

Soviet Planning Archives: The Files That Bergson Could Not See

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Abstract

This paper examines Soviet industrial materials supply planning using official documents from the Soviet state and party archives. It examines the planning practices of the 1930s and uses two criteria suggested by Bergson to examine its efficiency. The actual practices of annual and quarterly planning are viewed in terms of the relationship between the dictator (as represented by the Council of Ministers and Gosplan), the industrial ministries and their branch administrations, and producing enterprises. Our results confirm the general picture of operational planning from the Western literature but add a number of new insights into the operation and efficiency of industrial materials supply planning.

### **Soviet Planning: A Review of the Western Literature**

Western scholars who studied Soviet planning, or what Abram Bergson called “industrial materials supply,”<sup>1</sup> had to rely on official Soviet statistical publications, published decrees, and on scattered reports in the industrial press. The Joint Economic Committee of Congress’s noted “Green Books” summarized our knowledge of how Soviet industrial material supply planning worked and how it was changing from the 1950s through the 1980s.<sup>2</sup> A rereading of these studies reveals what we knew at the time. It was apparent that industrial planning was complicated, confusing, and often delayed, that it planned centrally relatively few commodities, and that it was dominated by the State Planning Commission (Gosplan), operating under its various titles during this period. The publication of a planning manual by Gosplan in 1974, with a revised version in 1980, did not prove helpful. It represented planning as a process of balancing a large number of equations but gave precious little operational detail.<sup>3</sup>

Western scholars followed three different approaches in their study of industrial material supply planning. One group tried to decipher the actual process of industrial materials planning, usually focusing on national economic plans.<sup>4</sup> The state of our

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<sup>1</sup> Abram Bergson, *The Economics of Soviet Planning* (New Haven: Yale University Press, 1964), chapter 7.

<sup>2</sup> Herbert Levine, “The Centralized Planning of Supply in Soviet Industry,” in Joint Economic Committee, *Comparisons of the United States and Soviet Economies*, Part I., U.S. Government Printing office, Washington, 1959; Levine, “Recent Developments in Soviet Planning,” Joint Economic Committee, *Dimensions of Soviet Economic Power*, U.S. Government Printing Office, 1962, 49-65; Gertrude Schroeder, “Recent Developments in Soviet Planning and Incentives,” Joint Economic Committee, *Soviet Economic Prospects for the Seventies*, U.S. Government Printing Office, 1973, 11-38.

<sup>3</sup> Gosplan SSSR, *Metodicheskie ukazanie k rasrabotke gosudarsvennykh planov ekonomicheskogo i sotsial'nogo pazvitiia SSSR* (Moscow: Ekonimka, 1980).

<sup>4</sup> See again the references to Bergson, Levine and Schroeder in footnote 1-2. For summaries of this work, see Paul Gregory and Robert Stuart, *Soviet Economic Structure and Performance*

knowledge on planning processes was summarized by Abram Bergson in his 1964 monograph.<sup>5</sup> Others, such as Joseph Berliner and David Granick, considered planning from the vantage point of the enterprise, studying how the enterprise was planned by its immediate superiors in the ministry.<sup>6</sup> A third group, including Bergson,<sup>7</sup> compared ex ante plans with ex post outcomes. The most exhaustive such study was Eugene Zaleski's 1980 study of plan targets and their fulfillment by five year and annual plans for the period 1933-1952 (actually from 1928),<sup>8</sup> in which Zaleski reached his famous conclusion that the Soviet economy was not "planned." Rather, resources were allocated after the plan was adopted by ad hoc "resource management" by state and party officials. Raymond Powell's overlooked article in the first volume of *Journal of Comparative Economics* is actually a theoretical description of Zaleski's resource management.<sup>9</sup>

Studies of Soviet planning, most notably Zaleski's, used published sources to study five-year and annual plans for the entire economy. The "operational" plans, however, mentioned most frequently by Berliner and Granick's managers were quarterly plans issued either by the ministry planning department or by their main administrations (glavk, singular, and glavki, plural). Operational planning took place largely out of public sight in Gosplan's branch departments, ministerial planning departments, glavks, and in enterprises.

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(various editions), Alec Nove, *The Soviet Economic System* (London: Allen & Unwin, 1977), chaps. 2-4, or numerous other works,

<sup>5</sup> Bergson, *The Economics of Soviet Planning*, chap. 7.

<sup>6</sup> Joseph Berliner, *Factory and Manager in the USSR* (Cambridge, Mass.: Harvard University Press, 1957); David Granick, *Management of Industrial Firms in the USSR* (New York: Columbia University Press, 1954).

<sup>7</sup> Abram Bergson, "Annual Plan Fulfillment in Soviet Industry, 1961-1985," In Abram Bergson (ed.), *Planning and Performance in Socialist Economies: The USSR and Eastern Europe* (Boston: Unwin Hyman, 1989), 235-244.

<sup>8</sup> Eugene Zaleski, *Stalinist Planning for Economic Growth 1933-1952* (Chapel Hill: University of North Carolina Press, 1980).

<sup>9</sup> Raymond Powell, "Plan Execution and the Workability of Soviet Planning," *Journal of Comparative Economics*, vol. 1, no. 1 (March 1977), 69-73.

This paper continues in the tradition of this literature, compiled by the pioneers of the study of the Soviet economy. In it, we return to a number of unanswered questions: What were the real procedures of industrial material planning? Was this a “planned” or a “resource managed” economy? The ultimate question is “how well” the Soviet industrial planning system worked.

Bergson suggests an efficiency framework for such questions in his *Economics of Soviet Planning*.<sup>10</sup> In this monograph, he examined labor allocation, pricing, investment allocation, and supply planning in terms of standard efficiency rules, such as equalizing marginal rates of return. In the case of administrative planning, there were no ready made efficiency criteria, but he volunteered two yardsticks: Was there a reasonable degree of cost-minimization incorporated in the fixed coefficients (or norms) used in Soviet planning? Bergson’s second yardstick is whether the economy actually produced the final output mix desired by system’s leaders? That is, did planning follow planners’ preferences? Bergson’s second yardstick is quite similar to Zaleski’s resource-management question. The preferences of the system’s leaders expressed in ex ante plans could scarcely be met if resources were allocated on an ad hoc and uncoordinated basis by local, regional, and national leaders.

### **Planning Practice in the Secret Soviet Archives**

The Soviet state and party archives were opened to scholars in the early 1990s. Although these archives have been voraciously devoured by historians and political scientists, their use by economists has been meager in comparison. Nevertheless, results have been impressive. Robert Davies is publishing a multi-volume series on Soviet economic history, much of which is based on the archives.<sup>11</sup> We now have four major archival-based books on the Soviet defense industry,<sup>12</sup> and a collection of case studies of

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<sup>10</sup> Bergson, *Economics of Soviet Planning*, 120-126.

<sup>11</sup> R.W. Davies, *The Soviet Economy in Turmoil, 1929-1930* (Basingstoke: MacMillan, 1989); Davies, *Crisis and Progress in the Soviet Economy, 1931-33* (Basingstoke: MacMillan, 1996); title of forthcoming publication???

