Financial and Technological Centralization: A Tentative Interpretation through *Régulation*

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Abstract

Centralisation is a relevant economic phenomenon that is receiving little attention in political economy. This concept points at allocative decision-making in an economic system. The economic and financial concentration of the last thirty years as well as technological change have progressively let everybody depend on less and less decision centres. We may single out three dimensions of centralisation: the increased size of the relevant corporations and their dependence on a few financial players - the Hilferding problem; the diffusion of technologies that produce interaction environments in which an increasing part of economic evaluations and transactions take place (platform capitalism); the diminishing relevance of national political jurisdictions as concerns the decisions on how to legally and institutionally frame the economic space in favour of a few political centres (the USA, China...). The consequence is that the ability of economic and democratic self-determination is progressively reduced. Moreover, social control is increased, but not in favour of democratic governments. The aim of the paper is to explore to what extent the study of comparative capitalism and, in particular, the theory of Réqualtion can understand this phenomenon. The loss of self-containment of capitalistic systems makes the study more complex.

Key words: Financial centralisation; Technological centralisation; Social control; Theory of *Régulation*.

JEL: B00; F23; F36; L12; O33

1. The changing landscape of comparative capitalism

In the last twenty years, the study of different forms of capitalism has seen a certain success, particularly in peripheral regions. Comparative capitalism highlights different institutional arrangements to understand the connection between institutions and growth as well as the reasons of crisis. After the redefinition of the models of capitalism, with new typologies and groupings performed by Bruno Amable (2003), we have assisted to an enlargement of perspective and a proliferation of applications to specific contexts. These studies have been sometimes hybridised by complementary views as centre-periphery relationships1 or Post-Keynesian macroeconomics (Baccaro and Pontusson, 2022; Mertens et al., 2022). It has been used to study the different trajectories of European capitalisms (Jackson and Deeg, 2012; Markantonatou, 2012; Johnston and Regan 2017) or reactions to the difficulties posed by the single currency (Gambarotto et al. 2019). This approach has been applied to explain the 2012 crisis and the difficulties of the South-European model or the South-East-European region (Gambarotto, Solari, 2015; Perez and Mastraganis, 2017; Clift and McDaniel, 2021). The confrontation between France and Germany has progressively lost interest and, in general, these two economies have been united in the so-called Contiental capitalism.

In the meanwhile, economic integration in the EU and financial globalisation have modified the economic landscape. Today, the interest on how institutions embed national markets has relatively lost relevance and the focus has shifted to "the international dependence and interdependence of national institutional configurations embedded in global markets" (Streek, 2010: 67). In fact, markets are "expanding faster than the institutions by which they are supposed to be regulated" (Streek, 2010: 67). As a consequence, among institutional forms, international relations have become progressively more relevant compared to labour market institutions that represented the central factor up to the 1990s.

As concerns the approach "Variety of Capitalism", the focus on coordinated and competitive markets has lost relevance even among those who proposed this distinction. David Soskice (2022) goes beyond variety of capitalism, looking at a single form of global capitalism based on technological innovation and the accumulation of contextual knowledge. Also the *Régulation* approach entered some difficulty in the new century, as the notion of growth regime adopted for Fordist regimes vanished and there was much uncertainty to define the new regime. In a first moment financialisation appeared as the new engine of growth (Boyer, 2000). The financial crisis of 2000 and 2007-08 have produced some remarkable change in the behaviour of central banks that is leaving us with institutional configurations progressively more difficult to represent. More recently, new technologies and platforms are becoming a more interesting aspect, but this capitalism is difficult to be conjugated to the national space (Boyer, 2022).

¹ These publications include Eastern European capitalism as Nölke and Vliegenthart (2009), Pelle (2019) and Drahokoupil and Myant (2011) or Southern European capitalisms as Gambarotto et al. (2015; 2019; 2020).

The strength of the *Régulation* framework is that it includes a variety of economic variables and connects the economic dimension to the socio-political environment, endogenising the state. Moreover, it is an open kit that can be modified and integrated progressively. On the other hand, since a clear new *growth model* is not easily recognizable, the identification of actual trends is very uncertain. It is difficult to make sense of facts in times of dissolving boundaries, even with a well structured framework. We have entered a time of complexity as no theoretical reduction is giving satisfactory results in terms of meaning at this level (Delorme, 2010; 2022).

