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Soviet Planning in Theory and Practice. From Marxist Economics to the Command System

Il piano sovietico in teoria e in pratica.
Dall'economia marxista all'economia di comando

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A B S T R A C T

The centrally-planned Soviet command economy was one of the twentieth century's most radical and complex economic, political and social experiments. Its establishment did not coincide with the onset of Soviet power across the former Russian Empire in 1917-1918, but instead resulted from fifteen years of shifts, readjustments and breaks, and through experiments with both quasi-socialist market economics and centralised administrative command practices. The present article surveys the conflictual relationship between Soviet planning and Marxism in this period. It demonstrates how the Stalinist command economy contradicted much of the theory and practice that the Bolsheviks themselves had thought ought to characterise the new economic system.

PAROLE CHIAVE: Soviet Union; Planning; Marxism; Command Economy; Stalinism.

L'economia pianificata di comando sovietica ha rappresentato uno dei più radicali e complessi esperimenti economici, politici e sociali del ventesimo secolo. La sua realizzazione però non è coincisa con l'affermarsi del potere sovietico nell'ex Impero Russo nel 1917-1918, ma è invece stata il risultato di quindici anni di cambiamenti, rotture e riassetamenti, concretizzati nell'esperimento di una quasi economia socialista di mercato e di pratiche di direzione amministrativa centralizzata. Il presente articolo indaga tale periodo specificamente riguardo alla relazione conflittuale tra pianificazione sovietica e marxismo. L'intento è mostrare come l'economia staliniana di comando abbia contraddetto, sia nella teoria che nella pratica, gli elementi caratterizzanti dell'iniziale progetto bolscevico di sistema economico.

KEYWORDS: Unione Sovietica; Pianificazione; Marxismo; Economia di comando; Stalinismo.



1. *Planning and the USSR*

The USSR was not the birthplace of economic planning. During World War I the German government had implemented the most comprehensive direction of production until that time, and unprecedented levels of state intervention replaced *laissez-faire* across much of the world¹.

The theoretical roots of economic planning pre-date «scientific socialism». The Fabians enumerated the «elaborate plans with specifications of a new social order» put forward by Plato, T. More, F.-N. Babeuf, C. Saint-Simon, C. Fourier and R. Owen, while US plan enthusiasts pointed to mechanical engineers C. Babbage and F.W. Taylor. In fact, even after K. Marx and F. Engels put forward their theories, revolutionary Marxists were far from the only proponents of planning. Notions of state-controlled economic management were key to the peaceful socialist transition proposed by the Fabians and E. Bernstein, but planning also remained dear to socialist policymakers like A. Thomas (the French wartime Minister of Armaments and later ILO Director) who had little sympathy for Bolshevism. Moreover, planning was still a priority for industrialists like W. Rathenau (the head of the German electrical-engineering company AEG) who had very little sympathy for socialism altogether².

As a result of the Great Depression, a growing host of Western international organisations began calling for «planning and ordering», while even Pope Pius XI, in his 1931 encyclical on reconstructing the social order, harshly criticised those who «in their abundant riches» had developed total disregard for the poor³. In the US, G. Swope and C.E. Beard put forward far-reaching proposals for the adoption of planning under democratic and capitalist governance. As much as they castigated Soviet realities, Beard's proposals still envisioned a «Five-Year Plan for America»⁴. *Laissez-faire's* long decline culminated in the New Deal, J.M. Keynes' *General Theory*, and the US National Resources

¹ A. RITSCHL, *The Pity of Peace: Germany's Economy at War, 1914-1918 and Beyond*, in S. BROADBERRY - M. HARRISON (eds), *The Economics of World War I*, Cambridge, CUP, 2005, pp. 41-76.

² G.B. SHAW (ed), *Fabian Essays in Socialism*, London, 1889, p. 31; W.O. HENDERSON, *Walther Rathenau: A Pioneer of the Planned Economy*, «The Economic History Review», 4, 1/1951, pp. 98-108.

³ G.A. JOHNSTON, *Social Economic Planning*, «International Labour Review», 25/1, 1932, pp. 58-61; CATHOLIC CHURCH, *Encyclical Letter (Quadragesimo Anno) of His Holiness Pius XI*, London, Catholic Truth Society, 1931, pp. 7-11.

⁴ C.E. BEARD, *A "Five-Year Plan" for America*, «Forum», 86, 1/1931; C.E. BEARD, *Plan for Stabilization of Industry by President of General Electric Co.*, «Monthly Labor Review», 33, 5/1931, pp. 45-53.



Planning Board, entrusted with urban planning, public works, water resources and research⁵.

Throughout the 1930s and 1940s, Western economists continued to reflect on the nature of planning and, agreeing that a single definition was nonsensical, they categorised different models, identifying as many as eight. They gave little consideration to the Soviet case. This was not due to lack of interest, but rather because, as P.W. Martin argued, any categorisation ought to start with a basic distinction between systems where the State directly controlled the economy and those where it collaborated with private initiative. Once this distinction was applied, the USSR alone fell in the first category⁶.

Although the significance of the shift towards State interventionism in the «sixty-odd countries» in the second category cannot be overstated, nor should the first category be overlooked. It was in the same period that the USSR had established what P.R. Gregory called the «most complex organisation ever constructed by mankind»⁷. The Soviet command economy brought planning to a level of complexity, centralisation and pervasiveness that made even the most radical interventionist policies in the West pale in comparison and, as R.E. Ericson pointed out, «provided a complete, coherent alternative to market systems»⁸. However, despite the stupendous complexity of this machine and the Soviet leadership's firm commitment to establishing a system capable of exactitude and of embodying the theoretical precepts of Marxism-Leninism, none of these objectives were ever achieved.

2. *The October Revolution and War Communism*

Marx left few blueprints on how to practically organise the economy under communism. In *Capital* he simply described the society of the «higher phase» as one of «freely associated men [...] consciously regulated by them in accordance with a settled plan». As for practical examples, the Bolsheviks could only look to the Paris Commune, whose only measure reminiscent of workers' control and nationalisation had been creating «worker cooperative societies» to

⁵ L.L. LORWIN, *The I.L.O. and World Economic Policy*, «International Labour Review», 33, 4/1936, pp. 458, 463.

⁶ K.W. KAPP, *Economic Regulation and Economic Planning*, «The American Economic Review», 29, 4/1939, pp. 760-761; J.E. ELLIOTT, *Economic Planning Reconsidered*, «The Quarterly Journal of Economics», 72, 1/1958, pp. 55, 61-62; P. W. MARTIN, *The Present Status of Economic Planning I*, «International Labour Review», 33, 5/1936, pp. 620-621; P. W. MARTIN, *The Present Status of Economic Planning II*, «International Labour Review», 35, 2/1937, pp. 180, 186.

⁷ P.R. GREGORY, *The Political Economy of Stalinism. Evidence from Soviet Secret Archives*, Cambridge, CUP, 2004, p. 4.

⁸ R.E. ERICSON, *Command Economy and its Legacy*, in M. ALEXEEV – S. WEBER (eds), *The Oxford Handbook of the Russian Economy*, New York, OUP, 2013, p. 2.

take over workshops deserted by their owners, who were however to be compensated⁹.

What Marx did do was to strictly differentiate between the capitalist division of labour in the «workshop», meaning a concentration of the means of production, and the division of labour affecting wider society, meaning their «dispersion». The bourgeoisie, Marx thought, feared the first could become a «conscious attempt to socially control and regulate the process of production» that would «turn all society into one immense factory». In 1917 V. I. Lenin deliberately identified this idea of «a single office and a single factory» with socialism¹⁰.

As the Bolsheviks prepared to storm the Winter Palace, Lenin repeated that «if a huge capitalist undertaking becomes a monopoly» then this automatically meant «a step towards socialism». In his view, such a step had been taken because *laissez faire* capitalism had turned monopolistic in its «supreme phase»¹¹. Thus, in the immediate aftermath of the October Revolution, the Bolsheviks nationalised land and instituted workers' control. At that point Lenin thought that, since «accounting and control» was all that was needed for the «proper functioning» of socialism, this could be attained «overnight» by replacing bourgeois power with a proletarian state. This, in accordance with Lenin's theories, meant establishing what was supposed to be a «Temporary Workers' and Peasants' Government», the Council of Peoples' Commissars (*SNK*)¹².

