

The political economy of Stalinism in the light of the archival revolution

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1. Introduction

One of the many favourable aspects of the collapse of the USSR was the vastly increased access to the archives of Soviet institutions by historians, economists and other specialists that resulted. This led to an intense study, by specialists from the successor states of the USSR, mainly Russia (which inherited the archives of all the central Soviet institutions), and by foreign academics, of the huge mass of documents on the Soviet period accumulated in what became the archives of the successor states. One major result of this study was the publication of a large mass of archival documents. By now, not only individual volumes, but a number of series of volumes, containing original documents in a wide variety of fields, have been published. In addition, numerous articles and books utilizing archival sources have been published. Furthermore, some archival documents containing previously unknown information are now available on the web. For example, Ukrainian archivists have placed on the web numerous documents relating to the 1933 famine in their country. This new approach to the study of the USSR,¹ and the additional knowledge resulting from it, is known as the archival revolution in the analysis of the Soviet system. Overviews of the new insights thus obtained about Stalinism have recently been published both by historians (Khlevnyuk, 2001; Litvin and Keep, 2005) and economists (Gregory, 2004; Gregory and Harrison, 2005), two journals/annuals have published special

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¹ There was some access to Soviet archives long before the collapse of the USSR. For example Fitzpatrick (1970) made extensive use of Soviet archives for her study of Lunacharsky's work in 1917–21. However, this access was very limited, was greater for the early years of the RSFSR/USSR than for subsequent periods, and did not apply to sensitive party, security, economic, military, Comintern, or diplomatic affairs. Publication of original documents was very limited and the resulting publications often misleading because of the non-publication of currently embarrassing documents.

issues on the archival revolution,² and there is a website devoted to political economy research in Soviet archives (<http://www.warwick.ac.uk/go/persa>). The purpose of this paper is to provide a survey of the new knowledge which is shorter than Gregory and Harrison's survey article, links the new knowledge to what was previously known, discusses some issues excluded from previous surveys, and considers questions likely to be of particular interest to *JOIE* readers.

2. Was the 'planned economy' rational?

The publication of the First Five Year Plan – a massive work of hundreds of pages full of tables and graphs – followed as it was by the Great Depression, created an image, widely believed throughout of the world, that the Soviet 'centrally planned' economy, unlike the anarchic and inefficient capitalist system, was a rational economic system.³ It was a system, many thought, that guaranteed high growth rates and allocated resources in accordance with social needs. Pre-archival academic research undermined this view in six ways.

First, beginning with Colin Clark (1939), and continuing with Bergson (1953, 1961) and his followers, academics criticized published Soviet growth rates and argued that the true figures were lower. Second, based on interviews with Soviet emigrants, it was argued (Berliner, 1957) that the actual practice of Soviet enterprise-level management was far removed from the official image. Third, it was argued (von Mises, 1935; Hayek, 1935, 1937, 1945; Bergson, 1964) that Soviet methods of decision making were bound to lead to large-scale waste and inefficiency. Fourth, detailed comparison of plans and outcomes (Zaleski, 1980) demonstrated that there was a great gulf between plans and outcomes, so that the very term 'planned economy' to describe the Soviet system was problematic. An alternative terminology, introduced by Grossman (1963) was 'command economy'. In the perestroika period this was incorporated into the derogatory Gorbachev-era Soviet label for the formerly much-admired 'planned economy', namely the 'administrative-command' system. Fifth, writers of the behavioural school (Bauer, 1978; Kornai, 1980a) analysed characteristic phenomena of really existing planning such as the soft budget constraint, investment hunger, and shortages, and in this way stressed the waste and inefficiencies of the system. Independently, earlier, and basing himself on published Soviet sources, another writer who undermined belief in the rationality of the 'planned economy' by describing how it actually worked was Nove. He did this in his classic paper *Nove* (1958), which refocused attention from plan *compilation* to plan *implementation*,

² *Cahiers du monde russe*, 40 : 1–2 (1999); *Jahrbücher für Geschichte Osteuropas*, 51(1) (2003): 36–98.

³ The present author can remember a lecture given by Joan Robinson to students of economics at Cambridge in the early 1960s. In that lecture she contrasted two ideal types, the market economy and the rational planned economy. Although she did not identify the latter with the Soviet system, she clearly implied that some version of a planned economy was rational and superior to the unplanned and anarchic market economy.

in his widely used textbook on the Soviet economy (Nove 1968) and in his economic history of the USSR (Nove, 1969, 1989, 1992). Sixth, the former Soviet economist Birman (Tretyakova and Birman, 1976; Birman, 1978) argued that the much discussed methods of ‘scientific planning’ were not in fact used for planning and that existing Soviet planning was actually based on rules of thumb.

We now know that Soviet growth rates were indeed exaggerated. Partly this is a result of the archival revolution. For example, using declassified data from the archives of the Central Statistical Administration, substantially lower growth rates for the Soviet period have been calculated (Eidelman, 1992, 1993). Similarly, using archival data, Harrison (1998, 2000) has explained the mechanisms of the hidden inflation that artificially increased Soviet growth rates and provided a quantitative estimate of their importance. Partly it is simply a result of the end of the USSR and of the censorship that has allowed Russian economists to publish alternatives to the old official statistics and led to general acceptance of alternatives.

Second, access to the archives has largely confirmed Berliner’s picture of enterprise level decision making.

Third, access to the archives has both confirmed and refuted the von Mises–Hayek–Bergson position. On the one hand, it has turned up numerous cases of large-scale waste (such as the Baltic–White Sea canal, which was too shallow to be made much use of). It has also shown the importance of non-economic factors in the allocation of goods (Lazarev and Gregory, 2003). These examples corroborate the von Mises–Hayek–Bergson position. On the other hand, it has turned up examples of highly effective Soviet decision making. A good example is the Soviet atom bomb. The first Soviet atom bomb test was carried out in 1949, only four years after the USA and long before most Western experts had anticipated. This success resulted mainly from two – very Soviet and non-market – institutions. These were an efficient external espionage service⁴ and the internal activities of the state security organs. The former secured a mass of detailed information from the Manhattan Project for the USSR. The latter provided the leader of the Soviet project, the gifted administrator L.P.Beriya. In addition (Starkov, 2000: 262), ‘the organizational work on the construction and planning of diffusion plants and on the production of enriched uranium was wholly carried out through the NKVD-MVD’.

The ability of the USSR to substitute its own institutions (an efficient espionage service and the internal state security organs) for institutions which characterize a market economy (such as profit-seeking business firms) confirms Gerschenkron’s idea (Gerschenkron, 1962) that latecomers in industrialization are sometimes

4 An efficient espionage service was not specifically Soviet. However, the combination of espionage and ideology, which made it relatively easy to collect valuable information on the non-commercial bases of ideological support or sympathy, was (for a long time) specifically Soviet. It played a considerable role in the 1930s and 1940s. In addition, the share of espionage in the Soviet acquisition of new technology was high by international standards. (Purchase of licenses were few and FDI virtually non-existent.)

able to substitute new institutions (such as investment banks or an activist state) for missing institutions (such as a large public capital market).

Fourth, the detailed information in the archives has largely confirmed the Zaleski interpretation (Belova and Gregory, 2002: 280; Markevich, 2004).

Fifth, the archives have confirmed the insights of the behavioural school. For example, Kim (2002) has confirmed for the USSR Kornai's (1980a: 486–487) conjecture about the importance, in generating shortages of consumer goods, of the siphoning of consumer goods away from the retail market by enterprises. Similarly, Gregory and Tikhonov (2000) showed the usefulness of Kornai's concept of the soft budget constraint in explaining informal aspects of the Soviet financial system after 1931, such as commercial credits, arrears, and surrogate money.