A fundamental cause of this complexity is that the *national methodology* to frame capitalism has partially lost ground. Statistics and other scientific materials are nationally embedded, but economic processes are not. Economic organisation and technology are more and more globally defined. Consequently, the risk is remaining trapped in a kind of scientific conventionalism. The state is relatively weak, particularly in the EU, in the sense that it has competitors and has little grasp on some crucial processes. Moreover, geopolitical instability with coercive acts from US and other large players tend to constitute a meta-order that polarises the economic space. The notion of bricolage (Mittelman, 2013) has been defined to describe the plurality of orders that is replacing the national state.

Robert Boyer (2015: 91) has argued that accumulation outflows the mode of regulation. Having lost the boundaries, some economic processes tend to be part of intensive accumulation centred in other regions, but whole sectors remain extensive. Moreover, the same system can take profit from labour regimes of other economies. Finally, a plurality of differently structured *peripheral models* are proliferating (Boyer, 2015: 208).

Centralisation is a relevant concept able to describe at least some part of economic phenomena taking place in contemporary economies. It is an issue partially known thanks to the studies of Hilferding and Hayek as well as Röpke and Schumpeter. Even if the insights proposed by these scholars have been relevant, this aspect of the political economy had a negligible real impact on the mainstream. The concept of centralisation points at the architecture of allocative decision-making and takes an economic system as a reference. We may single out at least three dimensions of actual centralisation:

- 1. The increased size of the relevant corporations, controlled by a few financial players the Hilferding problem;
- 2. The diffusion of *centralised technologies* that produce interaction environments in which an increasing part of evaluations and transactions takes place (platform capitalism, Boyer, 2022);
- 3. The decreasing relevance of national political jurisdictions as concerns the political decisions on how to legally and institutionally frame the economic space in favour of a few political centres (the USA, China...) or of local or sectorial authorities, which leads to *Policentricity*.

The evidence is that financial concentration of the last thirty years as well as technological change have progressively let everybody depend on progressively fewer economic decision centres. As a consequence, the ability of economic and democratic self-determination is progressively reduced. Moreover, social control is increased, but not in favour of democratic governments. The aim of the paper is to explore to what extent the theory of *Régualtion* can understand this phenomenon. It will try to point out what are the consequences of the loss of self-containment of capitalistic systems in favour of a polycentric regulation. Finally, what are the theoretical consequences that such change induce to the theoretical framework in terms of both: a) what is to be understood; b) by which theoretical tools; c) what is the impact on the different models of capitalism.

2. The centralisation of economic processes

A fundamental theme of political economy, from the work of Marx to the middle of the Twentieth century, is the consequences of the concentration of economic activities. On the one hand, the increased size of firms assures lower costs of production, on the other hand, it reduces competition or, in any case, concentrates economic power. We may divide these debates in a structural approach and an informational-decision-making perspective. The study of economic power is also relevant and will be discussed later.² The former point focusses on the concentration of industry and consequently of capital property; the second looks at how and by whom are allocation decisions taken and considers the organisation of information flows. The two views are related, but not necessarily delivering the same results. Capital property is related to company's control, but when we look at decision-making, the allocation of resources is performed by managers. Property and control became less tightly connected with managerialism, although capital remains influential on major strategies. In any case, the fragmentation and diversity of property expressed in a plurality of companies surely represents a decentralised architecture of decision making.

The textbook model of the market economy is based on the hypothesis of an extremely fragmented structure and a decentralisation of decisions regarding resource allocation. Real markets have a different shape. Marx (1867a; b) in the first and third book of the *Capital* discussed the tendency towards the concentration of production due to growing organisations exploiting economies of scale. Moreover, other factors within the capitalistic system helped the concentration of productive organisations: the leverage opportunities given by the joint stock companies (allowing minority control and groups of firms) and the development of the credit system that helped growth strategies. Finally, the competitive process produces a selection of firms and the acquisition of their capital by the largest. The consequence is both a market concentration in the direction of monopoly and the

² This issue has a long history. However, as concerns contemporary economics, probably Böhm Bawerk (1914) started a debate that has been developed by Ordoliberal jurists (who relevantly shaped the analytic criteria used by European anti-trust) and buried by the Chicago School.

leveraged control of productive capital by a few capitalists holding the majority control of companies (Brancaccio et al., 2015).

Marx analysed the role of the credit system and the stock market in the concentration of capital, but the full development of this aspect wad proposed by Hilferding (1910). He noted that the development of banking and finance tended to favour the concentration of capital and the set-up of cartels to keep profits high and stabilize the economy. On the one hand, the development of stock companies allowed the formation of groups, allowing the control of resources by a minority of subjects as well as favouring a better planning of production. On the other hand, mixed banks tended to help the development of financial conglomerates and any sort of agreement to control competition in a way to reduce risks. Hilferding's view underlines the role of credit to anticipate the liquidity needed by enterprises for investments as well as for standard operations. In this way, he stresses that power resides in the control of *money capital* rather than in the ownership of production assets. In chapter ten, Hilferding (1910) argues that the nature of finance is at odds with that normally attributed to capitalism because it requires organisation and control and not "anarchy". The creation and control of money is therefore the central aspect of the economy.

