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Abstract

In hierarchies, agents' hidden actions increase principals' transactions costs and give rise to

a demand for monitoring and enforcement. The fact that the latter are costly raises

questions about their scope, organisation, and type. How much control is enough? The

paper uses historical records to examine Stalin's answers to this question. We find that

Stalin's behaviour was consistent with his aiming to maximise the efficiency of the Soviet

system of control subject to the loyalty of his inspectors and the risk of a "chaos of orders"

arising from parallel centres of power.

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0. Introduction.

Economists usually explain the existence of hierarchical systems, and public agencies in particular, by market failures and the ability of the hierarchical systems to decrease transaction costs (Coase 1937, Olson 1965, Williamson 1975, Moe 1984). The efficiency of public administration, however, is a significant problem in many countries regardless of their cultural background, type of economic system or level of democracy. According to one of well-known Parkinson's Laws (Parkinson 1958), bureaucrats are inefficient by definition, because they tend to multiply their numbers and make work for each other. William Niskanen (1971) formalised the idea of bureaucratic empire building in his model of a bureau that maximizes its budget, not efficiency. Niskanen's model highlights the asymmetry of information between the bureau as an agent and its sponsor or principal, the politician, which gives the agent the capacity to deceive and leads to the principal-agent problem in their relations. Using its control over information, the agent can manipulate the principal's decisions and actions in its own favour; this could not decrease but, on the contrary, could ultimately increase politician's costs of running a hierarchy (Mueller 2003). The larger is the hierarchy, the greater the asymmetry of information usually is. If the size cannot be diminished for exogenous reasons, as it is often the case in public administrations, the problem of growing transaction costs intensifies. The substantial part of the latter are expenses on control of bureaucrats, i.e. the costs of monitoring and enforcing the observance of official rules and orders.

One of the tools often recommended to mitigate this problem and reduce transactions costs in public administration is to establish an independent Supreme Audit Organisation (SAI).¹ The World Bank, for example, argues that the SAI plays a critical role in the construction of strong institutions. It can curb corruption, save public money, reinforce legal, financial and institutional frameworks and reduce the arbitrary application

of rules and laws, providing an important "pillar of integrity" (World Bank 2001). At the same time, however, the literature underlines that the SAI is not free of problems (Streim 1994, Frey 1994) and we still know little about what makes a SAI successful (Dye and Stapenhurst 1998). Moreover, using cross-country analyses a recent work by Blume and Voigt (2007) questions the very assertion of wide positive influence of SAIs on the efficiency of governmental agencies and policy.

This brief review of the literature demonstrates that research in the field of control in public administrations is only in its very beginning and is concentrated heavily on the experience of democratic countries. Very little is known about monitoring and enforcement practices in dictatorships, despite their crucial role in the very survival and success of the regime; once orders are not maintained, the dictatorship falls. In the absence of other "pillars of integrity", like free media or an independent parliament, the dictator has to rely heavily on the secret police and other control agencies (Egorov et al. 2006). This paper attempts to fill the gap by examining the Stalin's experience of coping with the problem of efficiency of bureaucracy, using historical records from formerly secret Soviet state and party archives.

In the case of the Soviet command economy transaction costs influenced strongly the efficiency of the system and the principal-agent problem was one of crucial issues in the question of running the Soviet bureaucracy. The state agencies governed the whole national economy, producing both private and public goods. Production units operated in the absence of a competitive market environment, and the dictator at the top exercised the supreme authority of the state to establish laws and apply direct coercion. These factors meant that there was no market test of managerial efficiency and resulted in an interaction of political and managerial transaction costs of running the system.

Stalin (as well his predecessor and successors) mitigated the agency problem by developing a system of control organisations, which were analogous to the SAI. However, this was a control system in the military sense of "command and control". In military systems, the function of control is distinct from, but and contingent, on the power to command; control embraces monitoring of operations that were previously set in motion by a command and includes intervention in these operations so as to adjust them if necessary. Indeed, Soviet control organisations did not just audit the work of the bureaucracy, and report to the dictator; in addition officials executed the control function and "inspectors", as I will refer to them below, had some authority to intervene in order to enforce implementation of dictator's plans and orders. The system was external to the main Soviet managerial hierarchy that permitted to the dictator to interfere into operations of any agent on-the-fly, temporary reducing the number of hierarchical levels if necessary.

In this paper I analyse Stalin's decisions concerning the scope and design of the Soviet system of monitoring agent's efforts and enforcing implementation of dictator's orders. In the first section I start with the question whether the very establishment of such system was rational and continue with the problem of how Stalin determined its size. Further sections address questions about the dictator's choices of system structure and organisation (section 2), allocation of inspectors' time and efforts (section 3), and authority of inspectors (section 4). The final section concludes.

1. Rational Choice and the Soviet Control System

Despite its prospective benefits control is costly. In mitigating the agency problem in this way, the politician can only increase the productivity of the bureaucratic unit by incurring additional expenditures, because monitoring and enforcement require resources. Such approach will be beneficial and rational if the efficiency of the system increases

substantially. However, a self-enforcement incentive system could be still a better option, if it is feasible.

Contract theory has a long tradition of studying this problem, addressing the question how to write a contract between the principal and the agent with a payment scheme that the agent will accept voluntarily and that provides her with adequate incentives to do her best in principal's interests. The standard account (Bolton and Dewatripont 2005 describe the current state of this art) characterizes the problem in a market environment of western democracies, however. Contract theory tends to assume that, while either agent's type (honest or dishonest) or efforts are not observable, the agent's output – the result of the agent's effort – can be measured unambiguously and is common knowledge to both the agent and the principal. It is also assumed that a well-functioning independent legal system, third party, exists and the agent can freely sign the contract or not.

Under these assumptions there could be no clear role for the principal to monitor or intervene in the process of contract fulfilment. Thus, if the agent is risk neutral, the fact that efforts are unobservable does not lead to the principal-agent problem, since the agent takes risks upon herself. Further, in the case of a mono-contract between a risk-averse single agent and a single principal it is usually efficient for the principal to offer the agent a fixed payment combined with a share in the residual output. There is still no need for control. It is only when we move away from this simple case that the principal might become willing to undertake costly monitoring and enforcement.

Firstly, the monitoring may be productive if individual output becomes unobservable when agents work in teams or "collectives." Team working can permit each agent to seek to free-ride on the effort of others. Alchian and Demsetz (1972) proposed free riding as one reason why firms and hierarchies exist. The task of a firm's owner is to

monitor in order to mitigate this problem. Holmstrom (1982) supplemented this analyse and demonstrated that the owner's role is to enforce incentive schemes, breaking budget-balancing constrains of the team. As the number of agents rises above the limited span of control of a single principal, we could expect to find multiple supervisors. As the number of supervisors also rises, hierarchical relations among them, where supervisors at a higher level monitor those below them, could be expected to emerge. The risk of collusion and loss of control may also rise with the number of levels in a hierarchy and could act as a natural limit to its scale (Williamson 1967; Qian 1994).

