

GYÜRÜSI IZABELLA¹

THINKING ABOUT SYSTEMS AND INSTITUTIONS – ENGAGING WITH JÁNOS KORNAI'S SCHOLARSHIP²

In this paper I would like to provide an insight into the multiple usages of institutional economic theories for assessing economic phenomena and economic processes such as the functioning of different subsystems of the economy and economic structures. I will base my argumentation on János Kornai's lifework trying to emphasize the broad vision of systemic approach, the wide range of analysing tools provided by his theoretical thinking, and the high explanatory power of his theories.

This paper is influenced and motivated by the launch of the book: Systems, institutions and Values in East and West, which is a rather thought-provoking and influential book, based on the application and reconsideration of Kornai's theories with regard to the actual economic processes.

INTRODUCTION

I will start my discussion with a rather personal impression on Kornai's influential, extensive lifework. It is a great honour to be able to consider myself one of the scholars of János Kornai. I had the opportunity to read Kornai's books as a student and it is also an honour to be able to teach and explain Kornai's views as a teacher in the framework of various subjects at Corvinus University of Budapest, and see how amazed students are by the explanatory power of Kornai's theories for actual economic phenomena, such as the explanation and understanding of the Chinese economic system.

Kornai's heterodox approach gives an explanation for numerous economic phenomena, systemic changes, transitions, disequilibria, disfunctions of institutions, efficiency problems and development patterns. As various economists emphasized at the conference celebrating the launch of the new book on Kornai's scholarship, Systems, Institutions and Values of East and West, Kornai cannot be identified as a thinker of one particular school of economic thought, and honestly this provides a huge virtue and makes his thoughts even more powerful, as he is an economist who reflects on economic processes, system particularities from a unique perspective. In his speech celebrating the launch of the book Systems, Institutions and Values of East and

¹ PhD Candidate, International Relations Multidisciplinary Doctoral School, Corvinus University of Budapest

² The present publication is the outcome of the project „From Talent to Young Researcher project aimed at activities supporting the research career model in higher education”, identifier EFOP-3.6.3-VEKOP-16-2017-00007 co-supported by the European Union, Hungary and the European Social Fund.
DOI: 10.14267/RETP2020.03.07

West, Professor László Csaba also emphasized the uniqueness of Kornai's approach and the way of analysing and making reflections on economic processes. Bernard Chavance, an other speaker at the presentation of the book, underlined the importance of Kornai's contribution to the Discipline of Comparative Economics by developing an analytical framework, the notion system paradigm.

In my paper I would like to highlight the complexity of János Kornai's thoughts mentioned before, and the timelessness of his concepts.

THE SYSTEM PARADIGM

The power of this approach, among other reasons, lies within its interdisciplinarity, and the way of looking at a state, a system as a whole, considering economic, political, and sociological features. Therefore, this is a unique angle of view, focusing on the interactions and the interference between the different spheres of functioning of society (economy, politics, culture, ideology) (Kornai, 1998)

This paradigm emphasizes the importance of institutional approach while analysing economic processes focusing rather on the institutional framework which guides the interactions between economic, political and social actors. Does this way of explanation make Kornai an institutionalist? The answer is definitely not. However, it is without a doubt that his contribution to institutional economics is remarkable and inescapable. The systemic approach, the analysis of political and economic institutions, formal and informal institutions alike, gives us a much broader perspective and a better understanding of economic processes, a better approximation for estimating the effects of policy actions and regulations. Institutions in the theory of Kornai are understood similarly to how sense how Douglas North and Svetozar Pejovich defined them. In his fundamental article, North defined institutions as "humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights). While Pejovich defines institutions "as the legal, administrative and customary arrangements for repeated human interactions." (Pejovich, 1995, p.23)

In Kornai's approach, institutions are referred to as, "the prevailing legal order in the system concerned, its moral norms and its property rights, the distribution of positions of power, the incentives of the actors in society, and the structure of information." (Kornai, 1998)

It is important to emphasize that in Kornai's system theory not only do the "quality" and the elements of the institutions matter, but also the way in which these institutions have been formulated. Whether these rules, frameworks have been developed historically, coherently with the fundamentals of the system, whether they are system-specific, or whether they are the result of other circumstances (actual political, environmental, geographical circumstances). New policies, legal frameworks can be designed and implemented, however they cannot prevail, and cannot be long-lasting and powerful while they lack institutional embeddedness, which they cannot achieve if they are not coherent with the main elements of the system, or the system itself discourages the prevalence of such rules. Systemic characteristics determine the innovation potential, the competitiveness of a country, and consequently many other economic factors. The system can be understood as a set of institutions, which stipulates the essence of political, economic and social basement of a state.