Sixth, the archival revolution has confirmed and generalized the Birman argument about rules of thumb, such as 'planning from the achieved level'. (This means that in any period the aim was to repeat the output of the various sectors in the previous period with a few per cent added on.) Obviously, this was not universally applied, particularly in the Stalin period, since the structure of the Soviet economy changed radically then and the USSR introduced in the Stalin period numerous entirely new products, ranging from tanks and jet planes to penicillin. Nevertheless, it was often used, particularly in routine situations and especially in the more stable Brezhnev era. Because of their ignorance of many aspects of the past and present situation and uncertainty about the future, and also because of the complexity of economic life, decision makers in the USSR made extensive use of rules of thumb (what Nelson and Winter, 1982, refer to as 'routines'). One important rule of thumb, that is clear from both non-archival and archival sources, was that, when importing technology, choose either US or German models, if possible the former. The archival revolution, building on the earlier work of Birman and Zaleski, has drawn attention to other rules of thumb (Gregory, 2004: 124). These were, 'Heavy industry is more important than light industry. Defence orders are more important than civilian orders. Orders should be filled from domestic production, not imports. Services are unimportant and can be neglected.' These rules played an important role in day-to-day economic management. This confirms the behavioural or evolutionary view of how decisions are made in uncertain and complex environments

On the whole, the picture of 'central planning' emerging from the archival revolution confirms the views of critical economists basing themselves on published sources and personal impressions. It rejects the orthodox (pre-Gorbachev) Soviet view of economic planning as a harmonious socially rational process for 'the securing of the maximum satisfaction of the constantly rising material and cultural requirements of the whole of society through the continuous expansion and perfection of socialist production on the basis of higher techniques'.⁵ It

⁵ This is Stalin's formulation of the basic economic law of socialism. See Stalin (1952, 1972: 40–41).

confirms the Clark–Bergson view that published Soviet macroeconomic growth statistics were too high, the Berliner view that Soviet enterprise managers were far from selflessly executing a definite plan, the von Mises–Hayek–Bergson view that non-market decision making could be very wasteful, Zaleski’s view that the label ‘central planning’ was something of a misnomer for what was really a ‘centrally managed’ economy, the behavioural school’s vision of planning as a process of bureaucratic interaction rather than an optimization exercise, and the Birman–Zaleski stress on the role of rules of thumb. On the other hand, Soviet industrialization confirms the Gerschenkron view that latecomers to industrialization are sometimes able to develop new institutions that successfully substitute for the institutions developed by earlier industrializers.

If many of the findings of the archival revolution confirm what had already been argued in the academic literature, what have we learned? The new findings can be considered under the headings: microeconomics, mesoeconomics, macroeconomics, and the institutional framework.

3. Microeconomics

In the pre-archival literature it was assumed that Soviet enterprises were price-takers. That is, they were assumed to try and overfulfil their plans in physical terms, given firm prices established by the planners. It was known that hidden inflation resulted from increased prices for ‘new’ products, but it was assumed that by and large enterprises accepted firm prices fixed by the planners. The archives have shown that this was one-sided and that (Gregory and Harrison, 2005: 746) ‘price-setting was one of the most important activities of Soviet firms’. This partly resulted from the inability of understaffed pricing departments to fix the prices of all the commodities produced under conditions of rapid technological change, partly resulted from the enterprises’ desire to make fulfillment of output plans in monetary terms easier, and partly resulted from the sellers’ market, which made the goodwill of sellers very important for buyers.

Already prior to the archival revolution, the role of illegal supply agents in the ‘planned economy’ was well known. Their job was to obtain supplies in an economy in which all producer goods were rationed and there were perpetual shortages. In this way they helped their clients fulfill their production plans. They corresponded, *mutatis mutandis*, to sales representatives in market economies who, on behalf of firms interested in increasing their sales, try and sell goods to customers who have a choice of suppliers. In the ‘planned economy’ there is no problem of selling goods but there is a major problem in securing the inputs necessary to produce the plan targets. There was also some literature about the legal military supply agents who were stationed in enterprises with a view to ensuring the quality of weapons produced there. The archival revolution has provided us with a mass of extra information about the military supply agents (Harrison and Simonov, 2000; Markevich and Harrison, 2006). This showed,

inter alia, that although the military supply agents often rejected unsatisfactory products, they also often accepted unsatisfactory products. The former resulted from their loyalty to the Ministry of Defence, the latter from the need to maintain good relations with the producers. It also showed that the military agents often colluded with enterprise management to disguise quantitative plan underfulfilment. This resulted from enterprise management's need to report plan fulfillment and the military agents giving priority to quality over quantity and also their need to maintain the producer's goodwill.

Prior to the archival revolution, the existence in the planned economy of food and labour markets, and the importance of the second and third economies, were well known and much discussed. The archival revolution has also taught us about the quasi-market for inventions and associated quasi-market for research assets which sprang up as a result of the uncertainty involved in the invention phase of Soviet military R and D (Harrison 2005).

4. Meso-economics

The archival revolution has led to much additional knowledge about sectors of the economy. It has taught us both about the management of the sectors and about the development of the sectors themselves. The sectors were managed by People's Commissariats (later Ministries). In a study of the industrial commissariats, Gregory and Markevich (2002) showed that their behaviour – like that of enterprises – was frequently opportunistic, hiding capacity, demanding excessive inputs and hiding information. As far as the various sectors are concerned, there have been two good monographs on the trade sector (Osokina, 1998, 2001; Hessler, 2004), one on the pharmaceutical sector (Conroy, 2006), and important contributions by Igolkin (2004, 2005) on the oil industry. Probably there are other important works that have escaped the present writer's attention. In view of its importance and of the virtual absence of serious studies prior to the archival revolution, it is particularly interesting to look at what we have learned about the defence sector.

Oskar Lange long ago described the Soviet economic system as 'a *sui generis* war economy'. The similarity between Soviet economic institutions and those of, say, the UK in World War II, were obvious to all observers (rationing, direction of labour, state control of the economy, stress on physical rather than financial indicators, emphasis on guns rather than butter, etc). They were long ago discussed by UK economists such as Ely Devons and Alec Nove with firsthand experience of the UK economy in World War II, and also by the alert historian E.H.Carr (1946: 36–38).⁶ An important result of the archival revolution has been

⁶ However, Carr's expectation that these features of the UK war economy would be continued and intensified, with the market economy withering away as historically outmoded, turned out to be erroneous. (This mistake undermined the methodology of history advocated in his well-known book *What is history?*)

to stress both the size of the military sector and that military factors played a major role throughout the life of 'socialist planning', its birth, goals, institutions, and final collapse.

Samuelson (2000a) is a monograph on the role of Tukhachevskii (the gifted Soviet army officer, in 1935–37 a Marshal of the Soviet Union, who was shot in 1937) in the build up of the Soviet armed forces and is a major contribution to knowledge. It draws attention to the role of war preparations in Soviet planning. The defence sector of Gosplan was created in 1927 and remained very important down to the end of Soviet planning. The USSR rapidly expanded its capacity to produce weapons and produced very large numbers of them. In 1932, the USSR, which a few years previously had been incapable of producing any tanks, produced 2,600 of them. As the former Soviet intelligence officer Shlykov notes in his foreword (Samuelson, 2000a: xiii) 'between 1932 and the second half of the 1930s the USSR produced more tanks and aircraft than the whole of the rest of the world'. In view of what is generally written about Stalin's surprise at the outbreak of war on 22 June 1941, it is interesting to note (Samuelson, 2000a: 197–198) that on 6 June 1941 he signed decrees instructing the relevant departments to prepare themselves for a possible switch to wartime production from 1 July 1941.

Archival research has discovered some interesting and important facts about military expenditures from 1928 to 1941. It turns out that defence expenditure increased sharply in 1930–32 (Davies, 1993). In addition (Samuelson, 2000b; Davies and Harrison, 2000) from 1936 onwards the USSR was engaged in a massive and very expensive arms race with Germany. Measuring the share of national income devoted to defence raises a number of conceptual and measurement issues and various estimates are possible. (Should investment in the expansion of the armaments industry, which in private ownership economies is part of business investment, be considered military expenditures?) The data of the Soviet statistical office show defence expenditure as a proportion of the net material product, doubling in 1937–40 (Davies and Harrison, 2000: 90). Harrison (1996: 110) estimated Soviet defence expenditures in 1940, the year prior to the Nazi attack, as already 17% of GNP.

An important question raised by Soviet war preparations concerns their efficiency. It is well known that the Chamberlain government in the UK in 1938–39 pursued what appears in retrospect to have been an efficient programme of war preparations. Naval ships were built, radar stations were built, and the capacity to manufacture fighters was greatly increased, but actual production of planes remained low. Military expenses were kept under control, and prior

Nevertheless, this expectation did provide the inspiration and ideological driving force for his great work *A History of Soviet Russia* – a masterly multi-volume study conceived and undertaken in the pre-archival era. The co-author of the latter volumes, R.W.Davies, subsequently became an important contributor to the archival revolution.

to the outbreak of war the economy remained on a peacetime footing. Military preparations in the UK in 1938–39 did not have the adverse effects on living standards, hours of work and labour discipline that they had in the USSR in 1939–41. When war did break out, the UK was not burdened with large stocks of obsolete weapons, but was able to outproduce Germany in the crucial area of single-engine fighters in 1940, which was a major factor in the British victory in the Battle of Britain.

On the other hand, the USSR began the war with huge stocks of obsolete weapons, most of which were lost in the first few months of the war. In retrospect the huge Soviet production of weapons in the early and mid 1930s was just a waste (Simonov, 1996: 100, Ken, 2002: 335). Their production had been a substantial burden on the economy. (However, this view is based on hindsight. At the time, their production may have seemed necessary, to deter Japan from attacking Soviet interests, or fighting Japan if attacked.) Mass production of the T-34, often regarded as the best tank produced by any country during World War II, only began in June 1940. Although the creation of the capacity to mass produce modern weapons was a major achievement of Stalin in 1928–40, the actual production of huge numbers of weapons in 1930–37 seems – in retrospect – to have been rather a waste.

