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The Complexity of the European Integration – The General Vectors of Disorientegration[1]

The paper transcends prevailing literature on the crisis of European integration by demonstrating that disorientegration (losing orientation and weakening integration) is not a recent fortuitous event but a systemic pattern. It shows how the centrifugal force towards weakening European integration has developed by asking what are the general non-EU specific vectors of such a gradient. We argue that disorientegration is an echo effect of a complex amalgam of intertwined mechanisms secularly shaping the European integration process. Our paper also outlines the critical mass of conceptual prerequisites of reversing the European disorientegration.

Keywords: EU integration, complexity, orientation, innovation, governance

JEL classification: E10, E60, F15, H10, H70, O10

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Introduction

As the largest economy of the world, the European Union (EU) has served as a salient wealth generator for one of the most talented populations on Earth.[1] Still, for the first time in its 60-year history, the European integration is increasingly seen as a process that can be stopped or reversed in some aspects. Although a recovery appears on the horizon in terms of growth prospects, remaining challenges are still warning us that this is *no time for complacency*. (See EIB 2017; OECD 2017a) In 2016, the United Kingdom voted to leave the EU which left us in daze and we do not really know the direct and indirect consequences of such historic decision for the entire integration (e.g. domino effect for leaving the EU in other countries). With the gargantuan task of challenges, the European integration shows the sign of secular deterioration by becoming disoriented from its purposes. The assumption that the motor of the integration is the spirit of a faith community, by now has become a myth by nourishing disintegration. As the current president of the European Commission, Jean-Claude Juncker expressed it with commendable honesty: "There is not enough Europe in this Union. And there is not enough Union in this Union." (Juncker, 2015)

Importantly, the state-of-the-art literature on the shortcomings of the European integration mostly concentrates on EU-specific factors rather than embracing more systemic processes shaping the integration process. Moreover, to date, the available literature interprets the permanent crises in the EU as anomalies along the course of integration, while we are to show that the configuration has been encoded and developed endogenously. That literature tends to merely emphasise the absurd nature of the architecture of the Economic and Monetary Union (EMU) from the viewpoint of the theory on Optimal Currency Area and the recent Eurozone crisis and its lacklustre crisis management. Nonetheless, the conventional wisdom of this literature mostly lacks of a broader perspective and leaves the development of the *configuration of processes* at loose ends. Available literature has a predilection either to reduce the shortcomings of the European integration to only some factors (e.g. the lack of fiscal union) or to pay attention to certain topics without addressing dynamic relationships (e.g. Eurozone crisis [Baldwin–Giavazzi, 2016], impact on agriculture [Csáki–Jámbor, 2012], dealing with debt [Corsetti et al., 2015] or with core-periphery relations [Magone et al., 2016], or just with the contradiction between inter-governmentalism and supranationalism [Csaba, 2015; Spolaore, 2015]). The literature has just sporadically emphasised the danger of integrational crisis (Palánkai–Miklós, 2014; Vollaard, 2014), however, more and more signs indicated that (e.g. the new stream of Comparative Regional Integration Studies also emerged, see [Fioramonti, 2012]). Furthermore, studies have a strong tendency to express just a sheer claim for structural reforms to spark competitiveness via innovation throughout the EU. (Palánkai, 1999; Halmai, 2014) Even the new handbook on Economics of European Integration (Badinger–Nitsch, 2016) misses to outline the general vectors that have been influencing the configuration of processes resulting in a reasonable feeling

1 73% of the TOP 15 countries ranked in the IMD World Talent Ranking 2017 are Europeans. 70% of the TOP 10 countries ranked in the Global Talent Competitiveness Index 2017 are Europeans. (INSEAD, 2017)

of disorientegration. Moreover, addressing the nature of secular disorientegration is of essence because the psychological behaviour of people can spectacularly make things even worse. And since the process of European integration has always been influenced by public opinions (Bølstad, 2014), clarifying whether disorientegration is systematically encoded or not is crucial to get a better picture (opinions) over what exactly Europe is dealing with. This, however, requires a more *complexity-based system view*.

Complexity science conveys that the European integration is a *dissipative system*. Such systems, described originally by Ilya Prigogine, a Nobel Laureate in Chemistry, are far from equilibrium by being open, adaptive, showing irreversibilities in time, and can change course by creating new qualities and new structures. Accordingly, the integration is a dissipative system the existence of which relies heavily and primarily on the flow of energy (i.e. the willingness to integrate by overcoming a series of crises while realising social-economic and environmental progress). It is like a vortex in water, the pattern of which is dynamic and its shape is sustainable up until the flow of water is guaranteed. The European disorientegration did not therefore appear from some kind of historical vacuum, but rather logically and organically along the dynamics of integration. True, more and more studies are addressing the European integration through the lens of complexity. (See Geyer, 2003; 2018) Complexity means dependent entanglement among the large number of parts continuously interacting with each other. In a complex system, macro patterns are emerging from the interactions of constituent agents (e.g. universe, climate, living-organisms, ecosystems, society and culture, organisations, cities, traffic, and thus the European Union and the process of integration etc.). Still, the studies fall short either in uncovering the configuration of processes or contouring a modern governance capable of reversing disorientegration.

Our paper transcends prevailing studies on the shortcomings of the European integration by deciphering *what are the main non-EU specific mechanisms behind the secular "disorientegration" of the European Union*. To this end, it unravels the strongly intertwined general vectors of disorientegration that are creating ambiguous situations by implying an *encoded disorientegrative centrifugal trend*. Finally, the paper draws potential recommendations relevant for avoiding the collapse of the European vortex, that is to say, for reversing disorientegration.

General Vectors of Disorientegration

In the spirit of a complexity approach, we broaden the research canvas by considering the dynamics of the following contextual vectors of disorientegration: 1. the changing nature of external pressure; 2. the changing nature of policy horizon; and 3. the increasing importance of time.

The changing nature of external pressure

Studies on the shortcomings of the European integration either have a predilection to focus on the institutional architecture related problem[2] or they mostly have an ingrained practise to analyse merely the integration related narrow, and more importantly, quantifiable aspects to deliver well-exposed inferences.[3] Albeit these undertakings are of particular relevance, incorporating the qualitative impacts as well must be a *de rigueur* aspect of any kind of evaluation-oriented research if for no other reason than one of the most important and deeply rooted aims of the integration: to institutionalise peace. And, as Brennan and Hamlin (2004) stated, if the probability of war is significantly reduced, the integration brings unquestionable value (an emblematic recognition of this was the Nobel Peace Prize awarded to the EU in 2012).

