Regional business cycles synchronicity and regional inequality in the EU

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Extended Abstract

Against the backdrop of the EU economic integration process, the paper brings together a couple of distinct strands of literature, thus adding a salient perspective to the economic integration literature, studying a couple of distinct – though highly related – issues: (a) the patterns of regional business cycles synchronicity; (b) the impact of business cycles on regional inequalities. Business cycles are defined as "a type of fluctuation found in the aggregate economic activity of nations that organize their work mainly in business enterprises". Ergo, business cycles refer to the concerted cyclical upswings and downswings that characterize a span of macroeconomic variables - the most notable one is real GDP – and aggregate economic activity, in general. Typically, business cycles consist of a quartet of recurrent, but not periodic, stages: (a) expansion; (b) crisis; (c) recession; (d) recovery. Apparently, the notion of business cycles is not compatible with the neoclassical understanding of the (spatial) economy, which operates always in equilibrium and the only variations from a steady-state growth path may be arising from random or external shocks. Utilizing EUROSTAT data that refer to 276 EU regions (NUTS II level) and covering the period 1990-2020, the paper presents clear-cut empirical evidence, gained using sound and rigorous methods of empirical analysis, and provides a novel contribution to an area of research that has been (re-)gaining increasing interest. This is so as macroeconomic shocks – that influence regional inequalities – are considered to be the main driving forces behind business cycles.

The degree of synchronicity of business cycles across economies has been a core issue in the debate of the economic integration literature as the synchronicity of macroeconomic fluctuations is crucial for the smooth functioning of an economic union. This is especially so in the EU as the deepening and the enlargement of European economic integration process raises questions with respect to the pattern of European economic integration *per se*. Considering that national economies are composed of regions with diverse economic profile, the process of economic integration is, most probably, going to exert a stronger effect at the regional level than at the national one. Economic barriers are de facto lean(er) at the regional level, and thus the stronger effect at the regional level can be expected because, at the regional level, trade activity

is more intense, and specialization is higher. The dynamics of regional business cycles may thus condition the adjustment of national economies to the economically integrated environment.

There are a couple of streams of thought as regards the synchronicity of business cycles in an economically integrated environment. The first one supports the idea that economic integration leads, through facilitating the coordination of economic policies, to more symmetric fluctuations, which in turn leads to more synchronized business cycles. Such an idea directly refers to the OCA theory in the sense that as the more synchronized are the EU countries' business cycles, less costly should be giving up their independent monetary policy. The second one argues that increasing economic integration leads to regional concentration of economic activities, which may, in turn, convert sector-specific shocks into regional-specific shocks, thus increasing the likelihood of diverging business cycles. Even though empirical literature utilizes different datasets, employs different methods, and focuses on different spatial levels and time intervals, the findings, mostly, suggest that business cycles in the EU are becoming more synchronized. This holds mostly for the core EU countries (in particular, the core EMU countries). Yet, it holds for the peripheral EU countries as well. Notable is the finding that regional business cycles synchronicity has increased between EU countries (i.e., across national economies) and has decreased with EU countries (i.e., within national economies).

Recognizing whether regional inequalities move along the business cycles allows for discriminating between a short-run component and long-run component of regional inequalities. While the increase of regional inequalities due to short-run component calls, mostly, for short-run (i.e., redistributive) policies, the corresponding increase due to the long-run component calls, mostly, for long-run (i.e., structural) policies to be implemented. Apparently, in cases of counter-cyclical behaviour of regional inequalities either there is no urgent need (i.e., decrease of regional inequalities in periods of expansion) or there is luck of resources (i.e., increase of regional inequalities in periods of recession) for the implementation of short-run policies aimed at tackling regional inequalities. Thus, even though the vast majority of empirical studies on regional convergence (i.e., the process whereby poor(er) regional economies catch-up to rich(er) ones) implicitly adopts a long-run perspective, there is a strand of literature that associates business cycles with regional inequalities.

The literature offers several interpretations for the pro-cyclical behaviour of regional inequalities (i.e., increase of regional inequalities in periods of expansion, and decrease of regional inequalities in periods of recession). The pro-cyclical behaviour can be explained by the fact that expansion cycles begin at the poles of economic activity, where the interaction of agglomeration effects and market size provides a lead over other regions; on the contrary, during a recession period, these poles are more exposed to demand and supply contractions and, therefore, are more likely to be negatively affected than the rest of the regions, resulting in decreasing regional inequality. The concept of sheltered regions (i.e., isolated regional economies which are, mostly, dependent on the agriculture sector, government transfers and public employment) offers an alternative interpretation. In periods of expansion, sheltered regions do not keep up with the rest of the aggregate economy and do not use their potential for convergence. Not surprisingly, in periods of recession, sheltered regions do not suffer as much as other regions. From a different perspective, richer regions are better prepared to face growing demand during expansions due to the presence of more dynamic sectors in their production structure. On the opposite side, the counter-cyclical behaviour of regional inequalities is hinged upon the equilibrating role of labor mobility and the effectiveness of regional policy in periods of expansion. In empirical terms, the literature offers results that favour both the pro-cyclical and the counter-cyclical behaviour of regional inequalities in the EU.

In the course of time, the EU has managed, to a great extent, to match the political to the geographical boundaries of the European continent. This is so as the EU, on the historical record of its formation, has managed, in a series of enlargements, to expand, first southwards and then eastwards, integrating countries economically less and less developed and institutionally less and less endowed. Within the EU framework, the gradual emaciation of (artificial) border impediments concerning the movement of people, products, production factors and money constitutes the structural element – and the pure essence – of the European (economic) integration process. The EU is, gradually, moving from a "space of places" to a "space of flows" and from a "space to States" to a "State of spaces". Such a move (synonymous to the process of European integration) brings – together with the benefits (i.e., economic restructuring, sociopolitical transformation, democratization, curtailment of corruption, development) that are, indeed, too strong to be overlooked – effects which are of less unequivocal character. Closed borders distort market size, whereas the abolition of economic barriers generates (releases) all kinds of spatial dynamics that relate to the allocation of capital (i.e., physical and human), to productivity gains, to technology importation, to the realization of agglomeration economies, to access to foreign markets, and to import competition. Apparently, as the physical distance diminishes, the economic distance grows.