There is absolutely no reason for regarding dependency as cause or autonomy as cure for them. Second, by blurring objectives Gereffi fails to acknowledge that significant trade-offs exist among them; for example, low drug prices enable greater access to medicines by the poor but restrict the flow of funds available for development of local industry. This causal confusion is ultimately the most objectionable feature of dependency analysis. By obfuscating the true causes of legitimate and often pressing LDC problems, dependency theorists hamper rather than promote effective and just resolutions.

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The Agricultural Sector in China

Agriculture in China's Modern Economic Development. NICHOLAS R. LARDY. Cambridge University Press, New York, 1983. xiv, 285 pp. $37.50.

Unlike many recent writers on China, the author of this study of Chinese agriculture avoids taking a "position" of either censure or apology. Rather, Lardy casts the tone of the book by refusing to say that the first 35 years of socialism contained monumental errors. Instead, he invites the reader to consider three paradoxes:

1) That periods of great technological improvement saw stagnation in total output growth. (During the five chapters of the book, Lardy explains this paradox by showing that periods of excessive quantitative controls and cadre intervention in decision-making happened to coincide with times of technical change.)

2) That much of China's population remains malnourished despite a doubling of income per capita since the 1950's. (This paradox is later explained by the lack of intra- and inter-provincial trade to equalize the benefits of economic development.)

3) That Mao accorded to the peasantry a place at the vanguard of the proletariat yet continually subjected rural people to disruption and deprivation. (Lardy explains this paradox by demonstrating that Mao failed to understand the role of markets in squelching the bureaucracy, which he tried to accomplish through political campaigns.)

Having set out these intriguing paradoxes, Lardy further piques the reader's interest by posing six questions:

1) Has rapid industrial growth raised living standards in the rural areas? The answer to this question forms one of the key themes of the book, that balanced models of economic growth include agriculture not just as an exploited sector but as a major contributor to and beneficiary of growth. Because Mao thought a mere reorganization of the agricultural sector was sufficient, as contrasted with a full-scale investment strategy for industry, growth has not been balanced.

2) Why has industrial output grown at a rate of 11.3 percent annually but agricultural output at a rate of only 2.3 percent, just a step ahead of population growth at 2 percent? The answer combines the solution to question 1 above with that to paradox 1: that underinvestment during periods of technological change in agriculture, notably during the mid-1960's, was crippling to both sectoral and national development efforts. There were also "negative interventions" that exploited agriculture without giving it the resources genuinely to contribute to rapid economic growth. These interventions included not just output quotas but also adverse terms of trade for China's agricultural producers, who faced a nitrogen-rice price ratio higher than in any other Asian country (and six times as high as in Taiwan Province) and a relative price for a 28-horsepower tractor twice that in Japan.

3) Have post-1949 policies preserved the dynamism of resource allocation that characterized farms in the 1930's? Lardy shows that inadequate price incentives for labor-intensive cash crops, the futile efforts of central planners to direct production without knowledge of local conditions, the tendency toward gigantism, which reduced the connection between effort and reward, and the overemphasis on regional self-sufficiency (rather than regional specialization and gains from trade) all contributed to a decline in factor productivity.

4) Have investment decisions between agriculture and industry taken into account the marginal productivity of scarce capital? In the absence of data giving absolute magnitudes, Lardy ingeniously compares the rates of investment and output growth for the two sectors. He concludes not only that agriculture has received a much lower share of investment than industry but that investments in agriculture would have had much higher payoffs.

5) Have rural people "caught up" with urban dwellers in terms of standard of living, and have income disparities within the rural areas themselves been reduced? This question is the key to a socialist strategy of development, yet Lardy shows that egalitarian China has left as many poor in the wake of development as the countries of the First World in their early stages: "China is probably the only country in modern times to combine, over twenty years, a doubling of real per capita national income . . . and constant or even slightly declining average food consumption" (p. 159). Given the avowed goals of the government of China, this conclusion is truly paradoxical until one views through Lardy's eyes the inevitable effects of underinvestment, controlled and even reverse migration, inflexible and even regressive tax rates, emphases on quantity (as opposed to price) controls and regional self-sufficiency, and the pro-urban, pro-industrial bias of the leadership. To strengthen his point, Lardy critically summarizes estimates by earlier authors of per capita calorie and protein consumption to show that between 1957 and 1976–78 the levels of both declined in China.

6) What are the prospects for reform in the future? In one of the most interesting chapters of the book, Lardy suggests that the impressive benefits from the Production Responsibility System, widely touted by both Chinese and Western authors, probably reflect the short-term gains that have characterized previous periods of recovery from bad policies. He displays up-to-date evidence from the Chinese press that Chinese leaders, either through ignorance of comparative advantage and the benefits of price stimuli or because of a more fundamental "residual pro-urban bias," are not ready to provide the comprehensive types of economic reform that would allow China to achieve true modernization of the economy by the year 2000. Only with an improved set of marketing and pricing policies complementary to the new policies on the production side can China resolve the other questions and paradoxes to which Lardy points. The reluctance of lower-level cadres to give up their control of local production, the fear on the part of higher-level cadres that an increased role of markets will push China away from producer goods, the poor understanding of the role of trade in specialization and productivity growth, and the simplistic trade-off between grain and nongrain production all augur ill for sustained economic reform and growth in China.

