

Structural changes existing at the level of local labour markets¹ - a conceptual constructive analysis framework

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Abstract

Increasing complexity of socio-economic systems is reflected by increasing complexity of policies. The multilevel architecture of policies global, regional-continual, national, regional and local is segmented more and more policies. The New Multiannual Financial Framework (NMFF) for the period 2021-2027 in its 2019 draft include at EU level eight Policies and 17 priority sectors. Competition is the driving force of the economy - driver leading to structural changes, at local labour markets. The problem is divided in two main plans: “What means to be competitive?” and “How to be competitive?” Further, using a conceptual analysis of key concepts for the main policies included in the new strategic cycle (2021-2017), we create a framework for policy analysis structural changes of local labour markets. Our original contribution is framework design using concepts and instruments provided by the New Economic Geography theory and the Centre – Periphery Model. The new conceptual relationship Core - Periphery is a structural relationship from the global level, to regional development and labour market segmentation, present as well as at micro level, in organisations structures. Industrialization in global markets shapes the previous growth model manifested in discontinuous times. Radical innovation shapes in digital transformation shapes the new model of growth manifested in disruptive times. Our contribution is framework for policy analysis structural changes of local labour markets, classifying the EU’s NMFF branches by the core-periphery relation.

Keywords –structural changes, core -periphery, local labour markets, discontinuous times, disruptive times

1. Introduction

Increasing complexity of socio-economic systems is reflected by increasing complexity of policies. The multilevel architecture of policies global, regional-continual, national, regional and local is segmented more and more policies.

The over segmentation of policies domains increases the rigidity and decrease flexibility, slowing the adaptive resilience of socio-economic systems.

In view to better understand the Structural changes existing at the level of local labour markets we suggest a new conceptual constructive analysis framework following the steps of Constructive Conceptual Analysis. The conceptual analysis framework is competitiveness described in The New Economic Geography theory and with Core – Periphery as the New conceptual relation.

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2. Method – Constructive Conceptual Analysis of for the main policies included in the new strategic cycle (2021-2017)

Analysis is a usual term, mostly referred as linguistic analysis and less as method of inquiry in analytic philosophy. Kosterec (2016) delineates the linguistic analysis to conceptual analysis, by their aim, pointing that:

*“The aim of linguistic analysis is to provide insight into **how** a term is used within a specific field or domain, the aim of conceptual analysis is to examine **the place of a concept in the conceptual network of a language or a theory**”.*

Nuopponen, (2010) define the Concept Analysis (CA) as an “activity where concepts, their characteristics and relations to other concepts” are clarified and notify the “lack of method descriptions in methodological guides”.

Conceptual Analysis as a methods concerning theory of knowledge was root in philosophy, mathematics and logic. Moore, (1922) establish the fundamental principles of ethical reasoning. Base on this, during the 1930s, flourish the Cambridge School of Analysis. (Baldwin, 2013)

Russell is “responsible more than anyone else for the creation and development of the modern logic of relations – the single greatest advance in logic since Aristotle. He then used the new logic as the basis of his mathematical philosophy called logicism” (Ongley and Carey, 2013). Russell (1905) formulate the theory of definite description called as the denoting in theory of knowledge. Wittgenstein was Russell’s student. Eames (2013) notify that the Russell and Wittgenstein disagreed concerning the relevance of theory of knowledge to the domain of philosophy. Russell sees the logic and conceptual analysis as the core of knowledge theory, while Wittgenstein sees separates the realms o science and philosophy: “philosophy cannot tell us how things are, and science cannot clarify our ideas or our languages”. (Eames, 2013, p.168)

The third “father” of the CA is Wittgenstein. In its Philosophical Investigations (1953), Wittgenstein treats the concepts of “meaning, of understanding, of a proposition, of logic, the foundations of mathematics, states of consciousness, and other things”.(Wittgenstein, 1953) Kosterec (2016) delineates and compares three methods, usually labelled as conceptual analysis: ”constructive method, detection method, and reductive conceptual analysis”. (Box1)

Box 1. Conceptual Analysis Methods

Constructive analysis CA aims to broaden our conceptual theory, either by postulating a new relation or stating that some already known relation holds among previously unrelated parts of the language. Constructive analysis thus enables one to introduce new terms or concepts which were lacking in the initial explicit conceptual theory.

- study the relations among parts of a language

CA problem - the lack of an explicit relation among terms or concepts of a language within our conceptual theory of language.

- The problem is solved within a (possibly enriched) conceptual theory.

CA aim - **broaden our conceptual theory**, either

- by *postulating a new relation* (introducing new terms, or concepts)
- *stating* that some already known relation holds *among previously unrelated parts* of the language

Examples: definitions (prescriptive), explications; be an implicit relation among terms or concepts which is unknown to the speakers;

CA results- change the explicit conceptual theory but leaves the relations of the initial theory intact, is enabled by the relations within the initial conceptual theory;

- *is coherent* if the change of the conceptual theory is made using material already present in The initial conceptual theory, but a CA is mandatory to be always coherent.

CA fails if it does not result in a new relation

CA is used to modify the explicit conceptual theory so that the problem is solved within a (possibly enriched) conceptual theory. This type of analysis studies pre-existing relations in a conceptual theory and proposes a new relation, which is then tested.

Detection analysis - DA “it is common practice in philosophy to question a declaration that a certain relation holds among concepts of a given language”. In Mathematics mean is using knowledge about relations i.e. solving equations. In Philosophy is “whether some conceptual relation exists within our conceptual network”.

DA – could lead to a negative result

The problem is solved when the existence of the studied conceptual relation is found or proved possible or impossible within the implicit conceptual theory.

DA is used to analyse and broaden our knowledge of the implicit conceptual theory

Reductive Analysis - RA. Is whether some theory or language is reducible to another theory or language. For example, the question could be whether the former is only a notational variant of (a part of) the latter.

