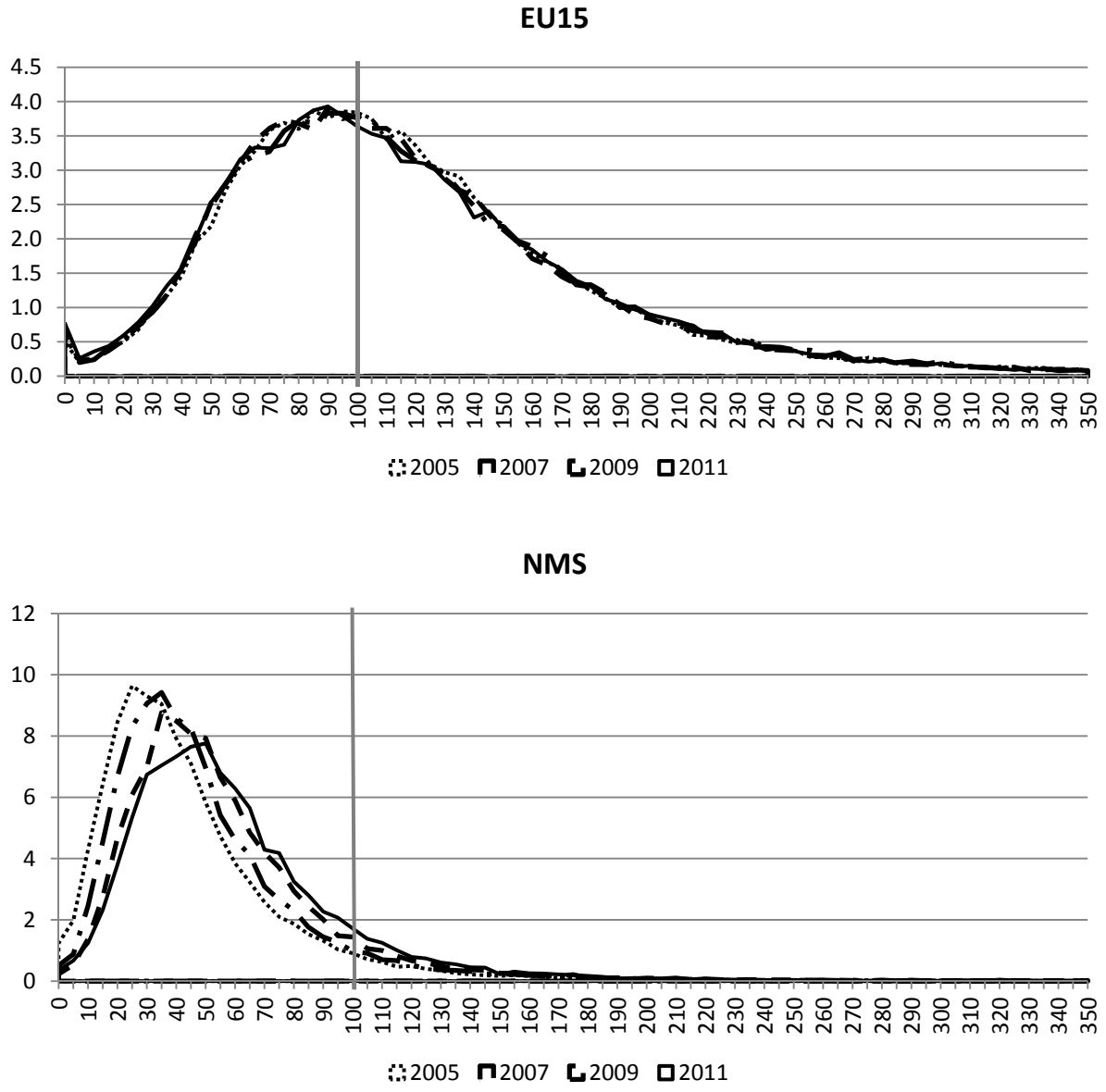
3.2.1 Changes in the EU15 and NMS income distributions

The principal changes in the EU-wide distribution of income that have taken place between EU-SILC 2005 and EU-SILC 2011 are summarised in the two relative frequency curves depicted below. All incomes are expressed in purchasing power standards and as a percentage of the year-specific EU-wide median equivalent disposable household income. In other words, the EU-wide median income is for every year equal to 100 on the horizontal axis. The two graphs clearly show the opposite trends that have taken place in the EU15 as compared to the 10 Member States that have joined the European Union in 2004, minus Malta (NMS)[12]. More in particular, the graph shows that to some extent, over time the relative income distribution of the EU15 has somewhat shifted to the left. For

[12] The Member States that joined the EU in 2004 are: Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia. Due to a lack of data, Malta is not included in the analysis.

up to 60 per cent of the median income, the curve for EU-SILC 2011 is higher than those of the previous years. Especially between EU-SILC 2009 and 2011, this shift is much more expressed at the bottom of the distribution than at the top. In contrast, for the Members that joined the EU in 2004 (NMS) we observe a stronger and opposite trend: equivalent disposable household incomes have clearly been converging to the middle of the EU-wide income distribution and shifted to the right, year after year. Nonetheless, it is obvious that on average the purchasing power of those living in the NMS remains much lower than the purchasing power of those living in the EU15, even for those with relatively high incomes in the NMS.