Kornai's work was fundamental in investigating the socialist system, describing and modelling its functioning and providing an analytical framework to understand the differences between the socialist and the capitalist system. His approach is much more than a methodology or an analytical tool to describe the socialist-capitalist dichotomy, it is rather an open-minded analytical, complex approach, based on some key elements (such as coordination mechanisms, property rights, production organisation schemes, market structures, budget constraint) to be studied in a system, maintaining the possibility and the probability of systemic changes, system transformations, thus considering it possible that an originally socialist system takes up capitalist elements and the capitalist system shows socialist element. Yet Kornai's approach is a dynamic approach. It makes it possible to assess the changes of consumer preferences as a function of institutional changes, changes in the economic, social and political environment. It makes it possible to understand system transformations, the characteristics of transitional economies, and the "symptoms" of the post socialist character. The notion of path-dependent development is a cornerstone of this approach, and Kornai's contribution is indispensable to understand, assess and demonstrate system-specific development.

Kornai's systemic perspective can be applied to the assessment of the effectiveness of the Eurozone institutions, and to find the reasons for the lack of efficiency in crisis. Bruno Dallago constitutes that the "Eurozone paradigm" can be considered equivalent to a system paradigm even though there are significant differences between Eurozone member states and the common values and sets of formal and informal institutions coordinating their economic, political and social interactions. The Eurozone lacks the complete system attributes, yet while member states maintain an important part of their sovereignty and formal and informal institutional specifications, they transferred an important part of their sovereignty, such as the monetary policy to the European Institutions. Due to diverse interests among member states, different economic patterns, different institutions, coordination failure emerges, moral hazard problem can be detected, therefore the Eurozone as a supranational construction leads to a suboptimal result and disequilibria.

This phenomenon can also be approximated from the theory of commons. If common economic and monetary policy, economic and monetary stability is understood as a common pool resource (CPR), it must be studied whether member states meet the following prerequisites for effective production of CPRs, according to Ostrom.

1. "Most appropriators share a common judgment that they will be harmed if they do not adopt an alternative rule.
2. Most appropriators will be affected in similar ways by the proposed rule changes.
3. Most appropriators highly value the continuation activities from this CPR; in other words, they have low discount rates.
4. Appropriators face relatively low information, transformation, and enforcement costs.
5. Most appropriators share generalized norms of reciprocity and trust that can be used as initial social capital.
6. The group appropriating from the CPR is relatively small and stable." (Ostrom, 1990, p.201)

The aim of the convergence criteria was to guarantee homogeneity to some extent and to achieve that the states adopting the common currency meet the criteria for the optimal currency area.

Nevertheless, from a macroeconomic and institutional point of view, Eurozone member states differ in many aspects. They have particular goals, fiscal policy remains a core part of national sovereignty, and they are also facing different cyclical and structural challenges. From this point of view, the Eurozone does not complete the above mentioned prerequisites for efficient common pool resources production.

“The European paradigm evolved through time. Monetary integration and the formation of the Eurozone through the Economic and Monetary Union (EMU) are the clearest and most demanding core of the paradigm.” (Dallago, 2020) The identification of the Eurozone as a paradigm is a very pioneer and interesting concept. Dallago analyses the different systemic aspects of the Eurozone, such as the level of integration, the interconnectedness and strength of its institutions and the democratic legitimacy of the European Union, specifically, the common monetary policy. As a conclusion of his analysis it can be observed that the Eurozone cannot be regarded as a “European state”. As a paradigm it is unbalanced and incomplete. Dallago also points out the democratic legitimacy problem that has emerged in recent years. There may exist opposite interests in European austerity policy and national fiscal stimulus, budgetary easing, promoted by national governments and supported by citizens. An unequal treatment of member states in applying sanctions in case of not complying with the obligations imposed by the Stability and Growth Pact might result in an even more severe democratic deficit problem.

“In the spirit of Kornai’s approach we can conclude that the European Union, and even more so the Eurozone, have too many political and administrative filters between the democratic principal, the citizens, and the common decision-making agents.” (Dallago, 2020)

In line with the remarks of Ostrom, multi-level governance patterns and the consistent application of the subsidiarity principle could further enhance democratic legitimacy and resolve information asymmetry problems, providing more decision-making capacities at different levels of governance. The more bureaucratic and hierarchical the coordination, the more difficult is to react in a quick and flexible way to external shocks and more transactional costs will emerge by managing information and coordinating the interactions among market and political actors. Overcentralisation, as Kornai stated, results in significant efficiency losses.

