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# János Kornai: economics, methodology and policy

Michael Ellman<sup>★</sup>

Kornai is an iconoclastic economist who developed an economic systems paradigm and applied it to the Leninist-Stalinist socialist system. His ideas overlapped with Marxism, with the Austrian school, with the Cambridge Social Ontology Group (CSOG), with Keynesianism, and with evolutionary economics. However, despite rejecting much of mainstream economics, Kornai did not retire to a heterodox bunker. Important results of his application of the systems paradigm were a rejection of market socialism, a rejection of price increases as a solution for shortages in the Leninist-Stalinist socialist system, and advocacy of a privatisation policy based on providing favourable conditions for the development of new private enterprises.

*Key words:* Socialism, Kornai, Privatisation, Shortage, Economic systems  
*JEL classifications:* B24, B31, P21

## 1. Introduction

János Kornai is now in the tenth decade of his life. His life's work has been the analysis of the Leninist-Stalinist interpretation of socialism, criticism of the Walrasian interpretation, comparison of the Leninist-Stalinist interpretation with capitalism, and the analysis of the transformation of Leninist-Stalinist socialism into capitalism. In the analysis of the Leninist-Stalinist version of socialism, he had the great advantage over writers in Western Europe and the USA that he lived in a country (Hungary) where the Leninist-Stalinist system was actually implemented over many years. He approached the subject from a new theoretical perspective and utilised a much better knowledge of how the Leninist-Stalinist socialist system actually worked than many writers on it. The main purpose of this paper is to explain Kornai's theoretical approach and relate it to other schools of thought (Section 2), and discuss some of the policy results to which its application led (Section 3).

In a previous paper in this journal, [Lebowitz \(2000\)](#) was very positive about the importance and significance of Kornai's work. He wrote (p. 377) that: 'it is surprising that János Kornai has not been awarded the Nobel Prize in Economics for his work on "actually existing socialism" (hereafter AES).<sup>1</sup> In the course of four decades, his

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<sup>1</sup> 'Actually existing socialism' is a term that was often used to describe the system that existed in Eastern Europe and the USSR until 1989–91. (Footnote added.) The term was publicised by [Bahro \(1978\)](#). Kornai describes the same system mainly just as 'socialism'. This is common in Eastern Europe and the former USSR.

examination of AES has penetrated deeper into its logic than the work of any other individual'. However, the main thrust of Lebowitz's paper was to criticise Kornai for generalising his conclusions about 'actually existing socialism' to all kinds of socialism. The present paper, in Section 4, responds to Lebowitz's critique.

## 2. Kornai's methodology and its relationship to other schools of thought

Much of the socialist calculation debate of the 1920s and 30s took place within the framework of the general equilibrium model, in which the goal of the Central Planning Board is to utilise the given resources in the most efficient way. In this model, prices are the main parameters, consumers maximise utility, managers follow rules set by the Central Planning Board, and the goal is to arrive at an optimal equilibrium. Private property in the means of production has been greatly reduced, but consumers and managers continue to behave according to traditional microeconomics. Kornai rejected this entire framework and replaced it by a systems approach. He outlined this new approach to the study of economic systems in his 1971 monograph *Anti-equilibrium: On economic systems theory and the tasks of research*, which criticised the economic relevance of both general equilibrium theory and optimal planning theory<sup>2</sup> and argued for a systems approach to developing a relevant economic theory and policy proposals.

Kornai's systems approach can be understood by comparing it with Marxism. Lebowitz (2000, pp. 379–80) quite correctly pointed out the similarity of Kornai's approach to that of Marx. Although he himself is no Marxist, Kornai recognised the priority of Marx in systems thinking. It was Marx, he argued, who 'can be considered the pioneer of the system paradigm because he did not confine himself to examining a certain sphere of capitalism (the political sphere or the economic, or the social or the ideological). He viewed all these spheres together and analysed the interactions between them' (Kornai, 1999, p. 4).<sup>3</sup> Just as Marx attempted to comprehend the origins, properties and end of the capitalist system, so Kornai attempted to comprehend the origins, properties and end of the Leninist-Stalinist socialist system. However, Kornai (1992, p. 364) does draw attention to one important respect in which his theory differs from Marx's theory. His starting point is political (the seizure of power by the Communist party) rather than economic (the state of the forces and relations of production).

Adoption of the systems approach implied a number of differences from the economic mainstream.<sup>4</sup> These include: rejection of the idea of maximising individuals

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However, Kornai has also referred to it as the Leninist (which developed into the Stalinist) interpretation of socialism. Other writers refer to it as state socialism, state capitalism, or Stalinism. In the West it was generally referred to as Communism. In this paper it is referred to as 'Leninist-Stalinist socialism'. Kornai's understanding of the term 'socialism' is discussed in Section 4.

<sup>2</sup> This was a theory, developed in the USSR in the 1960s on the basis of linear programming, that treated national economic planning as an optimisation problem.

<sup>3</sup> By 'system paradigm' Kornai means an approach to economics which concentrates on whole economic systems, their properties and development, rather than the approach of traditional microeconomics which concentrates on individual consumers and single firms. These systems must be real ones which actually exist now or have done in the past, and not imaginary ones which only exist in the articles and books of economists, as is often the case with mainstream economics.

<sup>4</sup> By 'mainstream', Kornai meant the ideas that dominate academia, its textbooks, prestigious journals, and departments of economics; and the dominant method it uses, mathematical modelling. At one time, Kornai himself adopted a fairly mainstream approach (Kornai and Liptak, 1962, 1965; Kornai, 1967). This mathematical period in Kornai's work was largely a result of the need to avoid political persecution (Kornai, 2006, 152–3).

with individually determined preferences as the basis of economic theory; rejection of the notion of economic equilibrium; rejection of the notion that the government (or planners) have an objective function which should be optimised; and rejection of mathematical modelling as the sole legitimate basis of economic research.

As Kornai (1999, p. 10) explained: ‘According to the system paradigm, individual preferences are largely the product of the system itself. If the system changes, so do the preferences’. In this respect Kornai agrees with the Cambridge Social Ontology Group (CSOG). Their starting points are different, but their conclusion (on this point) is the same. The starting point for the CSOG is the need to understand the nature of social reality and a specific view of that nature. It argues that: ‘social reality is an emergent, open-ended, structured transformational process in motion, in which the parts are constituted in and through their (changing) relations with each other’. (Lawson, 2015, p. 43). Hence the conclusion that: ‘No part of the social body is unrelated to other parts, and nothing has significance in a social vacuum. Our preferences, viewpoint and even our sense of identity, depend on the society we live in . . .’ (Lourenço and Moura, 2018, p. 12). The starting point for Kornai is the existence of economic systems. This means that people live and work in a specific economic system. Hence their preferences are formed by their position in that system. What these two approaches have in common, in general, is that people live in society, are formed by society, and are not Robinson Crusoes.