In this perspective, the allocation of resources becomes more and more influenced by a narrow number of decision units, centralising decision-making (a good description of the German economy of the times). In the landscape depicted by Hilferding the centralisation of decision-making is more elevated than the simple concentration of capital property. He also emphasised the increasing organisation of the information and decision-making process of the economic system. Hilferding (1910) argued that a few financial firms are at the apex of the organised capitalism, ultimately controlling the flows of resources through the allocation of capitals. The state in this picture plays an important role supporting private capital. In this way, the fundamental message of Hilferding that is interesting here is that even a capitalistic system can suffer from a high degree of planning.

Even if Hayek had a completely different political-economic view, he shared with Hilferding the interest in the cognitive dimension of economic processes, but displaced the attention to the efficacy of planning. Hayek (1937; 1945), similarly to Menger (1871), admits that entrepreneurs are planners with a limted knowledge. He studied how economic actors with imperfect and limited knowledge predict the future of the specific part of the economy of their interest. Their interaction in the market makes decentralised and imperfect knowledge progressively evolve in a way that prices converge on costs.⁴ He analysed the "problem of the Division of Knowledge which is quite analogous to, and at least as important as, the problem of the division of labour" (Hayek, 1937: 49). The decentralised market make dispersed knowledge obtain results that cannot be achieved by a single planner. "We need

³ In Hilferding's view the credit system is responsible of most of the elasticity of liquidity.

 $^{^4}$ In this model, the same process of individual decision-making produces the information needed by other subjects in a process of mutual interdependence.

decentralization because only thus can we ensure that the knowledge of the particular circumstances of time and place will be promptly used" (Hayek, 1945: 524). The central planner would require a complete and good knowledge of every detail of economic processes to do the job of the market. Therefore, concentrating decision-making does not help reaching some (relative) equilibrium. In this way, a concentration of decision responsibilities was seen as a source of instability and not as a factor stabilising the economy as in Hilferding's view.

Röpke's view was different from Hayek as he feared the consequences of centralisation on social integration. He affirmed that we can expect huge social costs from centralisation of economic activities. These are not only due to information problems but mainly to the displacement of the natural decentralised decision-making synergy with social variables (Röpke 1944, p. 174). He feared technologies leading to centralisation as adverse to what he called the "restoration of property" (Resico and Solari, 2018).

The normative and positive elements in the theories of these two scholars are symmetrical. Hayek had fundamentally in mind the danger of socialism and central planning. He considered cartels a negative phenomenon, but did not study the actual process of market concentration as Hilferding did. The latter warned against concentration, but was socialist and considered democratic planning possible and desirable.

The tendency towards concentration re-emerged in Schumpeter's *Capitalism, Socialism and Democracy* (1950), which discussed Marx's arguments in detail. His argument is that market concentration is inevitable due to large fixed costs of investments in research and development. Actually, the central point is about the higher efficacy of bureaucratised processes of innovation. The consequence is a kind of socialism in which most of employees are extremely specialised members of large organisations and a few companies control the economy. Contrary to Hayek, knowledge is efficiently produced and used by private planners: it would be absurd to prevent concentration.

A different perspective on organisation and knowledge has been supplied by John Galbraith in the New Industrial State (1967), where he admitted that the true enemy of the market is the engineer. Again, the market is an uncertain environment and companies try to plan demand. Accordingly, he contrasted the pretended spontaneity and casual development of demand and the actual need of large companies of planning consumer choices to stabilise production activities. He described marketing activities as deliberately oriented to shape the knowledge of consumers, acknowledging the importance of the knowledge dimension and the urgency to control it. In this way, similarly to Hilferding and Schumpeter he ascertained the tendency towards large production units and their interest in planning. However, he also underlined the difficulties of planning when demand is free to express its preferences. Therefore, large companies cannot afford free consumer choice or democratic government policies. Power has to shift towards private planners, in a way to control individual preferences, or to *encapsulate* people in ceremonial institutions favourable to planners (Waller, 1987; Rangone et al., 2022).