<sup>12</sup> John Barber, John and Mark Harrison, (eds.), *The Soviet Defence-Industry Complex From Stalin to Khrushchev* (London: MacMillan, 1998). Mark Harrison, *Accounting for War: Soviet Production, Employment, and Defence Burden, 1940-45* (New York: Cambridge, 1996). Nikolai

ministries and state committees under Stalin.<sup>13</sup> The current authors have also published their research on resource allocation within ministries in the 1930s based on the same ministry archives used in this paper.<sup>14</sup> A relatively large number of archival based articles have been published, too numerous to be mentioned here. Joseph Berliner's last published work evaluated some of these archival findings.<sup>15</sup> One of the current authors has published and edited surveys of this archival literature.<sup>16</sup> Even the most taboo of subjects during the Soviet period, the Gulag economy, is now the subject of intense research using archives located in the United States.<sup>17</sup> There is a web site in which economic working papers are displayed.<sup>18</sup>

We use the formerly-secret archives of the Soviet government concerning to the 1930s – the Council of People's Commissats, hereafter referred to as *SNK*, and of the two largest industrial ministries, the People's Commissariat of Heavy Industry, hereafter referred to as *NKTP*, and People's Commissariat of Light Industry, hereafter referred to as *NKLP*, and three of their main administrations (or *glavki*).<sup>19</sup> One such *glavk* is the

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Simonov, *Voенно-promyshlenny kompleks v 1920-1950-e Gody* (Moscow: Rosspen, 1996); Lennart Samuelson, *Plans for Stalin's War Machine* (Houndmills: MacMillan, 2000).

<sup>13</sup> E.A. Rees, (ed.), *Decision Making in the Stalinist Command Economy, 1932-37* (London: MacMillan, 1997).

<sup>14</sup> Paul Gregory and Andrei Markevich, "Creating Soviet Industry: The House that Stalin Built," *Slavic Review*, vol. 61, no. 4 (Winter 2002), pp. 787 – 814.

<sup>15</sup> Joseph Berliner, "The Contribution of the Archives," in Gregory (ed.), *Behind the Façade of Stalin's Command Economy*, 1-10.

<sup>16</sup> Paul Gregory, *The Political Economy of Stalinism* (London: Cambridge, 2003); Paul Gregory (ed.), *Behind the Façade of Stalin's Command Economy* (Stanford: Hoover Institution Press, 2001).

<sup>17</sup> Hundreds of thousands of Gulag files are now located at the Hoover Institution. For an early survey of these archives, see Paul Gregory and Valery Lazarev (eds.), *The Economics of Forced Labor: The Soviet Gulag* (Stanford: Hoover Institution Press, 2003).

<sup>18</sup> The PERSA web site can be found at [www.soviet-archives-research.co.uk](http://www.soviet-archives-research.co.uk). This website is maintained by mark Harrison

<sup>19</sup> *SNK* stands for Sovet narodnykh kommissarov (Council of Peoples' Commissats). *NKTP* denotes Narodny kommissariat tiazheloi promyshlennosti (People's Commissariat for Heavy

Main Administration for Metals, with the easily remembered acronym *GUMP*, which, in the early 1930s, was in charge of virtually all metals production. We collected plans, drafts of plans, petitions and other exchanges between Gosplan, SNK, and the ministry, and between the ministry and the glavk, and between the glavk and the enterprise. The “plan was the law”;<sup>20</sup> therefore, we would expect these plan/laws to be preserved in the archives. These ministries and glavki were chosen because of their importance and because their archives were in reasonable shape, although some were disorganized or scarcely organized at all. The glavk archives provide as much or more operational detail than those of higher organizations.

These planning archives are muddled, complicated, and confusing; it is extremely difficult to extract from them a concise description of material supply planning. We suspect that the actual participants found the process as muddled and confusing as we did. Planners used the same terms to denote different things or different terms to mean the same thing. There were national plans, plans of union republic, plans for ministries, for glavki, down to enterprise plans. Ministry plans were termed plans for a “branch of industry,” but they were not equivalent to the branch plan because several were divided between several ministries. “Plan” most often meant a legally approved plan, but it could also refer to any document or even to separate tasks and figures which appeared in the process of planning. “Plan” could also refer to a unified document containing a number of targets, or to just one part of the plan, such as the production plan, or even to the supply (or delivery) plan. “Plan directives,” “limits,” “control figures,” and “plans” were often used interchangeably, although “plan directives” were usually orders from superiors to define sequences, priorities, or, most importantly, the first variants of main targets. “Control figures” and “limits” typically meant “drafts” (the term “projects” is

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Industry). NKLP stands for Narodny kommissariat legkoi promyshlennosti (People’s Commissariat for Light Industry). In the postwar period, the term “People’s Commissariat” was changed to “ministries.” And SNK was changed to “Council of Ministers.” In heavy industries, we examine the files of GUMP, the main administration for metallurgy. In light industry, we examine the files of the wool and footwear administrations.

<sup>20</sup> Eugenia Belova, “Economic Crime and Punishment,” in Paul Gregory (ed.), *Behind the Façade of Stalin’s Command Economy*, 131-158.

used in Russian) of plans. “Control figures” usually referred to production, labor or price and cost plans, while “limits” referred to finance or capital investment plans. “Limits” were typically set by superiors, while “control figures” could be prepared by superiors as well as by agents themselves and only later be presented for approval.

Figure 1 shows the four dimensions of planning, which are parts of the internal discussions of planning in the planning archives.

### **A Description of Industrial Material Supply Planning**

Our discussion of industrial material supply planning will disappoint those expecting a clear and concise description. It tends to confirm the general outlines of planning found, say, in studies published by the Joint Economic Committee’s “Greenbooks” from the late 1950s through the early 1980s. We will not even discuss five year plans, whose operational insignificance has been established. We discuss both annual and quarterly plans.

#### ***Annual Planning***

The annual planning process began with decrees entitled “Instructions for Preparing” the plan. These instructions were approved by SNK (and drawn up by Gosplan), while the ministry issued its own instructions for preparing the ministry plan. These instructions set dates by which specific plan tasks were to be completed. There was no general planning “law” that carried over from year to year, and the issuance of each year’s instructions set off a round of bargaining just over procedures.

We have pieced together in Table 1 the actual schedule of preparing the annual plan by organization, starting with the “center” (the Politburo, SNK and Gosplan), and then moving to the ministries and republics, and then to enterprises.

The “first phase” of annual planning was supposed to be the “dictator” (Politburo and SNK) setting its Bergsonian “planners’ preferences,” e.g., its main objectives. Those responsible for carrying them out, ministries and subordinated organizations, were officially excluded. However, Stalin’s Deputy’s (Kaganovich) correspondence with Stalin refers to meetings with ministers on the same day that the Politburo considered national annual or quarterly plan tasks.<sup>21</sup> Kaganovich’s descriptions of Politburo meetings

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<sup>21</sup> O. V. Khlenyuk et al. (eds.), *Stalin i Kaganovich. Perepiski. 1931-1936 gg.* (Moscow: Rosspen, 2001).



to decide national control figures show that it dealt only with highly aggregated figures, such as the gross output of heavy and light industry, grain collections, or freight transport. The Politburo itself did not normally set plan tasks for specific products, except grain collections. It did, however, consistently set the investment budget and its distribution (in nominal rubles).<sup>22</sup> Hence, we conclude that here was no clear expression of planners' preferences of the highest political authorities with respect to industrial products and their distribution. These matters had to be worked out by technical specialists, largely in Gosplan.