In less than two months Lenin had admitted that «it was easy to issue a decree on the abolition of private property», but less so to manage the economy. The Supreme Council of the National Economy (*VSNKh*) was therefore established in December 1917 and empowered to «develop general norms and a plan for regulating the economic life of the country». At this point, Lenin thought that all was in place to «begin work to build up a new socialist economy»¹³. Therefore, between December 1917 and April 1918 banks and foreign trade

⁹ E. PIETORRI (ed), *Rapports et Décrets Officiels de la Commune de Paris et du Gouvernement Français à Versailles du 18 Mars au 31 Mai 1871*, Paris, 1871, pp. 163-164.

¹⁰ K. MARX – F. ENGELS, *Collected Works*, 50 vols, Institut M.-L., London, Lawrence & Wishart, 1975-1998, xxxv, pp. 360-362; V.I. LENIN, *The State and Revolution*, in V.I. LENIN, *Collected Works*, 45 vols, Moscow and London, Foreign Languages Publishing House, 1960-1970, xxv, p. 479.

¹¹ V.I. LENIN, *Karl Marx* (1915), in V.I. LENIN, *Collected Works*, xi, pp. 64-65; V.I. LENIN, *Imperialism: the Highest Stage of Capitalism* (1917), in LENIN, *Collected Works*, xii, pp. 197-202, 205-207; V.I. LENIN, *The Impending Catastrophe and How to Combat It* (1917), in V.I. LENIN, *Collected Works*, xv, p. 358.

¹² S.G. STRUMILIN, *Ekonomicheskaia Zhizn' SSSR*, Moscow, Sovetskaia entsiklopediia, 1961, pp. 10, 12; V.I. LENIN, *The State and Revolution* (1917), in V.I. LENIN, *Collected Works*, xv, p. 478.

¹³ V.I. LENIN, *Report on Economic Conditions of Petrograd Workers* (1917), in V.I. LENIN, *Collected Works*, xvi, p. 365; V.I. LENIN, *How to Organise Competition?* (1918), in V.I. LENIN, *Collected Works*, xvi, p. 408; V.I. LENIN, *Third All-Russia Congress of Soviets* (1918), in V.I. LENIN, *Collected Works*, xvi, pp. 467-468.



were nationalised and consumer organisations were placed under «Soviet power»¹⁴.

Yet, as reality proved too hard to bend by decree, Lenin ordered a retreat to State Capitalism: this meant State control over the banks, syndicated industry and consumers' societies. Lenin's practical model was the German economy, which he encouraged his comrades to «study» and «spare no effort in copying»¹⁵.

Gregory and R.C. Stuart called this an «uneasy truce» between the Bolsheviks and capitalism¹⁶. Accordingly, when on 28 June large scale industry was nationalised, owners were expropriated but enterprises were initially leased back to them free of charge. Moreover, they continued to organise and dispose of the financing and income as if nothing had happened. Economist L.N. Kritzman further argued that with the nationalisation of foreign trade, the Bolsheviks at first wished to exploit Russian capital through taxes, implying that they would «organise the national economy with the help of capital»¹⁷. Even measures related to the countryside were initially marked by moderation; in late 1918 Lenin called for a «tax in kind, in grain, on the rich peasants» who were «not to be expropriated, but taxed equitably, heavily»¹⁸.

However, decrees could hardly hold back the myriad of internal and external enemies that sought to crush the Revolution, and nor did these conciliatory policies satisfy the revolutionary spirit of many Bolsheviks¹⁹. A policy that instead helped on both fronts was inaugurated in January 1919: *prodrazverstka*. This demanded the appropriation of grain, and later of most agricultural products, at centrally set prices. This became one of the most emblematic policies of War Communism, together with what Lenin defined as «the persistent

¹⁴ S.G. STRUMILIN, *Ekonomicheskaja*, pp. 14, 22, 23.

¹⁵ V.I. LENIN, *The Revolutionary Phase* (1918), in V.I. LENIN, *Collected Works*, xvii, p. 22; V.I. LENIN, *Session of the All-Russia C.E.C.* (1918), in V.I. LENIN, *Collected Works*, xvii, pp. 293-294; V.I. LENIN, *Left Wing 'Childishness' and the Petty-Bourgeois Mentality* (1918), in V.I. LENIN, *Collected Works*, xvii, p. 340.

¹⁶ P.R. GREGORY – R.C. STUART, *Soviet Economic Structure and Performance*, 4th ed., NY, London, Harper & Row, 1990, p. 52.

¹⁷ L.N. KRITZMAN, *Geroicheskiĭ period Velikoy Russkoy Revoliutsii*, «Vestnik Kommunisticheskoi Akademii», 9/1924, p. 27.

¹⁸ V.I. LENIN, *Theses on the Food Question* (1918), in V.I. LENIN, *Collected Works*, xxviii, p. 46; V.I. LENIN, *Re the Decree on the Imposition of a Tax in Kind on Farmers* (1918), in V.I. LENIN, *Collected Works*, xxxii, p. 108; S.G. STRUMILIN, *Ekonomicheskaja*, p. 33.

¹⁹ For the debate on whether ideology or urgency played a greater role in ushering War Communism see: P.J. BOETTKE, *The Political Economy of Soviet Socialism: The Formative Years, 1918-1928*, New York, Springer Science, 1990, chapter 3; A. SALOMONI, «War Communism»: a Reassessment, in S. PONS – A. ROMANO (eds), *Russia in the Age of Wars*, Milano, Feltrinelli Editore, 1998, pp. 53-68; S. MALLE, *The Economic Organisation of War Communism*, Cambridge, CUP, 1985, Introduction.

carrying out of the centralisation of economic life on a nationwide scale», supplemented by an «unremitting demand for preliminary plans and estimates»²⁰.

The task of implementing these policies befell on *VSNKh* and the Council was equipped in 1918 with local as well as central economic bodies that integrated enterprises both horizontally and vertically²¹. However, war not only put a premium on highly centralised authoritarian economic measures, but also on the concentration of power in small tractable committees. The Council of Workers' and Peasants' Defence (*SRKO*) was therefore «vested with full powers for mobilising the country's resources», while a weakened *VSNKh* swelled to nearly one hundred and fifty bodies²².

The economic situation continued to deteriorate throughout 1919 and the Bolsheviks faced it with a further thrust towards socialism. In March 1919, the Russian Communist Party (bolsheviks) (*RKP(b)*) adopted its Second Programme which admitted that the abolition of money was not immediately possible, but reaffirmed that the Party strove to «promote a series of measures favouring moneyless cost accounting and paving the way for the destruction of money»²³. A year later a Congress of *VSNKh*'s local bodies even demanded the establishment of «a unit of account for the budget of the country, adopting as a basis of measurement a unit of labour»²⁴.

All this was to be implemented while sparing no efforts to, as Lenin stated, draw up a «fundamental economic plan» and «subordinate everything» to it»²⁵. For this reason, in July 1920, the *SNK* forbade enterprises from making any purchases on the «free market». Only central Soviet organs could carry out supply and the *SNK* banned «settlements in cash [or] by cheque». In November 1920 small-medium enterprises were brought under state control and the total number of nationalised enterprises reached 37,000, with more than half only employing between two and fifteen workers²⁶.

Bolshevik policies had secured the survival of Soviet power, but the economic situation on the ground became desperate. In the meantime, jaded by four years of brutal war, the Red Army was increasingly ordered to turn its rifles

²⁰ S.G. STRUMILIN, *Ekonomicheskaja*, p. 39; V.I. LENIN, *Basic Propositions of Economic and Especially on Banking Policy* (1918), in V.I. LENIN, *Collected Works*, xxvii, p. 319.

²¹ S.G. STRUMILIN, *Ekonomicheskaja*, p. 15; S. MALLE, *The Economic Organisation*, p. 206; E. ZALESKI, *Planning for Economic Growth in the Soviet Union 1918-1931*, Chapel Hill, University of North Carolina Press, 1971, p. 24.

²² V.I. LENIN, *Notes*, in V.I. LENIN, *Collected Works*, xxviii, p. 524; S.G. STRUMILIN, *Ekonomicheskaja*, pp. 31, 35. The original scheme of *VSNKh*'s organisation is reprinted in S. MALLE, *The Economic Organisation*, p. 217.