- the relations among two or more conceptual networks

RA result: finding out whether the relation in question holds among the given conceptual networks.

Examples: Science often redefines ordinary terms such as weight, colour, well-being, knowledge etc. A well-known philosophical reduction is the one between knowledge and justified true belief.

Based on (Kosterec, 2016)

Main steps in Constructive conceptual analysis method, synthesized by (Kosterec, 2016) are :

1. Specify the initial **Conceptual Background CB!**
2. Formulate the conceptual **problem P!**
3. State the new conceptual **relation R!**
4. Formulate tests **T** of the **conceptual relation R** within **CB!**
5. Elaborate the new relation **R** by tests **T respecting CB!**
6. If the relation **R** succeeds in tests, declare it a part of **CB!**

Further, we shall follow these six steps in view to build:

“a framework for policy analysis structural changes of local labour markets, policies included in the new strategic cycle (2021-2017) based on Core- Periphery new relation, as a result of a Constructive Conceptual Analysis Conceptual background”.

Competition is the driving force of the economy - driver leading to structural changes. The basic principle of competitiveness - making a profit. A profitable business or, in general any economic activity, is profitable when the income is greater than expenditure. This principle is reflected in all the five Porter’s competition forces: buyers/customers, suppliers, substitutes, new entrants and existing rivals. Porter (1979) Customers chose to buy if pay less and get more. Suppliers chose to delivers less and be paid more. Substitutes brings on a product market producer from other industries with different product with the same utility. New entrants diminish costs and relocate the clients from the prior sector’s industries. Existing rivals “fight” for the same product in the industry, in the same market. The problem is to be profitable, not big. And more than this, it is tremendously important to keep this positive balance long term to be sustainable. **In other words, it is important to create value in a sustainable manner.** Spacey (2017) points that “value creation is any process that creates outputs that are more valuable than its inputs”.

Van Neuss (2019) define **structural change at regional level**, in a broad sense as “the process of reallocation of economic activity across the three broad sectors agriculture, manufacturing and services” via **globalisation and trade**. OECD (2007) states, in the case of automotive industry, for the main drivers for change the “structural & economic (especially in terms of productivity), regulatory and technological”. National and regional governments in OECD countries are looking for ways to ensure that regions maintain a competitive edge in industries that generate wealth and jobs.(OECD, 2007)

The creation of value in a sustainable manner is our conceptual background, based on the competition.

3. Research question – conceptual problem formulation

To be competitive request a strong and precise strategy to create value. The actual model (to say the last hundred years) is focused on decreasing costs with any price, in the hypothesis that economic growth is infinite. Economic growth increases but also increases the resources consumption, some cases till exhaustion. Resources reserves are not any more available on long and medium term, the time horizon is shortening. Therefore, **the greatest change is in the strategy to create the value!** The new millennium model is changing the creation of value from “**diminishing the costs**” to “**creating value based on innovation**”! This new model expects to provide a sustainable growth in the sense that resources has to regenerate.

The problem is divided in two main plans: “What means to be competitive?” and “How to be competitive?”

Further, using a conceptual analysis of key concepts for the main policies included in the new strategic cycle (2021-2017), we create **a framework for policy analysis** structural changes of local labour markets. Our original contribution is framework design using concepts and instruments provided by the **New Economic Geography and the Centre – Periphery Model**.

4. The New Economic Geography and the Core– Periphery Model: the new conceptual relation

The Dixit-Stiglitz (1997) model is the starting point of the monopolistic competition and optimum production diversity. The research question is regarding the “production in welfare economics is whether a market solution will yield the socially optimum kinds and quantities of commodities” (Dixit and Stiglitz 1977). The starting point was the principle that “a commodity should be produced if the costs can be covered by the sum of revenues and a properly defined measure of consumer's surplus”. Dixit and Stiglitz (1977) authors find that in monopoly conditions, firm pays the fixed costs and they state the principle that “a market solution considers profit at the appropriate margin, while a social optimum takes into account the consumer's surplus. Dixit and Stiglitz (1977) The New Economic Geography (NEG) emerged when the Dixit& Stiglitz (theory) applied in the new industrial organisational theory, new international trade, new technological change and new economic growth.

Starting to 1985 emerges the NEG theory, which integrates geography with new trade and new growth. Fujita, Krugman and Venablesin (Fujita et al., 1999) present a spatial version of the Dixit Stiglitz Model.(FKVM) The spatial heterogeneity of resources induces inherent differences among locations, as a result of cumulative processes: urban and rural, industrial belts etc.

NEG explains agglomeration as the results of economic agglomeration. The NEG looks for:

Box 1.

New Economic Geography (NEG) the New Conceptual Relation

“Concentrations of population and of economic activity: the distinction between manufacturing belt and farm belt, the existence of the cities, the role of industry clusters. ...The larger point is that by modelling the sources of increasing returns to spatial concentration, we can learn something about how and when these returns may change, and then explore how the economy's behaviour changes with them.” (Fujita et al., 1999, p.4)

Research questions:

When is a spatial concentration of economic activity sustainable?

When is a symmetric equilibrium, without spatial concentration, unstable?

“The answers to both of these questions hinge on the balance between centripetal forces, forces that tend to promote spatial concentration of economic activity, and centrifugal forces that oppose such concentration. They are not quite the same question, however, essentially because the first asks whether a situation is equilibrium, the second whether an equilibrium is stable.”

