MAJOR EMPLOYMENT DISLOCATION

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Introduction

The process of structural change and worker displacement - Before delving into a discussion of the types of basic changes that have been occurring across industries and countries, it is appropriate to say a few words about the concept of structural change: what Schumpeter called the Creative Destruction (and reinvestment) of Capital. Structural change in industrial societies proceeds by the elimination and creation of jobs. To the extent that the newly created jobs are more productive than the old ones, structural change is a highly desirable process, and as part of the process of economic growth becomes the basis for improvement in economic well-being and the standard of living.

However, structural changes also pose various threats and may cause serious social damage depending on how the changes come about. As historical experience has shown, the changes frequently do not proceed smoothly, continuously and evenly, but tend to evolve in rather discontinuous and non-linear fashion. Expansion of employment in growing sectors, industries or regions may not compensate in the short run or even middle term for the losses of jobs in contracting sectors and locations with the result that large-scale structural imbalances emerge.

The process of employment contraction and expansion has at least two dimensions, a temporal and a spatial one. In a temporal sense, the creation of new jobs may not keep pace with the decline of jobs. Such dys-synchronous development is especially likely to occur if the displacement process emerges suddenly, rapidly or abruptly, like convulsions. In a spatial sense the destruction and creation of employment may not happen in the same location, leaving imbalances across areas, regions or countries.

The less synchronous, the less locationally balanced and the larger the scope of industrial reconversion then the greater will be the potential for major
employment dislocations with economic and social damage inflicted upon workers, firms and communities.

The most dramatic expression of these dislocations are plant closures and large-scale dismissal of workers. The impact of such action tends to be particularly serious if the declining industry is concentrated in a particular local or regional area and if the area has no industrial diversity (industrial mono-structure).

**Historical backdrop** - Worker displacement is a process that goes on continuously. Businesses are constantly going through the life cycle of birth and death. For the most part these changes occur gradually and affect small-scale enterprises. Consequently, the scope of work force displacement at any one point in time and for any locality is relatively limited. Thus, while the aggregate figures of jobs lost through the "churning" of the economic system seem large, when broken down on a micro basis (for a particular labor market for a particular point in time) the numbers may not be that devastating. For example, it has been noted that during the decade of the 1970s, the New England economy had experienced a loss of jobs amounting to approximately one million jobs. However, in that same period of time almost as many jobs were created and consequently, this region of the United States has remained in relatively good economic health.

Our interest in this report is not in job loss, per se, or even in large-scale job loss when it occurs gradually over an extended period of time. We are interested

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1 Consider the background picture for manufacturing in Scotland - a section of Britain that has incurred considerable work force displacement of the sort that we will be interested in considering in this report. Between 1966 and 1975 manufacturing plants in Scotland experienced closure rates anywhere from 1 to 4% per annum. Thus, over a ten year period 1/4 to 1/3 of the plants in existence would no longer be in existence. The highest incidence of failure occurred for small plants and for plants shortly after their arrival on the scene. Robert A. Henderson, "An Analysis of Closure Amongst Scottish Manufacturing Plants Between 1966 and 1975," Scottish Journal of Political Economy, Vol. 27, No. 2, June 1980, p. 152-174.

in the surges that clearly characterize a number of industries across a range of countries today.

However, before detailing the extent of large-scale displacement, it is instructive to examine some industries that have experienced substantial work force reductions without extensive dislocation over the past several decades as a significant contrast to the current situation that is gripping so many industries in so many countries. An interesting industry for this purpose is coal, since it occurs in isolated locations and as a result has the potential for creating substantial structural unemployment. In the case of United Kingdom coalmining, between 1960 and 1970 manpower in the industry dropped from 602,000 to 287,000. However, for this large reduction in employment (over 300,000) the number of redundancies amounted to slightly over 60,000 and most of these occurred during the latter phase of the program when normal and early retirements were not as available to the Coal Board.¹

A similar experience occurred in the Limburg coal fields of The Netherlands in the 1960s when coalmining employment was reduced by 30,000 (starting from a base of 44,000) with normal and early retirement handling slightly over 10,000 other employment about 16,000 individuals.

The 1960s also saw massive reductions in employment in the United Kingdom and the United States railroading. Between 1963 and 1973 employment in British Rail dropped from 477,000 to 230,000; 2/3 of this reduction of 214,000 workers came about as a result of normal and early retirement as well as special redundancy payments.²


For the United States railroads, employment in the late 1940s stood at over one million workers; by the late 1970s it had dropped to approximately 500,000. Almost all of this reduction had occurred through normal attrition, with only a small number of workers having been severed involuntarily.

The same story of dramatic rundown in employment (occurring on a gradual basis) could be told for the docks in the United States, United Kingdom and other countries, as well as for a variety of other industries. For example, in a ten year period between 1969 and 1979 the United States Postal Service experienced a drop in employment from 656,000 to 585,000 without any layoffs.

**Characteristics of the industries just mentioned** - The industries that have gone through large scale, work-force displacements and handled them in stride have a number of similar characteristics. Generally, they are either owned by government or in close relationship to the government via subsidies and other financial support programs. The industries tend to be oriented towards domestic markets/exclusively so such as post offices and railroads. This combination of being isolated from foreign competition and being supported by government financing enables the changes to be phased gradually -- so that the shifts do not become convulsions.

It should also be recognized that the decline in employment can take place in small increments due to the nature of the technology and the way in which the work force is dispersed as is the case for railroads and mines. A single coal mine may not employ more than several hundred workers and its closing then can be phased along a time continuum. Such is not the case with a steel mill which

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1 In the case of the rundown in coal mining in Belgium, the government authorized the industry to release 100 men a month with the government paying for all the losses.
may employ 4,000 or 5,000 workers and where it is difficult to phase its
demise in quite the same way as would be true of railroads and the mines.

A Selective Account of Major Employment Dislocations

We now portray some instances of major employment dislocations in selected
countries and industries.

Table 1 presents 12-month rates of change of production and employment levels
for selected industries and countries from mid-1979 to mid-1980. Through this
selection it is hoped that some of the more dramatic recent dislocations will be
catch.

It should be noted, that the economic indicators applied here give only a very
rough approximation of the scope of dislocation effects. Given different national
policy interventions and institutional arrangements in the various countries, regis-
tered employment as well as unemployment data do not reveal the true extent of ex-
cess labor. For example, policies of temporary employment maintenance have been
applied to a substantially different degree in the countries and industries under
consideration.

Similarly, production figures may reflect temporary efforts at upholding pro-
duction levels through public subsidization and may not be a good indicator of the
industry's future, if, for instance, these subsidies cannot be continued in light
of more permanent problems of decline.

Automobile Industry

The automobile industry exemplifies very vividly almost all of the essential
circumstances and causes which currently strike industries in most advanced
Western nations:

- market saturation (as in the United States) or a leveling off of growth
  in demand (as in Europe);
Note: Final draft will include a table covering a longer time period, such as 1970 to 1980, as well as the recent time period.

Table 1: Changes in Production and Employment in Selected Industries and Countries

<table>
<thead>
<tr>
<th>Industry</th>
<th>Indicator</th>
<th>Country</th>
<th>USA</th>
<th>JAPAN</th>
<th>SWEDEN</th>
<th>W-GERmany</th>
<th>FRANCE</th>
<th>U.K.</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEXTILES</td>
<td>PRODUCTION</td>
<td></td>
<td>-10.7</td>
<td>0.4</td>
<td>-4.6</td>
<td>-4.1</td>
<td>1.6</td>
<td>-14.4</td>
</tr>
<tr>
<td></td>
<td>EMPLOYMENT</td>
<td></td>
<td>-5.3</td>
<td>1.6</td>
<td>-2.8</td>
<td>-1.6</td>
<td>-2.6</td>
<td>-9.6</td>
</tr>
<tr>
<td>IRON AND STEEL</td>
<td>PRODUCTION</td>
<td></td>
<td>-36.7</td>
<td>2.7</td>
<td>-9.7</td>
<td>-3.5</td>
<td>9.4</td>
<td>-20.5</td>
</tr>
<tr>
<td></td>
<td>EMPLOYMENT</td>
<td></td>
<td>-19.2</td>
<td>1.3</td>
<td>-1.7</td>
<td>0.5</td>
<td>2.3</td>
<td>-9.5</td>
</tr>
<tr>
<td>SHIPBUILDING</td>
<td>PRODUCTION</td>
<td></td>
<td>-3.6</td>
<td>51.5*</td>
<td>-8.9</td>
<td>7.2</td>
<td>n.a.</td>
<td>-21.8</td>
</tr>
<tr>
<td>AND REPAIRING</td>
<td>EMPLOYMENT</td>
<td></td>
<td>-10.2</td>
<td>4.7</td>
<td>-17.5</td>
<td>n.a.</td>
<td>0.8</td>
<td>-9.8</td>
</tr>
<tr>
<td>MOTOR VEHICLES</td>
<td>PRODUCTION</td>
<td></td>
<td>-33.8</td>
<td>13.5</td>
<td>n.a.</td>
<td>-5.8</td>
<td>n.a.</td>
<td>-15.7</td>
</tr>
<tr>
<td></td>
<td>EMPLOYMENT</td>
<td></td>
<td>-34.2</td>
<td>5.1</td>
<td>6.4</td>
<td>1.7</td>
<td>-2.4</td>
<td>-6.2</td>
</tr>
</tbody>
</table>

n.a. = not available

*This figures needs to be checked

Source: OECD, Indicators of Industrial Activity, 1980-III
- changes in the composition of demand, such as the call for smaller
cars due to increased fuel prices;
- technical innovations in production, like the introduction of robots;
- organizational adjustment, as typified by the arrival of the standard-
ized world car models based on interchangeable parts and produced and
marketed in many countries;
- the present downturn in the business cycle and the high sensitivity
of car sales to economic fluctuation;
- the rapid progress by Japanese car manufacturers in gaining market
shares both in the United States and in Europe.

United States - The United States automobile industry has experienced a
dramatic loss of production, sales and employment over the past two years. This
decline is unprecedented in scale. The various causes for the current crisis
and for "the need for restructuring" seem to be more dramatic than in the other
major auto producing countries. There has been a cumulation of down-sizing
of vehicles, computerization and robot introduction, a fuel crisis in the
recent past and large increases in the cost of gasoline from a low level, relo-
cation of production facilities within the country and to other countries, a
recession in 1979 and through part of 1980 and a major breakthrough of sales of
Japanese cars.

