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# GLOBAL IMBALANCES AND EU CORE-PERIPHERY DIVISION

## Institutional Framework and Theoretical Interpretations

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**Abstract:** This article places the core-periphery division in the European Union (EU) within the framework of global imbalances and the dramatic geopolitical changes which have affected them in the past decades. These changes, which have been shaping the new world order, amount to the restructuring of developed economies with the engulfing of manufacturing by the financial sector; the shift in the geography of industrial activity resulting from the increased outsourcing and offshoring of production and increasing services; the transfer of competitiveness from West to East, to dynamic Asian economies, notably China; the emergence of chronic trade and financial imbalances in the global system, leading to the “debt-fuelled growth” of many advanced economies. The above developments, facilitated by free trade market reforms and enhanced by the financial crisis of 2008, threaten economic and political dominance of the West, particularly the US, and therefore the existing core-periphery pattern. A similar pattern of developments has been taking place within Europe (through the transfer of industrial production from the West to the East) which implies changes to the old European core-periphery pattern. The article approaches critically and qualitatively the above issues, by examining the convergence trends among EU member states and the possible factors underlying them, as well as a number of theoretical approaches that interpret spatial inequalities and core-periphery patterns.

**Key words:** financial and economic crisis; emerging economies; relocation of economic activity; unequal geographical development theories; New Economic Geography

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## 1. Introduction

This article places the core-periphery division in the European Union (EU) within the framework of global imbalances and the dramatic geopolitical changes which have affected them in the past decades. These changes, which have been shaping the new world order, amount to (Dunford and Yeung 2011; Wolf 2011; Labrianidis, Kalantaridis, and Dunford 2011; Smith 2013; Laurent 2013) the restructuring of developed economies with the engulfing of manufacturing by the financial sector; the shift in the geography of industrial activity resulting from the increased outsourcing and offshoring of production and increasing services—a substantial part of the operations of multinational corporations; the transfer of competitiveness, as a result of this delocalization, from the West to the East, to dynamic Asian economies, notably China; the emergence of chronic trade and financial imbalances in the global system, leading to the “debt-fuelled growth” of many advanced economies. The above developments, facilitated by market liberalization reforms and enhanced by the financial crisis of 2008, threaten economic and political dominance of the West, particularly the US, and therefore the existing core-periphery pattern. The new world division had a profound impact on EU economies, where a similar pattern of developments has been taking place, putting the old division between core and peripheral countries within Europe itself into question (Pickles and Smith 2011; Smith 2013). Within the above framework, a hot debate on an academic and political level has developed, and a number of theoretical approaches challenging the conventional, neoclassical, economic approach have emerged.

The article is structured as follows: In the second section, changes in global production and trade flows, leading to the convergence process described above and gradually setting the scene for a new geopolitical order, are briefly presented. Particular emphasis is given to the phenomenon of delocalization of economic activities of Western economies, which underlines most of the ongoing developments. Section 3, using mostly data from official Community sources, provides evidence on (1) regional imbalances reflecting the existing core-periphery pattern in the EU and the degree of convergence achieved at a member-state and regional level before and during the current economic crisis; (2) the “catching-up” of Central and Eastern European Countries (CEECs) and the factors underlying it which shows this group’s dynamism and resilience during the crisis. A brief discussion on the differences and similarities between eastern and western periphery of the EU follows in section 4, combined with reference to the prevailing views on the roots of the European crisis and its impacts on the two peripheries. The overall role of the EU Cohesion Policy (CP) in this context is also discussed briefly. While the absence of the regulatory role of the state in the neoliberal era is generally thought to be the major factor of inequalities in space, the fifth section of this

article emphasizes the stronger state intervention which takes place both in the domestic sphere and through the increased power and significance of international institutions and supranational arrangements in managing conflicts among hegemonic states and maintaining or shifting core-periphery patterns. Searching the appropriate theoretical framework to interpret ongoing changes at global and EU levels, the sixth section briefly presents some characteristic theories of the “disequilibrium” stance (as opposed to the “equilibrium” in space assumed by neoclassical economists), referring to older and newer unequal development and location theories. It focuses on the most recent of these, Krugman’s New Economic Geography (NEG) theoretical framework, stressing its relationship and similarities with the “cumulative causation school,” Wallerstein’s analysis of the capitalist world system and Harvey’s approach on unequal geographical development and the “spatial fix.”

## 2. Emerging Economies (EM) and the New Geopolitical Scene

### 2.1. World Core-Periphery Division and the Trend towards Global Convergence

The distribution of world GDP between 2010 and 2014 confirms the established trend for at least two centuries core-periphery division globally, with the EU, the USA and Japan contributing by 59% to this indicator—EU 23.1%, USA 21.9%, Japan 9% and the BRIC economies by 17%—Brazil 3%, Russia 2%, India 3%, China 9% (Alogoskoufis 2013, 25; Kallitsis 2014). Yet the much higher growth rates of the so-called EM, as well as of a number of other less developed ones, provide indications not only of the trend towards global convergence but also of a reversal of the above long-established division. According to estimates, in 2040, China, the fastest growing among the EM, is expected to account for 40%, the USA 14% and the EU 5% of world GDP. And “if for the USA this development is a dramatic deterioration of its present position, for Europe it represents a real collapse” (Laurent 2013, 178–79). The prediction that, by 2030, the International Monetary Fund’s (IMF) headquarters will have moved to Peking is quite characteristic of the ongoing changes (Kallitsis 2014). In other words, “the world dominated economically, politically and intellectually by the western high-income countries, particularly the US . . . sees its economic influence being diminished and its political dominance being questioned and put under severe challenge” (Wolf 2011, 1).

The trend towards global convergence is revealed in Table 1, which shows the rates of growth of old core and EM for different groups of countries between 2012 and 2015. It is striking that even Africa, notably sub-Saharan, shows higher growth rates than the average of “developed economies” and the “world,” with increasing

tendencies until 2015. That year, it had been estimated that the growth rate of the Southeastern European group will also exceed that of the “developed” group, owing mostly to the dynamism of CEECs.

Statistical evidence on the international flows of Foreign Direct Investment (FDI), presented in Table 2, further confirms the core-periphery pattern described, revealing a high concentration in the countries of the traditional “industrial center.” But it also shows the tendency towards reversal of this pattern, due to the increased attractiveness of dynamic developing economies as investment locations.