²³ KPSS, *KPSS v rezoliutsiakh i resheniakh s'ezdov, konferentsii i Plenumov TSK (1898-1988)*, 15 vols, Moscow, Iz. Pol. Lit., 1983-1990, ii, p. 89.

²⁴ Quoted in L.N. IUROVSKII, *Currency Problems and the Policy of the Soviet Union*, London, Garden City Press, 1925, p. 34.

²⁵ V.I. LENIN, *Ninth Congress of the RCP(b). Report of the CC (1920)*, in V.I. LENIN, *Collected Works*, xxx, p. 461.

²⁶ S.G. STRUMILIN, *Ekonomicheskaja*, pp. 62, 67; E. ZALESKI, *Planning*, pp. 16-20.



on striking workers, revolting peasants and even mutinied sailors. Recognising that an effective solution could not be found through the barrel of a gun, War Communism was abandoned²⁷.

By doing so, the Bolsheviks not only gave up on a set of specific policies, but on a much broader theoretical and ideological outlook. No other attempt to abolish money, the financial system, pricing and trade would be attempted again in the USSR. In theory it was believed that the communist society would be stateless, marketless, moneyless and classless. In practice, however, the abandonment of War Communism signalled the irreversible shift away from the attempt to build an economic system fully congruent with Marxist precepts. Soviet economic theory and practice would instead produce the command system, a construct that was marked both by the clear theoretical inspirations of, as well as by its strident inconsistencies with, Marxist precepts.

3. *The New Economic Policy*

Former Left Communist N.I. Bukharin openly admitted that «the transition to *NEP* [New Economic Policy] was the collapse of our illusions» and that «the centralised planned economy of [War Communism]» was not «universal», nor the «normal form of economic policy of the victorious proletariat». «The path to communism», lamented Bukharin, «was not at all as simple as we had previously assumed»²⁸.

In March 1921, Lenin admitted that the Bolsheviks had overdone nationalisation, excessively clamped down on peasant trade and needed to «retreat»²⁹. *Prodrazverstka* was replaced by a tax-in-kind, halving the quantity of foodstuff expropriated from the peasants, who could now freely trade their surpluses. This provision was extended to small enterprises which, after a strong stimulation of exchange and cooperation, were even denationalised. Peasants were given the right to establish production cooperatives, the leasing of State-owned enterprises was sanctioned as well as the opening of trading establishments. There was an official return to cash salaries while the revival of monetary policy and the transition of State enterprises to *khozraschet* were initiated.

²⁷ P. AVRICH, *Kronstadt 1921*, Princeton, PUP, 1970, pp. 220-228.

²⁸ N.I. BUKHARIN, *O Likvidatorstve Nashih Dnei*, in L.I. ABALKIN – YU.V. YAREZHENKO ET AL. (eds), *N.I. Bukharin: Izbrannie Proizvedeniia*, Moscow, Ekonomika, 1990, pp. 253-257.

²⁹ V.I. LENIN, *Speech at the Opening of the Congress* (1921), in V.I. LENIN, *Collected Works*, xxxii, p. 168; V.I. LENIN, *Report on the Political Work of the CC* (1921), in V.I. LENIN, *Collected Works*, xxxii, pp. 172-173; V.I. LENIN, *Report on the Substitution of a Tax in Kind for the Surplus Grain Appropriation System* (1921), in V.I. LENIN, *Collected Works*, xxxii, p. 219.

Over five months the Bolsheviks established a fragile, but functioning mixed economy³⁰.

Between 1924 and 1927 the rouble was strengthened allowing the USSR to re-enter the world market with gold-backed *chervonets*, the agricultural tax was reduced and made monetary, land leasing and labour hiring were reintroduced, and the Bolsheviks secured hundreds of foreign concessions³¹. As of the mid-1920s, private dealers controlled 64% and 83% of total and retail trade respectively, whilst peasants were told that the essence of NEP was “special attention” on the part of the State for the «development of agriculture» and for the «interests and needs of the peasant economy»³². There were also blatant admissions that the Bolsheviks had failed to build an economic system adhering to Marx’s precepts. Soviet recognition of these failings was harsher than similar criticisms by anti-Bolshevik Western economists and their émigré Russian counterparts³³.

In 1922 the Commissar for Finance G. Sokolnikov said that the Bolsheviks just «did not think at all to develop» the financial system since they assumed that «if money ceases to exist that is fantastic, since we stand for the elimination of money»³⁴. This had voided of any meaning the 1918 tax-in-kind decree, which Lenin admitted had been «enacted but never became operative». In light of the enormous depreciation of the rouble, the appropriation of grain surpluses at fixed prices had practically become confiscation without compensation³⁵.

L.N. Kritzman, of the Commissariat for Finance, openly admitted that it was debatable «whether the problem [of substituting a labour unit for money as an accounting unit] generally admitted of a solution» and that in any case «no solution was ever found, not even the broad principles for a solution»³⁶.

As for planning, the Deputy Chairman of *Gosplan*, I.T. Smilga, harshly remarked: «we tried to plan everything, but in fact [planned] nothing [and]

³⁰ S.G. STRUMILIN, *Ekonomicheskaiia*, pp. 74-84. *Khoziaistvennyi raschet* or *khozraschet*, literally «economic cost-accounting», meant self-sufficiency, profitability and equivalency of an economic unit.

³¹ MOSK.KOM. RKP(B), *Denezhnaia reforma. Sbornik*, Moscow, Izdat. MKRKP(b), 1924; RKP(B), *Chetyrnadsataia Konferentsiia RKP(b). Stenograficheskii Otchet*, Moscow, Gos. Izdat., 1925, pp. 301-304; A.C. SUTTON, *Western Technology and Soviet Economic Development 1917 to 1930*, Hoover Institution Press, Stanford, 1968; N.YA. PETRAKOV ET AL., *NEP i khozraschet*, Moscow, Ekonomika, 1991, p. 26.

³² L.M. KAGANOVICH, *Blizhe k birzham*, in L.M. KAGANOVICH, *Birzhi i Rynki. Sbornik*, Moscow, Iz. Biuro S'ezdov Birzhevoi Torgovli SSSR, 1924, p. 3; S. BAZYKIN, *Krest'ianskoe Pravo. Kakie Zakony Ustanovila Raboche-Krest'ianskaia Vlast' po selskému Khoziaistvu*, Moscow, Gos. Izdat., 1925, p. 5.

³³ S.N. PROKOPOVICH, *Ideia planirovaniia i itogi pyatiletki*, Paris, 1934, pp. 32, 62-64; L. LAWTON, *An Economic History of Soviet Russia*, II vols, London, Macmillan, 1932, i, pp. 107-112.

³⁴ INSTITUT MARKSA-ENGEL'SA-LENINA PRI TSK VKP(V), *Protokol Odinnadtsatogo s'ezda RKP(b)*, Moscow, Part. Izdat. TSK VKP(b), 1936, p. 313.

³⁵ V.I. LENIN, *Report on the Political Work*, in V.I. LENIN, *Collected Works*, xxxii, pp. 187.

³⁶ L.N. IUROVSKII, *Currency Problems*, p. 34.



plans degenerated into bureaucratic distortions»³⁷. In contrast, L. N. Kritzman stated that under War Communism the economy had actually never become socialist, for that would have required it to be «planned». There had been a «quantitative» rather than «qualitative» difference between the Soviet economy and that of a capitalist country: more Soviet enterprises than capitalist ones may have had plans, but these were «independent from each other» and this «lack of regularity», worsened by the fact that «there was no organ for the development and implementation of a national economic plan», meant a lack of socialist planning³⁸.