Although set primarily by "technicians," the major "control figures" and "limits" for the national economy and for the ministries set the general tone of plan discussion and negotiation between ministries and Gosplan and then between ministries and glavki. Planning was a process of information exchange and negotiation (*torg*). Not unexpectedly, Gosplan played a key role throughout. When confirming national plans, SNK often used the formula "approve the plan which Gosplan suggested with the following changes."<sup>23</sup> The "dictator" as represented by SNK generally tweaked the plan prepared by Gosplan, rather than preparing the main features of the plan. The "dictator" lacked the manpower real operational planning. In the mid 1930s, Gosplan was one of the largest state agencies employing about seven hundred specialists.<sup>24</sup> The entire staff of the Central Committee numbered fewer than 400, and SNK's chancellery employed 230 persons and its "funds", fuels, and transport committees each employed less than twenty persons.<sup>25</sup> Although SNK's chairman and Politburo members engaged in endless discussions of metallurgical products, completion dates of new plants, engineering details, and the like, at best, they could influence just a few physical indicators, such as

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<sup>22</sup> Gregory, *The Political Economy of Stalinism*, p. \_\_\_\_\_.

<sup>23</sup> State Archive of the Russian Federation, hereafter designated as GARF. F. 5446. Op. 15. D. 7. L. 1-28; D. 1. L. 20-33.

<sup>24</sup> Paul Gregory, "The Dictator's Orders," in Gregory (ed.), *Behind the Façade of Stalin's Command Economy*, pp. 13-14.

<sup>25</sup> Gregory, *The Political Economy of Stalinism*, Table B-7.

pig iron. The real planning was done by technical experts, whom Stalin mistrusted, disliked, and feared.<sup>26</sup>

National plans consisted of a text of main tasks, priorities and summary tables. The appendices included tables that set actual plan tasks. National plans included plan tasks for ministries and union republics and for several of the most important glavki. Although SNK “approved” the national annual plan, it did not approve “the ministry plan.” Only parts of ministry plans, such as the finance and capital investment plans including the “title lists” of main construction projects were approved. Both at the beginning and end of the process of the national planning process, planners’ preferences were weakly represented. The ministry plan of main physical indicators was never “approved” by SNK. The ministry simply worked on the basis of a number of “draft plans,” which the ministry battled (with Gosplan) to keep as general as possible (such as not providing detail on enterprise plans).<sup>27</sup>

Planning began in the ministries after receipt of control figures from Gosplan. On the basis of these directives, each ministry issued decrees, which established the schedule of planning in the ministry. NKTP’s decrees for the 1934 and 1939 detailed 13 separate phases to be carried out in 1933 and 19 separate phases to be carried out in 1938 (See Appendix A).<sup>28</sup> Each phase required glavki and functional departments (such as labor, finance and prices) to supply information, such as cost estimates, output figures, or enterprise targets. The planning process required complicated exchanges of information between glavks and ministry divisions with the ministry planning department.

Actual planning within the ministry was done by the ministry’s planning department. The planning departments of both NKTP and NKLP varied between 50 and 100 employees each in the 1930s, but their ranks were supplemented with temporary

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<sup>26</sup> Eugenia Belova and Paul Gregory, “Dictator, Loyal, and Opportunistic Agents: The Soviet Archives on Creating the Soviet Economic System,” *Public Choice*, no. 113, 2002, pp. 265-280.

<sup>27</sup> Belova and Gregory, “Dictator, Loyal, and Opportunistic Agents: The Soviet Archives on Creating the Soviet Economic System,” 274-276.

<sup>28</sup> A number of phases were to be completed on the same day, such as five phases to be completed on September 25 and six phases on October 1 for the 1934 plan.

workers during peak planning periods.<sup>29</sup> Other departments of the ministry were responsible for parts of the plan, while the planning department maintained the 'books' on the overall plan. The glavki were responsible for branch plans. Gump (the Main Metallurgical Administration) was responsible for metals, and the Main Wool Administration for wool products, and the functional departments, such as labor and finance, were responsible for labor and financial plans respectively. The various ministry supply department were responsible for the planning of distribution.

The ministry planning department served as the ministry's main contact with Gosplan and with the glavki and large enterprises. There were even occasions when the minister would organize a shadow planning department to check the work of its planning department.<sup>30</sup> According to ministry procedures, major decisions concerning ministry plan tasks were to go to the minister and were to be discussed at the ministry collegium meetings.<sup>31</sup> We use the agendas of collegium meetings of NKTP (1938) and NKLP (1933) to distinguish the first two phases of annual planning in ministries and their timing, as shown in Table 1.<sup>32</sup>

The first phase of ministry planning was connected with the second phase of government planning. During this phase the collegium issued preliminary plan tasks for

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<sup>29</sup>For example, in the fall of 1938, NKTP's planning department was supplemented by an additional 100 economists and technologists from other departments to handle peak-load work. RGAE 7297.28.5: 1, 77-90.

<sup>30</sup> For example, in 1938 as the ministry was preparing its annual plan for 1939, NKTP Minister Kaganovich organised an alternative group of planning specialists freeing them from their work for 15-20 days to study the materials along with the planning sector and to present to the collegium their results for the discussion of the 1939 plan." Protokol Zasedaniia Kollegii NKTP, September 7, 1938, RGAE 7604.3.136: 1.81.

<sup>31</sup> Besides ministry collegium meeting plan tasks also discussed at so called «meetings under the minister», «meetings under the deputy of the minister», «meeting of minister deputies» etc. Status of these meeting weren't determined by law so there weren't strict distribution of discussed problems between these meetings. In 1935-1937 ministry collegiums were abolished and discussions around plan tasks took place only at different meetings of ministry leadership.

<sup>32</sup> A. Markevich, "Bila li sovetskaya ekonomika planovoi? Praktika planirovaniia v narkomatah v 1930-e gg." *Ekonomicheskaya istoriia. Ezhegodnik 2003*. Moscow, 2003. PAGES

the ministry as a whole and for its glavki. During the second phase after receipt of information from glavks, the collegium revisited the initial plan tasks and assigned a second set of draft plans to glavki and large enterprises. Neither the minister nor the collegium approved a “final” version of the ministry plan. The collegium delegated the plan to its planning department, which issued operational instructions that were approved neither by the minister nor by the collegium. Nevertheless in practice the draft played the role of ministry plan. Final plan tasks which the ministry planning department passed to glavks were usually from this draft.<sup>33</sup>

Probably the most striking feature of Table 1 is that much of the annual planning process was done well after the start of the plan year on the first of January. In the case of Gump, which produced most of the economy’s metals, metallurgical enterprises were still waiting for their “final” output targets in late January, February and March, a process delayed by the need for supply departments to gauge demands for specialty steels. Delays were less prominent for the glavki of NKLP (the light industry ministry), which as lower-priority entities were less closely supervised.

The length of the delay depends upon what is meant by the “plan.” There was great pressure to set physical output and distribution plans as quickly as possible. “Secondary” plan indicators, such as credit plans, or cost-saving plans were decided upon later if at all. The enterprise “techpromfinplan” or “promfinplan”, whose multitude of indicators received so much attention in the Western literature, was either not compiled in the 1930s or was done retrospectively, simply to meet reporting requirements. Belova and Gregory even report the practice of “non-planning” in the mid 1930s. Gosplan reported that NKLP had not even bothered to prepare the 1934 plan below the level of its glavki. Textile firms prepared their 1933 plans only for reporting purposes, and many large textile firms around Moscow had not seen annual plans for years.<sup>34</sup> In 1937 in GUMP the majority of enterprise plans were finally approved in August – September of the plan year. An

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<sup>33</sup> A. Markevich, “Bila li sovjetskaya ekonomika planovoi? Praktika planirovaniya v narkomatah v 1930-e gg.” PAGES

<sup>34</sup> Belova and Gregory, “Dictator, Loyal, and Opportunistic Agents: The Soviet Archives on Creating the Soviet Economic System,” 275.

