

Notes on the Productivity Campaign in Japan

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I

I wear two hats. One is the economic theorist's hat. When wearing this hat, I talk with equal ease of America and Japan, Utopia and Altruria (not to mention Cloud-Cuckoo-Land). My other hat is the Japanese specialist's hat. When wearing this hat, I wander among the disciplines from music to geography and get intellectual hernia for my trouble. In this essay I intend to wear both hats at once.

Since Occupation days American funds and technical assistance have been devoted to increasing output per man-hour of labor in the Japanese economy. Since 1953, this effort has had the active cooperation of the independent Japanese government. There is now a Japan Productivity Center in Tokyo with American advisors. There are exchanges of productivity exhorters and observers between the two countries. There is also an Institute for Research in Productivity at Waseda University, affiliated with the Department of Industrial Engineering of the University of Michigan. At the same time Japan's largest labor federation, *Sohyo*,¹ has from the outset opposed the productivity campaign, as have the Opposition parties of the Japanese Left. And the establishment of the Institute at Waseda was marked by student riots led by the leading nation-wide student federation, *Zengakuren*.

II

Three interesting features of the Japanese economy are pertinent to this study:

1. Japan is one of the "dual economies" of Asia.² It has a highly advanced and moderately high wage "capitalist sector," featuring

factory production and wage labor. There is a notoriously sweated and low wage "precapitalist sector," featuring domestic and cottage industry and unpaid family labor. There is little mobility upward to the first sector from the second. It differs from the other Asian dual economies mainly in the extent and advancement of its capitalist sector.

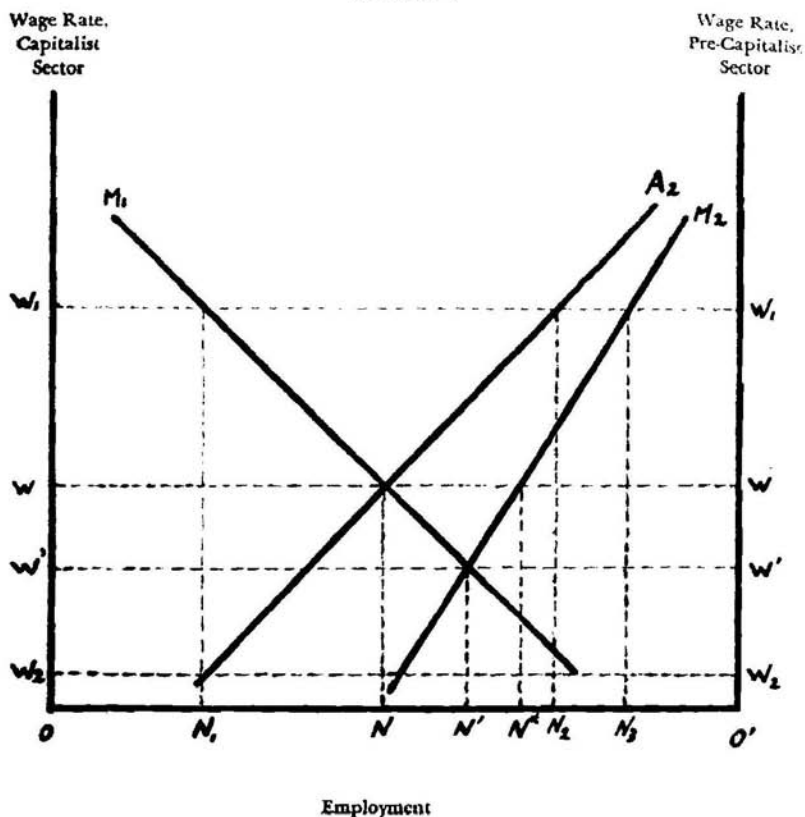
Approximately 40 per cent of Japan's labor force is employed in the capitalist sector, and 60 per cent in the precapitalist one. Of this 60 per cent, half are in agriculture and the remainder in miscellaneous family enterprises.³ A substantial wage gap has developed between the two sectors since the end of the Meiji Era (1912) and particularly since the end of the Second World War.⁴ It is the announced policy of the Japanese government to reduce or eliminate this gap.⁵

