

## A new institutional approach to the study of the Soviet-type economy

Tamara TODOROVA\*, Aleksandar VASILEV\*\*

### Abstract

*The paper analyses the transaction cost of economizing and efficiency-enhancing effects of the Soviet-type economy. The last 30 years of transition have seen the failure of market reforms in many industries in what are traditionally non-market economies. We argue that centralized, command-and-control systems are wealth maximizing in the conditions of persistent transactional and behavioural failures. With its centralism, strict hierarchy, and monopoly over information, the Soviet-type economy was able to produce significant output. We emphasize the role of centralism in coordinating economic activities, curbing opportunism, and facilitating information flow. In highly opportunistic societies where the transaction costs of market operation are significant, centralized systems are more efficient than decentralized, democratic systems based on free-market rules.*

**Keywords:** Soviet-type economies, transaction costs, opportunism, coordination, welfare

### Introduction

In his theory of the predatory state, North (1979) finds the following two objectives to such a state: 1) to provide a set of public goods and services designed to lower transaction costs and increase the efficiency upon which the growth of wealth is predicated; and 2) to specify the fundamental rules of the property rights structure, i.e. the ownership structure in factor and product markets, in a way that maximizes the rent flowing to the ruler and the ruling stratum. North applies his theory to the Soviet-type state in which the ruler aims to maximize the overall wealth of society and create a wealth maximizing the economic system. Olson (1984) argues

---

\* Tamara TODOROVA is associate professor at the American University in Bulgaria, Department of Economics, Blagoevgrad, Bulgaria; e-mail: ttodorova@aubg.edu. ORCID: 0000-0001-5598-3815 (Corresponding author)

\*\* Aleksandar VASILEV is senior lecturer at the University of Lincoln, Lincoln International Business School, Accountancy, Finance and Economics Department, Lincoln, UK; e-mail: Avasilev@lincoln.ac.uk. ORCID: 0000-0002-3956-6314

that no government, even an authoritarian one, has incentives to cause serious recessions or disequilibria in the economy. Even a totalitarian government would want to foster economic growth and maximize the overall economic output in order to reduce dissent. A socialist government which is egalitarian by nature would have stronger incentives to ensure the wealth of all its citizens and increase aggregate output which is to be distributed equally among all members of society rather than just few select groups. Coase (1960) referred to the Soviet socialist firm as a superstructure and a planned society which serves to substitute the market completely. In his theory of the firm, Coase (1937) based the analysis of bureaucracy on transaction costs as the marketing costs of organizing exchange. Coase (1937, p. 339) explained the nature of the firm as a centralized entity run by an authority, “a system of relationships which comes into existence when the direction of resources is dependent on an entrepreneur.” The firm would be larger the more transactions the manager undertakes to carry out instead of the market. At the extremum there will be one very large firm substituting the market completely. Such a super-firm, but of a very special kind, is the state: “since it is able to influence the use of factors by administrative decision” (Coase, 1960, p. 17). The big centralized state-owned firm carries out all the functions of the market based on administrative direction and control. Coase derived his views from Lenin’s statement that Russia will be run as one big firm (Bradley, 2014).<sup>1</sup>

Soviet-type economies are traditionally non-market economies faced with significant transaction costs of market exchange. Transaction costs and market failure in such non-market economies result from excessive contractual opportunism, high market uncertainty, and costly information in market exchanges. Societies where opportunistic members face high transaction costs, which determine a greater degree of centralism, administrative control, bureaucracy, and planning. With significant administrative costs and organizational opportunism, centralized hierarchical structures save on those costs of internal organization more effectively than diversified, decentralized structures. In what are traditionally non-market economies, market information is strongly asymmetric, information impactedness is strongly expressed, economic agents have no trust in each other, markets are static and do not seem to evolve, and market power is more prevalent than in market economies. According to Sacks (1988), behavioural and transactional problems related to bounded rationality and opportunism existed in non-market economies at

---

<sup>1</sup> In his Nobel Prize lecture Coase refers to the Russian economy on the eve of the October Revolution, “The Russian Revolution had taken place only fourteen years earlier. We knew then very little about how planning would actually be carried out in a communist system. Lenin had said that the economic system in Russia would be run as one big factory... And yet there were factories in the West and some of them were extremely large. How did one reconcile the views expressed by economists on the role of the pricing system and the impossibility of successful central economic planning with the existence of management and of these apparently planned societies, firms, operating within our own economy?”

the time of socialism, which justified putting transactions inside the firm to insulate them from the outside environment. Sacks (1988) discusses transaction costs in former socialist economies, where bringing transactions within the firm and replacing the market with non-market mechanisms seem to be valid for non-market societies, too.<sup>2</sup> The very same problems may be encountered with administrative bureaucracy rather than with the market mechanism as the environment outside the firm. Sacks finds that in non-market economies, too, the social cost of opportunistic behaviour (actual or perceived) may be substantial since more resources are devoted to the planning process, higher levels of inventories are maintained, and there are extraordinary duplication and fragmentation of productive capacity. Sacks concludes that human and transactional factors contribute to explaining why socialist countries have chosen to replace some interfirm, distant, arms-length transactions with intrafirm coordination. In a broad sense, behavioural transactional failures help explain why socialist countries have turned to the command economy and economic coordination through a central plan.

In this paper we argue that centralized systems such as those in non-market economies are designed with the purpose of reducing the overall transaction costs in the economy and maximizing joint output to a level higher than what the market offers. In highly opportunistic societies, groups, or industries where the transaction costs of market operation are significant centralized systems, these are more efficient than decentralized, democratic systems based on free market rules. The output generated on free market terms is lower than that under economic centralism. By means of bureaucratic control centralized systems succeed in lowering aggregate transaction costs and increasing cumulative output.