Incompleteness of institutions can lead to a substantial moral hazard problem and uncertainty. Transparency of democratic institutions of member states, transparency of European common policies, and common engagement for a hard budget constraint could make the Eurozone System more stable and could keep moral hazard problems under check. (Dallago, 2020)

SYSTEM-LEVEL COMPARISON: THE SOCIALIST AND THE CAPITALIST SYSTEM

One of the most influential and already (probably always) relevant chapter of Kornai’s lifework is the analysis of the socialist system. Kornai applied a unique methodology in his reflections on the different elements of the socialist system focusing on the interconnections between the different spheres of the system and assessing efficiency problems, detecting the reasons for these teething problems. Bernard Chavance in his speech held at the presentation of the book edited by Miklós Rosta and Dóra Piroška, emphasized that “a great contribution of Kornai to the system paradigm is the contrasting approach to the two great systems, that are characterized by a kind of symmetry of principal characteristics and modes of development.” (Chavance, 2020)

Kornai detected five important aspects of the socialist system which determine its character and the causality among them is unquestionable, and at the same time limits (actually to zero) the possibility to reform the system. (Kornai, 1993) The base of the socialist system is the dictatorial one-party system, the overall authority of the governing party. If the single-party system persists, the system itself cannot be reformed. Some changes might be in coordination mechanisms, and property rights, however the systemic features will not change fundamentally. From this point of view it is an interesting question whether today's Chinese system has remained a socialist system or is it capitalism, furthermore, can economic changes, several changes in property rights, and coordination mechanisms affect the polity? (Kornai, 2014)

An other core element of the socialist system is the primacy of state ownership. The elimination of private ownership eliminates natural incentives and thus it prevents market forces from working and lacks all kinds of motivation for carrying out innovations. Private property implicates that the actors are risk-taking, they are responsible for their decisions, taking the benefit after good decisions and assuming the responsibility for wrong decisions. Therefore actors are motivated to a more efficient usage of scarce resources, and they are forced to make "rational calculations". Property rights also promote innovations, as Kornai detailed in his book, *Gondolatok a kapitalizmusról*. (Kornai, 2011)

An integral part of the socialist system is bureaucratic coordination, the command-type control of the economy, and central planning. Iván Szelényi points out that Kornai "brilliantly showed that such bargaining with various levels of economic actors systematically produced shortages." (Szelényi, 2020 cites Kornai, 1980) The theory of economics of shortage has a huge explanatory power to understand how a socialist system worked, however, it is important to emphasize that the theory of economics of shortage can not only be applied to the socialist system, it has relevance for post socialist countries, (for example if we consider the healthcare system) and it can explain some phenomena of the capitalist economies as well.

Gerard Roland refers to Kornai's work as the most comprehensive theory of "actually existing socialism" in *Economics of Shortage* (1980) and *The Socialist System* (1992)." (Roland, 2020)

As Gerard Roland writes at the beginning of the chapter ("While producing his theory of the socialist economic system, Kornai's comparative approach, since *Anti-Equilibrium* (1971), has also given us a "mirror vision" of capitalism as an economic system.") Kornai's contribution to the understanding of the driving forces of capitalism, the innovation potential and also the surfacing of efficiency problems, is of crucial importance to the economic literature and specifically to comparative economics. A comparative approach (analysing the socialist and the capitalist system by the same methodology) can give a better insight into understanding both systems.

Kornai in his book, *Anti-Equilibrium*, defines socialism as Economy of Shortage and capitalism as Economy of Excess supply, proving that these features constitute a basic (core) element of the two kinds of systems. While excess demand on the market lacks market incentives for firms to become more competitive, excess supply does provide market incentives to compete in the marketplace therefore promoting innovation and generating consumer surplus.

"Kornai's theory emphasizes mostly the reproduction of surplus and shortage. Among the causes of surplus versus shortage, he identifies the dominant ownership form in society (i.e., private versus state ownership) as well as the political power structure favouring either." (Roland, 2020)

Gerard Roland formulated his views on capitalism in line with Kornai's approach and being affected by institutional theories, giving a complexity to his capitalism approach. Roland pointed

out that capital levy problem, and the role of democracy mitigating is an idea which should gain more attention. Compared to autocracies, democracies are able to solve commitment problems better, and they provide strong institutional protection. An other important remark of Gerard Roland is that from a political economic point of view capitalism needs to be inclusive to guarantee its stability. (Roland, 2020)

Péter Mihályi reflects on Kornai's thoughts about the opposition "rush economy" and harmonic growth. Kornai sees a possible way of development, the rush growth, which is unsustainable, and can only be achieved at high social costs. In a planned economy it was "normal" to impose firms to meet (unachievably high) growth rates, however this measure reinforced the principal-agent problem, reproduced shortage and the Soft Budget Constraint Syndrome emerged. Meanwhile in the case of harmonic growth, firms have more autonomy to act, prices will be the guidelines, and market forces will be able to work, therefore overall efficiency will rise. (Mihályi, 2020)

Concerns of János Kornai about a socialist system can not only be understood, but they also have relevance for today's economy. In the post-Fordian production model (when it is not common to produce to inventory) even in capitalism it is possible that excessive demand and excessive supply be present at the same time.

