Realizing the relationship of productivity to technological, organizational, and manpower variables, and the need to improve and increase production gains, this document examines existing public and private entrepreneurial and industrial relations structures in an effort to ascertain manpower policy measures which if strengthened or introduced might facilitate production gains. Investigated and included in the content are such topics as: (1) The Nature of Change, (2) Historical Perspectives, (3) Private Arrangements, (4) Public Policies, and (5) New Directions. Findings and implications include: (1) A recognition by the Federal Government that the sine qua non for a conducive environment for stimulating productivity changes is a high level of continuing employment for the economy, and (2) There is little prospect for success on the part of either private or public manpower policy directed to facilitating the adjustment of workers affected by productivity changes except against a background of a high employment economy. (SN)
PRIVATE AND PUBLIC MANPOWER POLICIES TO STIMULATE PRODUCTIVITY

Prepared for the National Commission on Productivity
NATIONAL COMMISSION
ON PRODUCTIVITY

Chairman
Peter G. Peterson,
Secretary of Commerce

Members
George P. Shultz,
Director, Office of Management and Budget
Beverly Briley,
Mayor of Nashville
John B. Connally,
Secretary of the Treasury
James D. Hodgson,
Secretary of Labor
Virginia Knauer,
Special Assistant to the President for Consumer Affairs
Arch A. Moore,
Governor of West Virginia
Herbert Stein,
Chairman,
Council of Economic Advisers
Stephen D. Bechtel, Jr.,
President, Bechtel Corporation
Berkeley Burrell,
President, National Business League
Edward William Carter,
President, Broadway-Hale Stores, Inc.
Archie K. Davis,
President, Chamber of Commerce of U.S.
R. Heath Lerry,
Vice Chairman of the Board, United States Steel Corporation
James M. Roche,
Member of the Board, General Motors Corporation
M. Peter Venema,
Chairman of the Board, National Association of Manufacturers
Walter B. Wriston,
Chairman, First National City Bank
I. W. Abel,
President, United Steelworkers of America
Joseph A. Beine,
President, Communications Workers of America
Frank Fitzsimons,
President, International Brotherhood of Teamsters
Lane Kirkland,
Secretary-Treasurer, American Federation of Labor and Congress of Industrial Organizations
John H. Lyons,
President, International Association of Bridge, Structural and Ornamental Iron Workers
George Meany,
President, American Federation of Labor and Congress of Industrial Organizations
Floyd E. Smith,
President, International Association of Machinists and Aerospace Workers
Leonard Woodcock,
President, International Union, United Automobile, Aerospace and Agricultural Implement Workers of America
William T. Coleman, Jr., Dilworth, Paxson, Kalish, Levy & Coleman
John T. Dunlop,
Professor of Political Economy and Dean of the Faculty of Arts and Sciences, Harvard University
Howard W. Johnson,
Chairman, Corporation of the Massachusetts Institute of Technology
William Kuhfuss,
President, American Farm Bureau
Edward H. Levi,
President, University of Chicago
Arjay Miller,
Dean, Graduate School of Business, Stanford University
John Scott,
Master of the National Grange
W. Allen Wallis,
Chancellor, University of Rochester
Leon Greenberg,
Staff Director
PRIVATE AND PUBLIC MANPOWER POLICIES TO STIMULATE PRODUCTIVITY

By:
Eli Ginzberg with James W. Kuhn
and Beatrice G. Reubens
Conservation of Human Resources Project
Columbia University
June, 1971
Preface

The National Commission on Productivity was established by President Richard Nixon in June 1970 to develop recommendations for programs and policies to improve the productivity of the U.S. economy. The Commission is composed of top-level representatives of business, labor, government, and the public. In order to aid the members in their consideration of various topics, staff papers are prepared by government or private industry experts in different subject matter fields. These papers serve as background material for the members but do not necessarily represent their views.

Professor James Kuhn prepared for the Productivity Commission a working paper on "Manpower Adjustments to Technological Change" and Dr. Beatrice Reubens prepared a companion piece on "Relevant Aspects of European Experience." This paper relies heavily on their respective analyses. It has also benefited from the flow of documents furnished by Messrs. Leon Greenberg, Executive Director of the Commission and Harold Wool of the Department of Labor who served as liaison between the Productivity Commission and the Conservation Project. Note should also be taken of the several fruitful communications between the aforementioned as well as the additional insights obtained as a result of participation in a May in a session of the Working Group on Labor-Management Relations under the Chairmanship of Professor John T. Dunlop.

The principal thrust of the paper is evaluative, not descriptive. The objective is to explore various manpower approaches that might facilitate productivity gains within the context of a dynamic economy and society characterized by a great variety of interacting forces contributing to change, by marked differences in entrepreneurial and industrial relations structures, and by steadily expanding private and public measures. The latter aim is to increase the efficiency of the labor market while affording greater protection to workers who may be vulnerable to the technological and related changes that are taking place or may occur in the future.