Source: (Fujita et al., 1999)

Llano (2000) points that FKVM model describes 3 localization forces:

- two agglomeration forces (symmetry de-stabilizers), Relationships between costs & demand (agglomeration forces) and
- one dispersion force (symmetry stabilizer): Local Competition (dispersion force);

4.1. Core - Periphery model at global level: a structural relationship

Before the NEG, Wallerstein (1974), describe the world system in the core-periphery model coordinates, where the state is not any more the analysis unit. In this approach next to economical analysis is made also a political one. Also, author observe that, “prior the modern era, world-economies were highly unstable structures”. According to Wallerstein (1974) the **world-system is a "multicultural territorial division of labour in which the production and exchange of basic goods and raw materials is necessary for the everyday life of its inhabitants."** Martinez-Vela (2001) comments Wallerstein definition, pointing that “this division of labour refers to the forces and relations of production of the world economy as a whole and it leads to the existence of **two interdependent regions: core and periphery**”. In this model, **Core** are locations where happens mostly processes that incorporate higher level of education, higher salaries, and more technology and generate more wealth to the world economy. **Periphery** are locations where are occurs processes that incorporates lower levels of education, lower salaries and less technology, which generates less wealth to the world economy. The third-tier structure – Semi- periphery are locations where ensues both core and periphery processes and serves as a buffer between core and periphery. Wallerstein sees the relation core- periphery as an exploitation relation, based on history events observation and analysis. We emphasise as very important to our purpose the 3 third structure of world systems> core, periphery and semi-periphery.

Goldfrank (2000) periphery agglomerate the labour -intensive, and the other on capital-intensive production. The three historical modes of production are, following Polanyi, mini-systems, world-empires, and world-economies.

Skocpol (1977) **the core-periphery relationship is structural. It changes the “traditional” to “modern”**. Semi-peripheral states act as a buffer zone between core and periphery, and has a mix of the kinds of activities and institutions that exist on them (Skocpol, 1977).

Figure 1. Core periphery theoretical and applied model



Source: (Moyer, 2016)Based on the list in Dunn, Kawana, Brewer (2000).

https://en.wikipedia.org/wiki/Semi-periphery_countries

(Chase-Dunn et al., 2000) distinguish between

*“globalization as a contemporary political ideology and what we call **structural globalization**-the increasing worldwide density of large-scale interaction networks relative to the density of smaller networks. The term "globalization" often refers to changes in technologies of communication and transportation, increasingly internationalized financial flows and commodity trade, and the transition from national to world markets as the main arena for economic competition. “*

Economic globalization is pulsatile and defined by (Chase-Dunn et al., 2000)

- “means greater integration in the organization of production, distribution, and consumption of commodities in the world economy;

- the globalization of trade over the past two centuries. Trade globalization means the extent to which the long-distance and global exchange of commodities has increased (or decreased) relative to the exchange of commodities within national societies.”

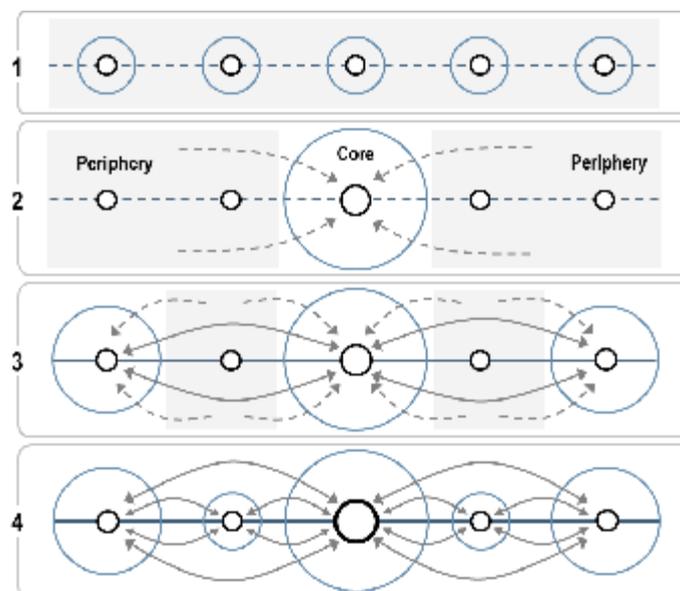
The core/periphery hierarchy is defined by (Chase-Dunn, 2001) as a structural constant, next to capitalism and interstate system. So, “core regions have strong states and specialize in high-technology, high-wage production while peripheral regions have weak states and specialize in labour-intensive and low-wage production”. (Chase-Dunn, 2001)

All the human interaction networks small and large, from the household to global trade, constitute the world-system. This whole process can be understood structurally as a stratification system composed of economically and politically dominant core societies (themselves in competition with one another) and dependent peripheral and semi peripheral regions, some of which have been successful in improving their positions in the larger core/periphery hierarchy, while most have simply maintained their relative positions.(Chase-Dunn, 2001)

4.2. Core-Periphery model of regional development

Friedmann, (1966) develop the Core-Periphery relationship in the Urban / agglomerations and rural since 1966. (Figure 2) Regional development reflects the economic structure. The human history shows the transition from mainly agricultural, homogeneous / dispersed distribution, in Stage 1 to the first agglomerations, commercials and crafts Stage 2 heterogeneous distributions. The agglomeration plays the role of Core, locations that hosts first of all the markets! The dispersed population groups (farms and family’s households) plays the role of periphery. The technological progress and industrial development increase the emergence of higher agglomerations clustered in industrial regional sub centres. In industrial core-periphery stage is reached the maximum of regional inequalities. The periphery is the satellite of Core, usually in a master slave functional relationship. The last stage, the Stage 4, present the Post-industrial development, mainly in networks, where the regional inequalities are reduced in a fully integrated system.

Figure 2. John Friedman’s Model of regional development - Core-Periphery Stages of Development in an Urban System



Source: (Friedmann, 1966), taken from (Rodrigue, 2020)

Note:

Stage 1 – Preindustiral, no urban hierarchy

Stage 2 - Transitional, Primate city

Stage 3 – Industrial – regional subcentres

Stage 4 – Post industrial –regional inequalities are reduced in a fully intergrated urban systems

Spatial structure reflects not only the development stage but also the specialisation and economic activities profiles. (Wallerstein, 1974) argues that „forces of the marketplace tend to maintain established differences of "occupational" structure among regions". People move from periphery to core (UMN, 2016)

Core is urban structures that concentrate financial power, education system especially high level and academic one, social elites, administrative centres and government, in a word – power! In these locations the incomes and salaries are higher and also the costs of living, wealth is concentrating. The economic profile of location is characterised by a high diversity, with or without industry, but mainly economic sectors that are **independent of space**.

