From Anti-equilibrium to The Socialist System and Beyond

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This essay attempts to understand János Kornai's works from a political economy perspective. It argues that Kornai has significantly contributed to the formation of a new paradigm of political economy. The main endeavor of Kornai has been the combination of analytical concepts of economics with the empirical description of real economies. After a certain period of theoretical experimentation János Kornai formulated his research program that can be called the shortage economy explanation of the socialist system. The *Economics of Shortage* and *The Socialist System* have created a new theoretical paradigm in a framework in which it has become possible to establish a connection between the analytical and empirical, universal and historical aspects of the theory studying the socialist system as a real economic entity. János Kornai has built his analysis of the socialist system on the primary role of politics in the creation of economic institutions. In his present work on capitalism he has extended this thesis to the capitalist system. This seems to be an important contribution of his to a new political economy paradigm that is just in the process of formation.

Keywords: political economy, shortage economy, surplus economy, soft budget constraint, socialist system, capitalist system

JEL codes: B52, P16, P51

1. Introduction: political economy versus economics

Classical political economy, in the process of separating itself from *philosophy*, was built on the paradigm of the *labor theory of value*. The labor theory of value simultaneously served as an *analytical* economic theory, that is as an equilibrium theory (discussing the relationship of value and prices), as an *empirical* theory describing the structure of the real economy and deducing the existence of social classes having opposing interests and economic conflicts from the distribution of surplus value, and finally as a *practical* theory giving economic policy advice. The main policy proposition of classical political economy was to limit the economic intervention of the state according to the metaphor of the invisible hand. Classical political economy integrated analytic and empirical-historical thinking and on this basis made normative recommendations. Marx's political economy radicalized further the idea of a unified theory. For Marx, political economy based on the labor theory of value became simultaneously the *social theory* of capitalism and the *practical program* of transcending capitalism. Marx believed that the economic and social system of capitalism and the *logical* structure of its *historical* transformation can be understood and expressed with the categories of political economy, that is with those of the labor theory of value.

However, in the second half of 19th century a paradigm change occurred in economic theory: the labor theory of value was replaced by the subjective theory of value. As a consequence, political economy was transformed into *economics*. This metamorphosis separated the interlocking analytic, empirical and pragmatic elements of economic theory.

This separation was clearly described by Carl Menger, who was one of the leading representatives of the Copernican turn of economic theory.

Menger made a distinction among theoretical, empirical and pragmatic economic theory (Menger 1985: 38-39.). Theoretical economics discovers the general nature and the universal laws of economic phenomena. Economics as an exact science does not examine empirical facts and the relationship among empirical facts, therefore it ignores the empirical and historical aspects of the economy.

The types and the typical relationships of economy may be of greater strictness or lesser, or in general of any nature - the nature of theoretical economics can under all circumstances consist in nothing else than in the exposition of just these types and typical relationships. In other words, it can consist only in the exposition of the general nature and the general connection of the laws of economic phenomena, but by no means, for instance, in the exposition of the nature and connection of individual phenomena of economy, i.e., in historical presentations, or else in practical rules for the economic activity of people. The *theory* of economy must in no case be confused with the *historical* sciences of the economy, or with the *practical* ones. (Menger 1985: 51)

Theoretical economics is a science that is neither historical nor practical.¹ Theoretical economics is an exact science because it does not generalize from empirical facts, but discovers the universal laws of the economy. It means that theoretical economics as a pure theory conceptualizes relationships that are *ceteris paribus* invariably valid. Theoretical economics as an analytical science formulates statements that are necessarily true and possess the "guarantee of *absoluteness*" (Menger 1985: 59). These statements cannot be empirically verified: "...the results of exact research, and indeed in all realms of the world of phenomena, are true only with certain presuppositions, with presuppositions which in reality do not always apply. Testing the exact theory of economy by the full empirical method is simply a methodological absurdity, a failure to recognize the basis and presuppositions of exact research" (Menger 1985: 69).

As opposed to theoretical economics *empirical* economics examines and describes the historical forms of the economy. If theoretical economics does not have a direct empirical subject, then there is a need for an empirical economics that deals with the totality of the real phenomena of human economy. This empirical economics examines economic relations existing in reality (Menger 1985: 72-73). *Practical* economics examines and describes the principles of economic policy making. Practical economics is a *normative* science (Menger 1985: 39).