Between 1990 and the beginning of the decade of 2000, the bulk of FDI inflows (around 70%) was directed to the old industrial counties. The distribution of investment inflows inside each group of countries is equally unequal. In the group of developing countries, the bulk of FDI was directed to Asian countries, with China being the most significant location, followed by Brazil and Mexico. The rising trend in investment flows to Asia observed until 1996 was interrupted by the financial crisis of 1997–98, which led to a massive investment outflow. A new rise in the share of the Asian group and that of two big economies of Latin America (Brazil and Mexico) in FDI inflows was again observed between 1999 and 2002 reflecting

Table 1 Growth Rates of Real GDP in Selected Countries (Annual Percentage Change): 2012–15

<i>Country/country group</i>	<i>2012</i>	<i>2013</i>	<i>2014</i>	<i>2015</i>
World	3.1	3.0	3.7	3.9
Developed economies	1.4	1.3	2.2	2.3
USA	2.8	1.9	2.8	3.0
Eurozone	−0.7	0.5	1.6	1.4
Germany	0.9	0.5	1.6	1.4
France	0.0	0.2	0.9	1.5
Italy	−2.5	−1.8	0.6	1.1
Spain	−1.6	−1.2	0.6	0.8
Japan	1.4	1.7	1.7	1.0
Developing economies	4.9	4.7	5.1	5.4
Southeastern Europe	1.4	2.5	2.8	3.1
Russia	3.4	1.5	2.0	2.5
Developing Asia	6.4	6.5	6.7	6.8
China	7.7	7.7	7.5	7.3
India	3.2	4.4	5.4	6.4
Latin America	3.0	2.6	3.0	3.3
Brazil	1.0	2.3	2.3	2.8
Middle East and South Africa	4.1	2.4	3.3	4.8
Sub-Saharan Africa	4.8	5.1	6.1	5.8

Source: Charemis and Hymis (2014) (original source from *World Economic Outlook*, IMF).

Table 2 Percentage Distribution of FDI by Country or Group of Countries (%): 1990/94–2003

<i>Country/group of countries</i>	<i>1990–94</i>	<i>1996</i>	<i>1999</i>	<i>2003</i>
Industrial countries	69.7	60.7	78.5	70.4
Europe	22	4.5	2.7	4.3
Developing countries	30.3	39.3	21.5	29.5
Africa	1.4	1.4	0.9	2.4
Asia	16.9	20.0	9.3	12.5
China	8.1	10.8	3.6	6.1
Middle East	1.8	1.5	0.5	0.8
Argentina	1.5	1.9	2.2	0.4
Brazil	0.9	3.0	2.7	3.1
Mexico	2.7	2.5	1.2	3.4
Total	100	100	100	100

Source: International Monetary Fund, World Economic Outlook Database (<http://www.imf.org/external/ns/cs.aspx?id=28>), October 2003. Own calculations.

the increased integration of these peripheral countries in the world economy. As shown in Table 3, this rise continued during the 2000s, and by year 2012 the share of developing countries in FDI inflows surpassed that of developed countries (52% for the former group compared to 41.5% for the latter). Asia, Southeastern Asia in particular, remains increasingly the most important pole of FDI flows,<sup>1</sup> followed by Latin America which also shows a remarkable dynamism.

## 2.2. The Dynamics of Change

A number of factors and developments in the global economy have underlined the above changes as they had profound implications for comparative development. Three sets of factors can be identified in this context (Dunford and Yeung 2011, 32): The first is the engulfing of manufacturing by finance in developed economies and the consequent “extraordinary recomposition of corporate profits in financialized economies.” In the USA, for example, in the early 1950s the manufacturing sector accounted for 55% of US corporate sector profits, but in 2003, it had fallen to just 7.8%, while the financial sector accounted for 34.8% of corporate profits. The second factor, a direct consequence of the first, was a shift in the geography of industrial activities, due to the increased outsourcing and offshoring of production and increasing services from core to export zones of peripheral economies, as part of the manufacturing operations of multinational corporations. This boosted the industrial growth in dynamic Asian economies—with China being the most significant of them—and the transfer of competitiveness from West to East leading to the emergence of a new industrial divide worldwide. This process is analysed in section 2.3. The above development, in turn, opened the

Table 3 Percentage Distribution (%) of FDI by Country or Group of Countries: 2010–12

<i>Country/group of countries</i>	<i>2010</i>	<i>2011</i>	<i>2012</i>
Industrial countries	49.4	49.7	41.5
Developing countries	45.2	44.5	52
Africa	3.1	2.9	3.7
Asia	28.4	26.4	30.1
Eastern and Southeastern Asia	22.2	20.8	24.1
Southern Asia	2	2.7	2.5
Western Asia	4.2	3	3.5
Latin America and the Caribbean	13.5	15.1	18.1
Oceania	0.2	0.1	0.2
Economies in transition	5.3	5.8	6.5
Total	100	100	100

Source: United Nations Conference on Trade and Development (UNCTAD), World Investment Report 2015 [http://unctad.org/en/PublicationsLibrary/wir2015\\_en.pdf](http://unctad.org/en/PublicationsLibrary/wir2015_en.pdf) and author's calculations.

way to yet another phenomenon: the emergence of ever-increasing trade imbalances in the global economic system, leading to the third phenomenon or underlying factor: the “debt-fuelled growth of some advanced economies, made possible by the flows of savings from emerging to rich economies.” For example, the US and UK trade/payment deficits with the rest of the world and China were possible only due to the inflow of foreign savings. China, for example, purchased US Treasury Bonds to manage its exchange rate vis-à-vis the currencies of its major trading partners and to accumulate reserves in case it needs to protect itself against speculative attacks. Capital controls were also employed to prevent speculative inflows that might force up its exchange rate and reduce the value of its dollar holdings. In 2009, China's foreign reserves hit US\$ 2.4 trillion (Dunford and Yeung 2011, 34). According to Laurent (2013), “Western economies financed the development of China, rendering it within 10 years the world's main creditor . . . Thus, the US just like Europe are being gradually transformed into wealthy countries with poor inhabitants” (145, 151).

The financial crisis of 2007–08 though not the major cause of the above-described changes has had a catalytic role. And “recovery [from the crisis] will be sustainable if, and only if, there is a progressive reduction in . . . global microeconomic imbalances” (Wolf 2011, 1; Quah 2011).

### 2.3. The Phenomenon of Delocalization or Relocation of Economic Activity

The shift in the location of industries, initially concerning those with “a considerable degree of labour intensity, ease of entry, relatively low value added and

increasing competitive pressures,” led to substantial changes in the geography of production globally (Labrianidis, Kalantaridis, and Dunford 2011, 148; Smith 2013, 7). This process of delocalization from core to peripheral regions has taken place over the years at four main phases: (1) in the 1960s and 1970s, within developed (industrialized) countries; (2) between the 1970s and the early 1980s, from core countries (in particular, the then European Community and the US) to semi-peripheral states of their immediate vicinity, namely, Southern Europe and Latin America with Mexico being the most significant location of this region; (3) from the early 1990s onwards, to CEECs and the BRICS group, notably China, which, under neoliberal market reforms, became attractive locations for both core and southern European investors. Within Europe, the geographical shift of certain parts of the value chain aimed at reducing labour costs and facing the rising competition from global producers. This shift concerned initially labour-intensive industries and parts of the automobile assembly value chains, but it increasingly includes services; (4) from around 2000 onwards, when new economic players from the EM appeared in European value chains, while foreign migrant workers were settled in European industrial districts (the Italian textile and clothing industrial districts, for example, are now “home to the largest concentration of Chinese workers in Europe”; see Smith 2013, 7). The same trend is now evident in the service economy through the outsourcing of labour contracting—“a migrant division of labour” as it is named. Global production networks reflect “European integration with the global economy or Europe’s interdependency within the global order” (Smith 2013, 7). At the same time, new regions, in the Mediterranean and South Asia, attracted firms from core and semi-peripheral regions. Lastly, around the end of the 2000s, a trend became evident towards delocalization of production further to cheaper Eastern locations within the EU (i.e., to countries such as Romania and Bulgaria), under growing competitive pressures from China and India. Thus, many new members became part of the production chain starting in Germany, producing not only fittings and equipment but also final industrial products (e.g., assembly of automobiles and heavy industry machinery). These developments denote the changing industrial map of Europe: while in the past the industrial zone of Europe was extended from Manchester (UK) to Milano (Italy), crossing the Netherlands, Belgium, Western Germany and Switzerland (a zone which in 1989, the year of the fall of the Berlin Wall, was characterized as the “blue banana”), nowadays, the industrial chart of Europe has been transformed extending from Southern Germany (the centre) to Poland, Czech Republic, Slovakia, Austria and Romania. This group of countries witnessed an increase in its share in the EU market between 2004 and 2013 by 5.3%, with the greatest benefits accruing to Germany (Taylor 2015).