Periphery is rural structures that have low financial power, incomes and salaries are low, usually concentrates poverty areas. The economic profile of location is characterised by a low diversity, agriculture, forestry and mining, but mainly **economic sectors that are dependent of space**. Regardless the scale level: local, national or global, people moves from periphery to centre, as brain drain, migration, mobility, driven by higher incomes and good jobs located in core.

4.3. Core-periphery model and labour market segmentation

Core-periphery is a tool to model labour mobility and migration. The dynamics of agglomerations is developed by Perroux (1955) which presents the case of growth poles, Myrdal launch in 1957 cumulative causation through the dispersion or concentration effect. Hirshmann (1958) identify the – “**trickle down**” effect, Friedmann & Miller (1965) – recreative hinterland (maximum 3 hours travel by car). Friedmann (1966) explains the Specialization of regions and division of labour between regions, the regional economic puzzle achieve an equilibrium through Spatial integration. Derica (2014) present the Core Periphery model in terms of Myrdal (1957) and Friedmann’s (1966) regional development policy in a synthesis. The Core locate abundant capital while the periphery locates abundant labour in a static image. The difference across space in both dimensions generate labour flows and capital flows in contrary directions. Abundant labour or capital demand for adequate capital a labour. This new equilibrium is created through migration / mobility / brain drain of labour towards core, for higher wages and incomes. In a global world the scene of labour mobility is moving faster and faster. The mobile workers execute mostly short time jobs, send a share of their remittance to their homeland and move for a new job. Fischer and Nijkamp (1987) points out that regional labour markets are delimited on an administrative basis or on institutional principles and not on the basis of functional or economic criteria. Morrison (1990) and Martin (1999) they promoted the dominant perspective by which labour markets are inherently local by their nature and extent, in the context in which they are multi-dimensional and have a very scalar nature. The location economy was launched by Marshall (1919, p. 285) by observing the industrial district, an industrial concentration in certain locations. Marshall, (1920 p. 268) explained the economic principles of agglomerations, and since 1890 launches the concept of positive externalities. Fischer and Nijkamp (1987) notes that “labour markets are segmented by firm, industry, job type, worker type, occupation and spatial location. In other words, the macro process of labour market segmentation is associated with a spatial segmentation process.”

4.4. Core-periphery model in organisations structures

John Atkinson's Flexible-Firm Model(Atkinson, 1984) classified the wide ranges of new ways of getting tasks done in functional, numerical and financial flexibility. The market instability generates a new structure of the workforce to optimise the allocation of human resources in the **core** and **peripheral** group. Market stagnation, job loss, uncertainty, technological change and working time generate new market realities. The response at firm level is the flexible firm. The flexible firm uses a “management technique that optimizes human resources by segmenting the workforce into core and peripheral groups”.

Atkinson (1984) Under Atkinson’s perspective, the core and peripheral group works within the company based on three types of flexibility:

Box 2. Atkinson's flexibility typology

Functional Flexibility. This is associated with **high-skill levels** across many different tasks, as exhibited by the **core group of workers**. It allows management to relocate core workers between multiple workforces and tasks. Developing functional flexibility within a workforce generally requires **increased training, more flexible working hours and re-evaluation of payment/value to the company**.

Numerical Flexibility. This generally applies to the **peripheral workforce**, and is related to the **volume of low-skilled workers available in the labour market**. Numerical flexibility means that employers can match labour demands with the number of employees under contract at the company. This can be achieved through the of *flexible employment methods such as short-term contracts, outsourcing, temporary workers and other means*.

Financial Flexibility. Financial flexibility refers to the **capability of organisations to adjust the price (pay) of labour in accordance with the supply and demand of workers within the company**. It also refers to the compensation granted to individuals upon the termination of their contracts. Thus, financial flexibility is related to and supportive of numerical and functional flexibility.

Source:

[https://www.businessballs.com/organisational-culture/flexible-firm-model /](https://www.businessballs.com/organisational-culture/flexible-firm-model/)

4.5. New, Shamrock organization in a discontinuous time

Handy (1989) push further the core periphery model to the Shamrock three leaves shape. In 1989 on the background of constant and random change called by Handy as "discontinuous change" transforms business, society, education and the nature of work. In this model the **Core workers** include the employees involved in strategies, knowledge and main processes; Flexible workers includes part-timers, contractors and consultants and Outsourced workers Include IT, marketing, payroll, training and franchising. **This "fluid structure" function in view to assure a rapid response to change.**

The core group- the skilled workers, primary workers and internal workers, are the employed on undetermined labour contract with the firm.. Glenn (2016) based on Ritson (2013) enriches the Atkinson model. So, the **First Peripheral Workers**, are employees on a daily labour contract, low skilled workers, easy to employ, assuring numerical flexibility. The second group of peripheral workers are in flexible labour contract forms: short term contracts, public subsidy trainees, delayed recruitment, job sharing, part time, etc. Another peripheral group is the external group of services provides for the firm, working as satellites for the firm based on a commercial relationship. The third peripheral group include: Agency Workers, Self-Employment, Subcontracting or Outsourcing.