In conclusion, from the theoretical point of view, it is not clear how much efficient is centralised planning of large corporations. Surely, it endangers individual freedom. This argument goes beyond the issue of multinational corporations. Nonetheless, it is clear that this trend constitutes a form of private planning and that large companies do it and that their effect is pervasive.

3. Present trends and dangers: private planning

Mergers and Acquisitions are increasingly connecting economies. The rise of liquidity and low interest rates have accelerated this process. Crisis of various nature also push mergers, just for the reasons explained by Hilferding: rise concentration, reduce competition to keep prices high (Brancaccio et al. 2015).

It is difficult to test the hypothesis of concentration and even more difficult to display some strong empirical evidence of processes of centralisation of allocative decision centres. A few scholars have attempted to empirically test these phenomena. Brancaccio et al. (2018) have measured the concentration of shareholding in a few hands looking at the network of control filtered by minimum shareholding thresholds.⁵ They found that the network control of major companies is highly concentrated in the world. The fraction of top actors holding cumulatively the 80% of the economic value of the firms considered in their sample is below 2% (Brancaccio et al., 2018: 103). As a consequence, they have mapped the verticalised network of companies control, which is increasing its centrality in recent times. They describe it as a concentration of the Marxian kind, but, looking at the names of the apex of this network of control, we discover that the central actors are the major US investment banks and investment funds (and a few other banks). Therefore, the situation has some affinity to that described by Hilferding (1910), who considered finance as the central actor in the decision structure of the economy. On the other hand, it also confirms that the real control of economic processes is in the hands of money managers (Minsky, 1996) and that managers are the real holders of decision making while the capitalist is more and more an anonymous figure (Duménil, Lévy, 2018).

Financial liberalisation has not only produced a finance-led growth regime, but had an impact on the geography of control. Obviously, this form of centralisation concerns strategic decisions of firms and not each and every economic decision. Financial actors leave much autonomy to companies to choose the way of producing profits and national institutions remain relevant. Nonetheless, it puts pressure in specific directions as concerns the way of structuring companies and their relationships with stakeholders. This makes a number of strategies less feasible. We may think of *family capitalism*, which is severely limited by the standards of international financial rules. IAS-IFRS have an impact on the evaluation of assets and public offering rules in case of take-overs makes it difficult to control undercapitalised groups. Moreover, the fact that relevant investors in stock

⁵ See also Vitali et al. (2011) for a similar study.

companies are large investment banks or investment funds produces a certain ordering effect that changes the shape of local finance's habits.

The relevant fact here is that this kind of centralisation is a cross-border process. The apical financial companies are expression of a few specific regions and well embedded in the liberal-market kind of capitalism. This situation constitutes an ordering factor that is not endogenous to the single country-capitalism. Consequently, besides the standard regulation effect of institutions within the specific capitalism, we have another dimension of regulation that may be seen as transnational or having a source above national economies. Considered that the controlled firms are the largest and most important in the specific economy, we may define an apical and an underwood regulation. This may be seen as a certain "loss of control" of national regulation on large firms, or as a kind of nested regulation. This is a different problem compared to that underlined in standard studies on multi-national firms and their foot-loose multiple strategies that actually perform a kind of "rules shopping" between different economic systems. It is not an issue of company emancipation from local institutions, but the birth of a Western nested regulation mode. Financial globalisation has in this way produced a kind of empire, a meta ordering of the system. Finally, the emperor is not the US government, but the dominant financial companies that control relevant economic activities and influence national regulations: dominant private planners. Hayek meets Hilferding.

4. Platform capitalism as technological centralisation

The phenomenon of centralisation is more evident in the field of new technologies. While, as concerns production and consumption, mechanics and electronics are spatially defined, web platforms are vaguely tied to geography. Informatics and the web are some naturally centralised technologies in which one centre determines what and how can be done. Moreover, interactions performed in these platforms are difficult to be related to a specific jurisdiction, even if the legislation has attempted to develop some convention (to collect a minimum amount of taxes). Platforms may fully operate on the web or supply mixed web and traditional services (e.g. delivery). Independently from where they are legally or physically based, these companies are global or, better, performing in the space in which the web is reachable.

Internet platforms are the result of high investments and predominant fixed costs. Most of the services they provide is for free or very cheap. In a certain sense, they provide public goods mostly for free. Income usually comes from indirect sources as advertising or database selling. They are not limited to specific traditional sectors and they are always in search of new ways of stimulating the interest of users. That induces a strong dynamics in terms of merging new start-ups to develop the business. Technological centralisation is not

⁶ In the case of PCs with Linux operating system some decentralisation exists. But as concerns computers and the web, we are simple passive users or content fillers.

caused by huge fixed costs, but by the intrinsic architecture of centralised knowledge and control that shapes these public spaces.