In addition, Kornai rejects the view that the starting point of economic research must always be the preferences of an agent. Hence he rejects the search for microfoundations of macroeconomics. Instead, he drew attention to the importance of norms, and autonomous control,<sup>5</sup> in maintaining sustainable dynamic development of economic systems (Kornai and Martos, 1973, 1981; Kornai 2006, pp. 226–31). An example of control by norms is domestic central heating regulated by a thermostat. The norm is the desired temperature. If the temperature diverges from the norm, the heating reacts. No utility maximising individual nor the price mechanism is necessary to take that decision.

Kornai based his analysis of autonomous control on his observation of how the Hungarian economy actually worked after the economic reform of 1968. Directive planning had largely been eliminated but the price mechanism played only a limited role in decision making. Nevertheless, the economy worked fairly smoothly. Kornai considered it necessary to explain how this was possible.

One of the main objects of our study [a mathematical model of autonomous control] is the dethronement of the “pure” price mechanism. We want to demonstrate that there exists a mechanism functioning *without* price signals which, under abstract conditions, is able to make the real sphere of an economy operate and to assure the survival of the system. (Kornai and Martos, 1973, p. 57)

As an example of autonomous control Kornai (2006, p. 227) gave the case of supermarket stock control.

<sup>5</sup> ‘Autonomous control’ of economic systems is based on an analogy with human biology. In humans such tasks as breathing, digestion and blood circulation are controlled by the autonomous nervous system. The heart can beat faster when a person is running, without any utility-maximising decision by the central nervous system.

It is not worth waiting for excess demand or excess supply to raise or lower the price of a product, or the profit margin to widen or narrow before ordering replacement stocks. It is enough to monitor inventory. If the stock of a product falls, it is worth reordering it. If the inventory rises above a normal level, there is a wait while it decreases before new stock is ordered, and so on. Customary commercial practice enables customers to be supplied smoothly and without price signals, simply by observing how inventories rise and fall.

Despite its use of mathematics and publication in a prestigious mainstream journal, this argument was neglected by the mainstream. Kornai (2006, pp. 230–31) ascribed this to the mainstream's mistaken adherence to the idea that all events have to be explained in terms of a utility-maximising decision maker. It also reflected the mainstream's attachment to prices as the crucial parameter in many theoretical models. However, he is hopeful that economics will, in due course, break the shackles of mainstream thinking (Kornai, 2006, p. 231).

Kornai (2014, pp. 106–11), in agreement with an important strand of thinking in the Austrian school and those influenced by it, argued that in the real world it is misleading to focus on equilibrium since real life is characterised by continuous change and frequent disequilibrium. Equilibrium, he argued, only exists in mathematical models, and it is confusing to use the term to describe real economic processes.<sup>6</sup> Hayek arrived earlier at this conclusion as a result of his debate with the market socialists. They had argued that market socialism could achieve an optimal equilibrium, just like the capitalist market. Arguing that the market was a process, and not a state such as equilibrium, undermined their case for market socialism. Kornai arrived at this conclusion as a result of the discrepancy between the economic systems he studied and the equilibria which played such an important part in the economics literature. Since the normal situation in the bureaucratic-command system<sup>7</sup> was that of shortage, and under capitalism that of surplus, he found it strange that mainstream economics devotes so much attention to the unusual phenomenon of supply and demand equilibrium and so little to the perpetual surpluses that mark capitalism. Hence his analysis of capitalism devotes much attention to the factors that maintain its surpluses (Kornai, 2014, second essay).<sup>8</sup>

Furthermore, Kornai rejected the idea which dominated the socialist calculation debate of the 1930s that economic systems should be assessed according to their ability to achieve an equilibrium at which given resources with given technologies are allocated efficiently. Kornai, following Marx and Engels,<sup>9</sup> regarded as a striking and

<sup>6</sup> Nevertheless, the argument of Leeson (2008, p. 14) that Kornai 'is, self-acknowledged or not, very much an Austrian' is exaggerated. It is true that some of his ideas overlap with those of the Austrian school. However, it is also the case that his ideas overlap with those of a number of other schools. He himself has stated: 'If forced to name those who have influenced me most, I mention the names of Schumpeter, Keynes, and Hayek, but first on the list comes the name of Karl Marx' (Kornai, 2009a, pp. 982–3).

<sup>7</sup> 'Bureaucratic-command' is a translation (the literal translation is 'administrative-command') of the derogatory term used in the USSR in the perestroika period for the economic system created in the USSR in 1930–34 and subsequently exported to Eastern Europe and China. Other terms used to describe it are 'central planning' and 'socialist planning'.

<sup>8</sup> Obviously the capitalist surpluses that Kornai examines are relative to the distribution of income and wealth. Normally under capitalism there are always a large number of people who experience a shortage of money to buy the goods and services they would like to buy. This is a major aspect of the inequality that is one of the main characteristics of capitalism. However, Kornai argues that, although the shortage economy is more egalitarian than the surplus economy, this is outweighed by two other factors. First, capitalism is necessary for the maintenance of democracy. Secondly, capitalism is the only system that generates continuous technical progress. This has enabled a rapid rise in global living standards (Kornai, 2014, pp. 129–30, 135). For a comparison of inequality in the two systems, see Ellman (2018).

<sup>9</sup> The reference is to a much-quoted passage in *The Communist Manifesto* (Marx and Engels, n.d., p. 54).

positive feature of capitalism its technological dynamism, in particular its ability to generate a continuous stream of revolutionary new products. This he saw as one of its main advantages and something which compared favourably with the inability of Leninist-Stalinist socialism to generate revolutionary new products. However, in considering this crucial argument, four qualifications are in order. First, many 'capitalist' innovations are a result of state stimulus (Mazzucato, 2015). Entrepreneurs do not operate in a socio-political vacuum. Secondly, some of the revolutionary new products were intended for mass killing (e.g. poison gas and nuclear weapons) or are otherwise harmful (e.g. cigarettes and medicines such as thalidomide). Thirdly, capitalist technological advances have been responsible for considerable environmental degradation. Fourthly, not all capitalist countries generate numerous revolutionary innovations. Kornai's (2014, pp.6–9) list of revolutionary innovations since 1917 is entirely dominated by just one country (the USA). Historically, it is the leading capitalist country that has produced the revolutionary innovations, not all the capitalist countries. These leading countries were the UK in the late eighteenth and early nineteenth centuries, Germany in the late nineteenth and early twentieth centuries, and the USA in most of the twentieth century and in the early twenty-first century. Perhaps in the middle and later parts of the twenty-first century it will be China. Since 1917 in the whole of Latin America, capitalism has produced just one revolutionary innovation on the Kornai list (the biro in Argentina). There is no reason to suppose that capitalism in any particular country will generate revolutionary innovations. The global capitalist system continually produces revolutionary innovations, but most individual capitalist countries just copy the innovator.