Undoubtedly, the most powerful driving force of the European integration was the apparent common external pressure, especially after the Second World War and during the decades of the Cold War up until the implosion of the Soviet Union *(Union of Soviet Socialist Republics, USSR)* and the German reunification. It required to avoid unilateral and destructive policies in Europe. Rekindling the flame of the European economy was of high priority not only in an economic and social but also in a political dimension on both sides of the Atlantic. It was considered as a defense mechanism against communism insofar as the enlargement of the integration continues by strengthening the Western alliance. The consistency of interests of European countries (including the United Kingdom) more or less dominated the process of European integration (European Coal and Steal Community, Common Market, European Monetary System [ESM], Single Market, Euro) from the 1950s up until the German reunification as a bifurcation point giving rise to conflicting interests. The German reunification entailed enormous fiscal burdens on West Germany and the Bundesbank was then forced to raise interest rates by triggering negative impetus on other ESM countries by leading to instability in the long political deal between France and Germany which eventually struck due to the repercussions of reunification. This was the time by when the coercive power of external pressure substantially dissolved into air in the perceptions of European policymakers and the internal dynamics of European country-level interests started to dominate.

By now, the external pressure, which created the consistency of interests for a long time, as a contextual vector of integration, seems to have been losing ground. Its nature has radically changed in terms of direction and complexity due to at least two intertwined reasons.

First, hegemonic powers have been weakening. With the implosion of the USSR and with the transition of post-communist Central and Eastern European countries, the emerging context made it able for the US with its faded hegemonic glory to have more inward orientation. (See Temin–Vines, 2013) As a consequence, the influential

2 Literature on federalism pinpoints the lack of political union, the lack of strong fiscal union with transfer mechanism. The European Union has developed mostly in the spirit of Ordnungspolitik with its limited governmental intervention logic (i.e. Lisbon Treaty suggests more intergovernmentalism).

3 Eichengreen and Boltho (2010) tried to quantify the economic impact of the European integration by admitting the difficulty of the task. They offered only a rough "guesstimation" that EU GDP is some 5 percent higher today than it would otherwise have been.

power of the US on the progress of the European integration has been gradually slowing down since the 1960s.[4] While other conflicts were mostly frozen by the East-West confrontation during the Cold War, these old Ghosts (with new features) were released from the bottle after the collapse of the USSR (e.g. growing disparities within Europe; recurrently crisis-ridden Russia; Ukrainian military conflict and upheaval with Russia; slowing Chinese economy; armed conflicts in the Asian part of the Middle East etc.). Today, external threatening dangers are not manifesting primarily in the form of expansive and invader-like behaviour of countries or certain group of countries, but in the array of complex grand challenges spanning across the traditional borders of countries (e.g. climate change, refugee and migrant influx etc.). Due to the more complex and elusive nature of external pressures coming from various directions (i.e. set of challenges), peoples' attention is more likely to become more fragmented (disoriented) by not powering enough to keep their eyes on the pulse of integration.

Second, external pressure started to increasingly falling short in terms of economic dimension. In the era of Great Moderation (1992–2007) there has been a widely held belief that policymakers have the ultimate tools and instruments to fend off any turmoil and spectacular deterioration, and the experienced moderation of macroeconomic volatility in various dimensions gave merit to such understanding. In this period, structural reforms seemed to have reached a plateau in the European Union, and this *status quo* was favoured by the increasing belief on decreasing uncertainties due to lowering macroeconomic fluctuations by leading to some sort of halo-effect as well as positive attitudes towards public policies in the advanced world, including the European continent. This contributed to a latent *disorientation* from not pursuing welfare through deliberate actions and the European integration has not been proved to be a developmental mechanism. As a result of the 2008 financial and economic crisis, Europe also entered into the era of Great Recession when uncertainty started to rise giving impetus to adapt, change, modify, even to reform current functions and processes. By the same token, increasing uncertainty and the lacklustre crisis management refuelled secessionism across Europe, particularly in the wealthiest regions of countries with large income disparities.[5] This can be interpreted as a symptom of *disintegrative* forces.[6]

Let us add that full sovereignty was never considered a top priority of the European integration because an *Alle Menschen werden Brüder* mentality would lead to moral hazard in a more dedicated way. This is why the godfathers of the European integration did not emphasise sovereignty so much, rather welfare and peace, because they were aware that future integration of rather different countries will make sovereignty unrealistic to be pursued at the harmful expenses of others driving the union more rigorously.

4 On the crucial role of the United States in initiating the European integration. (See Berend, 2016)

5 Autonomy orientation is typically arising in regions being substantial net contributors to the regional redistribution system. (See Zipfel et al., 2015)

6 In 2014, the Scots held a referendum about their independence, while similar tendencies were observable in Catalonia and in case of the Flanders. In June 2016, the United Kingdom voted to leave the European Union. Additionally, there were also voices from France, Denmark, Sweden, Austria, and the Netherlands about deteriorating faith in the EU.

The changing nature of policy horizon

Despite policy actions towards creating ever-closer Europe at the beginning of the integration, its dynamism was highly volatile and even slowing down over time. This was mainly due to phenomena triggering 1. *ever more complex world,* as well as 2. *the broken harmony between the financial sector and the real economy* whereby the policy horizon has become more and more limited.

Ever more complex world

The irreversible and complex process of globalisation resulted in increasing interconnectedness with asymmetrical interdependency being coupled with growing Knightian uncertainties. (Knight, 1921)[7] One of the most pivotal driving forces of globalisation has been the quite dynamic development and diffusion of information and telecommunication technologies (ICT) since the early 1970s, whereby accessing relevant as well as irrelevant information widely and rapidly has become an ubiquitous feature of these days. Affluent information about phenomena perpetually creates impressions, perceptions and decisions in the mind-set of economic agents about how to act. Since extensive information does not necessarily lead to the useful and relevant thesaurus of knowledge because of our limited rationality, considering uncertainty as a reducible component of ignorance (Hart, 1942) *via* learning-by-doing does not inevitably hold true. What is more, proactive perceptions are generating rising expectations over the timing of proper governmental interventions.

