

Lipovská, Hana; Coufalová, Lucie; Žídek, Libor

Article

Homo economicus in the shortage economy

DANUBE: Law, Economics and Social Issues Review

Provided in Cooperation with:

European Association Comenius (EACO), Brno

Suggested Citation: Lipovská, Hana; Coufalová, Lucie; Žídek, Libor (2018) : Homo economicus in the shortage economy, DANUBE: Law, Economics and Social Issues Review, ISSN 1804-8285, De Gruyter, Warsaw, Vol. 9, Iss. 4, pp. 207-226,
<https://doi.org/10.2478/danb-2018-0013>

This Version is available at:

<https://hdl.handle.net/10419/242133>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc-nd/4.0>



HOMO ECONOMICUS IN THE SHORTAGE ECONOMY

Hana Lipovská¹, Lucie Coufalová², Libor Židek³

Abstract

Rational agents react to incentives in the market economy as well as in the centrally planned economy. Economic laws are persistent regardless of the economic system. The legislative system changes the outcome of the game between economic agents and managers. The aim of this paper is to show how rational agents reacted to legislative incentives in the Soviet-type economy in Czechoslovakia in the 1970s and 1980s, that is, how they reacted to the general shortage in the centrally planned economy. Based on the original survey among former managers as well as on the legislative sources from the 1970s and 1980s, a taxonomy was made of economic reactions to the shortage economy. This survey was possibly the last chance to map the experiences of socialist managers who tried to run companies in the centrally planned economy. We distinguish plan manipulation in order to ensure payment bonuses; bribery in order to obtain short-supplied inputs and the creation of reserves for the purpose of fulfilling the plan. It was shown that, if the rational agent wanted to obey the higher law, he was forced to ignore lower legislation.

Keywords

Economic Crimes, Legal Cases, Shortage Economy, State Development Plan, Socialist Enterprises

I. Introduction

The Czech economy in the 20th century was a kind of economic laboratory. It experienced numerous forms of economic systems. The war economy of the First World War was followed by the various forms of cartel economy in the interwar period. During the Protectorate of Bohemia and Moravia, a centrally administrated economy characterized by rationing was adopted. After the Communist coup d'état in February 1948, the economic

¹ Masaryk University, Faculty of Economics and Administration, Lipová 41a, Brno 602 00, Czech Republic.
E-mail: lipovska@mail.muni.cz.

² Masaryk University, Faculty of Economics and Administration, Lipová 41a, Brno 602 00, Czech Republic.
E-mail: lcoufalova@mail.muni.cz.

³ Masaryk University, Faculty of Economics and Administration, Lipová 41a, Brno 602 00, Czech Republic.
E-mail: zidek@mail.muni.cz.

system turned into a centrally planned economy. Just after the Velvet Revolution in 1989, the market economy emerged as the result of a successful economic transformation.

The centrally planned economy was not homogeneous for the whole forty-year period. Its character and main features underwent significant changes between 1948 and 1989, especially after the partial (and unfinished) reforms of the economic policy conducted in the 1960s by Oto Šik. After the invasion of the Warsaw Pact troops in 1968, the liberalization experiments were terminated, and the economy was transformed into the Soviet-type economy (Šulc, 2004).

The aim of this paper is to show how rational agents reacted to legislative incentives in the Soviet-type economy in Czechoslovakia in the 1970s and 1980s, that is how they reacted to the general shortage in the centrally planned economy. It is crucial to understand that economic laws work in the very same way in all types of economic systems. Economic agents in the Soviet-type economy responded to incentives in the same way as any other rational agents in the market economy. What makes a difference is the playground defined by the legal framework.

In this paper we will present how the effort of fulfilling the main Act (five-year State Development Plan, respectively the shorter one-year State Development Plans) led to the violation of other laws, especially the Criminal Code. We use the legislature, the court's findings and decisions, reports of the General Prosecutor of the Czechoslovak Socialist Republic as well as the State's Final Accounts to document instances in which a lower law was broken in the name of a supreme law.

Furthermore, the unique results of our original research conducted among former socialist managers are used to illustrate the legal dimension of plan manipulation. This survey was possibly the last chance to map the experiences of the socialist managers who were in charge of companies in the centrally planned economy.

Firstly, we briefly introduce the legislative environment as well as the system of central planning, which eventually resulted in the shortage economy. Then the concept of *Homo economicus* in contrast to *Homo sectans* and *Homo se assicurans* is briefly introduced. In the third part, the rationality of the law-breaking is described. Further, we present the survey and data used. The key part of this paper is devoted to the selected cases of the plan manipulation and its motivation according to contemporary jurisprudence.

II. Legislative environment and the shortage economy

A key feature of the centrally planned Czechoslovak economy was the value dualism of the legislative. In the normal state of affairs, the laws of a higher legal force are the constitutional laws and ratified international treaties (Grinc, 2010). In the field of economic laws, the State budget has the leading role; however, it is not inviolable and its role is not rooted in the Constitution. On the contrary, in the Czechoslovak legislative system, the supreme character of the State plan can be observed. According to the Czechoslovak Socialist Constitution of 1960, "*all organizations and all citizens who have any task in fulfilling the national economy development plan were obliged to make the greatest effort and to make the greatest possible effort to fulfill the task*" (Law no. 100/1960 Coll. Constitution of the Czechoslovak Socialist Republic, Art. 13(1)).

Fulfilling the plans was also the utmost goal for all managers in the Czechoslovak socialistic economy. This supreme goal was embedded in most of the Communist Party's documents. For example, the Central Committee of the Party emphasized, in April 1972, that it was necessary to “*increase managerial responsibility for the timely fulfillment of the established plans and tasks, for the quality of production, for the careful and reasonable handling of the means and material supplies, for the proper use of the equipment and the raw materials, for the proper fulfillment of all contractual obligations within the set deadlines and for observing the technological discipline*” (Czechoslovak National Council, 1972). Respectively, there were methods governing how to deal with the superior stage in the planned hierarchy to set an achievable plan (see, for example, Mlčoch, 1990) but once it was set, it was supposed to be the ultimate goal to achieve. And in most cases, the plan was (at a minimum, formally) really met.

While the State plan was the upmost and most important economic law running the whole socialist economy, specific relationships of the economic subjects were regulated by economic law. Socialist economic law had a crucial position within the socialist legislative system and, similarly to the Constitution, it guaranteed the key features of the socialist economy in Czechoslovakia (Baňouch, 2012). Baňouch also mentions that public law broke through economic legislature into private law (Ibidem).