Kornai accepted the view of behavioural economists (e.g. Cyert and March, 1964; Simon, 1966) about how firms actually make decisions (Kornai, 1971, Ch. 7). He was one of the writers who switched the attention of students of planning from the normative to the behavioural approach. It came to be widely realised that 'economic planning is not a socially rational process for maximising the welfare obtained from scarce resources. It is one part of the social relations between individuals and social groups in the course of which decisions are taken all of which are imperfect and many of which produce results quite at variance with the intentions of the top economic and political leadership' (Ellman, 1983, p. 13). As a result, he rejected the simple maximising approach of the mainstream. The mainstream notion that the government (or the planners) have an objective function that they seek to maximise seems to Kornai entirely unrealistic. For one thing, the government normally comprises competing entities (e.g. ministries or regions) and politicians with different ideas. In a 2008 interview Kornai stated:

One of the worst properties of much standard analysis is the assumption that the governments have a maximand. Governments are very complicated institutions. Apart from rhetoric they do not maximise anything. Politics is full of mutually conflicting, inconsistent goals, and therefore full of hesitation, vacillation, ups and downs. Creating a consistent government objective function makes the model alien to real political decision-making and therefore almost irrelevant. (Kornai, 2010, p. 193)

Kornai also rejected the idea of prices both as a single variable and as the only parameter to which firms refer. They are not a single variable, since in the real world there are actual prices at which transactions take place, contract or list prices which precede them, prescribed prices (e.g. by a cartel or government agency), and reported prices

(the price reported to a tax office, statistical department, or economic research institute). Furthermore, they are not the only variable firms respond to since they also take account of non-price signals, such as: unwanted inventories (that in a bureaucratic-command economy may lead to a reduction in effort or informal barter); shortages (that in a bureaucratic-command economy may lead to forced substitution with a resulting decline in quality (Kornai, 1980b, p. 37); and also (in a market economy) the non-price actions of their competitors.

An important aspect of Kornai's understanding of the system paradigm is his critical approach to the use of mathematics in economics. In this, his conclusions overlap with those of Lawson (2003). They also overlap with Keynes's criticism of Tinbergen's econometrics.<sup>10</sup>

It is not characteristic of the system paradigm for theoretical analysis to rely on mathematical models. It would require a separate examination to say why not. There are certainly several factors, of which I would like to pick out the one that I find the most important. Mathematical economics and other social science researches that apply mathematical methods operate at a high level of abstraction. They are forced to analyse a narrow slice of reality, as that is the only way to construct a model suitable for mathematical analysis. One of the foundations of the system paradigm is to grasp reality, so far as possible, in its entirety, not just a thin slice of it. So it is prepared to make heavy concessions in rigor and exactitude. Its methodology is 'softer' than that of a 'semi-hard' (or ostensibly hard) economic paradigm. On the other hand, it is prepared to face puzzles the latter avoids. (Kornai, 1999, p. 11, one footnote omitted)

It should be noted that Kornai is '... not among those who see mathematical modelling as the *main* culprit in diverting economics onto wrong paths. Nevertheless, I agree that there are many shortcomings in the application of mathematical models and the teaching of mathematical economic theory, and they cause much harm to the discipline' (Kornai, 2014, p. 141). Kornai hopes to see the development of mathematical models with explanatory power.

In addition to the above general disagreements with mainstream theory, Kornai also disagrees with some specific applications of it. Examples of this range from scepticism about the application of cost-benefit analysis to project appraisal (Kornai, 1979) to criticism of the aggregation necessary to arrive at 'net excess demand' (Kornai, 2014, pp. 84–5).

One result of Kornai's rejection of theories that did not relate to any real world economy, and his interest in analysis that did relate to real world economies, was his criticism (Kornai, 2014, p. 9) of the gulf in academia between departments of economics (where mathematical modelling is valued) and business schools (where knowledge of real economies is valued).

Another school of thought closely related to that of Kornai is that of evolutionary economics.

Evolutionary economics inspired by the biological theory of evolution dates back several decades. It has undergone great development since the pioneering works (Veblen, 1898, Nelson and Winter, 1982), into a school of thought that has one foot in the mainstream and one out. I feel a close intellectual kinship with their work. (Kornai, 2014, p. 110, one footnote omitted)

<sup>10</sup> Kornai also recognised the significance of Keynesian unemployment under capitalism (Kornai, 2014, pp. 96–8) although he treated it as just one aspect of capitalist unemployment. He also shared Keynes's reluctance to leave investment to the capitalists. He supported an updated version of French indicative planning to coordinate new investment with expected demand and prevent the waste resulting from uncoordinated investment projects (Kornai, 2014, p. 137).

The reason for this is that: ‘There is a thought-provoking similarity between the natural selection and evolution of the living world and the growth and technical development that occur in a decentralized market economy’ (Kornai, 2014, p. 109).

However, despite the overlap of his approach with that of several heterodox schools, Kornai continually refers to, and engages with, mainstream literature. He does not confine himself to a heterodox bunker.<sup>11</sup> Nor does he make inflated claims for his systems approach: ‘. . . I do not demand a monopoly for the system paradigm. It is designed to supplement, not to replace other paradigms that are applicable within their own bounds’ (Kornai 1999, p. 16). In addition to accepting the limitations of the systems approach, Kornai also recognised its failures. By these he meant, in particular, the predictive failures of writers who used it, such as Marx, Hayek and himself (Kornai, 1999, pp. 20–3).<sup>12</sup>

Kornai’s interest in methodology arose from the inadequacy of existing economic theory, both Marxist-Leninist and Western mainstream, to help solve major topical economic problems.<sup>13</sup> He used the methodology that he developed to analyse concrete economic issues. The major economic problem that he analysed was the reform of the bureaucratic-command system in his native Hungary. His PhD thesis, which was published in English translation as *Overcentralization in economic administration* (Kornai, 1959) was a detailed account of some problems of that system. He was involved in plans to reform it. However, it became very obvious that there was no economic theory that could provide guidance for reformers. Some people were attracted to market socialism, but Kornai rejected it both in theory and as a basis for improving the Hungarian economic system.

### 3. Policy implications of Kornai's methodology

#### 3.1 *The critique of market socialism*

Kornai strongly opposed the idea of market socialism, as formulated by writers such as Lange (1938, pp. 72–98), and as experimented with in various countries. Lange's model is known as market socialism because in it large-scale industry and mining are state-owned, but enterprise managers themselves take decisions about the technology to be used, how much to produce, and buy the inputs they need in the market. They do this in the light of prices and simple rules imposed by the planners, which aim at reaching an equilibrium that will satisfy consumers' preferences in the most efficient way.<sup>14</sup> It is assumed that the planners are able to fix the required equilibrium prices for

<sup>11</sup> As he explained: ‘I take issue with the mainstream on some important questions and propose another approach to them. I cannot, sad to say, make my task easier by joining one of the “heterodox” schools wholly or partly opposed to the mainstream, and just add a layer to their intellectual structure or use their terminology. . . . On some questions my propositions show resemblance or correspondence with certain mainstream precepts, and at several important points they tie in with one or another of the heterodox schools’. (Kornai, 2014, p. 54)

<sup>12</sup> This refers to the following failures. Marx's failure was not to foresee the viability of capitalism and the fact that where it was replaced by state ownership and national economic planning that system would in due course collapse and capitalism would be restored. Hayek's failure was not to foresee that centralization, state intervention and planning (as in the UK during and after WWII) were not a slippery slope leading inevitably to serfdom. Kornai's failure was not to anticipate the speed and acceleration of the collapse of Leninist-Stalinist socialism.