Second, the monitoring may be productive when contracts are incomplete. As uncertainty about the future increases, it is likely to become more difficult or costly to predict all the possible states of nature under which the contract is likely to be implemented and, consequently, to describe them in the contract. Agents may then exploit the incompleteness by interpreting them ex post to their own advantage. This could require principal to intervene as well as to monitor. He may, as a protection against ex-post opportunism, choose to use his "residual control rights" (Grossman and Hart, 1986; Hart and Moore, 1990) to exclude others from using his assets.

Finally, the monitoring may be productive in the absence of the basic assumptions of contract theory: the agent's output has a commonly agreed value; there is a well-functioning legal system; the agent has freedom to exercise outside options. To monitor the agent's behaviour makes sense when output is difficult to measure or is not valued at its opportunity cost (Eisenhardt 1985). The absence of a third-party legal system makes it possible to violate the contract relatively easy: for the agent to steal from the principal and the principal to confiscate the agent's rewards. Ultimately, when the agent lacks outside options, coercion combined with monitoring of the agent's behaviour under an involuntary contract might be cheaper than the monetary rewards that would motivate her.

The Soviet leadership understood well that monitoring and enforcement are costly and consume resources that could be invested into production. Provision of adequate incentives for employees in order to economise on control activities was well recognised and discussed widely. Over the years there were many attempts to introduce payments schemes based on sharing output; most famous during the Stalin's rule are probably the spread of piece-rate wages after Stalin's speech to Soviet managers (1931), and the establishment of the "director's fund" (1936) for payment of bonuses to outstanding employees (Berliner 1957, Davies 1996). These attempts could not replace the monitoring and interventions, however, because the conditions favoured for their appearance, that I have described above, existed in the Soviet economy.

Some of these conditions tend to recur in all large organizations, regardless of their nature. For example, may contracts between agents and the dictator were incomplete, like many managerial contracts in big corporations and public administrations. As in any complex organisation, the principal-agent problem often existed in the form of free riding in teams where individual productivity was not observable.

Other problems, that promoted the introduction of additional system of external control, were specifically Soviet. Thus, the dictator had no perfect knowledge about the outcome. What did the dictator know about the scope for implementing his economic policy without monitoring? Formally, all economic agents had to present regular reports about the results of work to their direct superiors, and also to the Soviet statistical organs. In the end it was the Gosplan and the Soviet central statistical agency (TsUNKhU-TsSU) that had to aggregate the overall picture of economic developments and report it to Stalin. The dictator's problem, however, was whether he could rely on this information. The dictator did not observe the outcome directly but via a chain of reports and aggregations, and he knew that at each level of this chain agents had incentives to distort information.

Falsification of reports, the so-called *pripiski*, was a general issue in the Soviet economy, as pioneer studies about daily operations of the system have already revealed (Berliner 1957). In other words, the dictator not only was unable to observe agents' efforts; his knowledge of the outcome was also questionable without double checking.

Finally agents' freedom not to sign an unfavourable contract was limited. While Soviet citizens could choose their professions relatively freely, once a manager accepted a post it became very difficult for him to reject or criticize openly orders from above. Ultimately, the dictator himself had to secure his orders against direct disobedience since, without a third-party system of legal enforcement, he could not just hand a contract violation to an independent court and wait for fair justice against a violator. The courts were no more than a department in the dictator's office (Gorlizki 2001) and needed information for their successful operation.

To summarize, an external control system of monitoring and enforcement is an answer that economic theory would expect from a rational dictator under Soviet circumstances. It is true that the Soviet control system appeared immediately after the 1917 revolution and grew rapidly (Remington 1982). Does this fact support Stalin's rationality in the question of design of his empire? To introduce the monitoring did not demand any sophisticated calculations and could have been done instinctively; in contrast, to design complicated incentive schemes required comparisons of costs and benefits and evidence-based computations. Moreover, the dictator's inclination towards an intensive monitoring and frequent interventions could be explained otherwise, in terms, for example, of Stalin's psychopathology, jealousy, and twisted imagination. In this sense, the fact of a control system is necessary but not sufficient. The crucial question is whether we have evidences that Stalin actually calculated the efficiency of control activities and incurred their cost because he expected some benefit equal to or greater than the cost (Harrison 2006). In

other words, did Stalin truly seek to answer the question: How much control is enough? Or did he rather always prefer more control to less?

Simple economic reasoning suggests that a rational dictator, having introduced a control system, will expand it as long as marginal benefits exceed marginal costs. The costs should include both the direct ones, like the administrative costs which are clearly increasing in the scale of the monitoring apparatus, and indirect ones as well. The risk of collusion between agents and inspectors, which also rises with the scale of the apparatus, is probably the main component of the latter.

Rationality does not exclude mistakes, however. Moreover, a rational dictator can use a trail-and-error method and a rule of thumb in his decision-making instead of detailed calculations, because the latter themselves could be expensive. In other words, a dictator is limited in his actions by his mental capabilities and deliberation costs, choosing second or low best options, but still remained boundedly rational (Conlisk 1996, Harrison 2006).

One way to test the hypothesis of costs-benefit analysis and dictator's rational choice against Soviet reality is to analyze some key points in the history of the control system under Stalin: the periodic reforms, especially those that led to contraction rather than growth of the scale of the monitoring and interventions.

The reform that probably brought about the greatest reduction of the Soviet control system under Stalin was the 1934 transformation of the TsKK-RKI ministry (the United Ministry of State and Party Control), where several thousand inspectors worked, into the relatively small party (KPK) and state control commissions (KSK), which together employed no more than several hundred (GARF 7733/17/1453 f. 141). It was initiated by Stalin himself (Rees 1987, Getty 1997), and this allows us to interpret it as a clear example of the dictator's logic. Stalin's speech at the seventeenth party congress and those of his closest supporters such as Rudzutak and Yaroslavskii (Hoover/RGASPI 59/2/1-11) explain

two reasons for the reform. First, as the Soviet economy grew rapidly, Stalin argued, it became impossible to monitor the work of all Soviet and party organizations. Detailed inspections became episodic and for this reason needed to be replaced by periodic checks on the implementation of current orders from the center (Hoover/RGASPI 59/2/1: 97-97a; see also Rudzutak's speech, RGASPI 59/2/1: 105). Second, local state and party inspectors were colluding with "regional grandees" who considered as a result "that they have the right to violate decisions of leading organs with impunity" (Hoover/RGASPI 59/2/1: 94; see also Yaroslavskii's and Ul'anova's speeches, Hoover/RGASPI 59/2/1: 115, 119, 178-179). Before the reform, in other words, Stalin considered that the control system of the time was inefficient and was not producing the desired results while costing a great deal. His solution was to cut both the number of inspectors and their tasks, leaving only the duty to monitor systematically the implementation of main party and state decisions. As a top KPK official, Shkiryatov, explicitly acknowledged in 1936, "the inspector is the key figure who actually decides issues, not those who vote (the dictator and his close subordinators)," and that was why it was important to limit their burdens in order to increase the quality of their investigations (Hoover/RGANI 6/1/15: 134). Finally, it was easier for the dictator to find a few loyal inspectors than to find many. To strengthen the loyalty of the latter their salaries were substantially increased. In 1939, for example, regional KPK plenipotentiaries earned as much as regional party secretaries.