The Soviet economy during World War II is analysed in the excellent monograph Harrison (1996). This is a detailed examination of how the Soviet economy – unlike the Russian economy in World War I – survived a colossal enemy attack and produced the weapons that enabled the USSR to defeat a highly industrialized and technically advanced country and emerge as one of the two great powers. Harrison draws attention to the important positive role of the Soviet institutional capacity to manage shortages and distribute the defence burden. The economic system that had been created in the 1930s, although not very good at providing food and other consumer goods without queuing, was very effective in allocating resources to the defence sector and organizing mass production there. According to one estimate (Khanin, 2003: 43) labour productivity (per person, not per hour) in Soviet military industry in 1943 exceeded that in Germany and the UK by a wide margin and was 90% of that in the USA. Even allowing for the usual problems of international comparisons and possible differences in hours worked per person, these figures are very impressive. They testify to the effectiveness of state-organized mass-production under war-time conditions.

Harrison also examines the vexed question of the contribution of Lend-Lease to the Soviet victory. According to his careful estimates, Western (mainly US) aid provided about 10% of the total resources available to the Soviet economy in 1943 and 1944. This greatly speeded up the Soviet victory and saved numerous Western lives. Harrison's emphasis on the economic rationality of the richer USA specializing in military production and the poorer USSR in fighting, though sensible from an economic point of view, will leave a bitter taste in the mouths of Russians, who lost so many of their young men in a ghastly struggle.

Harrison (1996: 168) also suggests that the militarization of the economy during World War II may have led to a permanent loss of economic efficiency. It is certainly the case that in the post-war world, although one of the two great powers, the Soviet record in inventing, and bringing into production, revolutionary new products, was a poor one (although it did launch the world's first artificial satellite). The USSR relied heavily for technical progress on industrial espionage. The postwar military programmes (nuclear weapons and long-range missiles) were a heavy burden on the economy. This burden did not fall after the USSR achieved strategic parity with the USA. According to CIA estimates, in 1975–85 Soviet military expenditures measured in 1988 US\$ even exceeded US military expenditures. Since the Soviet economy was substantially smaller and was not demand-constrained, this was a very large burden. According to these CIA estimates, Soviet military expenditures carried on rising till 1988.⁷ A major factor explaining this increase was the priority status of military programmes (Davis, 2002: 15–16; Gregory, 2004: 124) – a rule of thumb in decision making dating back to early Stalinism.

5. Macroeconomics

The role of money in the Soviet economy was limited by the fact that many consumer goods (housing, public transport, education, medical care) were basically allocated (or heavily subsidized) rather than sold at market prices. (Rents, fares and charges for medicines did exist, but they were relatively insignificant.) Because of this, and because of the fact that producer goods were rationed, Soviet money was not a universal equivalent and hence some would argue was not 'really' money at all. In addition, the role of the rouble as a store of value was undermined by inflation and periodic (partial) confiscations (such as the 1947 monetary reform). However, Soviet money did perform some important functions.

Prior to the archival revolution it was well known that one of the functions of Soviet money was to check/audit the behaviour of Soviet enterprises ('control by the rouble'). A striking finding of the archival revolution is that, despite the stress on physical indicators, on fulfilling the plan for specific items of production, money was actually very important to Soviet enterprises. As Gregory and Harrison (2005: 745) have noted, 'A major surprise from the archives is that money played a much larger role than we expected.' This was so at all levels. 'The Politburo gave much more time and energy to how roubles would be spent than to consideration of the 'control figures' for output in physical units.' Similarly, enterprise plans were in roubles. Furthermore, extra roubles were very useful for enterprise management. They enabled enterprise management to buy additional goods intended for the retail market. Harrison and Kim (2006: 19) have argued that this siphoning off of goods intended for consumers meant that extra cash

⁷ For these figures see Davis (2002).

was useful to relieve effort. It enabled enterprise managers ‘to fulfill the plan with less effort, less hidden inflation, and more true real output than would have been possible otherwise’.

It is often argued that money derives its value from the fact that states accept it in payment of taxes. In the USSR, direct taxes on the urban population were not very significant. The state derived its revenue mainly from indirect taxes on goods sold in large volumes and with low price elasticities of demand, such as bread and vodka.⁸ For the urban population, Soviet money derived its value from its role as a medium of exchange for the consumer goods sold in state retail trade (other than those sold in foreign currency shops) and at the free market in food products (the so-called collective farm market).

A crucial macroeconomic relationship was the division of the national income between consumption and investment. For many economists, a surprise of the archival revolution is that it has confirmed in this context the Marxist view (expressed in pre-archival days in journals such as *Critique*) that the relationship between the authorities and the workers was of crucial importance for the former. The reason for this is that the authorities in the peacetime Stalinist years strove to maximize accumulation, but had to take account of the fact that worker effort depended on the supply of consumer goods and worker ideas of what was fair. Hence (Gregory, 2004: 94), ‘Consumption... was one of the most frequent items on the Politburo’s agenda, and in Stalin’s words, the “provisioning of the workers” had become one of “the most contested issues” facing the Politburo. He called the Ministry of Trade “the most complicated Ministry”. The Politburo named itself as the highest trading organization, deciding not only general trade policy but also trade plans, prices, assortment, and even openings of new stores. More Politburo time was probably spent on consumption (especially emergency sessions) than on any other issue.’ In order to squeeze more effort out of the workers the authorities used not only consumer goods but also rate busting and coercion.

6. The institutional framework

In addition to institutions familiar from capitalist economies, such as money and prices, the Soviet Union was also characterized by system-specific institutions

⁸ One of the interesting findings of the archival revolution was Hessler’s data on the pivotal role of vodka sales in absorbing wages in an economic environment in which rents were very low, food was often scarce, and manufactured consumer goods a low priority sector. These data are in Hessler (2004), Appendix C, which is available at <http://darkwing.uoregon.edu/~hessler>. It seems that in 1928–32 sales of vodka in nominal roubles rose almost sixfold, reaching almost 21% of socialist sector trade. Vodka also played a major role in socialist sector retail trade during World War II, reaching almost 38% in 1945. Like Tsarist Russia, the USSR had a ‘drunken budget’, with major social and public health consequences. The importance of vodka to the Soviet economy was known in pre-archival times (e.g. Carr 1946: 38 – who makes a sensible comparison with tobacco and beer in the UK), but the data uncovered by Hessler is new.

(such as Gosplan), institutional arrangements (such as the party/Soviet duality), and institutional processes (such as ‘economic reform’).

System-specific institutions

One of the system-specific institutions was Gosplan, the State Planning Commission. In many pre-archival textbooks, Gosplan played a major role both in working out and in implementing operational plans. The archival revolution has shown that, at any rate in the Stalin era, its actual role was more complex. In Gregory and Harrison (2005) it is argued that the primary task of Gosplan in the Stalin era was not to plan the economy, but to report honestly to Stalin what was going on in the economy. This was Stalin’s solution to a principal agent problem in which all the agents had an incentive to report rosy results to the boss. Gregory and Harrison’s argument was a useful counterblow to the pre-archival view that Gosplan was a bureaucratic monster always interfering in the activities of People’s Commissariats (ministries) and enterprises. It correctly stresses that in the Stalin era Gosplan was not primarily a line management organization but was primarily an advisory one. However, it may have gone too far in the direction of removing Gosplan from the management of the economy. When the war broke out Stalin instructed Gosplan to work out an emergency economic plan for the fourth quarter of 1941 and for 1942 (Cherepanov, 2006: 160).⁹ This was probably not so much a question of reporting the true state of affairs, but of allocating production tasks for weapons to particular factories. Nevertheless, it seems that once the State Defence Committee (the USSR’s ‘War Cabinet’) got into its stride,¹⁰ the Gregory and Harrison interpretation becomes more relevant. A.I. Shakhurin, the People’s Commissar (i.e. Minister) for the Aviation Industry in 1940–46, in a 1974 interview described the wartime People’s Commissariat for the Aviation Industry as implementing production plans received from the State Defence Committee, not from Gosplan (Kumanev, 2005: 210). This suggests that during the war, once it was established and running, the State Defence Committee, rather than Gosplan, was the chief organization managing military production. Cherepanov’s (2006: 235–251) detailed study of the activities of the State Defence Committee confirms this. The State Defence Committee had the advantage over Gosplan that, as the supreme political authority, it could not only give orders for output but also orders to establish the ‘guilt’ for production problems and send the ‘guilty’ for trial.

Another system-specific institution was the collective farm. The role of terror in enforcing collectivization was well known in pre-archival days. In his pre-archival study, Dobb (1966: 228) correctly pointed out that during collectivization ‘rigorous police measures were taken, including the large-scale deportation of *kulaks* from the areas of keenest resistance’. What the archives have added

⁹ It was approved on 16 August 1941.