Menger argues that the mixing of the concepts and the levels of analysis of the three different economics is a theoretical mistake, and it is important to separate clearly these three sciences from one another. For empirical economics it means that a historical-empirical analysis may interpret historical-empirical economies applying the concepts of theoretical economics, but this interpretation is not going to be an analytical theory, but the non-universal historical application of analytic concepts. It is an application that may examine the social and political aspects of economic action as an empirical and individual relationship, consequently this analysis cannot constitute a part of general economic theory, since the general theory may be general theory just because it assumes away the social and political aspects of economic actions. Modern economics may become an exact science only if it derives the social and political aspects of empirical reality from theory: economic theory

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¹ "Theoretical economics can never be viewed as a historical science, nor, as many wish, as a practical one" (Menger 1985: 53).

cannot be political economy any more. However, it is important to keep in mind that Menger did not reduce general economic theory to general equilibrium theory, since he thought that it was possible to build an analytical theory of historical change. With this idea he expanded the framework of theoretical economics.

Every theory, of whatever kind it may be and whatever degree of strictness of knowledge it may strive for, has primarily the task of teaching us to understand the concrete phenomena of the real world as exemplifications of a certain regularity in the succession of phenomena, i.e., genetically. Every theory, accordingly, strives first and foremost to make us understand the complicated phenomena of the research field peculiar to it as the result of the working of the factors responsible for its origin. *This genetic element is inseparable from the idea of theoretical sciences* (Menger 1985: 94).

This way Menger founded the Austrian School of economics that later heavily criticized general equilibrium theory.

2. The institutional turn of economics

The enquiry of social and political aspects of economic activities formulated originally in the language of classical political economy was carried on not by economics, but by the new social sciences: sociology and political science. However, in the 20th century there emerged new intellectual trends within economics that reclaimed the analysis of the social and political aspects of economic action for economic theory. The representatives of this new direction of research were not satisfied with the scientific program that separated the study of real economic processes from general theory. This new direction of research asked whether it was possible to create an analytical theory on its own right for the investigation of empirical economy? A theory that operates with analytical concepts but is different from general equilibrium theory.

Among the first to move toward the new theory was the Austrian School of Economics. Hayek stated that from the standpoint of general equilibrium theory it is impossible to compare the market economy and the centrally planned economy, because general equilibrium is unable to make a distinction between the two institutional forms of the economy.

[F]rom the factually false hypothesis that the central planning board could command all the necessary information, it could *logically* follow that the problem was in principle soluble. To deduce from this observation the 'admission' that the real problem can be solved in theory is a rather scandalous misrepresentation. No-body can, of course, transfer to another all the knowledge he has, and certainly not the information he could discover only *if* market prices told him what was worth looking for" (Hayek 1982: 138).

According to Hayek's argument the centrally planned economy and the market economy can only be compared if one abandons the assumption of general equilibrium theory about perfectly informed economic actors. Making the assumption that these actors are imperfectly informed, opens up the opportunity to examine the question about the utilization of information and it becomes possible to discuss the problem of alternative utilization of information. Economic theory may now deal with the issue that economies with different institutional structure will discover the necessary information for economic decisions in different ways. This new research agenda makes the market economy and the centrally planned economy comparable (Hayek 1945: 519-530).

Later on, beside the Austrian school, new institutional economics and political economy were developed. All these disciplines study the institutional aspects of economic action without giving up their aspiration for an analytical theory. This research perspective is embraced by János Kornai in his work.

3. In search of a new paradigm: Anti-equilibrium

János Kornai has created the new political economy of the socialist system. Kornai's theory of socialism is not an application of general equilibrium theory on empirical issues, but it is the formulation of a new paradigm of economic theory. What is more, János Kornai has created this new paradigm by working on a new subject, on the socialist economy. The theory on the socialist system has integrated the discourse on the socialist economy in a new, innovative way. Kornai has simultaneously renewed the theory and the empirical findings of this discourse. This is the reason why János Kornai has become the internationally best known and recognized Hungarian economist. The new theory can be found in the pioneering book of *The Economics of Shortage* and in *The Socialist System* that contains a theoretical synthesis of the subject. These books did not come into existence like Pallas Athena who leaped out of Zeus's head, fully grown and armed. To the contrary, these texts were the fruits of a stout and long lasting work, the products of theoretical experimentations.