Further KPK history shows that while its staff enlarged over years,² detailed investigations into whether new inspectors were really necessary preceded each decision of expansion. For instance, it was prohibited to establish positions for local KPK plenipotentiaries in the same regions where KSK plenipotentiaries worked (Hoover/RGANI 6/1/67).

Another example of Stalin's willingness to limit the scale of control is found in his public discussion with the chief public prosecutor Andrei Vyshinskii at the central committee plenum in July 1940. Vyshinskii was putting forward a draft proposal to reorganise the State control commission into a Ministry of State Control, while Stalin commented on his speech and inserted remarks and rejoinders. Correcting Vishinskii suggestions about the tasks of the future ministry, Stalin enlarged its duties in one respect and announced that all other ministries (except the Ministry of Internal Affairs and some others) would be accountable to it – which indicated a need for more staff, a bigger budget, and so on. However, simultaneously in another remark he limited the ministry's tasks with respect to monitoring contracts between economic agents: "this task will require 100 thousand people. It is impossible" (Stalin, Hoover/RGASPI 17/2/673: 113).

The final story that supports the rational choice hypothesis concerns "the central committee party organisers". The institute of party organisers was established in 1932 for the most important military plants. Party organisers represented the central committee of the communist party at these plants; appointed by the central committee, they acted as secretaries to local party cells. They numbered no more than one hundred during the 1930s. However, as a result of war preparations and the war itself, which increased the borders of strategic industries as well as their value for the dictator, their quantity rose to 1,129 by January 1941 and 1,531 by January, 1946. At the end of 1946 the central committee monitoring department initiated a reform that would cut their number to less than one sixth. The line of reasoning was close to Stalin's in 1934: too many inspectors cause inefficiency and disloyalty. The monitoring department argued that it could not control their work; too many party organisers diluted the importance of the institute and it was difficult to recruit so many qualified and trustworthy inspectors (RGASPI 17/122/128: 1, 23 - 24).

While these archival anecdotes do not portray Stalin calculating the marginal costs and benefits analyses of adding an additional unit to his control system with pen and paper,³ they demonstrate that the dictator had a broad understanding of the agency problem in application to the Soviet bureaucracy as well as the existence of decreasing returns on the policy of control expanding. He, as well as his subordinators, had a clear feeling that the size of the control system should be limited at some point because it would be too costly to try to monitor the implementation of all transactions in the system. This, however, raised questions about the arrangement of the system, i.e. how the system should be organised to maximise its returns, once the total monitoring was unacceptable. In the next sections I address Stalin's answers to these problems.

2. Design of the System.

The total number of orders - contracts in the command economy - tended to infinity in the USSR. Orders varied significantly in terms of validity, universality, complexity, degree of priority, etc. One can guess that the over-abundance of orders would require a complex control system structured in a way that would allow the simplification of monitoring procedures, for example by types of orders to achieve economises at scales and thereby permit specialisation of control activities. Indeed, the Soviet system of monitoring and enforcement was very complicated, and responsibilities between its subunits were distributed to a certain extent in accordance to types of orders, the implementation of which these subunits monitored.

Schematically there were two main subsets of external Stalinist control agencies, defined by scope of their responsibilities: organisations with narrow tasks in specialised fields and agencies with widely encompassing responsibilities.⁴ The first group of specialised agencies included, for example, the sanitation inspection, the trade inspection, the inspectorate of labour protection, the Ministry of Finance, the State Bank (responsible

for financial monitoring), the Gosplan (responsible for "planning discipline"), etc. Their freedom of actions was strictly limited; either they were second-rank organizations or the monitoring was not their primary task. In contrast, the monitoring and enforcement of orders were the primary role of organizations from the second group, and most of them were important and powerful institutions. The dictator himself determined and closely monitored their activity. Examples were the Ministry of State Control (RKI-KSK-NKGK), the party control organs (TsKK-KPK and departments of the party central committee apparatus), specialised units of the Ministry of Internal Affairs (the economic department OGPU-NKVD-NKGB-MGB), the prosecution service with its supervision of ('nadzornaya') function, and temporary ad hoc commissions created to solve particular problems and filled with dictator's closest subordinates. Inside the second group there was some specialization as well. The state and party control agencies as well as the majority of ad hoc commissions concentrated on checks of fulfilment of government and party orders, mainly imported orders that affected routine projects. The prosecution service had to monitor the implementation of Soviet laws that regulated the command economy, and check the consistency of lower level decrees against all-union legislation. The Ministry of Internal Affairs mainly concentrated on monitoring political loyalty of agents and looked for political causes of plan failures.

Despite the specialization, described above, different agencies of the Soviet control system overlapped substantially in their daily operations. The key players on the field, the state and party control organs, the prosecution service, and the Ministry of Internal Affairs often duplicated each others' work. The implementation of a particular order, for example the 1940 decree that prohibited job quitting, could be monitored at the same time by all of them and the labour inspection in addition. An explanation of such weak specialization can be found in the complexity of tasks that made multiple monitoring inevitable. For example,

the state and party control commissions invested great efforts to demarcate precisely their responsibilities in 1935; however, the best that they managed to achieve was to state that "The party control commission and the soviet control commission inform each other about the questions that they monitor" (Hoover/RGANI 6/1/43: 258; 6/1/176: 200).

It is more likely, however, that such overlapping was an intentional decision by the dictator rather than a phenomenon caused by the complexity of tasks and the difficulty to separate duties precisely. The dictator had a good reason to introduce such system once there existed risk of collusion between agents and inspectors, leading to biased information and control failures. Stalin knew that he could not trust his monitors unconditionally since there was the agency problem in his relations with control organisations as well. In January 1938 the chief public prosecutor of the USSR Vishinskii explicitly named the weakness and imperfection of the institution that he headed, and Stalin's lack of trust to it as a main reason for the multiple control system (Hoover/GARF 8131/14/3: 6). Moreover, the higher was the priority of a particular task, the greater was the desire of the dictator to have accurate information, and this increased the number of inspectors. For example, the Ministry of State Control did not just monitor from Moscow the work of the most important plants, but had their special representatives at these plants who had to monitor them on a regular base (GARF 8300/4/1: 1). The defence industry provides another example. It was monitored by party-organisers, mentioned above, as well as military representatives (Harrison and Simonov 2000, Markevich and Harrison 2006) and "enjoyed" the close supervision of the economic department of the Ministry of Internal Affairs (Mosokhin 2004) in addition to 'ordinary' control agencies.

Multiplicity of monitoring had to protect the dictator from inspectors' opportunism and cheating, but it carried additional costs as well. So the question was how to organize this multi-branch control system. There are two extreme options which could be mixed in

any proportion: a network, where everybody monitors each other; and a hierarchy where inspectors, whom the dictator trusts unconditionally, supervise those whose loyalty is valued less. The latter requires at least a number of 'honest' supporters; the problem of the former is that it is inefficient in the extreme: there is no real work except monitoring.

While there was no official hierarchy of Soviet ministries and organizations, they could be ranked on the base of their rights to check up each other. From this point of view, the organizations from the second group distinguished above were more powerful than from the first. All "big four" – the party and state control, the prosecution service and the Ministry of Internal Affairs – had very wide responsibilities including the right to monitor specialised inspections or functional ministries, like the Gosplan and the Ministry of Finance. Archives contain plenty examples of such investigations (see for example, Hoover/RGANI 6/1/32: 134; 6/2/259: 19; Hoover/GARF 8131/28/720: 2).

