Economic Convergence in the European Union

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Abstract

Starting with the Treaty of Rome (1957), the European Union adopted common policies to promote “harmonious economic development and balanced expansion.” The paper investigates how successful such policies were, by examining whether there was economic convergence of the real per capita GDP in the EU. Two measures of convergence are employed. The first is $\sigma$, which is based on the cross standard deviation of the real per capita GDPs of the EU countries; the second is $\beta$ convergence based on the neoclassical growth model. Both $\sigma$ and $\beta$ were estimated using EU data for the period 1960-1995. The empirical findings
support the hypothesis of economic convergence within the EU except for the 1980-85 sub-period where weak divergence was indicated.

• **JEL Classifications:** C1, C3, F15

• **Key words:** Beta \((\beta)\), Convergence, Sigma \((\sigma)\) convergence, European Union, Nonlinear Least Squares (NLS), Seemingly Unrelated Regressions (SUR)

**I. Introduction**

The successful introduction and establishment of an economic and a monetary union requires similar economic structures without persistent regional disparities in real and monetary conditions. The fulfillment of this requirement has been the focus of policy efforts in the European Union \((EU)\) ever since its official inception as the European Community \((EC)\) with the Treaty of Rome in 1957. European policy makers have adopted economic policies aimed at reducing per capita output and income disparities across its member states. This has taken the form of liberalizing trade in goods and services, allowing for free factor mobility, and devising transfer funds policies in order to help the poorer regions and countries catch up to the richer ones in terms of income and welfare.

Several empirical studies have used time series and cross section data to measure and evaluate economic convergence among countries and regions; e.g., see Sala-i-Martin (1996) and the references therein. A growing empirical literature deals with convergence within the EC. Sapir (1992) used trade data from various sources, for the 1960's, 1970's and 1980's, to evaluate the effects of European integration on trade, welfare and income distribution for twelve EC countries and subsets of it. He finds these effects to be beneficial, but, at the same time, not all regions reaped the same benefits. In some cases, regional disparities were exacerbated. Ben-David (1993) studied the link between trade liberalization and income convergence within the EC. Using country data up to 1985 from various sources, his results support the convergence hypothesis that poor regions tend to grow faster than rich ones. According to Ben-David, most of the convergence occurred in the post world war era, during a period of increased trade liberali-