As we will show in this paper, the tensions between the supreme law (the State plan) and lower legislature were bridged by economic crimes.

State plan as the supreme law

The achievement of the plan could be the result of a *soft plan*. For example, in the Program Statement of the Government in 1988, the then prime minister pointed out that individual plans of companies were based on low technical and economical parameters and were not compared with the level of foreign production and technologies (Štrougal, 1988). If the plan was not met, the common punishment was in the form of withdrawn payment of bonuses for managers as well as for employees. Harsher forms of punishment (such as demotion) were applied only rarely.

Generally, the managers of the companies were highly motivated to achieve planned results. It was a complicated task in the socialist economy because of the very core settings of the system. One of the main characteristics of the functioning was omnipresent scarcity (for example, Nuti, 1981, or Adam, 1995). The reasons for scarcity were miscellaneous. The phenomenon was possibly caused by mistakes in planning, overestimation of production abilities or by the absence of a middle-part in the production chain. In Verdery's view, scarcity was foremost a direct consequence of managers' hoarding (Verdery, 1996). However, the reasons can be seen in just the opposite way – the managers were de facto forced to carry out hoarding due to the unstable delivery of raw materials or semi-manufactured goods for their own production (for example, Mlčoch, 1990, Soulsby and Clark, 1996 or Křížek, 1983). They behaved in a very natural way and tried to create reserves of inputs (including labor force) to be able to achieve their planned goals (for example, Malý, Herc, 1988). The center was not able to reveal hidden reserves of

the companies due to dispersed information in the system. This is well-known from economic theory (Hayek, 1945) and economists of the period realized it in practice (Malý, Herc, 1988).

Rumischová et al. (1995) emphasize that scarcity in the centrally planned economy cannot be confused with scarcity that lies in the very essence of the market economy. The former is rather a result of the shortage economy, which occurs when prices are lower than the equilibrium prices. In such a case, demand exceeds supply and shortages emerge.

At the end of the 1980s, the Czechoslovak political center increased the requirements on key national enterprises, as the economy was drowning in serious problems. In some cases, this resulted in completely unrealistic plan objectives. One of our respondents, who worked in an engineering company as vice-director admitted:

“Everyone knew that the plan, as it was built, was unrealistic, that there was about 15% of outcome that would not be made.”

Hence, in general it was more complicated to achieve the goals outlined by the plan.

On the other hand, the same respondent said that the increasing failure to meet the plan had many other causes. The first was the system of daily depreciation of the work performed, i.e., of the finished items. Due to this fact, it was easier for inspectors to uncover problems with the plan performance. An important role was also played by the increasing denunciations of some of the workers to the political police, which, aware of the problems of the drowning economy, followed closely the performance of the most important companies in the country.

The State Development Plan therefore set conditions which could not be easily met by individual companies because of exogenous obstacles. On the other hand, these companies were highly motivated to overcome these, as the well-being of managers (as well as of many employees) was directly determined by fulfilling the plan.

As the incentives intentionally and in the spirit of the official political-economic doctrine distorted and suppressed market forces, economic agents also had to implement them to their utility functions. As Kornai (2013) remarks, buyers in a shortage economy (which is a typical state for the centrally planned economic system) try to influence sellers even by means of corruption. On the other hand, in the market economy (economy of surplus), it is the seller who tries to corrupt the buyers by a set of benefits, special gifts, etc. Buyers and sellers in both systems are rational agents who maximize their utility functions (economic laws are the same), but the different legal frames add different constraints, which leads to different outcomes.

Informal networks emerged in the communist society, persisted and effected the decision-making of the recent economic agents.

Fulfillment – or non-fulfillment – of the State Development Plan affected not only the macroeconomic condition of the Czechoslovak economy, but also the microeconomic well-being of the individuals. Part of the income, and thus well-being, was directly linked to the plan.

There was also a very close link between the State Plan and individual income. The then dissident Petr Uhl (1982) characterized this link as follows:

“The personal income of economic bureaucracy depends primarily on the fulfillment of the plan. Among the main criteria for assessing the business and granting the premium to business managers are still gross production and profit rates, while material cost reductions and labor productivity growth are less important, easily falsified data. This results in the ‘production for production’ trend, that is production at all costs, including the production of unneeded or poor-quality products.”

However, hardly any individual agent could influence key plan indicators only by means of single-handed effort. In the Soviet-type economy, results depended on collective effort as well as on exogenous conditions, which could be affected neither by the individual, nor the company (e.g., an engineering firm could not meet the plan if the subcontractor failed to deliver crucial components). This gap between the ideal State Development Plan on the one hand, and the daily routine on the other, created room for creative attitudes to the reporting of results as well as for economic crimes.

Criminal Code as the lower law

The plan had a central role in the improvement of management (Czech National Council, 1986). Even in the centrally planned economy, the microeconomic principles of the utility maximization worked. The decision-making of the responsible executives was influenced not only by the superior interest of the plan fulfilment, but also by the microeconomic interest of the particular production unit which he or she managed and by his or her own personal interest.

The main motive of economic crimes was therefore often the mixture of personal interest of the responsible executives and their effort to fulfil the plan. Both goals were in fact closely related because of the § 10 (4) Decree of the Federal Ministry of Labour and Social Affairs No. 157/1975 Coll. on the Regimentation of wage development and remuneration. According to this rule, the amount of funding in the so-called benefit fund was curtailed if the organization did not fulfil the plan. Gřivna (2009) claims that the economic law of the centrally planned economy was subordinated to the principle “On behalf of the plan”. This dual motivation made responsible executives commit a “theft of socialist property” as part of their effort to ensure that the company continued to function.

Managers intended to achieve the planned goal at nearly “any price” including criminal activities. These crimes, connected with planning, were legally specified as crimes against the economic system. Analyzing them, we should not forget that the overall legal system was set to be subordinated to the needs of the Communist Party (and in this specific area to the needs of the planners or generally the centrally planned system). Crimes at that time against the economic system thus would not be, in most of the cases, seen as crimes in the market economy. At the same time, we should bear in mind that not only the legal system, but the execution of law was distorted as well. The goal of the judges and prosecutors was to protect the socialist state and the socialist establishment. The prosecutors and judges were, and in fact had to be, supporters of the communist regime [1]. Schönfelder (2016) describes the functioning of the judiciary in socialist countries. He writes that politics and judiciary were not separated and court rulings in fact expressed political views. In practice,

verdicts were dictated by the Communist Party. He describes “telephone law”, meaning that the decision of the court was determined by a telephone call from the Party. This state of execution of the law also had, with high probability, impact on penalties in the criminal area of cases against the economic system.

