China's Great Leap Forward

Some Problems and Lessons

Solomon Adler

The biggest single asset of large and densely populated under-developed countries such as India and China is the huge reservoir of unemployed and under-employed rural labour. The systematic and efficient tapping of this reservoir is a prime desideratum for rapid economic progress.

If they cannot raise themselves by their own bootstraps, the task of industrialising in a reasonable timespan will prove inordinately difficult. However important in specific situations and sectors, problems such as the supply of foreign exchange and of capable managers, to which economists have perhaps devoted disproportionate attention, are not as fundamental as that of the effective mobilisation of the labour-force.

A second point emerging from the experiences of 1958 is that extremely rapid economic growth requires a technical revolution at all levels from the simplest to the most advanced combined with the flexible use of different scales of production from the smallest to the largest. The Technical Revolution is easier to grasp at its fairly rudimentary levels in agriculture, small industry and local transport than in modern industry and transport. Perhaps the easiest way to describe it is to say that there are many different levels of technique in China and that progress is occurring simultaneously in most of them.

CHINA made very substantial economic progress between 1949 and the end of the First Five-Year Plan in 1957. During 1953-1957 the annual average rate of increase in gross industrial output was 19.2 per cent, or just about the same as Soviet Russia's in 1928-1932. Similarly, the annual average rate of growth of 412 per cent in gross agricultural output, while high and well above the yearly increase of over 2 per cent in population, was still within the accepted standards of economic development.

The 1958 Leap

But what happened last year marked a radical departure from all previous norms. Gross industrial output shot up by 66 per cent and gross agricultural output by 64 per cent. Production of food grains, ginned cotton, ingot steel and coal all doubled or more than doubled, and China became the third largest producer of coal in the world. There is simply no precedent for such phenomenal rates of growth, not to mention the establishment of People's Communes throughout the countryside (outside a few minority areas), which was a revolution with the most profound social and political as well as economic and technical implications.

Two major conclusions emerge. First, China appears to have solved the food problem in its brute quantitative aspect and to have smashed the bottleneck hitherto invariably imposed by the lagging rate of increase in food supply on the Pace of Industrialisation. Needless to say, this was accomplished without the mechanisation of agriculture, second, China is well on the way to becoming the third greatest industrial power in the world. When precisely she will overtake Great Britain and Western Germany is less significant than either the inevitability of the end-result or than that it should probably occur fairly early in the second decade of the Chinese Revolution.

Once-for-all or Continuous?

Last year's achievements raise problems as fascinating as they are formidable for economists and economic historians, since even if the departure from accepted norms turns out to have been sui generis, its very magnitude demands an explanation. Looking to the future, can the pace of agricultural advance keep abreast with that of industrial advance, and if not, will it lag as far behind as in the past? Was the reservoir of unused labour dried up in 1957-8? Or are there still unemployed and under-employed labour reserves? Is the scope for simple technical improvements yielding quick and big increases in output at relatively small cost exhausted or, at any rate, greatly reduced? Is emancipation from "the superstition of technique" (i.e., the passive acceptance of previous best practice, foreign as well as domestic) a once-and-for-all operation, the richest returns from which were already creamed off in 1958? Or is it a self-sustaining and continuous process? And similarly with the great reductions in industrial capital construction costs and the striking extensions in the capacity of existing factories achieved with only little new investment, which were features of "the Great Leap Forward" in 1958, and which are themselves explicanda.

Again, a decisive variable for forecasting the future rate of growth is the rate of accumulation. The highest annual rate of accumulation attained by Soviet Russia during its First Five-Year Plan was some 30 per cent of the national income (narrowly defined). China certainly equalled and most probably surpassed this rate in 1958. Can such a rate of accumulation be maintained in 1959 and 1960? Will the People's Communes increase the rate of accumulation in the countryside and, if so, by how much? Will rising standards of living imperil the nigh rate of accumulation? Or can the steep ascent from backwardness be telescoped into a few years while living standards continue to rise at least gently? In 1953-1957 the curve of annual industrial growth formed a fairly sharp saddle-back with a regularity which suggested a Communist version of the Cobweb Theorem with respect to the amplitude--though not to the direction--of the annual swings. Will this pattern be repeated? And, if so, will it be possible to damp down the amplitude of the swings?

These are only a few of the questions with which the Chinese experience confronts the economist.

The 1959 Annual Plan

It is clear from various official statements that the Chinese regard "the Great Leap Forward" as a process covering 1959-1960 as well as 1958. The Annual Plan for 1959 calls for increases of 41 and 39 per
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cent. In gross industrial and gross agricultural output, and for the production of 525 million tons of grain, 5 million tons of cotton, 380 million tons of coal and 18 million tons of steel, with respective increases of 40, 50, 41 and 04 per cent on 1958. No less noteworthy than the size of the planned increases in industry and agriculture, which are higher than any ever achieved except in China last year, is the fact that agricultural expansion is again to match industrial.

At the time of writing, the prospects for attaining the main industrial targets appear to be reasonably favourable. Prediction in agriculture is more hazardous because catastrophic climatic vicissitudes can never be excluded. Barring these, however, the chances for at any rate approaching the key agricultural goals are fairly good, since emphasis has been placed on the more systematic use and wider diffusion of the combination of methods which proved so successful last year and to the implementation of which the People’s Communes are well adapted.