At this point, Soviet analysts publicly described the Soviet economy as characterised by socialist economic relations, but with patriarchal-natural and commodity-money dimensions as well³⁹. Yet, 1921 was also marked by two events that would have crucially influenced the evolution of Soviet planning. First, on 22 February the State Planning Commission (*Gosplan*) was established and tasked with «developing a single national economic plan [...] and for general control over the implementation of this plan»⁴⁰. Later in the year, an Electrification Plan for 10-15 years was put forward by the State Commission for the Electrification of Russia (*GOELRO*)⁴¹. This plan was presented as the first attempt to «proceed with a more systematic economic construction, to scientifically develop and consistently implement a state plan for the entire national economy»⁴². *GOELRO* set targets for electricity production as well as other key means of production, namely coal, steel, cast iron, iron ore, oil, cement, peat, bricks and paper. In all, *GOELRO* estimated that in fifteen years Soviet gross production would increase by 12-15%⁴³. Lenin called the *GOELRO* plan «the second programme of our Party» and coined the term «commanding heights» to refer to the means of production it set targets for. These, together with transport, banking and foreign trade, were to be firmly held in the State's hands so as to maintain socialist control⁴⁴.

³⁷ I.T. SMILGA, *Pyat' let novoi ekonomicheskoi politiki*, «Planovoe Khoziaistvo», 3, 1926, p. 49.

³⁸ L.N. KRITZMAN, *Geroicheskiĭ period*, pp. 97-98.

³⁹ P.I. POPOV, *Struktura Sovetskogo narodnogo khoziaistva*, in P.I. POPOV (ed), *Balans Narodnogo Khoziaistva Soyuz SSSR, 1923-24 goda. Trudi Tsentral'nogo Statisticheskogo Upravleniia, Tom XXIX*, Moscow, Mosk. Komm. Khoz., 1926, pp. 38-42.

⁴⁰ *Sobranie zakonov i rasporyazhenii pravitel'stva za 1921 g.*, Moscow, Upravlenie delami Sovnarkoma SSSR, 1944, p. 161.

⁴¹ S.G. STRUMILIN, *Ekonomicheskaiia*, pp. 56-57, 68.

⁴² NAUCHNO-TEKHNIЧЕСКИЙ ОТДЕЛ VSNKH, *Plan Elektrifikatsii RSFSR. Vvedenie k dokladu 8-mu s'ezdu Sovetom*, Moscow, Gos. T.I. 1920, p. 7.

⁴³ *Plan Elektrifikatsii RSFSR. Doklad VIII s'ezdu Sovetov Gosudarstvennoi Komissii po Elektrifikatsii*, Moscow, Gos. Pol. Izdat., 1955, p. 17, 23.

⁴⁴ V.I. LENIN, *The Eighth All-Russia Congress of Soviets. Report on the Work of the Council of People's Commissars* (1920), in V.I. LENIN, *Collected Works*, xxxi, p. 514; V.I. LENIN, *Notes for a Report* (1921), in V.I. LENIN, *Collected Works*, xxxvi, p. 585.

Fierce debates among the *RKP(b)* about the strategy for industrialisation, as well as its relationship to the precarious *NEP* equilibrium, characterised the remainder of the 1920s. These debates split the Party between a composite majority and the Left. In Lenin's mind, *NEP* had gone from a «retreat» to the embodiment of the «“reformist”, gradual, cautious and round-about approach» he later came to advocate. He even described the policy as achieving «a degree of combination of [...] private commercial interest with state supervision and control»⁴⁵. On the other side of the debate, L. Trotsky argued that a «profound defeat and retreat [...] was presented as a victorious step in the *smychka*», whilst economist Y.A. Preobrazhenskii put forward an articulate case for industrialisation⁴⁶.

All the Bolsheviks remained committed to industrialisation despite divisions within the Party on *NEP*. Industrialisation, however, was understood as a means to an end, just as much as the establishment of a planned economy was. The goal was always the attainment of socialism and the transition to communism, which could only be achieved by deploying planning, held to be superior to free-market capitalism. There was consensus about the general purpose of the plan, but there were alternative views about how to build such plan and the role it should be assigned.

Two planning schools of thought emerged. Geneticists, often former fringe Bolsheviks, Mensheviks and Socialist-Revolutionaries, thought that economic laws applied to Soviet realities. Proponents of this school held that planning ought to emphasise prevailing conditions and rely on scientific analysis in order to set feasible goals. The methodology of renowned geneticists V.G. Groman and V.A. Bazarov was anchored in statistical and dynamic coefficients, control comparison with pre-war data, economic balances and fixed production ratios for industry and agriculture. On the other hand, teleologists instead pointed to the transformative power of the Revolution, demurred at the boundaries of economic laws and declared that «our task is not to study economics but to change it», therefore emphasising the goal rather than prevailing conditions⁴⁷.

Geneticists championed a method based on the working out of a balance for the national economy. Groman defined the method as a «statistical

⁴⁵ V.I. LENIN, *Report on the Political Work*, in V.I. LENIN, *Collected Works*, xxxii, pp. 172-173, 214, 224; V.I. LENIN, *The Importance of Gold Now and after the Complete Victory of Socialism* (1921), in V.I. LENIN, *Collected Works*, xxxiii, p. 109; V.I. LENIN, *On Co-operation* (1923), in V.I. LENIN, *Collected Works*, xxxiii, p. 470.

⁴⁶ L. TROTSKY, *The Third International after Lenin*, New York, Pathfinder, 2002, p. 276; R. FERRARI, *Planning as a Social Technology*, in questo numero, pp. 41-61. *Smychka*, literally «union», was the term utilised in the USSR to refer to the concept of «worker-peasant alliance».

⁴⁷ S.G. STRUMILIN, *Industrializatsiia SSSR*, «Planovoe Khoziaistvo», 7/1927, p. 10; N.A. KOVALEVSKY, *Nekotorye voprosy metodologii narodno-khoziaistvennogo planirovaniia (metodologiia Gromana, Bazarova i ikh kritiki)*, Moscow, Vsesoyuz. Plan. Akad., 1933, pp. 1-2, 6-7, 16-17; A. IUGOW, *Russia's Economic Front for War and Peace. An Appraisal of the Three Five-Year Plans*, London, C.A. Watts, 1941, pp. 5-6.



operation intended to show how the social economy is reproduced», representing the «organic unity» between production, consumption, distribution and exchange. In essence, V. Leont'ev thought, the balance ought to «represent in numbers the total turnover of economic life»⁴⁸.

A first balance was worked out for 1923-1924 under the supervision of P.I. Popov, who regarded the «branches of the national economy as parts of a unified whole». The balance's task was to provide a «schematic picture» of this «unitary economic process», in order to achieve «the summing up of the statistical results of the economic activity of those millions of economic units [...] which make up the national economic organism»⁴⁹.

The balance method became a core element in practical planning work. *Gosplan* chairman G.M. Krzhizhanovskii described the aims of this work as drawing up increasingly detailed constructs, ranging from ten-to-twenty-year general plans, Five-Year Plans, yearly Control Figures, and quarterly and monthly plans⁵⁰.

Control Figures were the first to be drawn up and their compilation, as both geneticist supporters and detractors asserted, was practically and theoretically overseen by them⁵¹. These figures were «an attempt to scientifically anticipate the main economic processes in the USSR for the year ahead» in the form of both «a forecast» and «a directive». Groman argued that planning was only possible if «an accurate forecast of the development of the entire economy for the entire duration of the plan» was available. This, he argued, made of the control figures «an organic synthesis of the forecast of objective development and awareness of the goals that the State sets itself»⁵².

However, geneticism was already accused of being «a rejection of the plan» in favour of «predictions». It was seen as a refusal to abide by «a working 'blueprint' according to which construction will then be carried out»⁵³. This critique was unfair because geneticists at the *Gosplan* Commission on Control Figures

⁴⁸ V.G. GROMAN, *Balans Narodnogo Khoziaistva*, «Planovoe Khoziaistvo», 11/1926, p. 68; V. LEONT'EV, *Balans Narodnogo Khoziaistva SSSR*, «Planovoe Khoziaistvo», 12/1925, pp. 254-258.

⁴⁹ P.I. POPOV, *Balans narodnogo khoziaistva v tselom*, in P.I. POPOV (ed), *Balans Narodnogo Khoziaistva*, p. 282; L. LITOSHENKO, *Metodika sostavlenii narodno-khoziaistvennogo balansa*, in P.I. POPOV (ed), *Balans Narodnogo Khoziaistva*, pp. 38-42.

⁵⁰ G.M. KRZHIZHANOVSKII, *Pyat' let borba za plan*, «Planovoe Khoziaistvo», 3/1926, pp. 7-47.