2. In both economic sectors but especially in the precapitalist one, there is substantial "disguised unemployment" even in periods of booming prosperity.⁶ This term, which has become a favorite with specialists in economic growth, means essentially that many workers are "employed" as a form of family or institutional charity while adding little or nothing to the output of the enterprise which employs them. In economic terms, their "marginal productivity" is systematically below their wages or other income derived from their work. "Disguised unemployment" may also mean that many workers have skills which they can never hope to use. To cite an example from the teaching profession, Japan's elementary schools include on their staffs large numbers of violently dissatisfied men and women with substantial unusable graduate training in the higher reaches of history, politics, economics, literature, philosophy, and foreign languages.

Figure 1 illustrates the concepts of wage gap and disguised unemployment in the diagrammatic language of the economic theorist. Here OO' , measured on the horizontal axis, represents the Japanese labor force, which is taken as constant and fully employed. Wage rates in the capitalist sector are measured along the left-hand vertical scale, and employment in this sector is measured to the right from O . Wage rates in the precapitalist sector are measured on the right-hand vertical scale, and employment in this sector is measured to the left from O' .

The demand for labor in the capitalist sector depends upon the

FIGURE 1



wage rate in a manner suggested by the curve M_1 . This represents the marginal or incremental amount which additional workers add to their employers' revenue in value terms. Its downward slope illustrates the principle of diminishing returns. The demand for labor in the precapitalist sector is however not M_2 but A_2 , the higher amount which represents the worker's average product in value terms.⁷ This asymmetry means that capitalist employers try to adjust employment for the sake of maximum profits, precapitalist entrepreneurs divide earnings "among the family" and attribute all returns to labor in the absence of opportunity to earn any separate return on their capital.

In this situation, with free mobility between capitalist and pre-

capitalist sectors, labor incomes would cluster about a common level OW , and employment would be divided with ON in the capitalist and NO' in the precapitalist sectors. There would be no disguised unemployment⁸ and no wage gap. This is to a first approximation the Japanese situation prior to the First World War.

What has developed subsequently is a higher wage OW_1 in the capitalist sector, set by collective bargaining reinforced by employer paternalism and world public opinion.⁹ At this wage rate, however, it pays to employ only ON_1 men. The remaining N_1O' are thrown into the precapitalist sector, where labor income falls to OW_2 . The differential W_1W_2 constitutes the wage gap. Disguised unemployment in the precapitalist sector may be defined variously as N_1N , N_1N_2 , and N_1N_3 . I prefer the definition N_1N_2 , the number of workers in the precapitalist sector who would prefer to transfer to the capitalist sector if they could find work at the going wage OW_1 .

3. It should never be forgotten that Japan needs to export from 10 to 20 per cent of her total output to meet food requirements and to secure raw materials for other products. This means that export costs and prices cannot safely be raised above those of her competitors.

III

Enter the productivity campaign, with a blare of trumpets and ruffle of drums. What is it trying to do? Basically, to raise *average*¹⁰ product per worker and per man-hour in the capitalist sector. This is expected to perform a number of minor economic miracles. It can permit, as in America, the simultaneous rise of wages, output, and employment, while maintaining profits and mitigating inflation. It can lower cost of production relative to foreign competition, and that in a manner less abhorrent than wage-cutting. By so doing, it raises the money value of exports, and therefore also the funds from which necessary imports can be bought. Since wages are rising simultaneously with exports, the campaign can reduce world prejudice against Japanese exports and admit Japan to full most-favored-nation treatment in the international community, as symbolized by the General Agreement on Tariffs and Trade (GATT).

If all these blessings descend from Heaven as expected, they will combine to raise Japan's national income faster than her population is rising, and therefore also to raise the national living standards.

If they descend soon enough, they will enable Japan to surmount her dreaded employment crisis of the mid-sixties, when the immediate postwar crop of babies comes of working age and enters the labor market.

But this is the economics of the practical man from the prosperous country. It is supported less by deductive reasoning or systematic inductive evidence than by the overpowering examples of America, Canada, and Western Europe. Overpowering, that is, in the mind of the westerner and the western-oriented Japanese. To others, its relevance is questionable, since too many other things are not equal. The optimistic analysis assumes a certain harmony of class interests, which was to Karl Marx the essence of "vulgar economy." It would never have been acceptable to "un-kept" professional economists since 1929 as more than one possibility among many. It is a form of wishful thinking removed by only one important step from the child's faith in Santa Claus—it *could* conceivably work out that way.