The big three domestic producers of automobiles, General Motors Corp., Ford
Motor Corp. and Chrysler Corp., each reported large losses totalling $3.6 billion
for the first three quarters of 1980. During the third quarter of 1980, each
of the companies lost around $500 million.

At the beginning of July 1980, some 268,000 workers were unemployed, 217,000
of whom were on indefinite and 51,000 workers on temporary layoff. (In contrast,
during the downturn experienced during 1973 to 1975, 213,000 workers were out
of work.) This unemployment accounted for 36% of a total labor force of 735,000
in the three companies.

The severe slump has not only affected the automobile companies but the
supplier industries as well. Overall, an estimated 750,000 jobs have been
lost in the United States directly, or indirectly, related to the drop in pro-
duction of four million units from 1978.

During the past year, Chrysler has announced the closing of ten plants
resulting in a loss of 25,000 permanent jobs. Ford has announced the closing
of four plants amounting to 10,000 jobs. While General Motors has announced
plans to close eight plants, it is not clear what the net job loss will be,
since a number of replacement plants are being built.

United Kingdom - British Leyland, the national mass car producer in
Britain, decided in September of 1979 to cut its work force by 25,000 over
two years, and close 13 plants, at least partially. The future of 30 others
being
was reviewed. This planned cutback (out of a total work force of 165,000) came
in addition to the 18,000 jobs which had been lost over the previous 15 months.

British Leyland sought government funding in excess of £ 225 million remain-
ing from the £ 1 billion which already had been assigned to the firm.

The plant closures were planned on the basis of performance, and the exist-
ing state of modernization. British Leyland expected to concentrate on cars
for the medium market, including models from a partnership with Honda.

West Germany - The West German automobile industry faced a substantial
slump during the recession period of 1973 to 1975 in the aftermath of the oil em-
bargo in the Middle East. Overall, production declined by about 30% and employment
was reduced from 635,000 to 560,000 between 1973 and 1975. Volkswagen ran down
its work force by about 27,000 workers, in part through natural attrition and partly through severance payment contracts and early retirement. In addition, many workers were on short-time for several months. Opel had 27,000 employees in 1975 compared to 38,000 in 1973.

Starting in the autumn of 1975 the industry experienced an unexpected boom period that ended in 1980 when the onslaught of a recession coincided with an increase of the gasoline price and sharp sales gains by the Japanese car industry generated a decrease in demand for West German built cars, particularly for the upper-medium sized models of Opel, Ford and Audi. While Audi has attempted to cope by resorting to short-time work, Ford has started to reduce its work force by 6,000 and Opel has planned a cut of its employment at the Rüsselsheim and Kaiserslautern facilities by 5,300. Both companies have offered severance pay contracts mainly to workers over 59 years. In spite of this decline, a new engine and transmission plant is scheduled to open in Kaiserslautern, threatening to induce a further loss of jobs at the Rüsselsheim plant.

The main victims of job loss in the West German auto industry, just as in manufacturing as a whole have been unskilled, female, aged and foreign workers.

Italy - FIAT was struck by the recession 1974 to 1975. In 1974, it sold 12% fewer automobiles than in 1973, and the work force declined by 6.5%. In addition 66,000 workers were on short time. Effective in December 1974, further measures were agreed upon between the company and the unions, comprising extended holidays. As this proved insufficient a further agreement provided layoff of 65,000 out of 90,000 workers for 18 working days in February and March of 1975.

More recently, FIAT reported a loss of $48 million for its automobile division in the first ten months of 1980. In part this loss was a result of market slump, and in part it was due to severe labor unrest during September and October when there
was almost a complete shutdown of operations. The job loss during this part year has totaled 10,000.

In July 1980 the company announced a cut of production by 30% in the second half of the year to keep its already large stock of unsold cars from growing to intolerable proportions.

After the disruption in the fall and after extensive layoffs during summer 1980 (involving 78% of the work force) the company reached agreement with the metal working unions on October 17, in which the highly contested decision to make 14,000 workers redundant, was dropped. The agreement, instead, provided for reduction of force by voluntary redundancies, natural attrition, early retirement, internal mobility and layoff of 23,000 workers (rotated among 30,000 instead of the full work force of 140,000 as demanded by the union) in the Turin area at any time until December 1980. Thereafter, the company in consultation with the union will decide how many of these workers will be made redundant.

Steel Industry

The steel industry in most of the advanced industrial nations is in a state of crisis. Demand for steel decreased dramatically in all Western nations in 1980. The prices for steel, previously fairly stable, have started to drop. At the same time production costs have increased as a result of higher costs for iron ore and energy, leading to lower profitability of operations and substantial losses in many quarters of the industry.

At the present rate of capacity utilization is down to 50% in the United States, approximately 58% across EEC countries and 75% in Japan. There are mounting signs that the market continues to deteriorate. For example, crude steel production for the last quarter of 1980, compared to the same period in 1979 was down 3.2% for the United States, down 7.0% for Japan, down 18.5% for Sweden, down
12% for West Germany, down 25.2% for France and down 44.9% for the United Kingdom.

In spite of major attempts to maintain plant and employment through heavy subsidization in several European countries, extensive job losses have occurred during the recent past and significant reductions are planned for the near future in most steel producing countries.

The downturn of the steel industry has created serious imbalances to particular steel producing areas and regions. In spite of partial relocations of iron and steel plants from the traditional coal or ore-based centers to coastal areas, a heavy concentration of steel production has remained in such areas as Youngstown (Ohio), Lorraine in France, West Midlands and South Wales in Britain, the Ruhr and Saar districts in Germany and the Basque region around Bilbao in Spain. Frequently the economic plight of these regions is exacerbated by previous or present decline of the coal mining and shipbuilding industries.

United States - In the United States steel production declined by about 26% during 1979; and 60,000 jobs were lost during 1980. U.S. Steel announced in 1979 that it intended to close a number of operations involving a total of 13,000 employees. Bethlehem Steel has laid off 15,000 workers and is operating at about half of capacity in its remaining facilities.

Nation-wide, the unemployment rate in the basic steel industry amounts to about 25% with pockets of unemployment considerably higher than the average. One of the cities most affected by the shutdown of steel mills has been Youngstown, Ohio. U.S. Steel and Youngstown Sheet and Tube have closed four large mills, producing a job loss of 10,000 and a local unemployment rate of 13.2% at present.

Japan - While portions of the industry maintained normal operating rates and employment levels, substantial weeding out of old facilities occurred
during the late 1970s. For example, Nippon Steel, one of the largest steel producers closed a major plant in its Kamaishi complex during 1979 to 1980. While most of the steel workers affected by the shutdown (approximately 500 persons), were handled by attrition, a much larger number of workers in subcontracting and other firms related to the steel industry experienced redundancy. For example, 800 workers at an iron ore mine in Kamaishi lost employment. Significantly, the mayor of Kamaishi led a march of 5,000 protesting the "rationalization plans".¹

Europe - In Europe which had about 640,000 workers employed in the iron and steel industry about 40,000 jobs were lost in 1980. The Commission of the EEC has recently concluded a plan to deal with the crisis which affects all member countries. The plan became effective on October 1, 1980. The plan prescribes production quotas for all steel producing companies with a monthly output exceeding 2,000 tons with the objective of lowering the EEC steel capacity by 10 to 17% by the end of June 1981. The plan includes the closure of obsolete, unprofitable plants.

After the EEC adjustment plan was concluded, the French steel industry applied for subsidies from EEC funds for the early retirement of 22,900 workers over the ensuing three years. British Steel Corporation filed applications for 35,000 workers and Belgium for 11,300 workers.

United Kingdom - During the past two years nearly 80,000 workers at the British Steel Corp., the nationalized steel producer in Great Britain, have lost their jobs. During 1980 alone, the reduction amounted to 50,000, arriving at a work force of 100,000 towards the end of the year. In the Talbot

Works in South Wales nearly half of the 12,000 workers have been laid off.

West Germany - In West Germany, employment in steel has declined and there is the prospect of further decline at plant locations which are at a disadvantage due to high transportation costs (including the Saar, the Dortmund area, Salzgitter and Eastern Bavaria) and in the less technologically advanced facilities.

In the Saar steel-making district a loss of 5,000 jobs was encountered between 1975 to 1978 at the Röchling-Burbach Company. At the Neukircher Eisenwerke employment was reduced by 900 in 1977 and another loss of 3,700 jobs is scheduled for the next three years following a planned partial closure of the facilities.

Management at the Hoesch-Werke of Dortmund has recently closed down a steel mill and has scheduled the shutdown of two further mills using the obsolete Siemens-Martin technique. The abandoned mills are to be replaced by an oxygen plant which would lower total capacity by about 25% and would generate a job reduction of 4,200. Lately, these plans have been jeopardized given the deteriorating market situation and the EEC steel agreement.

The decline of the iron and steel industry along with the shrinkage of coalmining in the Ruhr and Saar areas has drained the industrial capacity of two of West Germany's previous industrial heartlands. In the Ruhr district approximately 500,000 jobs were lost between 1958 and 1974, whereas the number of newly created jobs was only about 170,000.

France - The steel industry in France is undergoing a restructuring process concerning both geographical relocation of the industry to the areas of Dunkirk, Fos and Nancy-Thionville and modernization and rationalization of production. By the end of 1980 the level of employment is planned to be reduced to 115,000 from 153,000 in 1976. The adjustment process has produced
a major and serious crisis in the industry involving worker unrest and social protests in the communities in the north and northeast affected by the reductions.

Sweden – Employment in the Swedish steel industry has declined recently but major shutdowns of operations have been avoided so far. Over the next ten years, however, a substantial permanent reduction of jobs is projected, including the partial and complete closure of a number of facilities. The projected job loss is 4,000 out of a current work force of 17,000.

Shipbuilding Industry

For several years the shipbuilding industry on a worldwide basis has been undergoing far-reaching structural changes to adjust to the rapidly decreasing situation. During this period the shipbuilding nations have increasingly taken up measures to improve the national industry's competitive position. Subsidies have been provided to maintain both production and employment.

United States – The shipbuilding industry in the United States relies primarily on government orders, hence it is small in size and relatively stable. Nevertheless, in 1976 Sun Ship, Inc. which had lost $250 million the previous year shutdown a number of its major facilities, laying off approximately 3,000 individuals.