<sup>13</sup> Kornai (1971, pp. xv–xvi).

<sup>14</sup> Lange (1938, pp. 90–98) did also consider the case in which goods are allocated in accordance with the aims and valuations of the bureaucracy rather than the preferences of consumers. However, Lange stated



all goods and services in the economy, and that enterprise managers stick to the rules. The centrally-fixed equilibrium prices and the rules fixed by the planners mean that enterprises will be able to buy the quantities of inputs they need from willing suppliers.

This differs radically from the working of the bureaucratic-command system where enterprise managers are bound by detailed plans for outputs and inputs; where inputs are all rationed and often difficult or impossible to obtain; where price-fixing is a prolonged and difficult process taking place at irregular intervals and based on principles different from traditional microeconomics; and where the goals are rapid industrialisation and war preparations. Hence, it seemed attractive to many who lived in the bureaucratic-command system and wanted something better. However, Kornai opposed the idea of attempting to implement Lange's model of market socialism for three reasons. First, because of its Walrasian foundations (fully informed planners who make optimal decisions in the absence of uncertainty, optimal prices, maximising behaviour, given resources and technologies, prices as (almost) the only parameters and equilibrium as the goal) and hence its remoteness from real-world economies. Secondly, because of its failure to understand that socialism and capitalism were systems with specific properties and it was not possible to create a system that combined the positive features of both. Thirdly, because of the gap between its behavioural assumptions and what experience had shown was the actual behaviour of officials in complex bureaucratic systems.

In the 1960s and 70s many economists and officials in the USSR and Eastern Europe proposed adding market elements to the existing bureaucratic-command economy, for example, by: giving more autonomy to enterprise management; introducing profit as a success indicator for state enterprises; and replacing the rationing of raw materials and intermediate goods by inter-enterprise trade in them. The centre would continue to plan the main investment projects. This was referred to by the Polish economist [Brus \(1972\)](#) as a 'planned economy with a built-in market mechanism'. Reforms along these lines were undertaken in various countries (Yugoslavia, Poland, Hungary, USSR). Such mixtures of market and plan were sometimes referred to as 'market socialism', now not as an abstract economic model, but as actually implemented reforms undertaken to raise efficiency. However, experience showed that these reforms did not produce the desired results ([Brus and Laski, 1989](#), Part III), and in some cases were positively harmful ([Kontorovich, 1988](#)). Kornai explained the failures from his systems point of view. Some people, he wrote scornfully, thought that economic system design was a matter of pick and mix. These people:

. . . envisage something like a visit to a supermarket. On the shelves are to be found the various components of the mechanism, incorporating the advantageous qualities of all systems. On one shelf there is full employment as it has been realized in Eastern Europe. On another, there is the high degree of workshop organization and discipline, like in a West German or Swiss factory. On the third shelf is economic growth free of recession, on a fourth, price stability, on a fifth rapid adjustment of production to demands on the foreign market. The system designer has nothing to do but push along his trolley and collect these 'optimum components', and then compose from them at home the 'optimum system'.

But that is a naïve, wishful day-dream. History does not provide such supermarkets in which we can make our choice as we like. Every real economic system constitutes an organic whole.

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that this case was improbable and that in general the 'socialist community. . . may be fairly confident that it will be able to ensure that the Central Planning Board follows the preferences of the consumers' ([Lange, 1938](#), pp. 37–8).

They may contain good and bad features, and more or less in fixed proportions. The choice of system lies only among various ‘package deals’. It is not possible to pick out from the different ‘packages’ the components we like and exclude what we dislike. (Kornai, 1980A, pp. 156–7)<sup>15</sup>

Bearing in mind the failure of numerous attempts at reform which attempted to combine attractive elements of both central planning and the market, and the ultimate switch to the alternative system, this was prophetic. However, the ‘organic wholeness’ of economic systems should not be exaggerated. The same system in different countries may differ in significant detail. Actually existing capitalism has, for example, in different countries different systems of corporate governance, different ways of involving employees in company decision making, different degrees of employment protection, and different financial systems.<sup>16</sup> Similarly, the ability of China and Vietnam to combine rule by the Communist party with a largely capitalist economy shows that, under certain circumstances, a mixed system that combines elements both of Leninist-Stalinist socialism and of capitalism, can exist and flourish for decades. Kornai and Qian (2009, p. 9) found this a ‘puzzle’. It is a puzzle which shows the limitations of Kornai’s systems theory as a complete theory of the Leninist-Stalinist socialist system. That theory can be used as a (partial) explanation of events in Eastern Europe and the USSR, but is inadequate to explain a key aspect of developments in China and Vietnam. This illustrates, as historians well know, that history is determined by a combination of structural and contingent factors.

There is also another reason to reject market socialism that was not discussed by Kornai. What Kornai termed the classical socialist system (i.e. the Stalinist system) was effective in mobilising resources for war (both in preparation for war and in fighting wars). As has been pointed out elsewhere:

Another important factor in the Soviet victory [in World War II] was the ability of the Soviet government to mobilise all the resources of the country for war. Four days after the war broke out, the [standard] working week was increased to 66 hours (six 11 hour days) and holidays were cancelled. This was a much more intensive use of the labour force than in Germany. In the USSR, two and three shift working became common. In addition, very large numbers of Soviet women worked in military industry and some served in the armed forces. Furthermore, more than a million teenagers worked in Soviet industry during the war. The economic system that had been created in the 1930s, although not very good at providing food and other consumer goods without queuing, was very effective in allocating resources to the defence sector and organizing mass production there. (Ellman, forthcoming, one footnote omitted)

Hence the Soviet leadership had a good reason to reject proposals for market socialism—they were incompatible with the main purpose of ‘central planning’—the mobilisation of the economy for war preparation and war fighting. In 1932, when a top Soviet leader suggested introducing market elements into industry, this was turned down. As Davies (1996, p. 267) correctly stated, this proposal was ‘quite impracticable’ and ‘may have been entirely incompatible with Soviet economic objectives’.

<sup>15</sup> Kornai only gradually arrived at this standpoint. In 1956 he believed that the socialist economy could be reformed. In that year he directed a working group that proposed introducing market socialism in Hungarian light industry. In retrospect, he regarded his 1956 views as naïve. (Kornai, 2006, p. 93). However, in retrospect, he also recognised that the economic reforms introduced later in Leninist-Stalinist socialist Hungary, such as the 1968 New Economic Mechanism, contributed to making life more liveable and facilitated the later transition to capitalism (Kornai, 2006, pp. 289–290).