The analysis is focused on identifying the manpower measures which, if introduced or expanded, are likely to make a significant contribution to productivity gains at a cost that would justify the effort.
Contents

Preface ........................................................................................................ iii
The Nature of Change ............................................................................. 1
Historical Perspectives .......................................................................... 3
Private Arrangements ............................................................................ 5
Public Policies ....................................................................................... 11
New Directions ..................................................................................... 13
The Nature of Change

Since productivity is affected by such diverse factors as changes in technology, management, market position, shifts in demand, structural transformations in the economy, attitudes and behavior of workers, governmental regulations, business fluctuations, and a host of additional factors, it clearly becomes difficult to outline a set of manpower policies that can be directly related to enhancing productivity gains.

There are two alternative resolutions to this dilemma. One would frankly acknowledge the tangled skein and proceed on the assumption that any alternatives that add to the efficiency of the labor market would contribute at least indirectly to the improvement of productivity. Hence the sensible approach, if productivity gains are a major concern, would be to explore any and all manpower approaches that could contribute to the efficiency of the labor market, firm in the conviction that they would also contribute to an improvement of productivity.

The second approach recognizes that while it is difficult to distinguish among types of changes, the scope of the Productivity Commission is fairly specific. Moreover, institutional changes in both the public and private domain in the United States ordinarily respond to specific, not general challenges. While there are difficulties in designing manpower policies that hold promise of contributing to productivity gains, these difficulties are more likely to be overcome than an effort directed at the open-ended challenge of improving the operations of the labor market per se.

There may, however, be a third position which defines the subject area broadly without removing all constraints or boundaries. This third approach would start with the recognition that productivity changes are always the outcome of multiple interacting forces. At the same time, the approach would acknowledge that the rate at which desired changes can be introduced will depend in considerable measure on the reactions of the workers who will be or who believe that they will be directly involved in the changes leading to productivity gains. It would be possible to broaden this focus further and include a combination of manpower policies that would be responsive also to workers who are indirectly affected by such productivity changes. Such a broadened focus could still stop short of encompassing all members of a labor force. For instance, if a major plant that dominates a local labor market closes as a result of technological and market changes, all the workers in that community can be said to be affected and might require different types of manpower assistance. This would not however make it necessary for manpower programs to be equally responsive to workers in distant communities, even though their employment might be indirectly affected by the plant closure.

The principal implication of this discussion is to underscore that the wider the net is cast to deal with the impact of productivity changes, the greater the difficulty of designing specific manpower policies that will be responsive; the more reliance must be placed on general manpower remedies. The narrower the focus, the greater the potentiality for specific measures.

In addition to this critical issue of the impact of changes, there are other considerations that must be set out if this discussion is to be properly framed. Because of the manner in which the Productivity Commission developed its agenda, the following discussion is centered, as far as private policies are concerned, on firms and industries in which formal collective bargaining arrangements exist. This means that little attention is paid to the large “unorganized sector” which continues to account for the vast majority of all workers. Moreover, the discussion is definitely biased, by virtue of this emphasis on the organized sector, toward larger companies, with heavy concentration on the goods producing sector. Such a concentration implies that some of the most difficult challenges to increasing productivity, those presented by the service sector where small unorganized firms predominate, fall outside the framework of this analysis.
Guided by the specifications laid down by the staff of the Productivity Commission, this paper will not deal with important macro aspects of enhancing productivity such as the maintenance of a continuing high level of national employment, policies aimed at enlarging the share of the United States in international trade, efforts to stimulate research and development, the level or paths of governmental expenditures, and a host of other policies that on balance probably have more impact on productivity than the subject matter at hand.

In short, this paper is focused on public and private manpower policies that have special applicability for that sector of American industry in which collective bargaining is well-established.
The Manpower Development and Training Act was passed by the Congress in 1962 on the mistaken assumption that a large number of skilled workers would soon be made redundant as a result of automation and that governmental intervention and assistance was required if they were to be retrained for profitable employment. Within twelve months it became clear that the widespread unemployment of skilled workers in 1962 did not represent dislocations caused by automation but rather cyclical unemployment. As the economy recovered, almost all of these skilled workers were reabsorbed without retraining. At that point, Congress modified the thrust of MDTA in the direction of improving the employability of the hard-to-employ. And through later amendments the legislation was further broadened to be more responsive to the needs of young people who were first entering the labor force.

Against the background of this recent history which points up the interrelations between Congressional assessment and legislative enactment, it would be well to consider briefly the concerns of the Productivity Commission. One strong impetus for its establishment was the belief that gains in productivity might help slow inflationary price rises. Another was the disappointing reversal of the late 1960's when at the height of the boom, the American economy showed modest gains in productivity. Since the establishment of the Productivity Commission there has been growing concern with the intensified competition that the United States faces in international trade. Imports in several critical industries such as steel and autos as well as shoes and textiles continue to command an ever larger share of our domestic market, and questions have been raised about the ability of our export industries to maintain their position in the international market. Hence the intensified concern with productivity.