¹⁰ It was created on 30 June 1941.

are details about the number of victims, where they were sent to, and what happened to them on the way and when they arrived. Collectivization required the deportation, arrest, shooting, and incarceration in prisons and camps, of about four million peasants. There was some support for collectivization in the villages, in particular among the rural poor. In the late 1920s poor peasants who revealed to the authorities where their neighbours were hiding grain were entitled to a quarter of it at low prices or as a long-term loan. Furthermore, the deportation of the 'kulaks' created possibilities for the redistribution of their property among the poor peasants. In addition, the deportation of their better-off neighbours assuaged the jealousy of many poor peasants. Nevertheless, it was primarily a policy imposed by force. The fact that the collective farms were successful in providing the authorities with an increased supply of basic wage goods was known in the pre-archival era and has been confirmed by archival research. An important new finding is why, in 1932, the Stalinist leadership permitted the introduction of the 'collective farm market' which remained a central institution of the Soviet economy despite its 'non-socialist' character. The reason (Davies, 1996: 187–190; Rossman, 2002) seems to have been the labour unrest in the Soviet textile towns in 1932 which the leadership needed to appease. Markets where food could be bought freely were considered an important contribution to labour discipline – both in the factories and in the fields.

Yet another system-specific institution was the position of the leadership in the economy and society. This was distinctive and often not well-understood in the pre-archival literature. Pre-archival textbooks and journal articles often imagined that the role of the top leadership was to lay down some broad goals. Given these goals, planners worked out the most efficient way of achieving them, and enterprises maximized output subject to the availability of inputs. The archival revolution has shown that this was a misunderstanding of the role of the top leadership. The top leadership was very much a hands-on leadership which continually intervened at all levels. For example, the leadership changed Gosplan's plan for the allocation of cars for the first quarter of 1933 at the beginning of the quarter and, when output prospects improved, changed the plan again later on during the quarter (Lazarev and Gregory, 2002: 334–335). Similarly (Davies *et al.*, 2003, Russian edition: 205), in July 1932, to strengthen the Soviet bargaining position with a New York bank from which the USSR was trying to obtain a loan, Stalin gave instructions that an official press statement should be made that the 1932 harvest was better than the 1931 harvest. (According to the estimates by Davies and Wheatcroft it was 6% worse.) In July 1932 (Davies *et al.*, 2003: 164) Stalin called for a reduction in investment, even in the military sector, in the interests of financial stabilization. The continued interventions in the economy of the leadership were not irrational excrescences to be removed by 'optimal planning',¹¹ but necessary consequences of the need to

11 The mathematisation of planning, much discussed in the 1960s and 1970s (Ellman, 1973).

respond to changing circumstances in the partial absence of traditional economic feedback devices.

The top leadership had to take decisions on a huge range of topics. These covered not just foreign affairs, macro-economic management, and major political issues, but also ranged from the composition of the management of the Union of Writers (Davies *et al.*, 2003 Russian edition: 462–466) to the honour to be bestowed on the world chess champion (Davies *et al.*, 2003, Russian edition: 660). Even (Davies *et al.*, 2003, Russian edition: 689) a trip by eight air force officers to England and France required Stalin's personal approval!

Some of the decisions ostensibly made by the top leadership were actually made at lower levels and presented to the top leadership for an approving signature. However, on many issues the leadership itself took the initiative, on issues varying from the ferocious decree of 7 August 1932 about the 'theft' of state and collective farm property, to the precise details of the indictment in the notorious (1936–38) Moscow trials.

Because of the huge volume of decisions made, and the resulting limited time to analyse the issues concerned, many decisions made were far from optimal and many issues requiring attention did not receive it.

A very important aspect of the role of the top leadership which the archival revolution has clarified is the role of Stalin personally. It turns out that this varied over time and was more complex than imagined in models of totalitarianism. We now know (Rees, 2004; Wheatcroft, 2004) that Stalin's position gradually evolved from the time he became the party's General Secretary (1922) to the time of his death (1953). The leader of an oligarchic group in the 1920s, from 1932 Stalin was unchallenged within the leadership,¹² and from 1937 to the end of his life he was a tyrant with powers of life and death over his closest 'colleagues'. The terror of 1937–38 was launched, supervised and ended by decisions of Stalin personally. We now have the texts not only of the proscription lists signed by Stalin in 1937–38 but also of his telegrams then agreeing to increases in the plan targets for killings in various regions of the USSR. We also have records of Stalin's remarks in informal meetings of the top leadership. These are often very revealing. For example, at the height of the terror of 1937 Stalin proposed the following toast, which strikingly reveals the combination of patriotism and paranoia that characterized Stalinism then (Dimitrov, 2003: 65).

The Russian tsars...did one thing that was very good – they amassed an enormous state, all the way to Kamchatka. We have inherited that

¹² However, the archival revolution has shown (Khlevniuk, 1995: 130–134) that in 1936–37 Ordzhonikidze was sceptical about Stalin's idea that there was widespread wrecking and sabotage by officials in Ordzhonikidze's own Commissariat. Ordzhonikidze actually gathered evidence to demonstrate that he was right and Stalin wrong. If he had used this at a meeting of the Politburo or Central Committee, this would have amounted to a challenge to Stalin. Instead of doing this, being unable to reconcile his loyalty to Stalin with intensified terror against innocent officials, he committed suicide.

state... whoever seeks the separation of any of its parts or nationalities – that man is an enemy, a sworn enemy of the state and of the peoples of the USSR. And we will destroy each and every such enemy, even if he was an Old Bolshevik; we will destroy all his kin, his family. We will mercilessly destroy anyone who, by his deeds or his thoughts – yes, his thoughts – threatens the unity of the socialist state. To the complete destruction of all enemies, themselves and their kin!¹³

However, although undoubtedly the boss, and an increasingly despotic and arbitrary one, Stalin was not omnipotent. There were occasions when social groups, or senior officials, influenced decision-making, or tried to do so. The influence of labour unrest on the 1932 decision to allow the ‘collective farm market’, and more generally the importance of worker attitudes in constraining accumulation, was pointed out above. The Stakhanov campaign of the mid 1930s seems to have been introduced by another member of the leadership (Ordzhonikidze) and not Stalin (Davies, Ilič, and Khlevnyuk, 2004). The 30 June 1941 decision to create the GKO (the State Defence Committee which formally acted as the USSR’s ‘war cabinet’ during the Soviet–German war) seems to have been an initiative of Beriia, Molotov and others, which a surprised Stalin accepted (Watson, 2005: 191). Even in the field of repression policy, there were other actors besides Stalin. The 1937–38 terror against Latvians in the USSR seems to have been an initiative of an NKVD officer and not Stalin (Khaustov, Naumov, and Plotnikova, 2004: 662). The third group of intended victims (‘other anti-Soviet elements’) of the notorious NKVD order 00447, the order for the deadliest of the ‘mass operations’ of 1937–38, may have been included as a result of the response of the localities to an earlier initiative from the centre which aimed at two other groups, ‘former kulaks’ and ‘criminals’.¹⁴ The final number of victims of the repression of 1937–38 was much larger than Stalin’s initial plans, which were greatly overfulfilled. This was partly because of the way the local authorities responded to the repression targets they received and partly because of the encouragement Stalin and Ezhov gave to plan overfulfillment by the officers in the state security service at national and local levels.

An example of how Stalin’s scenario could be disturbed, is provided by the June (1937) Plenum of the Central Committee, which launched the mass terror of 1937–38. At it, G. Kaminskii, the People’s Commissar for Health, said something that was not in Stalin’s script.¹⁵ However, this disturbance did not prevent Stalin’s policies being approved and did lead to Kaminskii’s immediate arrest.

13 This is a diary entry written after the event and not a stenographic record. For two other records of this toast see Nevezhin (2003: 150–166).

14 I owe this idea to Rolf Binner, who is writing a paper arguing this point.

15 The most reliable evidence for this is the letter of Vareikis to Stalin of 27 June 1937 (Khaustov, Naumov, and Plotnikova, 2004: 231). According to Khrushchev (who was present at the June 1937 meeting) speaking at the July (1953) Plenum and also in his memoirs, Kaminskii’s fatal move was to

He was shot in February 1938. On the other hand, it seems (Watson, 2005: 180) that in March 1940 at a Central Committee meeting attended by both Stalin and Molotov (the new Commissar for Foreign Affairs), the former Commissar for Foreign Affairs (Litvinov) criticized the foreign policy pursued since his dismissal. Despite this, Litvinov was still alive fifteen months later when the Nazis attacked and was appointed to the important post of ambassador to the USA in 1941.¹⁶ In addition, in June 1946 at a meeting of the Supreme Military Council a number of senior military leaders spoke out in defence of Zhukov after he was attacked by Stalin's confidants. As the US historian and Stalin biographer Kuromiya (2005: 176) has correctly pointed out, 'It was a remarkable change from 1937 and Stalin had to accept the change.' Moreover, at the end of his life (from 1945 onwards) Stalin took extended holidays and (Gorlizki and Khlevnyuk, 2004: 105) 'while Stalin was away, the [leaders remaining in Moscow]... operated as a genuinely collective agency: questions were properly debated and authentic fact-finding commissions were regularly set up for supplementary investigation of contentious issues'. This began to approximate to 'the traditional patterns of behavior that characterized Politburo meetings prior to the mid-1930s, before Stalin had entrenched his position as a dictator'. Furthermore, Stalin was dependent on the information he received, and was unable to eliminate patron-client groups.