The specific illegal behavior in the system appeared in different forms. One of them was the above-mentioned hoarding, which, in most cases, was a consequence of scarcity. Such behavior was formally illegal in the centrally planned system even though it was extremely common. Managers had to hoard the inputs just to maximize their chances of achieving the planned results. Unlike the market economies, which were implementing, for example, the Just-In-Time system since the 1960s (Yui, 1997), the Czechoslovak socialist economy suffered from frequent delays in subcontracting. Šulc (2004) mentions that delivery time in the centrally planned economy (about 130 days in the 1970s, in comparison to 70 days in the market economy) is substantially longer than the terms for compiling a plan. This forces managers to hoard inputs as a kind of inner insurance. Similarly, Šik in his breakthrough article, which preceded the economic relaxation in the early 1960s, wrote that the Czechoslovak economy suffered from the hoardings of necessary productive factors as well as from delays due to the lack of material (1965). This negative feature persisted even until the 1980s, as Uhl (1982) mentions:

“In case of a longer delay behind demand that has in the meantime fallen, unnecessary goods for the warehouse are produced. The buyer cannot rely on the supplier that he delivers on time or in the required quality (sometimes the goods is not delivered at all), so it is better if the customer relies on himself. The stocks are being hoarded – and they are then missing elsewhere. In particular, customers accumulate narrow-profile materials, even if they do not need them. On the contrary, the supplier manufactures only what suits him to easily fulfill the plan. That explains why the Czechoslovak economy is in a paradoxical situation in terms of Stockholding: total inventories are excessive, but in unnecessary assortment. Necessary supplies are missing, while there is surplus of the unnecessary supplies.”

Socialist managers had therefore just two options. Either they were forced to hoard the inputs in spite of the fact that it was costly, along with a high risk of wastage, or they had to opt for not a completely legal way of filling the plan. It was possible to use an informal network of petty services and counter-services to establish connections between companies with unnecessary hoardings and deficit companies. It was likewise possible – as everywhere and in every system – to take a risk and break the existing law. Císařovská and Prečan (2007) claim that:

“An enterprise that wants to succeed, that is, to fulfill a plan, must often violate rigid regulations, but at the same time ensures that everything is all right in theory. Thus, the actual amount of inventory is obscured by fictitious consumption and non-existent performance is being invoiced.”

In 1960 the Czechoslovak Communist Party introduced the new constitution, which supplemented the original constitution of 9th May 1948. According to the *Constitutional*

Law No. 100/1960 Coll. Constitution of the Czechoslovak Socialist Republic, Czechoslovakia became a socialist state heading to the state of communism (e.g. Skilling, 1962). According to Article 12, the economic policy of Czechoslovakia was managed by the state development plan. Approval of the socialist Constitution initiated new wave of codification which also brought adoption of the new Law No. 140/1961 Coll. Criminal Code (Gřivna, 2009).

For the aim of our research, the crucial part of the Criminal Code is Part II of the Special Section of the Code called ‘Economic Crimes’. This Part was divided into five sections:

- I. Crimes against the economic system (§ 116 – § 124),
- II. Crimes against economic discipline (§ 125 – § 131),
- III. Crimes against socialist property (§ 132 – § 139),
- IV. Crimes against currency and tax crimes (§ 140 – § 148) and finally
- V. Crimes against the rules of unfair competition, trademarks, designs and inventions and against copyright (§ 149 – § 152).

According to the Explanatory Memorandum to Act No. 140/1961 Coll., Part II recognized the most important changes in comparison to the previous Criminal Code (Act No. 86/1950 Coll.). In terms of state plan manipulation, the most substantial was section two. As the Explanatory Memorandum mentions, the aim of this section was to manage orderly and unimpeded functioning of the national economy.

The first part of section two (§ 125 and § 126) is devoted to ‘*Disrupting management, planning and control of the national economy*’. Subject to this adjustment is serious misrepresentation or falsity of data reported in the statements or reports serving to the management, planning and control of the national economy in order to gain *undue advantage*.⁴ Such statements are, according to the Supreme Court of the Czechoslovak Socialist Republic (Plsf 4/82), especially statements and reports on implementation of the economic plan for all indicators such as data on the tonne-kilometres reported in the daily records of vehicle performance, custom procedure proposals, list of works undertaken by the unified agriculture cooperative or statement on implementation of the plan revenues. According to the findings of the Industrial Committee (see Řezáčová, 1974) the main problem of economic crimes was connected with hidden crimes which were widely ignored by the working teams. Economic crimes against common property were generally considered justifiable, unlike crimes against private property. This notion was fully in accordance with the Czech saying “If you don’t steal from the state, you steal from your

⁴ The *undue advantage* was not defined in the Criminal Code, but the courts understood it as an “*advantage, which could not be gained by the socialist organisation while maintaining economic discipline*” (The Supreme Court of the Czechoslovak Socialist Republic, Tpjf 60/72 and Plsf 4/82, Federal Assembly 1987 and 1988). According to the Supreme Court (1973 and 1982), it could be, e.g., preferential acquisition of short-supply material or spare parts at the expense of another socialistic organization, using the financial funds of the organization to purchase material in retail and at retail prices, time discrepancy between invoicing the goods and real supplying of the goods, invoicing of the unexecuted works, fictive reducing of the inventory, overestimation of the revenues, incorrect accruals of revenues and expenses, falsifying sold-meal diary to improve economic performance, obstructing regular monitoring of the sales with a view to hiding the existing shortcoming (deficit) or reporting higher livestock and higher animal gains.

family". For example, a former communist and later dissident Karel Bartošek wrote just one month before the invasion of the Warsaw Pact forces into Czechoslovakia in 1968:

Bureaucratic system had its support even among "ordinary people". It allowed dishonesty in labor process. . . freedom of not doing something useful and being paid, "freedom of stealing" (not just materialised, but also "time stealing" for oneself) was significant. One of the sad mottos of that time was: who doesn't steal, steal from his family. . . Corruption was spreading especially on the field of services – people said "You can get everything if you have connections". (Bartošek, 1968)

Řezáčová (1974) further claims that "*Criminal repression is ineffective and the sentences imposed do not sufficiently prevent offenders from repeating criminal offenses.*" Moreover, the internal inspection often did not fulfill its tasks because of the remuneration system, due to which the internal inspection was materially involved in the fulfillment of the plan. This resulted in a willingness to participate in the crime with regard to covering it up.