The age of immediacy is therefore here to stay instilling uncertainties because there is no governance – neither national nor international – with the necessary *lapis philosophorum* to scientifically properly overlook *ex ante* the whole system and all the effects of the actions imposed because of the complexity it faces. Thus the performance assessment of public policies has become ever more limited.[8] Consequently, today we live

7 For example, Federal Reserve interest rate policy in the US affects the European economy, as well.

8 *Daniel Kahneman* stressed that the predictive power of our knowledge reaches its diminishing marginal returns relatively fast. This psychological finding holds especially in case of predicting non-linear processes evolving in the complex global system interspersed with growing interconnectedness and interdependency and the current dominance of uncertainties. This can be demonstrated on many policy grounds. For example, estimating ex ante the value of fiscal multiplier precisely is particularly cumbersome as it was admittedly the case documented by *Olivier Blanchard and Daniel Leigh* (2013). Unsurprisingly, the predictive power of the fiscal policy related forecasts has been rather poor. (Barroso–de Mendonça, 2015) Another apparent example is the case of public service provision. In case of health care performance of a country, the set of mostly influential factors (social, economic, political) are far beyond the control of authorities and public bodies. (Di Meglio et al., 2015)

For example, willingness to integrate requires inclusive growth and development to be triggered. In this respect, fast-growing SMEs *(gazelles),* creating more jobs than any other companies, seem to have been in the policy limelight, however, there is no quantifiable evidence whether those policies are really for achieving goals like increasing employment and innovation activity. (See OECD, 2013) The picture has also become blurred on another quite relevant front: whether the transfer system in a federal system can lead to convergence (minimised inequalities). A recent study showed the inefficient and ineffective functioning of the so-called Finanzausgleich transfer mechanism across the German Länder, where the transfers did not foster growth. (See Baskaran et al., 2017) in a heavily interconnected world economy where "no one is fully in charge", and where micro or national fluctuations are often amplified to a macroscopic level. Global economy is therefore pervaded by ever-increasing complexity that is mainly given by intertwined phenomena. Our belief in a repairable world, which dates back to the Enlightenment era, has become obsolete. The European continent is not an exception to this new norm (e.g. climate change marked by intensifying extreme weather anomalies; ageing society, increasing income and wealth inequality; broken harmony between the financial sector and the real economy; increasing inequalities etc.).[9] In case of such "wicked" challenges, goals are not necessarily known or are very ambiguous; and the relationships between means and ends are pervaded by a good deal of uncertainty and they are mostly poorly understood (unknown unintended consequences, unknown trade-offs and even unknown unknowns are existing).

These wicked problems, being highly resistant to resolution, are spanning across the borders of countries. Tackling them requires a more systematic understanding of their nature at national, regional and continent-wide levels to refine meaningfully the dominating economic policy toolkit. Harmonising economic, social and environmental dimensions by affecting the complicated and non-linear processes within, what is more, preventing the escalation of anthropogenic climate change require *collective action*.

Importantly, collective action must acknowledge the increasing complexity of the socio-economic system, which requires policy to avoid really bad outcomes rather than to perpetually trying to optimise the good ones. Otherwise, policymaking potentially brings hectic movements into the life of the society through Hayekian *scientism*-based interventions, which might have a depressing effect on the trust infrastructure (being inevitable also for strengthening the European integration). There is another side of *scientism*-based policy, which is *quantophrenia* (i.e. the dominant application of quantitative methods and tools). The ingrained practice of using mostly statistical quantification can become a camouflage in an ever-more complex world. By analysing and collecting statistical data and information, the observer does nothing, but synthetically manufactures reality, which does not necessarily equal to the "real" reality. Experts and economic practitioners are therefore inclined to put more weight on numerical, statistically recorded data than subjective opinions in their analyses. Actually, this bias represents our natural claim to get closer to certainty.[10] People think that certainty is everything, certainty equals with truth and the ultimate goal of science is to find truth. In this mind-set, statistical data are the fingerprints of what is really going on. This can easily lead to a policy cult which considers scoreboard, mechanistically derived targets as optimal ones having the potential to trigger continuous adjustment in the behaviour of agents. Experts' narratives are mostly based on those recorded data and their analyses influence the perceptions of other agents, too (e.g. policymakers) over what is really going on in the economy. Distortions and misguided impressions are therefore on the cards more vigorously regarding reality due to the omission of complex relationships. This points to another intriguing implication related to the limited policy horizon, namely to the *deterioration potential of democratic deficit* when it comes to referendums

9 Inequality has been increasing even among firms. (Andrews et al., 2016)
10 Big Data databases can also be misleading or delusional. (See Kovács, 2017a: 980)

because complex issues cannot be simply reduced to binary voting choices. In an era of growing complexity, achieving far-reaching and complex goals has become more and more cumbersome as for instance the case of the Lisbon Agenda exemplifies. In 2018, the EU has still not achieved the aim of the Lisbon Agenda to make the EU the most dynamic and competitive knowledge-based economy in the world even though this was planned to be fulfilled by 2010. It is hardly by chance that the European Commission (2018) emphasises that the EU should invest much more in the creation of the most innovative knowledge-based economy by being more ambitious in supporting breakthrough innovation.

All in all, increasing globalisation, growing complexity resulting wicked challenges have been directing toward a more limited policy horizon to govern (e.g. the integration process).

The non-amicable relationship between the financial sector and the real economy

There is another equally important feature of modern capitalism heavily affecting the policy horizon in general. It is *the broken harmony between the financial sector and the real economy* with all its symptoms (such as *credit consumerism* as well as the *bias towards larger companies*) and consequences (reinforcing *secular stagnation*).

Credit consumerism has evolved along the disproportional growth of the financial sector derailing from its original purpose to be a stewardship of society's assets.[11] With the benefit of hindsight, ICT-based new techno-economic paradigm together with lax financial regulations were the key driving force of globalisation and led to global financial market having ever-increasing liquidity (credit supply) eagerly seeking opportunity to be absorbed with better returns, i.e. because of the regulatory shortcomings in the financial markets, more people passed to financial markets and devoted attention to financial investments in fields like real estate.[12] In addition, there was another systemic aspect that provoked banks and investors to strongly prefer financial investments over investments in the real economy, that is to say in riskier technological or non-technological innovations and R&D activities. Namely, the ICT-based services oriented knowledge economy has some specific features that have been directing towards lower productivity through labour-saving technologies (i.e. automation, standardisation by means of ICT etc.) which entailed

11 The European Systemic Risk Board (2016) showed that there are extensive intra-financial exposures in derivatives markets. Additionally, non-banking financial companies started to soar in the shadow by leading to bubbles, overvaluation of assets. (See Abad et al., 2017: 35) The parasitic character of the financial sphere is also mirrored in the growing trend in share buy-backs thereby the players intend to boost stock markets. It implies that they are not looking for riskier and productivity-enhancing investments in the real economy (40% of S&P 500 firms bought back shares in 1990, their proportion was 60% in 1997–2003, while it was 85% in 2017).