IV

In damning the productivity campaign, the Japanese Left (including *Sohyo* and *Zengakuren*, along with the official Socialist and Communist Parties) have followed the American productivity enthusiasts down the path of vulgar economy. They have collected the more nightmarish of all possible consequences of a productivity campaign, stirred them together regardless of mutual inconsistencies, and labelled the whole concoction an American "imperialist," "colonialist," or "militarist" conspiracy.

This conspiracy, allegedly connived at by Japanese "comprador" government and business circles, has two main victims in view. The first is Japanese labor, which is to be exploited for the benefit of the capitalist class. The second is the Japanese "peace economy," which is to be sacrificed to war industries and to American exporters.

The conspiracy theory is compounded of three main fears, none impossible of realization:

1. Probably the most widespread fear is technological unemployment—the replacement of labor by machinery, without a corresponding increase in total output.¹¹ Or if machinery is not introduced, labor may be replaced by the "speed-up" of scientific management, or skilled workers replaced by unskilled as jobs are

subdivided. In view of the Japanese approach to a "guaranteed lifetime wage,"¹² this fear is not particularly acute among those already employed. It is concentrated among young people and the disguised unemployed, whose opportunity to step into the jobs of those who retire, die, or quit seems to be disappearing.

2. Monopoly seems to be the common fear. The benefits of productivity increases will go to the big *Zaibatsu* firms.¹³ These firms have American connections, and it is in their plants that American methods can be applied most readily. Increasing their productivity will permit them to drive their medium- and small-scale competition out of business and cut employment opportunities. Alternatively, it may force these smaller firms to cut wages even lower than they now are, and make the wage gap even wider than it now is.

Another aspect of the fear of monopoly is its expected effect on the distribution of income and wealth. If the *Zaibatsu* and other firms divert the savings of the productivity campaign primarily to profits, with only crumbs to labor or consumers, the net result will be a more unequal distribution of income and wealth.¹⁴ This in turn may lead to underconsumption and hence depression, according to the most popular of Left-wing theories of business fluctuation.¹⁵

3. A more sophisticated body of apprehension relates to Japan's trade position. If the productivity campaign results in increased imports of American heavy and automatic machinery, this will put pressure on Japan's chronically precarious balance of payments. This pressure can be solved by starving Japan's peace industries of raw materials. This in turn will mean additional unemployment in these industries, over and above those displaced directly by imported machinery.¹⁶ The balance of employment between war and peace industries will shift towards the former group, and a capitalist Japan will be left no choice between cold war and chronic depression.

This apprehension presumes that Japan's exports will not be aided by the productivity campaign. This may occur because the cost savings will go to profits; it may occur because of foreign discrimination against Japanese goods; it may occur because of the inelasticity of the world market. Any or all of these arguments the Left is quite willing to make.

These fears taken together reflect a general Leftist hostility, not

confined to Japan, not toward productivity increases as such but to productivity increases under capitalism. Productivity, like nuclear fission, is too dangerous a force to be entrusted to the private business man. Productivity is all very well in a socialist society, and indeed a matter for cultivation and welcome, but socialism must come first.

There does not seem to be a great deal to choose from between the pessimistic and suspicious vulgar economy of the Left and the Pollyanna optimism of its conservative counterpart. Each is a generalization of a number of special cases, and neither generalization is justified.