It is more difficult to rank the control organs inside each of these two groups. Specialised inspections and functional ministries had mutual rights of monitoring within the limits of spheres of their responsibilities. As long as these spheres did not intersect, they acted in parallel. The situation in the second group was more complicated and varied over time.

It is usually considered that the Ministry of Internal Affairs – the Soviet secret police – was Stalin's first watchdog and fulfilled the role of the inspector of last resort, monitoring the loyalty of the population and the bureaucracy, including inspectors of the system of external control (Kokurin and Petrov 2003). The Ministry of Internal Affairs was certainly an important tool of the dictator, but it occupied the position of unchallenged leader of the system only during the period of the Great Terror. In other times the dictator tried to keep a balance between different branches. Thus, the prosecution service had formal rights to check upon secret police activities (Solomon 1996) and it was the party

itself which monitored the secret police in practice. Only the state control organs never had such rights (GARF 8300/2/749: 224). In addition, the Ministry of Internal Affairs looked first of all for cases of political disloyalty, real or imaginary, and was involved much less in monitoring and enforcement of current policy and ordinary orders.⁵ In the latter regard the party and state control organs were, perhaps, more important.

The relations between the prosecution service and the state and party control organs changed over time. In the late 1920s the former was a relatively unimportant organ attached to the Supreme Court of the USSR, while power of the united (at that time) Ministry of State and Party Control TsKK-RKI was huge. The latter monitored the work of the former but not vice versa. The subordinate position of the prosecution service in that decade was so obvious that it was acknowledged by officials who considered strengthening the link with the TsKK-RKI, under the supremacy of the latter, as the only way to increase the efficiency of the former (see for example Pavlunskii's speech at the XXth plenum of the Soviet Supreme Court which occurred after a complex investigation of the Soviet Supreme court and the prosecution service conducted by the TsKK-RKI in 1928 (Hoover/GARF 8131/5/44: 88)). In a general report about its activities in 1931 - 1932 the prosecution service had to admit its lack of control over the work of Soviet ministries, the most powerful of which, like the Ministry of Heavy Industry, simply ignored any attempts to monitor their work (Hoover/GARF 8131/9/5a: 1- 38).

During the 1930s and 1940s the state and party control kept the right to monitor the work of the prosecution service (see for example reports about such investigation in 1939, 1943 etc. (Hoover/RGANI 6/6/2: 20-21; GARF 8300/2/71: 39)). However, the status of the prosecution service increased after the establishment of the office of chief public prosecutor of the USSR as an independent organ in 1933, and later its relative importance and independence also continued to grow (Solomon 1996). This being a huge organisation,

the prosecution service had to complete many investigations of cases of failure to carry out orders which had been initiated by the state and party control organs. Decisions of the prosecution service (and, consequently, courts' verdicts)⁶ could differ sometimes from the findings of the state and party control. For example, in April-May 1934 the prosecutions service received from the KPK 12 criminal cases with the advice "to judge and sentence wrongdoers"; however, only in 8 cases accused were put in jail while 4 cases, for different reasons, were ceased without indictments (Hoover/GARF 8131/11/11: 11-12). A 1946 attempt of the Ministry of State Control to receive the right to conduct formal investigations and to pass cases directly to the courts was rejected by the dictator (Hoover/GARF 8131/23/103: 11-17).

Simultaneously, the authority of the state and party control decreased over time. In 1934 the united Ministry of State and Party Control was split into two commissions which roles gradually decreased as well. Thus, the KPK – the most important among the two - was still very powerful at the beginning of its history, but lost much of its authority later. In 1934 - 1936 the KPK regional plenipotentiaries even had the right to give direct orders to state and party organizations (Hoover/RGANI 6/1/1 f. 11). During the Great Terror the KPK lost much of its power and was the subject rather than an active agent of the terror policy. The importance of the KPK was rebuilt to some extent in 1939 as an initiative by Stalin, which was made public by his party deputy Malenkov (Hoover/RGASPI 17/2/649 f. 125-158). The number of KPK plenipotentiaries and inspectors increased and its authority was expanded. However, already in 1940 part of the KPK functions were transferred to a "new" Ministry of State Control (Hoover/RGANI 6/6/1 f. 2). During the Second World War the KPK's role further declined. Finally, after the war the KPK lost its network of regional plenipotentiaries (Denisov et. al. 2004) and became an organization very similar to an "ordinary" department in the apparatus of the party Central Committee.

Stalin's decision to organise the Soviet system of monitoring and enforcement by mixing elements of hierarchy and network, which could be called "the fuzzy hierarchy", is explained by the fact that it permitted him to avoid the problems associated with both extremes. A more interesting question is why the level of fuzziness of the hierarchical structure increased over time. One can study changes in the status of different subunits of the Soviet monitoring system separately to answer this question. For example, Peter Solomon (1996) argues that Stalin's decision to turn back to the tsarist's tradition of justice in 1934-1936 caused the strengthening of the prosecution service. It seems, however, that a more comprehensive approach such as that undertaken above could provide us with further insights. In fact, the strengthening of networks elements in the composition of the Soviet system of monitoring and enforcement can be understood in terms of the transformation of "Team Stalin" (the term suggested by Wheatcroft 2004) into a one-person dictatorship. Stalin's accumulation of power did not solve his problem of how to secure enforcement of his policy (Harris 2003); on the contrary, it deepened what Ronald Wintrobe (1998, 2001) called the "dictator's dilemma": the more power the dictator has, the less sure he can be of the loyalty of subordinates. In this sense, the existence of relatively clear challenges and enemies in the late 1920s and earlier 1930s, and also perhaps during the Second World War, helped to improve mutual vertical trust between Stalin and his supporters. Later, however, this tendency reversed and the most likely challengers to his power became Stalin's closest subordinates themselves, and this arguably strengthened Stalin's will to have several parallel control units.

3. Selective Control

In order to motivate his managers, Stalin clearly wanted to give them the impression that the implementation of all orders and the efforts of all agents were subject to continuous monitoring. He addressed this question several times in his public speeches (see for example, Stalin's speeches at the XVII party congresses in 1934 (Hoover/RGASPI 59/2/1: 92)). As the main party newspaper *Pravda* (7 September 1940) explained the tasks of the Ministry of State Control was that "each ministry, each state or public organization should feel the all-seeing stare of state control."

Such statements were mainly for public consumption, however. They targeted rank-and-file managers in order to misinform them and make them afraid to cheat. Since a marginal approach to the size of control organs was in use, "total" monitoring was not feasible anymore; multiple overlapping system raised the cost of monitoring per order even further. This was openly recognised in several reviews of control activities (see, for example, internal report of a new chief inspector of the Defence Committee in 1938 (GARF 8418/12/402: 130-131); or the speech of the head of KSK at the KSK bureau meeting in 1936 (GARF 7511/1/136: 123)). As a top KPK official, Skiryatov, noted in 1940, addressing the regional KPK plenipotentiaries, "even if we add 2-3 inspectors (to each region) it would not save you; you would not be able to monitor everything in any case" (Hoover/RGANI 6/6/44: 88). Once spot checks were on the table, selective procedures became a crucial issue.