NKTP document declared that as of “15.09.1938 only 71.5% of enterprise plans were approved by glavks.<sup>35</sup> These reports either suggest a total lack of annual planning or that enterprises received only a target or two through some means that they did not consider a proper “plan.”

### ***Quarterly Planning***

Quarterly plans were the true “operational plans” of the Soviet economy. The state of our knowledge of quarterly planning was summarized in Zaleski, who was able to dig out a remarkable amount of detail, although very little on plan fulfillment.<sup>36</sup> Quarterly planning was organized according to the same basic scheme as annual planning. The Politburo met to discuss and approve the quarterly “control figures.” We have Kaganovich’s notes of such meetings prepared in summer months for the vacationing Stalin -- September 21, 1931 for the fourth quarter plan, June 7, 1932 for the third quarter plan, September 3, 1934 for the fourth quarter plan, and September 2, 1936 for the fourth quarter plan. These meeting dates question whether the Politburo deliberated the quarterly control figures from one to four weeks before the beginning of the quarter, which obviously left SNK, Gosplan, and the ministries little time for preparation, if Politburo deliberations were actually the starting phase of the plan. The Politburo’s “instructions” delivered to SNK and to Gosplan were usually of a very general nature and would have had little impact on the planning process other than in investment.<sup>37</sup>

About a month to a month and a half prior to the beginning of the quarter, the minister, based on directives received from Gosplan, issued a decree setting the schedule of quarterly planning and the main tasks for the ministry and its glavki. (Gosplan appeared to be issuing these general instructions to the ministries before the Politburo had met to consider the quarterly control figures!) The ministry planning department, as was the case for annual planning, played the key role. It passed the main control figures to the glavki along with copies to its labor, financial, and cost-sector departments. To provide some concrete examples of timing: Gump received its preliminary quarterly production tasks for the four 1937 quarters from one week to one month before the start of the

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<sup>35</sup> RGAE, F. 7297. Op. 28. D. 5. L. 100.

<sup>36</sup> Zaleski, 1980, chapter 12.

<sup>37</sup> Gregory, *The Political Economy of Stalinism*, 114-115.

quarter.<sup>38</sup> The preliminary first quarter plan tasks often were received simultaneously with annual production tasks in the summer, much earlier than for subsequent quarters.<sup>39</sup> After a period of negotiation, the ministry collegium issued glavk control figures through the planning department. The ministry approved the control figures for physical outputs first as they were the main interest of the ministry. Secondary indicators, such as costs and productivity, were approved later, if at all. As in case of annual plans the ministry delegated the “final” version of quarterly plans to the planning department.

After the glavk received its control figures, it still had to undergo the time consuming task of negotiating, and approving control figures for their subordinated trusts and enterprises. In the course of this process, enterprises attempted to shift production tasks to other producers with various tales of woe, such as broken down equipment, while the glavk shuffled production among enterprises to meet its overall target.<sup>40</sup> In such negotiations, the glavk often operated without an “approved” plan of its

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<sup>38</sup> RGAE 4086.2.3450: 41, 31, 9.

<sup>39</sup> For example, NKTP’s planning department sent Gump its preliminary limits (authorized by SNK) for the first quarter of 1937 already on July 25, 1936. RGAE 4086.2.3450: 48-52.

<sup>40</sup> The Komintern Plant requested on February 15, 1937 that Gump reduce its targets due to the need for capital renovations in setting plan targets. The Odzhonikidze Factory, on April 3, 1937, used on accident at one blast furnace and reduced capacity of another to request a 90 ton reduction in its pig iron target. Gump denied the Petrovsky Factory request on August 8, 1937 to reduce production from one furnace because delayed repairs, ordering it to put off the repair, and to raise its production of sheet iron, stating “in accordance with the protocol of the meeting organized by the deputy minister of heavy industry, your factory must in full guarantee the white tin plan for the third quarter.” Gump also denied the Kosogorsky Metallurgical Combinat’s repeated requests for lower production plans to allow them to shut down a furnace and clean a gas line.<sup>40</sup> Gump ordered the Petrovsky Factory to delay a capital repair of its pipe shop. Gump did not deny all requests. On July 20, 1937, Gump requested of the ministry planning department “in relation to the change in deadlines for repairs and in the assortment for pig iron for the third quarter of 1937 to change the pig iron plan for three (enumerated) factories without changing the overall pig iron plan.” On these cases, see: RGAE 4086.2.3566: 135-36; RGAE 4086.2.3566: 8. RGAE 4086.2.3567: 156-161; RGAE 4086.2.3567: 89, 91, 94 RGAE; 4086.2.3450: 21.

own.<sup>41</sup> The Glavk could challenge production tasks handed down by the ministry, but reductions required approval from the ministry planning department.<sup>42</sup>

The ministry planning department aggregated these “bottom up” figures and sent them to Gosplan and SNK; after “approval,” they became the “final” tasks submitted back to the Glavk and then to the enterprises. Gump received its “final” quarter tasks according to their order of approval. The first production figures, approved were pig iron, steel, iron ore, coke, ammonia products, refractory materials, and cement. The more difficult-to-plan tasks, such as rolled steels, came much later. The head of the glavk (or one of his deputies) approved the main plan tasks for each subordinated enterprises individually. The glavk’s planning department prepared the “final” allocation of tasks among enterprises. There were no glavk plans confirmed by the ministry or by higher bodies; there were only separate plan tasks confirmed by the ministry and a “final” draft prepared by the glavk’s planning department. Gump enterprises received their “final” production tasks, at best, several days before or after the start of the quarter.<sup>43</sup> In a typical example, Gump sent to Kuznetsk Metallurgical Combine its metal spikes plan for the second quarter of 1937 three weeks after the quarter began.<sup>44</sup>

Before the end of the quarter, enterprises had to submit to the glavk their “final” quarterly plans for comparison with the previous quarter. Although many enterprises to

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<sup>41</sup> Gump gave its enterprises their tasks for the fourth quarter on June 28, 1937, while Gump itself received its own authorized plan broken down by enterprises from NKTP planning department only on July 5, 1937. Gump gave its enterprises their production and assortment plans for rolled steels on July 17, 1937, while Gump received its own targets from NKTP only on August 8, 1937. On these cases, see RGAE 4086.2.3492 and 3450: 23-26. RGAE 4086.2.3492 and 3450: 11-14.

<sup>42</sup> For example, one month into the third quarter, Gump requested that NKTP’s planning department confirm its proposed changes, which had apparently already been negotiated in a prior agreement: “Gump’s preliminary limits of gross production for the third quarter of 1937 differ from the plan authorized by NKTP as follows: in the metals industry 50.9 million rubles instead of 51.5 and in fireclay industry 53.8 instead of 52.5 million rubles.” RGAE 4086.2.3450: 22.

<sup>43</sup> For example, Gump sent the production limits for the second quarter 1937 to enterprises on March 16, i.e. 15 days prior to the beginning of the quarter; and limits for the third quarter on June 27, three days before the beginning of the quarter. RGAE 4086.2.3566, 3492.

<sup>44</sup> RGAE 4086.2.3566: 101.

that point had been working only with output and assortment targets, in their “final” report they had to include not only production and assortment but also lower priority figures such as costs and profits. Delays were such that enterprises had to rely on their own calculations, which they submitted to the Glavk for final approval. The Dzherzhinsky Steel Plant still lacked approval of its 1937 third quarter financial plan, required for its quarterly report, and it had to demand (in a letter dated August 29) that Gump give it its confirmed quarterly plan including its financial plan.<sup>45</sup> If we consider the complete confirmed plan as “the plan,” this large enterprise had already operated two of the three months of the quarter without a plan.