⁵¹ N. JASNY, *Soviet Economists of the Twenties: Names to Be Remembered*, Cambridge, CUP, 1972, pp. 105-107; N. JASNY, *A Soviet Planner-V.G. Groman*, «Russian Review», 13, 1/1954, pp. 53-55.

⁵² I.T. SMILGA, *O Kontrol'nykh Tsifrakh*, «Planovoe Khoziaistvo», 8/1926, p. 7; A. MENDELSON, *Planirovaniie promyshlennosti*, «Planovoe Khoziaistvo», 3/1926, pp. 92-93; V.G. GROMAN, *Tezisy k peresmotru kontrol'nykh tsifr na 1925/26 g.*, «Planovoe Khoziaistvo», 2/1926, 2, p. 87; V.G. GROMAN, *K postroyeniyu kontrol'nykh tsifr narodn. khoz. na 1926/27 g.*, «Planovoe Khoziaistvo», 5/1926, p. 60.

⁵³ N.A. KOVALEVSKI, *Nazad, k kapitalizmu*, «Planovoe Khoziaistvo», 5/1926, p. 15.

did approach economic development by striving to develop both productive forces and «socialist forms of economic relations»⁵⁴.

What infuriated teleologists was that, as Smilga put it, the prevailing wisdom amongst those who actually compiled the Figures was that «the more accurate they are as a forecast, the more obligatory they are as a directive»⁵⁵. This not only gave primacy to the geneticist element, but aspired to render a directive that was determined to be economically feasible rather than merely politically or ideologically preferable.

Heated debates between geneticists and teleologists also raged over the General Plans. Again, geneticists emphasised plan-drafting as a process independent from the planner and stressed the importance of scientific analysis and realism. Instead, S. Sharov spoke of «teleological maximalism», stating that planners' subjective will and the force unleashed by the «colossal power» of the revolution originated the plan⁵⁶.

In 1926 Bazarov attempted to bridge differences. He stated that a long-term plan was «not only a forecast, but also a directive, not only genetic research, but also a teleological construct, not only the consideration of objective possibilities, but also a system of measures, necessary for the optimal use of these opportunities». Core to Bazarov's general conception of planning became «correspondence with reality» and the pursuit of an «optimum course of development», based on an understanding of the economy as a «harmonious, organic whole». The task was to implement the most efficient plan, drawn-up observing «proportionality and internal consistency», in a «smooth [way], without interruptions». In the end, just as Smilga had argued, Bazarov also stated that «teleological construction» was organically dependant on «genetic prediction»; the more accurate the latter, the more credible (and therefore necessary) the former⁵⁷.

Barely six months later leading teleologist S.G. Strumilin recognised that «every plan represents a certain combination of elements predicting what is objectively inevitable and a projection of what is advisable from the standpoint of our subjective social and class aspirations». «Assignments must, of course be [...] sufficiently realistic», he added⁵⁸.

⁵⁴ V.G. GROMAN, *Obzor narodnogo khoziaistva SSSR za pervoye polugodie 1925/26*, «Planovoe Khoziaistvo», 6/1925, p. 21.

⁵⁵ I.T. SMILGA, *O Kontrol'nykh*, 8/1926, p. 7.

⁵⁶ A.L. WEINSTEIN, *O Kontrol'nykh Tsifrah Narodnogo Khoziaistva SSSR na 1926/27 g.*, «Sotsialisticheskoe Khoziaistvo», 4/1926, p. 6; S. SHAROV, *Tsel' v plane i zadachi nashego khoziaistva*, «Planovoe Khoziaistvo», 7/1926, pp. 60-63.

⁵⁷ V.A. BAZAROV, *O metodologii postroyeniia perspektivnykh planov*, «Planovoe Khoziaistvo», 7/1926, pp. 9-14.

⁵⁸ S.G. STRUMILIN, *K perspektivnoi piatiletke Gosplana na 1926/27 - 1930/31 gg.*, «Planovoe Khoziaistvo», 3/1927, pp. 21-22.



By the late 1920s these debates were increasingly sidelined by the growing political consensus in the Party for the idea that the plan's goal was not reaching an economic optimum since, as Vaisberg argued, «all plans are united by a common task – building socialism in the USSR». «The plan [he concluded] is a system of tasks to change the reality that we have»⁵⁹. This view was to receive the utmost validation in what has become known as Stalin's Great Break, that is a frontal collectivising attack on the countryside and breakneck industrialisation. Geneticists, who still fervently argued that their proposed course, not teleological maximalism, truly stood by the teachings of Marx and Lenin, would soon be liquidated, first politically and later physically, together with their supporters in the Party⁶⁰.

4. *The command era*

The Great Break

Several crises had marred *NEP*, but the so-called «procurement crisis» of 1927-1928 aggravated the situation further. On top of Stalin's growing power in the Party and Bukharin's endorsement of faster industrialisation, a sudden «war scare» gripped the Party leadership. Meanwhile, peasants retreated from the State market, since they could sell grain to private traders at higher prices. Stalin denounced this as a *kulak* boycott of grain sales and launched a procurement campaign of requisition at fixed low prices in the Urals and Siberia⁶¹.

By 1928 *NEP* had brought about almost a complete economic recovery to 1913 levels, which Gregory has called «one of history's most rapid». There however exists a general consensus amongst the foremost scholars of the Soviet economy that *NEP* could only survive under conditions of moderate expansion⁶². Yet, the Party majority thought the late 1920s was no time for moderation. Therefore, on 7 November 1929, ten days before Bukharin's expulsion from the Politburo and the full defeat of his short-lived Right Opposition,

⁵⁹ R.E. VAISBERG, *Problemy piatiletnego perspektivnogo plana*, Moscow, Gos. Izdat, 1928, p. 15.

⁶⁰ *Ibidem*; KOMMUNISTICHESKAIA AKADEMIIA. EKONOMICHEskaIA SEKTSIIA, *Piatiletнем Plane Razvitiia Narodnogo Khosiaistva SSSR. Diskussia v Kommunisticheskoi Akademii*, Moscow, Izd. Komm. Akad., 1928.

⁶¹ J. HUGHES, *Stalin, Siberia and the Crisis of the New Economic Policy*, Cambridge, CUP, 2003, p. 209; L. VIOLA, *The War Against the Peasantry, 1927-1930. The Tragedy of the Soviet Countryside*, New Haven, YUP, 2005, pp. 119-120; P.R. GREGORY, *The Political Economy of Stalinism*, pp. 36-40. *Kulak*, literally «fist», identified in the late Russian Empire peasants owning more than 8 acres of land, whilst in the post-revolutionary period the term was utilised to refer to the land-owning peasantry.

⁶² P.R. GREGORY, *National Income*, in R.W. DAVIES (ed), *From Tsarism to the New Economic Policy: Continuity and Change in the Economy of the USSR*, London, Palgrave Macmillan, 1990, p. 247; P.R. GREGORY, *The Political Economy of Stalinism*, p. 24; R.W. DAVIES, *From Tsarism to the New Economic Policy*, in R.W. DAVIES (ed), *From Tsarism to the New Economic Policy*, p. 24.

Stalin officially called off the *NEP* «retreat». He vowed «to launch a successful offensive against capitalist elements», expressing a simple reasoning: the USSR was «fifty or a hundred years behind the advanced countries» and it ought to «make good this distance in ten years [or else] go under»⁶³.

The countryside was about to face an unprecedented onslaught. In 1922 the Party had concluded that industrialisation must be «closely dependent on the development of agriculture». Seven years later, emboldened teleologists stated they would not «subordinate our plan to the peasants' plough»⁶⁴.

The First Five-Year Plan was initially compiled on the basis of the 1927-1928 Control Figures, which were still mainly the product of geneticist planners. How departing from a geneticist construct planners could come up with unprecedentedly voluntaristic targets can be discerned from the discussion of the matter by G.T. Grinko, *Gosplan's* Deputy Chairman.

Grinko initially described the Figures as the scientific process of drawing up «careful and binding plans», built on «estimates» and «limits», culminating in a «provisional balance sheet of the reproduction of wealth on an increasing scale». This sounded very much like geneticism, but in fact Grinko began to call the Control Figures «a mere estimate [...] made for the purposes of orientation only». Notwithstanding his continuous references to the «strictly scientific [...] character of the planning work», he focused on a new interpretation of its «expressly socialistic character». Grinko now qualified the «synthesis» between forecast and directive as one «based on the consideration of the purpose ahead, or on a teleological principle». This represented a complete rebuttal of geneticism. At the same time, Grinko contradicted himself and argued that the Control Figures «with ever greater exactitude measur[e] the actual extent of possible economic development», while claiming that they «have tended to underestimate the potentialities of state industry».

