

Governing structural changes and sustainability through (new) institutions and organizations

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“The important thing for Government is not to do things which individuals are doing already, and to do them a little better or a little worse; but to do those things which at present are not done at all.” John M. Keynes (1926)

The Special Issue collects articles on the structural change with the potential danger of a new age of capitalism shaped by several and different topics like financialization and robotization, along with jobless growth and low productivity growth, in the service sector, and the need to integrate sustainability issues at the supply and demand levels. This issue investigates which institutions and type of governance would be able to govern these changes, risks and opportunities that are reshaping ways of doing things. Our goal also to create some cross-fertilization of diverse schools of thought combining innovation, path dependency, trajectories, demand issues, and post Keynesian insights. Some early works have paved the way for this synthesis (Dosi et al, 2010, 2019). In this roadmap, some scholars ask for a new European industrial policy where the nature of structural challenges are addressed with a focus on the content of instruments (Mazzucato et al., 2015).

Before to go further, we need some clarification about the way we define structural changes and sustainability. Structural change may be defined as the continuous introduction of new products and new production technologies with energy efficiency and de-materialisation (Ayres and van der Bergh, 2005: 116). In addition, we are also observing not a single structural change but diverse sources of structural changes in various domains such as consumption, technologies, production techniques and inputs and show aspects of structural change at macro and meso levels (Ciarli and Savona, 2018 ; Savona and Ciarli, 2019). In thier recent survey, Savona and Ciarli (2019) review diverse aspects of structural change that have a direct impact on environmetnal sustainability, supply and demand side. These dimensions imply fourth dimensions that are : 1) a focus on sectoral composition of the economy with a move from manufacturing to services called the tertiarisation; 2) the international division of labour and the impact on countries of changes in Global Values Chains (GVCs) ; 3) technical change with possible ecological innovations and opportunities for cleaner products and services; 4) demand changes affecting consumption patterns and preferences (Savona and Ciarli, 2019: 247). In relation to these diverse components of structural changes, these authors emphasis the interrelated area of these dynamics such as a change in GCVs that impact the division of labour and has huge impact on the emissions of energy intensity and the enviromental burden linked to global trade. We may also add to these fourth dimensions the impact of technological breakthroughs notably

with the digital transformation of the industry called Industry 4.0 (Cézanne et al., 2020) and its impact on the international division of labour and employment both within Europe and between Europe and the rest of the world (Dachs et al., 2019; Szalavetz, 2019). Finally the long term trend of the financialization of the economy that has accelerated structural change and their outcomes on various economies is the last dimension that should be scrutinized to have a global view on these dynamics.

Indeed, over the last three decades, many advanced economies have experienced significant changes in their productive structures, with a decline in the share of workers in manufacture and a transition towards the service sector (Kander, 2005). This idea is obviously not new and dates back at least to Baumol and Bowen (1965), Kaldor (1966) and Baumol (1967). It is easily summarized as follows: “a *transfer of resources from manufacturing to services may provide a structural change burden*” (Szirmai and Verspagen, 2015: 47). In recent years, the speed of technological progress increased vigorously, and many scholars started to speak in terms of robotization and danger of a jobless growth. Simultaneously, financialization emerged as a phenomenon which creates strong dependencies, in advanced economies, from the financial sector. According to critical political economists, financialization may have negative impact on labor productivity, because financial managers and financial corporations are more interested in maximizing their bonuses, shareholders’ dividends and financial compensation rather than in embarking on strategies oriented towards productive investments (Lazonick and O’Sullivan, 2000; Palley, 2012; Lavoie, 2014). In this context, assets are wasted in financial speculation and short-term strategies rather than being used for real investment expansions, innovation, job creation and labor productivity gains. Moreover, labor markets became more flexible, and jobs often unprotected, with the danger for “*the integrity of employment and social protection regimes*”, and more in general for the European and other advanced economic systems of industrial relations (Prosser, 2014: 359), mainly due to the looming threat of job relocations, the weakening of labor bargaining power and trade unions, in the context of globalization, vis-a-vis capital.

The aim of this special issue is clearly to show these issues in diverse countries according to their initial specialization, their path dependency and institutions. Structural changes do not have the same impact and outcomes for Eastern or Western countries in Europe as they experienced distinct co-evolution of technology and institution that shaped the contours and limits of these dynamics. Welfare models, and the institutions at the basis of the varieties of capitalism and of welfare policy may affect these processes. For instance, some European continental countries, have avoided, to a large extent, the pre-mature de-industrialization and have continued to invest in manufacturing and in capital intensive sectors rather than in services and finance. Scandinavian countries, have managed to drive the transition towards a service sector dominated by public administration employment and social services of higher quality and standards, resulting in benefits in terms of productivity and wages.