V

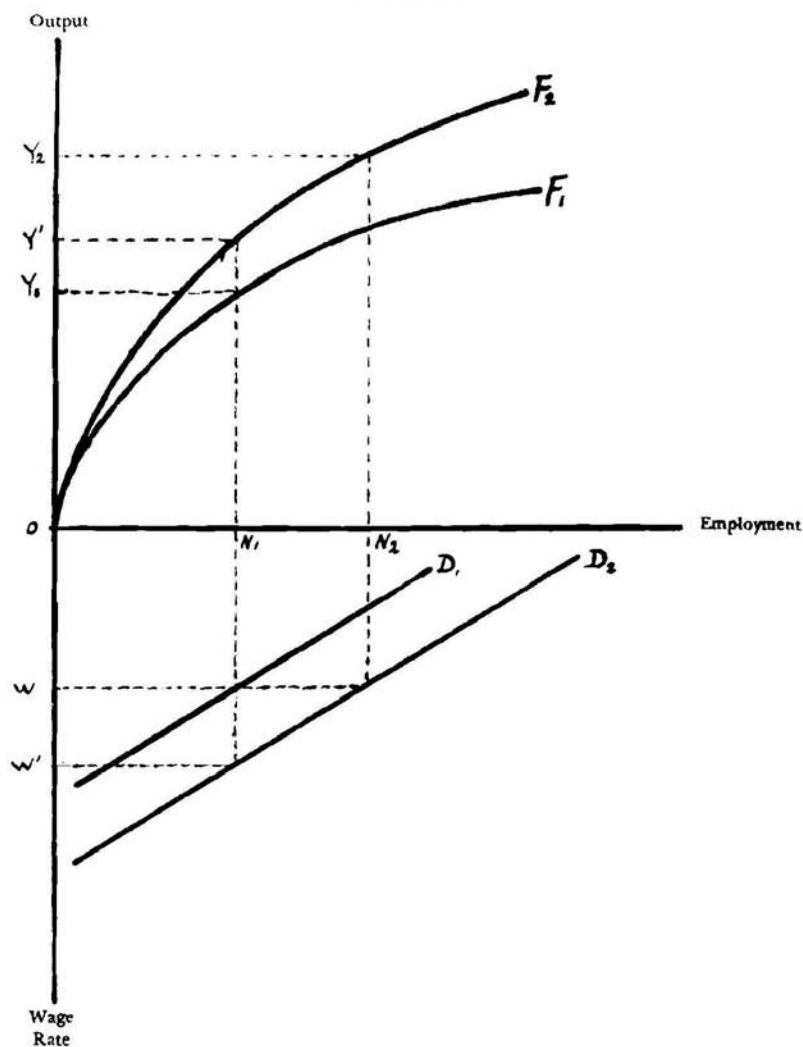
Indecisiveness is not the least of the charges levied against "modern" or "bourgeois" economics. Policy questions get "it depends" answers from economic theorists in all too many cases. To make matters worse, the conditions on which things depend have sometimes more mathematical than social meaning, at the same time that it is difficult to estimate their precise numerical values in practical situations. And so it will be here, to some extent.

The policy question which concerns us is: Can we expect the Japanese productivity campaign to increase or decrease employment and wages in the capitalist sector? The answer will be presented in stages. The first stage will deal with a purely competitive closed economy (without foreign trade); as a postscript, there will be added some of the modifications necessary in Japan.

The variable on which everything seems to depend is the effect of the productivity campaign upon the *marginal* product of labor at the existing level of employment. The *average* product will rise by definition, but it is the marginal product which in a profit-making society determines the demand for labor at any wage rate. (This generalization is more true in the long period than in the short. In the short period the operation of the marginal productivity principle is retarded by ignorance, routine, technical "indivisibilities," working rules, "guaranteed lifetime wages," and so on.)

There are two basic possibilities, one optimistic and the other pessimistic. They are illustrated by Figures 2 and 3. Figure 2 portrays the situation through the eyes of the productivity en-