Winiecki (1990) maintains that in Soviet-type economies there are disincentives to decentralized management in the state sector, that is, there are incentives to centralization. We argue that a centralized system based on economic control and planning is, in effect, efficient in the conditions of high transaction costs of market exchange. Preventing decentralized management in the state sector which implies enhancing centralized management reduces transaction costs and is thus preferable to decentralized management. Studying different systems of resource allocation is essential in the analysis of different modes of wealth maximization in various societies. Arrow (1969) maintains that the identification of transaction costs in different contexts and under different systems of resource allocation should be a major item on the research agenda of the theory of public goods and the theory of resource allocation in general. Furthermore, Arrow (1969) distinguishes between transaction costs and production costs in that transaction costs can be varied by a change in the mode of resource allocation, while production costs depend only on

---

<sup>2</sup> Sacks (1988, p. 866) writes, “While the environment surrounding the firm is different in market and non-market economies, many of the reasons for bringing transactions inside the firm are the same.”

the technology and tastes and would be the same in all economic systems. This implies that taking on a transaction cost and new institutional approach to the study of the Soviet system is a proper way to analyse it as a centralized resource allocation system which maximizes cumulative wealth.

We discuss the Soviet-type economy embodied by the former Soviet Union and its closest satellites. A different type of communism was pursued by China and Yugoslavia. Under Deng Xiaoping, China has followed a policy of market orientation and openness to world markets since the end of the 1970s. The Yugoslav economic model of self-management and industrial co-governance initiated in the 1960s has transformed Yugoslavia into a neutral state following a hybrid model of socialism with capitalist features. Both the Chinese and the Yugoslav model introduce private property and remove the monopoly of state ownership. Once private property is introduced into the system, there is little left of the Soviet-type economy. The former Soviet Union included the Russian Federation, Belarus, the Baltic states (Lithuania, Latvia, and Estonia), Ukraine, Moldova, etc. The Soviet Union and its direct neighbours Bulgaria and Romania represent strongly centralized socialist economies. At the same time, Central European economies were more reform oriented, with different degrees of decentralization and openness. For instance, while agricultural land remained largely in the hands of farmers in Poland throughout the entire period of socialism, it was fully expropriated in Bulgaria in the 1950s through the process of cooperation and also in the Soviet Union since the late 1920s with the forced collectivization and formation of the *kolhoz*, or the state-owned farms. Expropriation as a forced nationalization took place in all economies of the Soviet type. While in Hungary, Poland, Czechoslovakia, and the German Democratic Republic some small businesses were privately owned, in the former Soviet Union, Bulgaria and Romania, representative for the true Soviet-type economy, property remained primarily state-owned. In Hungary under the “Goulash communism” prices gravitated to the market equilibrium while in the Soviet Union and Bulgaria the central Pricing Committee established fixed price levels which caused chronic shortages and surpluses. While Central Europe had a milder form of communism, Eastern Europe adopted a strongly centralized economy with the communist party ruling all spheres of life.

The Soviet economy experienced different degrees of centralism under the different Soviet leaders but remained rigidly communist and totalitarian in its essence. Lenin (1917-1922) staged the October Revolution in 1917 as a dictatorship of the proletariat but eventually turned to the New Economic Policy (NEP) in 1922, which in a sense was a return to capitalist economic policies. Being in the middle of the road and designed as a mixture of socialist features with capitalist incentives, the NEP softened the degree of centralization and provided incentives to the peasants to produce more output. These soft policies were aborted with Stalin’s coming to power and his “great terror.” Using various forms of coercion and persecution, Stalin (1922-1953) pursued heavy industrialization, forced collectivization in agriculture, strict

central planning through 5-year plans and a highly centralized command economy. Khrushchev (1953-1964) abolished the cult of Stalin. Khrushchev encouraged initiative emphasizing agriculture. He expanded agriculture increasing its efficiency and preserved the large industrial complexes but emphasized consumer goods more than heavy industry and military goods. Khrushchev also invested in science and technology. He was dethroned by Brezhnev (1964-1982) whose conservative leadership exacerbated the economic problems of the Soviet system. The Brezhnev era, also known as the stage of “mature socialism” expanded the military complex and centralized the economy further. Although the Soviet system went through different leadership styles, the core of the Soviet-type economy was preserved. It was not until Gorbachev (1985-1991) came to power that true economic reforms were initiated with *glasnost*, *perestroika* and *samoupravlenie* (self-management), ensued by the disintegration of the Soviet Union from the initial 15 republics of the Federation.