Figure 9: Relative frequency curve of equivalent disposable household incomes in PPS in the EU15 and the NMS, expressed as a percentage of the year-specific EU-wide median income, EU-SILC2005-2011

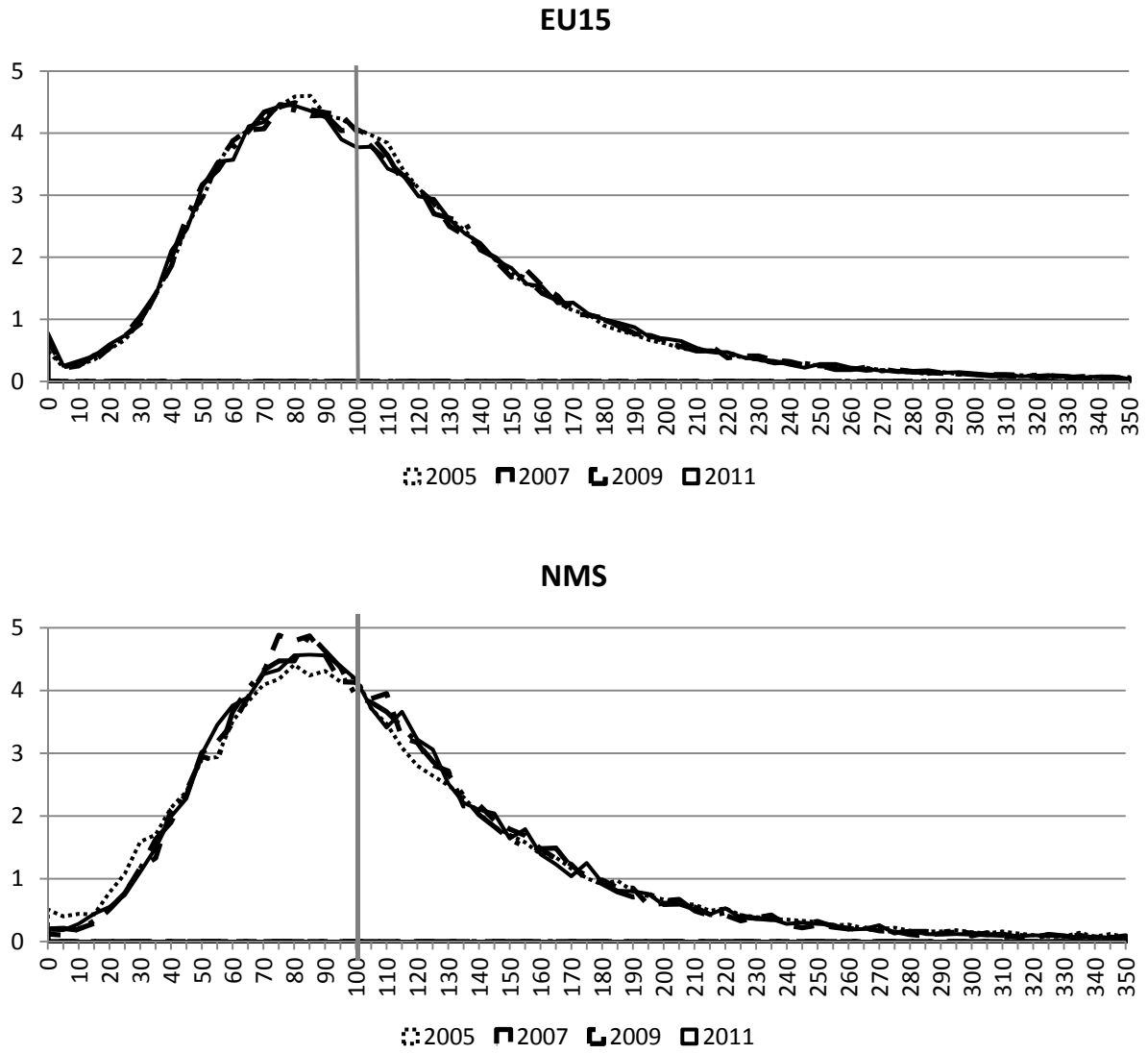


Note: NMS include the 10 Member States that joined the EU in 2004, minus Malta. Bulgaria, Malta and Romania not included in the calculation of the EU-wide median income.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

These major shifts in the EU-wide distribution of income, are not observable if we calculate disposable household income as a percentage of the year-specific *national* median income, as we implicitly do when estimating total poverty in the European Union with national relative poverty lines. This is further illustrated in Figure 10. First, it is clear that on average national relative income distributions in the EU15 are not fundamentally different from those in the Member States that joined the EU in 2004 (excluding Malta). Second, even though the income distribution has undergone important changes, especially in the NMS in the period of observation, these changes are much more modest in national relative terms than in EU-wide terms and cannot be so easily summarised without calculating more precise indicators.