Technological improvements and trade liberalization at a regional and global level underpinned these developments. In the European textile sector, for example,

competitive pressures and low-cost imports, combined with decades of European Union and state policies supporting delocalization and the integration of broader European production networks in the clothing industry, continue to threaten the viability and stability of local and regional production systems. (Pickles and Smith 2011, 168)

The abolition of quota-constrained trade in 2005 and the ending of the multi-fibre arrangement (MFA), which had largely governed the global geography of textile and clothing production for much of the post-war period, substantially contributed to this outcome. In parallel with the “globalization of production networks” (in particular, sourcing in the low-wage regions of East Asia), we observe the sector’s resilience in CEECs, due to an “intensification of the regionalization of clothing production in lower-cost producing regions” of this area (but also in North Africa and selected countries in the Mediterranean Basin, such as Turkey). This is due to the region’s “centrality in European clothing production networks” since the 1990s and its ability to service proximate markets, denoting the importance of this factor in addition to labour costs. Export-directed clothing production enabled these countries to survive pressures for deindustrialization during the “early years of post-socialist transformation and its integration into pan-European contracting relations” (Pickles and Smith 2011, 169, 172). A similar situation took place in North America after the establishment of North American Free Trade Agreement (NAFTA), which boosted regional integration of apparel and textiles, following global liberalization in the sector, and led to delocalization of apparel production from the US to Mexico and other countries in Central America and the Caribbean Basin (Begg, Pickles, and Smith 2003, 2192).

### 3. The Changing Core-Periphery Pattern in Europe

#### 3.1. Regional Imbalances among Countries and Regions

Table 4 presents the core-periphery pattern in the EU at a country level, based on Eurostat estimates for per capita GDP of years 2006 and 2012. The selected countries have been classified as “core” or “peripheral” countries, depending on whether this indicator is above or below the EU-28 average. The table not only shows that the centre of gravity in Europe still comprises countries located on its northwestern part, but also that the traditional division of Europe between “North” and “South” has been modified after the enlargements of 2004 and 2007: on the

one hand, the southern periphery was “strengthened” due to the addition of two more southern member states (Malta and Cyprus); on the other hand, the periphery expanded to the East to comprise 10 CEECs (10 + 1 after accession of Croatia in 2013). As noted, the Eastward expansion has also signalled a future growth zone in that area, due to the transfer of industrial production from western European countries (notably, the UK, France and Belgium) to those member states.

Expansion towards the East from the beginning implied accentuation of regional inequalities among European countries (due to the inclusion of poorer countries in the EU characterized by intense intra-regional imbalances) with a parallel upgrading of the relative position of many peripheral countries of Southern Europe. The impact of the global recession following the financial and economic crisis, initiated in 2008 with the collapse of Lehman Brothers, on the EU economy had no clear geographical pattern, affecting both more and less developed economies (European Commission 2014), although the impact was felt more by southern EU economies. As a result, the latter’s relative position deteriorated strengthening the old North-South divide. This development, reflecting the negative growth rates of GDP per capita of many of the old peripheral countries (last column of Table 4), with the most striking case being that of Greece, reduced the per capita GDP levels of this group, which in many cases approached those of the new Central and Eastern members.

Imbalances at the regional level are even more striking, given that one in four EU residents live in (NUTS 2) regions with a GDP per head in production parity standards (PPS) terms below 75% of the EU average, with most of these being located not only in the CEECs but also in Greece, Southern Italy, Portugal and most of the outermost regions (European Commission 2014). Lagging regions with lower value-added activities (e.g., agriculture and industry), whose GDP is less than 50% of the EU average, are mainly found not only in the CEECs (e.g., Bulgaria, Romania, Lithuania and Poland) but also in regions of southern member states (e.g., Portugal and Greece). Several of these regions, specializing in textiles and clothing production, as well as steel, electricity and office equipment, are particularly vulnerable to international competition, especially from EM (European Commission 2010). Dijkstra points to the significance of another indicator, the “Lisbon Index,” which evaluates the distance of regions from the eight targets of the Lisbon Treaty. It takes values from 0 to 100, with regions close to 100 having achieved all targets and regions close to 0 having achieved none (Dijkstra 2010). In 2008, only three regions in Finland and Sweden were successful in achieving all eight targets, whereas the Lisbon index reached the value of 38 in objective 1 (convergence) regions (with GDP per capita less than 75% of the EU average), eligible for funding from the EU Structural Funds, revealing their very low rate of target achievement (European Commission 2010).

Table 4 Core-Periphery in Europe at a Country Level (GDP Per Capita, EU-28 = 100)<sup>a</sup>

	<i>GDP per capita</i>		<i>Average annual GDP growth rate (%)</i>		
	<i>2006</i>	<i>2012</i>	<i>1998–2006</i>	<i>2007–09</i>	<i>2010–12</i>
Core countries					
<b>EU-28</b>	<b>100</b>	<b>100</b>	<b>2.5</b>	<b>−0.3</b>	<b>1.1</b>
<b>Eurozone-17</b>	<b>109</b>	<b>108</b>	<b>2.3</b>	<b>−0.3</b>	<b>1.0</b>
Luxemburg	271	272	5.1	0.1	1.6
Austria	126	131	2.6	0.4	1.8
Ireland	146	130	6.7	−1.2	0.4
The Netherlands	131	129	2.5	0.7	0.4
Sweden	123	129	3.5	−0.8	3.5
Denmark	124	125	2.0	−1.6	0.7
Germany	116	122	1.5	−0.2	2.7
Belgium	118	119	2.2	0.4	1.3
Finland	114	115	3.5	−1.0	1.8
United Kingdom	121	110	3.2	−0.9	1.0
France	108	108	2.3	−0.3	1.2
Italy	105	99	1.5	−1.7	−0.1
Spain	105	97	3.9	0.2	−0.6
Iceland	124	113	4.5	0.2	0.0
Norway	186	196	2.4	0.4	1.6
Switzerland	140	160	2.0	1.4	1.9
Average	134.9	134.7	3.1	−0.2	1.2
Peripheral countries					
Cyprus	93	91	3.9	2.3	−0.2
Malta	79	86	1.5	1.1	2.1
Slovenia	88	82	4.1	0.8	−0.2
Czech Republic	80	79	3.7	1.4	1.1
Greece	92	75	4.1	0.1	−6.1
Portugal	79	75	2.1	−0.2	−0.9
Slovakia	63	75	4.3	3.8	3.1
Lithuania	58	70	6.3	−0.7	3.8
Latvia	53	62	7.3	−3.5	3.0
Estonia	66	69	6.9	−3.6	5.4
Hungary	63	66	4.0	−1.9	0.3
Poland	52	66	3.9	4.5	3.4
Croatia	58	61	3.6	0.1	−1.4
Romania	38	49	4.1	2.3	0.6
Bulgaria	38	47	5.2	2.4	1.0
Average <sup>b</sup>	60.2	64.3	4.3	1.0	1.3

Source: Eurostat, <http://ec.europa.eu/eurostat/data/database>.

