Allen, Robert C. *Farm to Factory: A Reinterpretation of the Soviet Industrial Revolution.* Princeton: Princeton University Press, 2003. xviii + 302 pp. \$45.00. ISBN 0-691-00696-2.

Bob Allen portrays "Farm to Factory" as the core process of Soviet economic development: peasants became industrial employees. He argues that the Soviet record of economic development up to the 1970s shows considerable strengths. Could any of the alternative models of economic development that were available to Russia at the time have done better? Allen suggests not. If the Soviet economic system was good until the 1970s, whydid it fail in the 1980s? Allen's answer is that the Soviet economy failed because its strengths had become its weaknesses.

Allen's first proposition rests on four comparisons. First, the growth of Soviet productivity up to 1970 was right on the button by OECD standards. Second, even in the 1930s, with Stalin's dictatorship at its worst, aggregate output and consumption improved by more than the established western measures have allowed; that those who moved from farm to factory made substantial gains is not new, but Allen also casts this trend in a more favourable light than before. Third, while the early 1930s were a disaster for Soviet peasants, the agricultural system recovered quickly and its long run performance was comparable with that of western agriculture in an equivalent climatic zone. Fourth, educating Soviet women reduced fertility, slowed population growth, and let incomes rise; despite some notorious episodes of heightened mortality, death rates also fell markedly over the long run.

If the Soviet model was not so bad, was there some superior alternative? Allen starts with Russia as a market economy. Russian incomes were growing at a reasonable rate before 1914, but Allen argues that this performance was not sustainable through the interwar period. It relied too much on the world market for wheat; there was some industrialization but not enough; not enough of the income growth trickled down to wages. Market-economy food exporters like Russia would suffer badly in the Great Depression of the 1930s. Allen concludes that Russia could not have grown at late nineteenth-century rates through the twentieth century.

If a market economy could not have improved on Soviet reality, were there alternatives within a socialist framework? Allen simulates alternative accumulation strategies in the 1930s. Starting from the historical givens of the Soviet economy in 1928, he calibrates a general-equilibrium model to "predict" the historical outcomes year by year to 1939 subject to Stalin's economic policy and the transformational shocks of collectivization and a planned economy. Policy decided the proportion of capital goods output reinvested in the capital goods sector. Collectivization replaced the food market by compulsory procurements and caused large demographic and capital losses. Planning imposed physical controls on industrial firms while softening financial rules to let them employ more workers and produce more goods than profit-maximization would allow.

Allen uses this model to show what would have happened without collectivization and "soft" budget constraints on industry. He calculates that by 1939 collectivization had made a net contribution that was positive but small: positive because a vast migration from "farm to factory" raised average productivity as well as consumption; small because large capital losses offset the gain. Taking into account the millions of avoidable deaths he concludes that collectivization "added little to growth and corrupted socialism" (p. 171).

Stalin's bigger contribution, Allen suggests, was to subsidize industrial employment through the soft budget constraint. This was economically rational, he maintains, because too many labourers in agriculture had driven their marginal product to zero. With wages above zero, profit-maximizing firms would not take up the agricultural labour surplus. Allen concludes that industrial profit-maximization would have restricted "farm to factory" movement and left output about 20 per cent lower in every year through the 1930s. Given the small gains and large suffering

associated with collectivization Allen concludes that state controls on industry with a market relationship with peasant agriculture was the best development model.

The argument is clear and careful, but in my view Allen is critically wrong on the soft budget constraint. He treats it as a mere payroll subsidy that resulted in a costless efficiency improvement. In fact, its purpose and implications went far wider.

First, it grew out of the dictatorial relationship between the Bolshevik party and the economy. The Soviet authorities suppressed profit-maximization and allowed soft budget constraints not to improve economic efficiency but to build a command economy and direct resources by decree.

Second, Allen argues that in the 1930s the best model comprised soft budget constraints in industry and no collectivization. Peasant farms could have released their surplus labour to industry without loss of output while the remaining farmers would willingly have sold the food to feed them through the market. However, we don't need to speculate about what *might* have happened in the 1930s under these arrangements. We just have to look at what *actually* happened in the late 1920s. Budget constraints in industry were already becoming soft. The resulting shortages left peasants with few industrial goods to buy. With little to buy, they cut back food sales. Under these conditions price adjustment didn't work; offering higher prices for food just let the peasants buy the limited quantities of industrial goods available for even lower food sales. That left Stalin with two choices: harden budget constraints and let go of industry, or bring the peasantry under his control as well. He didn't have the option to go into the 1930s with controls on industry *and* a free market for food.

Third, the soft budget constraint was not just a subsidy for employment but reflected a more far-reaching willingness to tolerate inefficient behaviour generally. It did permit higher employment and output in the short run. But by eliminating the automatic punishment of inefficiency it also created incentives that were highly adverse for effort, allocation, and technology. Stalin's circle did not intend these consequences. They *wanted* Soviet firms to keep employment and other costs low, raise productivity, and make profits. They just did not want this *enough*. They wanted a command system more. To get one, they had to let budget constraints become soft. The result was that the rewards for productive effort and initiative in the Soviet economy faced an unequal competition with the gains from lying, cheating, shirking, and stealing.

This does not mean that some alternative was better. I sympathize with the view that Russia would have fared badly as a market-oriented food exporter in the interwar slump or the war that followed. The trouble is that Allen's analysis conveys no sense of the real price Russia is paying today for six decades of Stalinist planning, which temporarily boosted production and employment but did terrible damage to economic and civic institutions. Allen suggests that if Russia had made it through the twentieth century as a food-exporting market economy it would have remained relatively poor. But having emerged from communism Russia is poor anyway: according to Angus Maddison average real incomes across the former Soviet Union were only two thirds of the Latin American average in 1998, compared with rough parity in 1914.

The final part of Allen's argument concerns what went wrong in the long run. The Soviet economy was datestamped "best before 1970". The problem is why, if everything was so good until then, it turned out so badly after that. Allen suggests that once the "farm to factory" movement was complete, the strengths of the Soviet economy became its weaknesses. The soft budget constraint stopped industry from adapting to labour shortage and rising energy costs. Centralized plans focused on raising energy production rather than cutting consumption. Many have seen this as an era in which plans became increasingly ineffective. Allen's view is the contrary: "the plans were implemented; the problem was that they did not make sense" (page 211). As misallocation worsened the economy stopped growing. There is a lot of careful analysis and interesting data about investment allocation.

To support his diagnosis Allen must downplay the role of incentives. He suggests that collective agriculture was "not inimical to productivity growth" (page 174); in industry the "disincentives to innovate may not have been as strong as usually believed" (page 208); in general the Soviet economy declined not because of "incentive problems" but because of "a failure of imagination at the top" (page 211). I will need more persuading, however.

This fascinating book contributes to the long tradition of seeking a transferable "development model" for poor countries in Soviet historical experience (page 4). The problem is that this model is historically inseparable from dictatorship.

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