12 In the US, the debt of households started to accumulate rapidly, especially in case of low-income households being in low-inequality regions where the financial market, banking sector could spread the risk seemingly in a more efficient way. (See Coibion et al., 2014)

secular downward trends in manufacturing labour shares as Neiman (2013) shows.[13] Beyond the fact that this *per se* reinforces secular stagnation,[14] it also affected negatively the gap between rich and poor, and the features of services dominated economies in the advanced world (i.e. requiring higher skills and competences to pursue service innovation that have more qualitative outcomes) might also be counterincentive to diminishing income inequality. This is why casino finance has become a magnet[15] and *excessive credit consumerism* has appeared ubiquitous in the advanced world (e.g. in 1970, the share of domestic credit provided by the financial sector in percentage of the GDP was 87% in OECD countries, 54% in the European Union, and 112% in case of the United States; by 2012, the data were as follows: 210%, 168% and 235%).[16]

This is problematic because the intermediation role of the financial sector has to some extent ceased to exist, a phenomena being undeservingly neglected even in the most recent literature.[17] The symbiotic relationship between the financial sector and the real economy got impaired by creating a parasitic-like financial sector. (Hossein-zadeh, 2014: 67) If excessive *credit consumerism* is here to stay without lasting positive impetus on productivity, as historical statistical records show,[18] consumption and production patterns are unsustainable.[19]

Of course, excessive credit consumerism is also observable in case of states in the form of public debt overhangs. The ever-more limiting nature of policy horizon raises here again since empirical evidence suggest that assessing a given country's sovereign

13 The declining productivity growth was shown even in the ICT-using industries over time. (Kovács, 2017b, Chart 3) True, there is some problem with measuring productivity growth in an era of ICT-triggered services innovations and the increasing investments in intangibles (such as software, R&D, design, branding, training, and business process engineering) as Haskel and Westlake (2017) pointed out.

14 For a great account on secular stagnation see Teulings and Baldwin (2014).

15 Since 1950, securities, commodities, venture capital, private equity, hedge funds, trusts, and other investment activities like investment banking have been gaining dominance rapidly, plus more and more graduates from Yale, Harvard and Princeton were absorbed by the more speculative fields within the financial sector. In addition, bank lending has also been on rise. The boom of the financial sector was mostly responsible for the extensively increasing income and wealth inequality in the US. Unsurprisingly, the labour share of income has been secularly declining since the midst of the 1970s. (See OECD, 2015) By analysing where the wealth of billionaires has come from, a study found that over 40 percent of the growth in the billionaire population in the US is attributable to growth in the financial sector. The growing financialisation of the American economy contributed to the extreme wealth creation in the US: 27 percent of US billionaires worked in finance in 2014, compared with 10 percent in Europe and 20 percent in non-European developed countries. (Freund–Oliver, 2016)

16 See the World Development Indicators of the World Bank. According to recent estimates, credits above 90–95% of the GDP are more likely to be a serious drag on growth. (See Chong et al., 2017)

17 Studies addressing the factors behind structural change and the associated decline in labour share of income also neglects the role of the financial sector. (See Alvarez-Cuadrado et al., 2018) Still, the issue has been gaining more and more attention, as one of the most recent analyses by Alexiou et al. (2018) admitted and showed that there has been a severance of the link between the financial sector and the real economy.

18 Credit consumerism can be captured by the over-indebtedness of households. (See Mian et al., 2017) Importantly, albeit an increase in short term household debt can boost economic growth, the positive effect will be reversed after 3 to 5 years and growth will be deteriorating. (See IMF, 2017, Chapter 2)

19 Excessive credit consumerism is also propelled by manipulation and deception. (Akerlof–Shiller, 2015) For overproduction and overconsumption, just take a mere glimpse on the historical account of increasing waste generation. (See IPCC, 2007)

credit risk has its roots predominantly in financial sectors rather than in macroeconomic fundamentals, (see Ang–Longstaff, 2013) hence the hardly measurable dynamic patterns of psychological factors bring more uncertainty into policymaking.

Another symptom of the broken harmony is *the bias towards larger companies* that are dominating more easily than ever before. In the era of ICT-based network-oriented knowledge economy, monopolies can be maintained easier for a longer time due to ICT-related laws. In other words, the Baumolian contestable market principle has been weakened. It has become ever more difficult to beat those giants that are in the global frontier, while the share of medium size companies has been shrinking, larger companies have become the largest employers in the EU (according to Eurostat, 33% of total employment is given by larger companies, 29.2% by micro-enterprises). More and more quantitative evidence suggests that the declining dynamism of productivity in the real economy is mainly due to the disproportionately increasing financial sector (Cecchetti–Kharroubi, 2012; 2015), which started to prefer investments in the real economy that are less risky but can easily result in low productivity improvements, merely. In this way, the link between the financial sector and the real economy has become weakened and distorted by resulting a rise in market concentration in various industries. What is more, the uncertain economic climate drives risk-aversion strengthening the bias from the side of the financial/banking sector towards companies having higher net worth but not being necessarily more productive/innovative. (Gopinath et al., 2017; OECD, 2017b) This systemic bias towards larger companies is able to stifle down the positive effects of any kind of productivity-stimulating policies and programmes not only because larger companies can roll barriers in front of innovative start-ups via strategic use of patents, but also because zombie companies (i.e. longer-living unproductive companies in the market without being selected out) are living among us more vehemently;[20] hence wage stagnation,[21] intensifying joblessness with dispiriting growth performance,[22] moderated innovation activity and increasing inequalities have become the new norm.

Excessive credit consumerism and the broken harmony between the financial sector and the real economy are, of course, intertwined by creating unsustainable patterns. And once the unsustainable patterns of overconsumption and overproduction hold, non-differentiated monetary and fiscal stimulus become ineffective in reinvigorating growth rates of today because a more qualitative growth is needed.

[20] The European crisis management has increased the amount of non-financial zombie firms, whose interest bill exceeds earnings before interest and taxes. (See BIS, 2017: 13)

[21] For instance, Berlingieri et al. (2017) demonstrated that globalisation and digitalisation are associated with higher wage divergence between firms within any given sector by engendering growing labour income inequality within a country in a more conspicuous way.