Japan – Japan's shipbuilding industry, by far the largest in the world, has been troubled by surplus capacity and excess labor since 1975. Until about 1979 the country's seven major shipbuilding companies attempted to adjust their work forces to lower demand by "soft" reduction measures, such as recruitment freezes, transfer to departments outside of shipbuilding and natural attrition. Mitsubushi, for example, by using such measures lowered
its work force in shipbuilding from 80,000 in 1975 to 68,300 in 1979.

As the slump in the industry continued and further excess of manpower became apparent, the shipbuilders considered further and more drastic efforts to cutback employment. In 1979 Mitsubushi found ways to reduce the work force by another 10,000 workers through natural wastage, transfers and early retirement.

During the same year the other five of the other large companies revised their reduction programs as well, amounting to a combined total of planned reduction by 22,750, a large downsizing compared to the 58,000 workers employed in their shipbuilding divisions.

All in all, the displacement of workers from the shipbuilding industry in Japan has been of monumental proportions. Between December 1974 and June 1979 employment in the industry fell from 274,000 to 157,000, a drop of 117,000. Almost half of the reduction came from contract workers, who are mostly piece workers and who for the most part exhibit high mobility.

United Kingdom - The travail of the United Kingdom's shipping industry has occurred over an extended period of time. Historically, the industry represented a key export industry and accounted for a substantial proportion of employment in the Glasgow (Clyde) area and also on the northeast coast. Today, employment is well under 100,000, which is only a fraction of its peak post war level. Nothing seems to have been able to stem the tide: the first phase of mergers and consolidations gave way to the takeover of the remnants of the industry by the British government. In turn this enterprise called British Shipbuilders has been cutback steadily to the point where it constructs ships at only several locations and the prospects for further cutbacks are quite high.
West Germany - In the West German shipbuilding industry orders, production and employment have been declining almost continuously during the 1970s. Between 1974 and 1979 the German share of total world orders declined from 5.1 to 1.7% or, in absolute terms, from 7.6 million to 0.5 million tons. As a result, West Germany moved from the third to the sixteenth position in the ranks of shipbuilding countries. Employment declined from 71,000 in the middle of 1975 to 55,000 in mid-1979; and there is an imminent threat of more job loss.

Sweden - The shipbuilding industry in Sweden was expanding its capacity through much of the period after World War II. By the early 1960s Sweden had the second largest ship production after Japan and had attained a world market share of 10%.

The crisis of the industry, entailing heavy downward adjustment of capacity and employment started in 1975 -- at this point 4,000 workers were idled when the Eriksberg shipyard in Gothenburg faced bankruptcy. In 1976 a cut of employment by 30% from the 1974 level was targeted -- to be completed by 1978. During this period 8,000 workers left the industry.

In 1978 another 20% capacity reduction was mapped out. The decline was to be brought about by measures other than the shutdown of yards. Further downward adjustment was considered in 1980; this time including the possibility of closing down some operations.

Textiles

According to an estimate of the European Community Commission, the textile industries of the member states during the 1980s could lose half of their current employment amount to one million displaces as a result of import
competition from developing countries, from the United States and from eastern European countries.

During the last three years the artificial and synthetic fibers industry in several European countries has been among the worst affected sectors in terms of job loss.

Japan - Some of the large Japanese textile manufacturers cut down their work forces during the depression period in 1974, 1975. Kanebo closed five plants for six months, transferring 1,650 employees to other plants outside the textile division. Yunichika shut down three of its plants and reduced operations in six others/as a result, 3,000 workers were on temporary lay off. The Toyo Spinning Company encouraged its employees to resign voluntarily, hoping to achieve a 15% reduction of its labor force.

United Kingdom - Recent reports have suggested that a good fraction of the 450,000 jobs in the textile and clothing industry in the United Kingdom could be at risk, as a result of the substantially increased imports. Late in 1980, for example, ICI decided to close two of its fibre plants, thereby necessitating the redundancy of 4,000 individuals.

West Germany - The West German textile industry passed through an intensive period of restructuring during the 1970s. Between 1970 and 1979 the number of firms declined from 2,400 to 1,700; and employment receded from 500,000 to 300,000. Between 1970 and 1976 the West German textile industry was the frontrunner among all West German industries in loosing jobs.

Imports of textile products climbed steadily to a level of 45% in 1973. At the same time the proportion of exported goods increased as well, from 21% to 37%; finally, in spite of the greatly reduced employment, real output was about 9% higher at the end of the 1970s.
The transition period was marked by product and process innovation and product specialization increasing both the capital intensity and the productivity of the industry considerably. The adjustment of employment was associated with relocation, plant closures and attrition of work forces. The contraction hit some of the most disadvantaged and remote regions (like border areas), and contributed to a growing regional imbalance in labor markets. Moreover, it had a very negative impact on female and unskilled workers.

France - Approximately 1/2 million individuals work in the textile industry in France. Many have been displaced as small firms have been forced to close as a result of tough competition, often from imports. The overall impact has not been as severe as in some other countries of the Common Market, since the industry has maintained a vital core as a number of large companies have pursued acquisitions and mergers to fill out their product lines, thereby retaining substantial marketing strength.

For small and medium sized companies the impact has been severe and has affected certain textile towns quite dramatically. For example, in the Vosges region with textile employment normally averaging 21,000 workers, 3,000 jobs were lost last year and another 6,000 workers are currently on short-time.¹

¹Financial Times, April 8, 1981.
PART II

THE CONSEQUENCES OF LARGE-SCALE WORK FORCE DISPLACEMENT

Introduction

The previous chapter has enumerated the extent of work force displacements for a number of key industries. Presumably, changes of the magnitude just described exert substantial impacts on the individuals and regions involved. These ramifications need to be elaborated and it is to this task that we now turn. The order of analysis will be from the community to the individual and from the economic to the non-economic impacts.

Area and Regional Consequences

We begin this section by detailing the impact of large-scale, work force displacements for two auto production areas in North America: the first is for the golden horseshoe in Canada and the second, a major community in plight, Detroit, the automobile capital of the world.

Canada - The Canadian automobile industry is concentrated geographically with about 90% of the employment occurring in a small area stretching across southern Ontario. In communities like Windsor, St. Catherine and Chatham, anywhere from 40% to 80% of all manufacturing jobs are concentrated in the automobile industry. Thus in Windsor, where over 10,000 auto workers are on layoff, which represents almost 40% of workers displaced in this industry, the consequences have been substantial. The welfare and social service case load has increased approximately 30% in a one year period.

Detroit - The number of auto production facilities located in Wayne County, Michigan, declined from 206 in 1951 to 145 in 1976. Since that time two more plants have been closed: the Highland Park Tractor Plant of Ford and the Dodge main plant of Chrysler in Hamtramck. Other closures have been announced: the Lynch Road Assembly Plant of Chrysler, the Outer Drive Stamping Plant of Chrysler, the Clark Avenue Engine Plant of General Motors, and the Fleetwood Fisher Body Plant of General Motors. While both General Motors and Chrysler have indicated some plans for new construction, the net loss of jobs will be substantial. Chrysler, which is very much in a "make or break" situation, employs 28,000 workers directly and accounts for the employment of 51,000 in supplier firms, all located in the immediate Detroit area.

Not surprisingly, in early 1981 the unemployment figure was 12%. The decline in population has also been noteworthy: from 1.5 million in 1970 to 1.1 million in 1980.

Other indications of economic stress can be seen in the fact that recipients for food stamps jumped from a little over 200,000 in 1978 to 340,000 in August of 1980; and general assistance claims rose from 41,000 in 1978 to 87,000 in August of 1980.

Glasgow, United Kingdom - Seventeen of Glasgow's 20 shipyards, which employed 100,000 men and produced the Queen Mary, the Queen Elizabeth and the QE-2, have closed. So has the Singer Sewing Machine factory, which once employed nearly 20,000. Goodyear Tire and Talbot's Linwood car plant have also ceased operations.

Ruhr, West Germany - While for the country as a whole, the unemployment rate declined from 4.7% in 1975 to 3.8% in 1979, the rate remained high or increased in some labor market areas. The Ruhr District, West Germany's tradi-

\[^1\] Unemployment rates ran even higher for some other auto manufacturing centers: e.g. Flint 22%; Saginaw 17%; and Anderson 20%; in the case of these three communities auto employment accounts for a very large fraction of manufacturing employment.
tional heartland of heavy industry, has become a so-called "problem" region during the 1970s. In 1975, there were only 7.2% of problem areas in the Ruhr District, whereas in 1978 the amount was 44%.

The Pathology of a Community in Decline

Closer analysis of situations like those just cited reveals that a cluster of economic effects emerges over time. The immediate, direct effects tend to be quite visible, as the most discretionary spending income is curtailed.

A multiplier effect on employment may initiate a process of slow but steady decline in the community's economic base. In addition, there may be a short-run exodus of skilled craftsmen which impedes longer-run re-establishment of local industries. Finally, in small to moderate sized communities with little economic diversity, the process of decline may be practically irreversible once it has gained momentum.

Let us briefly examine what happens to a community's economy when there is a plant closedown. The first effect to be encountered is lost retail sales due to diminished spending, altered spending patterns, or worse, the exodus of workers and their families. This reduction in the spending of former wage-earners is aggravated by the curtailment of purchases of local goods and services by the closed-down plant. The combined effect of the loss of these two sources of local purchases is the loss of secondary jobs in the community, including trade, construction, finance, transportation, and public service. When the local economy establishes a new equilibrium, the multiplier effect will likely be seen to have taken its toll of two to three times the employees and payroll directly involved in the plant that has closed.

There are further costs that should be counted in the community impact statement. For instance, there should be expected a direct loss in local taxes

1 Some of the material in this section has been taken from an unpublished manuscript by Robert McKersie, Leonard Greenhalgh and Todd Jick entitled: "Economic Progress and Economic Dislocation".
as people move on and property values decline. Further tax losses would be incurred in cases where it is necessary to use tax breaks to attract replacement industry, in addition to the expenditure of tax revenues as direct costs of "recruiting" new plants.

In addition to the economic impact, a plant closing or other work force upheaval can seriously impair the quality of life in a community. First, it is evident that individuals experiencing job loss withdraw from community life as is typical of any serious loss being mourned. Thus stricken communities are likely to experience diminished church attendance and generally reduced participation in social organizations. This withdrawal dampens the community's vitality, weakens the bonds that form the social fabric of the community, and consequently creates a gloomy climate that encourages out-migration, thus exacerbating the community's morbidity.