What plan-fulfilment in 1959 would mean in terms of rapid economic growth is shown in the accompanying Table, the last two rows of which comparing growth between 1952 and 1957 and the projected growth between 1952 and 1957 and the projected growth between 1957 and 1959 are especially instructive. If the economic explosion of 1958 constitutes a challenge to many generally accepted assumptions about the character and practicable tempo of economic growth, the continuation of the Great Leap Forward on a scale even roughly approximating the envisaged in the 1959 Annual Plan should necessitate a thorough re-examination of these assumptions. Clearly, the analysis of the Chinese experiences in 1958 and 1959 should occupy a very high place on the agenda of serious students of the theory and practice of economic development.

Some Lemons of 1958

In any case, it is perhaps not too early to draw some of the lessons of 1958. First and foremost, the biggest single asset of large and densely populated under-developed countries such as India and China is the huge reservoir of unemployed and under-employed rural labour. The systematic and efficient tapping of this reservoir is a prime desideratum for rapid economic progress.

To vary the metaphor, it is entirely feasible for such countries to raise themselves by their own bootstraps and to complete the first, hardest and most crucial stage of industrialisation if they can effectively mobilise their potential labour force.

One may go further. If they cannot raise themselves by their own bootstraps, the task of industrialising in a reasonable time-span will prove inordinately difficult. However important in specific situations and sectors, problems such as the supply of foreign exchange and of capable managers, to which economists have perhaps devoted disproportionate attention, are not as fundamental as that of the effective mobilisation of the labour-force.

Success in this field widens, if it does not remove, the otherwise uncomfortably narrow bottleneck of food supply, although it does not ensure rates of growth in agriculture comparable with those in industry in the absence of concomitant social and agrotechnical changes. Likewise, it greatly and directly facilitates the promotion not only of small- and large-scale public works (the former being more significant than the latter for obtaining quick increases in agricultural output) but also of small- and medium-scale local industry.

A second point emerging from the experiences of 1958 is that extremely rapid economic growth requires a technical revolution at all levels from the simplest to the most advanced combined with the flexible use of different scales of production from the smallest to the largest. The Technical Revolution is easier to grasp at its fairly rudimentary levels in agriculture, small industry and local transport than in modern industry and transport. Perhaps the easiest way to describe it is to say that there are many different levels of technique in China and that progress is occurring simultaneously in most of them.

Walking on Two Legs

The Technical Revolution embraces replacing the shoulder-pole with the rubber-tyred wheelbarrow in the village as well as the discovery of 3-trough tapping at the Taiyun Iron and Steel Works. The Indian engineers who visited the Wuhan Heavy Machine Tool Plant learned at first-hand of such daring innovations as the substitution of concrete for cast iron in the bases of the latest heavy machine-tools and of air compressors for moulding machines in many advanced processes.

Similarly, while the giving of top priority to building up the core of large-scale heavy industry is essential to industrialisation, the policy of walking on two legs, i.e., of simultaneously developing small, medium and large-scale industry and modern and traditional methods of production, so far from retarding, actually hastens modernisation. High capital-intensity is not a virtue in itself. As is well-known, the People’s Communes gave a tremendous spurt to small-scale production. Their gross industrial output in September-December was over £2 billion, and it should be markedly greater in 1959. The growing shortage of labour, rural as well as urban, is speeding up the Technical Revolution.

It may be worth adding that the Chinese modus operandi differs from the Gandhian approach to handicrafts, which presupposes fundamentally static techniques and the preservation of the old village society.

A third lesson of the Great Leap Forward is the desirability of a...
simple and dramatic target with the widest economic ramifications such as that provided by the steel campaign in China, which has been of inestimable value in firing the popular imagination. Mao Tse-tung is using steel as the Archimedean lever of Chinese industrialization just as Lenin used electricity and Goelro as the Archimedean lever of Soviet industrialisation.

No Rigid Adherence

Fourthly, rigid adherence to a mechanical balance in the execution of a plan is incompatible with a very fast tempo of economic growth and the fear of running into bottlenecks and disproportionalities may easily become a brake on progress. Indeed, their emergence may even be converted into a stimulus. At the same time, it should remain a prime objective of short-run planning to anticipate the most serious disproportionalities. Otherwise, there will be avoidable wastes and it will be impossible to attain the optimum sequence of "balance, imbalance and new balance." Last year's steel campaign vividly illustrates this lesson, both in its positive and negative aspects.

Finally, "the Great Leap Forward" would have been impossible without the upsurge in mass enthusiasm for production which swept the country. This mass enthusiasm was essential for the efficient mobilisation of the labour-force in agriculture and in industry and for the Technical Revolution no less than for "walking on both legs" and for the steel campaign. It was the immediate source of the dynamics of balance, imbalance and new balance, since inflexible adherence to original plans would have been the surest way of curbing the people's initiative and zeal. It is the key to understanding the relative freedom from bureaucratism which is so refreshing a feature of recent developments. That the generation and maintenance of this enthusiasm involve less directly economic forces should enhance rather than diminish the social scientist's interest in the nature of the incentives which are its main-spring.

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