### **Coping With Delays**

As the above discussion shows, both annual and quarterly plans were received by producers with considerable delays. The fact that enterprises began the year or the quarter without a plan, however, does not prove that this was not a planned economy. State and federal governments and public universities, which often receive their approved plans late, are “planned,” as long as they have procedures and practices for coping with delays such as continuing budget resolutions. Some enterprises coped with delayed plans by means of preliminary permissions, the most important of which was the protocol of enterprise advance loading (*avansovaia zagruzka*). Enterprises negotiated these protocols with the glavk using preliminary drafts of annual indicators. In the case of Gump, commissions comprised of four representatives from Gump and three enterprise representatives negotiated the advance loading plan,<sup>46</sup> which set the projected annual volume of output (val) and its assortment.

The advance loadings protocols constituted a key step in enterprise operations. Enterprise refused to enter into supply contracts, until the glavk approved the advance loadings protocols. “Steel Trust” wrote to Gump: “We didn’t receive protocols of advance loadings with orders for rolling mills for the fourth quarter. Funds, orders and supplementary orders for our production are coming. We ask you to send the protocols of advance loadings for the fourth quarter. Before their approval, we will refrain from

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<sup>45</sup> RGAE 4086.2.3567: 2.

<sup>46</sup> RGAE 4086.2.3452, 3453, 3454.



concluding contracts.”<sup>47</sup> Besides the advance loading protocols, the glavk also had to rush to approve the enterprise’s preliminary labor tasks. Gump issued preliminary 1937 labor figures to Nerudostal on December 21, 1936, which were declared “valid until government approval.”<sup>48</sup>

Through custom and practice, glavks and enterprises learned to operate without confirmed plans. Receipt of the annual plan after the year was half up does not constitute proof that this was not a planned economy. What it does mean is that the economy’s operational units produced and delivered outputs on the basis of fragile preliminary agreements that could be changed at any time. The enterprise’s job was to meet its production and assortment targets, none of which were “final” at the moment production took place. Most production was based on “projections” of what the “final” figures would be. Moreover, the enterprise plan, which the enterprise was supposed to fulfill as a matter of law, was really only an output and an assortment plan. The enterprise promfin plan, which included financial and technical indicators, was simply reconstructed ex post to serve as a benchmark for future plans.

### **Interventions**

The delay of plans was not the ministry’s, glavk’s, or the enterprise’s primary headache. The propensities of superior organizations to intervene, to make changes in plans, to take advantage of “resource mobility” constituted greater threats of disruption and plan failure. The political leadership viewed its ability to intervene at will as a great strength. Stalin wrote: “For us, for Bolsheviks, the five year plan is not something that is a law that is forever given. For us the five year plan, *like any plan*, is only a plan approved *as a first approximation* [author’s italics] which must be made more precise, to change and improve on the basis of experience, on the basis of executing the plan. No five year plan can consider all the possibilities, which are hidden in the foundation of our movement and which are uncovered only in the process of work, in the process of carrying out the plan in factories, plants, and collective farms, in the regions, and so forth. Only bureaucrats can think that planning work ends with the creation of the plan. *The*

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<sup>47</sup> RGAE 4086.2.3562: 14.

<sup>48</sup> RGAE 4086.2.3431: 56.

*creation of the plan is only the beginning. The real direction of the plan develops only after the putting together of the plan.”*<sup>49</sup>

Ministry, glavk, and enterprise plans could be changed at any time. The stenographic report of a December 18, 1946 meeting attended by most industrial ministers (notably no Politburo member was present) shows the widespread dissatisfaction of those top managers responsible for plan fulfillment: The minister of electronic industry complained as follows: “During the quarter, even during the month, there are a great number of changes, modifications, and additions to the approved plan. We do not usually work according to the plan; rather we work on the basis of supplemental decrees, administrative decisions, and the like, Ministries themselves make quite a few changes as does Gosplan.” The minister of aviation industry voiced similar complaints: “It is better to have one plan than to change it twenty times. They begin work on the quarterly plan 45 days before the start of the quarter and it is approved only in the middle of the quarter.” Complaints about plan changes were as common in the 1930s as in later periods. Changes in NKLP’s 1939 plan continued through December 1939.<sup>50</sup> Although the first-quarter 1933 vehicle distribution plan had already been approved, the Politburo tripled the Kazak Party Committee’s allocation of vehicles (to collect emergency grain supplies)<sup>51</sup> and ordered a radical change in car distribution, allocating 90 percent to “organs of control over agricultural producers.”<sup>52</sup> These two Politburo interventions alone rendered the original plan inoperable. Ten days into the fourth quarter 1937 plan, the ministry raised Gump’s rolled steel plan by 500 tons.<sup>53</sup> On June 9, 1937 (near the end of the quarter), Gump raised KMK Factory’s target for ammonia sulfate from 6080 to 6290 tons.<sup>54</sup> In the middle of the second quarter of 1937,

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<sup>49</sup> I.V. Stalin, “*Voprosy Leninizma*,” 10th edition (Moscow, 1937), p. 413.

<sup>50</sup> RGAE. 7604.2.373: 1-2, 5, 8.

<sup>51</sup> GARF 5446.14a.628, 143-144; Russian center for the Preservation and Study of Documents of Contemporary History (Rosiiskii Tsentri Khraneniia i Izucheniia Dokumentov Noveiishei Istorii), hereafter referred to as RtsKhINDI. This document is from RtsKhINDI 17.3.914,10-11.

<sup>52</sup> RGASPI 17.3.915,8.

<sup>53</sup> RGAE 4086.2.3450: 1.

<sup>54</sup> RGAE 4086.2.3566: 100.

Gump raised the Dzherzhinsky Factory's quarterly plan for marketed output by 30 percent.<sup>55</sup>

These examples show that plans could be changed by virtually any superior organization – Politburo, SNK, Gosplan, the ministry, or the glavk. Plan changes were made according to the “normal order” of “correcting” and “finalizing” plans. As planning proceeded from preliminary” to a “final” stage that always remained on the distant horizon, interventions were considered a perfectly normal part of the process. Enterprise plans could be changed by directive of the ministry or by directive of the glavk. As an example of the former, Gump changed the 1937 second quarter plan for Krasnoe Sormovo Factory in the first month of the quarter: “in connection with the directive of the deputy minister of heavy industry to raise production designated for the Main Administration for Transport Machinery.”<sup>56</sup> Examples of changes initiated by the glavk abound: The director of Novomoskovsky Tin Factory protested two successive increases in its 1937 third quarter plan (first to 3000 tons and then to 3800 tons), stating that the higher targets could not be fulfilled and violated “earlier agreements” with the planning department of Gump.<sup>57</sup> On July 23, 1937, the frustrated director of the Makeevsky Metallurgical Factory protested Gump's “changes in the assortment of rolled steel not at all associated with the metals balance” and requested “to leave the assortment of rails in correspondence with the metals balances and stop the undue pressure on the factory.”<sup>58</sup>

The most important industrial official of the 1930s, Sergo Ordzhonikidze, Politburo member and commissar of NKTP – not known for his diplomacy – expressed his frustration with interventions in the early 1930s as follows: “They think that they can give our factories orders past us, but why the devil do we exist and why should I sit here?”<sup>59</sup>

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<sup>55</sup> RGAE 4086.2.3566: 50.

<sup>56</sup> RGAE 4086.2.3566: 2.

<sup>57</sup> RGAE 4086.2.3567: 135.

<sup>58</sup> RGAE 4086.2.3567: 5-7.