This paper aims to revisit the history of the Soviet system through the lens of transaction cost theory and provide an alternative view of this controversial historical period. We follow a long-term tradition in new institutional economics to present economic relationships narratively and qualitatively before a comprehensive quantitative model is undertaken using mathematical and econometric techniques. This study of the planning system from the perspective of transaction costs is only an introduction to a broader analysis of centralized economies. In section 1, the paper continues with an analysis of the mechanisms by which administrative control substitutes for negotiation costs within Soviet organizations. Section 2 discusses the transfer of information in the Soviet system. Section 3 addresses the problem of opportunism in Soviet enterprises and how they resolve it with the help of coercion and ideology

## 1. Coordination in the Soviet-type economy

Centralized systems are organized along strict hierarchy and authority to avoid haggling and to bring down negotiation and deliberation costs. They embed the command-and-control approach both at the aggregate and at the firm level. In the Soviet economy the *nomenklatura* recommends and approves appointments for all managerial positions in enterprises based on loyalty and obedience. Winiecki (1990) notes that since loyalty in the Soviet system is the foremost concern, managers, once appointed, are evaluated based on their loyalty, as measured by their compliance with commands such as achieving planned targets or meeting ad hoc commands, rather than their managerial efficiency (producing desired outputs at least cost). Winiecki argues that the preference for loyalty to one’s superiors over real performance does not signify the dominance of power or ideology over wealth considerations but rather the accumulation of rents by the ruling stratum. However, loyalty is an asset in a centralized system, since obedience and following commands

may be more important than competence, expertise, or independent opinion. In a centralized system, loyalty and the strict fulfilment of commands are, in effect, efficiency which allows to meet the goals of the system in the conditions of high transaction costs of internal and external operation.

Centralized systems rely on commands, directives, and orders rather than suggestions or recommendations because the latter require bargaining and negotiation. Negotiation costs are, in a sense, transaction costs. Through economic centralism, the Soviet-type economy saves on the transaction costs of economic coordination, substituting those with the administrative costs of bureaucracy which are being minimized under the command-and-control approach. With strong hierarchical decision-making commands which may be changed consequently or with new commands which may be issued, that involves less arguing and saves on time. Administrative control is process-oriented, rather than outcome-oriented, because time and effort for deliberation and individual decision making are saved. The *apparatchiks* and the economic bureaucrats issue direct orders or prescriptions on how to produce output, when, at what quality levels and in what quantities. Winiecki (1990) maintains that the control of economic activity by the economic bureaucracy and party apparatus in the Soviet-type economy guarantees rent maximization to the ruling stratum. However, control and guidance aim efficient achievement of desired economic outcomes. In a strongly centralized system, giving commands or directives to subordinates increases the overall efficiency of the system. Loyalty and obedience may be more important than competence, managerial talent, or other expertise, as consistent with the command-and-control approach. Economic centralism and bureaucracy favour strict discipline and loyalty more than creativity, imagination, technical skills, or knowledge when those contradict the goals of the system. Thus, managers are appointed based on their loyalty rather than their technical talent because the most obedient, disciplined and best performing (meeting production targets and following commands, suggestions, or guidelines closely) are the most appropriate and suitable in such a system of army-like discipline. When the system operates under high transaction costs, both environmental costs and those of internal organization, loyalty is valued more than creativity, individuality, competence, or knowhow. Authoritarian management fits well with strongly hierarchical structures designed to save on the administrative costs of bureaucracy and faced with high opportunism, difficult transmission of information or difficult coordination of tasks (Todorova and Vasilev, 2017). The socialist manager uses coercion in leading the organization, paired with his good engineering skills or technical knowledge of the production process. Under high transaction costs of social organization, stemming from opportunism and the various obstacles to economic coordination, a centralized system based on dictatorial decision making, economic control and planning is, in effect, efficient. Except loyalty, centralized systems tolerate features such as triviality, monotony, quantity targets rather than quality levels, process rather than outcome. Table 1 summarizes

those features of the centralized system which increase its efficiency and contrast with the economic freedom, quality commitment, outcome orientation and liberty of the market as a decentralized system of social organization.

**Table 1. Qualities which increase the efficiency of centralized systems versus decentralization**

Economic centralism	Free Market (decentralized systems)
discipline	liberty
triviality	creativity
thoughtlessness	thoughtfulness
loyalty	disobedience
sacrifice of personal interest	focus on self-interest seeking
altruism	selfishness
collectivism	individualism
output maximization	profit maximization
censorship	freedom of speech and opinion
process oriented	outcome oriented

*Source:* Authors' representation

According to Winiecki (1990) there is greater rent extraction and resistance to market reforms in industry than in agriculture in Soviet-type economies. He attributes this opposition to the fact that “the best paying managerial jobs under the *nomenklatura* are in industry while there have been some relatively successful economic reforms in Soviet agriculture, “a sector in which opportunities for rent extraction are less frequent and the benefits are smaller.” However, opportunism and bounded rationality are more strongly expressed in industry than in other spheres of the socialist economy. Sacks (1988) observes that opportunistic behaviour is a very serious problem in non-market economies. A salient feature of those economies is that enterprise managers do not have the freedom to choose among alternative suppliers which exposes industrial enterprises to excessive contractual opportunism, like the one which arises with specific assets in market economies. There are monopoly power, difficulty to exert control, costly measurement, and interfirm opportunism in the industrial sector. The socialist firm interacts with monopoly suppliers, distributors, the central planning committee, the pricing committee, the industrial trust, or association. Firms do not disclose information fully in order to get favourable input allocations and output targets and engage in opportunistic behaviour<sup>3</sup>. Opportunism and the hold-up problem in interfirm relations cause

<sup>3</sup> According to Sacks (1988, p. 868) in communication with central planners, socialist managers overstate input coefficients, capital needs and product redesign efforts.

significant transaction costs in the industrial sector. Therefore, the level of transaction costs rather than the possibility for rent extraction seems to be the reason for a stronger degree of centralism, large firm size, and hierarchy in industry. At the same time, the agricultural sector which seems to provide for more competition, numerous small-size producers and lower transaction costs allows more economic freedom of private agents and decentralization.