Kornai points out an important deficiency of the explanatory power of mainstream economics: the lack of a proper definition for market demand. That means that it is rather hard to conceptualize when one can speak about exact "realized" market demand and when it is only a potential market demand. In practice, due to imperfect information firms can only estimate (not calculate) the latter, which won't be exactly the same as the quantity consumed, therefore, market supply won't be able to cover the market demand, or there will remain unsold stock.

The 2008 economic crisis showed that budget constraints of capitalist companies are not that hard either. The possibility of a bailout encourages managers to disregard prudential concerns and it stimulates moral hazard problem leading to a macro-level efficiency problems.

THE SOFT BUDGET CONSTRAINT SYNDROME

One of the main, and most cited notions developed by Kornai, is the Soft Budget Constraint Syndrome, which is one of the main characteristics of a socialist system, and one of the main reasons for efficiency problems of state-owned companies. Nevertheless, the Soft Budget Constraint Syndrome is not only a "product of socialist systems", and it has not disappeared with the political-economic transition, furthermore, it can emerge even in capitalist systems. (Kornai, 2004)

Éva Krenyácz analyses the effect of SBC syndrome on the Hungarian healthcare system in the book, *Systems, Institutions and Values*. (Krenyácz, 2020) The soft budget constraint syndrome can be found in healthcare systems. Krenyácz cites Kornai's article with regard to the probability of applying a "flexible budget". As Kornai states: "the stronger the hospital manager's position is in relation to the hospital's superior organizations, the insurer providing the funds and the institutional owner providing the subsidy, the greater the hope of rescue. ... "The process is self-reinforcing. If many organizations expect and receive bailouts, so that they become frequent, even more will come to expect them. And with many organizations, the sequence of events starts again as before, after the bailout, in the knowledge that another rescue will be accomplished if need be." (Kornai, 2011)

As Krenyácz found in her research the SBC syndrome and the continued process of centralisation in the hospital sector influences managers' attitude to a great extent and has a

counterproductive effect on the efforts made to enhance the effectiveness. Centralisation reinforced the phenomenon of a soft budget constraint and therefore despite developing a comprehensive controlling system, hospital managers are striving to achieve economic stability while simultaneously monitoring liquidity and lobbying for bailouts, with end-of-year consolidations also moving manager attitudes in this direction. Provided that debt settlements become regular and expected, deficitary situation persists. Yet it has been proven that in the case of decentralised organisation of healthcare information asymmetry problems can be handled more efficiently and transparency can be better guaranteed. During the decentralised period, “the tools of management control (reporting by controller, coverage calculation, analyses of capacity, etc.) are preferred.” (Krányecz, 2020)

Krányecz demonstrated the overall importance of system features in the effectiveness of public services and the production of common goods, like healthcare services.

CONCLUDING REMARKS

János Kornai’ life work is the result of constant learning, scientific curiosity and reflection. Kornai in his speech at the Kornai Conference on February 22, 2018, (the last chapter of the book, *Systems, Institutions and Values*) emphasized the importance of further studying the relationship between a soft budget constraint and persisting non-Walrasian equilibria. He suggests that perceivable supply-demand disequilibrium might be explained by systemic reasons. System-level efficiency losses are detailed in his book titled *Dynamism, Rivalry, and the Surplus Economy* highlighting that shortage and surplus are present in the economy simultaneously due to production organisation schemes, market uncertainties and the existence of soft budget constraints in “capitalist” firms as well. The financial-economic crisis of 2008 and the current “Coronavirus” crisis have drawn attention to systemic disfunctions detected in capitalist systems and have shown the importance of carrying out further research to explain firms’ decisions, manager behaviour, and to assess the overall quality of market institutions. Kornai highlighted that commonly used economic expressions like demand needs to be redefined and explained, the Walrasian exchange should also be analysed from an institutional point of view.