Social interaction in concrete space is waning and more and more it moves to the web. Economic interactions are also increasingly taking place on the internet as concerns all economic phases: production, exchange and consumption. All that is possible thanks to centralised platforms that have the nature of public infrastructures. These public goods are in part produced by platform providers, in part are produced by the same users in the form of privately supplied public goods. These are often byproducts of their consumption activities (e.g. watching and commenting), seldom the intentional production of a public good (as building a specialised website or writing pages in Wikipedia).

Platforms have the advantage of reaching a large number of people. Consequently, they allow a huge amount of information exchange and that helps developing knowledge. Therefore they share with markets the advantages of converging interests of different actors in one (virtual) place. That allows communicating efficiently and the emersion of relatively stable knowledge. In this way, platforms represent a rapidly evolving, rich and relatively reliable source of information for everybody outperforming traditional sources as TV and newspapers. The consequence is that platforms represent a space of interaction competing with traditional meeting places and, above all, traditional market places.

The other side of the coin is that the same advantage of centralisation and massive participation is reached at the expense of a dramatic simplification of the symbolic knowledge's framework. Platforms define the framework of interaction setting a few options of a clear meaning. Moreover, the knowledge produced and requested is simple and semantically single-dimensional. In the long run, that affects the symbolic universe and the framing of participants' cognitive abilities (Kallinikos, 2005). Finally, what is mostly discussed, is the fact that platform collect big data on interests, choices and histories of clients, officially to improve the service. Actually, they create value from these data and sell them to other companies, developing a certain economic power. The many political implications of this fact are only partially relevant in this context. However, these platforms produce a problem of social control because they: 1. extract relevant information from user's choices and uses it; 2. they affect the cognitive attitudes as well as the meaning systems of users. That could have some problematic consequence for individual autonomy, but it surely constitutes a form of social control alternative to that of democratic institutions.

The development of these economic activities has a driving and polarising effect on economic processes, reorienting the strategies of all companies. The activity space of these platforms can be defined as a-national and this constitutes a problem for the framework of the models of capitalism. The same Robert Boyer (2022) has highlighted this trend of platform-capitalism and has distinguished two main models (plus the failed European). The former is predominantly based (in terms of know-how) in the US, the latter is the Chinese,

⁷ There is an implication in terms of social control and loss of individual autonomy, which is important from many political economy perspectives. Here we keep on the problem of regulation.

based on panoptical social control. In the former, the state has a secondary role and the decision making resides in a few dominating companies. In the latter, the state performs a kind of (robust) tutorship on the economy and on citizens. Robert Boyer argues that "American and Chinese platforms may compete at the international level but in the national arena they are iconic examples of antagonistic conception of modernity and they display contrasted trajectories to platform economy" (Boyer, 2022: 19). Cioffi, Kenney and Zysman (2022) are sure that, after this first stage of free private power in this market, some back-tide of regulation will reshape the context, as in the double movement of Polanyi. The European Union has attempted to conceive a web as a commons and it could have established a different form of platform capitalism, but it has been swallowed-up by the former model (Boyer, 2022).

Big data analysis develops very detailed knowledge on people's habits or preferences. Large platforms can in this way achieve some valuable assets that they can exploit in relation with other companies. Such knowledge relevantly modifies market behaviour of both producers and buyers and also affects the relationship between citizens and society. Robert Boyer considers that a new repartition of power between economic actors is taking place. A few platform designers enjoy an increasingly larger share of benefits from something that in the past was a commons - the social interaction space. Platform users tend to become dependent on these services, particularly when they invested a relevant part of their social identity (Boyer, 2022: 21). Moreover, social control becomes quite precise and the interconnection of different database can well control the individual. Finally, big platforms and governments tend to establish alliances to use information in specific cases.

The contemporary political economy literature analyses this case mainly from two perspectives: the concentration and abuse of power, from a classical perspective, and the surveillance capitalism, that develops the aspects of social control (Zuboff, 2019).

5. The interaction space and technological centralisation

Social and economic interactions are the fundament of our life. They take place in a space that can be considered public or a commons: often it requires costs for its set-up or care to be preserved. In may cases technologies may limit access to the interaction space according to the need to obtain a sure and fair environment. The history of markets consists in a slow evolution of rules and institutions able to properly shape this space of interaction. Organising this space for free or minimizing costs has been the pre-requisite of the development of our economy. From the cattle-market to Zöllverein and today internet auctions, the idea has been to extend free interaction to increase efficiency of encounters and exchanges. Enlarging political boundaries by unifying institutions and reducing transportation costs has been fundamental for economic development. The technology used was simple, open the place and connect cheaply distant places to obtain a single information space.