[22] The throttle of the European growth has become rustier because of the savings-oriented attitude of large older cohorts by putting low real interest rates into longer perspective. And once the population is aging, as Acemoglu and Restrepo (2018) documented, companies have become more and more willing to substitute (middle-aged) workers to robots or to reduce their numbers via intensified automation.

The increasing importance of time

Time has become more and more important when it comes to interpreting the disorientegration process in the European integration. In this respect, time has at least two layers: 1. *the realm of the "long time ago"*; 2. *from being to becoming*.

As far as the realm of the "long time ago" is concerned, the major message of studies on how war affects social and political behaviour in post-war periods is that propensity to cooperate and pursue civic engagement as a form of pro-social behaviour weakens with time. (See Bauer et al., 2016) The horrors of the first half of the 20th century are too far from today's generation. The dramatic impacts of the wars are living vividly only in the living memory of a soupçon of people. As former French President Valéry Giscard d'Estaing noted, the post-war consumer generation did not care about the war. (See Spiegel, 2012) People who lived through those bestial times appreciate and cherish peace the most and they were to hand over that feeling to their next generation; however, the life-changing trauma of wars has eased and even dissolved to a great extent into air over time with newer generations. And what behavioural economics and psychology science suggest is that people tend to be more sensitive to losses and pains than to forgone gains. (See Kahneman–Tversky, 1979) One might even argue that newer generations in Western European core-countries did not reach out peace by their own but have been increasingly treating it as a natural constituent of their lives. With new generations, the bases of people's expectations have been reoriented from evaluating the power of integration as a bulwark of peace at the first place to aspiring for more welfare in quantitative and qualitative means (e.g. increasing earnings and employment, fast growth rates, thriving productivity and competitiveness, access to modern public services etc.). And these *expectations* have not yet been entirely fulfilled.[23] This is why trust in European integration seems to have been weakening and the crisis-tolerance level of newer generations along the course of the integration has eroded and become even more erratic. Thus, the ethos of putting peace preservation as a common goal in front of individual (Member State) objectives has faded. Thus, *the gap between what should be done and what voters tolerate has been increasing*. Additionally, there is also a lack of momentum at higher levels in core countries to absolutely work together on the future of Europe. To overcome this driverless state, much more needs to be done.[24]

From *being to becoming* refers to the flow of time in our socio-economic innovation ecosystem in which structures, processes, and the psychic capital of people are in constant change over time due to bifurcations, irreversibility and non-equilibrium. On the front of structures and processes, let us underscore that ecosystems – such as our socio-economic innovation ecosystem being an open, dynamic and adaptive system embracing a large number of diverse interacting parts – are perfused with irreversible events even at the macro level. (Prigogine, 1980; 1997) This influences the context of

[23] According to the Nobel Laureate Kenneth J. Arrow, expectations are governing our decisions and actions, especially our expectations about others' expected behaviour. Regarding the expectations of new generations over the integration, the picture has not been as blight as previously expected in terms of employment, productivity, innovation and competitiveness. (See Sapir et al., 2004)

[24] Since the fall of 2017, the so-called Leaders' Agenda meetings take place to guide EU action over the next two years.

the European integration. For example, during the European integration an entirely new techno-economic system emerged in the advanced world. The theory of techno-economic paradigm suggests that the socio-economic development has recurrently arrive at a bifurcation point in time when irreversible changes occur. This cyclically evolving pattern is driven by technological revolutions by forming a new techno-economic paradigm. (Perez, 2009) As we indicated earlier, the new ICT-based techno-economic paradigm that emerged since the midst of the 1970s not only provoked profound changes in the production process, but also tailored them to a more service-oriented economy. In a system with such dynamics, it is hardly by chance that the European integration has been often considered as a process of *chain reaction* where the full range of steps forward cannot be precisely known *ex ante*. And the detectable fact that the integration is only partial was expected to help moving forward *via* constantly emerging irreversible steps towards political integration.[25] One may conclude that the European integration process has been a chaos as a type of unstable order.

Complexity science conveys that *non-equilibrium* (or disruption, or instability) arises endogenously in a complex system (Prigogine, 1977) such as the European arena interspersed with a large number of interacting members with their own dynamics. This system is *inter alia* pervaded by spillovers, non-linear processes, turbulences, far-from equilibrium situations, small changes with big cascading or escalating effects, and the legion of causes of events that are emerging in time. Non-equilibrium can be interpreted as some sort of asymmetry, as well. According to the well-known Noether's theorem, symmetry in nature always means that some sort of conservation of corresponding things is working behind the curtain (momentum, energy etc.). (See Noether–Tavel, 1971)

Consequently, when we see or perceive any kind of asymmetry, the conservation process falls short or is missing. This might be the case when it comes to the European integration in which heterogeneous countries do not show the ethos of faith community (as the energy of integration) as one would have previously expected. Noether's theorem also suggests that a complex system is by no means equal with the sum of its parts, but *the sum of its parts taken with the interactions among them*. This consideration is in order, for example, when it comes to understanding the dynamics of the European integration process meaning the progress from being to becoming. With the continuous enlargement of the EU and the growing linkages among Member States, the integration process has been becoming a mostly irreversible process continuously influencing our development opportunities. From the early 1950s onwards, the new stream of economic literature was evolving, it is called dependency theory. Interdependency is "[…] a situation in which the economy of a certain group of countries is conditioned by the development and expansion of another economy, to which their own is subjected". (Santos, 1970: 231) Under the auspices of dependency theory, economics incorporated more and more the Noetherian view about interactions, for instance, by analysing the core-periphery relations as manifestations of asymmetrical interdependency in the European integration. There is a good reason to think that real socio-economic development throughout the becoming EU – i.e. creating conditions for the realisation of human personality rests upon our

25 As Nietzsche noted, you must have chaos within you to give birth to a dancing star. It was reflected in certain cases (e.g. Beyen plan for a common market; the Hague summit etc.).

ability to stimulate synergies by influencing the dynamic relationship between core countries and peripheral ones.