But these contemporary preoccupations must be put into context, more particularly in the framework of the American economy's long-term adjustment to change. European observers have long remarked upon the greater openness of Americans to change. We have been heavily future-oriented. With a large continental market at their command, American businessmen have long seen gains from large-scale capital investments predicated on improved technology, and American workers have for the most part been willing to accept new processes and new techniques as long as part of the gains from change accrued to them in the form of higher wages and better working conditions. Moreover, American workers have been more willing than workers in Western Europe to follow the job. They have been willing to pull up roots and move to where opportunities are greater.

This openness to change has been reinforced by the fact that, except for the depressed 1930's, the thrust of the American economy has been toward steady expansion which helped moderate the opposition workers might otherwise have felt to productivity changes associated with labor saving. They had reason to believe that change would lead to more jobs, not fewer. Moreover the strong emphasis of American trade unions on job security also contributed to an openness of workers with considerable seniority toward change. Most workers believed that such changes as management might introduce would not jeopardize their jobs, even while it might reduce future hirings.

It is worth stressing that, with relatively few exceptions, alert management has been able to introduce new machines and new processes aimed at lessening costs without running into headlong opposition from organized labor. The classic illustrations of non-cooperation exemplified by printers setting bogus type, reductions in the size of painters' brushes, extra men in the cab or the cockpit, are conspicuous exceptions.

Beyond these classic cases of deliberate barriers to the reduction of labor costs, one must take note of the pervasive case of work rules which set the pace of work and the quantity of output far below a level consistent with the health and well-being of the work force.

But the work rule issue must be seen in context. Management is—or should be—constantly concerned with bringing about changes in the production process—that will result in a reduction of labor costs.
Employees are determined that they be recompensed for any changes in their accustomed ways of working since the gains that management will achieve depend in part on workers' cooperation. Unless they are recompensed in terms of higher earnings, workers will seek to profit from the changes by shortened work time, working less hard, or deriving some other benefit from the innovation. Since work rules come about as a result of an implicit or explicit agreement between management and its employees, it follows that workers will not agree to changes in work rules unless they receive some form of compensation. In their view management's agreement in the past to the work rule was in lieu of some other benefit. Hence they are entitled to some form of compensation if they agree at management's behest to a change in the rules.

Since management tends to make new capital investments at a time when it seeks to strengthen and expand its share of the market, it seldom runs afoul of labor's principal concern, namely that the change will lead to loss of jobs or reductions in incomes. If these are not in jeopardy, management can usually work out an arrangement with its labor force enabling it to introduce the new machines and processes.

Conflicts are likely to arise only under the following conditions:

— If the work force sees a threat to its jobs or earnings from the innovations.
— If management refuses to pay a proper price for work rules which must be altered if the innovations are to be introduced.
— If the innovations threaten to alter the relative position and power of different groups of workers (and union) in the plant.
— If the process of innovation is initiated in an atmosphere of suspicion and distrust and the workers decide that their best ploy is to fight change.

There are several other observations that can be extracted from a broad review of American experience. There appears to be a strong correlation among poor management, incremental work rules, and lagging productivity. Unless the leading firms in an industry are able to compete successfully at home and abroad, they will be unable to earn the profits and attract the external funds required to modernize and expand their plants. In a dynamic economy failure to keep abreast of changes in technology, markets, and other parameters will sooner or later lead to shrinking sales, profits, and employment. Once a company or an industry loses momentum the work force is likely to become less open to change, fearing that the contemplated innovations may speed the erosion of their jobs. Moreover, firms under some competitive pressure are less able to pay the price that labor may insist upon if it is to agree to the changes which management desires to introduce.

Another aspect of productivity change is the role that business fluctuations play in securing downward adjustments in the work force. Workers acknowledge the right of management to reduce the work force in the face of marked decline in the level of business. What frequently occurs, especially in a recession that lasts for a year or two, is that management makes numerous adjustments in its efforts to cut costs and to the extent that it is successful it rehires a relatively smaller number when expansion sets in.

Another classic method that facilitates the introduction of new technology occurs in multi-branch firms when management builds up its operations in new locations where it has installed new machines and new methods and closes out its operations in the old locations where its labor and other costs are much higher.

Another observation about the American experience that bears on the approach of the Productivity Commission is the marked difference in the strength of organized labor in different sectors of the economy which is reflected both in the ways that employees at the top. In the face of such a wide spread in wages and other benefits including supplemental unemployment benefits, pensions, and early retirement. In the face of such marked differences it follows that public manpower policy is likely to be geared to standards that are in the middle or lower range, rather than at the top. In the face of such a widespread in wages and benefits it is desirable that any new manpower efforts directed to stimulating gains in productivity provide maximum opportunity for labor and management to work out mutually suitable arrangements and that government restrict itself to establishing a conducive environment and standards that are applicable to the broad array of firms. Since State governments play a role in setting the levels of benefits—i.e. unemployment insurance—there is a further basis for the Productivity Commission to recommend elasticity in bargaining positions rather than federally prescribed approaches and standards above the minimum.