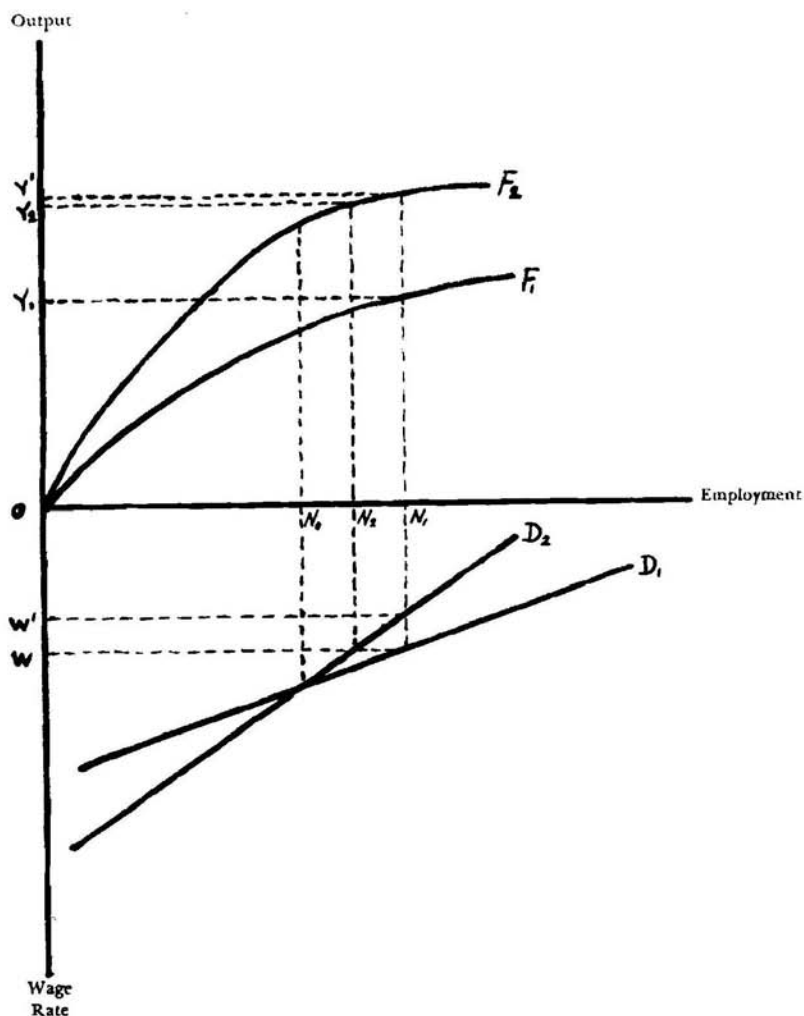
FIGURE 2



thusiast. Figure 3 portrays it through the eyes of the suspicious Leftist.

Let us first consider Figure 2, the optimistic presentation. The upper panel represents production functions, as they are called, relating the real value of output to the volume of employment. As

FIGURE 3



in the labor theory of value, this diagram relates output to employment alone. At the same time, it departs from the Marxian version of the labor theory of value in allowing for diminishing returns to labor by the decreasing slope of each production function as employment increases. Function F_1 represents the situation before the productivity campaign, and function F_2 the situation thereafter. F_2

is not only drawn above F_1 at all points, but it is drawn with a steeper slope at all points. The vertical distance between F_2 and F_1 therefore increases with the level of employment. This is the optimistic assumption of increasing marginal productivity of labor.

The lower panel of Figure 2 is derived from the upper one and particularly from the *slopes* of the F curves. Its horizontal axis remains employment; its vertical axis is the average real wage rate. It is read reversed; that is to say, greater distances *downward* from O represent *higher* marginal productivities and wage rates. The *slope* of F_1 at any point represents the marginal product of labor at that level of employment. This slope is projected on to the lower panel as the corresponding *point* on D_1 at the same employment level. It represents the highest wage at which it pays to offer this volume of employment. The same relation holds between F_2 and D_2 . Since the slope of F_2 exceeds that of F_1 at every level of employment, D_2 exceeds D_1 . This means that at any wage rate more employment can profitably be offered after the productivity increase than could be offered before; or alternatively, that higher wages will be offered in a competitive labor market at any employment level after the productivity increase than before.

Suppose, for example, an initial situation involving employment of ON_1 men at a wage rate of OW , and a total output of OY_1 . After the productivity campaign (given a sufficient labor supply) employment can rise to ON_2 at the same real wage rate OW , while total output rises to OY_2 . Alternatively, if labor is in short supply or real wages are pushed up by collective bargaining, wages can rise to OW' and output to OY' (less than OY_2) while employment stays at ON_1 . An intermediate outcome, however, is more likely than either extreme: employment in the interval N_1N_2 , wages somewhere in the interval WW' , output somewhere in the interval $Y'Y_2$.