Psychic capital also bears the stamp of increasing importance of time. The aggregated memory of actors (e.g. in the European integration) forms the so-called psychic capital (Boulding, 1950: 140) then brings path-dependency into any development path. The welcome and the support of economic policy actions depend a lot on the current status of (positive or negative) psychic capital which embraces memories of pleasure, success, achievement, recognition as well as memories of failures, disasters, atrocities, or perceived injustices and indignities. Introduced and implemented policy actions, initiatives, statements (e.g. regarding European integration) either from the government or the independent central bank can by no means be completely removed from the system or even neutralised. They become part of the memory of the given socio-economic-political system by impinging on psychological factors and behaviour. In the context of the European integration, the dynamics of psychic capital can be portrayed both at national and supranational levels having the potential to contribute to the disorientegration forces. At national level, for example, the Empty Chair Crisis of 1965 was a harbinger of long-standing and hard to dampen objection of a core country to build up a more supranational architecture.[26] At supranational level, for example, when the President of the European Central Bank was to free the ECB from its shackles by stressing that "do whatever it takes" to safeguard financial stability and the survival of the Eurozone by launching unlimited purchase of debt instruments from debt-crisis ridden states from July 2013; uncertainty, on the one hand, was reduced because of the powerful institutional signalling that boosted trust and confidence of markets. On the other hand, this action also had uncertainty-generating feature since this declaration was crystal-clearly unlawful (i.e. breaching Article 123 of the Treaty on the Functioning of the European Union) and it may have therefore catalysed further non-compliance in case of other actors by intensifying uncertainty.[27] Furthermore, psychic capital dynamics can also be captured by Public Opinion surveys since 1973 that are furnishing the message that attitudes towards enlargement and integration have been conspicuously decreasing since the 1990s.[28]

In sum, the changing nature of external pressure in case of the European integration, intermixed with the diminution of policy horizon, as well as with the increasing importance of time seem to be autochthonously forming a centrifugal force powerful enough to encode weakening into the integration process by making it less and less resilient over time. Disorientegration is therefore not a recent fortuitous event but a systemic pattern.

26 France held a referendum on the Maastricht Treaty, and even rejected the adoption of the Constitutional Treaty in 2005.

27 The commitment to no-bailout principle in the US applied in the 1840s is still remembered and this memory has strengthened the credibility of the federal system even today.

28 For instance, emerging scandals were harmful for the trust base of citizens in Europe (e.g. the Santer Commission's scandal in 1999; the 2006 Galvin Report highlighted the lack of control over MEPs' spending on assistants' wages and social security; the Cash for Influence Scandal in 2011 in case of a former Austrian MEP. And, of course, EU cohesion has also been challenged by the Euro crisis, the influx of refugees and migrants, increasing nationalism and populism in Central and Eastern Europe showing some sort of derailment from EU-values.

Conclusions

This contribution addressed the dynamic configuration of non-EU specific processes lurking behind the European disorientegration phenomena. Despite the consensual rhetoric recording disintegration as a relatively new-fangled phenomenon being the result of the 2008 financial and economic crisis and its ensuing sovereign debt crisis, with a veneer of complexity-awareness, we have identified the general vectors of which secularly evolved collage has been directing towards disorientegration.

Bearing in mind the nature of the European integration, our paper can by no means offer the full panoply of policy prescriptions for national and supranational governance. Still, and beyond the usual suggestion of "complete the internal market", at least three *conceptual prerequisites of reversing the European disorientegration* can be outlined.

First, *European and national governance should have a more nuanced, complexity-aware approach* in addressing grand challenges rather than intending to solve them once and for all. Encoded disorientegration directs toward the need for some sort of *contingency-aware governance* which is not in denial *vis-à-vis* our complex innovation ecosystem characterised by uncertainty, non-linearity, unpredictability and emergence (from being to becoming). The basic requirements of such governance shall be as follows: 1. *System thinking with more interdisciplinarity* to address the dynamic configuration of processes related to disorientegration in the EU as an endogenous phenomena, e.g. core-periphery nexus, or by taking into account the features of our current ICT-based, services dominated techno-economic paradigm which is far-from equilibrium). 2. *Acknowledging our limited knowledge and policy horizon:* the system (European integration) cannot be understood as a whole and what is more it cannot be governed since it has emergence, non-linearities etc. No one is in full charge of challenges. In the era of immediacy, policy is expected to follow arousing tensions and crises in due time; however, this is impossible. Therefore, social learning shall be cultivated by accepting that blossoming quantification can misguide and distort our evaluations over the effectiveness of various policies in tackling complex challenges and interpretations over socio-economic phenomena. Unless such shift is made, a bias toward more quantified and well established ideas of older vintage will exist further on without paving a way to riskier and more collaborative innovations having more qualitative impacts on our life.[29]

Second, *limited discretionalism is in order,* which is less likely to dismantle the trust infrastructure, by building more on collaborative participatory mind-set, especially in turbulent times pervaded by uncertainties. Some argue that Europe needs more democracy, it might nevertheless intensify disorientegration (e.g. BREXIT voting). For this reason, democratic deficit shall be mitigated *via* feeling the pulse of the citizen opinion without triggering negative impetus on governance and integration. For instance, the introduction of participatory budgeting can be a good way forward, i.e.

29 However, economic history exemplified that new and riskier ideas spur subsequent inventions more frequently. See Packalen and Bhattacharya (2015) in case of the US patent history. The European R&D statistics also lend support to the higher risk-aversion on the one hand, and the fiscal incapacity of national public finances to support R&D&I via fiscal incentives (as Eurostat [2016b] shows, the progress toward the R&D target of the Europe2020 strategy has been infinitesimally slow in the period of 2008–2015).

discussing budget-related issues with citizens on public service delivery when it comes to prioritising. Participatory budgeting provides a higher quality of feedback circle. (Kovács, 2012)

Third, the *EU governance shall re-establish and strengthen the trust and confidence* of EU citizens. Growing uncertainty, recessionary periods with grand challenges might lower the political costs of overarching reforms because the voters are more likely to accept that the outcome starts to depend on the weaving relations of various external processes and not mainly on governmental actions. Reforms may contain fostering positive green finance to address unsustainable credit consumerism and consumption patterns to transform the economic model via breaking secular stagnation, reducing the ever-widening gulf of inequality without ignoring employment–Industry 4.0 development nexus, and taking into account environmental constraints. Beyond game-changing reforms, the public sector also plays and important role in reinvigorating trust and confidence. Challenges associated with fundamental uncertainty call for good governance and more innovative public sectors signalling their ability to cope with the challenges by creating and maintaining necessary trust. Public sector innovation is "[…] the process of generating new ideas and implementing them to create value for society, covering new or improved processes and services". (European Commission, 2013: 7) The public sector should be a hotbed of innovation which can not only be a demonstrator for the private sector but can also become a mechanism of increasing the *quality of governance* across the board (by maintaining the quality of service provision, reducing excessive expenditures while not imposing additional burdens on labour and the economy as a whole by fostering trust building in time when painful measures are inevitable).