Note: Per capita GDP is in production parity standards, and the average percentage rate of change of real GDP has 2005 as its reference year.

<sup>a</sup>EU countries and countries of the European Free Trade Area: Norway and Switzerland.

<sup>b</sup>The average is based on the inclusion of candidate countries: Iceland, Montenegro, Serbia, Former Yugoslav Republic of Macedonia and Turkey.

We could say that, overall, the core-periphery divide of Europe, whether North-South or East-West, reflects “a divide between a ‘Europe A’ of prosperity, high human welfare, good governance and high democratic standards and a ‘Europe B’ of poorer, more poorly governed, more troubled democracies with more acute social problems and inequalities” (Lessenski 2014). The positive relationship between levels of development, measured by per capita GDP, and degree of governance quality—with poor quality of governance increasing as we move towards the South—has also been remarked in other studies (see, e.g., Featherstone and Kazamias 2014; European Commission 2014).

### 3.2. The Catching-Up Process

#### 3.2.1. *Inter-State and Inter-Regional Convergence*

Table 4 reveals a trend towards convergence among developed and lagging member states<sup>2</sup>—reflecting the higher than average GDP growth rate<sup>3</sup> of peripheral countries—in both the pro-crisis period (1998–2006) and the next two periods (2007–09 and 2010–12) following the first and second wave of economic crisis. This is so despite the fact that core countries retained their dynamism, with their GDP per capita remaining, on average, twice that of peripheral countries.

Between 2007 and 2009, real GDP per head fell markedly not only in the three Baltic States, among peripheral countries, but also in Ireland, Finland, Sweden, Denmark, UK and Italy, among core countries. The fall in real GDP per head was relatively small in France and Germany, while growth continued in Cyprus, Slovakia, Poland and the poorer, recently accessed, member states, Bulgaria and Romania.

Between 2010 and 2012, with the second wave of crisis having hit European economies, core countries resumed positive growth rates of around 2% on average, with some of them exceeding 3%. The contribution of net exports to recovery—which started in 2009—was substantial, though uneven among countries and highly depended on the EU’s growth prospects, particularly Germany’s as they are integrated into its cycles of growth. Among core countries, the sole exceptions were Italy and Spain<sup>4</sup> which showed negative growth rates, owing to the debt crisis hitting southern European economies and Ireland. Among peripheral countries, Greece and Portugal were particularly affected, with the first sinking into recession of –6%. The three Baltic countries resumed high growth rates, while Poland and Slovakia continued their dynamic path of growth. It is basically the growth path of these “less developed” member states (with GDP <75% of the EU average) that has led to overall regional convergence in the EU in the period examined.

A **Catch-Up Index** has been developed by the Open Society Institute of Sofia for 35 countries (EU member states, candidate and potential candidate countries)

which measures the countries' performance on the basis of four categories: economy, quality of life, democracy and governance (Lessenski 2014). The Index was initially designed to capture the progress of the EU10+1 member states (CEECs plus Croatia since 2013) in catching-up with the rest of the EU (i.e., with the old member-states EU15, +2). Its application in years 2011, 2012, 2013 and 2014 reveals that there exist some sub-regional patterns of development in Europe, with groups of countries showing similar levels of performance and forming observable geographical patterns, that is, forming clusters, while the latest years also capture the impact of the economic crisis (Lessenski 2014, 8). The findings show that some members from the EU10+1 group, in particular the three Baltic States and Poland, form a group of dynamic performers, leading the catch-up process of the East with the West. By contrast, some countries are rather regressing (Slovenia, Hungary and recently joined Croatia) or show no change (Bulgaria, Romania). "Economy" was found to be the area where the catching-up was faster, while a positive correlation was established between "economy" and "democracy"—though causality cannot be determined. The overall picture certainly reveals that while the old North-South divide has revived as a result of the crisis, a new North-South divide has emerged, with the "North" now including dynamic performers in the CEECs, which according to some observers is stronger than the East-West divide.

The crisis therefore has halted the tendency towards convergence among regions in a number of economic indicators, such as per capita GDP, employment and unemployment. Thus, following the first wave of the crisis, between 2008 and 2011, two out of three regions experienced a reduction in GDP per head, amounting to over 3% a year in Greek, Romanian, British and Irish regions. Similarly, disparities in both employment and unemployment rates have widened significantly since 2008, wiping out half of the employment gains made in the previous period. In 2008, five regions had an unemployment rate above 20%, but in 2013, the number had increased to 27%. The economic crisis has affected the regions differentially, so that some regions, particularly in the southern member states, were hit severely, while others were hardly affected. In fact, in many German regions, unemployment rates have decreased because of the relatively strong performance of the German economy since the global recession in 2008–09. In most parts of the EU, metropolitan regions were more affected by booms and busts, while rural regions proved to be more resilient, showing higher productivity growth between 2008 and 2011 (European Commission 2014).

Based on the evidence presented, we can assume that the long-run convergence process in the EU will continue after the end of the crisis, a process assisted by investment funded under CP.

### 3.2.2. *The Catching-Up of the Central and Eastern Periphery*

In Table 5, the growth rates of CEECs as a whole in the period 2000–2012 appear to approach those of the dynamic or EM shown in Table 1 and to be twice as high as those of other developed economies. The maintenance of these rates in the period 2010–12 possibly expresses their “resilience” in circumstances of crisis, which has been attributed to a series of factors: for example, the policy of deregulation and attraction of FDI which they have adopted during their period of transition to the free market type of growth, the type of sectors in which they tend to specialize, their increasing participation in world trade,<sup>5</sup> and the fact that some of them continue to delay their membership in the Eurozone. Of course, the different performances within the CEECs’ group often reflect the different policies and strategies followed by each country. It appears that the best performers were the countries that made the toughest reforms. The relatively strong resilience to the crisis of Poland has been attributed to its more diversified economy (which combines export-led growth with internal sources drawing from public and private investments in infrastructure, aided by EU funding).