János Kornai's PhD dissertation, *Overcentralization in Economic Administration* took the first steps toward the direction of a new theory by choosing to examine the real functioning of the system of central planning instead of remaining at an improductive exercise in the normative and ideological theory of planning. In this book the author's argumentations rooted in empirical investigations about the internal conflicts and bargaining processes of central planning already appeared. This early analysis was later utilized in the category and analysis of *vertical bargaining* in the socialist economy.

János Kornai's first attempt at the synthesis of theoretical and empirical research was his *Anti-equilibrium*. The author himself wrote about it in his autobiography: "*Anti-Equilibrium* is not merely an item on my list of publications. It was the most ambitious enterprise of my career as a researcher" (Kornai 2006: 197).

Kornai was not satisfied with the exactness and logical purity of general equilibrium theory. In *Anti-equilibrium* he tried to change this theory. His goal was to transform general equilibrium theory in order to make it capable to describe and analyze real economies. *Anti-equilibrium* was an attempt at bringing together analytical theory with the theory of real economies, an attempt at enriching general economic theory with the theory of social institutions. According to his theoretical program the former should be corrected by the latter.

Anti-equilibrium contains numerous important and path-breaking ideas that return in Kornai's subsequent writings, but the theory upon which the criticism of general equilibrium theory was based in this book proved to be unsuccessful even by the later evaluation of the author himself. The paradigm of general equilibrium theory resisted Kornai's criticism, since this theory is tied to those presuppositions that make it invariably valid – as we could learn it from Menger. These presuppositions of general equilibrium theory do not allow the incorporation those concepts which would be necessary to thematize the functioning of the real economy. In other words, general equilibrium theory assumes away those institutional configurations of the real economy that determine the functioning of the real economy and for this reason the study of the real economy cannot be incorporated into it. That is the reason why Anti-equilibrium turned out to be problematic: this book was controversial not for the answers it gave but for the questions it asked. János Kornai drew this conclusion: the errors

should be found not in general equilibrium theory, but in the way of its application to the real economy. "I should have attacked not the purity of the theory (the abstract, unreal nature of its assumptions), but the wrong use of it in mainstream economics. The real addressee of the critique should have been *mainstream teaching practices and research programs*" (Kornai 2006: 184-185).

Still, the theoretical experimentations of *Anti-equilibrium* proved to be valuable for the author whose research program was to establish the theory of the real economy in a new way. The new research question formulated by Kornai was not how to integrate the analysis of the real economy into general equilibrium theory, but how to create the theory of the real economy on its own. In formulating this new question, János Kornai could rely on an important critical thesis worked out in *Anti-equilibrium*. In this book the author made the argument that general equilibrium theory is unable to explain the differences of the existing economic systems, because from the perspective of equilibrium theory equilibrium can be achieved both in a market economy and a centrally planned economy.

Kornai writes in By Force of Thought:

Equilibrium is reached by both systems so long as certain rules are adhered to. Indeed, under a given optimum criterion and other conditions, both systems may arrive at an optimal state. [...] The similarity perplexed me. Was it then immaterial whether we lived in a centralized or a decentralized economy, under capitalism or communism? Or had the perplexing similarity arisen because both models overlooked the very attributes of real, living economic systems to explain the difference between actual capitalism and actual socialism—a living market economy and a living command economy? (Kornai 2006: 181).

This theoretical finding connects Kornai to the thinkers of the Austrian School, especially, as we saw, to Hayek.² However, Kornai does not simply remain within the confines of the Austrian theory but as we will see he also moves beyond it toward a more specific institutional analysis.

The conclusion can be drawn that *Anti-equilibrium* significantly contributed to Kornai's later theoretical synthesis about the socialist system – just because he was capable of critical self-reflection. Building on the lessons of *Anti-equilibrium* János Kornai could utilize his former efforts to find a new theoretical synthesis for the theory of the socialist system. The new synthesis could rely on the contrast worked out in *Anti-equilibrium* between surplus economy (pressure) and shortage economy (suction), between buyers' and sellers' market regimes. The novelty of *Economics of Shortage* and *The Socialist System* lies in the theoretical construction of the interrelationships between the shortage economy, the socialist system and the surplus economy, the capitalist system.