In studying the role of contract in the Soviet economy, Kroll (1988) observes that Soviet suppliers often excuse their failure to fulfil delivery obligations with external factors such as the failure of planning agencies to allocate sufficient supplies, the failure of a sub-supplier to perform, or the lack of transport to deliver goods. Thus, suppliers blame the planning system for a breach of contract caused by their own negligence. A supplier may have an incentive either to delay deliveries to its customers or to deliver the wrong assortment. The failure of one enterprise to perform is likely to have spill over effects (Kroll, 1987). Efficiency considerations influence the choice of contract rules, even in a system in which the market has been displaced by central planning and Soviet contract law serves to economize on the costs of negotiating contracts as in Western economies. According to Kroll (1987), the purpose of the rules governing breach of contract is not to maximize the utility functions of enterprise managers but rather to support plan fulfilment by inducing enterprise managers to fulfil delivery obligations.

Firm size matters in the Soviet-type economy, as larger firms tend to save on significant intrafirm transaction costs. Monopoly seems to be prevalent with the command economy. Winiecki (1990) reports that the breaking down of large monopolistic enterprises would liquidate some well-paid posts for the economic bureaucrats and the *apparatchiks* since pay scales in socialism are dependent on size and the privileged stratum would lose its benefits. Yet, in centralized systems hierarchical structures seem to be larger, as more of the functions of the market are being absorbed by the hierarchy. Williamson (1985) maintains that scholars generally decline to deal with quasi-markets and the non-market mode of organization and view the primary economic explanation for such nonstandard or unfamiliar business forms as monopoly. The search for monopoly, monopoly power and rent-seeking, therefore, cannot explain all organizational forms including those existing in Soviet-type economies.

Winiecki (1990) also views the disincentives to decentralization and the obstacles to expanding the private sector as an attempt of economic bureaucrats to abort reforms aimed at reducing the state sector and diversifying the command economy.<sup>4</sup> While command economies are not necessarily or strictly democratic

---

<sup>4</sup> Winiecki (1990, p. 73) writes, "Expanding the role of the private sector in a Soviet-type economy usually has the same objectives as decentralizing, market-oriented, efficiency-enhancing reforms in the state sector. Theoretically, private sector expansion could serve as a substitute for state sector reforms, and could provide the means to circumvent strong resistance to market-oriented change in the state sector... Analysts invariably cite ideology



states, the dominance of non-exclusively owned resources in the state sector economizes on aggregate transaction costs. The incentive to restrict the private sector in Soviet-type economies is to act on the high costs and inefficiency of private transacting in such high transaction cost economies. Since market transaction costs influence the mode of resource allocation and are sizable in some sectors of the economy, they render private ownership inefficient compared to the public one, which reduces aggregate output and slows the growth of the economy. We have previously shown that expensive bargaining and market dealings between private agents, high degree of contractual opportunism, high asset specificity, paired with high market uncertainty and asymmetric information prevent privately owned resources to achieve their maximum value and best use since there are inherent obstacles to their being exchanged and appropriated by agents who value them the most (Todorova, 2014). With high transaction costs of private exchange, a more efficient allocation of resources can be achieved under public ownership. The Soviet industrial sector is such a sphere, where not only private ownership is inefficient, but a high degree of centralism ensures the smooth coordination and fulfilment of production targets and the five-year plan. At the same time, agriculture which experiences less market failure and lower costs of market exchange, invites free initiative and private bargaining since the costs of redistributing property rights and organizing such an exchange are relatively low. Generally, competitive sectors such as agriculture and monopolistically competitive industries where markets operate smoothly and there are multiple, efficient producers provide for decentralization. The Soviet state was strongly present in metallurgy, heavy machine building, natural monopolies, military production, and defence.

As to the system of property rights in the Soviet-type economy, Winiecki argues that it is one of muddled property rights and hostility to private ownership so that to ensure rent maximization for the ruling state apparatus and bureaucracy. With private property, where resources are clearly exclusive, it is impossible for the socialist elite to extract rents since bribery or theft from the private sector are criminal acts. While private property is restricted, state-owned property in the Soviet economy is clearly defined and well protected to ensure efficiency and output maximization. Public ownership is preferred over the private one, because it is expected that most wealth would be generated in centralized, state-owned structures and organizations. Furthermore, it is not coercion which distinguishes the state-run firm from the private one, but the form of ownership.

In the Soviet-type economy, long-run goals are more essential than short-run ones. Industries or spheres of life which cannot be organized on market principles or where the market fails are inevitably subsidized by the central plan, so there is a “soft” budget constraint. Society agrees to subsidizing socially important and

---

as the cause for the limited role of the private sector (except in agriculture) in Soviet-type economies.”

essential economic activities, which the market refuses to provide. Winiński (1986) reports that, opposite to declared goals, part of the output in the Soviet-type economy exists only on paper, products are shoddy and obsolescent, deliveries are late, efficiency indicators miss plan targets, and the managers are obviously unable to do anything to correct the situation. Winiński (1990) also maintains that attempted reforms in Soviet-type economies are generally doomed to fail. These reforms are oriented to limiting the number of obligatory indicators for enterprises and replacing them with guidelines, abolishing commands but retaining the right to reappoint and dismiss managers and retaining the rationing of inputs, which constrains more profitable output mixes by enterprise managers, since changing the product mix will reduce the prospects of receiving scarce materials. Yet, contrary to Winiński's claim, production targets cannot be missed dramatically, or production reports falsified too heavily in the Soviet-type economy, because managers can be punished if being caught distorting information too much. A command-and-control economy imposes strict discipline and military-type order and there is always the danger of imprisonment in case of malperformance. Failure to perform is disobedience, while meeting the production target or quality level is evidence of loyalty. Thus, socialist managers would not dare to deviate too much from production targets.