Although the onset of the crisis led to major reductions all over the EU in trade and FDI, which are important sources of growth for the less developed member states, exports of the EU-13 to other EU countries have shown significant recovery and now account for a larger share of their GDP than that before the crisis, while FDI has also picked up (European Commission 2014). The increased share of the CEECs in world trade stems from the reduced international competitiveness of the old core countries in traditional sectors, such as textiles, metals and electro-optical equipment, and the relocation of these sectors in lower-cost countries within Europe (in the CEECs, in particular) or in distant locations, a development which brought about the increasingly negative trade balance of most-developed EU economies. However, the increased competition of these sectors from EM is expected to affect negatively this trend. It is therefore very likely that the deficits of the balance of payments, the high unemployment rates and the rise in intra-regional income inequalities will slow down this group’s rates of growth, and thus the degree of convergence with the EU’s wealthier economies in the near future (Podkaminer 2013). On the other hand, the group of core countries shows a positive trade balance in the trade of services, an indication of their strong world position in this sector.

Furthermore, the dispersion of European firms’ production globally increases demand for logistics, which favours urban centres hosting this type of activity. Some of these centres are already found in the newer member states, given that the rise in productivity owing to innovation, as well as the production restructuring towards higher value-added sectors (including services), appears to be taking place more intensively in the group of “less developed member states” (European

Table 5 Growth Rates of Real GDP (Annual Percentage Change) in CEECs, Japan, the US and the EU-27: 2000–2012

Country/ country group	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011 <sup>a</sup>	2012 <sup>a</sup>
Japan	2.9	0.2	0.3	1.4	2.7	1.9	2.0	2.4	−1.2	−6.3	3.9	1.4	2.1
USA	4.1	1.1	1.8	2.5	3.6	3.1	2.7	1.9	0.0	−2.6	2.8	2.8	2.9
EU-27	4.0	2.1	1.4	1.5	2.6	2.2	3.5	3.2	0.7	−4.1	1.8	1.8	2.1
CEEC <sup>b</sup>	5.2	0.3	4.3	4.8	7.3	5.9	6.4	5.5	3.2	−3.6	4.2	3.7	4.0

Source: Blazek and Netrdová (2012, 43) (original source from IMF 2011).

Note: CEECs = Central and Eastern European Countries; EU = European Union.

<sup>a</sup>Figures for 2011 and 2012 are IMF estimates.

<sup>b</sup>Consists of 14 countries, EU member states or candidate countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, Latvia, Lithuania, Former Yugoslav Republic of Macedonia, Montenegro, Poland, Romania, Serbia and Turkey).

Commission 2010). This perhaps explains the impressive rise in GDP per head in PPS terms in the metropolitan regions of Slovakia, Romania and Bulgaria (to 186% of the EU average in the first, 122% in the second and 78% in the third), which in the first two countries corresponds to more than double the national average increase (European Commission 2014). The rise in GDP is related to the higher than the EU average polarization in those countries' large metropolitan centres, a trend especially distinguishable in most post-socialist member states during their transition period to a free market era (Pociute-Sereikiene, Kriauciunas, and Ubareviciene 2014, 116).

We can conclude that while geographically the EU core still covers the area between London, Paris, Milan, Munich and Hamburg, it has been subject to transformations over the years: (1) around the 1990s, new centres appeared in Southern Europe, forming a "southern development zone" extending from Northeastern Spain to Northern Italy; (2) new centres have emerged in the past 10 years in capitals such as Warsaw, Prague, Bratislava, Budapest and Bucharest. In other words, the core-periphery division of Europe, though generally stable, expresses a fragile equilibrium which reflects the dynamics of change.

#### 4. Eastern vs. Southern Periphery, Economic Crisis and EU CP

The EU enlargement towards southern and eastern European countries (in the decades of the 1980s and 2000s, respectively) shows both similarities and differences. In the first place, both groups of countries increased the socioeconomic and political heterogeneity of the Community. Secondly, both groups came out of authoritarian regimes, though of different nature, and were poorer and more rural than the other average members. Thirdly, both enlargements have been considered as substantial geopolitical, in addition to purely economic, projects (Samary 2011; Lessenski 2014).



Attempts to modernize the economy in a number of CEECs (e.g., Romania, Yugoslavia, Hungary, Poland and East Germany), even before the fall of the Berlin Wall, through an increase in higher technology imports from the West, and given the bureaucratic structure of their economy, led to debt crises in the decade of the 1980s. A debt fuelled type of growth also characterized southern economies in the same decade, such as Greece following its accession to the European Community and the assumption of power by the new socialist government. The first stage of the eastern group's transition to the "market economy" or its integration to the globalized neoliberal world by others, from the fall of the Berlin Wall (1989) until about the beginning of 2000s, was characterized by massive privatizations and the dismantling of central planning, followed by substantial declines in growth rates. The decade of its accession to the EU (2000s) was marked by foreign capital penetration in the newly privatized banking system, increased FDI, mainly from German multinationals seeking for lower taxes and wages, and gradual "catching-up" with the EU. This growth model led to "a rapid rise in consumption and investment, with a large share of foreign currency lending," as well as to trade imbalances, caused by imports of inputs (semi-finished products), and the outflow of profits by multinationals, all leading to a "systematic external imbalance of the current account" (Samary 2011).

The high growth period was halted, as we saw, by the financial crisis of 2008 and so did the process of convergence of peripheral member states towards the European average (see also Blazek and Netrdová 2012, 43). Territorial cohesion within the EU was as a result seriously threatened. Due to the severe impact which the crisis had on the southern countries (Portugal, Italy, Greece and Spain) plus Ireland, the latter came to be called with the derogatory nickname P.I.I.G.S. In the eastern group in particular, the crisis led to substantial contractions of output (particularly felt by countries with the most outstanding performance in the previous period, e.g., Estonia and Latvia—see Table 4) and increases in public debt, following capital outflows and reduction of exports, eventually leading to the IMF's involvement in the rescuing of domestic economies.

The roots of the crisis lie, according to the widespread conception, on the different growth models or "accumulation regimes" prevailing within the EU-27, which in a way reflect the unequal income distribution in the Union: on the one hand, what has been described as an "overproduction" or "export led" growth model, adopted by countries with trade surpluses (e.g., Germany, Sweden and Austria); on the other hand, the regime described as an "overaccumulation" or "credit led" growth model, followed by the "highly financialized" countries with high debts and current account deficits (i.e., core countries like the UK, and of course peripheral countries, like the former communist countries, Ireland, where the crisis has "hit" its banking sector, Spain, where a "real estate crisis" emerged,



and Greece, where a public debt crisis of immense dimensions burst). In this interpretation, the growth model followed by surplus countries is the cause of the deficits of southern and eastern peripheral countries (see, e.g., Schmidt 2010; Stockhammer 2011; Caraveli 2012, 241–42). This is mainly true for Germany, the country that benefited most from the CEECs accession to the EU, due to the delocalization of its assembly plants or productive units to these countries, which facilitated the downward pressure on German wages and inflation (below the agreed Eurozone inflation rate), leading to production surpluses and export-based development (Samary 2011; Kitromilides and Skouras 2015). **The enormous trade surplus of Germany is, in fact, violating the common European rules on “economic balances” or equilibrium among European countries, according to many commentators (including Mr. Draggi).**