Like all Soviet organizations, the Soviet organs of monitoring and control worked according to plans. The latter represented lists of orders, the implementation of which was to be checked during a scheduled period. Plans of inspections consisted mainly of the most important and priority orders (see for example KPK plans for the 1930s or the 1949 annual report of the prosecution service; Hoover/RGANI 6/6/83: 170-172; 86: 110-112; Hoover/GARF 81831/28/259: 1-6 etc.). The rule "to include within plans first of all checkups of main state and party directives" was a basic principle which Soviet inspectors, following Stalin, constantly proclaimed (this formula, actually, outlived Stalin himself; see for example a decree of the Ministry of State Control issued on the 6th of June 1953,

GARF 8300/2/2/: 275-277). Since control over the most highest priority orders produced the highest expected returns on a unit of monitoring and enforcement activities, there is nothing strange in such an approach. However, it inevitably raised another question: once selection is not random, how to secure the implementation of secondary commands which fell within neglected areas.

Soviet inspectors discussed this problem many times at their internal meetings. Debates ended with relatively similar outcomes each time, but the solution was never published explicitly in so far as it was quite informal and indistinct. The ideal formula of the Soviet monitoring could be expressed as the triad: (1) be informed in general about the works of agents' (who were under supervision); (2) pay special attention to "top" orders and check their implementation; (3) react to current signals about abnormalities. For example, the secretary of the central committee of the Communist party Andreev instructed KPK inspectors in July 1939 that "inspectors ... have to know what is going on in ministries that are under their control regardless of their plans of inspections. ... They have to know people, their abilities ... The program of inspections is approved. ... But beyond the 'big' questions you also have to check upon current issues" (Hoover/RGANI 6/2/6: 4-5). The supervision of agent's work in general and reaction to signals should prevent a situation in which the agent ignored secondary issues, knowing that their implementation would be never checked, while plans had to give an opportunity to concentrate on main questions. In this sense, there was a trade-off between planned investigations and reactions to current signals in the daily work of inspectors.

Signals from below – from citizens as well as from organizations - were a useful way for the dictator and his inspectors to be informed about problems at ground level. They cost the dictator little and ensured him to some degree that inspections would be efficient, i.e. inspectors would monitor the implementation of really problematic orders

with a greater probability. So it is not a puzzle that signalling was widely encouraged in the USSR. The prosecution service, for example, developed so called groups of voluntary assistants in ministries which it monitored (Hoover/GARF 8131/15/49: 27). A duty of party members was to report about all defects he faces at a workplace or in daily life.

The monitoring based on signals had several problems, however. Firstly, signals matched poorly with the multi-branch system of monitoring where spheres of responsibilities of units overlapped. Due to fuzziness of the system people duplicated their signals sending them to several control organisations at the same time. This led to overloading of the control organizations with signals and complaints; the control organs spent a great part of their time sorting and resending the signals between themselves (Nerard 2002). For example, in 1936 the prosecution service alone received more than two and a half million complaints among which more than eighty percent were not appeals on court decisions, i.e. they represented whistle-blowing. The overloading meant that not all signals were examined. For example, the prosecution service reacted to only seventy five percent of signals from the previous example (Hoover/GARF 8131/14/3: 11 – 13). Unanswered signals naturally decreased activists' will to appeal again and thus decreased the efficiency of the whole system.

Secondly, the whistle-blowing was independent of the dictator. Since those who initiated signals could have priorities different to those of the dictator himself, the final pool of signals could be biased against his preferences. Then monitoring of only those orders about which signals had arrived could leave unchecked the implementation of tasks really important for the dictator, just because nobody signalled about them while some difficulties with their implementation existed. Moreover over-reaction to signals could undermine the loyalty of Soviet managers. The "honest manager's dilemma" (Belova 2001) was that it was difficult for Soviet managers to fulfil plans without breaking formal

rules. As Parshin, the Soviet minister of machine-building and instrument-making, claimed at a meeting in the Ministry of State Control in 1946 "if you (inspectors) inspect formally, you will be able to reprimand any of us" (GARF 8300/2/189: 55). So, an uncritical reaction to all signals about violation of rules could cause punishment of loyal managers who had successfully implemented basic tasks.

The Soviet control organizations were in permanent search of the "right" proportion between planned investigations and inspections caused by signals. For example, in August 1934 the Soviet control commission declared that inspectors must decrease their time spent on check-ups of main orders, which were planned, up to approximately 50 percent (GARF 7511/1/77: 5). An example of probably the most clear switch from planned inspections to responding to signals was a 1947 KPK reform when the institute of regional KPK plenipotentiaries (the investigations of which were planned from the centre and provided a ground for KPK operations) was abolished, and inspectors in Moscow began to work on the basis of signals to a larger degree. As a result the annual number of signals received by the KPK increased several times (Hoover/RGANI 6/6/1090: 4).

The final solution, of what the proportion between response to signals and planned inspections should be, depended on the relative importance of two main criteria for assessment of the work of the Soviet control organs. Stalin formulated the basic idea of Soviet control, "to monitor and to secure the realization of a chosen policy," as far back as 1920 (Stalin 1920, reprinted in 1952), and it was subsequently reproduced in many official instructions, decrees, and speeches (for example, GARF 7511/1/77 f. 3; GARF 8300/2/749 f. 198; GARF 8418/12/402 f. 131; Hoover/RGANI 6/1/12 f. 7; GARF 8300/1/901 f. 231; see also Ikonnikov 1971), but the tasks to be undertaken and the criteria of efficiency slightly differed. According to these documents, the work of inspectors should be evaluated either by reference to the number of failed orders that they revealed and

managed to enforce the implementation of; or by reference to the number of wrongdoers, responsible for these failures, whom they exposed (see for example the definition of KPK tasks in Hoover/RGANI 6/1/1: 7; 6/6/1: 2). The monitoring as such, in terms of a number of orders which have been scrutinised was never considered important, only problematic orders with ensuing remedial actions were counted. As the KPK explained to its plenipotentiary in Azerbaijan republic in November 1942, the KPK was not interested in information praising the work of economic agents under monitoring (Hoover/RGANI 6/6/48: 32).

In general, the former principle was usually considered as more important in the USSR. As the state control commission instructed its plenipotentiaries in August 1934 "our task is to check, to check and to check again the implementation of governmental decrees; our task is to enforce implementation of these decrees" (GARF 7511/1/77: 5). Punishment of wrong-doers was usually treated as an important but secondary task relative to the former one (Hoover/RGANI 6/1/12: 6-7). In 1943 the Ministry of State Control explained to its employees that they must take into account reasons and motives for violations and assign punishment in the light of managers' success in their work (GARF 8300/2/2: 34).

The loyalty of agents upon whom the implementation of orders depended was often more important than punishing agents' "sins" and this justified inspectors ignoring signals about them. Moreover, if inspectors followed only signals and were over-reliant upon them, they themselves could be transformed from the subjects into the objects of investigations. A complex investigation of the Azerbaijan republic conducted by the Ministry of State Control in 1948 is a good example of such risks. It started as a very wide campaign against local authorities, but the latter managed to transform the check-up into an investigation of the work of the ministry itself. In the end a commission of the Politburo – the highest body in the USSR - condemned the style of the initial inspection. Discussing

the resolution of the central committee of the Communist party about the inspection at an internal ministerial meeting, the minister of state control Mekhlis had to confess that "the task of the inspection was perverted; the inspectors switched on an examination of complaints ... that is not the ministerial style of work" (GARF 8300/2/9: 106).