But as will be clear in Section V this still leaves considerable scope for governmental policy even while placing primary responsibility on the partners to collective bargaining to find apposite solutions.
Private Arrangements

One important precipitant from a review of the experience of Western Europe is the marked parallel in approaches that have characterized the efforts of the principals in collective bargaining on both sides of the Atlantic when it comes to dealing with the facilitation of productivity changes. While differences in language or emphasis can be found—for instance that much touted new definition of “productivity bargaining” in Great Britain at the beginning of the 1960’s had been part of the American experience for a long time where it had been labeled sharing the gains from increasing productivity—the striking finding is the degree of parallelism in the approaches. In short, one will not find in the European experience a series of new principles and techniques ready at hand that can be borrowed. What one can derive from a review of the European experience is help in sorting out the more useful from the less useful approaches—at least within the experience of the countries reviewed.

One of the most important findings from a comparative analysis is the extent to which the countries of Western Europe still see the issues of adjustments to productivity change to lie primarily within the private domain. Government has a role to play but the principal actors remain labor and management, the principal instrument, collective bargaining arrangements.

For the purposes of this section we will deal sequentially with two approaches: ongoing adjustments and compensatory assistance. If there be one area in which the Europeans may be said to have the jump on the United States, it relates to the manpower planning.

Manpower Planning

There has been a general reluctance in this country on the part of management to take labor into its confidence with respect to any large-scale changes that carry with them the threat of serious reductions in the work force. Management has feared that such discussions would result in severe losses by alerting competitors to the impending changes, inducing the departure of key workers, and other untoward consequences. Hence it has tended to play its cards close to its chest.

Moreover, American trade unions have in general not made a bid for a role in broad decision-making affecting investment, markets, and product lines. They have been willing to leave these matters to management believing that their strength would be greater if they restricted themselves to bargaining over wages and the conditions of work. This stance has helped to reduce their role on decisions affecting major technological and related changes. It is worth observing that the two outstanding instances of advance formal manpower planning for major technological changes—dialing in the Bell System and computerization in the Internal Revenue Service—both involve non-competitive situations. But there are signs that American trade unions are becoming increasingly interested in contractual stipulations which provide that they will have advance information about company decisions that are likely to result in major disruptions or declines in employment such as accompany the closure of a plant.

European trade unions have gone much further than their American counterparts in seeking an active role in the decision-making process within the firm; witness the co-determination structure in Germany. However, it should be noted that even when trade union representatives are a part of management this does not necessarily assure ready acceptance on the part of the work force of changes that will bring with them significant alterations in employment, wages, and other conditions of work.

In Sweden, arrangements have been worked out between management and labor that provide for regular consultation aimed at improving productivity by providing the work force with technical and planning information so that employees will have a clearer view about the position of the firm and the actions that it must take to strengthen and improve its competitive position. The usual device for such consultation is through joint study committees or work coun-
technology and other managerial innovations will be or neglect of the manpower consequences of new of the preexistent difficulties resulting from ignorance improve their productivity, holds promise that power planning. productivity is the embryonic state of corporate introduction of new approaches capable of raising particularly in moderating adverse effects of the changes which the manpower implications of such innovations, the fact that the union leaders are under severe pressure in most instances not to accept arrangements that will adversely affect any significant minority of workers has made American management loathe to share its decision-making about innovations that carry the promise of reducing labor inputs.

There are additional difficulties with respect to manpower planning at the corporate level. Business leaders have more know-how in devising new ways of producing goods and services than in assessing the manpower implications of such innovations, particularly in moderating adverse effects of the changes on particular groups of workers. Manpower planning is a new technique and one of the constraints on the introduction of new approaches capable of raising productivity is the embryonic state of corporate manpower planning.

However, an ongoing effort in manpower planning, paralleling the technical effort of large companies to improve their productivity, holds promise that some of the preexistent difficulties resulting from ignorance or neglect of the manpower consequences of new technology and other managerial innovations will be lessened if not eliminated in the future.

An active corporate manpower policy can do a great deal to facilitate productivity changes. Reference was made earlier to the experience of the telephone industry and the Internal Revenue Service which relied to a marked degree on attrition over a considerable period of time to resolve the manpower disturbances incident to the introduction of a radically new technology. Additional techniques included transfers, special assistance with placements within and outside of the company, opportunities for workers to be retrained in order to meet new skill requirements, and still other devices.

Another dimension of manpower planning is the effort of such unions as the Plumbers and the Typographers. Each union, recognizing that major changes are occurring in the technology of its industry, has invested sizable sums to train its journeymen so they can cope with the new machines and processes. In the case of the plumbers and pipe-fitters the sum required to finance the program—on the order of $1 million annually—is raised from union contractors although the training program is jointly administered through Purdue University which provides special instruction for the training staff. The scale of the effort is suggested by the fact that in slightly more than a decade 80,000 journeymen received training.

The printers' training and retraining effort is financed by the International Typographical Union which spent about $2 million in the early 1960's to establish and equip a thoroughly modern school at Colorado Springs, Colorado. One of the interesting aspects of this retraining effort is the fact that the union member usually attends on his own time—during vacations—and must cover room and board out of his own pocket or with assistance from his local.