At all levels, the system follows the principle of satisficing, rather than optimizing. Maximum quality, maximum profit or cost optimization are not priority of the central plan, but minimum standards are followed. Success indicators such as the number of items produced, the number of labour hours used, the amount of raw materials, parts or components used are observed. Five-year plans set the quantity of final output or items to be produced. Minimum production targets known as quotas are set by the plan. The Soviet-type economy, in this sense, embodies the theory of sufficing advanced by Simon (1947) which contrasts economic with administrative decision making. Thus, products may not be of highest quality but should meet minimum quality standards. If caught with a quality lower than the minimum adopted or required, managers will be penalized. Deliveries are late but not excessively late, since managers of both supplying and producing firms could be dismissed or imprisoned if output is not produced on time or not produced at all. Product mixes are not optimal, since products and materials go to socially important spheres or towards the production of priority outputs. The ruler (as a last resort authority) can penalize managers for misconduct, disobedience, or poor performance at any time. The best performing enterprise managers (meeting production targets and following commands and guidelines closely) are the most obedient, disciplined and best performing in the command-and-control system.

## 2. Information flow in the Soviet system

Centralized systems have inbuilt mechanisms to reduce information costs, an essential type of transaction costs associated with collecting, consolidating, processing, and transmitting information. In the Soviet-type economy, the crucial information is concentrated in the economic centre, the *Politbureau*, the pricing committee, or the ministries. Because market demand is not studied at the firm level and traditional marketing tools are absent, production is organized along aggregate plans and forecasts and a huge amount of information is stored at the economic centre. This information is being processed and transmitted back from the central committee, ministry or trusts all the way to the manager of each individual socialist enterprise.<sup>5</sup> Arrow (1985) criticizes this process in that the individual productive units have incentives if they do not reveal information about the possibilities of production to the central planning unit because it would be easier to operate with less taxing requirements. In Arrow's view, the problem for the central planning unit (the principal) is how to tap the agent's information where a similar problem occurs in decentralization within a firm.

At the same time, Sacks (1988) emphasizes that in relatively simple circumstances bounded rationality does not represent a significant problem and coordination of activities among independent economic actors can be handled by the central planners. But in a world of complexity and uncertainty, the planning task becomes more difficult and costlier in terms of both the resources (human and material) expended in planning and the output lost in meeting non-optimal plans. Therefore, there are significant costs of information handling in the Soviet system. Sacks (1983) reports that the reason for creating the enterprise or the association is to avoid the costs of using the outside mechanism. By grouping enterprises into associations, the Soviet Union and Eastern European countries are facilitating direct communication and closer relationships between supplier and user or among users without interposing the central planners. In its environment, the Soviet firm is faced with informational asymmetries, adverse selection, contractual opportunism, contractual moral hazard, costliness of information, difficult access to information, obstacles to the transmission of information, the distortion of information and other forms of informational failures. Except the information transaction costs of the Soviet system at the aggregate level, there are costs of information handling within the individual firm, too.

---

<sup>5</sup> Kroll (1987, p. 121) reports that as a hierarchically organized economic bureaucracy the Soviet economy is coordinated by the State Planning Commission (Gosplan), which drafts production plans, and by the State Planning Committee of Supply (Gossnab), which drafts distribution plans for most centrally distributed commodities. There are over fifty ministries which break down the production targets down into specific production tasks for their subordinate enterprises.

Vertical integration in the Soviet-type economy occurs with huge industrial complexes, known as trusts or combines<sup>6</sup>, where vertically integrated, technologically related plants and industrial enterprises are united in a way such that the output of one firm is raw materials, parts, or components for another. In the socialist transmission of information, all strategic information is concentrated in the industrial complexes, ministries or economic associations of socialist enterprises which act as a strategic centre for the economy. They set the strategic goals of each enterprise while the operational decisions are left with the management of the enterprise. The role of the socialist director of the enterprise is to translate those strategic goals set by the economic centre into tactic, day-to-day actions and make daily and more trivial decisions on how to produce output, what resources to use, how to obtain those resources, how to deliver the ready-made output, etc.<sup>7</sup> The socialist manager in this resembles operational, low-level decision-makers in western modern corporations whose tasks are separated from the top, strategic management at the headquarters. This handling of information load and the separation of strategic and operational decision making are also consistent with Williamson's theory of information processing, in diversifying the transaction costs of information transfer. Williamson (1985) found that, with the increase in the number of transactions and information load, the unitary-form organization in the West could no longer handle internal transaction costs. The multidivisional form separates the strategic goals from the tactical tasks where strategic corporate managers are relieved of the burden of day-to-day operations and are charged with setting the mission, vision, survival of the business, the competitive environment, or the future of the industry. Williamson (1985) views informational load as the transaction cost reason for the emergence of the multidivisional form, particularly the generation, processing, and transmission of information.<sup>8</sup> A similar decomposition of tasks exists within the socialist firm. Sacks (1983) observes that in the socialist economy, by freeing the centre from routine tasks, the new system allows it to overcome information impactedness and to develop fine-tuning techniques so that its control over the important macro variables is improved and so that opportunistic behaviour by enterprise managers is reduced. According to Sacks (1983), it is the centre that does the long-term planning, allocates major resources among the divisions, and appraises the performance of the divisions, distributing rewards as it deems appropriate. To the extent that the socialist associations are designed to reflect: 1) the frequency with which transactions recur; 2) the amount of uncertainty involved; and 3) the degree to which durable transaction-specific investments (human or physical) are incurred, the associations would improve the

---

<sup>6</sup> From the Latin word *Combinatus*.