Figure 10: Relative frequency curve of equivalent disposable household incomes in the EU15 and the NMS in, expressed as a percentage of the national median income, EU-SILC2005-2011



Note: NMS include the 10 Member States that joined the EU in 2004, minus Malta. Bulgaria, Malta and Romania not included in the calculation of the EU-wide median income.

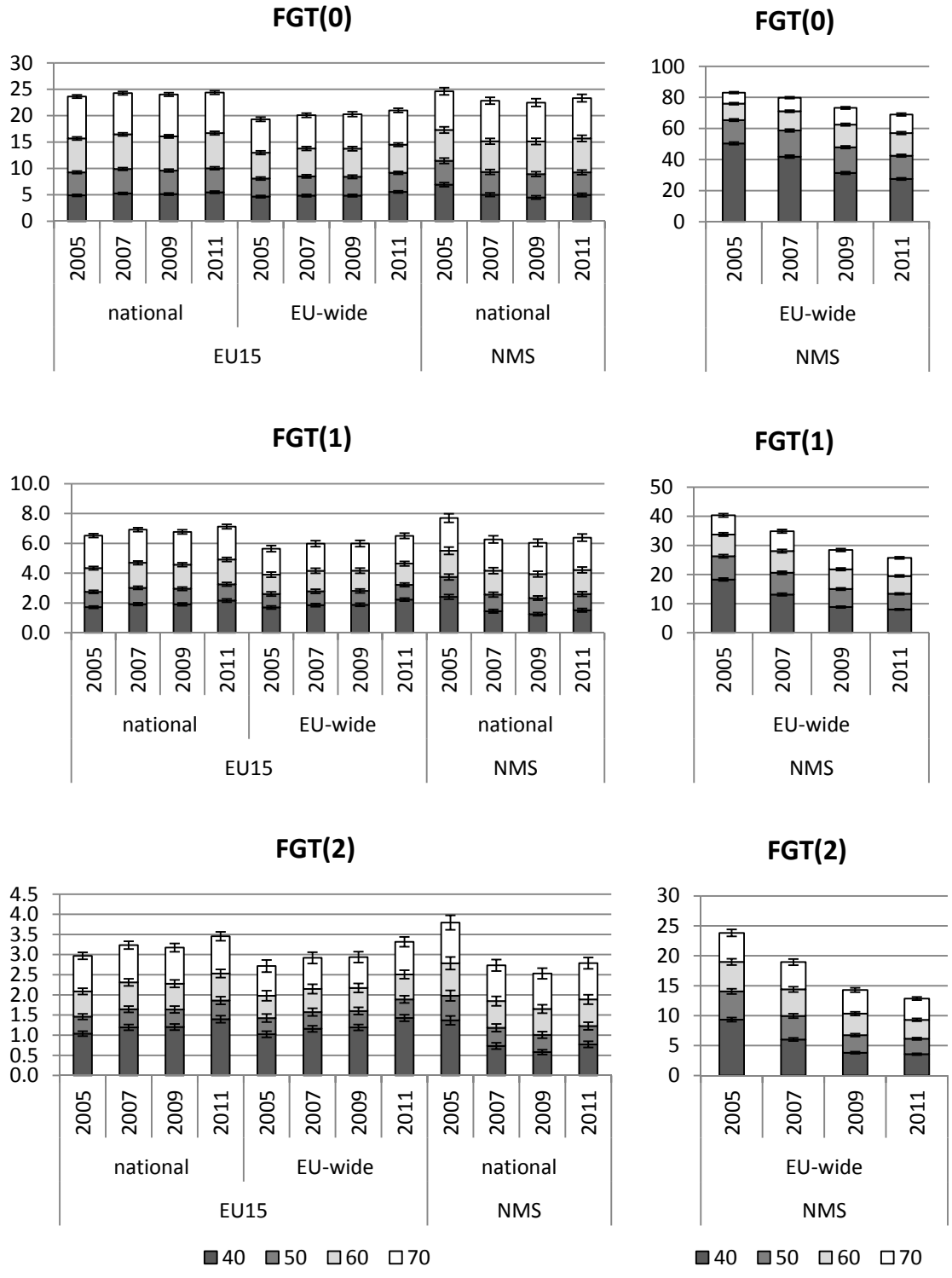
Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations.