<sup>16</sup> Kornai (1999, pp. 17–18) subsequently recognised the importance of differences in the economic system between capitalist countries, differences which later gave rise to the ‘varieties of capitalism’ literature.

### 3.2 Shortages and the price mechanism

A phenomenon which illustrates the difference between the behaviour of officials in the market socialist model and in Leninist-Stalinist socialism is that of shortages and the inability of the price mechanism to end them. An important feature of actually existing socialism was shortages, of both producer and consumer goods. Shortages of producer goods: delayed production; stimulated the small-scale production of components in user factories when large-scale production in specialist factories would have been more efficient; and led to the development of an informal barter system between enterprises to obtain the materials and components necessary to achieve plan goals. The latter created the profession of fixer, who knew where to obtain necessary components and what was necessary to provide in exchange for them. Shortages of consumer goods led to: queues (for non-durables sometimes measured in hours, and for durables sometimes in years); informal markets where scarce goods could be obtained at high prices; and public dissatisfaction. Both kinds of shortages led to forced substitution (Kornai, 1980b, pp. 36–8); that is, the acceptance of goods other than those the customer would have liked to obtain had they been available.

Kornai devoted his influential two-volume monograph *Economics of Shortage* (Kornai, 1980b, 1980c) to describing shortages, explaining their causes, and analysing their consequences. An important cause, in his opinion, was the paternalist relationship between the state and the (state-owned) enterprises. This created an almost unlimited demand by the enterprises for labour and commodities. Extra inputs were always useful (for current production; for hoarding for possible future use; for barter; or for meeting demands for workers to be sent to gather in the harvest). On the other hand, the enterprises did not have a hard budget constraint, since if they ran out of money their superior state agency would provide some more. Bankruptcy of state enterprises did not take place since it would have adversely affected production, employment, and socio-political stability. The state as owner could be relied upon to ensure that its enterprises had enough money to carry on. This situation Kornai referred to as the ‘soft budget constraint’. It meant that enterprise demand for inputs was not limited by cash or bank money. Without limits on demand but limits on supply, shortages of the goods and labour needed by enterprises were inevitable.

As far as consumer goods were concerned, the situation was different. Households were subject to hard budget constraints. They required money to buy goods, and their money was limited to their wages and their savings. Nevertheless, there were extensive shortages in the retail market too. What explained this? Economists of the mainstream and Keynesian schools had a simple explanation. It was a result of fixed prices. The government fixed retail prices and held them fairly constant. They did not respond to supply and demand. They were frequently held below the level which would allow all demand to be met. Hence the solution offered by mainstream economists such as Gomulka was to raise prices. That, they argued, would eliminate the shortages. For example, in his 1985 *Economics of Planning* debate with Kornai, Gomulka (1985, p. 2) stated that in the Leninist-Stalinist socialist economy, ‘consumer shortages are caused primarily by the high inflexibility of the consumer goods prices’. He also stated (ibid.) that Kornai’s ‘analysis seems to me to play down seriously the potential role of the price mechanism’ in explaining shortages and queues on the retail market in Leninist-Stalinist socialist countries. The policy implication was, of course, that there was a simple means of eliminating shortages. As Gomulka (1985, p. 9) put it ‘. . . a flexible

price system should . . . be able to equilibrate individual consumer markets most of the time'. Similarly, other economists also argued that Kornai's argument was mistaken, and that shortages were caused by inflexible prices. Kornai, however, was of the opinion that these arguments were naïve, since they ignored the fundamental fact that shortages on the retail market in the bureaucratic-command economy were part of a system and could not be ended by changes within that system.

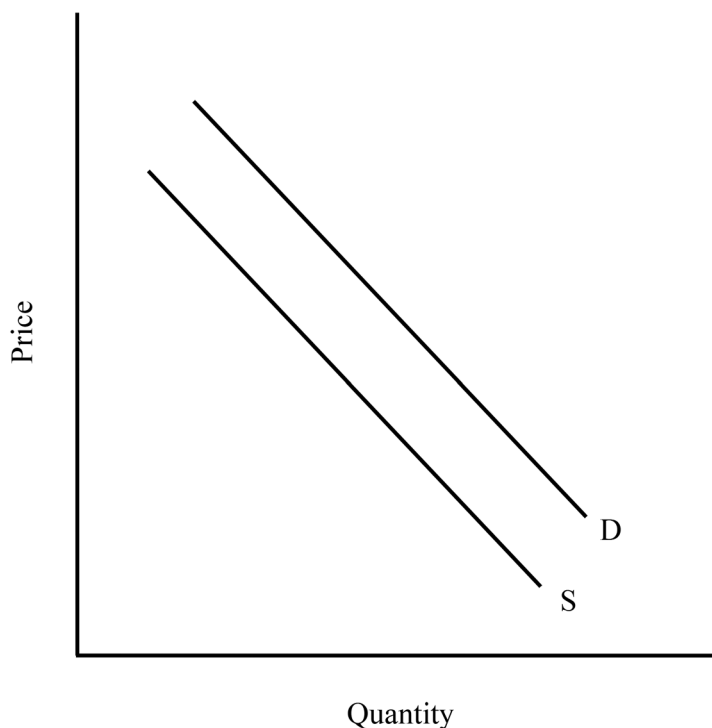
Kornai (1985) gave two reasons for this. The first concerned 'siphoning'. This was the term used to describe the purchase of consumer goods by state enterprises. They used these goods, which had been intended for purchase by consumers in the retail market, for: distribution among their own employees (e.g. in factory canteens); payment to fixers; barter transactions with other state enterprises; or (in some cases) for export. Since the collapse of the USSR, access to the archives of the Soviet state has confirmed the importance of siphoning (e.g. Kim, 2002). Since part of the supply of consumer goods was bought by state enterprises with soft budget constraints, the effect of price increases was reduced below what it would have been if consumer goods were bought only by households (who did have hard budget constraints).

The second argument concerned the behaviour of officials. This gave rise to what Kornai termed the 'shortage-preserving supply curve'. This describes a situation in which officials respond to a decline in shortages resulting from a price increase with measures that restore what they regard as a normal level of shortages. The shortage-preserving supply curve is drawn in Ellman (2014, p. 308) and is reproduced in Figure 1.

This debate had important policy implications. Economists often recommended price increases to overcome the shortages of consumer goods in bureaucratic-command economies. However, Kornai thought otherwise, on the basis of his analysis of the properties of the bureaucratic-command system, such as the soft budget constraint of state enterprises, the siphoning effect, and the shortage-preserving behaviour of planners. Kornai argued that 'price increases do not lead unconditionally to less shortage. They may or may not lead to less shortage – that depends not on automatic market forces, but on the very same decision-makers who determine prices on the one hand and supply and "siphoning-off" on the other' (Kornai, 1985, p. 54).