4. The formation of the political economy of the socialist system

The shortage economy explanation of the socialist system is a new theoretical paradigm. This theory assumes an internal relationship between the shortage economy and the socialist system. It was a common experience for those who lived in socialism that shortage phenomena proliferate in the socialist economy,³ but this experience was first transformed

² The relationship between Kornai and the Austrian school is discussed by Leeson (2008). Leeson shows how similar the ideas of the scholars of the Austrian School and those of Kornai are, to what extent these ideas overlap, but he does not deal with the theoretical differences of these ideas.

³ Let me invoke a joke from the era of socialism. Radio Yerevan is asked whether it is possible to create a shortage of sand in the Sahara. The answer is yes, if the socialist system is introduced in the Sahara.

into a comprehensive theory by Kornai. The author of *Economics of Shortage* and *The Socialist System* made the hypothesis that every shortage economy is a socialist economy and every socialist economy is a shortage economy. Consequently, the relationship between socialist institutions and the shortage economy is not incidental and extrinsic, to the contrary, this relationship is essential and intrinsic. The research task is to reveal the nature of this relationship.

In the process of confirmation of his hypothesis János Kornai explained how the political and economic institutions of the socialist system beget the shortage economy and its behavioral regularities. In this explanation the concept of *soft budget constraint* played a key role. Kornai invented and introduced this concept into the literature of economics. The category of soft budget constraint mediates between the analytical-deductive and historical-institutional argumentations of the theory due to its dual characteristics. The concept of budget constraint originates from microeconomics, but Kornai's idea that the budget constraint of an economic agent may be *soft* assigns an additional institutionally grounded meaning to this term. The concept of soft budget constraint refers to a specific historical-institutional nexus and goes beyond the world of standard microeconomics. The softness of the budget constraint of socialist enterprises is derived from the institutions of *bureaucratic coordination* and *state ownership*. Consequently, through the concept of soft budget constraint it becomes possible to establish a connection between the *analytic and empirical*, *universal and historical* aspects of the socialist system as a *real* economic entity within the framework of the *shortage economy* explanation.

The theory derives the shortage economy syndrome, the behavioral regularities of the economic actors in a shortage economy from the institutional structure of the socialist economy. This is an important theoretical innovation that also goes beyond the achievements of the Austrian School. In accordance with the theory of the Austrian School the shortage economy paradigm of socialism also emphasizes that in order to be able to understand the capitalist and the socialist system, general equilibrium theory has to be transcended. Kornai's theory also builds on the thesis that on the one hand private ownership and market (market coordination in Kornai's terms), on the other hand state ownership and central planning (bureaucratic coordination) belong to each other, there is an affinity between them (Kornai 1990; Kornai 1992: 447-450, 497-500). At the same time Kornai enriches the analysis of this relationship mainly by the utilization of the results of the property rights school and by demonstrating that the regularities of economic behavior induced by state ownership and bureaucratic coordination can be understood only if the theory of these institutions is linked to the concept of soft budget constraint and the issues of the shortage economy.

The shortage economy theory of socialism has understandably provoked a lot of responses within the circles of economists.⁵ However, it is important to mention that Kornai's theory has had not only theoretical but significant *practical* effects. The *Economics of Shortage* was read and understood not only by economists, but also by other social scientists and even by the wider and lay public.⁶

⁴ At present the category of soft budget constraint enjoys such a widespread acceptance in the scientific community that it is treated now as common property and those who apply it often do not refer to its original author.

⁵ Let me just remark that the impact of this theory has extended to the other social sciences as well. The international reception of *Economics of Shortage* is presented and analyzed by Hámori (2012).

⁶ Balázs Hámori remarks that the *Economics of Shortage* was published in 3000 copies in Hungary in 1980 and it immediately sold out: a shortage of *Economics of Shortage* was created (Hámori 2012: 387.).