The observations made in this subsection raise, among others, the following questions: (1) How has poverty measured with a national and a EU-wide threshold evolved in the EU15 and NMS? (2) How has the contribution of the NMS to the total poverty figure changed over time? (3) To what extent are total changes in poverty driven by income changes in the NMS? These questions will be consecutively answered in the three subsections below.

3.2.2 Poverty trends in the EU15 and NMS

Poverty levels and trends differ between poverty measured with a national and EU-wide poverty line, at least for the countries that have accessed the Union between 2004 and 2011. The changes for a poverty line at 40, 50, 60 and 70 per cent of median income are shown in Figure 11. In the graphs, the estimates should be interpreted as the population-weighted average of the countries belonging to the respective groups. In the EU15, poverty measured with a national poverty line increased slightly between 2005 and 2007 and again between 2009 and 2011. Between 2007 and 2009 for most measures and poverty lines no significant change took place, except for a very small decrease in the case of a poverty line equal to 60 per cent of national median incomes. Overall, with a poverty line at 60 per cent of the national median income poverty increased between 2005 and 2011 in the EU15 from 16.7 to about 17.7 per cent of the population. However, as we have documented in another paper (Decancq et al., 2014), we need to be careful with the poverty increase between 2005 and 2009, which is strongly driven by German data that are for that period not very reliable for cross-temporary comparisons. In contrast to what we observe for the entire EU, poverty measured with an EU-wide poverty line evolved not very differently from poverty trends with national poverty lines: it went up somewhat more than poverty measured with national poverty lines and increased significantly between 2005 and 2007 as well as between 2009 and 2011. If the poverty line is set equal to 60 per cent of the EU-wide median income, the poverty headcount of the population living in the EU15 increased from 13.0 per cent in 2005 to 14.5 in 2011.

Figure 11: Poverty trends in the EU15 and the NMS (without Bulgaria, Malta and Romania) with the poverty line expressed as a percentage of the national and as a percentage of the EU-wide median equivalent household income, EU-SILC 2005-2011



Note: 95% confidence intervals do not take account of the fact that the poverty line has been estimated on the basis of the data.

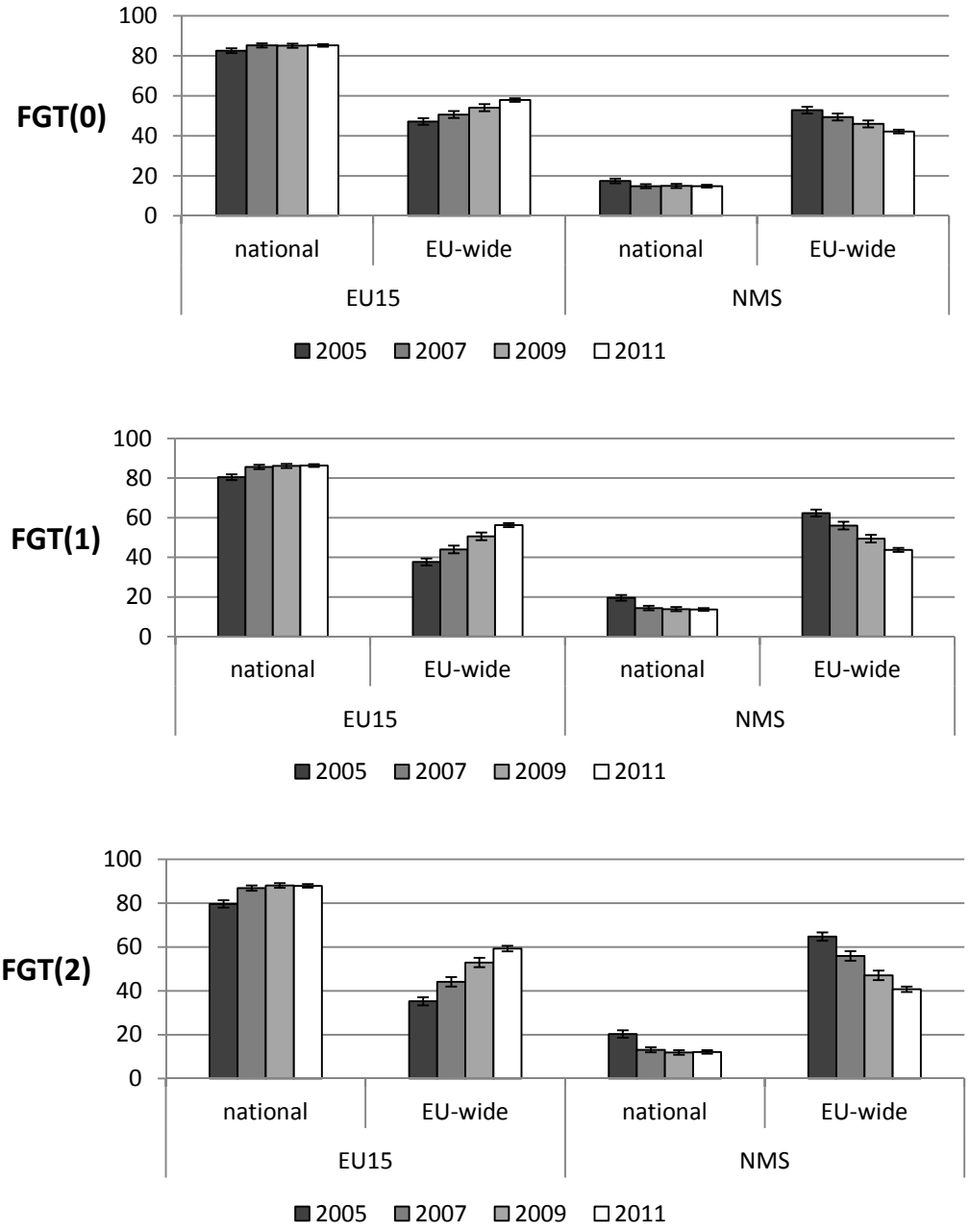
Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