Grinko further argued that «the strength of the system is not its technique, which is still inadequate, but its social foundations». The plan was imbued with «revolutionary power» and was to be nothing less than a «plan of socialist construction» whose «central idea» was to achieve «a steady progress of socialisation». This was only possible through «strengthening and accelerating the position of socialist industry», in itself a goal, which meant that «industries producing the means of further production shall be in advance of that in all other fields».

⁶³ J.V. STALIN, *A Year of Great Change. On the Occasion of the Twelfth Anniversary of the October Revolution* (1929), in J.V. STALIN, *Works*, 14 vols, Moscow, Gos. Iz. Pol. Lit., 1946-1954, xii, p. 124; J.V. STALIN, *The Tasks of Business Executives* (1931), in STALIN, *Works*, xiii, p. 41.

⁶⁴ RKP(B), *Dvenadtsatyi s'ezd RKP(b). Stenograficheskii otchet*, Moscow, Iz. Pol. Lit., 1968, pp. 688, 811; R.E. WEISBERG, *Burzhuzniye Izvrashcheniia v Oblasti Planirovaniia*, «Planovoe Khoziaistvo», 1/1930, p. 21.



Notwithstanding nominal maintenance of the Figures' dual role of forecast and directive, prognosis failed to exercise any meaningful role since the teleological principle's preeminence could trump forecasts by claiming that the political objective surpassed the estimates. Willingly running into economic imbalances, disregarding profitability as an investment criterion, treating the countryside as a colony to be stripped of resources, forcedly contracting household consumption — all of this became the core of a strategy aimed at achieving extremely demanding targets. As Grinko stated, «the optimal or maximal variant is now the minimum plan»⁶⁵.

This «optimal» variant was the result of two upward revisions carried out in 1929 and set targets 20% higher than those of the «starting» variant. Taking 1927-1928 data at «1926-1927 unchanged prices» as reference point, the «optimal» plan set for 1932-1933 targets such as +203% national income, +236% industrial gross output (+304% in heavy industry, +203% in light industry), +328% overall capital investment, +483% construction (excluding peasant construction), +525% and +321% electrification and overall industrial fixed assets respectively, and a significantly lower +154% agricultural gross output⁶⁶. While defending these figures, Grinko even put forward the trivialising claim that this plan entirely refuted the «super-industrialisation» that he ascribed to the former Left Opposition⁶⁷. In fact, the call for the fulfilment of the Five-Year Plan within four years was soon made Party policy and represented an umpteenth maximalist correction. Even Strumilin, who had also come to proclaim the «primacy» of teleology, whilst still cautioning against setting «utopian tasks», was apparently left extremely skeptical⁶⁸.

The command model in practice

During the 1930s the constituent practices of the centralised administrative command system were instituted. These practices, alongside their distorting effects, would remain – with only partial modifications – the core pillars of the Soviet economy until the late 1980s. This system, as aptly encapsulated by G. Grossman, was «rooted in the logic of haste» and perennially affected by

⁶⁵ G.T. GRINKO, *The Five-Year Plan of the Soviet Union. A Political Interpretation*, NY, International Publishing, 1930, pp. 9-10, 14-16, 22-24, 49, 45.

⁶⁶ GOSPLAN SSSR, *Piatiletanii Plan Narodnokhoziaistvennogo Stroitel'stva SSSR*, 3rd ed, 3 vols, Moscow, Gos. Pol. Izdat., 1930, i, pp. 11-12, 129-135, 162-165. For an explanation of the «1926-1927 unchanged prices» system, see the following subsection.

⁶⁷ G.T. GRINKO, *The Five-Year Plan*, p. 54.

⁶⁸ S.G. STRUMILIN, *Problemy Planirovaniia v SSSR*, Leningrad, Izd. Akademii Nauk, 1932, pp. 25-26; R.W. DAVIES, *The Soviet Economy in Turmoil, 1929-1930*, Cambridge MA, HUP, 1989, pp. 55, 67, 179, 187, 191.

the «pressing contrast between urgent political goals and available resources»⁶⁹.

The Party's supreme leadership possessed total decision-making power and exercised it according to the priority principle. This principle described «the ability peculiar to the Soviet system to concentrate at any given moment, under the guidance of a single thought and will, on the most important sectors of the general line of economic construction virtually all [...] combined resources»⁷⁰. This essentially meant directing the economy in accordance with political preferences. The profitability of enterprises, economic equilibrium and the avoidance of bottlenecks were not key preoccupations or criteria for decision making. The attainment of political objectives by prioritising industries' strategic to their goals became the guiding principle. Decisions were taken administratively and passed further down the power pyramid, where each institution possessed a *rukovoditel'* (head), who issued orders and bore responsibility for his organisation in accordance with the principle of *edinonachalie* (one-man management).

General Plans became of limited use to the leadership, as shorter ones amply sufficed to set extremely demanding objectives for the purpose of mobilising Party, administration and the broader masses. Interestingly, Five-Year Plans, the most renowned product of Soviet planning, were not binding. Operative plans, setting compulsory production quotas, were produced annually, or quarterly or monthly for strategic enterprises. *Gosplan* was the supreme planning authority and the chief Party agency for the implementation of its political directives. *Gosplan* and several further functional committees represented the institutions of the *apparatchiks*, the bureaucrats who worked out targets and resource allocation. *Apparatchiks* issued instructions to *khoziaistvenniks* (the heads of enterprises and Ministries who were responsible for plan fulfilment). *Plan-Zakon* (the plan is the law) was more than a billboard slogan: annual plans, once approved, really did assume the force of law.

Each year the planning process started in June or July. On the basis of the Party's directives, *Gosplan* issued a directive setting the main production ratios and targets, as well as investment and other indicators for the year ahead, relying on past performance. Meanwhile, the Ministries had already worked out a provisional production and allocation programme, which from August to October they tried to reconcile with *Gosplan's* directives and with the enormous amount of information provided by enterprises, before sending the final product to *Gosplan*. Ministries' input and output claims were, respectively, often

⁶⁹ G. GROSSMAN, *Notes for a Theory of the Command Economy*, «Soviet Studies», 15, 2/1963, p. 108.

⁷⁰ G.T. GRINKO, *The Five-Year Plan*, pp. 13-14.



significantly higher and lower than *Gosplan* estimates. Negotiations lasting until December on dozens of production and allocation indicators related to thousands of product groups were therefore carried out in Moscow between planners, Ministers and enterprise directors. Their final result, meant to be achieved in January, was the actual plan, which included production, supply and investment targets and which Ministries had to disaggregate and pass down the ladder to enterprises. The plan comprised several binding indicators, which grew to almost thirty, amongst which gross output was the crucial and unwieldy indicator for plan fulfilment.

Prices were centrally fixed and unresponsive to demand and supply. Both producer and consumer goods prices took account of the cost of production, including wages, materials and transport costs, overheads, an allowance for depreciation, a markup for profits and, in respect of retail prices, a turnover tax. Planning relied on the so-called «1926-1927 unchanged prices» as accounting units, whilst prevailing prices were utilised in actual transactions. National income and production aggregates were calculated on the basis of «unchanged prices», whilst prevailing ones formed both factor incomes and allocated purchasing power.

As per official practice, the Party should have determined output targets and later the investment necessary to attain them. In fact, its leadership increasingly directed the economy by determining investment, focusing on calculations made in roubles and not in weight and length measures. Archival evidence has proved that the Politburo largely disregarded the setting of Control Figures for the «commanding heights» as a practical means of imposing its preferences on the planning agencies. As Gregory put it, «experience, intuition, and bargaining», rather than actual scientific practices, appeared to be the ultimate determinant of final and supposedly «optimal» highly aggregated figures⁷¹.