Member of Parliament Hluší (1974) also noticed, that "*Suppliers are obviously violating the law to avoid the consequences of non-compliance with the delivery times or the quality of the products delivered. How should we face this violation of socialist law? In my opinion, the most effective is to exclude supplies which were made without a contract from fulfilling the plan, with all the consequences for corporate and personal material involvement.*"

The second part (§ 127) deals with '*Breaking of obligations when managing financial and material resources*'. The essence of this rule violation lies in gaining an undue advantage by creating financial funds and reserves (so called *black funds*). Such *black funds* were created from illegally gained financial resources and served for the financing of black wages for workers who worked in short-supplied branches, providing bribes in supply-customer relationships, paying costs of exaggerated representation or providing resources to sport organizations (Federal Assembly, 1985). Another way of breaking § 127 was unjustified payment of bonuses or ignoring the rules on the payroll tax (Federal Assembly, 1973). The Attorney General of the CSSR also listed in his 1973 report the following motives for the § 127 violation (Federal Assembly, 1973):

- * Effort to succeed in competition on the labor market with the other organizations and especially such as making workers from other organizations fluctuate due to higher wages.
- * Effort to keep own employees, especially in the short-supply professions in order to withstand competition from other organizations.
- * Effort to circumvent the rules on the recruitment regulation to avoid the technical, organizational and efficiency measures.
- * Disagreement with the wage rules.

The next part (§ 128) deals with the quality of production and completed work. According to this section, the undue advantage is illegally gained even if the responsible economic executive delivers products while concealing their substantial defects, which are known to him, or products which could not be used by the customer to fulfil his tasks.

Socialist courts also distinguished between the results of breaking economic laws. If the offender wanted to gain the advantage for the socialist organization, the punishment was

milder in comparison to the crime committed for personal enrichment, which were judged as stealing (compare Státní plánovací komise, 1988).

In 1976 only, the estimates of the damage caused by the economic crime reached 331 million CSK. In the same year the budget deficit reached 194.3 million CSK, while the state revenues were 156 billion CSK. The real amount of the economic crime is, of course, difficult to estimate; nevertheless, according to the General Attorney it was certainly significantly higher (Federal Assembly, 1985).

III. Homo economicus in the Centrally Planned Economy

Neoclassical economics is based on the concept of Homo economicus. *Homo economicus*, or “economic man”, is, according to the traditional economic point of view, (e.g. Blackburn, 2016):

- * a rational agent, who
- * has stable preferences,
- * is forward looking,
- * pursues only his self-interest,
- * chooses alternatives with the highest expected utility.

As Paul Heyne mentioned, Homo economicus dominates capitalist societies and market economies (Heyne, 2008). A widespread mistake – also made among current economists – claims that Homo economicus is selfish (e.g. Cartwright, 2014, or Aldred, 2012). However, Homo economicus has nothing in common with selfishness. His moral qualities (which are, however, not crucial for the economic models) are included in his utility function. If he is generous, kind-hearted and charitable, he just maximizes the utility function which comprehends his utility from his charity. On the other hand, if he is greedy and evil, his utility function comprehends his utility from his badness. In other words, the concept of Homo economicus is value neutral.

That is why he can be, despite common belief, used for modelling the centrally planned economy. As we will show later, even in the centrally planned economy, each rational agent seeks to maximize his individual utility function. The difference between his behavior in the market economy and the centrally planned economy lies in the set of restrictive conditions given by the formal and informal institutions rooted in the system.⁵

Czech economists during the second half of the communist regime came up with two concurrent concepts of Homo economicus, which were considered more suitable for the conditions of the centrally planned economy: Homo sectans (introduced by the later leader of the Czech economic transformation, Dušan Tříška) and Homo se assicurans (a concept developed by the leading theoretic economist Jiří Hlaváček).

⁵ Institutions can be divided into two subgroups: formal (codified by the authority of the state) and informal, which are built in the society in the way of thinking and acting (e.g. customs, morals, level of corruption and respect to the law). Informal institutions evolve spontaneously and are more stable and change only over long periods (generations). On the contrary, the legal system can be changed relatively quickly.

Homo sectans (seeking man) is a theoretical agent in a centrally planned economy with an excess-demand. In a shortage economy, the consumer (Homo sectans) bears additional search costs which are necessary to obtain commodity in short supply. The budget set of Homos sectans is therefore different than it would be in the market economy (Tříška, 1989). Homo se assecurans (self-insuring man) is a producer who maximizes the margin between its ability to produce and the output it really produces. He occurs in a shortage centrally planned economy, where his main risk – as the manager – is that he receives an unimplementable plan for the next year. According to Hlaváček (1987 and 2013), Homo se assecurans does not have a profit motive as he is interested solely in keeping his job. Furthermore, he does not maximize the utility function of the center. The concept of Homo se assecurans results in the Index planning method. This method of planning takes the status quo (volume of production in year T) in account and then multiplies this volume by an index $1 + \delta$, where δ is a very small number close to zero. A rational manager never reveals his real production possibility as he needs to have as much of a reserve as possible in order to gain additional space in case of a tougher plan. Homo se assecurans therefore produces “as inefficiently as possible” and his production plan lies under the production line, not on the border of the production set as in the market economy (Hlaváček, 2013). In the shortage economy, a manager chooses between two options:

- a) to accept the result passively, use the lower level of input to produce insufficient level of output and gain with certainty;
- b) to break the lower laws of the CPE legislative system to reach its expected gain. Breaking the law may take one of the following forms:
 - i. plan manipulation in order to ensure payment bonuses;
 - ii. bribery in order to gain the short-supplied inputs.

Breaking the lower laws with a view to keeping the supreme law (central plan) can result in one of two following outcomes:

- * the economic crime committed by the manager will be punished;
- * the economic crime committed by the manager will *not* be punished.

A rational manager in the centrally planned economy is going to break the lower law if the penalty for breaking the higher law (not-fulfilling the plan) is higher than the penalty for breaking the lower law. If he is a risk-taker, his willingness to break the law depends also on the probability with which he will be punished.

To sum up, homo economicus in the shortage economy might be under certain conditions highly motivated to break the lower law so that he could fulfill the plan. In the rest of this paper we will examine concrete cases in which the rational agents, who wanted to fulfill the supreme law, broke the lower law because of shortages.