These two examples from the American scene have much in common with the experience in various European countries where management and labor have cooperated to establish training and retraining opportunities so that the work force can stay abreast of rapidly changing technology.

One might call attention, here, to the British law on industry training established by joint efforts of employers through a training tax. In exceptional cases the government undertakes to provide the required instruction. The British approach recognizes the need for substantial and continuing training and upgrading if Great Britain is to remain competitive in the markets of the world. It should be observed that while this legislation was passed more than five years ago, the British have been proceeding with "all
deliberate speed". Personal consultation with the British authorities in June 1970 revealed that with the exception of a few industries, the efforts were still in the take-off stage.

What this adds up to then is that manpower planning in the private sector on both sides of the Atlantic is still embryonic, reflecting such diverse factors as the recent emergence of the art of corporate manpower planning, the lack of experience in most industries of management-labor consultation with respect to productivity and related changes, the reluctance of American management to open this realm of decision-making for bargaining with the union, and the time and costs involved in building responsive institutions such as new training structures. But within these limitations it is worth noting that such efforts as have been launched have relied largely on cooperation between the private sector parties. The government is largely out of it.

Ongoing Adjustments Affecting Productivity

Every industrialized economy is subject to change. Every alert management seeks to anticipate and respond to new developments—technological and market—to improve its efficiency and to control if not reduce its costs. Every trade union strives continuously to get a greater share of the enlarged productivity for its members. If these be the parallelogram of forces operating in a modern economy one can conclude that a major thrust of all collective bargaining is directly or indirectly concerned with issues of productivity. Management is striving for ways to gain worker approval so that productivity can be increased; and workers will agree to the changes that management desires only if they are offered a quid pro quo.

And the process of negotiation and settlement is a never-ending one, for no sooner is one arrangement arrived at then the negotiated situation is buffeted anew by fresh forces. Management is constantly on the lookout for changes that can contribute to further gains in productivity and the workers will not agree until they are offered something of equal value in return.

To the extent that the foregoing, though somewhat distorted, is still a reasonable facsimile of what goes on in the arena of labor-management relations, it follows that a wide array of solutions developed as part of the ongoing process of collective bargaining are intertwined with efforts to stimulate productivity. For productivity gains—broadly defined—are the key to management's goal. Without such gains, profits will erode and markets disappear; the firm cannot survive.

Brief consideration should therefore be paid to a range of approaches that are part and parcel of ongoing collective bargaining arrangements in order to assess their relevance for stimulating productivity improvements. Among the most important are: union-management cooperation; group incentives; and work-rule settlements. Others involve training and retraining, job design and redesign, adjustment of hours of work schedules, joint efforts to eliminate seasonal fluctuations, and union cooperation in the policing of worker behavior. Still other devices might be considered as potential contributors to enhancing productivity but we will limit our attention to what we believe to be the three most important approaches.

For the most part organized workers in an industrialized setting look upon management from an adversary point of view which means that they are generally unwilling to offer suggestions about how things could be done better—that is more quickly and with less waste—unless there is something in it for them. For if they are not careful they run the risk of becoming victimized in the very act of seeking to help management improve its productivity. As a result of the suggestions that they might make, one or more men might become redundant.

Despite this conventional adversary or trading relation—suggestions are offered by workers only if they lead to potential rewards—there have been occasional successful efforts by management to elicit worker cooperation without immediate and direct systems of recompense.

The American cases that are most frequently cited under this heading relate to the ongoing consultation which exists in the Tennessee Valley Authority between representatives of management and the workers to review on a monthly basis at different levels in the organization proposals for improvements that may originate with either group.

The second case relates to union-management efforts to improve plant safety in the West Coast pulp and paper industry. With many small employers in the industry, the union plays the dominant role in this effort which has proved highly successful in the years since World War II, dropping the injury-frequency rate by about seven-eighths and bringing it far below the rates prevailing in comparable plants in other parts of the country.

A third related approach is that carried on by the Industrial Engineering Department of the Ladies Garment Workers' Union where upon request of
small—or even large employers—the union's technicians will make their skills available to assist management in improving its scheduling, subdivision, and allocation of work. The union, having built up substantial expertise in connection with its wage negotiations, believes that it is to the benefit of its members to make such expertise available to employers who are struggling to survive in a highly competitive environment. Many of them will go under unless they can improve their productivity. The union recognizes the close links between improved productivity for the employer and job security and higher wages for its members.

The Joint Study Committees of Works Councils in Sweden and some of the arrangements worked out as part of the co-determination model in Germany are similarly directed to find a common ground on which management and labor can cooperate to improve the firm's productivity.

It is in Japan, however, especially in some of the best managed firms that such efforts have proved most successful. The author recalls seeing plant engineers holding regular sessions with semi-skilled workers to elicit from them their recommendations about materials, adjustments of the machines, and other changes aimed at increasing the firm's productivity. Inquiry disclosed that in this particular firm—a leading exporter of electronic equipment—such supervisor-worker sessions were held at the work site twice weekly for an average period of 30 minutes each. It is interesting to speculate how much longer cooperative rather than confrontation tactics will be characteristic of Japanese industry. This much is clear: there are few counterparts in other countries.