From its inception, the command system was marred by serious shortcomings and inconsistencies. Institutional duplication and the reshuffling of agencies, although varying in intensity from period to period, always weakened administrative management. The whole planning process itself was perennially delayed by missing data and figures, especially those that Ministries were expected to provide. There was little forward planning, barely enough time to deal with immediate tasks, and plans were continuously amended to make good the recurring imbalances. Supply was therefore ineffective at best and there were coordination problems affecting the planning process both vertically and horizontally. More broadly, the priority officially assigned to the gross output

⁷¹ P. GREGORY, *The Political Economy of Stalinism*, pp. 76-78, 111-118, 190-195.

indicator caused serious distortions in the setting of targets and in ascertaining plan fulfilment.

The «unchanged prices» system provided for a persistent headache in the shape of deflating prices for products subsequent to the «unchanged prices» reference year. New prices were often set illegally and arbitrarily by the Ministries and enterprises to their own opportunistic advantage and control over the correspondence between output calculations in old and new prices also became a chimerical exercise. An unavoidable effect of the dual «unchanged» and prevailing prices system was that the two prices routinely differed starkly.

Enterprises sent to their respective Ministries an excessive amount of too little detailed information, which further complicated the whole planning and accounting process. This seriously hampered the allocation of funds, materials and machinery as well. These shortcomings pushed enterprises to engage in a wide range of semi-legal and illegal practices to secure materials and workforce. They became increasingly opportunistic and prone to downplay their productive capacity as well as to resist to technical innovation. This secured them lower plan targets to fulfil, making fulfilment and overfulfillment bonuses easier to attain, while exempting them from the risks that adapting to new techniques involved in short-term productivity. Enterprises became predisposed to requesting excess inputs, which they hoarded so as to be able to meet plans that were assigned late and could be subject to sudden change. This often caused breakneck «storming», that is attempting to fulfil a yearly plan in few months.

More broadly, Five-Year Plans quickly assumed an increasingly ritualistic function, with their non-operational and highly aggregated targets usually going unfulfilled. As for the «command» element of the system, it was «less-than-absolute», since realities were in fact marked more by complexity than uniformity. Stalin himself stated as much to the economists he convened in 1941. Plan inconsistency became a structural feature of the system, to the point that actual economic planning progressively lost ground to the administrative operationalisation of the Party's political goals. Both free and State markets continued to play a key role in commodity exchange and labour apportioning, household choice remained relatively autonomous and enterprise managers successfully circumvented state regulations. Finally, black and grey markets flourished in what became a fully-fledged «second economy», partially compensating for the shortcomings of the intricate administrative machinery of the Soviet political and economic system⁷².

⁷² This subsection has been drafted relying on the scholarship of E.H. Carr, M. Dobb, G. Grossman, A. Bergson, D. Granick, J.S. Berliner, A. Erlich, E. Zaleski, M.C. Kaser, I. Szamuely, W. Brus, A. Nove, R.W. Davies, M. Ellman, J. Kornai, E.G. Yasin, P. Sutela, H. Hunter, J. Szyrmer, J.M. Kovacs, M. Harrison, S. Wheatcroft, P.R. Gregory, M.C. Stuart, R.E. Ericson, G.I. Khanin, A. Tikhonov, A.



A 1948 *Gosplan* memorandum vividly detailed the effects of these shortcomings on economic performance. In the Kyrgyz SSR bakeries had produced 98% of pastries from rye flour at a constant price of «patisserie cakes», causing a tenfold overestimation that allowed them to declare that they had overfulfilled the gross output plan. The Riga Plywood Factory over-fulfilled the gross output plan by 193% by producing «radio boxes unrequested by the plan which were assigned an inflated constant price of 40 rubles per box». Finally, the Leningrad *Krasnokhimik* plant applied an inflated price for toothpaste and «brought to 50% the share of this product on the plant's gross value output, although only 5% of the plant's workers were employed in the production of toothpaste»⁷³.

Theoretical fumbling

Halfway through the First Five-Year Plan, it became clear that there was not going to be a return to the early 1920s drive for the establishment of a moneyless and marketless economy. After collectivisation was declared achieved in late 1931, the Soviet authorities announced that *kolkhozes* could engage in the «unimpeded sale» of grain, livestock and meat surpluses at free market prices. Even L.M. Kaganovich stressed the need to «promote in every possible way the delivery of products to the markets», simultaneously reiterating the need to «strengthen the *kolkhozes* and reinforce the struggle against the kulaks». This was no return to the NEP and proved too little too late to prevent a cataclysmic famine⁷⁴.

On the industrial front, in June 1931, Stalin affirmed that «the principles of *khozraschet* are grossly violated» and that in order to «put an end to inefficiency» it was necessary to «introduce and reinforce *khozraschet*»⁷⁵. Moreover, in 1932, after the abolition of *VSNKh*, the newly formed People's Commissariat for Heavy Industry under the leadership of S.K. Ordzonikidze became a vocal supporter of price reforms, as well as of reforming materials and machinery supply and introducing interest-bearing loans for industry⁷⁶.

Markevich, A. Cheremukhin and V. Kontorovich. For an exhaustive survey of their scholarship and of Western and Russian literature on planning see: M. ELLMAN, *Socialist Planning*, 3rd ed, Cambridge, CUP, 2014. For the standard Soviet view see: S.G. STRUMILIN, *Planirovanie v SSSR*, Moscow, Gos. Pol. Izdat, 1957.

⁷³ RGAE (Russian State Archive for the Economy), f. 4372 op. 48 d. 343, l. 29-31.

⁷⁴ «*Pravda*», 7 May 1932, p. 1; «*Pravda*», 11 May 1932, p. 1; «*Pravda*», 21 May 1932, p. 1; «*Pravda*», 8 August 1932, p. 2.

⁷⁵ J.V. STALIN, *New Conditions – New Tasks in Economic Construction* (1931), in J.V. STALIN, *Works*, xiii, pp. 76, 78.

⁷⁶ R.W. DAVIES, *The Socialist Market. A Debate in Soviet Industry, 1932-33*, «*Slavic Review*», 43 2/1984, pp. 204-205, 221-223.

This coincided with a period in which reliance on monetary and trade mechanisms was given an unprecedented ideological justification. At the 17th Party Congress of 1934 Stalin himself criticised the «Leftist chatter [...] to the effect that Soviet trade is at a superseded stage; that it is necessary to organise the direct exchange of products; that money will soon be abolished». Instead, Stalin asserted that, «we shall use money for a long time to come, right up to the time when [...] the socialist stage of development has been completed». Money had become an instrument of capitalism which had «adapted to the interests of socialism». This radical revision of Marxism extended the validity of money, trade and credit well beyond Marx's «period of the revolutionary transformation»⁷⁷. The Soviet leadership started wielding the tools it now considered «adapted to the interests of socialism». Food rationing was successfully abolished and prices were revised, although the leadership still stood by the «unchanged prices» system⁷⁸.

The new Soviet Constitution of 1936 contained an even more radical theoretical revision. In the 1919 Constitution, the economic organisation of the country was said to rest on the motto that «he who does not work, neither shall he eat!». The 1936 Constitution coupled this principle with a slightly, but meaningfully modified version of the Marxist battlecry «from each according to his abilities, to each according to his needs». The new text argued that Soviet citizens would each receive «according to their labour» and called this newly coined formula «the principle of socialism»⁷⁹. In the same year, Stalin proclaimed that «our Soviet society has already, in the main, succeeded in achieving socialism»⁸⁰.

This was yet another unprecedented alteration of Marxism, which Trotsky was quick to define as «inwardly contradictory, not to say nonsensical»⁸¹. Marx had indeed stated that in the «lower phase» the distribution of the means of personal consumption would be carried out in accordance with labour supplied. He had also recognised that not all labour could be considered equal since «unequal individual endowment» necessarily meant «unequal labour». However, Marx presupposed that already in this phase given quantities of

⁷⁷ J.V. STALIN, *Report to the Seventeenth Party Congress on the Work of the Central Committee of the C.P.S.U.(B.)*(1934), in J.V. STALIN, *Works*, xiii, pp. 349.

⁷⁸ R.W. DAVIES – O.V. KHEVNIUK, *The End of Rationing in the Soviet Union, 1934-1935*, «Europe-Asia Studies», 54, 6/2002, pp. 592-594; M. HARRISON, *Prices, Planners, and Producers. An Agency Problem in Soviet Industry, 1928-1950*, «The Journal of Economic History», 58, 4/1998, pp. 1032-1033, 1035-1045, 1048-1050; M.C. KASER, *Soviet Planning and the Price Mechanism*, «The Economic Journal», 60, 237/1950, pp. 87-88.