Trends in the new Member States are very different from those observed for the EU15. First of all, there is a much wider difference in poverty figures depending on whether or not the poverty line is expressed as a percentage of the EU-wide median income. Indeed, whereas the median income of many EU15 countries is relatively close to the EU-wide median income, the median income in the NMS is generally substantially lower than the EU-wide median income. Second, trends do also differ. Whereas poverty in the EU15 has been on the rise, in the new member states it has declined between 2005 and 2007, and for low levels of the poverty line as well as generally for the (squared) normalised poverty gap ratio also between 2007 and 2009. The decline was stronger than the concomitant increase in the EU15, explaining the overall standstill in the EU as a whole (see also below). For instance, with a poverty line at 60 per cent of the national median income the poverty headcount in the NMS decreased from 17.3 in 2005 to 15.1 in 2007, after which it did not change significantly for the remaining period of observation. Between 2009 and 2011 the trend reversed though, and for the poverty headcount at 40 per cent of median incomes as well as for the (squared) normalised poverty gap ratio generally, we observe a non-negligible increase in poverty, reinforcing the trend observed for the EU15. In contrast, poverty measured with an EU-wide poverty line has continuously and substantially been on the decline, even though the decline strongly slowed down between 2009 and 2011. For instance, at 60 per cent of the EU-wide median income (and excluding Bulgaria, Malta and Romania), the poverty headcount dropped from 76 per cent in 2005 to 57 per cent in 2011, a drop of nearly 20 percentage points in as little as 6 years' time. Between 2009 and 2011 the slowdown in the decrease of EU-wide poverty combined with an increase in the EU15, resulting in a non-significant change at the EU level. Interestingly, especially during the first years of observation and in particular in the case of the poverty headcount this declining trend is the result of the large reduction of people with an income below 40 per cent of the EU-wide median. Indeed, until 2009, the percentage of people with an income between 40 and 70 per cent of the EU-wide median income even increased, in line with what could be expected on the basis of Figure 9.

3.2.3 A decomposition of poverty levels by groups: EU15 vs. NMS

From the relative frequency distributions presented above, it follows that the share in total poverty, and so our conclusion about the region in which the largest gains in poverty reduction could be achieved, differs dramatically if poverty is measured with an EU-wide poverty line. In addition, given the apparent changes in the EU-wide distribution of income, it would be no surprise that the contribution of the NMS to total poverty has declined substantially over the past few years. Both expectations are confirmed in Figure 12.

Figure 12: Share of the EU15 and NMS in the poverty headcount, the normalised poverty gap and the squared normalised poverty gap, with the poverty line set at 60 per cent of the national and at 60 per cent of the EU-wide equivalent median household income, EU-SILC2005-2011



Note: Bulgaria, Malta and Romania are not included in the analysis. 95% confidence intervals do not take account of the fact that the poverty line has been estimated on the basis of the data.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database.

The share of both groups of member states in the FGT indices based on national poverty lines roughly corresponds to their share in the total EU-SILC target population. In the period 2005-2011, the share of the EU15 in the total population (excluding Bulgaria, Romania and Malta) did not change significantly and remained around 84 per cent. At the same time, the share of the EU15 in the total poverty figure increased between 2005 and 2007, while it did not change significantly between 2007 and 2011. The higher we set *alpha*, the stronger the change: for the poverty headcount the share increased from about 83 per cent to 85 per cent, for the normalised poverty gap it increased from about 80 to 86 per cent and in the case of the squared normalised poverty gap it went up from 80 to about 87 per cent. The share of the NMS in the total poverty index shifted downward with the same amount[13].