**The Eurozone crisis in particular reflects the euro’s problematic architecture, resulting from the monetary union’s lack of the “necessary political foundations,” which led to its inability “to provide proper banking supervision and control but, most importantly, to correct wrong signals in the financial markets” (Kitromilides and Skouras 2015).** This shortcoming resulted in the augmentation of current account deficits and debts, which, given the countries’ **inhibition to boost their competitiveness through currency devaluations in periods of crisis, in combination with the non-existence of an automatic mechanism for the transfer of public finance funds to weaker member states, necessitated “internal devaluation” measures (reduction of pensions, salaries and public expenses as well as increased unemployment), usually imposed by the lending countries and international institutions (IMF, European Central Bank [ECB], etc.).** Moreover, transferring the crisis to the periphery, the argument goes on, “greatly benefits Germany’s ageing economy, through the immigration of trained labor from the indebted countries suffering from high unemployment” (Kitromilides and Skouras 2015). Although firmly based, this line of argument rarely takes into consideration **internal structural deficiencies in both southern and eastern peripheral countries which include bureaucratic rigidities and corrupt and profligate political elites** (see, e.g., Caraveli 2012; Kitromilides and Skouras 2015). It furthermore fails to assess the impact of the large transfers of money from core to peripheral countries through the EU Structural Funds (or the misuse of such transfers), as well as the fact that “austerity measures”—which admittedly offer no sustainable solution to the less competitive and indebted countries—have in some cases, combined with structural reforms, brought about positive results on growth (e.g., the recent cases of Ireland and Portugal). There is of course general agreement on the need for greater European integration, that is, “to promote the prospect of a federal Europe,” aiming at “reviving growth rather than reducing sovereign debt,” through “a reformed Eurozone without its basic design faults” (Kitromilides and Skouras 2015), but

serious objections on the part of many member states inhibit the achievement of this target (Samary 2011; Smith 2013).

The southern enlargement of the EC was accompanied by the creation of a European regional policy (expressed in the Single European Act of 1986 and strengthened in the Maastricht Treaty and after each reform of the Structural Funds) which was implemented through an increase of transfers to weaker members. This reflected the need for redistributing funds within a single market, recognizing that the openness of economies to free trade and higher integration, combined with weak domestic structural characteristics, induces greater inter- and intra-regional inequalities<sup>6</sup> and obstructs cohesion (see, e.g., Rodriguez-Pose 2012). Indeed, over the years, the financial support under Regional or Cohesion Policy has consistently focused on less developed regions, although under the Lisbon Treaty (2005) it has shifted from reducing economic disparities (focusing on investment in hard infrastructure in lagging regions) towards business support and innovation, employment and social inclusion, following the economy's liberalization. In particular, in period 2000–2008 the largest increases in per capita public expenditures were realized in member states with per capita GDP less than the EU average, while public investments as a proportion of GDP/inhabitant were higher in lagging regions. Over the same period, both public expenditures and public investments per capita in Cohesion countries—directed to vital areas, such as R&D, support for small-and-medium enterprises (SMEs), sustainable energy, human resource development and social inclusion—converged to the EU average (European Commission 2010; Caraveli 2012). The accession of even weaker member states in the mid-2000s and the exclusion of many regions of the southern periphery from the Structural Funds (due to their transition to a higher level of development) implied that the lagging CEE regions would be the major beneficiaries from such transfers. According to European Commission estimates, CP in the 2007–13 period has made a substantial contribution to growth and jobs in the CEECs (in particular, Latvia, Lithuania, Poland, Hungary and Slovakia), where it has increased GDP and employment levels, while the longer-term effects are estimated to be even greater due to the impact on the development potential of these economies<sup>7</sup> (European Commission 2014). The contribution of CP to growth and job creation is expected to be strengthened in the current programming period (2014–20) through the concentration of resources on a few key priorities and a stronger focus on performance and results. On the other hand, the harmonization of CP with budgetary targets, in the framework of the Europe 2020 strategy, and the emphasis on “competitiveness” and “convergence,” rather than “cohesion” are likely to limit the development potential of lagging regions.

The financial crisis accelerated the tendency for delocalization of industrial production from western (core) to eastern (new peripheral) countries within the

framework of globalization of the production chain (Taylor 2015). This has enhanced their production and export potential as well as their competitive position in the EU and globally (though often at the expense of their internal territorial cohesion), which perhaps explains the remarkable resilience of some of these countries during the crisis years. It also proves that “competitive” strategies are in fact working towards raising development and welfare levels.

## 5. Institutions, States and Geopolitical Considerations

While the absence of the regulatory role of the state in the neoliberal era is generally thought to be the major factor of inequalities in space, stronger state intervention has in fact been taking place in contemporary economies, either in the domestic sphere, or through the increased significance and power of supranational entities (e.g., EU) and international institutions such as the World Trade Organization (WTO), the IMF and the World Bank. Their role in shaping and imposing rules, that is, acting as global governance, is instrumental in influencing the core-periphery pattern globally or on a European scale.

True,

the European construction (with the European Treaties) in the framework of globalized capitalism ensures that governments in power serve the markets and the markets serve the dominant states to pursue their anti-social policies: welfare reductions, dismantling of public services, etc. in order to proceed to privatizations and financial speculation. (Samary 2011)

But the reduction of welfare expenses<sup>8</sup> by no means implies reduction in overall state expenditure or the role of the state in contemporary economies. It is worth noting that even during the first post-war period of the “neoliberal invasion” (the decade of the 1980s)—when “the free mobility of capital was regarded as crucial to reviving profit rates and all barriers to that (such as planning controls) had to be removed except in those areas crucial to the national interest”<sup>9</sup> (Harvey 2001, 25)—“the reduction of state intervention was everywhere limited even in the case of governments that pioneered in promoting the ‘neoliberal revolution’ (i.e., the US and the UK),” so that the magnitude of the state, measured by the proportion of state expenditure in GDP, rather than being reduced was actually augmented (Serafetinidou 2012, 582). Moreover, the new forms of globalized production, reflected in the operations of multinational corporations and the consequent rivalry between them, do not imply the weakening of the state which is often the prevailing argument. On the contrary, the state has to “play an even more significant, in relation to the past, role in safeguarding and promoting the

‘national’ capital in global markets . . . through a series of legislative, economic, diplomatic or even military means”<sup>10</sup> (584). It is however true that “the state has in recent decades less power to impose its rules (e.g., taxation laws) on a ‘national’ capital which is now moving freely, choosing the geographical location that offers the most favourable terms—e.g. low labour cost and taxation” (585). This factor often leads to consensus and collaboration among “private” and “state” forms of capital.