János Kornai did not commit himself to direct political activities, protests against the socialist regime because he decided to work out his theory in Hungary (Kornai 2006: 132-134). Still, the theory of the shortage economy did also have a political influence. In the socialist system social science publications could attract an attention of political and ideological nature even if they did not want to create a direct political effect. The public who read these works was mainly made of lay intellectuals with critical attitudes toward the existing system. The subject matter of Economics of Shortage was the socialist system and this subject was not an esoteric topic for a narrow scientific community but an existential problem for ordinary people. The *Economics of Shortage* destroyed the belief in the superiority of the socialist system and demonstrated that it cannot be reformed. The separation of the theory of socialist system from reform economics had an intellectually liberating power. The book sent the message that the theses about the political sacredness of the one-party system and state ownership do not have to be approved by the theory. These theses could not be contested by the reform economist, since he or she was striving for practical and not for theoretical success. It was the condition of the political success of economic reforms that the advocates of reforms did not challenge the basic institutions of the socialist system. The shortage economy theory of socialism did just that, it challenged and removed the ideological underpinnings of the socialist system and for this reason it played an important role in the intellectual preparation for the collapse of the socialist system, by destroying the identity of the socialist system.⁷

5. A new paradigm of political economy

The socialist system collapsed by the 1990s. How does it affect the researcher who has lost the most important subject matter of his research? Can the theory of shortage economy retain at least some of its theoretical importance? I think it can. In the last 20 years János Kornai's writings demonstrated why the theory of shortage economy stayed with us. First, the theory can be applied to the analysis of the postsocialist transformation, due to the effects of the socialist past on the transformation process – this is the effect linked to the path-dependence of social change. Second, the category of soft budget constraint is a useful analytical tool not just for the study of the socialist, but also of the capitalist system, because there exist actors with soft budget constraint also in a capitalist system. One should just think of the health care sector. Third, and it seems to be the most important point, the collapse of the socialist system has not invalidated the theory describing the socialist system with the interrelated concepts of shortage and surplus economy. This set of concepts may also be utilized in the theory of capitalist system: the understanding of capitalism requires that it be regarded as a surplus economy (Kornai 2011). With this research program János Kornai is contributing to the development of a new paradigm of political economy.

In explaining economic behavior the new political economy relies on the analytic concepts of economics that are connected to an institutional analysis. Consequently, the empirical application of the analytical theory is also a process of theorizing. North states this rather clearly: "[...] in a zero transaction cost world, increases in the stock of knowledge and its application (both physical and human capital) provide a key to the potential well-being of human beings in societies. What was left out of the analysis was why the potential was not

⁷ "[...] *Economics of Shortage* played a uniquely important role in the intellectual preparation of the systemic change – it happens only on very rare occasions that a professional work can be so unambiguously connected to an important historical turning point of systemic change." (Chikán 2004: 698). See also Hámori (2012: 393).

⁸ See Kornai (1998) and Kornai – Eggleston (2001).

realized, and why there is such an enormous gap between the rich countries and the poor countries when the technology is, for the most part, available to everyone" (North 1990: 133). In other words: if the theory is unable to thematize the impact of institutions on the actions of economic actors, it will not be able to explain how economic systems function in practice. The representatives of new political economy argue that the behavior of economic actors is determined by economic institutions, but economic institutions can and should be understood from political institutions (North – Wallis – Weingast 2009; Acemoglu – Robinson 2012).

This important finding was already the corner stone of Kornai's theory of shortage. While the word 'party' did not appear in *Economics of Shortage*, the substantive discussion in the *The Socialist System* began with analysis of the party's role, political power and ideology. The book stated what I had been unable to express 12 years earlier: the origin and operation of the socialist system can only be understood truly by starting from the role of political power and official ideology (Kornai 2012: 367).

With the extension of his theory on the capitalist system Kornai also performs the *generalization* of the thesis that the political system determines the economic system.

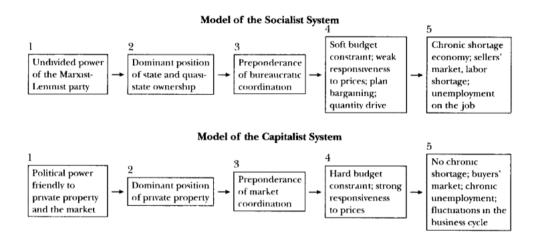


Figure 1. Models of the Socialist and the Capitalist Systems Source: Kornai (2000: 29).

From the analysis based on the contrast and comparison of the socialist and the capitalist system follows the general thesis that political institutions play a determining role in the formation of economic institutions. This theory seems to be rather close to that of Acemoglu and Robinson (2006; 2012).

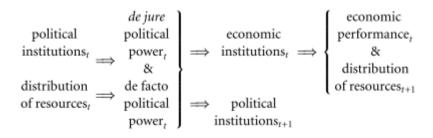


Figure 2. Institutions and economic performance Source: Acemoglu-Robinson (2006: 677).