The manifestations of social withdrawal explained above are only the milder symptoms. Economic decline is also associated with social deviancy - in other words, the stricken community is likely to be that much more of a "jungle" than the healthy community, since one reaction to job loss is anomie. For instance, Harvey Brenner found that when the unemployment rate rises, so do the rates of homicide and state prison admissions. Furthermore, there is an increase in the rate of suicide, the ultimate withdrawal from society.¹

A very vivid example of the psychological trauma that strikes a community that has incurred substantial job loss can be seen in the attached article about Anderson, Indiana (see following page).²

The Anderson syndrome could be repeated in many countries. It would apply to the aftermath of the shutdown of steel facilities in Corby, England; to many communities in Lorraine, France; as well as to some sections in Germany.


²David J. Blum, "Indiana Town With a 17.5% Jobless Rate Has Added Burden of Psychological Pain", The Wall Street Journal, May 7, 1980.
Indiana Town With a 17.5% Jobless Rate Has Added Burden of Psychological Pain

Suicide, Murder Rise

That may be soon. Studies of previous economic slumps have shown that the rates of suicide and murder increase as unemployment rises. Even Mr. Hooker, who worked at one of the local GM plants for 43 years, seems despondent these days. "I was director of personnel from 1965 to 1977 at Delco," he says, "and you know, every single person I hired is laid off."

Anderson’s steadiest employer for the past 50 years has been GM. Because of strong contracts negotiated by the United Auto Workers, most families here earn at least $15,000 a year. In times of plenty, the living standard always included a comfortable house and a GM car. "After 15 years, you’re making upwards of $20,000 a year, you’re buying boats and spending money," says Robert Kinerk, departing president of the UAW local that represents the Delco-Remy workers. "You don’t even dream you’re going to be laid off."

Almost everyone in Anderson has been touched somehow by the layoff problem. The local chamber of commerce says that for every 100 workers who lose their jobs at the two GM plants, another 60 to 65 workers lose jobs in other sectors of the economy. Says William Ray, executive director of the chamber, "People in Anderson have had it too good for their own good for too long."

For now, most workers have enough money to pay their bills. Under the union contract, two years of experience entitles laid-off workers to supplemental unemployment benefits that amount to 95% of take-home pay, less $12.50 a month for lunches, gasoline and other personal expenses they no longer have.

Those union benefits and the government unemployment checks that last for six months give most families enough to tide themselves over for the moment. But long-term prospects for the economic survival of the GM workers are diminished by the unexpectedly heavy layoffs of senior workers at the Delco-Remy plant and the expiration of supplemental benefits after one year.

Cutbacks at the Delco-Remy plant are affecting workers who have been on the assembly line as long as 15 years. One is John Vernon, a 13-year veteran who got laid off four days after his wife, Katherine, lost her temporary tax-accounting job on April 15. "We’ve cut everything out but bills," Mrs. Vernon says. "My son played the saxophone in the marching band, but he’ll have to give it up. We don’t have much hope of getting back to work, either of us." The Vernons, like many other families in Anderson, are thinking about transferring to GM factories in other cities.

When the supplemental benefits run out, which will be at the end of this summer for many GM workers, no one can predict what the city or its people will do. "It’s highly likely that we’ll be swamped at this time next year," says Mr. Bennett of the county welfare office. But with his department already straining under the added fiscal burden, he says, Anderson might have to be declared a disaster area. "Barring a miracle, that may be the only answer."

Meanwhile, the city government is building a $2 million parking garage downtown, though nearby lots have dozens of empty spaces. "When I’m downtown, I drive by that garage," says Joyce West, "and I wonder: What are they going to park in it?"
Patterns of Community Response

The single most important variable explaining the impact of work force displacement on a community is the proportion of the community's workers involved in the primary cutbacks. We have identified a number of instances where job loss can be taken "in stride" by a community, precisely because the changes could be "digested". In a study of three plant shutdowns in upstate New York, the system-wide impacts two years later were negligible and in the case of one community the economic health was actually better as a result of the challenge posed by the plant shutdown. While unemployment rates had risen to over 10% immediately after the shutdown, over the ensuing years the community "healed" itself and any permanent damage to the economic system could not be detected.¹

A second factor that explains the severity of long-term consequences relates to the economic specialization of the region. Where one-industry towns exist, like Corby, England, or Detroit, Michigan, then the consequences are bound to be substantial. However, in situations where the workers displaced from one industry can move, within the commuting area of the labor market, to openings in other industries then the long-term consequences are minimized. For example, in the case of Japan, it has been possible for excess workers in the steel industry to take up employment in the automobile industry. In this respect, it would appear that Japan and (to some extent) West Germany are well situated because of the large diversified industrial areas that exist in these countries. By contrast the United States with its Detroit automobile concentration, Youngstown steel concentration, and Akron rubber concentration, has encountered structural unemployment because the concentrations of displaced workers are not able to shift to other industries in the local labor markets--either because other industries do not exist or, if they do, because their employment fluctuates in synchronization with the basic industries due to their relationship as suppliers and contractors.

Impact of Job Loss for the Individuals Involved

Aside from the aggregate effects described above, job loss for the individuals involved represents a very personal event and even where the overall statistics might not indicate any difficulties, certainly for the individuals involved severe transitional consequences are likely to be experienced. We will consider these impacts both with respect to the economic and non-economic dimensions.

Economic impact on individuals - The most concrete and perhaps the most visible impact of job loss is in the economic sphere. The severity of income loss for the individuals affected varies with many factors. The state of the labor market (the number of jobs available), the personal characteristics of the individual (age, sex, and experience), and the mobility of the individual all have a direct bearing on whether the individual suffers any economic hardship as a result of job loss. Even controlling for some of the variables just mentioned, the range of economic experience can be quite wide. At one extreme are individuals who ultimately do better as a result of change, usually not more than 10% of the terminated population. Such individuals "land on their feet" with better jobs than they had before the shutdown. At the other end of the spectrum is a group that suffers long-term unemployment and may even end up on welfare. This is a group for whom job loss can be catastrophic, leading to loss of all savings, forced sale of capital goods such as automobiles and housing, and a "nose dive into poverty".

The best guess as to the typical economic impact of job loss is that it costs the individual something in excess of $21,000.¹ A large part of this sum is due to lower earnings brought about by the fact that the subsequent job does not pay as well as the job which was lost. Another way of saying the same thing is that the worker takes a capital loss because the human capital

that had been developed within the particular situation cannot be marketed for the same value. Beyond losses in human capital, other losses come in the form of moving household goods, out-of-pocket costs for travel to search for new employment, and the like.

The varying economic consequences can be illustrated from three studies from the United States, the United Kingdom and Japan.

United States - Two years after the shutdown of three plants in upstate New York researchers found the following: 3/4 of the workers had found new jobs; 14% had left the labor market; and 10% were unemployed. For those finding new jobs the decline in earnings was substantial and about 1/5 reported a major reduction in family income. This reflected the fact that in about 25% of the cases other members of the household entered the labor market after the layoff of the primary breadwinner.¹

United Kingdom - Based on a summary of redundancy studies prepared for the United Kingdom's Department of Employment, the following emerged. Half of the displacees experienced periods of unemployment in excess of ten weeks. Individuals who seemed to be primarily in this category were older and unskilled. Anywhere from 2% to 10% left the labor force, with women being especially prone to following this route. Geographical mobility ranged from 3% to about 20%.²

Japan - Some 2,000 Japanese workers, who had been displaced from the shipbuilding industry in Nagasaki, were surveyed in February of 1980. Based on 848 returns the following major points emerged from the survey. Two hundred eighty-seven fell in the age group 50 to 59. Whereas only 24 workers had been temporary employees previously, 105 fell into this category with their new employment. Over 250 individuals had experienced unemployment in excess of one

¹Robert Aronson and Robert McKersie, op. cit.

²Unpublished study.
year. About 10% of the total were still unemployed at the time of the survey. Monthly earnings decreased for 478 and only increased for 140 individuals. Regarding the nature of employment, 303 said that it had become more unstable, while 139 said it had become more stable. From the cross tabulations it is clear that adverse consequences affected older workers and women workers much more frequently than their counterparts.¹

**Impact on the quality of life** - Although job loss has traditionally been viewed as an economic phenomenon, a growing body of literature has been documenting its ripple effects throughout the affected individual's lifespase.

The psychological response of the individual to job loss ranges over a wide spectrum. Certain individuals who thrive on change respond to the challenge of job loss quite effectively and their emotional well-being may actually improve as a result of the event. At the other extreme we find individuals who never recover from the trauma of job loss. Some authors have taken advantage of what is already known about the grief reaction in explaining the reaction of the individual to job loss. Depending on the level of ego involvement in the job, job loss may be seen as akin to any type of major loss, such as death of a loved one, loss of an arm or leg, or the destruction of one's home as a result of a natural disaster. Some individuals can quickly reestablish themselves and develop a new platform on which to continue living; others never are able to cope and remain emotionally impaired the rest of their lives.

It is further known that by and large, men appear to have more difficulty in handling the psychological consequences of job loss than do women. This is probably due to the fact that holding a job is more central to the self-concept of men than it is for women (at least at the present time). It may also be that the economic loss will generally be greater for men and thus the psycho-

logical consequences greater. One interesting consequence of the increasing participation of women in the work force and the possible liberation of men to adopt non-remunerative activities of caring for the children and managing the household is that the consequences of job loss may lessen for men and increase for women.

In addition, the intensity of the emotional reaction to job loss appears to be greater for white-collar than blue-collar workers. White collar workers typically assume or may even be assured by management that they enjoy job security--here the reality of displacement comes as a severe shock.

The psychological reaction to job loss is not monolithic; it changes over time. In fact, almost all individuals pass through several stages of emotional reaction. The first stage is that of denial: when news is unbelievable, the only way to handle the situation is to suppress the event. This period of defensive shock is quite understandable because all signals of the employment relationship had pointed towards security and continuity, and the announcement that the organization is going to be terminated hits most people as something they cannot reconcile with their assumptions. In most organizations, as years of service increase, employees feel more and more secure. Seniority counts for something in terms of fringe benefits, and if temporary layoffs followed by recalls occur, then seniority is often used as the allocation device. Then too, the employer most likely cultivates the impression of continuity as a way of maintaining an intact work force.