The increasing importance of continuous processing in modern manufacturing has led to a lessened reliance on piece work systems of wage payments. Correspondingly, management has had lessened opportunity to make use of individual bonus payments as a spur to higher productivity. In turn, it has begun to experiment with group bonus schemes. But even after many years of experimentation, particularly with the Scanlon Plan and its variations, the fact remains that the group bonus approach has not taken deep root in the United States. The essence of the plan is a bonus based on a ratio of total payroll to produce sales. Through joint-management committees, workers come forward with ideas and suggestions on how productivity might be increased, and if the payroll ratio declines part of the gain is distributed as a group bonus. Many workers evinced limited interest in the plan because of the small amount of money available for distribution; and many managements are dubious that workers are really entitled to a bonus since the decline in payroll costs need not reflect any particular contribution on the part of the workers.

A large-scale move in the direction of a group bonus plan came with the Kaiser-Steel Workers Long-Range Sharing Plan. The principal objectives, worked out with the assistance of outside experts, were two-fold: the substantial elimination of individual bonuses, and more flexibility for management to introduce new machinery or modify existing production processes. The ensuing record is equivocal: many workers who had an option refused to shift from an individual to group bonus; the fluctuating group bonus in certain years was disturbingly small; and workers did not agree to give management the wide latitude it sought in introducing cost survey approaches. The plan has not been replicated in any other steel plant. On balance, progress via the bonus route has not been outstanding as a method for speeding the acceptance by workers of changes leading to increased productivity.

The essence of the confrontation between management and labor over such changes is nowhere better illustrated than in the case where long established work rules must be altered if new productivity gains are to be made. As indicated earlier, work rules, agreed to by management, represent a form of negotiated settlement in lieu of adjustments in wages, hours, or other benefits. Hence once in place, they cannot be taken away by unilateral action of management but must be bargained away. Often the price in dollar or other terms comes high. In the case of the West Coast Longshoring Industry the original dollar cost of the privileges to rationalize the handling of cargo came to $27 million of benefits for the union members. Later studies revealed that the employers were well satisfied with the bargain they had made because of their still greater savings in labor costs and time for handling freight movements. More recently the threat of containerization and new methods of off-dock loading and unloading has created new frictions between management and the union, underscoring that even a highly successful arrangement is likely to be unsettled by new points of friction as new issues come to the fore with changes in the market and technology.

Much has been made over the years about "bogus work" in the printing industry although an inquiry in the 1960's revealed that only about 2 to 5 percent of all locals were still printing such make-work. Most
Compensatory Assistance

Even if manpower planning were more effective than it actually is, and even if ongoing adjustments through collective bargaining arrangements were able to remove obstacles to productivity gains to a greater extent than in fact they can, the incontrovertible fact is that in a fair number of situations the survival of a firm or industry might require a scale of adjustment that would have widespread and deleterious effects on the welfare and well-being of a significant part of its work force. In such situations the basic challenge would be to determine upon a range of compensatory devices that would go a long way to assure that the workers affected by the changes would not be forced to bear the burden in the form of loss of job, loss of income, and loss of other benefits. This is an imperfect world and it might not be possible to assure that the affected workers suffer no losses but the quality of a society can be assessed in part by the efforts that it is willing to make so that the costs of progress are not assessed upon a group of workers whom fate has placed in the path of the juggernaut. At a minimum, a civilized society—especially one that enjoys high income—should provide a range of benefits and protections for the innocent victims of change. Here we are concerned only with measures that fall within the province of the private sector, recognizing that additional actions of a remedial nature might be initiated and carried out in the public domain, either exclusively or in a cooperative arrangement with the private sector.

The well publicized history of the plant changes of Armour and Company in the early and middle 1960's can help us to focus on the different arrangements that moderate the dislocations suffered by long-term employees as a result of a company's actions to improve its competitive position by modernizing and relocating its plants.

One of the simplest approaches is the giving of notice: at first the company limited itself to 90 days; later it agreed to a 6 months lead time. The longer the lead time, the better the opportunities for workers to find alternative local employment, enter training programs, or explore opportunities in other labor markets.

The company also made an offer to transfer workers to one of its plants but only a minority took advantage of a transfer. Many were loath to cut their roots in communities where they had been born or where they had lived for many years; and others were uncertain whether they could make it in a new locale both in the plant and in the community. Hence many preferred to accept the lump-sum severance pay that was offered them.

Later on, the company broadened the transfer offer to include an opportunity for a worker to try out a new job in a new locale. If he didn't like it—or could not make it—he had "flow back rights" which meant that he could return to his old location without loss of benefits, including moving expenses and separation pay. Many more workers were willing to accept a transfer under these liberal conditions.

Many older long service workers were unable to find jobs. They received monthly retirement payments which eventually were pegged at a minimum of $150.00. Other workers found jobs but earned considerably less than previously. The most helpful adjustment in their case probably would have been more adequate early retirement benefits.