Other countries have experienced both de-industrialization and financialization, along with robotization, but also ecological transition. Finally, other countries embarked a transition towards low skilled manufacture sectors, or low skilled sub-sectors in the service with low productivity gains and low wages and experiment various ways to integrate (or not) environmental in their productive systems. This variation, which is not even exhausting the different possibilities of transitions, offer opportunities of analysis, of studies, comparisons and of empirical reflections, as well as theoretical formulations beyond the current state of the art and the mainstream approaches.

Finally, climate change and sustainability constraints create burdens for the manufacture sector, which is considered more polluting than others. In this context, rules, institutions and governance are needed more than ever, to create the right incentives and the appropriate coordination among agents for embarking a sustainable path of development and have decent jobs. Sustainability, however, needs to be understood not only in terms of environmental sustainability. It should encompass also social sustainability, avoiding inequality and poverty as well as macroeconomic sustainability (or stability) avoiding boom and bust and financial euphoria and panics. About consumption, neoclassical economic models still dominate research on sustainable consumption, representing consumers as substantively rational individuals that make deliberate and autonomous decisions to maximize their individual utility based on stable and exogenous preferences and perfect information. However, a vast, but scattered, interdisciplinary literature -including sociology, behavioral economics, evolutionary economics, psychology and anthropology -provide many new insights for explaining sustainable behavior and structural changes needed in this field (Axsen and Kurani, 2012; Cordes and Schwesinger, 2014; Babutsidze and Chai, 2018). Indeed, changing consumption is as much dependent on the economic values of different consumers groups as on the capability of certain groups to convey new values and to co-opt new consumers, suggesting a potential place for learning sustainable consumption which may have an impact both at macro and micro levels (Witt, 2017). The evolution of demand and consumption, analyzed already by Veblen, was further developed more recently, for instance based on work by U. Witt and others (e.g., Witt 2003, 2008; Lazaric et al. this volume). An evolutionary economics of consumption and demand scrutinizes preferences and values, which is symptomatic of evolutionary research responding to contemporary problems (e.g., Buensdorf and Cordes, 2008; Cordes and Schwesinger, 2014; Cordes, 2019). This includes research within interdisciplinary so-called naturalistic perspectives, for instance on learning and transmission processes of new behavior, such as in consumption qualified as “green”. Work along these lines also makes evident the pertinence of environmental questions, which may become the new battle horse of evolutionary-institutional approaches as much as innovation and consumption, all in both research and policy (e.g., Maréchal and Lazaric 2010; Brouillat and Oltra 2012). With respect to innovation, the long-standing lack of a critical stance towards innovation, failures to link innovation to social

inclusiveness and ecological sustainability, and the reluctance to think about innovation in terms of governance should be taken more seriously and reflects one direction for shaping these structural changes (e.g., Metcalfe et al., 2005, Gifford and McKelvey, 2019; Savona and Tommaso, 2019).

In this special issue, papers discuss sources of these structural changes with three axes.

The first axis explored the discussion around the complementarity between Keynes and Schumpeter. Pariboni and Tridico's article explores the famous Baumol's disease and the productivity slowdown in capital accumulation. Following Sylos Labini's insights, they show with a panel data of 25 European countries, that the increase part of services and the transfer of resources from manufacturing to services may provide a structural change burden with little room for productivity gains and labor productivity. This process of change affects both structures and international division of labor. If the schumpeterian dynamics is important for generating innovation, for accelerating growth and productivity path, fiscal policies and stimuli to demand are necessary. In short the keynesian engine is a natural engine to the schumpeterian dynamics and may correct some negative externalities of these structural changes linked to the creative destruction.

In the same vein, Saviotti et al's article (this volume) shows the nature and the complexity of this structural change. Structural change may be a mechanism of growth that enables continuation of growth in the long run with the hypothesis of increasing return (Young, 1928). In this case structural change depends on the efficiency and creativity trade off. Efficiency operates on all existing processes and reduces the amount of outputs to produce a qualitative constant of output. Creativity generates new goods and services that change the economic structure of the system. Both efficiency and creativity are required to drive change in the structure of the economic systems. The nature of these changes will depend on the combination of two scenarios (low quality -with only an inter sectorial diversification- and high quality with an inter and intra sectorial diversification-).