<sup>7</sup> See Sacks (1988) on information transfer and transaction costs in socialist systems.

<sup>8</sup> Williamson (1975, pp. 137-138) writes, "The multidivisional form served to economize on bounded rationality and attenuate opportunism: operating decisions were no longer forced to the top but were resolved at the divisional level, which resolved the communication load."

efficiency of the economy by reducing overall transaction costs (Sacks, 1983). The directors of the socialist enterprises perform the task of operational or transactional managers charged with dealing with suppliers, finding materials and components for the specific unit or subsidiary, monitoring employees within the division, supplying other divisions with components, know-how, capital, etc. They have information relevant only to the separate branch, unit, or product.

Kroll (1988) emphasizes that one important source of planning failure is the cost of collecting, transmitting, and processing the enormous quantity of information required for centralized decision making. Information costs in the Soviet-type economy arise from the limits on the computational abilities of the central planners, i.e., from bounded rationality, and the complexity and uncertainty in planning and coordinating a society's economic activities<sup>9</sup>. Because information is costly to collect, there are inconsistencies among the enterprise's production plan, delivery orders and the allocation of supplies. The combination of unbalanced plans, imperfect information and perverse incentives heightens the risk of opportunistic behaviour by Soviet enterprises (Kroll, 1988). Kroll sees the contract system and contract law in the Soviet-type economy as a formal substitute for the informal methods of supply insurance and a means of economizing information costs (Kroll, 1988).

Once the information is transmitted to the enterprise manager, he has the task of communicating it to the workers in the enterprise. Ordinary workers and employees are generally uninformed of the decisions of the strategic center and must act upon the commands of the informed manager. This allows the relocation of tasks and minimization of transaction costs. With low-skilled workers, opportunistic labor productivity would be low without proper guidance, commands, instructions, and control. There is the need for strict control over the use and transmission of information in Soviet firms, which determines a greater degree of centralism. Plans and reports are precisely formulated, and tasks of individual workers, brigades, units, or departments are strictly defined. This concentration of information in the hands of the manager or team of managers determines a high degree of centralism and hierarchy in the Soviet firm, while the manager is typically authoritarian. Strict hierarchy in transmitting information and commands on production targets and plan objectives saves on information transaction costs. Information in the Soviet system is complex and, given its large size, the socialist enterprise must handle large volumes of centralized information. This creates further challenges in handling the information load within the enterprise. The socialist managers process the aggregate information of the economic centre for subordinates and thus management turns into

---

<sup>9</sup> According to Kroll (1988) complexity arises from such factors as the large number of enterprises and production activities, and the interdependency of these activities. Uncertainty is rooted in the asymmetric distribution of information between planners and enterprises, and the tendency of enterprises to distort the information they supply to planners by understating their production capacities and overstating their input requirements.

an information processing unit, while workers follow strict commands. Such a concentration of information in the processing unit running the enterprise serves to economize on transaction costs, as the unit specializes in the transmission, generation, processing, and collection of information.

### 3. Opportunism in Soviet-type firms

Opportunism is a serious source of behavioural transaction costs in non-market economies. There is excessive opportunism not only in interfirm relationships, but within the socialist enterprise, too. Authoritarian management and coercion serve to curb this type of behavioural failure within the organization and bring about a high degree of centralism so that to save on the administrative costs of bureaucracy. In the Soviet-type economy workers are notoriously opportunistic at the workplace but this is embedded in the culture, as well (Pejovich, 2003). Workers shirk massively and cheat on quality or parameters which are hard to measure. Since quantity, production targets and quotas are a priority in accordance with the principle of sufficing and minimum acceptable levels, quality is sacrificed for the sake of quantity, or the best quality is not aimed at. Workers often freeride on the efforts of other members of the brigade, since the “brigade” principle rewards team results, rather than individual effort.<sup>10</sup> For instance, workers are strict with check-in and check-out times since those are measured strictly but are relatively lavish and undisciplined with work breaks, since those are not measured.

Except shirking on the job, opportunism in Soviet firms includes falsifying reports and production data about numbers and quality levels, overestimating and lying about the usage of raw materials, so that to hide wasteful usage or secure additional supplies of raw materials, exaggerating one’s productivity in order to meet the daily norm or yield, lying about one’s contribution in the production of cumulative or brigade output, lying about one’s qualification in employment contracts, asymmetric information and adverse selection in employment, manipulating machines and production data, underusage of materials or components. Shirking also takes the form of procrastination, delayed performance, absenteeism, lack of discipline, lack of quality commitment or production of products of lower quality. The most blatant form of opportunism in socialist enterprises is stealing. Workers save on materials, parts, or components or overreport their usage with the purpose of stealing them later or directly steal materials, inventory, or output from the factory.