The formal apparatus of Figure 3 is almost exactly the same, but the results are almost exactly opposite. This is because the new production function F_2 (in the upper panel) has been drawn to illustrate the apprehensions of the Left. Here machinery has raised the output obtainable with small numbers of workers, while rendering larger numbers more or less redundant. While F_2 lies above F_1 by hypothesis as in Figure 2, its slope is less than that of F_1 after a certain employment level ON_0 is reached, so that the vertical distance between F_2 and F_1 decreases to the right of N_0 . This means

that for employment in excess of ON_0 , the marginal productivity of labor is less after the productivity campaign than it was before, although its total and average productivity remains higher than before. On the lower panel of Figure 3, D_2 now crosses D_1 at N_1 , and lies below it for higher levels of employment.

To interpret this conjuncture, suppose the initial situation to involve employment of ON_1 workers (N_1 greater than N_0), at an average wage rate OW and with an aggregate product OY_1 . When productivity is improved, employment at OW will drop to ON_2 although output rises to OY_2 . This is what is meant by technological unemployment, with N_1N_2 workers unemployed. Or alternatively, employment can be held at ON_1 , but only by a fall of real wage rates to OW' . In this case output will rise further, to OY' (greater than OY_2). This is what is meant by a productivity campaign increasing the intensity of the exploitation of labor.¹⁷

To apply a similar argument to Japan, we should interpret these diagrams as referring not to the entire economy but to its capitalist sector only. When the demand for labor rises in the capitalist sector (as in the case of Figure 2), workers are drawn in readily from the precapitalist sector. Labor incomes rise in this sector, and the wage gap tends to fall even though capitalist sector wages rise somewhat. When the demand for labor falls in the capitalist sector (as in the case of Figure 3), workers are thrown back into the precapitalist sector rather than into total and open unemployment. Labor income falls in the precapitalist sector, and the wage gap rises even though capitalist sector wages fall slightly.

We must in addition remember that output depends in Japan not only upon labor but upon raw materials, most of them imported. This introduces the possibility that the productivity campaign may increase output by much less than is suggested by diagrams such as Figures 2 and 3. This is because it may decrease Japan's capacity to import raw materials, since it requires imports of capital goods and possibly service of foreign loans as well.

VI

The productivity campaign in Japan therefore seems something of a gamble rather than a panacea or a curse. It is a gamble on at least three sets of circumstances not considered adequately by extremists of either party:

1. Will the campaign raise the marginal as well as the average productivity of labor in the capitalist sector at present and prospective levels of employment? An affirmative answer is grounds for optimism, and vice versa. This is the point stressed by Section V of the present paper.

2. To what extent will the campaign raise capital and overhead costs per unit of output? If it avoids the temptation to peddle "experts" and equipment (particularly foreign experts and equipment) indiscriminately, and if Japanese business men are satisfied with existing profit margins, we can be optimistic on this point.

3. Can improved productivity improve Japan's international trade position? Granted that increased capital imports are required for the productivity program itself, the answer depends in part upon the resulting economies of fuel, raw materials, or in the agricultural case, food. But more important for industrial products at least, the answer depends upon the prosperity of the capitalist world outside Japan. If the capitalist world prospers, Japan can export readily some part of the increased output of the productivity campaign on favorable terms in return for necessary imports of all kinds. If the capitalist world does not prosper, it may turn to the "beggar-my-neighbor" remedies for depression unemployment which have in the past played havoc with Japan's export trade outside Japan's own sphere of influence.

The post-Occupation cooperative Japanese-American productivity campaign has in its first seven years been so swamped by other developments as to render its immediate effects difficult to isolate. Tests more powerful than my own casual empiricism may hardly be worth their cost. This empiricism, rendered somewhat less casual by oral interviews at the Institute for Research in Productivity,¹⁸ indicates that things have gone reasonably well on all three fronts.

1. The specific improvements introduced have tended to raise marginal along with average labor productivity. There is none of the stress on "firing excess workers" characteristic of the earlier rationalization campaign of 1948-50. This is primarily because the recovery of Japanese output has given these "excess workers" something to do quite apart from any productivity campaign, and partly from a desire not to exacerbate the labor movement. Yet even without a labor movement to be placated, there is no need to campaign

for this dismissal of excess workers when there are few excess workers to fire.