Harvey (2006) sees

a central contradiction between territorial and capitalistic logics of power . . . internalized within capital accumulation, given the tension between regionality and territorial class alliance formation on the one hand and the free geographical circulation of capital on the other, (107)

stressing the significance of the state in this context: “Capitalist firms come and go, shift locations, merge or go out of business, but states are long-lived entities confined within fixed territorial boundaries.” And this “dialectic of the territorial and capitalist logics of power has far reaching effects particularly with respect to imperialism and geopolitics” (107). So “the role of territorial power is to ensure open spaces within which surplus capitals can move. The effect is for capital accumulation to diffuse outwards and proliferate on the world stage.” Ultimately however, all “capitals” (i.e., investments) will be looking for a spatial fix. This is when geopolitical rivalries for influence or control over other territories emerge, such as those that produced two world wars between major powers in the past century (108). He then concludes that the development of contemporary economies “must be regarded as a decentralized and unstable evolutionary process characterized by uneven geographical developments and strong competitive pressures between a variety of dynamic centers of political-economic power” (Harvey 2001, 41). The degree of global governance conducted by international institutions (WTO, IMF, World Bank, European Commission) reflects the need for increased regulation and coordination of these centres, which either strengthen their position or facilitate the rise of new (“emerging”) centres of power. In this context, Germany’s hegemonic status in the EU and its repercussions for peripheral European states discussed above can be interpreted as a strategy aimed at “counterbalancing the direct US influence in Europe,” given the downward path to its global hegemony since the 1970s<sup>11</sup> (Desai 2010; Samary 2011).

There is therefore nowadays more rather than less scope for state intervention, whereas contrary to the prevailing view, a truly free market is far from being the economic system’s basic characteristic. As Wallerstein (1987) remarked in the seventies,

not only is the capitalist system not properly described as a system of free enterprise today, but there never was a moment in history when this was a reasonable descriptive label. The capitalist system is and always has been one of state interference with the freedom of the market in the interests of some and against those of others.<sup>12</sup> (121)

And he continues by emphasizing that identifying state ownership with socialism has contributed to a massive confusion with severe political consequences. This is because core states have stronger state machines than peripheral states, while countries based on state ownership have admittedly lower standards of living compared to countries predominantly characterized by a private enterprise system, whereas social inequality in the so-called socialist countries is still manifestly enormous (Wallerstein 1987, 61, 91).

At the heart of EU policies, the Lisbon Strategy of the EU and the “global Europe” that followed it aimed in theory at creating a liberal competitive system of market integration, jobs and growth that would lead to both enhanced competitiveness and convergence across the EU. They also aimed at “repositioning the EU on the global stage, in recognition of the increasingly interdependent world in which Europe was situated and the shift to multi-polar economic and political centers of gravity” (Smith 2013, 7). On internal regional disparities, CP itself is a highly interventionist policy, absorbing nearly a third of the Community budget (about the same with the proportion absorbed by the Common Agricultural Policy, admittedly the most interventionist so far EU policy), directing transfers of money to areas most in need. As we saw, however, such transfers by no means secure a reversal of the core-periphery pattern, which in some cases is reproduced and strengthened.

## 6. “New International Order”: Theoretical Interpretations

The core-periphery division has been approached theoretically by many schools of thought in the post-war period, basically from the 1950s to the 1970s, both from an evolutionary Marxist perspective and the liberal tradition. On the one hand, the “dependency” theorists of the Latin American School (e.g., Prebisch 1950; Furtado 1970), the school of the “development of the underdevelopment” (e.g., A. G. Frank 1966, 1967, following the thinking of Baran 1957), the approach of “the structure of dependence” (of Dos Santos 1970) and the theories of “unequal exchange” (of Emmanuel 1972) and “global accumulation of capital” (by Amin 1971), to mention the most known approaches (described by Wallerstein 1987, 53). Nearly all of these theories—developed mainly by Asian and Latin American scholars—focused on the relations of “dependency” among peripheral or

underdeveloped countries and core or industrially developed countries in a “world system,” with these relations being the cause of the problems of the first group of countries.

In more or less similar lines of thinking, Wallerstein, in his analysis of the “capitalist global system,” includes another group of countries, the “semi-peripheral” countries, highlighting the fact that “within a capitalist world-economy, all states cannot ‘develop’ simultaneously by definition, since the system functions by virtue of having unequal core and peripheral regions” (Wallerstein 1987, 61). He moreover observes that the economic system is not characterized by free competition, and it is “free” only when “the market serves effectively . . . the existing system of stratification” (66).

The core-periphery distinction, widely observed in recent writings, differentiates those zones in which are concentrated high-technology, high-wage diversified production (the core countries) from those in which are concentrated low-technology, low-wage, less-diversified production (the peripheral countries). But there have always been countries which fall in between in a very concrete way and play a different role. The productive activities of these semi-peripheral countries are more evenly divided. This group of countries (where the former socialist countries can be classified) acts as a peripheral zone for core countries and . . . as a core zone for some peripheral areas. (97)

More recently, the Marxist social geographer David Harvey introduces a geographical as well as an economic dimension to core-periphery divisions, stressing the significant impact of both “free market competition” and “agglomeration forces” on the choice of business location. He remarks,

Small pre-existing geographical differences, be it in natural resources or socially constructed endowments, get magnified and consolidated rather than eroded by free market competition. The coercive laws of competition push capitalists to relocate production to more advantageous sites and the special requirements of particular forms of commodity production push capitalists into territorial specializations. (Harvey 2006, 98)

He then recognizes the strength of the “self-organizing dynamics of concentration and centralization of capital in space” and of “agglomeration economies (including those achieved through urbanization)” in generating “locational dynamic in which new production tends to be drawn to existing production locations . . . Circular and cumulative causation within the economy then ensures that capital rich regions tend to grow richer while poor regions grow poorer.” This means that

“the tension between geographical centralization and dispersal is omnipresent within the geographical landscape” (Harvey 2006, 98). He further observes that the reduced transport costs in the globalized economy augment rather than reduce territorial divisions and specializations of labour, because “small differences in production costs (due to raw materials, labour conditions, intermediate inputs, consumer markets, infrastructural or taxation arrangements) are more easily exploitable by highly mobile capital.” So, “reducing the friction of distance makes capital more rather than less sensitive to local geographical variations.” In the end, “the combined effect of freer trade and reduced transport costs is not greater equality of power through the evolving territorial division of labour, but growing geographical inequalities” (Harvey 2006, 100–01).

On the other hand, there are older theories of development and growth, as well as of the geographical concentration approach—within the liberal tradition—in particular, the “growth poles” or the “cumulative causation” school, which underlie Harvey’s analysis to a significant degree. Two of the most representative theories are those of G. Myrdal (1957) and N. Kaldor (1972, 1975).

Interestingly enough, the most recent theoretical approach for interpreting the core-periphery division stems from the mainstream tradition. This is the NEG theory which is also based on many of the above theories, especially the geographical concentration approach of the “cumulative causation” school, emphasizing the importance of “history” in the location process. Given its significance in reintegrating space issues in mainstream economic analysis, it is worth analysing in more detail its basic model and question to what extent it can explain the European core-periphery model and current global changes (see also the analysis in Caraveli 2012).

Initiated with the works of Krugman (1991a, 1991b), the NEG model describes the process of regional polarization within a country, resulting from the interaction among economies of scale, transport costs and market size, assuming inter-regionally mobile labour and product variety. Accordingly, an important analytical question is how the above factors affect spatial competition and location under conditions of increased economic integration (regionally or internationally). It is proved that in intermediate stages of the economic integration process, that is, when “transport costs” (in the broader sense including all kinds of impediments to the integration process) are at an intermediate stage, economic activity will be concentrated in one or a few regions where growth will be accentuated. In this process, which is led entirely by market forces, the driving force is agglomeration economies that generate cumulative growth and establishment of a core-periphery pattern.