An interesting and unfortunately topical feature of Stalin's post-war advice to his east European followers concerns the national question. He recommended the exchange of populations so as to create ethnically homogenous states and eliminate irredentism. For example, speaking with a Hungarian delegation in April 1946 about the position of the Hungarians in Slovakia, he suggested that they move to Hungary (*Vostochnaya*, 1997, 1998: vol. 1, 414). He said that the postwar exchange of Poles (living in what became part of the USSR) for Ukrainians and Belorussians (living in what became part of Poland) was a good example of how to solve national minority questions (*ibid.*: 418).

We can see clearly from the archives that Stalin was a multi-faceted figure who influenced many walks of life. Stalin's role as a patron of Soviet cinema has been well analysed by Sarah Davies (2005). She concludes that:

Stalin's influence on the development of Soviet cinema was decisive in many respects – his support for the principle that films should be entertaining as well as ideologically sound, and his encouragement of the genre of comedy; his advocacy of material support for the film industry, and his efforts to raise

criticize Beriya, who had Stalin's confidence. See Lavrentii (1999: 91) and Khrushchev (1999: 132, 153, 171).

¹⁶ However, the leadership did not trust him and he was excluded from the Molotov-Roosevelt meetings in Washington in 1942. According to Chuev (1991: 97), in conversation decades later, Molotov stated that, 'Only by chance did Litvinov remain alive.' (This probably means that the leadership considered arresting him in 1939 or 1940 after he was removed from his position as People's Commissar for Foreign Affairs but thought better of it.)

the status of cinema; his active criticism and reworking of films at all stages of production... Influential though he was, Stalin was not the only important factor shaping Soviet cinema. Mass taste, Soviet filmmaking traditions, technological changes, international influences (especially Hollywood), all played a role. So, too, did other individuals.

Like a Renaissance prince patronizing the arts, Stalin not only assured material support for the making of Soviet films, but also influenced their content.

However, Stalin's patronage of the cinema had stifling consequences in the late 1940s and early 1950s. By the end of his life (Davies, S., 2005: 225) 'cinema's supreme patron had succeeded in virtually destroying what he had campaigned for in the mid-1930s: choice for the viewer and entertaining films on contemporary topics. Far from "seeing himself in films", all that the viewer could now see (with a few exceptions) were a series of "great men", including, of course, the greatest of them all – Stalin himself.'

This degeneration was simply one result of a political system which permitted top leaders to cling on to power into their old age. The Soviet Communist Party, like monarchies and the Roman Catholic Church, chose its leaders for life. This delayed rejuvenation and caused promotion blockages. In this respect, the US Constitution, as amended, and the current Constitution of the Russian Federation, which confine a President to a maximum of eight years in office, are more sensible.

It was not only Stalin's personal position which varied over time and was more complex than imagined in models of totalitarianism. The same applies to the position of the party in Soviet society. On the basis of an in-depth analysis of party finance, Belova and Lazerev (2007: 450) argued that: 'The party was not a static entity but rather an endogenously evolving institution. The party can be probably better explained by a mixed model – a model in which the party is simultaneously a ruler, a dictator's agent, and an autonomous political club.'

Another key institution of the Soviet system was the state security organization. Prior to the archival revolution, most of what was known about the state security organs (Cheka–OGPU–NKVD–MVD–KGB) came from former victims or defectors. The archival revolution has confirmed their accounts of torture, inhumane detention conditions, and arbitrary power. The archival revolution, however, has clarified five other issues. First, it has provided data on the number of victims. Second, it has shown the crucial role of the state security organs in implementing Stalinist policies. Third, it has shown the great importance of the state security organs as a source of information for the leadership about the situation in the country. Fourth, it has exposed as a myth the notion that state terror (for example in 1937–38) was a result of the state security organs escaping from party control and themselves initiating an orgy of terror. Fifth, it has explained the role of the Gulag in creating Soviet and post-Soviet criminal culture.

The data on the number of victims of Stalinism are as follows (Getty, Rittersporn, and Zemskov, 1993; Ellman, 2002). The number of deportees (first peasant victims of collectivization and then victims of ethnic cleansing) was about six million. The number of those sentenced on political charges (this includes those involved in armed anti-Soviet resistance and also collaboration and treason during the second world war) was also about six million. Of these twelve million victims of repression, about 3–3.5 million seem to have died from shooting, while in detention, or while being deported or in deportation. This range includes about one million excess deaths in 1937–38 from the terror of those years. However, it excludes the victims of the famines of 1931–34 and 1946–47, although by appropriate policies many of them could have been saved, and there is reason to think – although this is controversial and much debated – that some of the former died as a result of a starvation policy (Ellman, 2007). The publication of the NKVD orders for the ‘mass operations’ of 1937–38 has shown clearly that the victims of the mass terror of 1937–38 were victims of a centrally planned quasi-military series of attacks on the population by terrorists who ruled a huge state. This is surprising from the standpoint of US historians of the USSR of the so-called revisionist school writing in the 1970s and 1980s such as Getty (1985). Other surprises from access to the archives are the large number of deaths in 1937–38, the fact that the Gulag reached its greatest extent at the end of Stalin’s life and not in the late 1930s (Davies, 2003: 6), and the fact that the number of prisoners who spent some time in the Gulag was much greater than the stock of prisoners at any one time. Substantial numbers of Gulag prisoners (especially ordinary criminals) were regularly released.

The role of the state security organs in implementing policy was discussed above in connection with the Soviet atom bomb project and can also be seen in the collectivization of agriculture. Although this had some support from the poor peasants, it met widespread resistance in the countryside, with numerous riots and attacks on officials and in some areas even armed uprisings. These were crushed by savage repression by the state security organs without which the policy could not have been implemented.

The role of the state security organs in informing the leadership is a new phenomenon which the archival revolution has uncovered. There has been published, for example, a multi-volume series of volumes containing the monthly reports by the state security organs to the top leadership about the situation in the country (*Sovershenno sekretno* 2001–). In a situation in which the media were censored and official bodies had an incentive to report distorted data about their sector in order to secure more resources, the leadership had a need for a source of accurate information. In this respect the state security organs had an important function. In some cases their role was positive. For example, it seems that in 1933 their reports (Davies and Wheatcroft, 2004: 206) ‘evidently played a major role in convincing sceptical authorities, including Stalin personally, that they were confronted with genuine famine’. However, in some respects it was

negative. The endless anti-Soviet plots and conversations which the state security organs reported may have generated more repression than would have occurred without them.¹⁷ The state security organs, just like all other organizations in the Soviet economy, were bureaucratic organizations seeking to prove their necessity and the value of their work.

The role of the state security organs in informing the leadership draws attention to the difficulty dictators have in assessing what is going on in their country. Having destroyed independent social organizations, established total media censorship, and created a socio-economic system in which organizations at all levels had an incentive to understate their possibilities and overstate their needs, getting accurate information became very difficult. In a striking retrospective justification of glasnost, Gorbachev (2006: 53) argued that it had been necessary to reduce the fog of uncertainty which surrounded the leadership's appreciation of the real situation in the country. 'An important aspect of glasnost was feedback from the population, who received the possibility of saying what they thought, which increasingly concerned things inconvenient for the leadership. Thanks to this, the initiators of perestroika received a real picture of the moods and wishes of the population, rather than information filtered and censored in various offices and committees.'

This fog of uncertainty created by the institutions of the USSR confirms the importance of Hayek's argument about the value of the market as a mechanism for gathering and utilizing information. It also confirms the classical arguments for free speech and a free media. Indeed it has been argued that one of the reasons for the final collapse of the USSR was the false picture the leadership had of the economic situation resulting from the misleading official economic statistics (Khanin, 2007). This made them over-confident about the situation and delayed necessary remedial measures until it was too late.

Prior to the archival revolution, it was often asserted in the USSR that during past terrorist episodes (such as 1937–38) the state security organs had 'escaped from party control'. The idea was that the blame for the millions of victims lay not with the party leadership but with the leaders and officers of the state security organs. We now know that this was entirely false. For example, archival documents show clearly that the terror 1937–38 was initiated, supervised and ended by Stalin personally. Furthermore, they also show that the myth about the state security organs escaping from party control was invented by Stalin himself.¹⁸

¹⁷ After the war, in informal conversation with other leaders, Stalin is said to have observed that (Zhdanov, 2004: 227 italics added) 'The war showed that there were not as many internal enemies in the country *as was reported to us* and as we thought. Many people suffered for nothing.' (Since this is hearsay, reported more than 50 years after the event, its accuracy is very uncertain. Possibly it was simply an attempt to transfer the blame for mass terror from its instigator to his subordinates.)