IV. Data and Methodology

Our research is based on a unique survey conducted among former executives and authorities. As of the present date, 75 in-depth interviews have been carried out for our research. Each interview took at least 90 minutes and was conducted by one of eight trained interviewers in line with the uniform syllabus pre-prepared in co-operation with sociologists and political scientists. Each interview covered a range of questions in the following fields:

- * Relationships between the company and central planners;
- * Interrelationships between companies;
- * Relationships within the individual company;
- * Role and position of the Communist party and the trade unions within the individual company.

The absolute majority of the respondents (97%) were men, just two respondents were women. Most of the respondents (84%) had a tertiary education. The average age of the respondents was 68 years of age. The respondents were former executives from a great variety of sectors, including heavy engineering, construction, transportation, energy and steel industry, mining, textile manufacturing and food processing, but also the academic sector, research and development as well as the central planning and the banking sector.

The job positions of the respondents ranged from planners through financial and department managers to executive directors. In general, these people had, therefore, the power to make decisions over the planning process and the fulfillment of the objectives established by the plan. All interviewed respondents performed these positions during the period under consideration. Most of them also held executive positions after the Velvet Revolution of 1989.

Qualitative methods (primarily tagging) were applied in order to collect and analyze the interviews.

Furthermore, the court findings, General Attorney reports as well as the minutes from the Communist parliaments were used.

V. Economic crimes – general statistics

Crimes against the economist system were considered to be one of the most painful problems of the Czechoslovak communist society. The model of the Criminal Code of the Russian Soviet Republic of 1922 established close ties between economic law and criminal law (Baňouch, 2009). This is indeed characteristic for the very essence of the command economy (*ibidem*).

In the late 1980s, under the direct influence of perestroika, the system of justice undertook substantial changes as well. For example, the Chairman of the Supreme Court in the Czechoslovak Socialist Republic J. Ondřej mentioned, in line with the Central Committee of the Communist Party, that even the judiciary had to be an object of perestroika. Reconstruction of the judiciary should focus on higher quality as well as shorter delays (Ondřej, 1987). At the same time, there was a high increase of criminal activity in the 1970s and 1980s.

The Attorney General J. Pješčak stressed that the index of prosecuted and accused people in the Czechoslovak Socialist Republic was higher than in other countries, including the West (1988). Especially corruption and bribery at managerial levels were seen as the most serious features of the 1980s (Ibidem). There was rapid growth of economic crimes between 1980–1984, which was fueled by the intentional higher activity of the socialistic judiciary.

However, as the Supreme Court of the CSSR mentioned (Plsf 4/82), the punishment for the offenders of economic crimes was relatively low. For example, in 1981, 77,054 persons were sentenced for criminal offenses in Czechoslovakia, compared with only 757 persons (nearly 1%) sentenced for economic crimes (ibidem). The same report claims that a similar proportion of the persecuted economic crimes was recorded in the whole period from 1977 to 1981.

Yet, in the 1980s, the frequency of the plan manipulation increased substantially. For example, the Treasury Minister of the Czech Socialist Republic Jiří Nikodým admitted in his report that in 1986, the Financial Administration imposed ten times more financial sanctions for violating accounting norms than in 1985.

Two main categories of economic crimes caused by the Homo economicus effort in the shortage economy were bribery with a view to gaining short-supplied inputs and creation of reserves for the purpose of smoothing fluctuations in plan fulfilment.

These economic crimes were closely connected with the plan and plan manipulation. Each of these economic crimes can be demonstrated in real-life cases based on the interviews with managers of socialistic companies. The following sections illustrate these crimes with case studies and describes the relationship to the plan in detail.

Bribery with a view to gaining short-supplied inputs

If a concern did not have a sufficient amount of material (inputs), it could hardly fulfil the plan. Almost all of the managers interviewed in our research confirmed that a lack of material or problems with subcontractors were the most frequent obstacles in meeting plan objectives, especially in the final stages of the socialist rule. One of the executives in engineering stated:

“The last six years [before the revolution] . . . it was mainly about finding the screws. Well, it was a problem to get anything. Whatever was necessary to be manufactured, the manufacturer could not be found. We wanted to bring something up, it was not a construction firm. Everything was a huge problem to find (. . .) That was the hardest time then. It was terrible. When there was one piece of the components missing, you had to deal with the production line at a standstill, with the female workers who could not do their work.”

For example, in AZNP, the situation in 1989 was so serious that there were around 2,000 almost finished cars that could not be dispatched due to a missing component. On the other hand, the considerable idle times also caused by the shortage of material and components resulted in much overtime, which, together with the fear of losing rewards, led to sagging working moral and consequently a really high wastage rate (Vilfemek, 2012).

Such a situation might inevitably result in a failure to meet the plan and therefore it constituted a strong bribery motivator for the executives.

Indeed, in some cases, it really forced the responsible executives to bribe their supplier in order make them provide the supplies at a higher than official amount of material. For example, the District Court in Dolní Kubín judged a bribery case in which the accused pleaded that offering bribes to ensure the material supply was a common thing in the Czechoslovak communist economy (Supreme Court, 1982). Similarly, in a different case the accused explained that, without bribes, the concern would have only 32% of the spare parts it needed for production (ibidem). Another typical example is the case of a Unified Agriculture Cooperative chairman who bribed the warehouseman of the Agriculture Purchasing and Supplying Enterprise in order to set the price of barley bought from the UAC higher than that corresponding to the real price category (ibidem).

The most common way to bribe somebody was via small presents. One of our interviewees, a director of the business department in investment engineering, mentioned: *“As for some bribery, it was more like a bottle [laughter] or a box of chocolates or something like that.”* However, according to Vilímek (2012), the political police monitored also events of handing over envelopes in cars or restaurants. The author notes that most of the managers used a wide range of unconventional methods to acquire the desired resources.

Corruption was so widespread that Kučera (1983) mentions companies creating so-called black funds to have enough resources for bribery. In the government statement, Prime Minister Štrougal stressed the importance of fighting corruption by the introduction of more severe punishment. In 1986 alone, 296 citizens were found guilty of corruption (Štrougal, 1988).

Besides the shortage of material inputs, managers also had to deal with a shortage of manpower. To fulfill the plan, a sufficient amount of labor was necessary. In an environment characterized by a permanent lack of manpower (e.g. Žídek, 2006), this was sometimes very difficult. In such cases, the responsible executives needed either to retain the existing staff or attract employees from other (“competing”, in an environment without competition) companies. In both cases the main motivating factor were higher wages, and as the communist economy was based on the principle of wage levelling, this could be ensured only by wage bonuses. The previous allegation can be substantiated by an excerpt from an interview with a department head in a company operating in engineering:

Interviewer: “You’ve already said that it was possible to change the plan when there were some simple objective difficulties in fulfilling it, but there certainly had to be some interest in simply accomplishing this plan. What were the consequences of not fulfilling the plan for the employees?”