<sup>59</sup> Cited in O. V. Khlevnyuk, *Stalin I Ordzhonikidze: Konflikty v Politburo v 30-gody* (Moscow, 1993), p. 32.

Those held responsible for plan fulfillment, from the ministry to the enterprise, occupied a weak position when resisting plan increases, because the tasks that were being increased were, after all, “preliminary.” The production figure that was being changed constituted an *informal agreement* with superiors. Even preliminary agreements between the ministry and Gosplan provided little protection from changes. The minister of light industry, Liubimov, tried to head off changes in a meeting of the ministry on November 12, 1936 declaring that the ministry should “insist on its position and disprove the projections of Gosplan, which do not take into consideration the lack of raw materials at our factories and trusts because this result will predetermine the non-fulfillment of our production program.”<sup>60</sup> The archives do not contain Gosplan’s response.

The ministries took measures to immunize themselves from interventions: They delayed submitting information, they argued for last-minute submission of their own plans, and they prepared their own (dual) plans which were independent of the state plan. Their general strategy was to obtain as general plans as possible to be free to allocate their own funds as flexibly as possible within their organization. Gosplan fought numerous battles to force ministries to divulge enterprise plans, while ministries wanted only to disclose ministry and, at best, *glavk* plans. The ministry even attempted to deprive Gosplan of even basic information arguing that national security was threatened by giving this information to planning and financial authorities.<sup>61</sup>

### **The Efficiency of Norms**

Bergson’s first efficiency criterion for industrial material supply planning is the “efficiency” of norms. Did the input-output norms used by planners reflect some sort of engineering or economic efficiency? Were enterprises producing outputs with a minimum expenditure of material resources? The authors have addressed this issue in other publications, and we shall limit our comments here.<sup>62</sup> What is clear from the archives is that planners were operating by “feel” and “intuition” rather than on the basis of “scientific” norms throughout the 1930s. When the Soviet Union began first producing

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<sup>60</sup> RGAE, 7604, 1, 815, ll.9-11.

<sup>61</sup> Gregory, *The Political Economy of Stalinism*, p.

<sup>62</sup> Gregory and Markevich, “Creating Soviet Industry; Gregory, *The Political Economy of Stalinism*, p.

vehicles in the early 1930s, the producer (NKTP) requested almost the entire year's production for its own use.<sup>63</sup> The head of NKTP's supply department complained in a December 1937 meeting that his department "cannot really check orders" which is "necessary to defeat the greedy opportunists." The NKTP commissar expressed dismay upon learning that production plans had been met for a period of years when his enterprises were receiving only from forty to fifty percent of the supplies they had requested. The director of NKTP's supply department used a trial and error process in allocating materials: "We will give 100 units to one glavk, 90 to another. In the next quarter we'll do the reverse and see what happens. You see, we do this on the basis of feel; there is no explanation."<sup>64</sup>

### **What Can We Learn From the Planning Archives?**

If we compare our description of industrial material supply planning with Bergson's summary description,<sup>65</sup> much of what we say here was either known or anticipated. We knew that plans were delayed, that the planning process was chaotic, that enterprises "gamed" their superiors, and that the primary emphasis was on outputs. There was also a healthy skepticism about the ability of planners to produce the outputs and mix of outputs desired by the leadership. To quote Bergson: "Limitations in control over quality and assortment of output probably would have been one of the major sources of divergence ... between the mix of end products realized and that sought."<sup>66</sup> The fact that the archives provide general support for an extensive literature that was developed with great care and at great cost over a long period of time is comforting and an important contribution on its own.

The most important service of the archives is to allow us to look inside a number of black boxes that could never have been penetrated otherwise. The first such black box is 'planners' preference', namely the manner in which the objectives of the party leadership were expressed and the degree to which they were implemented. In fact, the

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<sup>63</sup> Valery Lazarev and Paul Gregory, "The Wheels of Command," *Economic History Review*, 55, 2 (May 2002).

<sup>64</sup> These examples are from Gregory and Markevich, "Creating Soviet Industry," pp. 805-6.

<sup>65</sup> Bergson, *The Economics of Soviet Planning*, 133-157.

<sup>66</sup> Bergson, *The Economics of Soviet Planning*, p. 156.

archives show Stalin's persistent concern about the implementation of his orders with impassioned (and futile) pleas for an "implementation" commission and fears that his decisions would get bogged down in some bureaucratic sinkhole.<sup>67</sup>

The major insight from the planning archives is the fact that planners' preferences were very weakly expressed in the normal order of planning, if it all. In the 1930s, the Politburo had virtually no staff; Politburo members were overloaded with detail work, and Politburo instructions to SNK and to Gosplan were brief, vague, and hardly operational. It was left to the bureaucratic organizations that Stalin despised to enunciate planners' preferences. The most detailed recorded Politburo instructions are found in Kaganovich's September 2, 1936 letter to Stalin,<sup>68</sup> in which the Politburo sets an overall rate of increase of union and local industry, transport targets, market fund targets, and the overall investment "limit." Politburo instructions for other quarter plans are even less specific.

Note that we emphasized the weak expression of planners' preferences in the "normal order" of planning. A second and associated insight is that the "dictator" exercised planners' preferences through interventions. But the dictator's ability to intervene at will does not support the notion of a powerful dictator controlling the

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<sup>67</sup> Gregory, *The Political Economy of Stalinism*, p.

<sup>68</sup> "We [the Politburo] discussed with the ministers the fourth quarter plan. The volume of production of union and local industry was set at 19.7 billion rubles, which gives a 17.3 percent increase relative to the third quarter. The ministries proposed to establish tasks for each main administration, trust and enterprise for the production of completed production and a detailed assortment of production with a high quality parts and corresponding to established standards. The Council of Labor and Defense is charged with approving this more detailed plan. We set the average daily loading of the rail system at 91,000 cars, the transport of commercial freight at 131 million tons, and the volume of passenger transport at 12 billion passenger kilometers. The volume of water transport is set at 12 billion tons and of sea transport at 7.8 billion tons. We set the volume of capital work at 7909 million rubles and financing at 7048 million rubles, taking into account the lowering of construction costs. Retail trade of state and cooperative stores is set at 28 million rubles. The market fund for grain is set at 3100 thousand tons, for grits at 230 thousand tons and for sugar at 360 thousand tons, for vodka at 20,300 thousand deciliters. We ask you to send your opinion." *Stalin i Kaganovich Perepiski*, 658-659.

allocation of resources from above. The Soviet planned economy was, in fact, a “nested dictatorship,” in which the agents of the dictator were the “dictators” of agents below them in the hierarchy.<sup>69</sup> The interlocking directorate of Politburo/SNK was the dictator of the industrial ministries, the industrial ministries were the dictators of the glavki, the glavki were the dictators of the enterprises. At each level, the relationship between the dictator and agent was characterized by an antagonistic principal agent problem. Interventions made by the glavk or the local party boss would be unlikely to confirm to the priorities of the ministry or the republican party secretary much less of SNK or the Politburo. It was the institution of a fulfilled ex ante plan carefully coordinated by the center that held out the prospect of the actual execution of the national dictator’s preferences. A system of uncoordinated interventions at the various level would not result in the execution of the planners’ preference of the system’s highest leaders.