4.6. Critics for the Core-Periphery model

Raagma (2003) select as the most important Critics for the Core-Periphery Model the following ideas:

Box 3

Critics for the Core-Periphery Model

Friedman's, Gibbs's and Hautamäki's models became stuck in industrial society's economic **models and environmental static**: they presumed that the economic structure stabilizes and that the environmental problems of the rapidly growing cities would be continually insurmountable. Also, the CPM originated from rational arguments and the interests of production. They ignored people's personal needs and cultural factors

Friedmann's (1966) CPM was criticized ever since it was created. Brenner (1977) claimed that the centralization of power cannot cause the centralization of economy. He also said that the given approach would *not sufficiently describe interregional division of labour, distribution of wealth and goods*.

Storper and Walker (1989, 183) point out the importance of historic legacy and layers of investment, which create a specific milieu for a region. Because of that, many development paths are excluded and a path-dependency is formed: **the development of a region is rather evolutionary, based on the social networks and cultural values.**

The New economic model based on innovation and new structural changes at local labour markets level – in disruptive times

4.7. A new framework for the policies according to new conceptual relation Core-Periphery model

Shumpeter (1934) launches the theory of innovation, and (Kondratieff and Stolper, 1935) develops the theory of long cycles delimited by the technology carried by radical innovations / super innovations.

The new global context is characterized by the emergence and manifestation of all types of innovation and especially disruptive innovation. OSLO 2018 defines radical innovation along with incremental innovation:

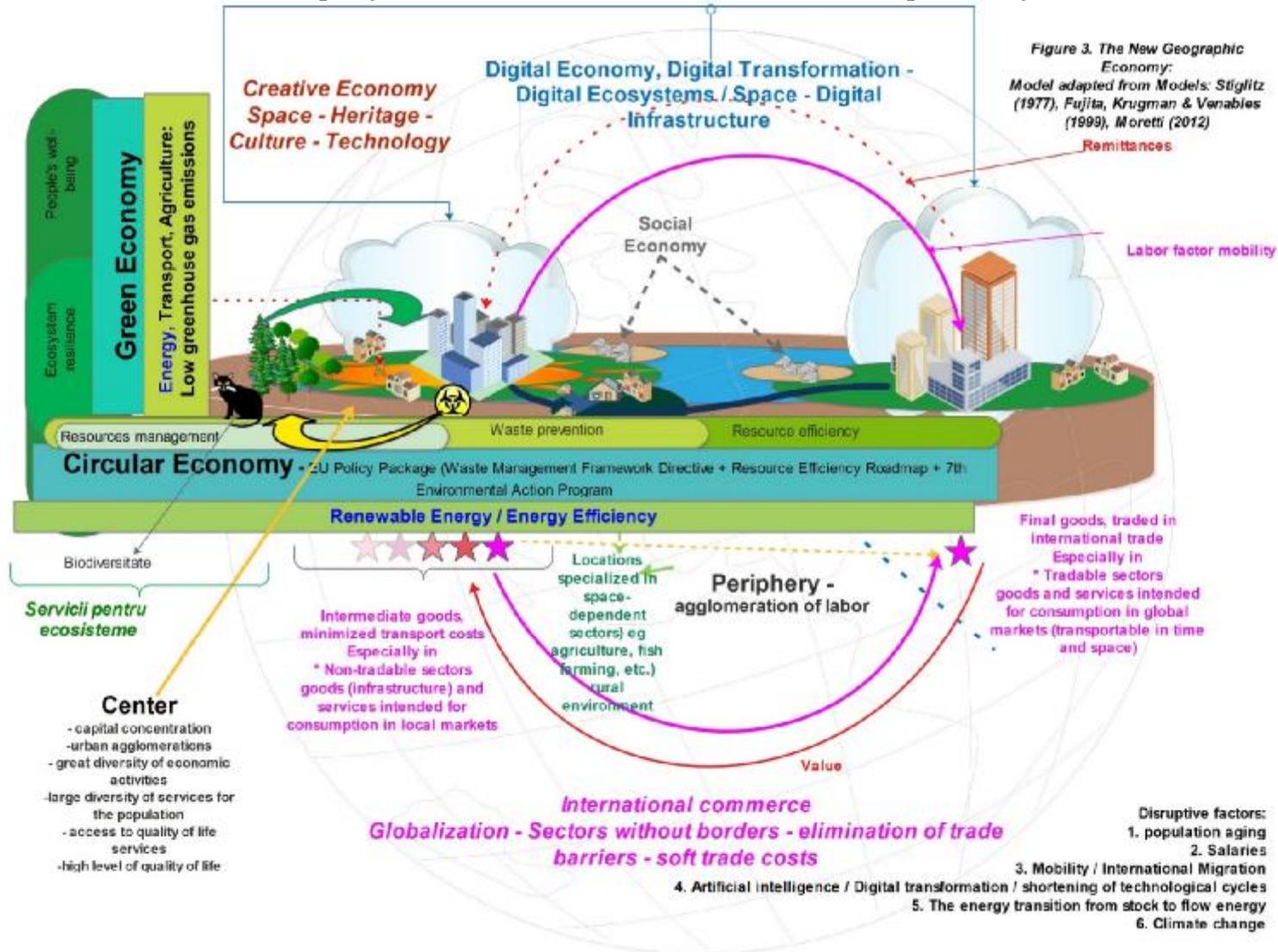
"3.56. The basic requirement for an innovation is that it must be significantly different from the company's previous products or business processes. Because "significantly different" is subjective and will vary depending on the company's capabilities and context, the interpretation and comparability of innovation statistics may benefit from additional data on the importance of innovations in terms of novelty or economic impact. Some forms of novelty, such as disruptive / disruptive or radical innovations and certain types of economic impacts, are difficult to identify in the limited observation period recommended for the study of innovation. (OSLO 2018, p.77)