Acemoglu, Johnson and Robinson argue that there exists an intrinsic connection between political and economic institutions and this connection is of hierarchical nature: the causal direction starts from the polity and goes toward the economy.

[P]olitical institutions determine the distribution of de jure political power, which in turn affects the choice of economic institutions. This framework therefore introduces a natural concept of a *hierarchy of institutions*, with political institutions influencing equilibrium economic institutions, which then determine economic outcomes (Acemoglu – Johnson – Robinson 2004: 5).⁹

North and his co-authors also draw attention to the importance of the internal relationships between the economic and the political system. "The seeming independence of the economic and political systems on the surface is apparent, not real. In fact, these systems are deeply intertwined" (North – Wallis – Weingast 2009: 269). In their previous study they made an even stronger statement:

Sustaining social order requires the development of a state organization capable of limiting violence, and that requires that political and economic systems work in concert. The fundamental contribution of our approach is integrating a theory of economic behavior with a theory of political behavior by demonstrating *how political systems manipulate the economy* in order to sustain political stability, limit violence, and provide social order (North – Wallis – Weingast 2006: 4).

Kornai's argument about the interrelationship of the polity and the economy is not just similar but is also different from the statements of Acemoglu and Robinson and North et al. Kornai extends the thesis about the primary role of politics in the creation of economic institutions in the socialist system to the capitalist system. North et al. and Acemoglu and Robinson generalize this thesis from the comparison of capitalist and non-capitalist (mainly precapitalist) systems and apply it to the socialist system. At the same time Kornai also emphasizes those correspondences between the political and the economic system of society that maintain the coherence of society. Both in the capitalist and the socialist system the institutionalization of the polity serves as the political safeguard of the economic system and as a basic condition that informs the institutional patterns of the economy.

North et al. also emphasize the importance of the correspondence between the intrinsic structures of the political and the economic system. They call it the theory of *double balance*. Double balance is

a correspondence between the distribution and organization of violence potential and political power on the one hand, and the distribution and organization of economic power on the other hand. The idea of the double balance suggests not only that all of the social systems in a society must have an internal balance of interests but also that the political, economic, cultural, social, and military systems must contain compatible systems of incentives across the systems if a society is to remain stable (North – Wallis – Weingast 2009: 20).

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⁹ See also: "Each society functions with a set of economic and political rules created and enforced by the state and the citizens collectively. Economic institutions shape economic incentives: the incentives to become educated, to save and invest, to innovate and adopt new technologies, and so on. It is the political process that determines what economic institutions people live under, and it is the political institutions that determine how this process works" (Acemoglu – Robinson 2012: 46-47).

Acemoglu and Robinson also underline that there is an intrinsic relationship between the institutional configurations of the polity and the economy: extractive political institutions build up a coherent whole with extractive economic institutions, while inclusive political institutions generate and maintain inclusive economic institutions (Acemoglu – Robinson 2012: 76-77).

It seems that Kornai's present work is in line with that of other authors who are building a new paradigm of political economy. This is a new frontier of research and Kornai's work can be seen as an important contribution to this new paradigm.

6. Conclusions

The understanding of the patterns of functioning of the socialist and the capitalist system, the description of these systems within a theoretical framework that combines analytical and empirical, theoretical and historical aspects of explanation played a central role in the oeuvre of János Kornai. This work required simultaneously the careful collection of tiny details and an understanding of the big picture made out of those tiny elements. This task – beyond the necessary mental capabilities – also demanded from the researcher self-discipline, humbleness toward the subject of inquiry, and an immense amount of work. I wonder what inspired the author to make all these painstaking efforts. Was it curiosity? Was it the intellectual excitement of discovering new theories? Or the joy to solve puzzles? All this must have been important, but there was also something else, and it was the wish to change the existing social practice. János Kornai cultivates science also as a means for the goal of practical change. For him exact scientific analysis is important also because it may assist in the choice among practical alternatives of action. For János Kornai science serves important human, and even political values. The internal theoretical-logical coherence of his works serves the coherence of the thinking and acting man. How did Goethe ask in the novel Lotte in Weimar? "[...] is work the objectification of conscience [...]?" (Mann 1977: 283). The oeuvre of János Kornai answers this question in the affirmative.

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