⁷⁹ YU.S. KUKUSHKIN – O.I. CHISTIYAKOV, *Ocherk istorii Sovetskoi Konstitutsii*, Moscow, Polit. Izdat., 1987, p. 245; *Konstitutsiia (Osnovnoi Zakon) Soiuza Sovetskikh Sotsialisticheskikh Respublik*, Moscow, Iurid. Izdat., 1937, p. 11.

⁸⁰ J.V. STALIN, *On the Draft Constitution of the U.S.S.R.* (1936), in J.V. STALIN, *Works*, xiv, pp.164-165.

⁸¹ L. TROTSKY, *The Revolution Betrayed. What is the Soviet Union and where is it Going?*, Detroit, Labor Publications, 1991, p. 220.



socially necessary labour would be rewarded with goods of corresponding value. Each worker would be given a certificate detailing the labour he provided and consequently «he [would] draw from the social stock of means of consumption as much as the same amount of labor cost»⁸².

The new 1936 Soviet truth however meaningfully departed from Marx's writings in a critical way. It postulated that any given quantity of socially necessary labour be rewarded with a monetary wage rather than a corresponding quantity of available means of consumption. Marx's original principle was supposed to regulate the «higher phase» precisely because only at that point would the economy have attained the necessary abundance to guarantee that each citizen could provide the labour she/he could and also receive what she/he needed.

The USSR, which had recently abolished rationing, was nowhere near this stage. The wage labour system, and its ideological justification, was still anchored on a fixed working day, division of labour and on wage differentials unequally remunerating disparate skills not in accordance with socially necessary labour expenditures, but with the subjective worth attached to each specific profession. Soviet ideologists categorically negated the existence of exploitation in the USSR stating that the absence of private property and State control of resources in the interests of socialism, i.e. of the whole people, precluded it.

It is not by chance that the mid-1930s turn towards *khozraschet*, money and trade caused the development of a command rationalising mindset. N.A. Voznesenskii, who would later rise to unprecedented levels of authority in economic theory and practice with that very mindset, would seek to functionalise (and not discard) the command system using the same tools that Stalin sanctioned as fully socialist in 1934-1936. However, the mid-1930s coexistence of planning with monetary and trade elements caused such widespread theoretical confusion that, although the drafting of a new Soviet political economy textbook was sanctioned in 1936, as late as 1941 several unresolved issues still impeded its completion⁸³.

Stalin therefore convened a meeting of economists and Party leaders. At this meeting he revealed a new truth on the issue of economic laws: «the law of value has not been overcome». Without the concept of «value», he continued, «cost of production» would lose its meaning, while there could also be no distribution, income calculation and pricing policy. Stalin explained how the law of value's character «changes, adopts a new content», just as «money» and

⁸² K. MARX – F. ENGELS, *Collected Works*, xxiv, pp. 85-87.

⁸³ N.A. VOZNESENSKII, *Khozraschet i planirovaniie na sovremennom etape*, «Bol'shevik», 9/1931, pp. 29-30, 33-35; N.A. VOZNESENSKII, *O sovetskikh den'gakh*, «Bol'shevik», 2/1935, pp. 36-45.

«commodity» did too. «All categories stay», concluded Stalin, «but they adopt a different character» and become tools for communist construction»⁸⁴.

This novel theoretical innovation would be made public in 1943, when the obvious became official: since labour was «not qualitatively uniform», accounting for it in «hours or days» was impossible. Accordingly, «on the basis of the law of value», calculations and comparisons were to be realised «by means of accounting and comparison of the products of labour, of ‘commodities’», which were «use values», but also «ha[d] value». It was on the basis of the «conscious use» of the «transformed law of value» that «trade, money, etc. [had become] tools of a planned socialist economy».

The «transformed law of value», it was added, caused no «chaotic distribution» of social labour and the means of production amongst centrally-planned branches, while «labour power, land and the most important means of production [were] no longer commodities». This new theoretical construct was therefore added to the many that would have been «overcome only in the highly developed stage of communism»⁸⁵.

None of this cleared up the theoretical confusion. When K.V. Ostrovitianov, one of the leading figures of Soviet economics, was asked which of his now contradictory articles on the «law of value» were to be considered correct, he could only answer, «you know, take the latest one...»⁸⁶.

5. *Results*

The Great Break's results were staggering. GNP had almost doubled between 1913 and 1940, growing at an annual rate of 5-6% (10% at 1928 prices) between 1928 and 1940. Yet, household consumption had fallen from 80.5% of national product to 52.2%, while as of 1939 gross agricultural production stood at 11.092 million roubles (at «1926-1927 unchanged prices»), respectively barely surpassing and still below the levels of 1913 and 1929⁸⁷. As well, the human cost of the Great Break reached the unimaginable. Between 5.5 and 8.5 million Soviet citizens lost their lives in the drive towards collectivisation and industrialisation⁸⁸.

Stalin's purpose had been to build an economic system capable of achieving such results, no matter economic and human costs as well as the actual non-

⁸⁴ ARAN (Archive of the Russian Academy of Sciences), f. 1705, op. 1, d. 166, ll. 20-24. E. Pollock first discovered this text and analysed it in his *Conversations with Stalin*.

⁸⁵ *Nekotorye voprosy prepodavaniia politicheskoi ekonomii*, «Pod Znamenem Marksizma», 7-8/1943, pp. 57-68.

⁸⁶ Quoted in L.A. VOZNESENSKII, *Istiny Radi*, Moscow, Respublika, 2004, p. 91.

⁸⁷ R.W. DAVIES – M. HARRISON – S.G. WHEATCROFT (eds), *The Economic Transformation of the Soviet Union, 1913-1945*, Cambridge, CUP, 1994, pp. 269, 272, 285.

⁸⁸ M. ELLMAN, *The Role of Leadership Perceptions and of Intent in the Soviet Famine of 1931-1934*, «Europe-Asia Studies», 57, 6/2005, p. 828.



fulfilment of Five-Year Plan indicators. As Ericson observed, said system proved «very good at mobilising scarce resources and concentrating on a few clear, well-defined objectives»⁸⁹. This was demonstrated not only during the Great Break, but also throughout the Second World War, when the USSR decisively outproduced and out-supplied Nazi Germany. The establishment of the command economy also allowed the Soviet leadership to attain several broad political and ideological goals: the creation of a hierarchical economic system geared to respond to political directives; its abidance by some broad Marxist-Leninist ideological tenets – overwhelming preponderance of State ownership over private property, of administrative levers over individual initiative and of planning over market mechanisms; the creation of a mighty heavy industrial base; and the massive build-up of defence capabilities.

In 1990 the nonagenarian Kaganovich defiantly repeated that in the late 1920s the choice had been between the Great Break or being «crushed for five hundred years». In fact, recent scholarship, expanding on earlier intuitions, has proved that collectivisation produced no «enhanced tribute» for industrialisation and that the Great Break's results could have been achieved through more moderate and less disruptive policies⁹⁰.

In the ensuing forty years, the socialist prelude to full-blown communism would be repeatedly extended and the tools inherited from capitalism would keep surviving. In addition, the nominal scope of prices, money, credit, profit and bonuses would be widened to the point that these «economic levers» became the core of repeated attempts at reforming a system that, from its inception, was meant to be their nemesis.

⁸⁹ R.E. ERICSON, *The Classical Soviet-Type Economy: Nature of the System and Implications for Reform*, «The Journal of Economic Perspectives», 5, 4/1991, p. 12.

⁹⁰ J.R. MILLAR, *Mass Collectivization and the Contribution of Soviet Agriculture to the First Five-Year Plan: A Review Article*, «Slavic Review», 33, 4/1974; H. HUNTER – J. SZYRMER, *Faulty Foundations. Soviet Economic Policies, 1928-1940*, Princeton, PUP, 1992, p. 258; A. CHEREMUKHIN ET AL., *Was Stalin Necessary for Russia's Economic Development?*, London, Centre for Economic Policy Research, 2013, pp. 43-46.