The command-and-control manager is faced with the challenge of excessive worker opportunism which happens on a large scale, since the enterprise is a

---

<sup>10</sup> The brigade often had its own code of ethics and except for individual productivity it decided on the personal lives and morale of the workers. The most senior or most experienced worker would most often be the chief of the brigade and would generally be party-approved.

monopoly and involves many employees. His authoritarian approach restrains opportunism and guarantees that enough output is produced. Being autocratic, the socialist manager controls strictly the usage of inputs, the costs of production, the work schedules and the output produced (number of units produced, customers served, or sales achieved). If workers hide information, coercion and the threat of punishment oblige them to reveal it completely. Authoritarianism is a good way to reduce the cost of bureaucracy and administrative control when workers are highly opportunistic, uneducated, or low-qualified. Standard products are produced with the help of general-purpose equipment and less qualified labour in established industries (Gros and Steinherr, 2004). A production firm, a furniture plant, or a textile factory where standard processes take place, invite more monitoring and control than innovative and creative organizations. Workers show little initiative, prefer standard, tedious tasks, and even expect commands from the managers. If left without precise directives and instructions or asked to use creativity, workers are unable to operate and the production process stops. Workers are generally unmotivated and need monitoring which increases the transaction costs of internal operation. Being high transaction-cost, opportunistic organizations, Soviet firms invite a greater degree of centralism and autocracy, concentrating power in the hands of the manager. He manages and monitors a large unqualified labor force where decisions need to be made quickly without deliberation, haggling and negotiation. The protracted mode of democratic, decentralized management which takes longer to decide, is inappropriate and inefficient in the Soviet, state-owned firm. Command-and-control leaders ensure the safety of the system from external threat, internal dissent, or crisis. Without work discipline, proper organization, and strict monitoring, the system would collapse.

As with every other method or tool of economic governance, there are limitations to autocracy in Soviet firms, just like there are in western organizations. The costs of detecting, monitoring, preventing, or discouraging opportunism on the job are sizable and represent a substantive share of the costs of internal organization. It is impossible for the Soviet firm to rely solely on coercion, penalties, strict control, and centralism. These repressive methods are complemented by ideology. According to Winiecki, ideology is used by the ruling elite and economic *nomenklatura* solely to obtain power, privilege, and wealth. Winiecki (1990) reports that the ideological explanation for the hostility to the private sector in the disequilibria and structurally distorted Soviet-type economy fails, because in all spheres of society ideological fervour has generally subsided and because ideological reservations have had to be overcome first and foremost at the top. However, ideology plays a significant role in the Soviet-type economy since it is a non-coercive method of stimulating the workforce in a collectivist system where members of society are all dependent on each other. Ideology unites people, making them work towards the enterprise goals, identify with the organization, and align their interests with those of the organization. In collectivist societies ideology nurtures altruism, collectivism, loyalty, and

sacrifice of personal interest for the sake of the common good. According to Pejovich (1993) in Eastern Europe the community is generally seen as an organic whole with its own common good to which its members are expected to subordinate their private ends. He believes that the prevailing nature has a bias toward collectivism, egalitarianism, emphasis on extended family, and shared values. In the absence of private property there is less focus on self-interest, individualism, and profit maximization. In organizations where members are strongly opportunistic, persuasion, common values and beliefs are used instead of consistent punishment and remorse. Workers believe that they work for the society, that their labour is socially important and that producing output on time is crucially important for all. In the Soviet system, ideology performs the role of corporate culture in western organization, a rewarding, non-coercive, informal device for increasing worker conscientiousness, stimulating productivity, and curbing opportunism on the job.

As a result of the Soviet orientation to the command-and-control approach, paired with ideology, the Soviet Union adopted Taylor's scientific management in the 1920s and 1930s. It is believed that Taylorism, one of the first approaches in management theory, lay the foundation of the five-year plans. Taylorism appealed to the Soviet leaders because it applied time and motion studies, rational analysis, bureaucratic top-down administration, and command-and-control leadership style to provide the best method to perform particular tasks or meet production quotas. Taylor (1911) was the first in the management theory to discuss shirking on the job as a problem in achieving high productivity levels. Soviet leaders such as Lenin, Trotsky and Stalin found scientific management appropriate for their system not just because economic inputs could be measured precisely or optimized by design but because of the possibility to apply directives and commands to control workers in the conditions of a non-market economy. Aleksei Gastev (1966, 1973), a Soviet economist, trade unionist and Director of the Soviet Institute of Labor, was charged with the task of introducing scientific management in the Soviet economy. He reformulated it under the name "nauchnaia organizatsia truda."<sup>11</sup> Sorensen was brought to the USSR to share his experience as a long-term manager of the Ford Motor Company (Sorensen and Williams, 1956). In his studies, Stalin (1976) believed that the combination of the Russian evolutionary leap and American efficiency is the essence of Leninism. Because scientific management requires a high level of managerial control over employee work practices and focuses on detail, it increases the ratio of low-level managers to blue-collar workers and causes friction between workers and managers. To alleviate the tension of worker resistance to precision and strict detail, the Soviet authorities resorted to ideology.

---

<sup>11</sup> Which stands for scientific organization of labour.



## Conclusions

Economic agents in East European economies continue to be traditionally opportunistic for the most part. Coase<sup>12</sup> states that the transition and the move to a market economy in Eastern Europe make clear the importance of institutional factors. Transitional economies are advised to move to a market economy and their leaders wish to do so, but this is impossible without proper market institutions and without understanding the institutional setting within which transacting takes place, since institutions affect the incentives for producing and the costs of transacting.<sup>13</sup>

With high transaction costs of market exchange and internal bureaucracy, the Soviet-type economy had clear transaction cost advantages and throughout this paper we have tried to demonstrate the various mechanisms by which the Soviet economy saved transaction costs with its centralized mode, hierarchy and monopoly over information. With all its shortcomings, the Soviet system was able to produce a large amount of output in the conditions of high transactional and behavioural failures, by reducing the aggregate level of transaction costs. By selecting managers carefully, pursuing loyalty, and curbing worker opportunism with the means of command-and-control and ideology, the Soviet economy operated as a large scale, strongly centralized system. Thirty years after the start of the transition, the failure of market reforms and the relatively inefficient economic system prove that centralized systems such as those in non-market economies are designed with the purpose of reducing the overall transaction costs, so that there is joint output and wealth maximization. With significant transaction costs of market operation, centralized, command-and-control systems are more efficient than decentralized, democratic systems based on free market rules.