If the poverty line is set to 60 per cent of the EU-wide median income, we can observe a continuous and very large increase in the share of the EU15 in total poverty. Also in this case, the yearly increase rises with *alpha*. In the case of the poverty headcount, the share of the EU15 in the total poverty figure has increased every two years with about 3.5 percentage points, from 47 to 58 per cent. At the same time, the share of the EU15 in the normalised poverty gap went up from 38 to 56 per cent, while it increased from 35 to 59 per cent in the case of the squared normalised poverty gap. Moreover, as the changes in EU-wide poverty have been largest at the extreme left of the income distribution, the share of the NMS in EU-wide poverty has been reduced even more dramatically at lower levels of the poverty line.

3.2.4 A decomposition of poverty trends by group

In this last subsection of the paper we will try to quantify the effect of changes in the EU15 and the NMS (excluding Bulgaria, Malta and Romania) on the total change in poverty. In principle, one would expect that poverty changes in the EU15 would account for the largest share of the change in total poverty figures, given that the EU15 accounts for about 84 per cent of the EU population (without Bulgaria, Malta and Romania). However, given the large changes in EU-wide poverty in the NMS, the exact contribution is more difficult to estimate intuitively.

For decomposing poverty trends in the EU by the two groups of countries, we will follow Corluy and Vandenbroucke (2012), and decompose the total change in poverty (Δpoverty) as follows:

$$\begin{aligned}\Delta poverty = {} & \overline{Share_{EU15}} * \Delta Poverty_{EU15} \\ & + \overline{Share_{NMS}} * \Delta Poverty_{NMS} \\ & + (\overline{Poverty_{EU15}} - \overline{Poverty_{NMS}}) * \Delta Share_{NMS}\end{aligned}$$

The first component consists of the average share over two years of the EU15 in the total population, multiplied by the difference in poverty in the EU15 between the two years. By keeping the share in the total population constant, the component reflects the effect of a change in poverty in the EU15. The second component does exactly the same for the change in poverty levels in the new Member

[13] Note that if we did not normalise the poverty gap (that is, not divide it by the poverty threshold), the share of the EU15 in the total (squared) poverty gap would be even larger. For the EU27 minus Bulgaria, Malta and Romania, it oscillates between 92 and 93 per cent for the poverty gap and between 96 and 98 per cent for the squared poverty gap if incomes are expressed in purchasing power standards. If we compute the poverty gap in euro amounts, the share of the EU15 is even higher. The same is true for EU-wide poverty.

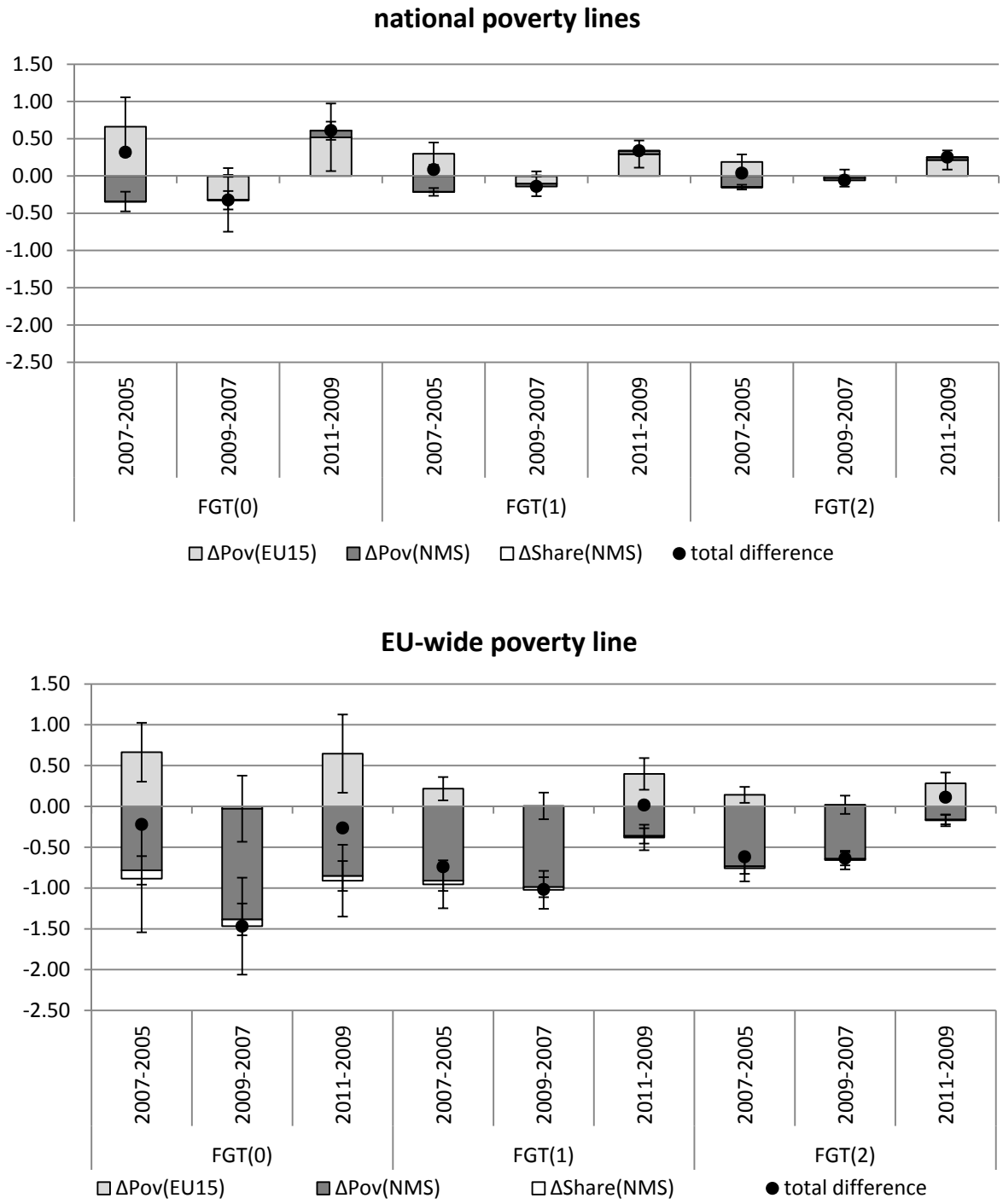
States. Finally, the third factor estimates the impact of the change in the share of the new Member States (and as a complement, the EU15) in the total population. The effect of the change in the share is of course dependent upon the degree to which poverty levels differ between the EU15 and the NMS, which is also reflected in the third term of the formula: it consists of the difference in poverty levels in both groups, averaged over the two years of comparison.