Experience, particularly in Poland, confirmed the validity of Kornai's argument about the results of price increases for the shortage goods (mainly food products), for which price increases were discussed and sometimes implemented. When this policy was put into practice, it frequently failed to reduce the shortages for more than a short time. This resulted not only from siphoning and the shortage-preserving response of the planners, but also from two other factors. These were: first, the compensating wage and pension increases which the authorities felt compelled to agree to in order to compensate the population for the price increases and (when food prices were increased) to prevent starvation; and, second, the effects of the disequilibrium *relative* prices (and quantities) of foodstuffs, on the one hand, and durables and services, on the other (Ellman, 2014, pp. 299–300).<sup>17</sup>

<sup>17</sup> This last argument was developed by the Polish economist Podkaminer (1982, 1987, 1988). It was based on mainstream demand theory, but this was utilised in a more sophisticated way than by authors who simply assumed that the way to overcome food shortages was to raise food prices. Podkaminer's argument was corroborated by the 'surprising' results of the huge food price increases imposed in Poland by the military regime in 1982 (Podkaminer, 1987, p. 511); and by the relative price movements in Poland after the price liberalisation of 1989–90 (Bell and Rostowski, 1995).



**Fig. 1** *A shortage-preserving supply curve*

Fig. 1 'shows a situation in which there is a normal shortage (e.g. a waiting period of four years for a car), which cannot be reduced by increasing prices because of the behaviour of the planners. When the price is increased, demand falls but so does supply, because the planners respond to the reduction in demand by reducing production or cutting imports or increasing exports. They aim to preserve the normal level of shortage in this market. This behaviour results from the planners' ideas of what is normal and acceptable; the fact that decision making is not guided by profit maximisation; and the general environment of shortages, which means that there are always attractive alternative uses for consumer goods (e.g. exporting them to earn scarce foreign exchange)' (Ellman, 2014, p. 307).

Furthermore, the authorities in the Leninist-Stalinist socialist countries were not free to fix prices at levels that would allow all demand to be satisfied. They were subject to social and political constraints. Low rents particularly benefitted officials, who had the best housing and paid very low rents. Low prices for cars enabled officials to obtain these desirable goods at favourable prices. A considerable number of influential officials would have objected to paying higher rents and other prices. Furthermore, when raising rents (frozen at 1926 levels) was proposed by the Soviet Minister of Finance in 1948 (Dobrokhotov *et al.*, 2010, p. 496), this was rejected by Stalin on political grounds. Low rents were treated in official propaganda as one of the advantages of the socialist system. To have raised them would have partially delegitimised the Leninist-Stalinist socialist system in terms of its own rhetoric. In addition, raising food prices could cause strikes and riots, with major political consequences. Twice in Leninist-Stalinist socialist Poland the top national leader (first Gomulka and then Gierek) was overthrown as a result of working class reaction to food price increases. In the USSR,

the one-time Minister of Finance and then briefly Prime Minister Pavlov (1995, p. 97) emphasised the ‘Novocherkassk syndrome’ that for many years prevented the Soviet leaders from increasing food prices.<sup>18</sup> In his debate with Kornai, Gomulka (1985, p. 8) sensibly drew attention to the role of political and ideological factors in generating the price policy which created shortages of consumer goods and services. Kornai, of course, recognised this issue. In his analysis of the results of trying to solve the housing shortage by raising rents, he concluded by noting that changing relative consumer prices after a long period of stability in rents would have not only economic but also far-reaching political consequences (Kornai, 1980C, p. 510).

Another factor generating shortages in the Soviet Union was the ‘structural militarisation’ of its economy (Ellman, 2014, pp. 124–6). Many years after publishing his model of market socialism, Lange (1962) pointed out that the Soviet economic system was ‘a *sui generis* war economy’. Kornai (2014, pp. 149–150) himself pointed out that war economies generate shortage phenomena, but did not relate that to the peacetime experience of Eastern Europe or the USSR. In part, this reflects the lesser importance of military factors in the Hungarian economy. However, it also reflects self-censorship. Kornai consciously decided, in order to enable *Economics of Shortage* to be published legally in Hungary, to avoid writing explicitly about the USSR (Kornai, 2006, p. 243). Generalising the Hungarian experience to all the countries which adopted the Leninist-Stalinist socialist system neglects an important aspect of the Soviet experience.<sup>19</sup> Surprisingly, this major issue concerning the welfare effects of socialist planning was largely ignored in the academic debates of the 1930s and later. As was observed four decades ago: ‘The main problem that “central planning” raises for economic welfare is that central planning . . . is primarily concerned with war preparations. The main purpose of economic planning in many countries is to expand the capacity to wage war’ (Ellman, 1983, p. 20).

In this combination of causes of shortages, Kornai gave a one-sided emphasis to three of them, the soft budget constraint, the siphoning effect, and the shortage-preserving behaviour of the planners. In *The Socialist System*, which was published 12 years after *Economics of Shortage*, more attention is given to ‘arbitrary and irrational relative prices’ as causes of shortages of consumer goods and services. In particular it is pointed out that free or heavily subsidised prices for basic needs (housing, medical care, public transport, basic food products, etc.) inevitably cause shortages of them (Kornai, 1992, pp. 273–5). This made his explanation of the cause of shortages on the consumer market less original and brought it much closer to the explanations given by Gomulka and Podkaminer. Another explanatory factor in some countries in some

<sup>18</sup> In June 1962 a national increase in meat prices led in Novocherkassk—a town in the North Caucasus—to a strike, blocking of the railway line, riots and demonstrations under the slogan ‘Meat, Butter and an Increase in Wages’. Top leaders arrived from Moscow to pacify the demonstrators but to no avail. The restoration of order required troops to shoot into a crowd of unarmed demonstrators. In all, 23 people were killed and many more injured. A show trial held two months later sentenced seven participants to death and others to prison sentences of between 10 and 15 years. By ‘Novocherkassk syndrome’, Pavlov meant the fear of the Soviet leadership that an increase in food prices would precipitate a repetition of the events in Novocherkassk, possibly on a larger scale.

<sup>19</sup> Kornai (1992, p. 174) does mention the priority of the arms industry in investment planning. He also noted 20 years earlier the importance of the development of defence-related industries in the USSR in the 1930s (Kornai, 1972, p. 92). Similarly, in *The Socialist System*, p. 29 he explains the Soviet stress on rapid growth by military needs. Despite this, military requirements play a very minor role in *Economics of Shortage* and *The Socialist System*.

periods was the growth in the money incomes of the population in excess of the growth of state retail trade, as a result of subsidies and the growth of actual wages in excess of planned wages. Nakamura (2017, p. 163) pointed out that in the USSR, ‘planned and actual wages systematically differed during nearly the entire Soviet period’. When prices in state retail trade were fixed for some time, this was bound (when actual wages exceeded planned wages) to lead to shortages (unless the extra purchasing power was absorbed by voluntary saving or compulsory purchase of government bonds).