Interviewee: “Well, of course, material involvement was tied to meeting the plan, especially the benefits. I think, it was quite an important part of the earnings.”

The fact that meeting the plan was a key condition for the payment of bonuses was corroborated by a developer from another engineering company, who stated directly that *“To get the benefits, we had to meet the plan, didn’t we?”*

In many cases, this made the responsible executive juggle the plan indicators: “*so when there was the closing of accounts, there was a bit of magic in it*” and thus commit an economic crime. However, the courts consequently tended to perceive such crimes leniently, recognizing the good will of the responsible executives.

The following case shows a payment-related crime which was judged by the Supreme Court. A manager of the *Severomoravské cihelny* company (brickworks) in Nový Jičín gave instructions to his subordinate staff to report higher than actual production of earthenware. This led to overestimation of annual production by 1,327,612 CSK and therefore to an undue 122,590 CSK payment of total bonuses. This crime was motivated by his effort to prevent turnover of workers by paying higher bonuses (Supreme Court, 1973 and 1982). On the other hand, according to our interviewees, not fulfilling the plan and therefore not assuring bonuses was a reason for the dismissal of management (assistant of the director in engineering, sales officer in international trade; a head of Human Resources in a textile machinery company). Executives were therefore motivated to fulfil the plan at any price. Nevertheless, in some cases, it was really difficult for them to meet the plan objectives, as they had to face serious production problems due to the abovementioned bad customer-supplier relationships. Poor delivery often made it impossible to continue production. Lack of material or poor quality of the components provided by the subcontractors could force managers to bribe their suppliers in order to assure a better position for their companies. Such cases will be analyzed in the next section.

Creation of reserves

An important requirement of the centrally planned economy was permanent fulfilment of the plan. However, even in the communist economy there were seasonal fluctuations as well as temporarily fluctuations in inventory (e.g. Polidar, 1983). The findings of the Supreme Court (1982) admit that economic crimes according to the sections of § 125 – § 127 were most often committed for the purpose of reporting smooth or proper fulfilment of the plan (contrary to reality). The main aim of such plan manipulation was the creation of reserves which should ensure steady plan fulfilment. For example, a manager of the department store *Prior* was prosecuted for retaining daily revenues of up to 183,693 CSK and using these funds to replenish (lower) revenues in the following months (Supreme Court, 1982). Other symptomatic plan manipulations using reserves were performed by invoicing higher than actual material consumption in order to form the material stock (reserves). According to a respondent from an engineering company, there were, at least in the construction industry, easy ways to drown costs and subsequently justify higher material requirements:

“I knew colleagues who had been studying at the faculty of civil engineering. They were always saying: Guys, you know, building, that’s the basis. What you drown at the foundations, you drown. Nobody checks it anymore. Yeah? Because when they dug a hole. . . the builders were reevaluated according to how much concrete they brought there. Well, when there were just 20 mixers in there, 20 mixers were needed on the base, weren’t they?”

In general, companies tried to hoard supplies like hamsters. It had to, inevitably, lead to more than the allowed inventory in stock. This was confirmed, for example, by a planner from an armament industry company who said: *“We were allowed to have, let’s say, 250 million in stock, but in fact we had, I don’t know, 270, 280 and so on.”*

Similarly, there were instances of faked reductions of car parts with a view to obtaining additional funds to purchase new material. Presumably the most characteristic was a case of an executive who ordered the store managers to retain part of the revenues (3 million CSK) earned in December 1979. These funds were meant to be reported only in 1980 to ensure the fulfilment of the retail sales plan. Moreover, this executive also personally falsified reports on the plan fulfilment in order to cover funds manipulation (Supreme Court, 1982). However, this was not an isolated case of plan results manipulation. Indeed, it was common practice at that time. For example, a respondent from an engineering company (assistant director) mentioned that the plan was in many cases only fulfilled on paper. In fact, machines that were recorded for accounting purposes as having been completed in November or December were not finished until January or February.

Everything that we have mentioned was a consequence of the political center’s poor knowledge of the real possibilities of the companies. The omniscient planner claimed the right to decide everything that was to be produced in the economy. However, the administrative in the center had no real motivation to set the plan goals in accordance with the real possibilities of the companies.

A respondent from the knitwear industry (Chief Executive Officer) said:

“Well, let’s imagine, there were time series when everything came up in some years and it gradually improved, so they had some time series, and that was one side of the thing. Now, the planner was given the demands of the store, and besides, what did he do? I, when I had been at the Planning Committee for a year and a half, and I stepped up against this nonsense and demagogy, and told them at a big meeting that it made no sense the game the planner was playing. You know, he would set a plan for someone to manufacture a certain number of pieces of a product knowing that they would never be manufactured, never had been and never would be, that he, in fact was breaking the law. That it was . . . , well, it was only some half a year prior to the revolution. But the main problem was that the planner just took the bull by the horns and wrote a plan for five million pieces to be manufactured once the trade wanted them. Whether they would be made or not did not bother him at all.”

The same argument was also brought up by a technical director in the construction industry, who also pointed out that the company was almost defenseless and could not do anything to change it:

“We could not do anything at all. Every plan was, of course, built on high numbers, say, the plan was binding, the company resisted, the classical capacity, the classical shortage of people there. Of course, the party authorities were involved, because the economic results of the company . . . or . . . the company executives had to explain things at local and regional party committees, as it was a really big company. This in case there was any disproportion in the plan because the people in Prague had no idea what the capacities

of the company were. I mean there might have been a demand for an enormous number of some big machines that the company was just unable to produce.

Maybe financially it could be done, yeah, but in a different assortment of machines. This was helped by the industrial secretary of the district or regional committee, who was not afraid to write a letter to Prague, that the unrealistic demand would simply lead to a plan fulfilment failure, to a problem in the company. So, in such cases, changes were sometimes made, but otherwise, I do not remember that many changes would have been made in the central state plan. It was more like that . . . maybe . . . when the plan was being made, from September, there might have appeared a need to manufacture a single-purpose machine, like a production line or something, just for the defense industry segment. So, then something of the plan was thrown out to make space for the needed manufacture. But that did not happen very often as far as I remember.”