Even though this decomposition helps to quantify the effect of poverty changes in the EU15 and the NMS on total poverty, at least three caveats should be borne in mind. First, the decomposition assumes the poverty line is given and ignores the effect of both groups on total poverty *via* their effect on the poverty line, either by differential income growth in both groups, or by increasing their share in the total population. Second, the effects we are most interested in cannot be teased out separately, but always run through another factor: the change in poverty levels through the share of the group in the total population, the change in group shares via the difference in average poverty levels of both groups. Third, the decomposition is a mere accounting approach and is no attempt to construct a realistic counterfactual. It merely serves as an exercise to indicate which changes account for most of the total change in poverty. A more detailed discussion of these and other issues in relation to this decomposition can be found in Corluy and Vandenbroucke (2012).

Regardless of how the poverty line is defined, the contribution of shifts in relative shares of both groups in the total population is very modest and in many cases negligible. This is no surprise, as the estimated share of the new Member States decreases only slightly, from 16.1 in EU-SILC 2005 to 15.6 in 2011. Poverty trends in the EU on the basis of a poverty line equal to 60 per cent of national median incomes, are first and foremost a result of poverty changes in the EU15. In the first two years of observation, the increase in poverty in the EU15 is largely compensated (but in the case of the poverty headcount not fully compensated) by a decrease in relative poverty in the NMS. In the subsequent two years, poverty does not change very much in the NMS and the changes reinforce the somewhat more substantial trends in the EU15.

The picture is very different in the case of poverty measured with a poverty line equal to 60 per cent of the EU-wide median equivalent disposable household income. In spite of its relatively small share in the total population, poverty trends in the NMS have had an important impact on total poverty in the EU. In the first period (2005-2007) they more than offset the increase in EU-wide poverty in the EU15. In the second period (2007-2009), the decline in EU-wide poverty is entirely driven by a decline in EU-wide poverty in the NMS, while in the third period (2009-2011) the further decline in poverty in the NMS was just sufficient to counteract a new increase in EU-wide poverty in the EU15.

Figure 13: Decomposition of poverty trends by groups, with a poverty line equal to 60 per cent of the national and the EU-wide median equivalent household income, EU-SILC 2005-2009



Note: NMS do not include Bulgaria, Malta and Romania. 95% confidence intervals do not take account of the fact that the poverty line has been estimated on the basis of the data.

Source: EU-SILC UDB 2005, 2007, 2009, 2010 (IE), 2011, authors' calculations. Purchasing power parities for final household consumption from Eurostat's online database

4 Conclusion

In the European Union, income poverty is usually measured with a poverty line defined as a percentage of the national median income, using the so-called at-risk-of-poverty indicator. In this paper we show that such a perspective, even if it leads to useful and valuable results, tends to conceal important income dynamics that take place at the EU-wide level. In order to uncover these trends, we contrast national an EU-wide poverty dynamics in a cross-temporary perspective using EU-SILC 2005-2011 data. While doing so, we pay particular attention to different dynamics in the EU15 and the Member States that joined the EU in 2004. In the first part of the paper we look at EU poverty as a whole, while in the second part we focus separately on both groups of countries.