All in all, disorientegration is an echo effect of a complex amalgam of mutually intertwined and interrelated mechanisms secularly shaping the European integration process. Further research shall analyse the interplay between non-EU-specific and EU-specific vectors to better ground the contours of some sort of contingency governance in a more detailed manner.

References

Acemoglu, D. – Restrepo, P. (2018): Demographics and Automation. *NBER Working Paper,* No. 24421.

Akerlof, G. A. – Shiller, R. J. (2015): *Phishing for Phools: The Economics of Manipulation and Deception.* Princeton, Princeton University Press.

Alexiou, C. – Vogiazas, S. – Nellis, J. G. (2018): Reassessing the relationship between the financial sector and economic growth: Dynamic panel evidence. *International Journal of Finance & Economics,* Vol. 23, No. 2. 155–173.

Alvarez-Cuadrado, F. – Long, N. V. – Poschke, M. (2018): Capital-labor Substitution, Structural Change and the Labor Income Share. *Journal of Economic Dynamics and Control,* Vol. 87, No. 1. 206–231.

Andrews, D. – Criscuolo, C. – Gal, P. N. (2016): The Best versus the Rest: The Global Productivity Slowdown, Divergence across Firms and the Role of Public Policy. *OECD Productivity Working Paper,* No. 05. OECD Publishing, Paris.
Ang, A. – Longstaff, F. A. (2013): Systemic Sovereign Credit Risk: Lessons from the U.S. and Europe. *Journal of Monetary Economics,* Vol. 60, No. 5. 493–510.
Badinger, H. – Nitsch, V. eds. (2015): *Handbook of the Economics of European Integration.* London, Routledge International Handbooks.
Baldwin, R. – Giavazzi, F. eds. (2016): *Rebooting Europe. How to Fix Europe's Monetary Union: Views of Leading Economists.* CEPR, VoxEU Book.
Baskaran, T. – Feld, L. P. – Necker, S. (2017): Depressing Dependence? Transfers and Economic Growth in the German States, 1975–2005. *Regional Studies,* Vol. 51, No. 12. 1815–1825.
Bauer, M. – Blattman, C. – Chytilová, J. – Henrich, J. – Miguel, E. – Mitts, T. (2016): Can War Foster Cooperation? *Journal of Economic Perspectives,* Vol. 30, No. 3. 249–274.
Berend, I. T. (2016): *The History of European Integration. A New Perspective.* London, Routledge.
BIS (2017): International Banking and Financial Market Developments. *BIS Quarterly Review,* September 2017.
Blanchard, O. – Leigh, D. (2013): Growth Forecast Errors and Fiscal Multipliers. *American Economic Review: Papers and Proceedings,* Vol. 103, No. 3. 117–120.
Bølstad, J. (2014): Dynamics of European Integration: Public Opinion in the Core and Periphery. *European Union Politics,* Vol. 16, No. 1. 23–44.
Boulding, K. E. (1950): *A Reconstruction of Economics.* New York, Wiley.
Brennan, G. – Hamlin, A. (2004): The European Constitution and Peace: Taking the Heat out of Politics. In Blankart, C. B. – Mueller, D. C. eds.: *A Constitution for the European Union.* Cambridge, MIT Press. 3–23.
Cecchetti, S. G. – Kharroubi, E. (2012): Reassessing the impact of finance on growth. *BIS Working Paper,* No. 381, Basel.
Cecchetti, S. G. – Kharroubi, E. (2015): Why Does Financial Sector Growth Crowd Out Real Economic Growth? *BIS Working Paper,* No. 490.
Chong, E. Y. L. – Mody, A. – Sandoval, F. V. (2017): Finance and Growth: The Direction of Causality. VoxEU.org, 17 January 2017.
Corsetti, G. – Feld, L. P. – Lane, P. R. – Reichlin, L. – Rey, H. – Vayanos, D. – Di Mauro, B. W. eds. (2015): *A New Start for the Eurozone: Dealing with Debt.* CEPR, VoxEU Book.
Csaba, L. (2015): Föderális Európa, vagy „Nemzetek Európája"? A pénzügyi válság kezelésének rendszerbeli következményeiről. *Magyar Szemle,* Vol. 24, No. 7–8. 53–76.
Csáki, C. – Jámbor, A. (2012): Az európai integráció hatása a közép-kelet-európai országok mezőgazdaságára. *Közgazdasági Szemle,* Vol. 59, No. 7–8. 892–910.
De Deus, J. D. B. V. – de Mendonça, H. F. (2015): Empirical evidence on fiscal forecasting in Eurozone countries. *Journal of Economic Studies,* Vol. 42, No. 5. 838–860.

Di Meglio, G. – Stare, M. – Maroto, A. – Rubalcaba, L. (2015): Public Services Performance: An Extended Framework and Empirical Assessment across the Enlarged EU. *Environment and Planning C: Government and Policy,* Vol. 33, No. 2. 321–341.

EIB (2017): *EIB Investment Report 2017/2018: From Recovery to Sustainable Growth.* EIB, November 2017.

Eichengreen, B. – Boltho, A. (2010): The Economic Impact of European Integration. In Broadberry, S. – O'Rourke, K. H. eds.: *The Cambridge Economic History of Modern Europe, Volume 2. 1870 to the Present.* Cambridge, Cambridge University Press. 267–295.

European Commission (2013): Powering European Public Sector Innovation: Towards A New Architecture. *Report of the Expert Group on Public Sector Innovation.* Directorate-General for Research and Innovation.

European Systemic Risk Board (2016): Shedding Lights on Dark Markets. First Insights from the New EU-wide OTC Derivatives Dataset. *Occasional Paper Series,* No. 11/ September 2016.

Eurostat (2016a): *Smarter, Greener, More Inclusive? Indicators to Support the Europe2020 Strategy.* 2016 edition. Eurostat, Statistical Books.

Eurostat (2016b): Europe 2020 Strategy. Positive developments since 2008 in the EU on education, climate change and energy… but limited or no progress for employment, poverty and R&D. *Newsrelease,* No. 145. 19 July 2016.

Fioramonti, L. (2012): *Regions and Crises: New Challenges for Contemporary Regionalisms.* International Political Economy Series, Palgrave Macmillan, Institute on Comparative Regional Integration Studies. 264.