One can treat the trade-off between planned inspections and signals from the point of view of the choice between the scope and the focus of monitoring. While signals permitted to increase the former and in this sense decreased its costs, whistle-blowing activities were out of the dictator's power and could threaten loss of his control over the system. Once the dictator had to choose between his dominance over the monitoring agencies and the scope of monitoring, he preferred the former; in this sense focus of monitoring was more important than its scope.

4. The Inspectors: How Much Authority was Enough?

The duties of control agencies in the Soviet system determined their credentials. Both tasks mentioned above demanded delegation of some repressive power to the agencies. The task of punishing wrongdoers naturally supposed such authority and achievement of the enforcement mission required it as well. Punishment has to deter agents from opportunistic behaviour; moreover coercion is an important incentive for implementation of orders in the command system. Application of punishment signals that the dictator considers the agent guilty of non-fulfilment of the transaction. If the order remains in force in the next period, the agent responsible for its implementation has a clear idea of her future payoff in the case of repeated failure. In this sense, punishment could restore agent's loyalty and secure implementation of transaction. However, punishment is a sufficient tool of enforcement only if the outcome depends purely on agent's efforts. If the problem of elaboration of correct orders exists or the outcome depends also on future states of nature which can not be completely taken into account in framing the order, then punishment could be

inadequate tool to enforce transaction.⁹ It could happen that it is just impossible to fulfil the order under the current conditions and corrections in the order are necessary. In this case the best action of the inspector and the dictator behind him is to support the agent, assisting her, and in such way to secure implementation of valuable transaction.¹⁰ Thus, implementation of orders as the task of control organisations could require delegation to them an authority to intervene in some way into agents' daily operations.

We can expect that the authority to adjust orders and to assist agents to implement transactions will appear in the list of credentials of control agencies only if their task is to secure implementation of orders and the dictator concedes that orders could contain mistakes. Indeed, Soviet specialised inspections like the Labour Inspection, the Sanitation inspection or the Trade inspection had no power to intervene except to fine and punish offenders because the validity of laws which they monitored were beyond question at least in the short run. The authority of the Ministry of Internal Affairs to adjust orders was also quite limited (but its power to punish was huge) as the ministry monitored first of all the loyalty to the dictator not implementation of particular orders. But other agencies - like the state and party control organs, and the prosecution service – were endowed with both the authority to punish and to assist in some way, since the Soviet leadership and Stalin himself realised very well that their orders could be in general imperfect and incomplete (Markevich 2007). They enjoyed both rights during the larger part of their histories.

The task to enforcing implementation of transactions under supervision had a strong influence on the timing of inspections as well. With such aim, prior inspections that could prevent potential future failures had obvious advantages over posterior investigations that could only explore the causes of failures and punish the offenders. In fact, Soviet officials continually underlined the duty of inspectors to avert failures and their partial responsibility for plan fulfilment (Getty 1997; see also Kuibyshev's speech at KPK

meeting in 1934 Hoover/RGANI 6/1/17: 221; or the 1929-1930 report of the prosecution service, Hoover/GARF 8131/7/39: 5 etc.).

The authority of control organs to intervene created the problem of parallel centres of power, however. The system of monitoring and enforcement agencies was external to the 'normal' Soviet bureaucratic hierarchy, and the power to command of the former, while it could assist productive units to complete transactions, challenged the authority of the latter. The control agencies were involved heavily into daily managerial activities. The prosecution service, for example, characterised its own work in 1931-1932 in the following way: "the prosecution service played the role of the pusher ('tolkacha'), attracting the attention of agents to corresponding issues by its inquiries; when agents argued that there were objective reasons for failures, the prosecution service informed the government" (Hoover/GARF 8131/9/5a: 10 – 11). The KSK reviewed its operations in the same way in 1939: "in many cases KSK officials became advocates of those whom they had to monitor. It is especially clear in the questions of allocation and delivery of equipment, spare parts and raw materials" (GARF 7511/1/204: 25).

Moreover, knowing that the control agencies are responsible for averting of transaction failures, agents appealed to them for assistance despite the risk that the former could blame (and punish) the agent for existing difficulties. For example, the director of the Likhachev car plant in Moscow appealed to the KPK to enable it to receive resources, in this case accommodation for workers (Hoover/RGANI 6/1/17: 176). Having obtained the KPK assistance once in 1939, the officials responsible for the construction of plant number 100 of the Ministry of Ammunition shifted in their further appeals from their own minister to the KPK in 1940 (Hoover/RGANI 6/2/32: 62) etc. Summarising such practice in 1938, the KSK concluded that, by appealing to the control agencies, managers tried to

secure themselves from prospective failures instead of working hard; and demanded that such managers be punished (GARF 7511/1/201: 1-2).

Parallel centres of power produced chaos in management since officials did not know whose orders to follow and to whom to appeal. The story of KPK plenipotentiaries is a good illustration of this point (for the full story see Getty 1997). One of Stalin's aims of the January 1934 reform of the Soviet control system was to put regional party leaders under much closer supervision than they used to have. Realising this aim, offices of KPK plenipotentiaries were established in the regions. The plenipotentiaries had to monitor the implementation of party directives at local level and had the right to adjust orders of regional leaders, which made them in some sense more influential than local party bosses. Regional party secretaries naturally resisted this, which confused rank-and-file managers further. As a result of endless discussions and tensions between regional party secretaries and plenipotentiaries around the question who had the final responsibility to manage, the centre had to restrict the authority of plenipotentiaries for the first time as early as the middle of 1934, since the centre needed goods that the "normal" hierarchy produced. In three years Stalin had to deprive KPK plenipotentiaries of the right to give orders at all, leaving such right only to the KPK bureau, the highest organ in this organization. The KPK plenipotentiaries had to channel their suggestions either via the KPK bureau or via corresponding regional authorities (Hoover/RGANI 6/1/73: 113). In this sense, superiority of regional party secretaries was re-established and the KPK plenipotentiaries could challenge their decisions; on the other hand the latter had to assist the former to resolve potential difficulties. As the KPK leadership instructed their plenipotentiaries at the meeting in Moscow in 1940, they had to appeal to the bureau only in the case of the most serious issues, deciding ordinary questions in the regions together with local authorities. However, at the same time the KPK insisted that the relations between the plenipotentiaries

and local party bosses should not be "too peaceful", since the activity of the latter was the under monitoring of the former. (Hoover/RGANI 6/6/44: 4, 8, 78).

The same problem, of how much authority should be granted to inspectors to assist agents, in addition to the right to punish them, existed in the case of other control agencies as well. In other words, the dictator had to find a way of adjusting his orders effectively without producing negative effects on the basic management hierarchy. The whole history of reorganisations of the credentials of the Soviet control agencies is in a large degree the history of finding an answer to this question.

