

Robert C. Allen, **Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution** (Princeton and Oxford: Princeton University Press 2003).

The issue of the economic performance of the Soviet Union is hardly any less controversial today than it was at the height of the Cold War. While specialists continue to debate the precise figures, the consensus today is that under Stalin the Soviet economy grew rapidly, though at enormous human cost, and that economic growth was not translated into commensurately rising living standards. Moreover, revisionists have argued that the Russian Revolution aborted what would have been a capitalist economic take-off which would have allowed Russia to join the ranks of the leading capitalist powers. Those who find anything positive in the Soviet experience risk demonisation as apologists for Stalin.

Bob Allen is a distinguished economic historian who has only recently ventured into the minefield of Soviet economic history and in this book he seeks systematically to clear a path through it, arguing that Russian capitalism before the revolution was not poised for take-off. He recognises that collectivisation and the terror imposed economic, as well as human, costs but argues that the economic gains of Stalinist industrialisation had neutralised those costs by the end of the 1930s. Finally, he argues that the slowdown of the Soviet economy after 1970 was not, as today's consensus has it, inherent in the Soviet system of economic planning, but was primarily the result of major planning mistakes when labour surplus turned into labour shortage. Robert Allen does not reach his conclusions as an apologia for Stalinism, but on the basis of computer simulations based on traditional, though now unfashionable, models from development economics.

Allen argues that pre-revolutionary Russia lacked what are generally considered to be the institutional pre-requisites for capitalist development so that its development prospects were not good. Although economic growth in the fifty years before the Revolution was relatively rapid, by the Revolution the sources of growth had been exhausted. Agriculture had reached North American levels of productivity by 1913 and wheat prices collapsed after 1914. The expansion of the railroads had run its course and there was no prospect of protected light industry becoming internationally competitive. The appropriate comparators for the prospects for Russian capitalism in the twentieth century are not Japan but Argentina or even India. Moreover, Russian capitalist development had brought little if any benefit to the urban and rural working class, intensifying the class conflicts that erupted in Revolution.

Following War Communism, the New Economic Policy (NEP) sought to develop the Russian economy within a quasi-capitalist framework. However, the institutional and structural barriers to Russian economic development were now compounded by the unfavourable circumstances of the world economy, so that there was no prospect of export-led development, while low domestic incomes provided only a limited market for domestic industry. Without a state co-ordinated investment programme, the Soviet economy would be caught in the low-income trap typical of the underdeveloped world.

The Soviet Union had a massive rural surplus population with little scope for increasing agricultural productivity, other than through the consolidation of excessively fragmented holdings. The obvious development strategy, as soviet economists were well aware, was to transfer the surplus rural population to industrial employment in the cities. The key issue was how to achieve this. Stalin achieved it by

a brutal policy of collectivisation, forced migration, compulsory requisitions and heavy rural taxation. Allen believes that the continuation of the NEP policy of encouraging market forces in agriculture, alongside rapid industrialisation, could have achieved almost the same result at much less human cost as the surplus population was attracted to industrial employment in the city and those who remained increased their sales of produce. Allen argues that a capitalist economy would not have created the industrial jobs required to employ the surplus labour, since capitalists would only employ labour so long as the marginal product of labour exceeded the wage. State-sponsored industrialisation faced no such constraints, since enterprises were encouraged to expand employment in line with the demands of the plan.

Allen's simulations of alternative strategies in the 1930s suggest that a capitalist development strategy would have provided very slow growth and high unemployment, but that the Stalinist collectivisation strategy soon overcame the disasters of collectivisation to outperform a hypothetical continuation of the NEP policy alongside rapid industrialisation by the end of the 1930s, although not by very much. The other positive feature of the Stalinist strategy was that the rapid expansion of education and growth of employment reduced the fertility rate and saved the Soviet Union from the population explosion that has plagued much of the third world.

The strong performance of the NEP strategy might seem surprising, since the turn to forced collectivisation was made at the end of the 1920s precisely because the NEP was not working: the peasants were not increasing their sales sufficiently to feed the urban population. However, Allen's finding is primarily due to his assumption that without collectivisation farm output would have grown steadily, so that under his NEP simulation farm output is 51 percent greater than under collectivization and it is still 16% higher in 1939 (p. 234): the food supply to the cities comprises a much lower proportion of total agricultural production than under collectivisation.

Soviet industrialisation was not only based on forced collectivisation, but also on the massive allocation of resources to heavy industry and the military at the expense, Stalin's critics have argued, of the living standards of the population. Allen uses simulations of Feld'man's classic Soviet growth model to show that an investment strategy focused on heavy industry is quite compatible with rising consumption and re-analyses the best available data to show that, after the catastrophe of collectivization, living standards indeed rose rapidly.

Bob Allen shows that the Stalinist strategy worked, in strictly economic terms, until around 1970, when growth slowed dramatically. He explains the downturn in terms of the failure of the system to adapt to the ending of the labour surplus, but the failure was not so much that of the system as of the decision-making at the top. A growing proportion of investment resources was wasted by diversion to the military; by expanding energy production instead of economising on consumption; by investing heavily in Siberia; and by retooling old plants rather than closing them down and building new facilities. However, we might ask whether these faulty decisions were just subjective errors or whether they did not perhaps have deeper systemic roots. The decisions may have been economically irrational, but there were good reasons for them, as for so many other economically irrational decisions, in the rationality of the soviet system.

Bob Allen's book convincingly establishes the superiority of a planned over a capitalist economy in conditions of labour surplus (which is the condition of most of the world most of the time). However, his findings should not divert attention from

the well-documented deficiencies of the soviet economic system that provided perverse incentives at every level and led to grotesque levels of inefficiency and waste. His book is testimony to the astonishing achievements of soviet workers, whose efforts produced such impressive results despite their often appalling living and working conditions.

The big question raised by Bob Allen's book is whether it is possible to reconcile the benefits of central planning with democracy and microeconomic efficiency. Gorbachev believed that it was, but his attempts at democratisation and economic liberalisation led to the collapse of central planning, so that the Russian people merely exchanged the irrationality of the soviet system for the irrationality of global capitalism. The failure of the Soviet Union to achieve its proclaimed socialist aims surely does not mean that it is impossible for humanity to make a better world.

Bob Allen has written a thought-provoking book, packed with stimulating insights and supported by rigorous analysis, that merits reading and re-reading.