With a focus on the nature and the content of sustainable consumption, Lazaric et al., explore the main determinants of sustainable consumption in France. Their empirical findings illustrate at meso and microlevel how to define sustainable consumption and to build some indicators. Based on a cluster methodology from the "highest" to "lower" level of sustainable consumption, they show the diffusion of environmental values and social influences among consumers. While their result show significant amount of inequalities towards sustainable consumption (according age, gender issues, income and localization), empirical findings illustrate also how sustainable consumption is learnt through a process of peer's pressure producing local interactions and opportunities to learn with those around you and who matter (friends, family, colleagues). In others words the weight of small networks has a huge impact on sustainable consumption and reinforces pre-existing path and prior green preferences. This local path dependency and local interactions show also the difficulty to changes consumption

pattern and the need of policy makers to act in this direction to correct inequalities in consumption and to include inclusiveness for providing an equal access to citizens to learn about sustainability while providing an access to green products and practices.

The second axis of papers discuss the impact of financialization and its change. Imami et al's paper (this volume) show more precisely after the collapse of the socialist system, a change in the informal systems of finances. These informal systems such as rotating saving and credit schema have been diffused have been very important in many countries and socialist countries stimulated by a lack of access to loans. In the absence of private banks and with restriction on loans by state Banks, this informal finance became a useful instrument for meeting different households needs during socialism period and in context of centralized State where any deviation to legal and ideological frame would be punished. During the post socialist and the transition period, these tools decrease with the emergence of an increase mobility of people, job insecurity, and an increased level of distrust among citizens generating a new form of reluctance towards these ancient monetary tools.

In the different direction, Perillo and Battiston (this volume) explain the dramatic accelerator of the finance growth in Western countries. This financialization of the economy has two sources: 1) the provision of credit and financial services to the economy and to households; 2) the striking growth in assets management activities and profits. They explain why the common view that financialization was good for the economy and economic growth has changed after the 2007-2008 crisis and the post recession with rising of inequalities as an important structural change, also raised by Jacobs and Mazzucato (2016). In this context, their empirical analysis show the implication of an unconventional financial tool :the QE (quantitative easing) implemented by the European Central Bank, with possible positive development for the economic sphere and the change in the bank's borrowing behaviour. They scrutinize the impact of this new tool for creating additional resources to the real economy and implications in terms of financialization (intra financial exposure and among financial actors).

The third axis of this special issue explores impacts of these structural changes according from diverse clusters of countries. Deleidi et al., (this volume) illustrate these trends with nine selected countries from the period of 1970-2015. Their results show that the stagnation of the labor productivity is explained by a small increase within sector and structural change towards service sectors and show the tertiarization 's trend. They assess the weight of structural change within sector and across sectors affecting the weight of the overall productivity dynamics. Testing the impact of demand factor on the within productivity growth with use the Kaldor Verdoorn law, they assess the small role of the tertiarization in the recent period (1999-2015), and the role of demand growth for determining productivity dynamics in manufacturing and private sector of the economy. The poor dynamics of demand after the 2008 crisis has contributed to productivity stagnation especially in large economies and countries with larger manufacturing sector.

Gräber et al. article worth to be noticed here. This paper that received the EAEPE Kapp Prize in 2020 for its originality and quality of its empirical findings, harmoniously combines post keynesian insights with the notion of path dependency to illustrate diversity and distinct ways among countries to respond to the openness shock imposed by the European integration. Four clusters have been identified: core, periphery, catchup countries in Eastern Europe and financial hubs countries. They demonstrate the uneven distribution of technological capabilities for understanding the core periphery duality and show, more generally, the relationship between positive change and product complexity and the importance of accumulating technological capabilities. Given the fact that the accumulation of these capabilities is a path dependent process, with the absence of policy intervention these trajectories are self reinforcing across time. A policy response will be to support more convergence within Europe through institutions to rebalance the position of leaders with the position of laggards. This could be done with institutions more inclusive contributing to increase convergence of living standard in the Union.

Finally Pusch's paper (this volume) scrutinizes the impact of the minimum wage in Germany and observes two groups of firms a group A affected by the minimum wage and a group B with all firms that pay wages above the minimum wage level. Their results show a very low overall employment loss in sector A, a small shift from low wage industries to higher wage industries (from sector A to sector B) and more generally the minimum wage is most likely to be negligible and provide no contractionary monetary reactions. The introduction of a binding minimum wage which has caused a small shift from sector A to sector B has created an overall drop of 0, 1 % of jobs and a drop of a number of "mini job"s and produced a new area for a re-regulation of industrial relations in Germany in favour of supporting demand.

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