In the NEG framework, the driving forces of spatial agglomeration are the cumulative (or circular) causation procedures (“history” according to Krugman), rather than “first nature” (e.g., natural endowments) characteristics. The same



framework interprets “international polarization” through the “vertical linkages” model developed by Krugman and Venables (1995) and Venables (1996, 1999), which assumes mobility of labour only between sectors of production (e.g., agriculture and industry), but not between countries and regions, so that large wage differentials are maintained. The main driving forces of specialization in this context are “demand and cost linkages” (known in the literature as backward and forward linkages), which lead to “Marshallian-type” industrial clusters, so when introduced to the model they allow it to interpret regional specialization. When transport costs are sufficiently low (i.e., in more advanced stages of economic integration), diseconomies of scale or deagglomeration forces emerge in central regions, representing centrifugal forces which outweigh the centripetal ones. At this point, the periphery becomes again attractive due to its lower wages, so that new migration of factors of production (capital and labour) to peripheral areas starts. Divergence now gives way to convergence, an outcome similar to that predicted by the neoclassical model. The NEG framework then interprets the flows of investment to the East (through the operations of multinational companies) in search of low costs and the flows of its output (i.e., production) to the West, eventually leading to the types of convergence seen in sections 2 and 3 for the global and the EU economies. From this respect, it also incorporates the supply and demand dimension of the global imbalance problem underlying the “structural Keynesian theory.” The supply-side reflects the new production paradigm (expressed in the relocation of production to the East) that underlines contemporary globalization. The demand-side reflects the conversion of US and EU consumers into “global consumers” who purchase the surplus products of the export-led economies of the East and Germany in the EU (Palley 2014, 2–4).

Although it has been criticized for being part of the mainstream in the sense that it is broadly neoclassical, with microfoundations, the NEG model has contributed in reinstating space issues into mainstream economic theory and “bringing back to life” the “disequilibrium strand”—the theoretical stance interpreting territorial inequalities, expressed in one way or the other in all theories mentioned above. It is furthermore critical of the mainstream as it rejects the assumption of perfect competition and efficient markets adopting that of imperfect competition and “multiple equilibriums” (Krugman 2011, 4). It has further been criticized, among others by Krugman himself, on the grounds that it can interpret old-type (19th-century) industrial zones and production clusters (e.g., “Marshallian industry localizations”), but not contemporary concentrations which are more information spillovers type, thus increasingly dominated by intangibles rather than tangible goods (Krugman 2011, 5; Storper 2011, 12). For the same reasons, the model would be inappropriate to interpret financial capital flows and financial imbalances which occupy a large part of global imbalances. As a result, it fails to



take into consideration a fundamental change in the global movement of capital in contemporary economies: the flow of financial, but recently also productive, capital from peripheral, less developed, to industrialized countries,<sup>13</sup> which is contrary to conventional microeconomic and development theory, in which capital should flow from capital-abundant countries of the core (i.e., the US) to capital-scarce poor countries (i.e., EM), where rates of return are higher (Palley 2014, 24). Equally important is its complete neglect of the substantial role of the state in contemporary economies, which stems from its basic neoclassical origin.

The substantial contribution of NEG lies not only in its accepting and adequately analysing a situation of a long-lasting disequilibrium in space resulting from a gradual concentration or agglomeration of economic activities (described as “catastrophic agglomeration”), and the unequal development this process brings about. It also lies in the inclusion in its analytical framework of the possibility of a change in the above pattern, as, under certain circumstances, a relocation of production factors away from original centres (described as “catastrophic de-agglomeration”) to peripheral regions can lead to the emergence of new centres and the reversal of the established core-periphery division. The NEG model can in particular explain the limited convergence among EU states and regions that has been characterizing the course of EU integration up to date (i.e., from the 1992 EU Treaty onwards), given the political impediments in the further deepening of European integration; the reemergence of the old North-South divide due to the dramatic external shock caused by the current crisis; the appearance of new centres in both the old and the new European periphery and internationally (basically China and India); the role that southern EU countries can play under the changing, turbulent, circumstances in the Mediterranean and Middle Eastern regions. After being properly adjusted to include current developments, the NEG model could play a pioneering role in dealing with the dramatic geopolitical changes the world is experiencing (Storper 2011, 10; Caraveli 2012, 249).

## Notes

1. It is characteristic, that in 2005, over 50% of Chinese exports were produced by 100% foreign-owned companies, and over 76% of Chinese exports were produced by foreign-owned or joint-venture companies (Palley 2014, 10–11).
2. A trend already observed in the 1950s and 1960s, which was interrupted in the 1973–86 period, possibly due to the economic crises characterizing this period (in particular, the oil crises of years 1973 and 1979). A decisive underlying factor of the trend towards convergence between 1950 and 1973, as well as after 1986, was the great interregional and international movement of the labour force (European Commission 2010).
3. It refers to both the “average” for EU-28 and that for the Eurozone-17.
4. Although often classified as a country of the southern periphery, Spain is here classified in the group of core countries on the basis of its GDP/head. Certainly, there are substantial regional differences within the country, with a “north-south” divide very similar to that of Italy.

5. It should be noted that between 2000 and 2007, while the share of the group of EU-15 countries in the total value of world trade increased by less than 15%, the corresponding share of the group of EU-12 increased by over 30% (European Commission 2010).
6. A premise proved in many empirical findings.
7. Yet a number of empirical studies ascertain that no specific impact (positive or negative) from the operation of the Structural Funds on regional performance can be discerned (see, e.g., Marzinotto 2012; Bouayd-Agha 2013).
8. Here, we must juxtapose the views held by a number of analysts of Marxist orientation, according to which the welfare state simply expresses “a political compromise between the two major classes [capital and labour] which otherwise would have embarked into a constant battle” (quoted in Serafetinidou 2012, 347).
9. In contrast to the target of the social democratic state which is attainment of “full employment and the optimization of the well-being of all its citizens subject to the condition of maintaining adequate and stable rates of capital accumulation” (Harvey 2001, 25).
10. According to Harvey, the neoliberal state “trumpets the virtues of competition while it is actually opening the market to centralized capital and monopoly power” (25).
11. Manifested as we saw in the rise of emerging economies and the eastward shift in the centre of gravity in the global economy.
12. It should, however, be remarked that the augmentation of the role of the state in regulating and controlling the economic and social life of developed economies took place in the period following the first world war, that is, after the end of the “competitive” period of capitalism (for a thorough discussion and analysis on this issue, see Serafetinidou 2012, 319–96).
13. Bershidsky (2015) notes that European companies attract increasingly Chinese investments, referring to the examples of the Swedish Volvo, the French Peugeot-Citroen, the Sonya-Rykiel fashion group, the Piraeus harbor in Greece and Pizza express in the UK, bought by Chinese companies.

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