A third insight is that most the operational planning was done by those who had to fulfill the plan, namely the ministries, the glavki and the enterprises. Whereas, central planning organizations had few specialists in the 1930s, each ministry employed from 1000 to 8000 specialists. As such, they had enormous information advantages relative to any central organization. Plan instructions – the plans themselves and changes in plans – were issued as decrees of the superior organization, but many decrees were actually prepared by subordinated organizations. Gosplan prepared SNK’s decrees; ministries prepared Gosplan’s decrees, glavki prepared ministry decrees, and enterprises prepared glavk decrees. Decrees were presented for signature, and the signatory could always insert some changes, usually minor. In the case of conflicts, such as conflicts over resources between two enterprises, alternative decrees were prepared and the superior would decide the conflict by signed one of the decrees.

A fourth insight was the extremely high transaction cost of centralized decision making. Each annual or quarterly plan brought forth thousands of petitions (khodotaistvo) for output reductions or increased supplies. Those requests that were seriously examined required the formation of commissions of representatives of the disputing parties and their superiors, which tied down high level decision makers in endless meetings over often trivial issues. To give one typical example: The Gorky region (as represented by its

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<sup>69</sup> For a description of nested dictatorship, see Lazarev and Gregory, “The Wheels of Command,”

state and party officials) requested a lowering of its timber target. A special commission comprised of high level Gosplan, ministry, and regional officials had to be formed and to meet in Moscow to reach a decision, which was made by issuing a decree.<sup>70</sup> The Gorky region's protest would have been one of thousands received in that quarter. Insofar as interventions could be made by virtually any superior, the only way to maintain some kind of national order was to take the very steps taken in the Gorky timber case, which required the participation of the chairman of Gosplan, the chairman of the fuels commission and other high level officials to deal with a request to reduce output by a fraction of one percent of the national production figure. Few such requests could be dealt with in such a thorough manner. Most interventions by superiors probably stood, even if they were uncoordinated, chaotic, and politically motivated.<sup>71</sup>

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<sup>70</sup> Timber trusts in the Gorky region felt that their 25 mcm 1935 production target was unrealistic. Instead of protesting to their own ministry, Gorky timber trusts solicited the support of local state and party organizations, which sent a telegram to Gosplan requesting a plan reduction from 25 to 23 mcm, citing technical problems, distance from rivers, difficulty of floating logs down the river, and lack of horses. Gosplan sent this telegram to Molotov, who convened a special commission. On November 3, 1935 a meeting of the "Commission on the Question of Procurement of Timber in Gorky Region" was called, attended by local Gorky representatives, the chairman of Gosplan, the Minister of Timber Industry, the Commissioner of Fuel, and Gosplan's timber sector chief. The special commission refused Gorky officials' request to lower the production target but ordered the ministry to allot the region 50 additional tractors. This bargaining outcome was typical for the period: Requests to lower output targets were denied but means were sought to give producers the wherewithal to meet the production target. This case is cited in Rees, "Timber," in Rees (ed.), *Decision Making in Stalin's Command Economy*, 133-34).

<sup>71</sup> We cannot gauge whether or not economic decision were economically or politically motivated. Consider two examples: On September 12, 1933, Molotov wrote the Chairman of Gosplan: "The Crimean's were in my office. They wanted me to reduce the harvesting targets for the second region... We must check and decide..." Was the eventual decision based on economic considerations? Stalin's correspondence speaks of visits by officials to his Sochi dacha asking for



Powell's model of "resource management" assumes that the interveners can achieve some degree of economic rationality by an accurate reading "non-price" signals. It does not take into account the extreme limits on the time of interveners, the possibility that their decisions will be politically motivated, and the fact that some producers will be better signalers of scarcity through bullying or occupying high positions. The bullying for more resources by some industrial ministers (such as the persistent Ordzhonikidze) were so fierce that Stalin openly wondered whether Gosplan could resist the relentless pressure.<sup>72</sup>

A fifth insight is the degree to which all decision makers avoided fixed rules of conduct. In the case of planning, this practice is illustrated by the absence of general planning rules. Despite the fact that a huge number of plans were prepared each year, there was no "general law" or "general procedure" of planning. Rather than general instructions valid each year, SNK, Gosplan, and the ministries issued new instructions each year. The planning archives overflow with "Instructions for Preparing" various plans. The lack of firm planning procedures permitted economic agents to engage in lengthy bargaining with superiors about the dates of submission of materials, which slowed down the planning process. Each planning process was consumed not only with disputes over the plan itself but also over planning procedures such as frequent disputes about the dates of submission of information.<sup>73</sup> The lack of general rules that carried over from plan to plan imposed enormous additional transactions costs. The fact that framers of the system avoided rules reveals their preference for arrangements that favor discretionary action by superiors. The system itself shied away from "final" plans. Almost all plans (except national plans which had ideological meaning) down to the final moments of the quarter or the year, were labeled as "drafts" or "preliminary." The official keepers of the plans were planning departments in the ministry and glavk, which

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plan corrections and favors. Stalin approved the requests of two Caucus party leaders for loans of grain on September 6, 1935 after gaining their support for the firing of an official who had fallen out of favor. O. V. Khlenyuk et al (eds.). *Stalinskoe Politburo v 30-e gody*, (Moscow: AIRO-XX, 1995), 134. *Stalin i Kaganovich. Perepiski. 1931-1936 gg.*, pp. 224, 556-557

<sup>72</sup> *Stalinskoe Politburo v 30-e gody*, p. 134.

<sup>73</sup> Paul Gregory, *The Political Economy of Stalinism*, p.

kept issuing preliminary targets and kept track of planned changes. The absence of “final approved plans” gave free rein to interventions, and it also created enormous uncertainties for the enterprise and the glavk, which operated on the basis of tenuous preliminary agreements, that provided no protection against arbitrary plan changes.

A sixth insight is the dominance of production and assortment with periodic attempts to elevate other indicators when problems became acute. Just as in the postwar period when “reforms” or “experiments” to improve quality or lower costs were announced with great fanfare, the 1930s also saw attempts to raise the status of secondary indicators. NKLP adopted in 1933: “About Measures to Insure the Fulfilment of the Labour Productivity Plan for 1933,” which directed “attention of glavks and republican ministries that the major indicator for judging the work of enterprises in the current economic year is the fulfilment of the labour productivity plan and the wage plan.”<sup>74</sup> In 1937, SNK stated that “plan fulfilment must be evaluated not on the basis of gross production but on the production of finished and completed production according to standards of quality and assortment.”<sup>75</sup> That such special instructions were required to direct attention to other indicators in the plan suggests the dominant role of gross production. Only when plan failures in other areas became acute, central authorities turned to secondary indicators like quality or labor productivity. Our description of planning, however, shows why the elevation of secondary plan targets would not work: In many cases, secondary plan targets did not even exist or were constructed retrospectively. It is extremely difficult to order the fulfillment of plans that do not exist.

Sixth, the archives show that some plans were taken more seriously than others, a finding that sheds some light on the dispute between Keren and Granick concerning the firmness of plans.<sup>76</sup> This literature asks whether the plans of producers were changed so

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<sup>74</sup> RGAE 7604.1.119: 125-126.

<sup>75</sup> *Sobranie Zakonov*, 1937, No. 24, p. 98.

<sup>76</sup> Michael Keren, “The Ministry, Plan Changes, and the Ratchet Effect in Planning,” *Journal of Comparative Economics*, 6, no. 4 (1982), pp. 327-342. David Granick, “The Ministry as the Maximizing Unit in Soviet Industry,” *Journal of Comparative Economics*, 4, no. 3 (1980), pp. 255-73; Alice Gorlin and D. P. Doane, “Plan Fulfillment and Growth in Soviet Ministries,” *Journal of Comparative Economics*, 4, no. 3 (1983), pp. 415-431.

frequently that there was no real “plan or were changes in enterprise plans simply a reshuffling of a fixed ministry plan.? Our evidence suggests that plans approved at the highest level (SNK) were firmer than others. Ministries and glavks would point out to petitioners that the plan they wanted changed originated from SNK and as such could not be changed. The firmness of ministry plans, however, was relative. There are numerous cases of ministry and republic plans being changed even though they had been approved at the highest levels, but they were being changed by those who had approved the earlier plan.