¹⁸ The decree of 17 November 1938 (signed by Stalin and Molotov), which ended the terror of 1937–38, stated (Khaustov *et al.*, 2004: 609), *inter alia*, that the 'defects' in the work of the NKVD had resulted

The Gulag, with its nationwide camps, huge intake of prisoners (the number of sentences to the Gulag in 1934–53 seems to have been approximately twenty million¹⁹), role of criminals in the camps, and regular release of criminals, generated its own criminal culture. The Soviet and post-Soviet phenomenon of the *vory v zakone* ('thieves-with-a-code-of-honour',²⁰ i.e. recognized authorities in the criminal world) was a creation of the Gulag – where they spent much of their lives (Varese, 2001: chapters 7 and 8). Their culture was marked by initiation rituals, hostility to Soviet power, anti-social behaviour, male chauvinism, and the power to enforce their own punishments – including the death sentence – throughout the USSR. Although sometimes referred to as the 'Soviet mafia' it had a specific social origin, in the prisons and camps of the Soviet state, which differed from that of the Sicilian mafia.

System-specific institutional arrangements

A specific Soviet institutional arrangement was the dual power of party and Soviet organs, the latter legally holding power, the former *de facto* exercising it. An interesting result of the archival revolution was to demonstrate that the relationship between the two was not constant but fluctuated over time. In the early 1930s the Politburo – the highest party body – was very active. It met frequently and took all key decisions. The party Central Committee also held regular meetings. However, in the years 1947–52 formal meetings of the party leadership hardly ever took place. There seems in those years to have been just two Politburo meetings and three Central Committee ones. Ultimate power was in the hands of Stalin personally, who held the top positions in both the party and Soviet systems, but much executive power was in the hands of the Sovmin Bureau, which consisted of the top figures in the government (Gorlizki and Khlevniuk, 2004: 54–58). It had taken over some of the functions previously exercised by the Politburo.

System-specific institutional processes

An important issue for the 'planned economies' was that of 'economic reform'. By this was understood institutional changes which would reduce the inefficiencies of the 'planned' economy and combine the benefits of 'plan' and 'market'. It used to be thought that economic reform was something which was first discussed in

from the fact that 'enemies of the people had attempted in all ways to separate the work of the NKVD and Procuracy from the party, to get away from party control and leadership'.

19 For this figure, and some details, see Ellman (2002: 1160–1161 and 1164) and Bezborodova, 2004: 33–39. The exact number depends partly on precisely which categories of detainees are included (the available statistics distinguish between 'camps', 'colonies', transit prisons, and various other categories). There is also a distinction between the number of sentences and the number of prisoners, since some people were sentenced more than once. Furthermore, it is known that the Gulag documents on which contemporary estimates are based are not entirely reliable.

20 This is the translation given by Varese (2001: 145).

Eastern Europe (notably in Poland and Hungary) in the 1950s, then discussed in the USSR in the first half of the 1960s, and then led to a series of reforms in Eastern Europe and the USSR beginning with Poland in 1956 (and prior to that in Yugoslavia), and carrying on with the USSR in 1965 and Hungary in 1968).

The archival revolution has shown that this picture is quite inadequate. Actually, economic reform goes back to the dawn of the ‘planned’ economy. Already in 1932 Ordzhonikidze (a Politburo member and at that time the top industrialist) tried to implement what was later called economic reform. Subsequently in the 1930s and 1940s significant economic reforms were discussed by senior banking and monetary officials (Davies, 2001). Furthermore, the party applied economic reform to itself before applying it to the national economy, a striking example of rulers practicing what they preach. After the monetary reform of 1947 and the resulting need to balance the budget, state subsidies to the party were cut and the party had to balance its income and expenditure.²¹ It gradually reduced the share of state subsidies in its income and increased that of membership contributions and publishing activities, eventually ending up with a significant accumulated surplus (Belova and Lazarev, 2007, 2008).²² Attempts to implement economic reform and talk about the need for it were not something resulting from destalinisation but had accompanied the administrative-command system from the beginning and had been applied to the party itself from 1948 onwards. Furthermore, the archival revolution has confirmed the pre-archival Kontorovich evaluation of economic reform. Kontorovich (1988) had argued that the Soviet economic reform of 1965, which seemed quite rational from a Western standpoint, was actually – under Soviet conditions – counterproductive. Analysing the 1932 Ordzhonikidze proposals, Davies (1996: 267) argued that they were ‘quite impracticable’ and ‘may have been entirely incompatible with Soviet economic objectives’.

The underlying reason why the attempt to graft market elements on to the command-administrative system was a failure can be understood from the standpoint of systems theory. Viable economic systems form an integrated whole, and it isn’t possible to select a mix of the most attractive elements from various systems. In the 1950s the idea arose in Hungarian economic circles that the traditional economic model formed an integrated economic mechanism with characteristic advantages and disadvantages, and that if it were desired to overcome the disadvantages what was required was an alternative economic mechanism (Kornai, 1959). Two decades later Kornai (1980b: 156–157) poured

21 See the speech by Krupin, the business manager (*upravyayushchii delami*) of the Central Committee, at the meeting of heads of party finance departments on 22 April 1948 (Archives of the Soviet Communist Party, Hoover Collection, fond 17, opis 76, delo 1124).

22 The annual surpluses were relative to Soviet accounting. For example, the costs of the party officials in the armed forces seem to have been borne by the Ministry of Defence, whereas the membership contributions paid by party members in the armed forces were party income. Similarly, the party’s publishing profits reflected, inter alia, the relatively low price of paper.

scorn on those who thought that economic system design was a matter of pick and mix. These people:

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

But that is a naïve, wishful day-dream. History does not provide such supermarkets in which we can make our choice as we like. Every real economic system constitutes an organic whole. They may contain good and bad features, and more or less in fixed proportions. The choice of system lies only among various 'package deals'. It is not possible to pick out from the different 'packages' the components we like and to exclude what we dislike.

7. The archival revolution and open questions

In the past, when everyone based themselves on published sources, there were lively debates about particular issues (such as Soviet growth rates, or the possibility of overcoming shortages by raising prices). The new sources have added to knowledge, but these new sources too are open to various interpretations. Debates continue.

One example concerns the Soviet trade sector. In Osokina's (1998, 2001) work, the main emphasis is on the repression of consumption and the use of discriminatory rationing. Hessler (2004), on the other hand, drew attention to periods such as 1923–27 and 1934–38 when trade flourished, consumption was encouraged, and when (in the mid 1930s) Macy's of New York was treated as an example of the standards 'cultured' Soviet trade should aspire to. For Hessler, rationing was only a temporary response to a crisis rather than a desired state of affairs.

Another example concerns the interpretation of the 1931–34 Soviet famine. This was a major event that seems to have caused 5.5–6 million excess deaths, i.e. roughly the same number as that of Holocaust victims. In an important monograph Davies and Wheatcroft (2004) analysed the economic history of Soviet agriculture in 1931–33. They argued that the famine was a result of a combination of structural and conjunctural factors. The main structural factor was the decision to industrialize quickly. This led to a massive state demand for grain to feed the rapidly growing urban population, the armed forces and for export (the first five year plan was based on the export of Soviet

primary products for imports of German and US capital goods). The main conjunctural factors were two bad harvests. For these primarily the weather – and not the authorities – were responsible. The situation was worsened by the attempt at the rapid and complete socialization of livestock without adequate provision of care for the socialized livestock, and the stress on sown area at the expense of crop rotation. Davies and Wheatcroft decisively rejected the idea that any of the excess deaths were consciously caused by the authorities. On the contrary, the leadership reduced procurements and carried out relief measures as the seriousness of the situation became known. However, despite this solid monograph by two outstanding specialists, the present author has argued (Ellman, 2005, 2007) that some of the excess deaths can be characterized as mass murder and, on a liberal interpretation of the relevant legal texts, as genocide. This debate is ongoing and shows that the new sources, on their own, do not provide answers to all questions.

Yet another example concerns Stalin's intentions in early 1953. Prior to the archival revolution it was conventional to argue that the replacement of the Politburo by the Presidium at the nineteenth party congress (1952), Stalin's attack on Molotov and Mikoyan at the October (1952) Central Committee plenum, the much greater size of the Presidium 'elected' at that meeting compared to the old Politburo, and the announcement of the 'doctors' plot' in January 1953 were heralds of a new 1937, that is of a new wave of mass terror against the population combined with a purge in the leadership, similar to what had happened in 1937–38. Study of the newly available material led the cautious historians Gorlizki and Khlevniuk (2004) basically to endorse this position. While reluctant to indulge in speculations which exceed the available documentary evidence, they conclude their chapter on Stalin's activities in 1952–53 with the remark that by the end of his life 'Stalin had nudged the apparatus of repression and ideological discipline into one final offensive'. On the other hand, the Russian economist Khanin (2005) has suggested that at the end of his life Stalin was about to launch a liberalization program. Given the absence of definitive documentary evidence, and the role that evaluations of Stalinism have come to play in debates about the future of Russia, this particular discussion is not likely to end soon.