One of the most interesting topics for a researcher studying system transformations is the assessment of the political and economic system of today’s China. Although important changes have been experienced, and China has presented an economic miracle, the main aspects of its political institutions have not changed, the system itself has not changed. This fact underlines the importance of interdisciplinary analysis, and the huge role of institutional quality and the analysis of the polity. Economic performance also depends on the above mentioned factors, moreover, as in the case of China, there can be a trade-off between democracy, well-functioning democratic institutions and economic growth. This trade-off, however, is not acceptable. (Kornai, 2018, Kornai 2020) Scientists from East-Central Europe have even more to tell and teach about transition and provide theoretical analysis on the long-term effects of system changes, assessing the emergence and the efficiency of institutions.

Kornai, in the closing chapter provides research directions for us, as well as a responsibility to follow the path that Kornai, one of Hungary’s most important and powerful economists of all time, has shown us.

I will conclude my paper with the words of Balázs Hámori. “Kornai’s unique life work could be described as the complex influence of five important characteristics: 1. swimming against the current, 2. sensitivity to reality, 3. theory creation, 4. systems thinking, 5. double mother tongue”. These virtues characterize the whole lifework of János Kornai and motivate researchers to not fear to address, analyse and study economic phenomena from a different angle, create theories, and apply a critical approach with commitment and modesty.

The book, *Systems, Institutions and Values of East and West* reflects this complexity of assessing economic phenomena, institutional challenges and system transformations. The editors and the authors of the different chapters have made a great effort to highlight the different aspects and applications of system paradigm, the importance of institutional approach by using institutional analysis methods for assessing current economic trends and efficiency problems.

BIBLIOGRAPHY

- Chavance, B (2020) *Systems, Institutions and Values in East and West : Engaging with János Kornai’s Scholarship Book presentation*, online conference, Corvinus University of Budapest, 23rd of September 2020.
- Dallago, B (2020): *The System Paradigm and the European Monetary Union: What János Kornai’s Contribution to Comparative Economics Can Suggest to the Eurozone*, In: Rosta & Piroška ed. *Systems, Institutions and Values of East and West*, CEU Press, 2020, Budapest-New York
- Hámori, B (2005): *Kornai János: A gondolat erejével – Rendhagyó önéletrajz – Recenzió*
- Kornai, J (1971) *Anti-Equilibrium. On Economic Systems. Theory and the Tasks of Research*, Amsterdam: North Holland Publishing Co.,.
- Kornai, J (1980): *Economics of Shortage* (Amsterdam: North Holland)
- Kornai, J (1993): *A szocialista rendszer* (Budapest: HVG Kiadó, 1993)
- Kornai, J (1998): *The System Paradigm*, Working Paper,
- Kornai, J – Maskin, E – Roland, G (2004): *A puha költségvetési korlát I, II*. In: *Közgazdasági Szemle*, LI. évf., 2004. július–augusztus (608–624. o.), *Közgazdasági Szemle*, LI. évf., 2004. szeptember (777–809. o.)
- Kornai, J (2009) “The soft budget constraint syndrome in the hospital sector.” *International Journal of Health Care Finance and Economics* 9, no. 2 (2009): 117–135.
- Kornai, J (2011): *Gondolatok a kapitalizmusról*, Akadémiai Kiadó, Budapest, 2011
- Kornai, J (2014): *Példaképünk: Kína?*, Available at: <https://www.tarki.hu/adatbank-h/kutjel/pdf/b347.pdf>. Accessed: 03.03.2020.
- Krenyácz, É (2020): *Modified Management Thinking in Health Care: The Impacts of Centralization and the Soft Budget Constraint*, In: Rosta & Piroška ed. *Systems, Institutions and Values of East and West*, CEU Press, 2020, Budapest-New York
- North, D (1991): *Institutions*, In: *The Journal of Economic Perspectives*, Vol. 5, No. 1. (Winter, 1991), pp. 97-112.
- Ostrom, E. (1990): *Governing the Commons: The Evolution of Institutions for Collective Action* New York: Cambridge University Press
- Mihályi, P. (2020): *The Theories of János Kornai and a Less-known Hungarian Economist, Ferenc Jánossy, on Unbalanced Economic Growth*, In: Rosta & Piroška ed. *Systems, Institutions and Values of East and West*, CEU Press, 2020, Budapest-New York

- Pejovich (1995): *Economic Analysis of Institutions and Systems*. 1995 Revised Edition. 1997 ISBN 0-7923-8031-2, Springer Science+Business Media New York, 3rd printing, 2002
- Roland, G (2020): *Thinking Capitalism with János Kornai*, In: Rosta & Piroška ed. *Systems, Institutions and Values of East and West*, CEU Press, 2020, Budapest-New York
- Szelényi, I (2020): *János Kornai's Theory of Socialism*, In: Rosta & Piroška ed. *Systems, Institutions and Values of East and West*, CEU Press, 2020, Budapest-New York