The case of the girl office workers, whose plight had worried the future General Secretary of *Sohyo* in 1955,¹⁹ can serve as an example. The introduction of high-speed computing machinery has tended to increase the employment of office workers, most of them unmarried girl high-school graduates, by making it possible to process and use much more information much more quickly. There has been a shift away from jobs which center about skill in the use of the *soroban* or abacus, but a shift toward jobs which center about skills in the use of Japanese typewriters as well as of key-punches, sorters, and more elaborate types of computing equipment.

2. There has been in the productivity campaign more stress on cost accounting and control, on improved layout of existing plants, on time and motion studies and similar procedural improvements, than on vast and expensive imports of late-model fancy machinery. The Institute for Research in Productivity, for example, has supplied individual clients with "plant audits," which are essentially recommendations for improving performance with the plant and equipment the firms already have. Where machinery purchases are required, as in the electronic-computer case we have been following, the American visitors at the Institute have urged Japanese firms to start making it themselves under license from western patentees.²⁰ There might have been more diversion of the productivity program to push the sales of American machinery had the recessions of 1953-54 and 1957-58 lasted longer, but this is mere conjecture. There has incidentally arisen in Japan a theory of "new imperialism" applied specifically to the American case.²¹ The theory envisages the export of American capital and military equipment as required to avoid economic stagnation, and has aroused considerable opposition as well as considerable support.

3. Except for the two short and mild recessions mentioned, the West has been generally prosperous during the initial phase of the Japanese productivity campaign. Severe restrictions have been placed on the export of particular items (blouses, fish, pottery, tableware, etc.) to America and elsewhere from time to time. However, these have not prevented the quantum of Japanese exports from rising steadily. If we take the prewar (1934-36 average)

quantum of exports as 100, the index has risen every year, starting at 32.1 in 1950 and reaching 95.3 in 1957.²² I wish one could say with some certainty that this general capitalist prosperity, relatively favorable to Japanese export industries and to the productivity campaign, did not require the substantial military underpinning which it has in fact enjoyed.

NOTES

1. Labor opposition to the productivity campaign is, however, not universal. Some of the smaller federations and unaffiliated unions are willing to cooperate. Indeed, some individual *Sohyo* unions are less militant in practice than *Sohyo* as such in theory. The most important cooperative labor federation is *Zenro Kaigi*. (In 1957 *Sohyo* had 3.41 million members as against 0.78 million for *Zenro Kaigi*.)
2. The phrase "dual economy" is associated with the work of the late Dutch economist J. H. Boeke. In using it I do not accept the Boeke "dual economy thesis" to the effect that Asians "prefer" precapitalist forms to "unnatural" capitalist importations from abroad. Compare, however, Boeke, *Economics and Economic Policy of Dual Societies* (New York: Institute of Pacific Relations, 1954).
3. Detailed estimates (for the fiscal year 1956) may be found in the official Economic Planning Agency's *New Long-Range Economic Plan of Japan (F.Y. 1958-F.Y. 1962)* (Tokyo, 1958), p. 143.
4. For statistical evidence as to the situation at the end of the Meiji Era, see Miyoei Shinohara, *Survey of Japanese Literature on Japanese Economic Growth* (preliminary mimeographed edition: Stanford University, 1957), p. 56.
5. A good English summary of the contemporary wage-structure and wage-gap position is Kazushi Ohkawa, "The Differential Employment Structure of Japan," *Annals of the Hitotsubashi Academy* (1959), pp. 205-217.
6. Several estimates of the volume of disguised unemployment in Japan have been collected and compared by Shigeto Tsuru in his paper "Employment in Japan: Problems and Prospects," in *Essays in Japanese Economy* (Tokyo: Kinokuniya, 1958), ch. 5. Tsuru's own estimate of 2.64 million (out of a total labor force of slightly over 45 million) is conservative compared to other estimates of 6.8 to 10 million (*ibid.*, pp. 86-90).
7. A_2 is also used as a "transfer curve," indicating conditions under which different numbers of workers would prefer to transfer to the capitalist sector on the supposition that they wish to work in whichever sector their labor incomes are higher. A more advanced analysis would include a separate transfer curve, probably lying somewhat above A_2 , because of the noneconomic attractions of the precapitalist way of life. Compare Harvey Leibenstein, *Economic Backwardness and Economic Growth* (New York: Wiley, 1957), ch. 6.
8. The total product of this economy would, however, be greatest at a (lower) labor income OW' , with ON' workers in the capitalist and $N'O'$ workers in the precapitalist sector. This is because the marginal products in the two sectors would then be equal, and there could be no further gain by transfers of workers. Some economists might consider NN' workers as

"disguised unemployed" in the precapitalist sector at wage *OW*, since their labor incomes exceed their incremental contributions to total product.