Production chain logistics is becoming increasingly complex. Modern production no longer takes place only in an organization but in an urban agglomeration. (Figure 3) This agglomeration plays the role of Centre and functionally realizes a concentration of capital, a high concentration of diverse (unrelated) economic activities, offers an extremely wide range of services and infrastructures at affordable costs for the population, services that ensure a high level of quality of life and, last but not least, it acts as a magnet that attracts talent (Florida, 2002; Moretti, 2012). The Periphery concentrates natural resources and specialized sectors in areas dependent on space such as agriculture, forestry, fish farming, tourism (land dependent), and mining. Peri urban - the buffer zone between urban and rural concentrates mainly the labour factor, especially in the new millennium. The boundaries of production functions are delimited by the space in which final goods and services are produced for consumption either locally or globally. **The production of tradable services and goods is carried out in core sectors**, specialized sectors, globally competitive, which achieve value through sales to the final consumer, in markets anywhere in the world. It is important that through economies of scale are minimized, optimized costs for the production of intermediate goods and services. Support for lower intermediate production costs is supported by **non-core sectors, which provide non-tradable goods and services** at a distance through foreign trade, and are **destined for local consumption**. This category includes production infrastructures (access to land, transport, energy, knowledge, skilled labour, storage, security) and quality of life (housing, access to water, energy, gas, water, sewerage, education, sports, culture, health). The complementarity functionality of non-core sectors ensures the success of core sectors. The public administration makes the balance of core-periphery functionality sectors and guide the shapes regional and local structures. The value created in global markets define the success of the core sectors (called also base sectors), but in the presence of then on-core sectors support. The newly created balance allows the realization of investments supported by taxes, high-income jobs that in turn create other positive externalities, new jobs in new sectors of activity, supporting the virtuous circle of development. The absence of a strong public administration does not allow the development of production infrastructures and quality of life, leading to the settlement of the location from the international trade circuits of the global economy. The location enters the vicious cycles of development, loses active labour, cannot make investments, cannot develop infrastructure, and quality of life decreases to marginalized areas, poverty with severe material deprivation especially in rural areas, but also as bags of poverty in the urban environment.

Transportation and energy costs are also called hard costs and transaction, commercial and intellectual property costs are soft costs. The decrease in connectivity costs is marked by the disappearance of state borders and the formation of economic blocs, as is the case in the European Union.

In these markets trade borders are eliminated, state borders are reduced in functionality allowing, among other things, the mobility of the labour factor. The labour factor is allocated internationally at the best price, especially when the cost of the stay exceeds the cost of departure.

Figure 3.A framework for policy analysis structural changes of local labour markets, policies included in the new strategic cycle (2021-2017) based on Core- Periphery new relation, as a result of a Constructive Conceptual Analysis



People can migrate with their family, permanently changing their domicile and even their citizenship, or they can only go for a fixed period of time to other labour markets, keeping their domicile in their country of origin. Mobile workers can work in other labour markets either in the conditions of the national labour market / home market as posted workers / posted workers or directly in the conditions of the host markets in official conditions or, worse in unofficial conditions, disconnected from protection systems from both countries (home and host). Beyond connecting to social protection services, mobile workers send money home to relatives through remittances. Rodrick (2018) recently noted that international labour mobility is the largest unexplored frontier of globalization. Emigrants increase their income from 3 to 6 times when they move from a low-income country to a high-income country. Ketkar and Ratha (2008) highlighted the innovative role of remittances in financing development for poverty-stricken countries / regions.

Digitization, digital transformation and the creation of digital ecosystems make it possible to reduce transaction and execution costs by increasing efficiency, especially through automation and the use of Artificial Intelligence. These technologies mainly replace routine and repetitive work performed mainly by low-skilled workforce.

Urban agglomeration also creates negative externalities such as waste, pollution and resource consumption at such a rapid rate that it is no longer possible to regenerate natural resources, ecosystems of nature and biodiversity are destroyed, greenhouse gas production increases.

The benefits of globalization also bring challenges. Connecting to globalization requires the adoption of fast-paced and especially faster and faster pace of technological change. Technological changes are mainly manifested by the shortening of production cycles, especially in certain sectors, sectors exposed to automation which have a high risk of releasing labour, regardless of the level of preparation by the manifestation of substitution effects. Technological changes can act as shocks with extremely high diffusion speeds, manifested in the form of crises.

Another challenge to which the local / urban or national economy must strike a balance is that of identity. Exposure to common events, processes and global culture exposes communities at any level to the risk of losing their identity. Paradoxically, the identity is the source of supporting the competitive force through global differentiation, but it is also exposed to the risk of global levelling.

4.8. The New Multiannual Financial Framework 2021-2027 and resilience to disruptive factors

The New Multiannual Financial Framework (NMFF) for the period 2021-2027 was established on 5.04.2019. it comprises **eight Policies at EU level and 17 priority sectors** with related implementation programs. "Within each priority, programs will be **grouped in policy clusters**, which will be reflected in the titles of the annual budget." The financial framework reflects, in a significant manner the EU's priority. The complexity of the world is mirrored by the "**key crosscutting priorities such the digital economy, sustainability, security, migration, human capital and skills, as well as support for small businesses and innovation.**"(SWD(2018) 171 final). Each policy topic assumes to built resilience to the main disruptive factors, some of them challenging for Romania: population aging, Salaries, Mobility / International Migration, Artificial intelligence / Digital transformation / shortening of technological cycles, The energy transition from stock to flow energy, Climate change. Are the subjects of the new policy architecture (see Annex)

In terms of our paper, the disruptive factors are the tests for the Conceptual Background. We remind that "the creation of value in a sustainable manner is our conceptual background, based on the competition".

4.9. Our contribution

Our contribution is framework for policy analysis structural changes of local labour markets, classifying the EU's NMFF branches by the core-periphery relation. This framework is built in the conceptual background, corresponding to the point five of the methodology "5. Elaborate the new relation R by tests T respecting CB!".