The employment relationship must be seen as akin to any social relationship. During the period the parties are in accord, considerable stability and reinforcement takes place. However, as the relationship is breaking up, considerable bitterness and destructive behavior can take place. This is what social scientists call "end game" behavior. If the employer has indicated that the business is going to be terminated in the near future, the counter
reaction may well be: "Why shouldn't I 'jump ship' as soon as possible and find other employment; why shouldn't I use up all my sick leave; or why shouldn't I give just minimal effort while I am looking for employment elsewhere?"

The Political Impact

By far the most important dimension of large-scale work force displacements is political. Given the severity, both qualitatively and quantitatively, of displacements, it is not surprising that substantial worker protest has developed during the last decade. During the late 1960s and the first half of the 1970s, several hundred factory occupations occurred in France and a similar number in the United Kingdom—in the case of the latter country it was estimated that 150,000 workers participated in these protests of decisions to close plants and cut back employment.¹

While the response to displacement in the form of protest and group action has characterized Europe more than other regions—even in Japan, where the reaction to change has been reasonably accommodating, there have been marches. On the Canadian scene, there is the picture of increasing resistance to cutbacks and in several instances workers have occupied plants as protest to the cutbacks.

But not all massive displacements result in the social and political reaction just described. For example, there are industries that have experienced rapid rundown of employment and yet there has not been the controversy and the attention shown that is currently the case. For example, in the United States during the 1950s and 1960s the textile industry left New England, thereby temporarily stranding over 100,000 workers. Between 1969 and 1971, due to massive cutbacks in defense spending and shifts in priorities, the Boeing Corporation laid off 70,000 workers out of a total employment of 110,000. Many of these

workers had been employed in the northwest region of the United States. In
the case of United Kingdom textiles between 1951 and 1966, employment dropped
from 360,000 to 145,000 as part of a conscious program to scale down the size
of the industry and to upgrade its technology.¹

Certainly, it must be recognized that the scale effect mentioned earlier
is a critical factor in explaining the reaction of the community and, indeed,
the country to economic change. It is one thing for a series of plants pro-
ducing electronic products, none of them employing more than 1,000 people,
to be shut down. Thus, when RCA dropped its employment from 21,000 to slightly
over 7,000 between 1969 and 1979, the country was aware that it was losing a
good part of its electronics industry but there was not the national concern
that is currently the case. In contrast, when several automobile companies
lay off over 200,000 workers (as in the United States) with much of this con-
centrated in a few labor market areas, the impact is bound to be different, and
certainly perceived in drastically different terms.

Another explanation is that "times have changed" and workers and their
union representatives are not willing to accept economic change and the ensuing
displacement as the "breaks of the game". Without developing an elaborate ex-
planation, it is clear that industrialized societies have become much more
societies of protest and fighting for vested interests. Women in the labor
market are asserting their rights. For example, many of the workers who were
displaced from textiles both in New England and the United Kingdom were women,
and during the 1950s and 1960s they accepted these changes as "inevitable". It
is unlikely, if changes of these magnitudes occur again, that the response on
the part of the workers involved would be as fatalistic.

PART III

THE NATURE OF THE ECONOMIC CHANGES TAKING PLACE

The Challenge at Present: Towards a New Division of Labor in the World Economy

Economic development does not always take place smoothly, but tends to possess a cyclical dynamic. These cycles frequently produce waves of worker displacement and dislocation.

Looking at periods of intensive structural change in the past we notice the waves of rationalization in the United States and Europe during the 1920s and the wave of mechanization and automation during the 1950s and early 1960s. Accompanying these periods of intense technological innovation, there were phases of accelerated sectoral changes in the economy, like the decline of the primary industries (agriculture and mining) and decline and expansion within various industrial sectors.

Another cycle of major restructuring set in during the 1970s; it has, by now, generated a new economic and social environment. This time, the wave of change appears to involve nothing less than a sweeping re-division of labor on a world-wide scale for substantial segments of industrial production.

Major shifts of production have occurred across the core industrial countries--the United States and Europe are losing competitive power and market shares to Japan--but more importantly, new countries have built up considerable industrial production capacity and have entered into competition with virtually all of the established industrial nations. Typically, the newcomers have distinctive advantages, such as more recent and, therefore, more modern production plant and equipment (often imported from the advanced countries), low wage cost, limited or weak trade unions, few or low labor standards and environmental pro-
tection, and low cost energy and raw materials.

Erosion of competitiveness of the core industrial countries, as could be expected, came first in industries of high labor intensity and large components of low-skilled workers, such as in textiles, clothing, electrical and optical goods.

Subsequently, a growing challenge came from such countries as South Korea, Taiwan, Malaysia, Brazil, Mexico and the Middle East in fields with more sophisticated, capital-intensive technology, like shipbuilding, iron and steel, automobiles, engineering and electronics. And a number of further countries now appear to be at the doorstep of large-scale manufacturing and capable of entering world markets.

The advancements made by newly industrialized countries in many areas of industrial products has stepped up competition for mass products and has prompted some of the old established nations to emphasize the production of more specialized, high technology goods to compensate for some of the losses in mass production. Others, rather than following the forward strategy of innovation and modernization, have taken a rather defensive, protectionist posture with the effect that structural adjustment has been delayed.

The move towards a new division of labor on a world-wide scale may have originated in the large divergence of production costs, notably labor costs, between the old and the new industrial countries, and by the efforts of many of the core industrial countries to expand through exports their markets for consumer and investment goods. While these conditions prevailed in the 1960s, further events occurred during the 1970s accelerating the pace of restructuring. Most important among them were:

- the breakdown of the monetary order of fixed exchange rates in 1973,
rencies and producing a shift in the competitiveness of many products in international markets;

- rapid increases in the price of energy and raw materials, altering the terms of trades across countries and within countries (such as the shift of manufacturing from the "frost belt" to the "sun belt" in the United States).

Yet, it seems doubtful whether the emerging shifts in the international division of labor as such could have generated the present critical employment situation in many established Western industrial nations had they not been confounded or accelerated by other developments.

There have been a number of overriding developments during the 1970s that tended to aggravate the employment effects emanating from structural shifts:

- the globalization of markets. It is fashionable to talk about the world car with components produced in a variety of countries depending upon respective cost advantages. This de-integration of production is illustrated by the exporting of logs to Japan by large United States lumber companies—as a result 10,000 workers have been displaced from lumber-processing and related jobs;

- the synchronization of business cycles and cycles of product innovation. Both have heightened the vulnerability of national economies to external pressures as changes are not dispersed but happen everywhere at the same time;

- increased speed of structural adjustment due to higher rates of innovation and development of product and process as well as better systems of communication and transportation;¹

¹This point can be illustrated by the rapid advancement of micro-electronics. It appears as if never before in industrial history has a major new technology arrived and spread as precipitously as the micro-processor. Developed in 1969 by the American firm Intel, it took the micro-processor merely six years to pass through three generations of development. The impact of the diffusion of this innovation has been tremendous. For example, the watch industry in West Germany, located in parts of the state of Baden-Württemberg (representing a tiny fraction of the larger West German electronics sector of about one million employment), lost every second job between 1970 and 1975 following the breakthrough of electronics in this industry.
multinational firms with a world view have accelerated the shift process as they have redeployed assets across national boundaries;
- inflationary pressures have driven many businesses to the point of bankruptcy as costs have increased while weak product markets have made it impossible to pass on the higher costs to the customers;
- the restrictive economic and fiscal policies followed by governments to counter inflation have contributed to low rates of economic growth;
- the shrinkage of the volume of world trade during the present recession.

These factors, taken together, have not only extended the scale of economic contraction and job loss, but have also affected the damage or social cost of worker displacement. They have lessened the chances that workers displaced by structural adjustment will find new jobs. Thus, in the face of declining economic growth rates and rising unemployment levels there has been a lowering of the readiness of workers to accept structural changes and mobility.

In short, it is the coincidence of the new division of labor and of low economic growth levels which characterizes the current unfavorable environment.

Types of Capital Shifts

Within the ongoing process of internationalization of production and commerce, economic restructuring takes various forms. There are various ways to think about the subject of investment and disinvestment. We use a distinction that is most relevant for understanding the impact of economic change on employment. Basically, we can differentiate the deployment of capital to change products and processes within existing industries (reinvestment) from the shift of capital from the declining to the growing industries (disinvestment plus new investment).

The first form of structural adjustment can be called internal and is handled within a firm or plant by introducing new products and technology or by improving the utilization of plant equipment and human resources. Restructuring
may also happen through reallocation external to particular firms, i.e. by the
decline of industries and firms and the growth of others and by a similar ex-
ternal, inter-firm reallocation of labor. Policy approaches in this case are
directed towards encouraging and easing the reallocation of the resources af-
fected. The distinction between these two categories of structural change may
be blurred if adjustment comes about through mergers of firms, product diversi-
fication and other forms of industry reorganization. A good illustration of
this mixture can be seen in the experience of the food retailing industry in
the United States, which has gone through a number of dramatic changes wherein
the large supermarkets have automated while many of the independent supermarkets
have captured larger shares of the business in the same geographical areas.

Internal restructuring has gained in importance relative to external adjust-
ment especially in Europe. In part this evolution is due to the process of
growing concentration of industry, but also to the increased search for job
security, employment stabilization and other elements of fixed-cost of labor
at the firm or plant level. Nevertheless, there remain important sectors in
national economies where structural adjustment proceeds in an external fashion--
by the contraction and expansion of firms and industries. Thus, the current
depressed industries with large-scale loss of jobs, like shipbuilding, textiles,
and automobiles show relatively low overall potential of internal transfer of
resources to new and different product categories; therefore, the changes are
bound to lower substantially their employment levels.

Within the steel industry, there have been some attempts to widen the
scope for internal transfer of production capacity, as, for example, through
the expansion of steel companies in the engineering and metalworking fields.
Similarly, big automobile companies have made efforts in recent years to diver-
sify their range of products so as to reduce the risk from sudden decline of
monostructured production. All of these are examples of internal restructuring.
Nevertheless, most of the adjustments occurring in the steel and auto industries in most countries must be characterized as external.