Some markets developed open public spaces, others as clubs. This is the case of the stock exchange. Companies pay fees and have to meet some information disclosure requirement to have access to the trading place. In this way, the technology of interaction is not completely open for certification purposes. We had markets converging to one space as Dow-Jones and decentralised as NASDAQ. When the stock-exchange migrated to platforms it chose a centralised technology. The way actors interact is predefined by the architecture of the platform, which is controlled by a single actor (Pick, 2015). The latter has a potential information monopoly and publishes the specific informations needed to exchanges (not all) for free.

A further requisite of efficient markets is traders anonymity. Personality of traders is important in single deals and is used to increase trust. However, to reach a single efficient price in a market of a commodity, anonymity of actors is an important requisite to avoid price discrimination. This is particularly relevant when suppliers are in a few number.

The same happens with social interaction platform, which are open and free, but are technologically centralized and the form of interaction is pre-determined. Differently from the stock exchange, you don't pay to get in, you just have to comply to some rules. As any commons it needs financing and advertising is a partial source of income for the platform (sometimes a fee applied to transactions). The problem is that the information gathered by the platform is valuable and an important source of gains comes from the exploitation of these data. This fact is an anomaly and has some political and economic implication.

In the United States we can record some reaction to the evolution of the economy of platforms. Zephyr Teachout and Lina Khan (2014) have acknowledged that the market structure is deeply political because it is the outcome of decisions or non-decisions that are pretty political (concerns the common interest) on the way actors can use their power. Laws and institutions shape markets and broadly define the space of market interaction. That has an impact on the position of given actors and therefore influences the power of certain players. Big platforms that contribute to define our social or economic action space have a power similar to that of the state in our ordinary life. They can define the rules and can apply policy measures as well as to impose costs to clients. In a certain sense, platform have a power that is even greater than that of the large utilities.⁸

In general, the inseparability between company's economic position and political power influences individual choices limiting individual autonomy. This theme was researched by Ordoliberal scholars as Walter Eucken and Franz Böhm. They theorised the reciprocal dependence between economic and legal theory and introduced the notions of power and freedom in their reasoning about market order. All Ordoliberal scholars, particularly Grossmann-Doerth, were suspicious of the spontaneous framing of the space of interaction. They believed that the economic order left to itself would evolve in non-desirable directions, increasing monopoly power and generating all sorts of inequality,

⁸ Zephyr and Khan argue that the Bank of America or Exxon, when we use their services, rule our life in a way not so different from public institutions (Zephyr and Khan, 2014: 38).

which would badly affect freedom of economic interactions. Franz Böhm (1927-28) studied the problem of *privaten Macht*. In his view, prices as well as freedom of contract represent a kind of public good, going beyond the distinction between private and public law. Power and liberty are the result of the legal structure. For this reason, Ordoliberals supported the creation of the anti-trust authority and favoured its intervention on the core of corporate decisions to grant a power-less space of interaction.

Platforms have produced a new space of interaction, away from the natural environment, that suffers from anomy. Therefore, they concretely risk producing dangerous situations. The supporters of market anarchy hold an optimistic view of this situation, but they usually overvalue the autonomy of the individual. ⁹

The ability of some market player to produce and control the information that is used for interactions is a dangerous case. The ability of the market to produce and control information is often idealised as a commons. The knowledge of an actor is a private good and can be good or bad, leading to different results in exchanges. The information on goods, prices and the terms of negotiations is instead necessarily a public good created by interaction. Information is that and nothing more, particularly the personality and preferences of traders have to remain private. Market makers are normally caring for this public good because it determines both the fairness and the efficiency of trades. If information is not a public good, it is difficult to achieve a market clearing single price (Theissen, 2003). Nobody wants to enter trades in *ad hoc* segmented markets and price discrimination. Historically, rules and institutions develop sometimes spontaneously, sometimes as result of some authority, to allow that this interaction space achieves an informative efficiency. Such rules are a common good of interacting actors. They are frequently studied as an exclusive domain of the state. Actually, it is a commons that all participants contribute to produce and keep in good health.