In the majority of cases decisions on this problem were close to the result of the KPK plenipotentiaries' story. While inspectors constantly argued for extension of their rights that would allow them to work more efficiently (see for example, the minutes of a meeting at the Ministry of State Control in 1947 or discussion at the same ministry in 1956: GARF 8300/2/260: 103; 8300/17/369: 9, 16), they rarely enjoyed the right of unlimited interventions and direct command over managers whose work they had to monitor. But inspectors usually had some authority to work on the problem together with managers in a so called "operative" manner and to raise the question at the upper level of hierarchy (either in their own system or in the "normal" Soviet managerial hierarchy), if necessary. For example, the institution of inspectors of the Ministry of State Control permanently attached to particular plants and factories ('postoyannie kontroleri na predpriyatiyakh'), which was introduced in 1940, had no right to interfere in current management of these enterprises, but had to either resolve problems that arose together with enterprise managers or appeal to the Ministry of State Control as well as to the branch ministry which was in charge of the enterprise (GARF 8300/2/1: 58).

Due to a hierarchical organization of the external control system the number of inspectors of a low level was much greater than the number of their superiors. As a result it

was just impossible for inspectors of a low level to receive approvals for all their suggestions from their superiors because the number of suggestions was much greater than the superiors were able to examine. This made daily relations between inspectors and agents' superiors crucial from the point of view of efficiency of control. This, however, was a potential source of corruption (since inspectors were also partly responsible for implementation of transactions), which led to permanent reorganisations of the system. This was part of the expenses which the dictator had to pay for his power.

5. Conclusions

Having accumulated huge power in his hands Stalin had to delegate some of his authority to the Soviet bureaucracy to run the Soviet economy and political system. The national scale of the enterprise demanded a colossal hierarchy to rule and granted agents a clear information advantages over the dictator. This made the principal-agent problem a particularly sharp one, increased transaction costs and left the dictator few chances to avoid establishing a system of external monitoring and enforcement. In creating such a system, Stalin was rational enough in his choices and tried to maximise its efficiency; however he had to mitigate the problem of the loyalty of inspectors themselves, the threat to loss control over the monitoring system itself and the necessity to lessen the risk of a "chaos of orders" arising from parallel centres of power.

Was the result which the Soviet system of monitoring and control produced efficient? From the dictatorial point of view, the answer is positive. Despite well-known biases, because of the multi-branch system of monitoring Stalin knew quite well the outcome which the Soviet economy produced. He also managed to secure the implementation of his main orders. However, from the point of view of the society as a whole the answer is more complicated. Resources spent on monitoring were lost in some sense, as they did not directly produce additional value.

What can we learn from the Soviet experience concerning the efficiency of public administrations and the SAI as a tool to improve the latter? Firstly, it shows that functioning of hierarchical systems in a dictatorial environment carries additional expenses. The SAI as such is not a sufficient tool to control their work and a system of several parallel SAIs monitoring each other is necessary. Having several SAIs secures the dictator from collusion between the agent and the inspector to some degree and could be an attractive alternative to the introduction of independent media for him. In addition, the dictator can not rely on private initiative in the form whistle-blowing and economise his expenditures in this way, since in general the whistle-blowers and the dictator have different preferences. Second, the Soviet experience highlights a potential advantage of the SAI in a dictatorship. Being unrestricted on institutional arrangement of the system, the dictator can reduce the distance between gathering information and acting on it. The peculiarity of the Soviet control agencies was that they had authority to intervene in order to enforce transactions. Despite the further problems that combining of the functions of monitoring, punishment and adjustment in one office produced, Stalin never separated these functions completely even though he reorganized his control system many times. However, the question whether this was the main reason for the workability and longevity of the Soviet system demands further research.

1. The SAI exists in many countries, for example: the General Accounting Office in the USA, the National Audit Office in the UK, the Federal Audit Court in Germany, the Supreme Audit Court in France, and the Accounts Chamber in the Russian Federation. Their historical background goes back to auditing in early centuries in Egypt and China. In the Anglo Saxon tradition the SAI is an independent body which reports to parliament. In

the Continental system the SAI is independent of the legislative and executive braches (see for details Streim 1994, Frey 1994, Due and Stapenhurst 1998, World Bank 2001).

- 2. For example, the number of KPK plenipotentiaries increased several times and reached 59 in 1946 (Hoover/RGANI 6/6/1 f. 2).
- 3. I have managed to find an example of such explicit calculations for the late Soviet period, however. In 1987 the Politburo discussed the question of the size of the Soviet system of justice. Top party officials stated that the Soviet system of justice cost 169 millions and "earned" 380 millions roubles for the state budget in the previous year, arguing for the necessity of its extension (Hoover/RGANI 89/7/12 f. 8-9).
- 4. Beyond the central control agencies, various intra-branch inspectorates existed. Usually they had rather wide authority but only within their "branches," which were ministries, main administrations or factories. They executed the role of external control towards the production units of lower levels, subordinating directly to a branch boss, like a minister, a director of chief administration etc.
- 5. The question of political loyalty of agents is beyond the scope of this paper. For analysis of Stalin's relations with NKVD and his strategy for monitoring his agents' political loyalty see Paul Gregory's forthcoming book, *Terror by Quota: Planning State Security under Stalin (Evidence from the Soviet Archives)*, in preparation for a planned Yale-Hoover series. For theoretical analyses of loyalty under dictatorship see Wintrobe (1998, 2001).
- 6. In the USSR courts were closely connected with the prosecution service and supported the majority of its findings (Solomon 1996).
- 7. A substantial part of the KPK apparatus fell victims to purges of 1937-1938 (Hoover/RGANI 6/1/77: 87-90, 107-108; 6/1/78: 135-138; 6/1/95: 110-113 etc.).

- 8. However, two years later the KPK regional party collegiums were obliged to check implementation of particular orders on the instructions of the Politburo, since the latter wanted to influence the focus of monitoring. (Hoover/RGANI 6/6/40: 1-2; 6/6/1: 20).
- 9. Moreover, inadequate application of punishment could produce the opposite effect, decreasing work incentives and undermining agent's loyalty (Wintrobe 1998).
- 10. This produces a dynamic commitment problem for the dictator, like in the case of soft budget constrains (Kornai, Maskin and Ronald 2003). *Ex ante* the dictator has to declare that his order is perfect and contains no mistakes, threatening the agent with punishment if she does not fulfil the transaction. *Ex post*, however, it could be difficult for the dictator to punish the agent since an order revision could be his best move (Markevich 2007).
- 11. They could of course summarise practice of implementation of laws in fields of their responsibility and advise the dictator how improve the rules, but this analytical function of audit (which is not analysed in this paper) did not produce any authority to intervene into daily managerial process.
- 12. Exceptions were departments of the Ministry of internal affairs which monitored of particular orders, like the economic department which supervised the Soviet defence and intervened frequently (see for example the correspondence between the department and the Ministry of Defence I in 1938 RGAE 8157/1/154).

References

Publications

Alchian, A. & Demsetz H. (1972). Production, Information Costs and Economic Organization. *American Economic Review*, 62, 777 – 95.