Certainly it is the case that in many situations a combination of both internal and external restructuring strategies are underway. For example, in the United States, the automobile industry appears to be going through a sharp downward shift in demand for workers (external) at the same time that the type of employment required due to the new technology is also changing (internal restructuring). The United States rubber industry also vividly illustrates the simultaneous evolution of both internal and external developments. With respect to internal restructuring we would mention the shift to new technology in the production of radial tires; the shift to new methods of compensation (the abandonment of piece work in favor of day work) and a number of other changes that have moved the industry to a continuous shift operation and a more full utilization of plant and equipment. On the other hand, the fall-off in demand and the difficulty that some companies such as Firestone have experienced must be seen as part of an external restructuring development. Also, the policy of a number of companies to operate on a non-union basis and to open plants in areas where it is feasible to remain non-union is a strategy that provokes severe employment consequences for established manufacturing centers. But it is hard to classify this as either internal or external. To grasp the dimensions of this development, the rubber industry (which just ten years ago was almost 100% organized) has now moved to a point where from 20% to 30% of its production workers are not unionized.

Systematic Comparison of External Versus Internal Restructuring Activities

The following chart compares in summary form the two methods of restructuring that we have been presenting in this Part:
Nature of the Change | External | Internal
---|---
Drop in demand and a shift of capital and labor from the declining to the expanding industries | Change in products and technology

Pace of the Change | Reasonably rapid | May be implemented more slowly

Geographical Implications | New locations | Usually same locations

Source of Financial Assistance | Often outside sources, especially government | May be generated from working capital or banks

**Nature of the change** - Several industries have been forced into external restructuring on a world-wide basis since they have experienced a substantial fall in demand, for example shipbuilding and steel. In other situations the fall-off in demand may affect a given industry in some countries more than in others, (for example, the automobile industry). In other instances the restructuring may have been triggered as a result of shifts in demand across competing products. For example, when the United Kingdom entered the Common Market, a shift in refining sugar to the "beet" method meant that Tate and Lyle, which had been in sugar production by the "cane" method, had to institute substantial cutbacks in a number of its refineries.

By contrast, internal restructuring describes an upgrading of facilities, a movement to new technology and a modernization of operations. This has been happening on a world-wide basis in the textile industry for some time. Other important examples of internal restructuring can be seen in the shift to the production of radial tires with a different technology in the rubber industry, as well as the introduction of robots in the automobile industry.

**Pace of the change** - By its very nature external restructuring usually comes on an industry quickly and there are few ways available to slow down the pace of change. If demand falls off, then there is little that can be done to
forestall the employment consequences. Whereas, with internal restructuring, the life of old equipment can be prolonged and the improvement in operations can be planned over several years. This is especially true of programs to lower costs and to improve productivity through the introduction of various labor-saving devices. It is also the case in terms of shifting production to more modern facilities. For example, a number of tobacco companies in the United States have been moving production away from old factories in urban areas to modern one-story factories in rural areas where space is much more available to lay out the modern technology.

Geographical implications - Inevitably, external restructuring means a geographical shift in the concentration of employment, because typically the growing industries are not located in the same areas as the declining industries. By contrast, with the development of modern facilities, the introduction of new technology can take place in the same labor market areas as the old facilities. For example, General Motors has agreed to construct most of its new plants in existing labor markets.

Government assistance - Outside financial assistance, especially from the government, is much more likely to be involved in external than in internal restructuring. A variety of government programs to assist developing industries, that is picking and assisting the "winners", occurs in almost all industrialized countries.

By contrast, internal restructuring is less likely to involve governmental help and usually, if outside financial assistance is involved, it comes from the banks. For example, Toyo Kogyo, producer of Mazdas, faced a severe crisis in 1974 when its Wankel-powered Mazdas "flopped" in the market due to their high gasoline consumption. In the face of this financial problem, one of the leading banks, Sumitomo, lent a substantial sum of money (30% of the company's debt) and as a result the company was able to retool and get back on its feet.
A similar experience occurred in West Germany about the same time. The Volkswagen Company faced a rapidly deteriorating economic situation in 1974 to 1975 and (at its low point), in the spring of 1975, the Company was quickly approaching insolvency. Although the federal and state governments were the largest among VW's shareholders, both levels of government resisted calls by management and labor representatives to help end the financial crisis period. Rather, government insisted upon a free-enterprise solution.

Occasionally a government does provide financial assistance for internal restructuring. In the West German steel industry the government yielded to requests for public aid for modernization and adjustment programs. The case in point concerns the Roechling/Burback (GMBH) and Neunkircher Eisenwerke, two of the three largest steel producers in the Saar District and of vital significance for the employment of this depressed region. The two companies were hit exceptionally hard by the steel crisis. In contrast to other West German steel companies which had altered their production program in favor of quality and special steel products, the Saar companies still concentrated on basic steel and, in this field, faced strong competition from Italian steel plants. In addition, the geographical location of the Saar mills relative to users and raw material supplies was unfavorable, the technology used was partly out-dated, and finally, work rules made changes in production more difficult.

In 1978, after the two companies were taken over by the Luxembourg-based ARBED S. A. group, the two companies came forward with a five-year modernization and rationalization program aimed at regaining profitability of the operations and enhancing job security but only after a planned reduction of employment by 8,800.

The ARBED group did not see itself in a position to finance the restructuring scheme from its own resources. Therefore, the federal government and the state government, in light of the strategic importance of the two companies
for the regional labor market, stepped in to provide (to both companies) a loan guarantee of 900 million Deutschmarks paid in five installments over the five-year implementation period of the plan. The public aid provided investment for modern plant and equipment and enabled the firms to stretch the run-down of the work force over a longer period of time.

One conclusion that can be drawn from these cases is that governmental subsidies are more likely the larger the scale and the more devastating the prospective dislocation of employment for an area or region.
PART IV

STRATEGIC RESPONSES TO ECONOMIC RESTRUCTURING

Introduction

In this Part we make the transition from the background analysis of the nature and extent of economic restructuring to a discussion of various activities for dealing with the employment dislocations that are involved: either actual or potential. These approaches can be labeled Positive Adjustment Programs.

To anticipate the development of thinking in this Part, we will examine a spectrum of strategies ranging from purely remedial efforts that only deal with the consequences of economic change to programs that are purely preventative, that is, they deal with the prospect of economic dislocation by preventing it from happening. In between are various approaches that can be labeled integrative, or as we will designate "positive adjustment", wherein both the capital and labor considerations are harmonized to the greatest extent possible. Several examples will be given of integrative approaches across a number of countries.

The Historical Evolution of Strategies, Policies and Measures

The past twenty years have been marked by an extensive and rapid development of approaches towards structural adjustment. This expansion is reflected in the heavily increasing public outlays for adjustment as well as in the increased institutional network operating at the firm level as well as in the governmental area on local, regional, national and international levels.

Prior to World War II several countries had developed, although in a more rudimentary form, policies of unemployment insurance, employment exchange and
public relief work.

After World War II regional and industrial policies were initiated, based primarily on investment premiums and subsidies for depressed areas and for shrinking industries.

The 1960s were marked by the spread of public policies for training and retraining and other forms of promotion of worker mobility; through the 1970s, the emphasis in labor market policies was increasingly directed toward job maintenance and job creation in private industry through public subsidization of wage costs. These schemes may be regarded as a response to the inadequacy of aggregate demand management policies to deal with the stagflation problem\(^1\) and also to the growing divergence of economic development and unemployment across and within national economies throughout the 1970s. In view of this divergence it is not surprising that the labor market policies of the 1970s evidence a tendency towards more selective, categorical and targeted application for particular industries, geographical areas and labor force groups.

At the same time higher aggregate rates of unemployment and higher differentiation of unemployment were answered by more job protection and redundancy compensation through law and collective agreements.

During the second half of the 1970s, as it turned out, the employment problems were not merely cyclical but more of a structural nature emanating from a worldwide redivision of labor. Consequently, the responses shifted from temporary schemes of public assistance to more permanent and more preventative type approaches. In the face of very small or negative economic growth rates and shrinking world trade, competition on both domestic and international markets grew harsher. In this situation governments have stepped in

either to shield their most affected industries from a rapid loss of output and employment (the protectionist stance) or, to the contrary, they have accepted the challenge from intense competition by accelerating the pace of structural conversion towards more competitive products and processes (the aggressive stance).

Now, practically all of the Western industrialized nations are not merely confronted with internal conflicts between different goals, as between economic progress and economic and social security, but they are also facing heightened expectations, minimum standards or guidelines set by law, agreement or public opinion setting the limits of acceptability for the resolution of these conflicts. Values and sentiments have changed in society, placing much greater emphasis on (or taking much more for granted) individual rights to employment or even claims to a particular job.

In addition standards for the quality of work and employment have risen. Structural change must not lead to jobs that have lower pay, require less skill, require more commuting, have worse working conditions. These standards and expectations channel and constrain the paths for structural adjustment. While they mean definite social progress and, thus, should not be relaxed without necessity they also make it more difficult to conceive of and find ways out of impending employment problems.

Competing Philosophical Approaches

The accompanying chart summarizes the extreme strategies:

<table>
<thead>
<tr>
<th>Overall Strategy</th>
<th>Laissez-Faire</th>
<th>Preventative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Change</td>
<td>Uninhibited</td>
<td>Controlled or Stopped</td>
</tr>
<tr>
<td>Employment Consequences</td>
<td>Remedial</td>
<td>Averted</td>
</tr>
<tr>
<td>Role of Government</td>
<td>Minimal</td>
<td>Major</td>
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</table>
On the one hand, there is the laissez-faire approach embodying the assumption that people can take care of themselves and the best course to follow is to allow economic change to take place in an uninhibited fashion and to let solutions emerge through the interplay of free market forces. The principle of this approach is: "Let industry have its natural course". This laissez-faire posture usually starts from the belief that a free enterprise system and reliance on market forces will produce the most efficient outcome of the process of structural adjustment. Any interference with competitive forces and the free mobility of capital and labor in line with market forces, will inevitably impair an optimal resource allocation and prevent the best solution from coming about.

In the laissez-faire approach jobs are not protected and the impact of the change may not even be cushioned for the workers involved. Historically, this approach characterized the early phases of the industrial revolution, and of the countries in our study probably the United States comes closest to this approach. However, in the United States there has been growing concern for the impact of the change and some of the consequences may be dealt with in remedial fashion. The term remedial means that the decision to undertake restructuring has been made and the objective of the policies to cushion the impact of the dislocation for the workers, firms and communities involved.

The other distinct philosophy is protective, specifically of the workers involved. It starts from the premise that workers affected by economic change are impacted adversely through "no fault of their own". It points to the hardship and the difficulties encountered by the workers who bear the brunt of change and the emphasis is on policy approaches towards averting economic dislocation. In the extreme it means that economic changes do not take place because the costs for individuals potentially involved would be higher than the gains to the economy, given various assumptions and orientations to the tradeoffs
involved between economic change and worker security.