Figure 3 summarise the spatial distribution of the main policy action, allocating the following labels:

- **Core** - New global industries - global consumption, global employer

- Artificial intelligence / automation
- International trade
- Final goods and services tradable in international trade

- **Periphery** - Non-core sectors - local consumption, promoter Regions supporting smart specialisation, increasing competitiveness and sustainable quality of life

- Circular economy
- Social economy
- Green economy
- Connectivity - Energy & Transport & Information
- Creative economy
- The digital economy
- Climate change
- Quality of life services

5. Final remarks and conclusions

Industrialization in global markets shapes the previous growth model. The process of growth and wealth is generated in industrialized agglomerated locations. The main principle is “the creation and use of territory is fundamental to economic development” and “the territorial forms that industry takes are central to the shape and survival of capitalism itself”, Walker and Storper (1991). The **discontinues times**, as Handy (1989) called more than three decades before, just passed. It manifests by flexibility and adaptability increasing, as a response to “the drivers of changes in regional economic structures are assumed to be linked to globalisation, notably to reorganisation of production.” OECD (2007) Mechanism like “outsourcing and offshoring are the main globalisation drivers that changes the geography of production and processes” (OECD, 2007), with direct impact on regions and their economic structures.

Radical innovation as response to disruptive factors announces the need to shape a new growth model. Climate change, ageing & dramatic loss of biodiversity and waste creation that brings life over profit as importance are disruptive factors that acts in the same time. Under the simultaneous action of, some dangerous risk threshold could be passed and life is put at high risk. We name the new times as the **disruptive times**! Core is defined with the objective of increasing profit as the first priority. Periphery is defined as the life preserving as first priority. In consequence, when the life preserving is in danger periphery becomes the first priority. Periphery becomes the functional driver over the core, and then life overcomes profit, considering that profit in absence of life is worthless. Therefore, the life preserving is a part of the Conceptual Background in our case the Competition.

Then, we add to the Competition (CB) is the driving force of the economy - only while the life is not in danger. But, as Raagma (2003) said „even if the form changes, the economic concentration remains the same” but the relationship core-periphery is changing, shaping the new economic structures at local level, as well as the local labour markets.

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References

- Atkinson, J., 1984. Manpower strategies for flexible organisations.
- Baldwin, T., 2013. G. E. Moore and the Cambridge School of Analysis. Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199238842.013.0010>
- Chase-Dunn, C., 2001. World-Systems Theorizing [WWW Document]. URL <https://irows.ucr.edu/cd/theory/wst1.htm> (accessed 5.17.20).
- Chase-Dunn, C., Kawano, Y., Brewer, B.D., 2000. Trade Globalization since 1795: Waves of Integration in the World-System. *American Sociological Review* 65, 77. <https://doi.org/10.2307/2657290>
- Derica, B., 2014. The classic core-periphery model: Myrdal & Friedmann [WWW Document]. SlideServe. URL <https://www.slideserve.com/derica/the-classic-core-periphery-model-myrdal-friedmann> (accessed 5.20.20).
- Dixit, A.K., Stiglitz, J.E., 1977. Monopolistic Competition and Optimum Product Diversity. *The American Economic Review* 67, 297–308.
- Eames, E.R., 2013. Bertrand Russell's Dialogue with His Contemporaries (Routledge Revivals). Routledge.
- Fischer, M.M., Nijkamp, P., 1987. Current Trends in regional Labour Markets. London Papers in Regional Science Unemployment, the regions and labourmarkets:reactions to recession.
- Florida, R., 2002. The Economic Geography of Talent. *Annals of the Association of American Geographers* 92, 743–755. <https://doi.org/10.1111/1467-8306.00314>
- Friedmann, J., 1966. Regional Development Policy: A Case Study of Venezuela. M.I.T. Press.
- Fujita, M., Krugman, P.R., Venables, A., 1999. The spatial economy: cities, regions and international trade. MIT Press, Cambridge, Mass.
- Glenn, S., 2016. Organizational Structure. What is an organizational structure? The internal, formal framework of a business that shows the way in which management. -.
- Goldfrank, W.L., 2000. Paradigm Regained? The Rules OfWallerstein's World-System Method. 1 150–195. <https://doi.org/10.5195/jwsr.2000.223>
- Handy, C., 1989. The Age of Unreason. Harvard Business Review Press.
- Ketkar, S., Ratha, D.K. (Eds.), 2008. Innovative Financing for Development. The World Bank. <https://doi.org/10.1596/978-0-8213-7685-0>
- Kondratieff, N.D., Stolper, W.F., 1935. The Long Waves in Economic Life. *The Review of Economics and Statistics* 17, 105. <https://doi.org/10.2307/1928486>
- Kosterec, M., 2016. METHODS OF CONCEPTUAL ANALYSIS. *FILOZOFIA* 71, 220–230.
- Llano, C., 2000. ECONOMIC GEOGRAPHY: THE CORE-PERIPHERY MODEL.
- Marshall, A., 1920. Principles of Economics (8th ed.) - Online Library of Liberty, 8th Edition. ed. Macmillan and Co., limited St. martin's Street, London.
- Marshall, A., 1919. Industry and Trade.
- Martin, P., 1999. Public policies, regional inequalities and growth. *Journal of Public Economics* 73, 85–105. [https://doi.org/10.1016/S0047-2727\(98\)00110-8](https://doi.org/10.1016/S0047-2727(98)00110-8)
- Martinez-Vela, C., 2001. World Systems Theory. ESD.83.
- Moore, G.E., 1922. Principia Ethica,. CAMBRIDGE AT THE UNIVERSITY PRESS.
- Moretti, E., 2012. The New Geography of Jobs. Houghton Mifflin Harcourt.
- Morrison, P., 1990. Segmentation theory applied to local, regional and spatial labour markets [WWW Document]. URL <https://journals.sagepub.com/doi/10.1177/030913259001400402> (accessed 3.18.19).
- Moyer, K., 2016. Periphery Role in the World Systems Theory [WWW Document]. Medium. URL <https://medium.com/@kendallgrace15/periphery-role-in-the-world-systems-theory-fa5d291cac55> (accessed 5.16.20).
- Nuopponen, A., 2010. Methods of concept analysis - a comparative study. *LSP Journal - Language for special purposes, professional communication, knowledge management and cognition* 1.
- OECD, 2007. Globalisation and Regional Economies: Can OECD Regions Compete in Global Industries?, OECD Reviews of Regional Innovation. OECD. <https://doi.org/10.1787/9789264037809-en>
- Ongley, J., Carey, R., 2013. Russell: A Guide for the Perplexed. Bloomsbury Academic.
- Porter, M.E., 1979. How Competitive Forces Shape Strategy. Harvard Business Review.