Berliner, J. S. (1957). *Factory and Manager in the USSR*. (Cambridge, MA: Harvard University Press)

- Blume L. & Vogit S. (2007). Supreme Audit Institutions: Supremely Superfluous? A Cross Country Assessment. *Mimeo*
- Bolton, P. & Dewatripont M. (2005). *Contract theory*. (Cambridge MA: MIT Press)
- Coase R.H. (1937). The Nature of the Firm. *Economica*, 4(16), 386-405
- Conslik, J. (1996). Why Bounded Rationality? *Journal of Economics Literature, XXXIV*, 669 700
- Davies, R.W. (1996). The Industrialisation of Soviet Russia. Vol. 4. Crisis and progress in the Soviet Economy, 1931-1933. (Basingstoke and London: Macmillan Press)
- Eisenhardt, K. M. (1985) Control: Organizational and Economic Approaches. *Management Science*, 31(2), 134 49
- Egorov G., Guriev S. & Sonin K. (2006). Media Freedom, Bureaucratic Incentives, and the Resource Curse. *Mimeo*
- Frey B. S. (1994). Supreme Auditing Institutions: A Politico-Economic Analysis. *European Journal of Law and Economics*, 1, 169 76
- Due K. M. & Stapenhurst R. (1998). Pillars of Integrity: The Importance of Supreme Audit Institutions in Curbing Corruption. *International Bank for Reconstruction and Development, Mimeo*
- Getty, A. (1997). Pragmatists and Puritans: The Rise and Fall of the Party Control Commission. *The Carl Beck Papers in Russian and East European Studies*, 1208
- Gregory, P. (2007). Terror by Quota: Planning State Security under Stalin (Evidence from the Soviet Archives). *Manuscript*
- Gorlizki Y. (2001). Theft Under Stalin: A Property Rights Analysis. Mimeo
- Grossman, S. J. & Hart O.D. (1986). The Costs and Benefits of Ownership: A Theory of Vertical and Lateral Integration. *Journal of Political Economy*, *94*, 691-719

- Harris, J. (2003). Was Stalin a Weak Dictator? *The Journal of Modern History*, 75, 375 86
- Harrison, M. (2006). The Rational-Choice Dictator A Replay. *Europe-Asia Studies*, 58(7), 1141 56
- Harrison, M., & Simonov N. (2000). Voenpriemka: Prices, Costs, and Quality Assurance in Interwar Defence Industry. (In Barber J. & Harrison M. (Eds.), *The Soviet Defence-Industry Complex From Stalin to Khrushchev* (pp. 223-245). Basingstoke: Macmillan Press)
- Hart, O. & Moor J. (1990). Property Rights and the Nature of the Firm. *Journal of Political Economy*, 98, 119 58
- Holmstrom, B. (1982). Moral Hazard in teams. *The Bell Journal of Economics*, 13(2), 324 40
- Ikonnikov, S. N. (1971). Sozdanie i deiatel'nost' ob'edinennykh organov TsKK RKI v 1923-1934 gg. (Moskva: Nauka)
- Kokurin A.I. & Petrov N.V. (Eds) (2003). *Lubianka Organy vchk-NKVD-NKGB-MGB-MVD-KGB*, 1917-1991 Spravochnik Documentov. (Moscow: Fond Demokratiia)
- Kornai, J., Maskin E. & Roland G. (2003). Understanding the Soft Budget Constraint. *Journal of Economic Literature*, 41(4), 1095-136
- Markevich, A. & Harrison M. (2006). Quality, Experience, and Monopoly: the Soviet Market for Weapons under Stalin, *Economic History Review*, *LIX*, 113 42
- Markevich, A. (2007). The Dictator's Dilemma: to Punish or to Assist? The Party Control Commission under Stalin. *Mimeo*
- Moe, T. M. (1984). The New Economics of Organisation. *American Journal of Political*Science, 28, 739 77
- Mosokhin, O. (2004). VCHK-OGPU na zashchite ekonomicheskoi bezopasnosti gosudarstva I v bor,be s terrorizmom. (Moskva: Yauza-Eksmo)

- Mueller, D. C. (2003). *Public Choice III*. (Cambridge: Cambridge University Press)
- Nerard F. (2002). Signali v Nizhegorodskogom (Gorkovskom) krae (In *Obshchestvo I vlast'*. *Rossiiskaya provintciya*. *Vol.1 1917 seredina 1930-kh godov*. Moskva, Nizhnii Nivgorod, Paris)
- Niskanen, W. (1971). *Bureaucracy and representative government*. (Chicago, Aldine, Atherton)
- Olson, M. (1965). *The logic of Collective Action: Public Goods and the Theory of Groups*. (Cambridge: Harvard University Press)
- Parkinson, C. N. (1957). *Parkinson's Law: The Pursuit of Progress*. (London: John Murray)
- Qian, Y. (1994). Incentives and Loss of Control in an Optimal Hierarchy. *Review of Economic Studies*, 61, 527 44.
- Rees, E. A. (1987). State control in Soviet Russia: the rise and fall of the Workers' and Peasants' Inspectorate, 1920-34. (Basingstoke: Macmillan Press)
- Solomon, P. (1996). *Soviet Criminal Justice under Stalin*. (Cambridge: Cambridge University Press)
- Stalin I.V. (1952). Polnoe sobranie sochinenij. Vol. 4. (Moscow: Politizdat)
- Streim, H. (1994). Agency Problems in the Legal Political Systems and Supreme Auditing Institutions. *European Journal of Law and Economics*, 1, 177 91
- Williamson, O. E. (1967). Hierarchical Control and Optimal Firm Size. *The Journal of Political Economy*, 75, 123 38
- Wheatcroft, S.G. (2004). From Team-Stalin to Degenerate Tyranny (In Rees, E.A. (Ed.) *The Nature of Stalin's Dictatorship: The Politburo*, 1924 1953 (pp. 79-107). London:

 Palgrave)

- Remigton, T. (1982). Institution Building in Bolshevik Russia: The Case of State control.

 Slavic Review, 41, 91 103
- Williamson, O. E. (1975). *Markets and Hierarchies: Analyses and Antitrust Implications*. (New York: Free Press)
- Wintrobe, R. (1998). *The political economy of dictatorship*. (Cambridge, New York: Cambridge University Press)
- Wintrobe, R. (2001). How to understand, and deal with dictatorship: an economic view. *Economics of Governance*, 2, 35-58.

World Bank. (2001). Features and functions of supreme audit institutions, *Prem Notes*, 59.

Archives

Note: Russian archival documents are numbered according to a standard system: collection (fond), inventory (opis), file (delo), folio (list).

- Hoover/RGANI: "Archives of the Former Soviet State and Communist Party' from the Russian State Archives of Recent History (Moscow) at the Hoover Institution of War, Revolution, and Peace (Stanford, CA).
- Hoover/RGASPI: "Archives of the Former Soviet State and Communist Party' from the Russian State Archives of Social and Political History (Moscow) at the Hoover Institution of War, Revolution, and Peace (Stanford, CA).
- Hoover/ GARF: Archives of the Former Soviet State and Communist Party' from the State archive of Russian Federation (Moscow) at the Hoover Institution of War, Revolution, and Peace (Stanford, CA).
- GARF State archive of Russian Federation (Moscow).
- RGAE Russian State archive of national economy (Moscow).