The Secretary of Labor, building on this and related experience, has recently certified in Railpax a guarantee to workers who are let out or downgraded of full pay applicable to their previous job (including wage increases) for a period of six years together with the maintenance of full fringe benefits, supplementation to wage level if the worker is downgraded, moving expenses if relocated, separation allowances, and compensation for the sale of one's home or cancellation of lease.

One must quickly add that these most liberal arrangements have not been introduced for the bulk of the work force in the freight end of the railroads but only for the much smaller number of workers involved in interurban passenger service. The principal relief for railroad workers threatened by technological change earlier had been agreements to reduce the work force primarily through attrition,
with varying types of wage guarantees, rather than through precipitous forced separations. While the arrangements were often difficult to arrive at and also led to conflicts in their implementation, the fact remains that large numbers of workers were removed from the railroad work rolls over the last three decades in a more or less orderly fashion and in a manner that offered most of the workers considerable protection while they found another place for themselves in the economy or reached the age where they could retire.

The European experience parallels in most respects the approaches that have been delineated above—particularly as regards the use of attrition, early notification of closure, severance pay, retraining allowances, relocation allowances, supplemental payments to assure previous earning levels, and early retirement. Long advance notice is increasingly given. In some European countries monetary compensation in lieu of notice is preferred.

In the case of attrition, some employers fear that the remaining work force may have a distorted age structure and that new entrants may be excluded in one-Industry towns.

In the case of severance pay, the Swedish trade unions urge that the amount of money be geared to the difficulties that workers face in finding alternative employment and not be based only on previous length of work and earnings, as is the rule in most European plans.

As regards early retirement schemes there is an awareness in some of the European countries that the value of this particular adjustment device depends on the adequacy of the amounts that are provided. If the sum is too small it will fail to provide the alternative adjustment that a redundant older worker requires.

Some of the additional methods that have won varying degrees of favor among the countries of Western Europe are the following: adjustment of the workweek with an aim to sharing the reduced work load among a larger group of workers. It is recognized that this has severe limitations because it tends to lead to inefficient operations and to result in the retention of an excess work force—which are likely to erode many of the gains that were potentially present from the introduction of technological or related improvements.

A related group of approaches, less equivocal in effect, concerns the timing of the work force adjustments. Spacing them out can prove helpful, and equally helpful are separations that are geared to an expansion in local and neighborhood employment.

Time off with no loss of pay is a device that some European firms have used to enable potentially redundant workers to broaden their job search.

Private sector forces, particularly large corporations that are closing down or moving away, may make special efforts to facilitate the location of new firms in the area in the hope and expectation that they will provide employment opportunities for workers who are being left behind. And a related device is for the firm that faces a sudden surplus of workers to make special efforts to place them with other companies either in the immediate vicinity or even some distance away.

While it is not easy to quantify the extent to which these various devices have made their way into accepted practices in different European countries, it would be fair to say that on this particular front the most responsive countries, of which Sweden is perhaps the leader, have been experimenting and institutionalizing a wider range of adjustment mechanisms than we have as yet adopted in the United States to smooth the readjustment of workers who become surplus as a result of gains in productivity.
Public Policies

As noted earlier the major thrust in both Europe and the United States to cope with the manpower dimensions of productivity changes has been in the private domain, primarily through collective bargaining procedures. But there are a series of public policies that while addressing themselves to other aspects of social and economic need have the potential for contributing to solving problems of workers affected by productivity changes. This is true for instance for Social Security, particularly the opportunity for men at age 62 to receive benefits at the 80 percent level; for unemployment insurance (reinforced in some cases by privately bargained supplemental benefits); by access to the newly put in place public training and retraining programs, particularly MDTA; by various services provided by the Federal-State Employment Service including counseling, placement, and to a modest degree mobility allowances and related forms of assistance. These and still other public manpower and manpower-related programs are available to workers who meet the stipulated criteria, including many workers who may have suffered a loss of employment or income consequent to productivity changes in the enterprise where they had been employed.

The important points to note in this connection are first that the aforementioned benefits have not been developed with consideration for the special disabilities that workers are likely to experience as a result of the progress of productivity; and further, such national or Federal-State programs are likely to pay relatively low benefits—far below what is needed to insure that workers displaced by productivity changes can enjoy a standard of work and living equal to or close to that which they had been accustomed.

In addition to this basic structure of support and assistance brief reference should be made to Trade Readjustment Allowances (TRA) which provide, under a complex of safeguards, special assistance for workers who lose their jobs as a result of their employers suffering reverses from import competition resulting from tariff concessions. Workers may receive up to 65 percent of their average weekly wage—or 65 percent of the average weekly manufacturing wage—whichever is less—for a maximum period of 52 weeks unless they are in training in which case they may receive 26 additional weeks (13 weeks for those over 60 years of age). If they cannot find suitable employment in their normal place of residence they may receive relocation allowances equivalent to 2 1/2 times the average weekly manufacturing wage plus reasonable expenses incurred in moving including their family and household effects to their new location of employment. Despite the fact that the legislation has been on the books for the better part of a decade Department of Labor certifications have affected up to 1971 only about 10,000 workers at a total sum of about $7 million. Most of the assistance has been in the form of allowances. Few workers have been trained and fewer relocated.