Seventh, we cannot conclusively answer whether resource management was conducted for economic or political gain. The operational planning system, however, could not have been constructed better for the exercise of political influence. There were no “final” plans. Everything was tentative. Everything was subject to arbitrary change by someone higher up in the chain of command. Even if every political intervention were made with the intention of economic efficiency, the overall result would have produced the opposite, given the impossibility of coordination. We cannot guess what went on behind the scenes when petitioners met with their superiors, but we do know that savvy politicians, such as a Stalin, would weigh the political implications of rejecting an influential regional or industrial leader. We have one empirical study of the allocation of vehicles by the Politburo, which strongly concludes that political factors determined the allocation of one of society’s scarcest resources and that economic factors were ignored.<sup>77</sup>

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<sup>77</sup> V. Lazarev and P. Gregory “Commissars and Cars: The Political Economy of Dictatorship,” *Journal of Comparative Economics*, vol. .

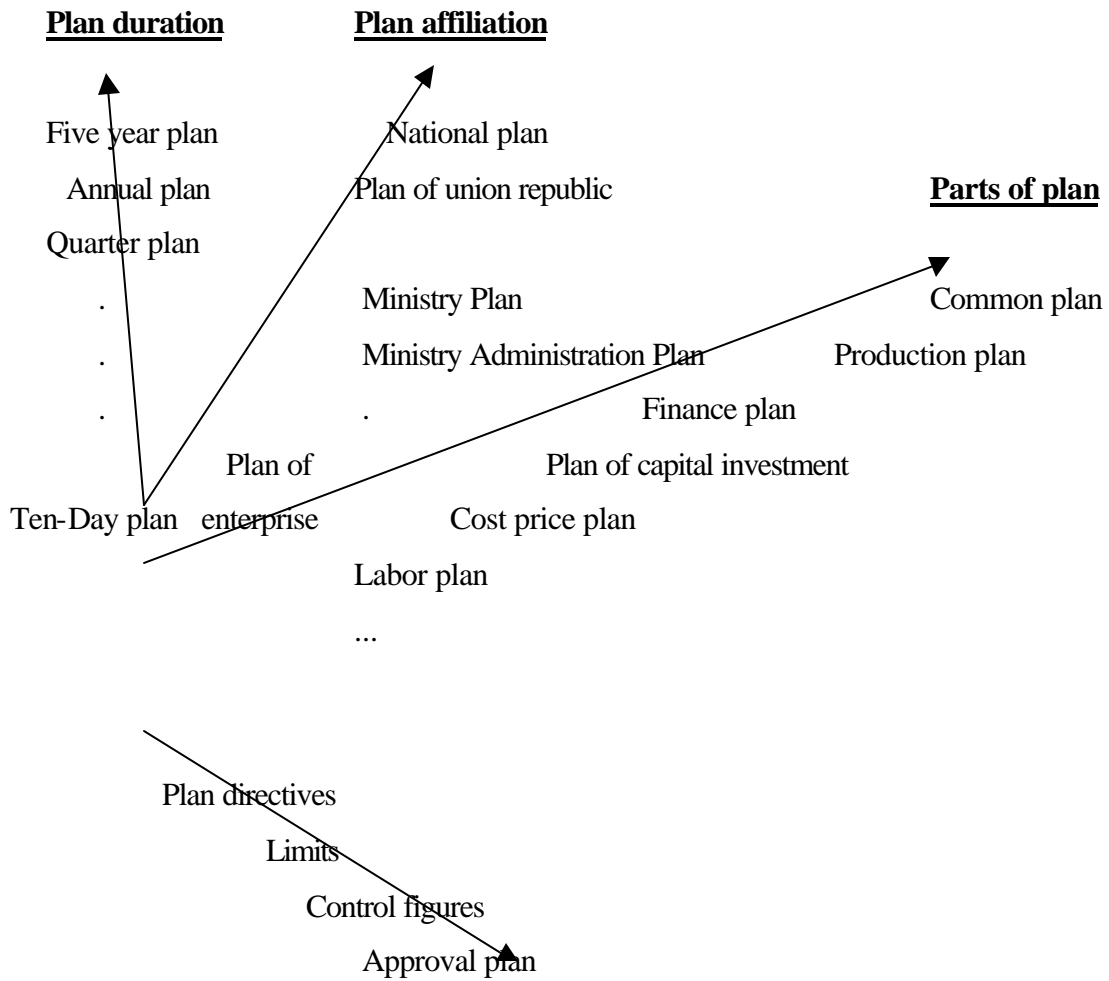


Figure 1: Dimensions of plan preparation

Table 1. Schematic Schedule of Annual Planning: Reconstructed from SNK, Gosplan, Ministry, and Glavk Archives

	Center: SNK, Politburo and Gosplan	Ministries and glavki	Enterprises and Trusts
June-July	Small number of control figures for national economy		
August – October	Preparation of larger number of control figures for ministries and republics		
September-October		Ministry collegium discussion of main ministry tasks broken by by glavki	
October-December	Gosplan and finance ministry bargain with ministries over inputs and outputs		Provide information to glavk for preparing first draft of glavk plan
November-December		Exchange of information and negotiation between glavki and ministry	
Late December-early January	SNK “approves” plans for ministries and republics		
January 1	<b>OFFICAL START OF ANNUAL PLAN</b>		
January		Approval of finance and capital plan of ministry; delegation of other tasks to ministry planning department; delegation of “final” tasks from ministry planning department to glavks	Special meetings with Glavk to approve main targets
January-March			
March and later			Confirmation by glavk of “final” enterprise plan
Third and Fourth quarters of plan		Glavki requires enterprises supply “complete” plan with financial and price indicators	Enterprises retrospectively prepare “complete” plan including financial and price indicators

Table 2. Schematic Schedule of Quarterly Planning: Reconstructed from SNK, Gosplan, Ministry, and Glavk Archives

	Center: SNK, Politburo and Gosplan	Ministries and glavki	Enterprises and Trusts
A month – a month and a half before the quarter	Set main control figures for national economy	Ministry issues a directive setting the schedule of quarterly planning and the main tasks for the ministry and its glavki	
During the last month before the beginning of the quarter	Gosplan and finance ministry bargain with ministries over inputs and outputs	Ministry collegium discussion of main ministry tasks. Exchange of information and negotiation between glavki and ministry	Enterprises receive first variant of quarterly tasks from glavk and relate their suggestions for changes
A few days before or after the beginning of the quarter	SNK approves national quarterly plans		Glavk delegates to enterprises and trusts main production tasks
<b>OFFICAL START OF QUARTERLY PLAN</b>			
A few days after the beginning of the quarter	SNK approves national supply plans	Approval of finance and capital plan of ministry; delegation of other tasks to ministry planning department; delegation of “final” tasks from ministry planning department to glavks	Glavk delegates to enterprises all “final” production tasks
Two weeks after the beginning of the quarter			On the basis of production tasks trusts and enterprises provide glavk with more complete information for their quarterly plans
Two weeks after the beginning if the quarter and later			Glavk delegates to trusts and enterprises quarterly tasks (including secondary indicators) if they are included in plan