European Integration and Income Inequality Convergence

Extended Abstract

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September 21, 2012

ABSTRACT

Scholars and policy makers have argued that European integration increases income inequality, while increasing states' social policy convergence. However, scholars have paid little attention to the relationship between European integration and income inequality convergence. This paper fills this gap in the literature by investigating the relationship between European integration and income inequality convergence from 1980-2007 using a sample of 17 European Union countries. Preliminary findings show a sigma convergence, which is a decrease in the dispersion of income inequality across the 17 E.U. countries over 1980-2007. The results also show a beta-convergence; that is, some countries with below average income inequality have caught up with those with above average income inequality as a result of European economic and political integration.

(Word count: 120)

DESCRIPTION OF THE PROBLEM

Scholars and policymakers have shown concern regarding effects of the European Union (E.U.) on income distribution, as many believe it weakens the welfare state's redistributive power by coercing states to adopt austerity measures (Pierson 1998), which increases income inequality (Beckfield 2006). They also argue that the E.U. should increase welfare state social policy convergence, such as social protection spending (Diaz-Bautista 2008; LoRe and Tully 2011; Alonso 1998; Bouget 2003; Paetzold 2012; Schmitt and Starke 2011). However, scholars have paid little attention to the relationship between European integration and income inequality convergence. This paper will fill this gap in the literature by investigating the relationship between European integration and income inequality convergence from 1980-2007 using a sample of 17 European Union countries. I will use sigma-convergence (Barro and Sala-i-Martin 1991) to characterize the decrease in dispersion of income inequality between these countries. I will measure whether countries with below average income inequality have caught up with those with higher income inequality using beta-convergence[1] (1991), a commonly used technique for measuring the growth rate of lower income countries relative to higher income countries. There is beta convergence when lower income countries grow faster than higher income ones.

BACKGROUND

Political Integration, Welfare State Convergence and Income Inequality Convergence

Research has shown that the welfare state shapes income distribution, stratification and poverty (Alderson and Nielsen 2002; Brady 2005; Kenworthy 1999; Korpi and Palme 1998; Moller et al. 2003). For example, tight monetary policies tend to benefit the economically fortunate, while full employment policies

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[1] Economists originally used beta-convergence to explain the process by which lower income countries catch up with higher income ones (Barro and Sala-i-Martin 1991). Neoclassical growth theory argues that countries have a steady state of development. The closer a country is to its steady state, slower it grows. Higher income countries are closer to their steady state than lower income ones. Consequently, lower countries tend to grow faster than higher income ones (Grossman and Helpman 1991; Romer 1990; Sala-i-Martin 1996; Solow 1999). Thus, there is beta-convergence when average growth rate of GDP is negatively related to initial its level: (1/T)log(Git/Gi0)=a-blog(Gi0)/T.

tend to benefit the poor (Boix 1998; Hibbs 1987). Moreover, research has associated European integration with welfare state retrenchment (Huber and Stephens 2001; Korpi 2003; Scharpf 1996). For example, under the Maastricht treaty that established the European Monetary Union, states were allowed a budget deficit no more than 3% of their GDP (Attia and Berenger 2009). One would expect such a policy to decrease welfare state generosity. Additionally, the E.U. integration subjects countries to similar political and economic policy requirements (Korpi 2003:603), which have increased social welfare similarity across E.U. countries (Attia and Berenger 2009; Marzinotto 2006; Püss, Maere and Reet 2003; Püss, Mare and Kerem 2005; Greve 1996; Kuitto, Jahn and Düpont 2011). Beckfield (2006) has shown that European political integration has increased income inequality by decreasing welfare state generosity. If European integration causes both retrenchment and convergence of the welfare state, one should not only expect income inequality to increase, but also that it will converge across countries. This paper 1) argues that income inequality has converged across the 17 E.U. countries over 1980-2007 (that is, these countries have become similar in their levels of income inequality over time). Moreover, since European integration increases income inequality via welfare state retrenchment, while increasing social protection convergence, 2) this study hypothesizes that countries have become similar in their level of income inequality as they have become more similar in their levels of social protection spending.

Regional Economic Integration, Labor Market and Income Inequality Convergence

Research has shown that European economic integration increased market similarity (Mejean and Schwellnus 2009; Pierson and Leibfried 1995; Rhodes 1995; 1997) and income inequality across the E.U. member countries by increasing labor and wage competition and by weakening labor unions (Alderson 2004; Beckfield 2006; Western 1997). If European economic integration increased income inequality by increasing labor competition and weakening unions and European economic integration increased economic similarity, one could expect European economic integration to increase income inequality convergence. Following this

logic, 3) this paper hypothesizes that the sample of 17 E.U. countries to have become more similar in their

levels of income inequality as they have become more economically integrated. Additionally, since regional

integration decreases welfare state generosity and welfare state's generosity is a function of a country's

income, (since political and economic integration forces countries to decrease social protection spending) one

could expect some countries with below average income inequality to start catching up with leader countries

(beta-convergence). Therefore, 4) this study hypothesizes that the average growth rate of Gini coefficient and

the logarithm of its initial level to be negatively related.