9. To lessen world discrimination against Japanese goods many employers in export industries have offered only minimal resistance to raising wage rates of their own employees closer to European levels—while subcontracting all the work they can to the cheaper precapitalist sector.
10. But not necessarily *marginal*.
11. It goes without saying that the Japanese Left rejects the so-called "Law of Markets" of the nineteenth-century French economist J. B. Say, to the effect that supply creates its own demand and that general overproduction or underemployment is impossible. The productivity enthusiasts on their part generally accept the Law of Markets, with the proviso that both real and money wage rates be flexible in both directions.
12. On the guaranteed lifetime wage, see James C. Abegglen, *The Japanese Factory: Aspects of Its Social Organization* (Glencoe, Ill.: Free Press, 1958), ch. 2. Standard criticisms by American Occupationaires of Japanese employment practices were "hiring ten men to do a boy's work" and "hiring half the staff to serve tea to the other half."
13. The Occupation campaign against the *Zaibatsu* (financial oligarchy) ended in failure and reversal in the late forties. See T. A. Bisson, *Zaibatsu Dissolution in Japan* (Berkeley: University of California Press, 1954). For shorter accounts, consult G. C. Allen, *Japan's Economic Recovery* (London and New York: Oxford University Press, 1958), ch. 9, and J. B. Cohen, *Japan's Post-war Economy* (Bloomington, Ind.: Indiana University Press, 1958), pp. 194-204.
14. Recent "monopoly" theories of income distribution stem from Joan Robinson, *Economics of Imperfect Competition* (London: Macmillan, 1933), Book 10. The most influential single version has been Michal Kalecki, "The Distribution of the National Income," reprinted in William Fellner and B. F. Haley (eds.), *Readings in the Theory of Income Distribution* (Philadelphia: Blakiston, 1946), selection 11. It is interesting to observe that Japan is one of the few countries in which the labor share of the national income had for many years a declining tendency (Shinohara, *op. cit.*, p. 44).
15. Maldistribution theories of trade depression date back to Rodbertus, Marx, and their predecessors. A restatement of the Marxian version may be found in Paul M. Sweezy, *Theory of Capitalist Development* (New York: Oxford University Press, 1942), pp. 166-185. A standard reformist version is John A. Hobson, *Economics of Unemployment* (London: Allen and Unwin, 1922).
16. Such an analysis was presented orally by General Secretary Iwai of *Sohyo* during his American visit of 1955 (prior to his elevation to the General Secretaryship). His prime example was the electronic computer, one of which can replace hundreds of girl clerks and abacus operators.
17. A good text book presentation of the formal analysis of this section is Joseph P. McKenna, *Aggregate Economic Analysis* (New York: Holt Dryden, 1955), pp. 226-229.
18. I spent two academic terms of 1958 in Japan and Korea, studying the overseas programs of American universities under the auspices of the Institute for Research on Overseas Programs. One of the leading Japanese programs is the Michigan-Waseda relationship centering in the Institute for Research in Productivity.
19. See note 16.
20. However, Japan was not manufacturing electronic computers in 1958.

21. The theory of "new imperialism" is associated with the economist Kaname Akamatsu. Its most controversial feature is the suggestion that "new imperialism" may benefit its "victims" (such as Japan) along with the "imperialists" themselves (such as the United States).
22. *Economic Survey of Japan (Keizai Hakusho), 1957-58* (Tokyo: Economic Planning Agency, 1958), Annex 13, p. 299. The quantum of imports, however, rose during the same period from 37.2 to 142.6, thereby increasing the strain on the Japanese balance of payments, despite the rise of Japanese exports.