The Laissez-Faire Approach in Practice

It is not necessary to spend much time illustrating the laissez-faire approach since it is out of this backdrop that most of the experience of industrialized countries has evolved. Indeed, the move towards preventative programs has sprung out of the harshness of economic change and the painful experience of people caught in the structural unemployment that has characterized many periods of the industrial revolution.

One example of an industry that has experienced a series of major economic changes without extensive government involvement is the textile industry in the United States. One period of change involved the movement of most manufacturing activity from New England to the South during the 1940s and 1950s. More recently the industry has increased productivity with new mechanization. About the only government connection to these changeovers has been through the operation of the unemployment insurance system.

Preventative Approaches

As the preceding section on the historical evolution of strategies indicated, the significant trend of the past twenty years has been a movement towards more preventative measures for dealing with economic dislocation. The driving force has come from the expectations and sense of entitlement to employment continuity on the part of the working population.

There are several considerations under which preventative measures have been justified. One is the idea of allowing enterprises to retain their incumbent labor force (rather than redeploying workers through reduction and recommitment of employment). The retention of the experienced work force makes sense where skills are specific to particular jobs or sets of jobs so that new human capital investments would have to be made in the case of new
recruits. A second consideration in favor of employment maintenance relates to the substantial and well known monetary and social costs of unemployment which could be avoided by keeping surplus workers on the payroll for some time. Thus, it has been emphasized that in some countries the costs accruing to the public treasuries from income maintenance to an unemployed worker may be nearly as high or higher than the cost of subsidizing continued employment. Therefore, given the large returns from any transfer from unemployment to employment, it is understandable that governments have been keen to apply such measures.

Perhaps the pendulum has reached its limit in emphasizing the costs of change (and we will be talking about a better balance in the latter sections of Part IV that deal with integrative approaches to restructuring); nevertheless, it is important to summarize the various categories into which preventative programs fall.

Conceptually, one can distinguish three approaches to the objective of preventing dislocation. First, the firm or industry can be shielded from the pressures of change by some type of protectionist measures. Thus, the employment disruptions never occur because the product market has been stabilized. Second, the firm that is facing the prospect of demise with all the attendant disruption can be "bailed out" by government. The use of the term "bail out" suggests that the object of the aid is to avoid the permanent layoff of the workers rather than to foster restructuring and a transition to more viable arrangements. Finally, we come to measures that can be termed employment stabilization. These programs consist of temporary assistance to firms to provide continuity of employment even though jobs are being eliminated and economic restructuring is taking place.

It should be clear that as we consider these three approaches, we will be moving from examples that are essentially negative to those that are primarily positive examples of adjustment measures.
Trade protection - One approach is to turn away from an international economy and resume a more national orientation by erecting barriers to trade and establishing local content rules: "Let goods be homespun", as Keynes said. This protectionist approach carries many problems and risks. Outputs of protected national industries are the inputs to other national industries, which dislike to buy from high-cost national suppliers and are likely to turn to cheaper imported products. Thus, either the protection is extended to become effective or the problem of non-competitive costs is merely shifted to another industry.

Similarly, the introduction of protectionism in one country is likely to lead to similar measures in other countries. There are links, for example, between the economic and financial capacity of developing countries and the economic growth of the developed countries. If the developing countries can't expand their exports because of trade barriers erected in the advanced countries, they must cut down in imports, which, in consequence, will lead to lower economic activity in the export-oriented economies.

Rescue operations - A second strategy which engenders great dangers is one of un-coordinated public subsidization of troubled industries in the hope that they will gain a competitive edge over industries in the other countries. This subsidization of troubled industries has occurred in a number of countries, but no doubt the most well known examples have occurred in the United Kingdom. The programs have followed several forms. The most highly publicized is the bail-out, wherein the troubled company or industry is rescued either through nationalization or a large loan from the National Enterprise Board. The United Kingdom is not alone and the United States has underway a bail-out program for Chrysler; and other examples can be found in the Scandinavian and Mediterranean countries.
Usually, these programs are justified by some type of "balance sheet" analysis that shows that the governmental treasury will be better off by putting funds into the company to save the jobs, rather than allowing the layoffs to take place with the concomitant necessity of financing a series of unemployment and welfare contributions.

Despite some passionate political feeling and the balance sheet work by economists, most evaluations have concluded that rescue operations cannot be justified on an economic basis. It has been noted by a number of analysts that programs that start out as short-run solutions to avoid large employment disruptions are difficult to abandon over the long run. For example, Australia in the mid-1970s instituted a series of support programs for textiles, clothing and footwear, and passenger motor vehicles in order to avoid large-scale displacements. The Government has been forced to continue these programs and has given a commitment that they will be maintained until at least 1988.

**Employment stabilization** - The general aim of public schemes for stabilizing employment is to provide temporary assistance (subsidies, allowances, etc.) to enterprises in order to maintain jobs or employment in periods of reduced manpower need. As a rule, it is assumed that unemployment of surplus workers is avoided by keeping them on the payroll.

Most of the schemes in operation were developed or amended in response to increased economic fluctuations of aggregate demand during the 1970s. They were designed to help private employers save labor costs during economic downturns for workers who were not fully utilized. Some schemes are also considered to bridge the period of reduced labor requirements during structural conversion or reorganization in the firm. Thus, being clearly conceived of as temporary measures, these schemes are to be distinguished from more long term public subsidies to wages, output or capital or the take-over of enterprises or industries by the government.
Though it is clear that these measures are not primarily used to extend the life of permanently declining or uncompetitive firms or industries, they still have some significance as measures for avoiding major employment dislocation. From an ex ante viewpoint, one does not always know whether a fall in demand signals a temporary or permanent decline. Therefore, it makes sense in this case to apply stabilization policies until the nature of the decline becomes more apparent. Only if the measures are applied more permanently is there a major risk that they impede structural adjustment. The temporary maintenance aid to the incumbent work force may, furthermore, be used to reduce work force reduction through means other than lay-off.

Secondly, if a decision is made to attempt to save the enterprise through restructuring, modernization or product change, employment maintenance schemes may be of valuable assistance to handle the transitional phase of increased costs. The overall value may be enhanced if the period of idleness is used for efforts of training the underutilized work force. For, even if it turns out that through the temporary maintenance the redundancy of workers cannot be avoided, the intermediary training may still enhance the chances of the displaced workers in finding alternative employment.

Finally, the public support may be targeted to maintain the employment of particular groups of workers; for example, of those whose risk for becoming reemployed is especially high. Thus, these schemes may be a meaningful response to the increased concentration of unemployment (so-called structuralization of unemployment and increased labor market segmentation) among certain categories of labor (older workers, women and minorities).

The measures used to maintain jobs or employment are of different types:

1. Direct subsidies to wages.
2. Subsidies to short-time work programs.
3. Subsidies to production, inventories or goods purchase in the hope that employment maintenance effects will arise.
(1) **Direct wage subsidies** - In Japan, the employment subsidy program has to be seen in relation to the system of lifetime employment commitment of large parts of the work force which is practiced among large firms, but also partially by medium and small firms. To retain this system under conditions of major declines in the demand for labor the Japanese government in 1975 introduced into the Employment Insurance Law an employment subsidy scheme under which one-half (in large enterprises) or two-thirds (in medium-sized and small enterprises) of the wage bill for excess labor was paid. During the period from January, 1975, to October, 1976, some 3.4 million workers received benefits under this program, and the payroll subsidy covered 29 million man days. The subsidy proved to be very effective in keeping down the level of unemployment during the recession period.

This subsidy scheme was revised in October, 1977, and incorporated in the Employment Adjustment Service, a major component of the Employment Stabilization Service. The subsidies are drawn from a special Employment Stabilization Fund, which in contrast to the employment insurance program is financed by the employers' contribution alone.

While the original subsidy program was laid out primarily as an anti-depression scheme, the more recent emphasis has been more on assisting structural change, e. g. the conversion of business activities, during which the employers are encouraged to maintain employment contracts with their employees. The subsidies are also granted to cover the costs of providing education and training while the employees remain with the enterprise or are shifted to other enterprises.

These policies are in line with the general Japanese strategy of improving the viability of the private sector and not resorting to measures to absorb the unemployed into the public sector.
Another illustration of direct wage cost subsidy schemes to defer redundancies was the Temporary Employment Subsidy (TES) applied in the United Kingdom. TES is a 20% wage subsidy to the employer of up to £20 per week, for as long as eighteen months, for each worker who would otherwise have been made redundant. It has had a disproportionately large impact on labor-intensive industries, such as textiles, clothing and footwear. In these industries the scheme is being modified to deal with objections raised by other manufacturers in the European Economic Community (henceforward referred to as the EEC) according to which TES constituted an unfair subsidy program in these industries, in violation of the General Agreement on Tariffs and Trade. Workers in these industries are now eligible under a shorttime program similar to the one practiced in West Germany (see below).

As in Japan the British TES subsidy has been regarded as a temporary and transitional device to help the enterprise to revitalize its operation and market prospects rather than to maintain a firm with no future.

(2) Temporary subsidies to shorttime work - In West Germany the public subsidy for partial compensation of lost earnings during shorttime working has been of great importance since the incorporation of this allowance into the Labor Promotion Act of 1969. During the recession of 1974 and 1975 shorttime work was widespread in the economy to stabilize the level of employment and to avoid or defer redundancies. In 1974 the number of shorttime workers was 292,000; in 1975 a peak volume of 773,000 workers was reached. For this year the estimated reduction of unemployment through this measure was 175,000.

The rate of worker compensation during the shorttime period is 68% of the net wages lost and is thus equal to the unemployment benefit rate. To receive this compensation the employer (or the works council) must file an application.

1Department of Employment Gazette, March, 1978, Table 103; and July, 1977, p. 694.
with the local employment exchange office. It has to be demonstrated that the shorttime work is "unavoidable" due to economic causes and temporary, and that all other available measures to forestall shorttime work (like the elimination of overtime) have been taken. The scheme has been applied to cases of cyclical downturns, as well as to excess manpower resulting from rationalization and restructuring measures.

Shorttime subsidies are granted for a period of between four weeks and eighteen months (in areas of structural depression or high unemployment for up to twenty-four months) for a minimum of one-third of the work force losing 10% or more of normal working time.