In his autobiography, Kornai recognised some of the limitations of *Economics of Shortage*:

Before a comprehensive, chronic, intense shortage economy can develop in a country, it is *necessary* for the budget constraint on firms that account for most of the production to be soft, but that is not a *sufficient* condition. Other factors must also take effect: a ban on free enterprise, administrative restrictions on competition from imports, distortions in the price system, and so on. *Economics of Shortage* placed too much emphasis on the soft budget constraint. That weakness cannot be explained by self-censorship and the need for voluntary curtailment to ensure legal publication. The main reason is that the analysis was not yet sufficiently mature. (Kornai, 2006, p. 262)

Kornai was not original in drawing attention to shortages as an economic phenomenon with serious implications. Hicks (1947) had already done that for the post-war UK. Hicks ascribed the shortages to price controls (which fixed prices below the level at which all demand could be met) and the inadequacy of quantitative controls (i.e. rationing of consumer goods and allocation of raw materials) to deal with the resulting excess demand. He suggested overcoming the problem by raising interest rates and a forced loan (a standard measure in the USSR under Stalin) so as to reduce demand. He did not advocate increasing or freeing prices, possibly because of a rejection of open inflation and/or apprehension about the possible socio-political effects of rising prices, and/or because price increases in the UK in 1947 were politically unacceptable. In this respect (not advocating price increases to end shortages) Kornai agreed with Hicks.

Holzman (1970) developed the analysis of Hicks (and Ohlin, 1949) into an analysis of the situation in the USSR. He ascribed the well-known microeconomic problems of the USSR (including shortages) to taut plans. In this way he offered an explanation of shortages focussed not on something the (Leninist-Stalinist) socialist countries did not have (bankruptcy<sup>20</sup>) but on something they did have (an economic system based on pressure from above).

*Economics of Shortage* had an important ideological function throughout the world (it was widely translated). It helped to erode the Leninist-Stalinist socialist system, both by what it said and by what some readers read into it and what the author himself thought (Kornai, 2006, pp. 250–3, 244). In addition, Kornai was quite right about the ineffectiveness of price increases in eliminating shortages in the bureaucratic-command economy. There was no automatic process of supply and demand adjustment, independent of the decisions of officials subject to socio-political constraints and institutional regularities, that would eliminate shortages as a result of price increases.

<sup>20</sup> The soft budget constraint looked at from the perspective of a market economy is simply the result of the absence of bankruptcy (Kornai, 1980B, pp. 28–9). When bankruptcies are normal for companies that exceed their financial resources, those companies disappear.

This reflected his understanding that this was a system that behaved differently from a market economy.

This phenomenon is relevant to the long debate about the historical specificity of economic theory (e.g. [Hodgson, 2001](#)). There was a real, and long-persisting, phenomenon of shortages in the Leninist-Stalinist socialist countries that could not be eliminated by price increases because of the behaviour of the suppliers and some of the demanders. This illustrated the fact that the ‘law of supply and demand’<sup>21</sup> is not universal and general to all economies, but is just a generalisation of something specific to some markets in one economic system.<sup>22</sup>

The crucial (and, from a mainstream perspective, quite unexpected) role that Kornai ascribed to the behaviour of the people in the bureaucratic-command system (planning officials who tried to maintain the ‘normal’ level of shortages, managers who strove to obtain inputs without worrying about their cost, and workers who preferred rationing to market-clearing prices) is why Kornai is sometimes considered a behaviourist. Contrary to some uses of that term, this simply means that the system-specific behaviour of the inhabitants of the bureaucratic-command economies plays an important role in his theory of that system. However, Kornai’s behaviourism was based on the anthropological method of participant observation (by an economist who lived and worked in the system he analysed) and not on the method of experiments under controlled conditions borrowed from experimental psychology and used by contemporary economic behaviourism (e.g. [Thaler, 1980](#); [Kahneman et al., 1982](#)).

### 3.3 Kornai on privatisation

Another area where the systems approach turned out to be valuable from a policy perspective concerns privatisation. In 1989–92 the collapse of the Leninist-Stalinist socialist system meant that privatisation of the previously state-owned economy became a major policy issue. How should it be organised? Should shares in state-owned companies be sold to the public, as in Thatcherite privatisation? Should companies, land and flats be given free to their workers, farmers and tenants? Should assets such as land and housing be returned to the former owners or their heirs? Should the managers of state-owned enterprises (SOEs) have the possibility to transform their management rights into management and ownership rights? Should all state property be sold for vouchers to the whole population, the members of which would receive the vouchers for a nominal price or for free? These were fundamental issues with an important influence on the future development of the countries concerned. Some

<sup>21</sup> By this I understand the proposition that discrepancies between supply and demand can always be eliminated by price adjustments and that this happens automatically because of appropriate behaviour by the demanders and suppliers.

<sup>22</sup> Curiously, in view of his focus on the historical specificity of economic theory, as an example of possible laws or principles at his third level of abstraction (human civilisation) [Hodgson \(2001, p. 326\)](#) includes ‘effects of supply and demand on prices’. However, this is just a generalisation to all human civilisations of a feature of some markets in one (fourth level) system i.e. capitalism. Neither in the Soviet civilisation nor in the world of Odysseus ([Finley, 1962, p. 77](#)) were prices determined by supply and demand. Even under capitalism, many prices are sticky, as [Kornai \(2014, p. 69\)](#) noted. Under capitalism, fluctuations in demand for primary products usually do influence their prices but for manufactured goods they usually influence not prices but the quantities produced. This is partly a result of different market structures (monopoly, oligopoly, or a large number of competitors) and partly a result of the contrasting system of remuneration of the producers (fixed wages of industrial workers versus fluctuating incomes of smallholders).



countries adopted a neo-Bolshevik approach, with the emphasis on rapid privatisation for political reasons (to make the return of the previous system impossible, despite the continued political strength of the Communist Party and its supporters). At a lecture in 1999: 'Asked about his role as privatization minister [in Russia] from 1992 to 1994, Chubais conceded that his privatization efforts could be characterized as "Bolshevik-style" – lacking public support and quickly executed . . . His strategy was to privatize as quickly as possible, using every minute of the day to privatize: "I did not speak, I privatized", Chubais proclaimed' (as reported by the inviting organisation and quoted in Kornai (2000, p. 25).