Today it is clear that big trading organisations can obtain a relevant control of this space. The fact that many platforms apply controls on obscene contents highlights their precise ability to monitor and censurate information. They show an ability that is hardly achievable by the state in its normal jurisdiction. In classic markets, traders are not excluded because of their preferences. They may be excluded when they cheat or when they do not respect contracts. In platform as well as in all centralised technologies, controlling and selecting actors is a feasible and not necessarily visible action. The risk of etero-direction of preferences in social media as well as in many forms of platforms has been denounced in case of polls, but it exists in any case in many ordinary interactions. The danger is that allowing censorship for ethical purposes opens the way to a more dangerous deformation of the economic and political sphere of society.

⁹ There are many different effects of price discrimination, some of them could be useful for consumers. It may also help less wealthy people to access some good. Joseph Salerno discussed some of these benefits (Salerno, 2022).

Big platforms as Amazon, according to Lina Khan (2018: 325-334), enjoy a relevant power of gatekeeper, amplified by the power connected to the large amount of information it gathers. They represent both a digital retail market and a way consumers have to inform themselves on the available supply of products and prices. The gathering and analysis of this information has a huge value for their suppliers. Moreover, platforms enjoy the most significant self-reinforcing network externalities produced by enlarging the supply and customer number. Their informational advantage increases as their market size grows, producing some barriers to entry.

Companies use platforms to distribute their products because of the potential size of the market and the visibility they achieve (as it is used by people to inform themselves). The fact pointed by Lina Khan (2018) is that Amazon exploits its gatekeeper power to improve its negotiating power and this is a form of power. This suppliers' squeezing becomes an advantage for customers, but it produces huge profits for the platform at detriment of competitors. Amazon is accused to prevent suppliers to sell their products through other platforms. The analysis of big data on consumer behaviour and the centralisation of technology grant a huge advantage—also on the control of customers. It allows to discriminate prices. Customisation means to selectively supply information to different potential buyers, which is quite problematic in terms of the publicness of information (Fudenberg and Villas-Boas, 2005). The anonymity of standard markets, that was a pillar of liberalism, is totally cancelled.

Technological companies have proposed the idea of technological exceptionalism of platforms to justify they role in managing these commons. Yaël Eisenstat and Nils Gilman¹⁰ argue that technological companies demand to be subject to different rules compared to other private companies. But their different nature and their particular role is actually this role in managing some commons and that requires a specific more severe regulation (and not less) to protect other market users. Soskice affirms that Affirms ICT companies are unable to collude against the state (Soskice, 2022: 225), but their danger is to substitute the state in their domain.

We may conceive this tendency as a case of centralisation based on a technology allowing the control of information and knowledge - against the auspices of Hayek and according to the critical view of Galbraith. Even in absence of capital concentration and direct control of decision making, the decision space is deformed and made less fair. In this form of centralisation still US companies are dominant and Europe with its different economies represents a peripheral form of capitalism. The peculiar aspect is that European capitalisms are in this way subordinated to private companies (which are nonetheless supported by the US government).

¹⁰ Si veda Eisenstat, Yaël and Nils Gilman, "The Myth of Tech Exceptionalism", 2022, https://www.noemamag.com/the-myth-of-tech-exceptionalism/ accesso 27/2/2022.

6. The State in a polycentric power arrangement

After thirty years of financial globalisation the state, seen as institutional form, is not in good health. The sovereignty of the national state has tended to diminish in favour of other jurisdictions or other kind of powers. In part, that was due to the need to open boundaries to international finance. In any case, that makes the study more difficult. Klebaner (2022), analysing the problem of plurality of orders, has underlined "les difficultés analytiques de la place de l'État dans la régulation multiniveau".

After the crisis of 2008 we assisted to a certain return of government intervention and that had a further strong acceleration with the COVID-19 crisis. In many European countries we experimented a come-back of industrial policies and interventionism (also due to the scarce results produced by the strategy of flexibilising labour markets). Actually, the return of government intervention was somehow disordered and mostly oriented to avoid massive crisis. It was not well geared just because the state as institutional form is living a time of weaknesses due to the loss of force of the institutional compromises that hold macro-institutions together. Moreover, the main factor of weakness, financial liberalisation and the huge productive interdependence between economies has not changed relevantly. All projects of de-globalisation are still waiting a clear trend. Even the forced disconnection from Russian supplies appears as temporary. Nonetheless, US awkward activism is defining a sphere of Western countries in which the US international political force holds and affects economic choices. We have seen the US deciding the stop to "North Stream 2" and warmly suggesting the stop of Italian TAP2 (from Azerbaijan), or asking to block selling Italian technological companies to Chinese groups. In a certain sense, some steps have been made to develop a stronger Europe by the coordination of many policies and "making debts together" (which has further limited member states autonomy). On the other hand, European states find themselves subordinated to the US jurisdiction as concern energy, technology, finance, trade and defense, which is a kind of imperial centralisation of these sectors.