The archival revolution is not yet over. A number of scholars in various countries are working in this area and further interesting results can be expected.

Conclusion

The archival revolution has greatly enriched our knowledge of Stalinism. As far as the basic question of the rationality of the 'planned' economy is concerned, it has largely confirmed the picture presented on the basis of published sources by critical economists (notably Clark, Bergson, Zaleski, Kornai, Nove, and Birman). With respect to microeconomics it has taught us the importance of price-making for Soviet enterprises and given us additional information about

the military supply representatives. It has also taught us that technical progress created quasi-markets in some areas. In mesoeconomics it has provided us with information both about the industrial commissariats and about a variety of sectors. In particular, it has provided a mass of information about the defence sector and the crucial role it played in Soviet economic history. We now have a much better picture of the Soviet economy in World War II. In macroeconomics we are better informed about the role of money and the importance of worker effort and the factors the authorities thought influenced it.

The Soviet economy had a number of distinctive institutions. Of these, the State Planning Commission (Gosplan) seems to have played a role during the Stalin era unlike that imagined by pre-archival texts. The dictator played a key role in many fields, not only in formulating the main lines of economic policy, but also in areas ranging from terror to the cinema. To provide reliable information and implement unpopular policies the authorities used the state security organs. These did not ‘escape from party control’. They faithfully implemented party policy. Their importance, along with that of industrial espionage, illustrates the validity of Gerschenkron’s argument about the need and ability of latecomers to industrialization to develop new institutions to deal with the absence of the institutions of the earlier industrialisers.

The Soviet economy also had system-specific institutional arrangements such as the party-state duality. The way these worked was not constant but evolved over time. There were also system-specific institutional processes, such as economic reform. The archival revolution has greatly enlarged our knowledge of the origins and early history of this.

Although we now have much more evidence than before, there are still lively debates about the interpretation of particular issues. Furthermore, the revolution is ongoing and further results can be expected.

References

- Barber, J. and M. Harrison (eds) (2000), *The Soviet Defence-Industry Complex from Stalin to Khrushchev*, Basingstoke: Macmillan.
- Bauer, T. (1978), ‘Investment cycles in planned economies’, *Acta Oeconomica*, 21(3): 243–260.
- Belova, E. and P. Gregory (2002), ‘Dictator, loyal and opportunistic agents: the Soviet archives on creating the Soviet economic system’, *Public Choice*, 113: 265–286.
- Belova, E. and V. Lazarev (2007), ‘Why party and how much? The Soviet State and the party finance’, *Public Choice*, 130: 437–456.
- Belova, E. and V. Lazarev (2008), ‘Secret public finance: revenues and expenditures of the Soviet Communist Party, 1938–1965’ (forthcoming).
- Bergson, A. (1953), *Soviet National Income and Product in 1937*, New York: Columbia University Press.
- Bergson, A. (1961), *The Real National Income of Soviet Russia since 1928*, Cambridge, MA: Harvard University Press.

- Bergson, A. (1964), *The Economics of Soviet Planning*, New Haven: Yale University Press.
- Berliner, J. (1957), *Factory and Manager in the USSR*, Cambridge, MA: Harvard University Press.
- Bezborodova, I. V. (2004). 'Vvedenie', in A.B. Bezborodov and V.M. Khrustalev (eds), *Istoriya stalinskogo Gulaga*, vol. 4, Moscow: ROSSPEN.
- Birman, I. (1978), 'From the achieved level', *Soviet Studies*, 30(2): 153–172.
- Carr, E. H. (1946), *The Soviet Impact on the Western World*, London: Macmillan.
- Cherepanov, V. (2006), *Vlast' i voina*, Moscow: Izvestiya.
- Chuev, F. (1991), *Sto sorok besed c Molotovym: Iz dnevnika F.Chueva*, Moscow: TERRA. There is an English translation, Chuev, F. (1993), *Molotov Remembers*, Chicago: Dee.
- Clark, C. (1939), *A Critique of Russian Statistics*, London: Macmillan.
- Conroy, M.S. (2006), *The Soviet pharmaceutical business during its first two decades (1917–1937)*, New York: Lang.
- Davies, R.W. (1993), 'Soviet military expenditures and the armaments industry, 1929–33: a reexamination', *Europe–Asia Studies*, 45(4): 577–608.
- Davies, R.W. (1996), *Crisis and Progress in the Soviet Economy, 1931–33*, Basingstoke: Macmillan
- Davies, R. W. (2001), 'Making economic policy', in P. Gregory (ed.), *Behind the Façade of Stalin's Command Economy*, Stanford: Hoover Institution Press.
- Davies, R. W. (2003), 'The archives and the Stalinist economy', PERSA Working Paper no. 27 (<http://www.warwick.ac.uk/go/persa>).
- Davies, R. W. and M. Harrison (2000), 'Defence spending and defence industry in the 1930s', in Barber and Harrison (2000).
- Davies, R. W., M. Ilić, and O. Khlevnyuk (2004), 'The Politburo and economic policy - making', in E. A. Rees (ed.), *The Nature of Stalin's Dictatorship*, Basingstoke: Palgrave Macmillan.
- Davies, R. W., O. Khlevniuk, E. Rees, P. Kosheleva, and L. Rogovaya (eds) (2003), *The Stalin–Kaganovich Correspondence 1931–36*, New Haven: Yale University Press. This is an abridged translation of *Stalin i Kaganovich Perepiska, 1931–1936 gg.* Moscow: ROSSPEN, 2001.
- Davies, R. W. and S. Wheatcroft (2004), *The Years of Hunger: Soviet Agriculture, 1931–1933*, Basingstoke: Palgrave Macmillan.
- Davies, S. (2005), 'Stalin as patron of cinema', in S. Davies and J. Harris (eds), *Stalin. A New History*, Cambridge: Cambridge University Press.
- Davis, C. (2002), 'The defence sector in the economy of a declining superpower: Soviet Union and Russia, 1965–2001', *Defence and Peace Economics*, 13(3): 145–177.
- Dimitrov, G. (2003), *The Diary of Georgi Dimitrov*, New Haven: Yale University Press.
- Dobb, M. (1966), *Soviet Economic Development since 1917*, 6th edn. London: Routledge & Kegan Paul.
- Eidelman, M. (1992), 'Peresmotr dinamicheskikh ryadov osnovnykh makroekonomicheskikh pokazatelei', *Vestnik statistiki*, 4: 19–26.
- Eidelman, M. (1993), 'Pereschet dinamicheskikh ryadov produktsii stroitel'stva za 1961–1990 gg.', *Vestnik statistiki*, 7: 11–20.
- Ellman, M. (1973), *Planning Problems in the USSR: The Contribution of Mathematical Methods to Their Solution 1960–1971*, Cambridge: Cambridge University Press.
- Ellman, M. (2002), 'Soviet repression statistics: some comments', *Europe–Asia Studies*, 54(7): 1151–1172.