The main findings can be summarised as follows:

1. In terms of the EU-wide income distribution as compared to the income distribution at the national level, it can be noticed that the former is more disperse, but its shape is not fundamentally different from the national ones. In relation to changes, more dramatic shifts are observed in the EU-wide distribution, while on average the national distributions have remained rather unaffected. The EU-wide distribution has become more condensed between 40 and 100 per cent of the median, especially during 2005 and 2009. This change corresponds to a decrease in overall inequality together with a decline in between-country income differences.

2. Poverty trends with a poverty line expressed as a percentage of national median incomes are very different from poverty trends if the poverty line is expressed as a percentage of the EU-wide median income. More in particular, we observe between EU-SILC 2005 and EU-SILC 2009 no significant change for poverty measured with national poverty figures and an increase in poverty between EU-SILC 2009 and EU-SILC 2011. The opposite is true if poverty is measured with a poverty line equal to a percentage of the EU-wide median income. In the latter case poverty decreased substantially between EU-SILC 2005 and EU-SILC 2009, but did not change significantly between EU-SILC 2009 and EU-SILC 2011. Clearly, the crisis has halted, but not (yet) substantially reversed the convergence of the lowest incomes in the EU towards the EU-wide median income. This adds a more nuanced view to the social divergence witnessed after the recession based on national standards. At the same time however, poverty measured with an EU-wide poverty line is substantially higher than poverty measured using national-specific poverty lines.

3. Due to the relative nature of the poverty measures used, it is important to analyse to what extent trends are caused by changes in median incomes. In most countries median incomes increased (and so did the EU-wide median income) or did not significantly change between 2005 and 2009. In contrast, in seven countries they decreased between 2009 and 2011, whereas the EU-wide median income did not decrease significantly. In important respects, the 'poverty standstill' measured with the national at-risk-of-poverty indicator between EU-SILC 2005 and EU-SILC 2009 is the result of a 'poverty line effect': increases in real incomes at the lower tail of national income distributions did not surpass real income growth of median incomes. On the contrary, using an EU-wide threshold, income effects were larger than the poverty line effect and, as a result, EU-wide poverty decreased. However, between EU-SILC 2009 and EU-SILC 2011 the opposite happened in the case of national poverty lines:

increases in poverty with an anchored poverty line were not fully offset by decreases in national median incomes.

4. Even if income differences remain substantial, between EU-SILC 2005 and EU-SILC 2011 incomes in the countries that joined the EU since 2004 have strongly converged towards the EU-wide median income. Concomitantly, EU-wide poverty has declined in the NMS, while it increased in the EU15. As a result, EU-wide poverty is now also to important extents a matter of poverty in the EU15, and no longer predominantly an issue of concern for the NMS. Nonetheless, the share of the EU15 in total poverty measured with poverty lines defined at the national level remains much larger than in the case of poverty with an EU-wide poverty line.
5. Overall, total changes in poverty measured with national poverty lines is first and foremost determined by changes in the EU15, while over the past years, changes in EU-wide poverty have been determined to a large extent by changes in the income situation of people living in the new Member States, much more than what would be expected on the basis of their relatively small share in the total EU population.

To sum up, EU policy makers and researchers committed to better understand social cohesion in Europe as a whole and to think through the options and pitfalls for taking initiatives at the EU level for strengthening the European social model, should have a closer look not only at national income dynamics, but also at EU-wide dynamics in the distribution of household incomes. Until now, research in this area remains to a large extent an open field, with promising research questions abound.

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ImPRovE: Poverty Reduction in Europe. Social Policy and Innovation

Poverty Reduction in Europe: Social Policy and Innovation (ImPRovE) is an international research project that brings together ten outstanding research institutes and a broad network of researchers in a concerted effort to study poverty, social policy and social innovation in Europe. The ImPRovE project aims to improve the basis for evidence-based policy making in Europe, both in the short and in the long term. In the short term, this is done by carrying out research that is directly relevant for policymakers. At the same time however, ImPRovE invests in improving the long-term capacity for evidence-based policy making by upgrading the available research infrastructure, by combining both applied and fundamental research, and by optimising the information flow of research results to relevant policy makers and the civil society at large.

The two central questions driving the ImPRovE project are:

> How can social cohesion be achieved in Europe?
>
> How can social innovation complement, reinforce and modify macro-level policies and vice versa?

The project runs from March 2012 till February 2016 and receives EU research support to the amount of Euro 2.7 million under the 7th Framework Programme. The output of ImPRovE will include over 55 research papers, about 16 policy briefs and at least 3 scientific books. The ImPRovE Consortium will organise two international conferences (Spring 2014 and Winter 2015). In addition, ImPRovE will develop a new database of local projects of social innovation in Europe, cross-national comparable reference budgets for 6 countries (Belgium, Finland, Greece, Hungary, Italy and Spain) and will strongly expand the available policy scenarios in the European microsimulation model EUROMOD.

More detailed information is available on the website http://improve-research.eu.

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