Freund, C. – Oliver, S. (2016): The Origins of the Superrich: The Billionaire Characteristics Database. *Working Paper,* No. 16–1. Peterson Institute for International Economics.

Geyer, R. (2003): European Integration, the Problem of Complexity and the Revision of Theory. *Journal of Common Market Studies,* Vol. 41, No. 1. 15–35.

Gopinath, G. – Kalemli-Ozcan, S. – Karabarbounis, L. – Villegas-Sanchez, C. (2017): Capital Allocation and Productivity in South Europe. *The Quarterly Journal of Economics,* Vol. 132, No. 4. 1915–1967.

Halmai, P. (2014): *Krízis és növekedés az Európai Unióban – Európai modell, strukturális reformok.* Akadémiai Kiadó, Budapest. 370.

Hart, A. (1942): Risk, Uncertainty, and Unprofitability of Compounding Probabilities. In Lange, O. – McIntyre, F. – Yntema, T. O. eds.: *Studies in Mathematical Economics and Econometrics.* Chicago, University of Chicago Press. 110–118.

Haskel, J. – Westlake, S. (2017): *Capitalism Without Capital: The Rise of the Intangible Economy.* Princeton, Princeton University Press.

Hossein-zadeh, I. (2014): *Beyond Mainstream Explanations of the Financial Crisis. Parasitic Finance Capital.* London, Routledge.

IMD (2017): *World Talent Report 2017.* IMD, Lausanne, Switzerland.

IMF (2017): *Global Financial Stability Report. Global Financial Stability Report October 2017: Is Growth at Risk?* IMF, Washington.

INSEAD (2017): *Global Talent Competitiveness Index 2017.* INSEAD, Business School for the World.

IPCC (2007): *Fourth Assessment Report.* Climate Change 2007: Working Group III: Mitigation of Climate Change. 10.2 Status of the Waste Management Sector.

Juncker, J-C. (2015): *State of the Union 2015: Time for Honesty, Unity and Solidarity.* European Commission – Speech. Strasbourg, 9 September 2015.

Kahneman, D. – Tversky, A. (1979): Prospect Theory: An Analysis of Decision under Risk. *Econometrica,* Vol. 47, No. 2. 263–291.

Knight, F. H. (1921): *Risk, Uncertainty and Profit.* New York, Harper.

Kovács, O. (2012): Policies Supporting Innovation in Public Service Provision. *INNO-Grips Policy Brief,* ICEG European Center.

Kovács, O. (2017a): The Complexity of Industry 4.0 – Part 2. *Economic Review,* Vol. 64, No. 9. 970–987.

Kovács, O. (2017b): The Complexity of Industry 4.0 – Part 1. *Economic Review,* Vol. 64, No. 7–8. 823–851.

Lehmann, K. E. (2018): The Crisis of the European Union as a Complex Adaptive System. *Journal of Common Market Studies,* 1 February 2018.

Magone, J. M. – Schweiger, C. – Laffan, B. eds. (2016): *Core-periphery Relations in the European Union. Power and Conflict in a Dualist Political Economy.* Routledge, London. 312.

Mian, A. R. – Sufi, A. – Verner, E. (2017): Household Debt and Business Cycles Worldwide. *The Quarterly Journal of Economics,* Vol. 132, No. 4. 1755–1817.

Neiman, B. (2013): The Global Decline of the Labor Share. *The Quarterly Journal of Economics,* Vol. 129, No. 1. 61–103.

Noether, E. – Tavel, M. A. (1971): Invariant Variation Problem. *Transport Theory and Statistical Mechanics,* Vol. 1, No. 3. 183–207.

OECD (2013): *An International Benchmarking Analysis of Public Programmes for High-Growth Firms.* OECD Paris.

OECD (2017a): *OECD Economic Outlook.* November 2017. OECD, Paris.

OECD (2017b): *Making Globalisation Work: Better Lives for All.* Meeting of the OECD Council at Ministerial Level. Paris, 7–8 June 2017.

Packalen, M. – Bhattacharya, J. (2015): New Ideas in Invention. *NBER Working Paper,* No. 20922.

Palánkai, T. (1999): *Az európai integráció gazdaságtana.* Aula Kiadó, Budapest. 379.

Palánkai, T. – Miklós, G. (2014): Magyarország integrációs profilja. Az európai integráció negyedszázados és a magyar EU-tagság tízéves mérlege. *Közgazdasági Szemle,* Vol. 61. 452–485.

Perez, C. (2009): Technological Revolutions and Techno-Economic Paradigms. *TOC/TUT Working Paper,* No. 20.

Prigogine, I. (1977): *Time, Structure and Fluctuations.* Nobel Lecture. 8 December 1977.

Prigogine, I. (1980): *From Being to Becoming: Time and Complexity in the Physical Sciences.* San Francisco, W. H. Freeman.

Prigogine, I. (1997): *The End of Certainty. Time, Chaos, and the New Laws of Nature.* New York, Free Press.

Santos, T. D. (1970): The Structure of Dependence. *The American Economic Review,* Vol. 60, No. 2. 231–236.

Sapir, A. – Aghion, P. – Bertola, G. – Hellwig, M. – Pisani-Ferry, J. – Rosati, D. – Vinals, J. – Wallace, H. (2004): *An Agenda for a Growing Europe.* Oxford, Oxford University Press.

Spiegel (2012): European Luminaries Reflect on Euro: "Seventeen Countries Were Far Too Many". Interview, *Spiegel.de,* 11 September 2012.

Spolaore, E. (2015): The Political Economy of European Integration. In Badinger, H. – Nitsch, V. eds.: *Handbook of the Economics of European Integration.* London, Routledge. 435–448.

Temin, P. – Vines, D. (2013): *The Leaderless Economy: Why the World Economic System Fell Apart and How to Fix It.* Princeton, Princeton University Press. 328.

Teulings, C. – Baldwin, R. eds. (2014): *Secular Stagnation: Facts, Causes and Cures.* VOXEU.org e-Book.

Vollaard, H. (2014): Explaining European Disintegration. *Journal of Common Market Studies,* Vol. 52, No. 5. 1142–1159.

Zipfel, F. – Vetter, S. – Pietzker, D. (2015): Better off on Their Own? Economic Aspects of Regional Autonomy and Independence Movements in Europe. *DB Research, EU Monitor, European Integration,* 6 February 2015.