I would recommend Lardy's book not only to policy-makers and students of economics within China but to anyone who wants fresh insights into China's agricultural development or who believes that economics makes for dull reading.

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Secondary Education in Japan

Japan's High Schools. THOMAS P. ROHLEN. University of California Press, Berkeley, 1983. xii, 363 pp., illus. $35; paper, $10.95.

Japan possesses a system of secondary schools that is second to none in rigor. The minimum Japanese high school curriculum includes three years of mathematics, three of English, three of social studies, three of Japanese, and two or three of science. Every high school student studies international economic issues in depth. All acquire some knowledge of European, American, and Chinese history. Most have read some Shakespeare as well as other foreign literature. And many study a second foreign language while completing the standard requirement for English. It need hardly be said that Japanese high school students work hard. They attend school for 240 days of the calendar year, not 180 as in the American pattern. They commonly spend three to five hours daily on homework and together with teachers are charged with cleaning and low-level maintenance of their school's physical plant.

The author of the present book sets forth this and much other information concerning the Japanese secondary school system in a cogent and careful manner. An anthropologist by training and a management consultant by profession, he applies the same techniques to this study that he earlier employed in studying a Japanese bank. On the basis of their general reputations and some prior information, Rohlen selected five schools in the city of Kobe with different clienteles and emphases along the spectrum of college versus job preparation. After collecting information from numerous written or printed sources, he attended classes, interviewed teachers and students, and observed their daily routines. He then relates his findings to a broader Japanese context.

Rohlen is apparently the first investigator to have approached the subject in this way or to have written on Japanese high schools in such detail. Until recently the Japanese took their high schools entirely for granted and foreigners had very little interest in them. But these attitudes are naturally changing as Japanese achievements gain notice. For the past 20 years Japanese school children have ranked first internationally on standardized tests in mathematics and near the top in science. And each year some two million take calculus in high school, whereas a mere 165,000 Americans do so. But the positive aspects of the Japanese schools are considerably broader than this. Classes proceed in a disciplined and orderly manner with low disruption levels by the standards of American society. There is very little use of drugs. And students participate widely in sports and other recreation activities.

However, none of this should imply that a state of perfection exists; for over the college preparatory schools—a majority of all high schools—hangs the cloud of "examination hell." In Japan, formal testing is the exclusive device for deciding admission to college, and the tests endeavor to gauge an applicant's mastery of knowledge, not potential for college-level work. Because of this format, memorization and endless preparation are widely believed to pay off, and a proliferation of cram schools, study guides, special tutors, and youthful anxiety have become the predictable result.

"Pick up any of Japan's national news magazines in February and March and you will find university examinations to be lead stories." This cover photograph from one of the magazines "shows a student jumping for joy at being accepted—presumably to Tokyo University, for the building in the rear looks like that campus. By the apparent age of the celebrant, he has finally succeeded in passing the entrance examination after a number of tries." [From *Japan's High Schools*]

These patterns have naturally elicited hostility, and Rohlen describes some of the criticisms. He points out that most Japanese think the examinations rob young people of social development, cause them emotional distress, encourage them to memorize rather than analyze information, and promote intellectual conformity at the expense of more critical thought. But he also endeavors to show that the system has certain strengths. The schools themselves produce workers who adapt to a rigorous environment. Examinations based on knowledge tend to reward effort as opposed to mere intelligence. Everyone thinks he or she has a reasonable chance to succeed. And by eliminating interviews, emphasis on grades, and personal recommendations, the examinations may help curb personal favoritism. There is in any case little prospect for change in the short run. When the Education Ministry abolished public "practice" examinations in the late 1960's, private testing companies experienced rapid increases in demand for their services. And as the public high schools tried to downplay exam preparation, certain private high schools began to surpass them. In the 1950's and 1960's, all top-rated high schools were public; now in the 1980's the top-ranked schools are private. University entrance examinations remain a focus of public debate and suspicion even as competition among individuals serves to strengthen their hold on the country.

A salient issue for Americans, of course, is what we can learn from this system. Rohlen, while not too explicit about this, first seems to say, "Not very much." He does not in any case see the Japanese secondary school as a "model" for its troubled American counterpart. The societies are too different, ours ethnically diverse, theirs essentially uniform. Popular expectations are too far apart. Americans want teenagers to cultivate social skills and a sense of independence; Japanese lean more toward discipline and more time for social maturation. And the respective philosophies of education diverge too greatly, the Western tradition stressing logic and analysis over Japanese education's emphasis on facts. These differences, at the same time, can be defined too sharply. Americans certainly recognize the im-