This stress on the need for rapid privatisation of SOEs was supported by some international financial organisations, by some economic advisers and by some economists commenting on the 'transition'.<sup>23</sup> Rushed privatisation of SOEs, however, was rejected by Kornai. He argued at the beginning of the transformation process that:

. . . the sale of state property should *not* be governed by the guiding principle of speed. The "Enough of it, away with it" approach is irresponsible. State ownership has a definite role in places where it can solve certain tasks more efficiently than private enterprise. For example, no one would propose to hand over highways to private owners . . . [ownership] changes will evolve in a prolonged organic process. This process should be energetically accelerated, but it should not be rushed hysterically, nor should it be executed as a sudden operation . . . in my opinion we shall have to reckon for the next two decades with the *dual* economy that emerged in Hungary over the past ten to twenty years, and with its two constituent parts: the state and the private sectors. (Kornai, 1990, pp. 93, 101)

Kornai also objected to the application of what some economists treated as the theoretical justification for rapid privatisation, the Coase theorem. Kornai (2000, pp. 16–17) strongly criticised what he termed 'vulgar Coase-ism'. 'Vulgar Coase-ism' in this context meant disposing of state-owned assets as quickly as possible and thinking that it did not matter to whom they were transferred—the existing managers, the existing workers, the general public, asset-strippers, criminals, or people with political connections—since it was assumed that Coase's theorem proved that the assets would soon end up being owned by capable managers who would ensure their restructuring into efficient businesses.<sup>24</sup>

Kornai's (1990, 2000) approach was to stress, not the need for rapid privatisation of the existing SOEs, but the need to provide favourable conditions for the emergence and development of new private enterprises. This was based on his ideas (derived from Marx, Hayek, Schumpeter and Braudel) about capitalism as a system. In this system the key role in economic development is played by the entrepreneur and gradual development, and in socio-political development by the bourgeoisie. Hence, if capitalism was to replace Leninist-Stalinist socialism, it was necessary to remove the bureaucratic restrictions on private enterprise and encourage both the multiplication of the number of entrepreneurs and the spread of bourgeois norms (such as: the need to pay for property, the need to pay bills and the willingness to risk one's own money in business ventures). Trying to construct capitalism quickly by central policies, as Leninist-Stalinist

<sup>23</sup> As has been observed about the transformation of the bureaucratic-command system into national varieties of capitalism: 'There were innumerable publications about "transition" as if it were a real phenomenon rather than a debateable label for the complex process of transformation of one economic system into another economic system'. (Ellman, 2019, footnote 18)

<sup>24</sup> This explanation of 'vulgar-Coase-ism' is based on Ellman (2019, footnote 15).

socialism had been constructed, was fundamentally misconceived. It failed to understand the capitalist system.

Subsequent events showed that this stress on the development of new private enterprises and criticism of schemes to rapidly privatise the economy by issuing vouchers to the public, which could be exchanged for shares in investment funds (which invested in former SOEs) or in individual former SOEs, was entirely sensible (Ellman, 2005, pp. 597–9). The importance of the new private sector was soon generally accepted (Kolodko and Nuti, 1997; Dabrowski *et al.*, 2001). A decade after the commencement of the transformation of the Polish economy, Dabrowski *et al.* (2001, p. 318) observed that: ‘the early conventional view probably over-estimated the positive impact on performance of fast privatisation of SOEs’. Kornai’s stress on privatisation by means of permitting, supporting and encouraging the creation of new private firms corresponds to an important aspect of the development of the private sector in China. Hence Kornai and Qian (2009, p. 4) conclude that: ‘China’s reform experience conforms to Kornai’s notion of the “organic development” of the private sector, where natural development of new enterprises in private ownership rather than accelerated privatization [of the SOEs] drives the growth [of the private sector]’.

#### 4. Kornai’s rejection of socialism in general

Kornai was criticised by Lebowitz for generalising the negative conclusions of a theory that is only relevant to the vanguard mode of production (i.e. an economic system introduced by a vanguard political party<sup>25</sup> that has seized power) into a rejection of all varieties of socialism. That is understandable criticism from an advocate of a socialism (Lebowitz, 2000, p. 391) ‘whose seed and genetic programme is the association of free and equal producers’. However, Kornai, like Marx, was uninterested in discussing utopias. For him, socialism meant primarily the self-proclaimed socialist system introduced by Communist parties in the USSR and elsewhere, which actually existed for decades, and not some utopian system that does not exist anywhere on a national scale despite 200 years of debate about its allegedly superior qualities.<sup>26</sup>

However, Kornai did recognise that there are a variety of possible interpretations of ‘socialism’. He distinguished five of them, the Marxist; the Walrasian (as in Oskar Lange’s model of market socialism); the Leninist (which developed into what Kornai termed ‘classical socialism’, the ‘best example [of which] is Stalin’s rule for several decades’ (Kornai, 2009B, p. 17); the social-democratic; and the contemporary Chinese and Vietnamese. He did not select one of these five interpretations as the correct use of the term. ‘“Socialism” is not a registered trademark. No one has the right to give a mandatory and exclusive definition, claiming that his definition is the only legitimate one’ (Kornai, 2009B, p. 22). Nor did he advocate the introduction into a real economy of any one of these five interpretations.

<sup>25</sup> The ‘vanguard political party’ is a Communist party. It regards itself as representing the working class (and sometimes also other strata such as poor peasants). As Kornai summarised its ideology: ‘The working class does not exercise power directly; it is represented by the party. The party is the vanguard of the working class and so ultimately of the whole of society. As such it is destined to lead society . . . The party knows better than the people itself what the people’s interest demands; this is precisely what “vanguard” means’. (Kornai, 1992, p. 55)

<sup>26</sup> There are some producer cooperatives scattered around the world that approach on a small scale Lebowitz’s vision of socialism.

However, despite Kornai's critical analysis of Leninist-Stalinist socialism, there are many socio-economic reforms that have been introduced in the past in one or more capitalist countries, which were denounced at the time by their opponents as socialist, but which had substantial benefits for a large part of the population. Similarly, there are numerous reforms currently under discussion in various countries that are described by their advocates as socialist and may well benefit many people. The same may apply in the future. Kornai's work is a powerful critique of the vanguard mode of production but, as Lebowitz correctly pointed out, not of all the measures and systems that may now or in the future be described, by their supporters or opponents, as 'socialist'. Kornai himself has recognised that:

The parliamentary system does not collapse, nor does the KGB arrive when the state starts to offer free health services or to make free education a universal right. The prime feature of the [Leninist-Stalinist] socialist system is repressive and totalitarian political monopoly. The welfare state arrives under constitutional conditions of political democracy and operates in ways compatible with democratic institutions. (Kornai, 2014, p. 154)

Nevertheless, Kornai's detailed account of how a movement dedicated to building a socialist utopia failed to do so, created many economic problems, and eventually collapsed, is a useful lesson for anyone who still has hopes of building a socialist utopia.

## 5. Conclusion

Kornai is an iconoclastic economist whose work overlaps with that of several heterodox schools, but who does not belong to any one of them. His analysis began not from the individual or the firm, nor from the market, money or the plan, but from the properties of economic systems, resulting from both production processes and the behaviour of the people in those systems. This enabled him to develop a realistic, although incomplete, analysis of the bureaucratic-command system, and to foresee the failure of policy proposals that could only have worked in a different economic system. It also enabled him to develop alternative, and superior, ideas about privatisation when (Leninist-Stalinist) socialism collapsed and capitalism was reintroduced.

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