- Ellman, M. (2005), 'The role of leadership perceptions and of intent in the Soviet famine of 1931–34', *Europe–Asia Studies*, 57(6): 823–841.
- Ellman, M. (2007), 'Stalin and the Soviet famine of 1932–33 revisited', *Europe—Asia Studies*, 59(4): 661–691.
- Fitzpatrick, S. (1970), *The Commissariat of Enlightenment*, Cambridge: Cambridge University Press.
- Gerschenkron, A. (1962), *Economic Backwardness in Historical Perspective*, Cambridge MA: Harvard University Press.
- Getty, J. (1985), *Origins of the Great Purges: The Soviet Communist Party Reconsidered, 1933–1938*, Cambridge: Cambridge University Press.
- Getty, J. A., G. T. Rittersporn, and V.N. Zemskov (1993). 'Victims of the Soviet penal system in the pre-war years: a first approach on the basis of archival evidence', *American Historical Review*, 98(4): 1017–1049.
- Gorbachev, M. (2006), *Ponyat' perestroiku ...* Moscow: Al'pina Biznes Buks.
- Gorlizki, Y. and O. Khlevniuk (2004), *Cold Peace: Stalin and the Soviet Ruling Circle, 1945–1953*, Oxford: Oxford University Press.
- Gregory, P. (2004), *The Political Economy of Stalinism*, Cambridge: Cambridge University Press.
- Gregory, P. and M. Harrison M. (2005), 'Allocation under dictatorship: research in Stalin's archives', *Journal of Economic Literature*, 43(3): 721–761.
- Gregory, P. and A. Markevich (2002), 'Creating Soviet industry: the house that Stalin built', *Slavic Review*, 61(4): 786–814.
- Gregory, P. and A. Tikhonov (2000), 'Central planning and unintended consequences: Creating the Soviet financial system, 1930–1939', *The Journal of Economic History*, 60(4): 1017–1040.
- Grossman, G. (1963), 'Notes for a theory of the command economy', *Soviet Studies*, 15(2): 101–123.
- Harrison, M. (1996), *Accounting for War*, Cambridge: Cambridge University Press.
- Harrison, M. (1998), 'Prices, planners, and producers: an agency problem in Soviet industry, 1928–1950', *Journal of Economic History*, 58(4):1032–1062.
- Harrison, M. (2000), 'Soviet industrial production, 1928 to 1955: real growth and hidden inflation', *Journal of Comparative Economics*, 28(1): 134–155.
- Harrison, M. (2005), 'A Soviet quasi-market for inventions: jet propulsion, 1932–1946', *Research in Economic History*, 23(1): 1–59.
- Harrison, M. and B.-Y. Kim (2006), 'Plans, prices and corruption: the Soviet firm under partial centralization', *The Journal of Economic History*, 66(1): 1–41.
- Harrison, M. and N. Simonov (2000), 'Voenpriemka: prices, costs, and quality assurance in the interwar defence industry', in Barber and Harrison (2000).
- Hayek, F. von (ed.) (1935), *Collectivist Economic Planning*, London: Routledge.
- Hayek, F. von (1937), 'Economics and knowledge', *Economica*, 4(3): 33–54.
- Hayek, F. von (1945), 'The use of knowledge in society', *American Economic Review*, 35(4): 519–530.
- Hessler, J. (2004), *A Social History of Soviet Trade*, Princeton, NJ: Princeton University Press.
- Igolkin, A. (2004), 'Otechestvennaya neftyanaya politika v pervoi treti XX v.', in D. Platonov (comp.), *Istoriko-ekonomicheskii al'manakh*, vol.1, Moscow: Akademicheskii Proekt.
- Igolkin, A. (2005), 'Osobennosti razvitiya neftyanoi promyshlennosti SSSR v gody pervykh pyatletok (1928–1940 gg.)', in V. Alekperov (ed.), *Neft' strany Sovetov*, Moscow: Drevlekhranilishche.

- Ken, O. (2002), *Mobilizatsionnoe planirovanie i politicheskie resheniya*, St.Petersburg: Evropeiskii universiteit.
- Khanin, G. I. (2003), *Ekonomicheskaya istoriya Rossii v noveishee vremya*, vol.1, Novosibirsk: Novosibirsk State Technical University.
- Khanin, G. I. (2005), “‘Ottepel’ “i ‘perestroika’ nachalis” pri Staline?”, *EKO*, 9: 70–100.
- Khanin, G. I. (2007), *Ekonomicheskaya istoriya Rossii v noveishee vremya*, vols. 1 and 2, Novosibirsk: Novosibirsk State Technical University.
- Khaustov, V. N., V. P. Naumov, and N.S. Plotnikova (2004), *Lubyanka. Stalin i Glavnoe upravlenie gosbezopasnosti NKVD 1937–1938*, Moscow: MFD.
- Khlevniuk, O. (1995), *In Stalin’s Shadow*, Armonk, NY: M.E. Sharpe.
- Khlevniuk, O. (2001), ‘Stalinism and the Stalin period after the “archival revolution”’, *Kritika*, 2(2): 319–327.
- Khrushchev, N. S. (1999), *Vospominaniya*, vol. 2, Moscow: Moskovskie novosti.
- Kim, B.-Y. (2002), ‘Causes of repressed inflation in the Soviet consumer market: retail price subsidies, the siphoning effect, and the budget deficit’, *Economic History Review*, 55(1): 105–127.
- Kontorovich, V. (1988), ‘Lessons of the 1965 economic reform’, *Soviet Studies*, 40(2): 308–316.
- Kornai, J. (1959), *Overcentralization in Economic Administration*, Oxford: Oxford University Press.
- Kornai, J. (1980a), *Economics of Shortage*, Amsterdam: North-Holland.
- Kornai, J. (1980b), ‘The dilemmas of a socialist economy: the Hungarian experience’, *Cambridge Journal of Economics*, 4(2): 147–157.
- Kumanev, G. (2005), *Govoryat stalinskie narkomy*, Smolensk: Rusich.
- Kuromiya, H. (2005), *Stalin*, Harlow: Pearson.
- Lavrentii (1999), *Lavrentii Beriia, 1953: Stenogramma iyul’skogo plenuma TsK KPSS i drugie dokumenty*, Moscow: Mezhdunarodnyi fond ‘Demokrakiya’.
- Lazarev, P. and P. Gregory (2002), ‘The wheels of a command economy: allocating Soviet vehicles’, *Economic History Review*, 55(2): 324–348.
- Lazarev, V. and P. Gregory (2003), ‘Commissars and cars: a case study in the political economy of dictatorship’, *Journal of Comparative Economics*, 31(1): 1–19.
- Litvin, A. and J. Keep (2005), *Stalinism: Russian and Western Views at the Turn of the Millennium*, London: Routledge.
- Markevich, A. (2004), ‘Byla li sovetskaya ekonomika planovoi? Planirovanie v narkomatakh v 1930–e gg.’, in *Ekonomicheskaya istoriya: Ezhegodnik, 2003*, Moscow: ROSSPEN.
- Markevich, A. and M. Harrison (2006), ‘Quality, experience and monopoly: the Soviet market for weapons under Stalin’, *Economic History Review*, 59(1): 113–142.
- Nelson, R. and S. Winter (1982), *An Evolutionary Theory of Economic Change*, Cambridge, MA: Harvard University Press.
- Nevezhin, V. A. (2003), *Zastol’nye rechi Stalina*, Moscow–St.Petersburg: AIRO–XX.
- Nove, A. (1958), ‘The problem of success indicators in Soviet industry’, *Economica*, 25(97): 1–13.
- Nove, A. (1968), *The Soviet Economy*, 3rd edn, London: Allen & Unwin.
- Nove, A. (1969, 1989, 1992), *An Economic History of the USSR*, 1st edn, 2nd edn, and 3rd edn, London: Penguin.
- Osokina, E. (1998), *Za fasadom ‘stalinskogo izobiliya’: Raspredelenie i rynek v snabzhenii naseleniya v gody industrializatsii. 1927–1941*, Moscow: ROSSPEN.

- Osokina, E. (2001), *Our Daily Bread: Socialist Distribution and the Art of Survival in Stalin's Russia, 1927–1941*, Armonk NY: M.E.Sharpe. This is a translation of Osokina (1998).
- Rees, E. (2004), 'Stalin as leader 1924–1937: from oligarch to dictator' and 'Stalin as leader, 1937–1953: from dictator to despot', both in E. Rees (ed.), *The Nature of Stalin's Dictatorship*, Basingstoke: Palgrave Macmillan.
- Rossmann, J. (2002), 'A workers' strike in Stalin's Russia', in L. Viola (ed.), *Contending with Stalinism*, Ithaca: Cornell University Press.
- Samuelson, L. (2000a), *Plans for Stalin's War Machine: Tukhachevskii and Military-Economic Planning, 1925–1941*, Basingstoke: Macmillan.
- Samuelson, L. (2000b), 'The Red Army and economic planning, 1925–40', in Barber and Harrison (2000).
- Simonov, N. (1996), *Voenno-promyshlennyi kompleks SSSR v 1920–1950-e gody*, Moscow: ROSSPEN.
- Sovershenno sekretno* (2001–), 'Sovershenno sekretno': *Lubyanka – Stalinu o polozhenii v strane*, Moscow: Institute of Russian History, vol. 1 2001, vol. 7 2004.
- Stalin, J. (1952, 1972), *Economic Problems of Socialism in the USSR*, 1972 edn, Peking: Foreign Languages Press.
- Starkov, B. (2000), 'The security organs and the defence industry complex', in Barber and Harrison (2000).
- Tretyakova, A. and I. Birman (1976), 'Input–output analysis in the USSR', *Soviet Studies*, 28(2): 157–186.
- Varese, F. (2001), *The Russian Mafia*, Oxford: Oxford University Press.
- Von Mises, L. (1935), 'Economic calculation in the socialist commonwealth', in Hayek (1935). This is a translation of an article first published in 1920.
- Vostochnaya* (1997, 1998), *Vostochnaya evropa v dokumentykh rossiskikh arkhivov 1944–1953*, vols. 1 and 2, Moscow-Novosibirsk: Sibirskii Khronograf.
- Watson, D. (2005), *Molotov: A biography*, Basingstoke: Palgrave Macmillan.
- Wheatcroft, S. (2004), 'From Team-Stalin to degenerate tyranny', in E. A. Rees (ed.), *The Nature of Stalin's Dictatorship*, Basingstoke: Palgrave Macmillan.
- Zaleski, E. (1980), *Stalinist Planning for Economic Growth, 1933–55*, Chapel Hill, NC: University of North Carolina Press.
- Zhdanov, Yu. A. (2004), *Vzglyad v proshloe*, Rostov: Feniks.