Also, the political police that monitored the performance of the leading companies was aware of the unrealistic plan requirements that were superior to their production capacities. The consequence of this was in some cases poor quality of production (Vilímek, 2012), or other difficulties in meeting the plan. Nevertheless, in the vast majority of cases, the plan was almost formally fulfilled. The obligation to comply with its objectives, however, forced businesses to act on or beyond the limits of legality. The situation continued to deteriorate in the late 1980s, when the system was already facing very serious problems.

VI. Conclusion

The State Development Plan was an economic goal translated into the supreme law of the Czechoslovak Socialistic Republic. Meeting the plan was the ultimate goal, to which all economic activities were subjected to. Not fulfilling the plan meant losing bonuses or facing other sanctions. Lack of material and missing subcontracts made it even more difficult to achieve the objectives set by the plan.

The model of Homo economicus works even under the conditions of a centrally planned economy. Rational agents in the Czechoslovak socialist economy sought to maximize their utility function, which was, however, restricted by the conditions set by the plan. Optimal outcomes therefore occurred just when the lower law was broken. Due to non-standard procedures like the creation of reserves, bribery or accounting manipulation became the most common ways how to avoid problems with the center and employee dissatisfaction. The companies, however, acted in a natural way, as they tried to maximize their utility function. The nonstandard behavior of the executives was just a reaction to the incentives given to them by the system that tolerated similar behavior for a long time. In the late 1980s, these stimuli, together with the worsening of the supplier-customer relations, created even more pressure on the companies, thus forcing them to make much more effort to meet the plan. At the same time, the judicial system, closely linked to the ruling political party, increased its effectiveness in detecting and punishing economic crimes.

The hierarchy of the incentives can lead to an obscure situation: if a rational agent wants to obey the higher law, he is forced to ignore lower legislation. This was the case of the Czechoslovak Centrally Planned Economy in the 1970s and 1980s. The outcomes of such

rational behavior were (because of the low rate of fraud detection as well as the lenient punishment) better than in cases of exemplary respect for lower laws.⁶ Nevertheless, in accordance with the concept of *Homo se assicurans* and *Homo sectans*, the outcomes were also worse than they would be in the free market economy.

Acknowledgement

This work was supported by the Grant Agency of the Czech Republic, Real functioning of the centrally planned economy in Czechoslovakia (No. GA15-09404S). We thank the anonymous reviewer for his valuable comments.

References

- Adam, J. (1995). *Why did the Socialist System Collapse in Central and Eastern Europe?* London: Macmillan Press.
- Aldred, J. (2012). *The Skeptical Economist: Revealing the Ethics Inside Economics*. Abingdon: Routledge.
- Bañouch, H. (2009). Hospodářské právo. In Bobek, M. & Molek, P. & Šimíček, V. (Ed.), *Komunistické právo v Československu. Kapitoly z dějin bezpráví*. Brno: Mezinárodní politický ústav, Masarykova univerzita.
- Bañouch, H. (2012). *Vybrané ústavní garance práva na spravedlivý proces (komentář k článkům 37 až 40 Listiny) in Eliška Wagnerová, Vojtěch Šimíček, Tomáš Langášek, Ivo Pospíšil a kol.: Listina základních práv a svobod: komentář*. Praha: Wolters Kluwer. ISBN 978-80-7357-750-6.
- Bartošek, K. (1968). Revoluce proti byrokratismu? *Rudé právo*, 48 (197), 18th July 1968.
- Blackburn, S. (2016). *The Oxford Dictionary of Philosophy*. Oxford: Oxford University Press.
- Cartwright, E. (2014). *Behavioral Economics*. Abingdon: Routledge.
- Císařovská, B., Prečan, V. (2007). *Charta 77: dokumenty 1977–1989*. Praha: Ústav pro soudobé dějiny AV ČR, v.v.i.
- Constitution of the Czechoslovak Socialist Republic 1960. Constitutional Law No. 100/1960 Coll. Constitution of the Czechoslovak Socialist Republic.
- Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1961) *Criminal Code. Law No. 140/1961 Coll. Criminal Code*. Retrieved November 1, 2017, from http://www.psp.cz/eknih/1960ns/tisky/t0065_01.htm.
- Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1972). *Stenography from the 3rd meeting, 25th April 1972*. Retrieved November 1, 2017, from <http://www.psp.cz/eknih/1971cnr/stenprot/003schuz/s003008.htm>.
- Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1974).

⁶ The utility-maximizing agents were also motivated to violate the supreme law as well as the common economic patterns: it was rational from their short-run point of view to produce under the production possibility frontier, to avoid a production increase in their plan for the following year.

Hluší, J., *speech in the Federal assembly, Stenography from the 13th meeting, 18th October 1974*. Retrieved July 9, 2018, from <http://www.psp.cz/eknih/1971cnr/stenprot/013schuz/s013010.htm>.

Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1974). Řezáčová, O., *speech in the Federal assembly, Stenography from the 13th meeting, 18th October 1974*. Retrieved July 9, 2018, from <http://www.psp.cz/eknih/1971cnr/stenprot/013schuz/s013010.htm>.

Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1986). *Report of the Czech National Council Committee for the plan and budget (document No. 145) to the governmental draft of the Czech National Council Resolution on the State final account of the Czech Socialist Republic and the Final Accounts of the Czech socialist republic funds for 1985 (document 144)*. Retrieved November 1, 2017, from <http://www.psp.cz/eknih/1981cnr/stenprot/020schuz/s020001.htm>.

Chamber of deputies, parliament of the Czech Republic. Czech National Council. (1987). *Governmental draft of the Czech National Council Resolution of 30th June 1987 on the State Final Account of the Czech Socialist Republic and the Final Accounts of the Czech socialist republic funds for 1986 (documents No. 35 and 36)*. Retrieved November 1, 2017, from http://www.psp.cz/eknih/1986cnr/tisky/t0035_00.htm.