As a consequence, the concept that best expresses the situation of political institutions is bricolage. Mittelman has proposed this idea of Global bricolage as explosion of organisational pluralism (Mittelman, 2013). The notion of global bricolage is an application of the approach to polycentric governance normally applied to local commons. Global bricolage is understood as a mix of "disorderly processes and institutional reassemblages" (Mittelman, 2013: 34). The idea of polycentric governance emerged in the study of Vincent Ostrom (1972) who proposed this definition: "a polycentric order is one where many elements are capable of making mutual adjustments for ordering their relationships with one another within a general system of rules where each element acts with independence of other elements" (Ostrom, 1972: 57). It has been developed in specific situations of complex governance of common resources by Elianor Ostrom (2010). More recently McGinnis (2016) more generally defined a polycentric system of governance as holding (1) multiple centers of decision-making authority with overlapping jurisdictions; (2) the latter

interact through a process of mutual adjustment establishing new formal collaborations or informal commitments; (3) these interactions generate a pattern of overarching social order. In this kind of order there exist multiple and overlapping centers of decision-making each one sufficiently autonomous to be able to make collective decisions.

The state has an important role in comparative capitalism both as an ordering power and an economic actor. Before that, it is important as the boundary of a specific form of capitalism, with its own regulation mode. Presently, studying comparative capitalism and, in particular, state-economy interactions is becoming an increasingly complex matter. One of the terms in relation is becoming a plurality of orders in part overlayed, in part overlapping. It has difficulty to contain a specific regulation mode as other orders affect its growth model and the ordering institutions.

Nonetheless, an ordering perspective has to be found in such complexity (Delorme, 2011). A reasonable complexity reduction heuristics is that of a loose empire of Western countries facing other attempts to extend control to other countries by Russia and China. A sovranational order emerges in the form of a bricolage of jurisdictions and effective power relations. In the case of Europe, economic processes have effectively lost much of their selfcontainment in political jurisdictions. Panitch and Konings (2008) in American Empire and the Political Economy of Global Finance have interpreted financial globalisation as a kind of sovra-national order. The international economic control exerted by finance is producing some effective polarisation and some cultural hegemony (contested). Even if Radhika Desai affirmed that US hegemony is not reachable, after 2020 the West is shrinking and the US finance is holding strength on its close satellites. There is no political centre in this empire, rather it can be seen as a field of power with multi jurisdictional arrangements in the way of the bricolage described by Mittelman (2013). The interesting aspect is that at the imperial level, financial multinationals are the relevant source of power, while states find themselves at the subordinate level. All this makes the exact definition of what we study rather blurry and it is difficult to find relevant statistics as measures are made within states.

A further, even most promising, complexity reduction heuristics is given by the notion of dependent model of capitalism, which has particularly been studied in Eastern Europe (Nölke and Vliegenthart, 2009; Drahokoupil et al., 2011). It incorporates a limited regulation mode with different architectures that makes it depending on external sources of regulation or by other countries growth models. Actually, this problem concerns all economies with different intensity.

5. Conclusion: comparative capitalism and private planning

Comparative capitalism remains a fundamental field of research (Boyer, 2004; 2015). In the last times, States and institutional complementarities have been weakened by a variety of factors, from globalisation to internal devaluation policies (to keep the euro viable). That has the consequence to change the relative relevance of institutions in favour of

international relations, while labour market institutions become subordinate. On the other hand, two fundamental economic phenomena, labeled here as centralisation, have increased the complexity of economic order. The former is a classic phenomenon of the kind studied by Hilferding which, differently from 1910, is taking place cross-border in the Western world limiting the autonomy of single states. The latter is due to the transformation of social and economic interactions, migrating to the web. There, a strong technological centralisation is changing the shape of markets and mostly bypassing the control possibility of states. We should be aware that our future will be designed by a few private planners residing in central regions.

The consequence is that national regulation modes remain relevant, but become partial, complemented by the way the economy is integrated in international environment. Accumulation regimes tend to become defined at different levels: some underwood economy, often connected to building sectors and classic services, and more global processes of accumulation connected to multinationals and platforms. In a certain sense, all economies are becoming "dependent models" or, better, we have central structures of accumulation in some region and peripheral accumulation in other regions. Moreover, relevant economic decisions affecting a regional economy are systematically taken in other economic systems (central regions). That increases the variety of *Models of capitalism* due to the augmented possible structural combinations. Therefore, the study of comparative capitalism has to take into account more structural and institutional dimensions.

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