- Raagma, G., 2003. Centre-periphery model explaining the regional development of the informational and transitional society [WWW Document]. ResearchGate. URL https://www.researchgate.net/publication/23730995_Centreperiphery_model_explaining_the_regional_development_of_the_informational_and_transitional_society (accessed 2.28.19).
- Ritson, N., 2013. Strategic Management. Strategic Management 52.
- Rodrick, D., 2018. Globalisation: New Deal On Labour Mobility [WWW Document]. URL <https://www.socialeurope.eu/globalisation-new-deal-on-labour-mobility> (accessed 5.22.20).
- Rodrigue, J.-P., 2020. Core-Periphery Stages of Development in a Urban System | The Geography of Transport Systems, V. ed. Routledge, New York.
- Russell, B., 1905. On denoting. Oxford Journals 14, 479–493.
- Skocpol, T., 1977. Review: Wallerstein’s World Capitalist System: A Theoretical and Historical Critique. American Journal of Sociology 82, 1075–1090.
- Spacey, J., 2017. 8 Examples of Value Creation [WWW Document]. Simplicable. URL <https://simplicable.com/new/value-creation-examples> (accessed 5.14.20).
- UMN, 2016. World Regional Geography: People, Places and Globalization. University of Minnesota Libraries Publishing edition.
- van Neuss, L., 2019. THE DRIVERS OF STRUCTURAL CHANGE: THE DRIVERS OF STRUCTURAL CHANGE. Journal of Economic Surveys 33, 309–349. <https://doi.org/10.1111/joes.12266>
- Walker, R., Storper, M., 1991. The Capitalist Imperative.
- Wallerstein, I., 1974. Modern World-System I. Capitalist Agriculture and the Origins of the European World-Economy in the Sixteenth Century,. University of California Press.
- Wittgenstein, L., 1953. PHILOSOPHICAL INVESTIGATIONS, 1958th ed. Blackwell.

Annex

The new Multiannual Financial Framework 2021-2027: A Modern Budget for a Union that Protects, Empowers and Defends:³

I. SINGLE MARKET, INNOVATION & DIGITAL

1 Research & Innovation

- Horizon Europe
- Euratom Research & Training Programme
- International Thermonuclear Experimental Reactor (ITER)

2 European Strategic Investments

- InvestEU Fund
- Connecting Europe Facility
- Digital Europe Programme (including Cybersecurity)

3 Single Market

- Single Market Programme (including Competitiveness and Small and Medium-Sized Enterprises - COSME, Food Safety, Statistics, Competition and Administrative Cooperation)
- EU Anti-Fraud Programme
- Cooperation in the Field of Taxation (FISCALIS)
- Cooperation in the Field of Customs (CUSTOMS)

4 Space

- European Space Programme

II. COHESION & VALUES

5 Regional Development & Cohesion

- European Regional Development Fund
- Cohesion Fund
- Support to the Turkish-Cypriot Community

6 Economic & Monetary Union

- Reform Support Programme including the Reform Delivery Tool and the Convergence Facility

³ Source: European Commission, 2018. A Modern Budget for a union that Protects, Empowers and Defends. The Multiannual Financial Framework for 2021 - 202., {SWD(2018) 171 final}, Document no. 52018DC0321

- Protection of the Euro Against Counterfeiting
- 7 Investing in People, Social Cohesion & Values
- European Social Fund + (including Integration of Migrants and Health)
 - Erasmus+
 - European Solidarity Corps
 - Justice, Rights & Values
 - Creative Europe (including MEDIA)

III. NATURAL RESOURCES & ENVIRONMENT

- 8 Agriculture & Maritime Policy
- European Agricultural Guarantee Fund
 - European Agricultural Fund for Rural Development
 - European Maritime & Fisheries Fund
- 9 Environment & Climate Action
- Programme for Environment & Climate Action (LIFE)

IV. MIGRATION & BORDER MANAGEMENT

- 10 Migration
- Asylum & Migration Fund
- 11 Border Management
- Integrated Border Management Fund

V. SECURITY & DEFENCE

- 12 Security
- Internal Security Fund
 - Nuclear Decommissioning (Lithuania)
 - Nuclear Safety and Decommissioning (including for Bulgaria and Slovakia)
- 13 Defence
- European Defence Fund
 - Connecting Europe Facility – Military Mobility
- 14 Crisis Response
- Union Civil Protection Mechanism (rescEU)

VI. NEIGHBOURHOOD & THE WORLD

- 15 External Action*⁴
- Neighbourhood, Development and International Cooperation Instrument (including external aspects of migration)
 - Humanitarian Aid
 - Common Foreign & Security Policy
 - Overseas Countries & Territories (including Greenland)
- 16 Pre-Accession Assistance
- Pre-Accession Assistance

VII. EUROPEAN PUBLIC ADMINISTRATION

- 17 European Public Administration
- Administrative Expenditure, Pensions and European Schools

INSTRUMENTS OUTSIDE THE MFF CEILINGS

- Emergency Aid Reserve
- EU Solidarity Fund
- European Globalisation Adjustment Fund
- Flexibility Instrument
- European Investment Stabilisation Function

⁴The European Peace Facility is an off-budget fund outside the Financial Framework