Chamber of deputies, parliament of the Czech Republic. (1975). *Decree of the Federal Ministry of Labour and Social Affairs No. 157/1975 Coll. on the Regimentation of wages development and remuneration*. Retrieved November 1, 2017, from <http://www.psp.cz/sqw/sbirka.sqw?cz=157&r=1975>.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1973). *Report of the Supreme Court of the Czechoslovak Socialist Republic and the Attorney General of the Czechoslovak Socialist Republic on the state of the socialist legality. Submitted by President of the Supreme Court of CSSR Josef Ondřej and Attorney General of the CSSR Ján Feješ on the 21st May 1973*. Retrieved November 1, 2017, from http://www.psp.cz/eknih/1971fs/tisky/t0036_01.htm.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1985). *Report of the Supreme Court of the Czechoslovak Socialist Republic and the Attorney General of the Czechoslovak Socialist Republic on the state of the socialist legality. Submitted by President of the Supreme Court of CSSR Josef Ondřej and Attorney General of the CSSR Ján Feješ on the 10th April 1985*. Retrieved November 1, 2017, from http://www.psp.cz/eknih/1981fs/tisky/t0164_01.htm.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1987). *Governmental draft of the resolution, by which the Federal Assembly of the Czechoslovak Socialist Republic approves the State Final Account of the Czechoslovak Federation for 1986 (document No. 31)*. Retrieved November 1, 2017, from <http://www.psp.cz/eknih/1986fs/sln/stenprot/005schuz/s005002.htm>.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1987). Ondřej, K., *Report of the CSSR Supreme Court on the state of socialist legality. Print 91. CSSR Federal Assembly 11th joint meeting, 9th November 1988*. Retrieved November 1, 2017, from <http://www.psp.cz/eknih/1986fs/sln/stenprot/011schuz/s011018.htm>.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1988). *Report of the Supreme Court of the Czechoslovak Socialist Republic and the Attorney General of the Czechoslovak Socialist Republic on the state of the socialist legality*. Prague: 4th August 1988. Retrieved November 1, 2017, from http://www.psp.cz/eknih/1986fs/tisky/t0091_01.htm.

Chamber of deputies, parliament of the Czech Republic. Federal Assembly. (1988). Pješčak, J., *Report of the CSSR General Attorney on the state of socialist legality*. Print 91 from 11th joint meeting, 9th November 1988. Retrieved November 1, 2017, from <http://www.psp.cz/eknih/1986fs/slsn/stenprot/011schuz/s011018.htm>.

Chamber of deputies, parliament of the Czech Republic. House of commons. (1990). *Stenography from the 27th meeting, 18th May 1990*. Retrieved October 2, 2015, from <http://www.psp.cz/eknih/1986cnr/stenprot/027schuz/s027012.htm>.

Grinc, J. (2010). *Právo pro politology*. Praha: Grada Publishing a.s.

Gřivna, T. (2009). Trestní právo hmotné. In Bobek, M. & Molek, P. & Šimíček, V. (Ed.). *Komunistické právo v Československu. Kapitoly z dějin bezpráví*. Brno: Mezinárodní politický ústav, Masarykova univerzita.

Hayek, F. A. (1945). The Use of Knowledge in Society. *American Economic Review*, 35(4), 519–30.

Heyne, P. (2008). *Are economists basically immoral? And other essays on economics, ethics, and religion*. Indianapolis: Liberty Fund.

Hlaváček, J. (1987). Homo se assecurans. *Politická ekonomie*, 35(6), 633–39.

Hlaváček, J., & Hlaváček, M. (2013). *Generalised Microeconomics*. Praha: Karolinum.

Kornai, J. (2013). *Dynamism, Rivalry, and the Surplus Economy: Two Essays on the Nature of Capitalism*. Oxford: Oxford University Press.

Kučera, J. (1983). *Formování socialistického člověka a socialistického životního způsobu*. Praha: Práce.

Křížek, M. (1983). Objektivní rozpory socialistické ekonomiky a hospodářského řízení. *Politická ekonomie*, 31(9), 885–898.

Malý, V., Herc, S. (1988). Příspěvek k pojetí systému plánovitého řízení v období intenzifikace. *Politická ekonomie*, 36(1), 17–28.

Mlčoch, L. (1990). *Chování podnikové sféry*. Ekonomický ústav ČSAV, výzkumný publ. WP no. 348.

Nuti, D. M. (1981). Socialism on Earth. *Cambridge Journal of Economics*, 5(4), 391–403.

Polidar, V. (1983). *Organizace a technika bankovních operací*. Praha: SNTL.

Rumischová, L., Soukup, J. et al. (1995). *Makroekonomie (základní kurz)*. Praha: Melantrium.

Schönfelder, B. (2016). The evolution of law under communism and post-communism: a system-theory analysis in the spirit of Luhmann. *Financial theory and practice*, 40(3), 294–318.

Skilling, G., H. (1962). The Czechoslovak Constitution of 1960 and the Transition to Communism. *The Journal of Politics*, 24(1), 142–166.

- Soulsby, A., Clark, E. (1996). Economic Restructuring and Institutional Change: Post-Communist Management in the Czech Republic. *Journal of Socio-Economics*, 25(4), 473–96.
- Státní plánovací komise. (1988). *Plánované hospodářství*, 41, (5–12).
- Supreme Court of the Czechoslovak Socialistic Republic. (1973). *Assessing the court practice in prosecuting offenses against the economic discipline pursuant to Catch II Second section of the Special Section of the Criminal Code*. Plenum of the Supreme Court of CSSR from 19th September 1973, ref. number Tpjf 60/72.
- Supreme Court of the Czechoslovak Socialistic Republic. (1982). *Assessing the court practice in prosecuting offenses against the economic discipline pursuant to Catch II Second section of the Special Section of the Criminal Code*. Plenum of the Supreme Court of CSSR from 24th November 1982, ref. number Plsf 4/82.
- Šik, O. (1965). *K problematice socialistických zbožních vztahů*. Praha: Nakladatelství ČSAV.
- Štrougal, L. (1988). Programové prohlášení vlády.
- Šulc, Z. (2004). *Stát a ekonomika: příspěvek k teorii hospodářské politiky*. Praha: Karolinum.
- Tříška, D. (1989). Consumer under supply constraint: Homo sectans. *European Journal of Political Economy*, 5(4), 429–606.
- Uhl, P. (1982). *Program společenské samosprávy*. Köln: Index.
- Verdery, K. (1996). *What was socialism, and what comes next?* Princeton: Princeton University Press.
- Vilímeček, T. (2012). Mladoboleslavská Škodovka v období normalizace (1968–1989). In: *Česká společnost v 70. a 80. letech: sociální a ekonomické aspekty*. Praha: Ústav pro soudobé dějiny AV ČR.
- Yui, H. (1997). The Japanese-Style Production System and Total Quality Management. *Total Quality Management*, 8(2–3), 333–336.
- Žídek, L. (2006). *Transformace české ekonomiky*. Prague: C. H. Beck.