## References

Arrow, K.J. (1969), The organization of economic activity: Issues pertinent to the choice of market versus nonmarket Allocation, *The Analysis and Evaluation of Public*

---

<sup>12</sup> Coase, R.H. (1991), Nobel Prize lecture, December 9, retrieved from [www.nobelprize.org/nobel-prizes/economics/laureates/1991/coase-lecture.html](http://www.nobelprize.org/nobel-prizes/economics/laureates/1991/coase-lecture.html).

<sup>13</sup> Coase (1991) writes, “These ex-communist countries are advised to move to a market economy, and their leaders wish to do so, but without the appropriate institutions no market economy of any significance is possible.” Coase thinks that the West would have done a better job advising the emerging market economies, if it knew more about its own economy. Coase continues, “It makes little sense for economists to discuss the process of exchange without specifying the institutional setting within which the trading takes place since this affects the incentives to produce and the costs of transacting. I think this is now beginning to be recognized and has been made crystal-clear by what is going on in Eastern Europe today.”

- Expenditures: The PBB System*, Joint Economic Committee, 91<sup>st</sup> Cong., 1<sup>st</sup> sess., vol. 1, pp. 500-518. Washington, D.C.: Government Printing Office.
- Arrow, K.J. (1985), The economics of agency, in Pratt, J.W and Zeckhauser R.J. (eds.), *Principals and Agents: The Structure of Business*, pp. 37-51, Boston, MA: Harvard Business School Press.
- Bradley, R.L. (2014), *Capitalism at Work: Business, Government, and Energy*, Salem, MA: M&M Scrivener Press.
- Coase, R.H. (1937), The nature of the firm, *Economica*, New Series, 4(16), pp. 386-405.
- Coase, R.H. (1960), The problem of social cost, *Journal of Law and Economics*, 3, pp. 1-44.
- Gastev, A.K. (1966), *Как надо работать*, [How One Should Work], Москва: Экономика.
- Gastev, A.K. (1973), *Трудовые установки*, [Organization of Labor], Москва: Экономика.
- Gros, D. and Steinherr, A. (2004), *Economic Transition in Central and Eastern Europe: Planting the Seeds*, Cambridge: Cambridge University Press.
- Kroll, H. (1987), Breach of contract in the Soviet economy, *The Journal of Legal Studies*, 16(1), pp. 119-148. <https://doi.org/10.1086/467826>
- Kroll, H. (1988), The role of contracts in the Soviet economy, *Soviet Studies*, 40(3), pp. 349-366. <https://doi.org/10.1080/09668138808411763>
- North, D.C. (1979), A framework for analyzing the state in economic history, *Explorations in Economic History*, New York: Academic Press Inc., pp. 249-59.
- Olson, M. (1984), Microeconomic incentives and macroeconomic decline, *Review of World Economics* (Weltwirtschaftlicher Archiv), 120(4), pp. 631-645.
- Pejovich, S. (1993), Institutions, nationalism, and the transition process in Eastern Europe, In: Paul, E. (Ed.) *Social Philosophy and Policy: Liberalism and the Economic Order*, pp. 68–74. Cambridge University Press. <https://doi.org/10.1017/S0265052500004143>
- Pejovich, S. (2003), Understanding the transaction costs of transition: It's the culture, stupid, *The Review of Austrian Economics*. 16(4), pp. 347-361, <https://doi.org/10.1023/A:1027397122301>
- Sacks, S.R. (1983), *Self-Management and Efficiency: Large Corporations in Yugoslavia*, London: George Allen and Unwin.
- Sacks, S.R. (1988), Transaction costs in non-market economies, *Journal of Institutional and Theoretical Economics*, 144(5), pp. 865-870.
- Simon, H.A. (1947), *Administrative Behavior: A Study of the Decision Making Processes in Administrative Organization*, 4<sup>th</sup> ed. New York: The Free Press, 1997.
- Sorensen, C.E. and Williams, S.T. (1956), *My Forty Years with Ford*, New York: Norton.
- Stalin, J.V. (1976), *Foundations of Leninism: Lectures Delivered at the Sverdlov University*, Beijing, China: Foreign Languages Press.
- Taylor, F.W. (1911), *The Principles of Scientific Management*, New York: Harper and Brothers.

- Todorova, T. (2014), The tragedy of the private: Some transaction cost considerations, *International Journal of Social Economics*, 41(6), pp. 482-492. <https://doi.org/10.1108/IJSE-02-2011-0069>
- Todorova, T. and Vasilev, A. (2017), Some transaction cost effects of authoritarian management, *International Journal of the Economics of Business*, 24(3), pp. 295-314. <https://doi.org/10.1080/13571516.2017.1322258>
- Williamson, O.E. (1985), *The Economic Institutions of Capitalism*, New York: The Free Press.
- Winiecki, J. (1986), Distorted macroeconomics of central planning, *Banca Nazionale del Lavoro Quarterly Review*, 157.
- Winiecki, J. (1990), Why economic reforms fail in the Soviet system: A property rights based approach, *Economic Enquiry*, 28(2), pp. 195-221. <https://doi.org/10.1111/j.1465-7295.1990.tb00811.x>