#### Comments on : The Euro Area Wage Distribution Over the Crisis by A. Brandolini and A. Rosolia Discussant : Ranjan Ray, Monash University Motivation:

- Analyse the evolution of the distribution of earnings in the Euro Area (EA) during the global financial crisis.
- Study the determinants of this evolution using data drawn from the EU-SILC data set.
- Focus on the divide between 'core' and 'periphery' countries in the EA in movements in several key economic indicators, most notably, employment, real wages, and income distribution.
- Examine the level and nature of differences between the EU-SILC data and the national accounts with respect to several key economic indicators.

### Data Sets and Definitions

- EU-SILC (EU statistics on Income and Living Conditions) Waves 2008 and 2012.
- EA is defined as the 12 countries that has joined the union for some years before the 2008 recession.
- Divided these 12 countries into 2 groups based on their exposure to the 'sovereign debt crisis' of 2011-12: 'Periphery' group consists of Greece, Ireland, Italy, Portugal and Spain; 'Core' group consists of Austria, Belgium, Finland, France, Germany, Luxemburg and Netherlands.
- Study focusses on annual (cash) earnings gross of social and income taxes paid by the employee.
- In the SILC data , attention restricted to 'employees aged 20 to 69 years who report positive monthly values of the wage rate'.
- Rigorous Adjustment made to standardise the meaning of earnings across EA.
- PPPs within EA used to incorporate cost of living differences when converting wages from nominal to real values.

#### Features and Results

- Prices differ between countries in a given year but such differences have changed during the crisis.
- Number of hours worked by employees dropped more than GDP per capita (5.4%), while real hourly wages rose by 4.7 %.
- This EA wide picture hides significant heterogeneity between the 'periphery' and 'core' countries: for example, real GDP per capita and hours worked by employees fell considerably between 2007 and 2011 in the 'periphery' countries, but did not change much in the 'core' countries'.
- Authors believe that the sovereign debt crisis can shed some light on this divergence.
- Divergence also between the EU-SILC averages and national accounts based averages for salaried employment and real wages, with the former recording significantly lower levels.

## Features and Results (Continued)

- Adjustment for cross country differences in cost of living has virtually no impact on EA mean wages but narrows the gap between core and periphery means.
- Such adjustments reduce measured inequality in the EA as a whole.
- The EU-SILC data shows that the wage adjustment within the EA was substantially larger than that suggested by the national accounts.
- Relative costs of low wage labour have fallen far more in the periphery than in the core countries- by 6-8 %.
- Employment share of core countries increased by 1.9 %; the weight of younger employees fell in both core and periphery countries, but markedly more in the latter.
- Results highlight a major adjustment of wage rates during the crisis in the EA as a whole.
- Most of the EA wage adjustment is attributable to changes in the periphery wage schedules.

#### Discussant's Remarks

- Interesting and important study on the growing divide between the 'sovereign debt' affected countries and the others in the Euro Area.
- The disparity between the averages in the EU-SILC and national accounts needs closer examination. Need to relate this finding to the significant literature that exists on differences between the means in survey data and national accounts- for example, the studies by Ravallion and Deaton among others.
- The PPP s within the Euro area play quite clearly a crucial role- needs a separate section describing how the magnitudes were arrived at.
- The estimation and use of subnational PPP s need to be explored in the context of this study and applied to the construction of real wage levels. Some of these countries are large enough for the attention to shift from economy wide treatment to that based on regions.
- The treatment of prices leaves room for improvement. The work of Muellbauer and Pendakur have shown that price movement can contribute significantly to inequality changes if one abandons the assumption that all the households face identical prices. The issue should be examined on the EU-SILC data.
- Following on from the above suggestion, it will be useful to examine differences between the core and periphery countries in this regard.

# Discussant's Remarks (Continued)

- Sen (RES, 1976) has suggested an interesting method of ranking countries based on a welfare function based methodology that evaluates inequality corrected means of the various countries evaluated at each others' prices. The advantage of this axiomatic procedure is that it goes beyond the overall price level differences that the PPP conveys and takes into account the varying structure of relative prices across items that prevails in the various countries. The authors could consider adopting this procedure and examine if the welfare levels between and within the core and periphery countries has been growing or reducing over the period between 2007 and 2011.
- There is no attention paid to poverty rate differences between the two groups of countries. This needs to be brought in further work. There needs to be greater focus on poverty that may have grown differentially between the core and periphery countries.