A related program has been Adjustment Assistance under the Automotive Products Trade Act of 1965 (APTA). In the three years before its expiration, certificates were issued for 2,500 workers in six States. About 1,950 workers received weekly payment totaling $4.1 million. Only 100 workers received training at a cost of $61,000. Without entering into all of the reasons for the restricted use of these adjustment procedures, it is important to recognize that the legislation represents a significant departure in that it provides special benefits to workers who suffered loss of jobs and income as a result of national trade policy.

Against this background of domestic experience it would be well to set out the more ambitious efforts and experiments that have been undertaken in Western Europe and Canada in the domain of public policy to ease the adjustment problems of workers adversely affected by technological and related changes.

The first point worth stressing is that the Europeans look with favor on establishing through legislation minimum standards to which the private sector must adhere. Specifically, such legislation requires employers to provide severance pay to redundant workers; portability of private pensions; minimum time periods governing dismissal notices; advance notice
to the Employment Service; obligatory consultation on the part of management with representatives of the workers; and related measures.

In the view of Europeans such legislative standards help to ensure minimum performance; assure benefits to all workers rather than only to those who belong to strong unions; help to equalize labor costs among a large number of firms; reduce barriers to mobility resulting from private pension programs; and generally stimulate manpower and personnel planning and management.

Additional dimensions of the European experience relevant to the problem at hand follow. The relatively high level of employment has created a favorable background conducive to the reabsorption of redundant workers—at least for all except those nearing retirement age. When older workers lose their jobs they face major problems in finding work and many retire prematurely. Several European countries have experimented with subsidized training and employment within industry; with sheltered work; and with income maintenance to assist disemployed older workers. Without elaboration one can say that none of the efforts has been particularly successful. The Swedes who have done the most are increasingly worried about the ever larger number of older workers who are being cast on the public sector for employment and support. Several countries are seeking ways of facilitating the transition of older workers onto the old age pension system if they lost their regular employment several years before they are ready to qualify.

The last aspect of foreign experience that should be noted relates to the efforts of several countries to establish a closer coordination between private and public adjustment policies. The earlier reference to legislative standards is relevant here. In addition is the establishment of the Canadian Consultation Service in which governmental experts use their good auspices to facilitate agreements between management and the workers. In Great Britain public sector enterprises, such as the British railways, were requested to adjust their employment reduction program to the government's regional employment objectives. In France, a major steel producer closing down a plant was able through government cooperation to build an industrial park and induce new firms to hire the dismissed steel workers.

Foreign governments have also moved to make public facilities available to private companies for the retraining of their work force. And governmental agencies in several countries undertake special manpower services for small companies faced with difficult adjustment problems such as testing their employees and facilitating their job hunt and transfers.

The commitment of all sectors to a high employment policy makes such collaboration between the public and private sectors easier as does the consensus that it is important for people not to be victimized by change and to be afforded every help in remaining employed and supporting themselves.

These last comments indicate that it will be difficult, if not impossible, for the United States to borrow liberally from the more elaborate panoply of measures devised by Europeans in the public arena and in collaboration between the public and private sectors to ease the adjustment of redundant workers unless and until we succeed in achieving a much lower level of unemployment.
New Directions

The reader of this analysis is in a good position to decide for himself the different measures that might be introduced or strengthened to facilitate productivity changes in the American economy through a strengthening of private and public manpower policies. The following brief check list indicates the principal directions where new initiatives hold promise of constructive advances:

-A dedication of public policy stressing the twin objectives of speeding productivity changes while at the same time assuring that the workers adversely affected will receive due compensation for any injuries that they may suffer as a consequence.

-An acknowledgment by key leadership groups that there is much scope, through the strengthening of both private and public manpower policies, to create a more conducive environment for speeding productivity changes.

-The institution of a technical assistance service, panel, or group of consultants that would be available to work with management and labor in facilitating manpower adjustments to productivity change.

-The principal areas where new and improved private, public, and joint manpower programs are required.

(a) The compulsory vesting of private pensions after a qualifying period of 10 years or so.
(b) Liberalization of the social security system to permit earlier receipt of pensions by displaced workers.
(c) More liberal mobility allowances for workers seeking employment in new locations.

-Efforts to achieve a higher degree of coordination among government procurement policies, regional development policies, and manpower policies to moderate adverse effects of productivity changes and to facilitate the reemployment of displaced workers.

-Increased governmental efforts to provide more research and development assistance for industries that have had a low level of productivity gain.

-Efforts directed to improve the interstate clearance system of the Employment Service and otherwise strengthen its services to displaced workers.

Above all, the Federal government must recognize that the sine qua non for a conducive environment for stimulating productivity changes is a high level of continuing employment for the economy. There is little prospect for success on the part of either private or public manpower policy directed to facilitating the adjustment of workers affected by productivity changes, except against a background of a high employment economy.