Income Inequality Convergence and Future Trends in Within-Country Income Inequality

Although research has shown a positive relationship between economic integration and within-country

income inequality (Beckfield 2006), scholars remain unclear regarding future trends in within-country income

inequality (Clark 2011; Firebaugh and Goesling 2004). Understanding the relationship between the European

economic and political integration and income inequality convergence will increase our understanding about

future trends in within-country income inequality in the E.U. and other regions of the world. Since economic

integration increases market similarity (Mejean and Schwellnus 2009; Pierson and Leibfried 1995; Rhodes

1995; 1997) and increases income inequality by weakening unions and the welfare state's redistributive power

(2006), a positive relationship between economic integration and income inequality convergence might

indicate that it is less likely that within-country income inequality will decrease in the era of economic

integration.

DATA AND METHODS

The dependent variable in this analysis is the absolute value of countries' Gini coefficient residual

relative to the average Gini of the 17 countries. The Gini residual is the difference between a country's Gini

coefficient and the mean Gini of the 17 countries. Coefficient of variation, variance and standard deviation

have also been used to measure economic and social protection spending convergence (Alsasua, Bilbao-Ubillos and Olaskoaga 2007; Bouget 2003); however, these measures transform the data such that analysis remains at the level of the E.U. as a whole, preventing estimation of within- and between-country effects. This study uses the Gini residual to enable country-level analysis, including estimation of between-and within-country effects. The Gini coefficient data come from the Standardized World Income Inequality Database (SWIID) (Solt 2009). Solt standardized the United Nations income inequality data using custom missing-data algorithms, which enables cross-country comparison.

The independent variables in this analysis are three commonly used measures of regional political integration, regional economic integration, and welfare state generosity, respectively: 1) the number of cases that national courts referred to the E.U. Court of Justice, 2) the share of a country exports going to the E.U. and 3) social protection spending (Beckfield 2006; Fligstein and Stone Sweet 2002; Caporaso 1976; Frankel 1997; Nye 1968; Sapir 1992). The 1957 treaty establishing the European Economic Community (2006) conferred the European Court of Justice the power to interpret European law and incorporate it into national law (Stone Sweet and Brunell 1998a, 1998b). The more cases a country refers to the E. U. Court of Justice, the more integrated the E.U.'s law is in this country's law (Burley and Mattli 1993:42), signifying greater political integration of that country with the E.U. This study will test the effect of the number of cases a country referred to the E.U. Court of Justice on the Gini coefficient residual as compared to the average Gini of the 17 countries. The export share data are from the International Monetary Fund (IMF) database: Direction of Trade (IMF 2011). Social protection sending (SPS) is from the Organization of Economic Cooperation and Development (OECD). SPS contains public spending on old age, health, family and housing; it also includes unemployment, survivor-and-incapacity-related benefits (OECD 2011).

I will use generalized least square (GRL) random effects to model income inequality convergence (Gini residual). GRL random effects model is most appropriate for this analysis because the data contains within-

country and between-country variation. The between-country effect comes from the fact that countries disproportionately contribute to the number of observations of data. Within-country effects could be attributed to countries' institutional history (Beckfield 2006). GRL random effects will pool these within- and between-countries effects. While the ordinary least square (OLS) fixed effect model is a commonly used technique for cross sectional panel data, it controls for time invariant effects within-countries, while dropping the between-country effects. The GRL random effect model also controls for time invariant effect, but keeps between-country variation.

Similarly to previous studies (Beckfield 2006; Beckfield 2009), preliminary results show significant effects of European economic and political integration on income inequality. Preliminary results also show decreased dispersion of the Gini coefficient between the 17 E.U. countries, during the period between 1980-2007. As hypothesized, the decrease in Gini dispersion across these countries indicates convergence in income inequality. Moreover, preliminary analysis showed a negative relationship between the average growth rate of the Gini coefficient and the logarithm of its initial level. This supports the hypothesis that the negative relationship between the average growth rate of Gini coefficient and the logarithm of its initial level is an indication that some countries with below average income inequality have experienced faster income inequality growth than leader countries. These preliminary results could mean that E.U. integration not only increases within-country income inequality, but it also closes the gap in level of income inequality between the E.U. countries. The preliminary results are not presented pending comparison of these results against those obtained from other commonly used measures of convergence.

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