There are benefits from shorttime work both to employers and the workers. The employer keeps his experienced work force and avoids the cost of dismissal and rehiring of workers. The workers retain their employment contract and benefit through reduced loss of earnings during shorttime work. They receive their normal wage for the hours worked plus public shorttime allowance for hours not worked, the sum of which varies between 68% and 99% of normal earnings depending on the loss of hours per month and on the saving of taxes and other contribution. On average the compensation is somewhat more than 90% of normal net pay.

In France a similar program of subsidized shorttime work was introduced as a means of spreading employment. It is based on an agreement reached in 1975 between the National Council of Employers and trade union federations. For each hour lost below forty a week, a worker receives compensation for shorttime work. When added to the state unemployment allowance, the allowance guarantees the worker at least 50% of his normal gross hourly pay.

(3) Subsidies to output, inventories or goods purchase - Public programs aimed at maintaining employment through temporary subsidies to promote production output, inventories or the purchase of goods during slack demand have been pio-
neered and are most advanced in Sweden. They constitute elements in an active labor market policy which together with anti-inflationary aggregate demand management and a solidaristic union wage policy compose what has become known as the "Rehn-Meidner Model" or the "Swedish Model".

In the main there are three types of measures employed in Sweden:

(a) **Subsidies to local governments or private firms for purchases from Swedish manufacturers** - The purchases are subsidized by 20% of the cost and have to be made earlier than originally planned. The firms supplying the products must be located in areas suffering from unemployment or the risk of unemployment.

A similar measure was followed in the shipbuilding area. Swedish shipowners when ordering ships from Swedish shipyards, received a 30% write-off loan with no interest and no repayments for the first five years. The remaining 70% of the loan was financed from government credits.

(b) **Subsidies to firms which build up their inventories during recession periods** - To be eligible for this subsidy of 20% of the value of inventory accumulation, a firm has to guarantee that the number of workers in the firm does not decline during the subsidization period (of one year). Moreover, the firm has to be situated in districts afflicted by heavy unemployment.

During the recession of 1976 to 1977 this subsidy turned out to be the most expensive policy instrument, with total costs exceeding 1,000 million Swedish crowns. Among the prime beneficiaries of this subsidy were the shipyards whose existence was threatened mainly due to the severe competition from shipbuilding in Japan. Towards the end of 1978 the Swedish shipbuilding industry ran out of orders and new ships built were stockpiled, assisted by public subsidies of 700 million Swedish crowns per annum. Together with the public credit guarantees the shipbuilding indus-
tries received public support running to 17.5 billion crowns annually.

Subsidies to inventories were also heavy in the steel and the pulp and paper industries. In the pulp industry alone the stocks had accumulated to 1.4 million tons of raw materials which made up half of the world's total storage of this product.

The policy of building inventories helped for a while. If the slump in the economy had proved to be temporary, then the policy would have been successful since increased demand would have led to a buying up of the stockpiles. As it turned out, unfortunately, the crisis has been of a more permanent nature and new and more drastic steps to deal with over-capacity had to be taken.

(c) Subsidies for training of workers threatened by layoff - If a Swedish firm withdraws plans for lay-offs and if it designs a training program of at least fifteen hours of general training in cooperation with the local trade union, it can obtain subsidies for up to 800 hours for each worker threatened by lay-off. The subsidy amounts to twenty-five Swedish crowns for the first 480 hours and fifteen crowns for the remaining number of hours.

Problems of employment maintenance policies - A number of criticisms have been launched against the various public measures to temporarily maintain workers on the payroll. One major argument has been that the subsidies have (to a considerable extent) amounted to windfall profits to firms which would have kept the surplus workers on their payroll in any case or would have built up their inventories even in the absence of subsidies.

Another alleged problem is a redistributional one. Subsidies may favor the less efficient firms and may, therefore, distort efficient resource allocation and competition. (This misallocation would have to be compared to the one presented by low-capacity utilization and by mass unemployment.)
Many critics have characterized these programs as being very expensive ways of buying jobs from industry.

Whatever the merits of these objections and criticisms they would have to be balanced against the positive impact of these measures as outlined above.

Some of the problems may be traced to lack of administrative experience in implementing the schemes, given the novelty of the measures.

Another distinction that helps sort out when employment-sustaining policies may be appropriate is to define whether the economic changes taking place are cyclical or secular. For cyclical changes, that is, short run changes in the level of economic activity, then some form of employment-sustaining policy may make sense to tide the firm or industry over until the time when demand rebounds for the products. However, if the changes are basic and structural, what economists call a secular development, then short run measures only postpone the inevitable. It is out of this realization that basic changes are taking place in so many industries in so many countries that the judgement about employment subsidies has been generally negative.

National Approaches Compared

At this point we would like to compare the strategies across several countries. Fortunately, we are able to use the experience of one large multinational firm that closed down facilities in five different countries during the late 1970s.

United States - Many facilities have been closed by this company. There has been some severance pay of a modest amount and for some workers advance notice of six months has been given. In general, the workers have had a mixed experience, with some finding employment when the labor market was favorable and others remaining unemployed for a substantial period of time. This would be laissez-faire with only modest concern for the transition effects of the workers involved.
Great Britain - A large manufacturing facility was closed down. The workers received redundancy pay averaging approximately £6,000. There were substantial demonstrations seeking to reverse the decision but this did not happen. The workers were able to obtain other employment in the greater-London labor market. This would be classified *laissez-faire* with some concern for the financial needs of the worker.

Sweden - When the company announced that it was shutting down its facility in Sweden, the Government through its offices found a buyer and helped finance the loans that were required. This would be a modified protection approach wherein the Government used its good offices and some capital but did not nationalize or directly intervene to protect the jobs.

Tunisia - When the company announced to the Government that it intended to close down its facility, the Government quickly passed legislation to buy the company and to continue it in operation. This was in the face of a weak position for domestic sales, since imports of this product were capturing a larger and larger share of the market. This approach would be considered pure protection of the industry to avoid job loss.

West Germany - In this case the facility was a warehouse and sales operation and the close-down followed the normal procedure of a close-down agreement, what is called a social plan. The facility was closed and the union and the workers involved agreed to a plan of payment and assistance in obtaining other employment in the labor market. This case would illustrate many of the elements of what can be called the integrative approach.

The Integrative Approach

At this point we would like to summarize some of the overriding themes that have emerged from our discussion thus far. On one hand, there is the strategy of prevention: protecting jobs and employment stabilization, and this has been practiced by a number of countries. It emphasizes the premise
that change per se may not be a net benefit. Using balance sheets the argument is made that if a particular industry is allowed to close down, then the economy may be worse off than if the particular industry were supported.

By contrast, the strategy of facilitating capital mobility works from the premise that the gains more than compensate for the losses; the losers may not be fully compensated but society in general will be better off via economic progress.

In between these two strategies is one that seeks to emphasize both the gains realized from capital mobility as well as those from protecting the workers. Policies can be geared towards an active pursuit of programs to enhance productivity and improve competitiveness by scrapping uncompetitive industries and firms and by promoting competitive and dynamic sectors. Underlying this approach is the belief that while structural change is inevitable and desirable a pure market solution to change tends to produce social injury too high to be acceptable or lead to a solution which places the cost or burden of the adjustment unilaterally on a particular group or party, thus creating socially unfair solutions. To provide for a more even and more socially balanced distribution of the costs (and benefits) of structural adjustment some intervention into the market process or some more cooperative procedure is required which helps to cushion the risks posed by employment dislocation for workers and communities. We call this latter approach the integrative or positive adjustment method.

Examples of the integrative approach - Japan and West Germany constitute two interesting cases of policies that we would call positive or integrative. The strategic approaches in the two countries parallel each other more or less as far as the substantive thrust and objective of the approach is concerned. Both are directed towards modernizing and rationalizing the national economies, notably the industrial sectors, so as to strengthen their competitive power in world markets. Both countries lack energy and raw materials, and in the face
of rapidly rising costs for these imports, Japan and West Germany have been forced especially to compensate for the deteriorating terms of trade by maintaining or extending the export component of national production.

While the general objectives of restructuring policies between Japan and West Germany are very similar, there are some striking differences as far as the institutional and organizational mechanisms are concerned. Thus, in Japan we find a much more active and direct involvement of the government in orchestrating the process of industrial development. Industrial policy in West Germany, in contrast, relies more on a decentralized, free-enterprise-type approach, leaving the basic responsibility of structural adaptation to the individual firm. The government intervenes into the process of structural change only to promote research and development and to cushion the risk of substantial damage in the shrinking sector. In the absence of direct and explicit state interventionism in West Germany there is a comprehensive promotion of the general policy of modernization based upon a fundamental consensus of the major social groups and some indirect public policies of economic restructuring.

**Japan** - Among the OECD (Organization for Economic Cooperative Development) countries, Japan today practises the most offensive, forward planning approach to structural change. Rather than extending the life of uncompetitive or declining industries, the national government, in close cooperation with national banks and large corporations, fosters the rapid elimination of excess capacity and redirects financial and redundant labor resources into dynamic sectors.

This practice is part of a comprehensive and well established national economic planning policy, which deliberately gears resource allocation towards technological advancement, energy savings, environmental protection and, above all, international competitiveness.

Recently, Japan's industry has entered a third major wave of investment after World War II. After developing the heavy industries and building up export-oriented mass production, investment into high technology and quality
products is being promoted with public outlays of 240 billion yen under a 7-year national plan by the Ministry of Commerce and Industry (MITI).\(^1\)

Among the growth industries are engineering, precision instruments and tools, electronics and information, motor vehicles, aircraft and aerospace industries. The major stagnating and shrinking branches are iron and steel, textiles, non-ferrous metals and shipbuilding.

Financial assistance and promotion, ranging from development credits, to subsidies, tax credits and financial aid for and coordination of research and development, are provided primarily to the industrial sector which is considered to be of major strategic significance for the international competitiveness of Japanese industry. In 1978, legislation was passed that explicitly promotes the introduction and spread of high technology.

At the same time as the dynamic sector receives the attention and support of national planning—so do the shrinking industries or those which are the least competitive. By a 1978 law the state provides for "extraordinary measures to stabilize declining industries". The objective is to force these industries to shrink in order to improve their chances of survival.

The procedures laid down encompass rules on how to identify candidates for capacity reduction, methods to determine the rate of decline and rules and methods of how to finance the contraction process (at present shipbuilding, steel, some chemical products and textiles are designated as contraction industries).

The decision about where and how to cut down in production capacity is influenced by consulting teams composed of representatives of industry and the ministries. The financing of the cost of capacity reduction and for the severance payments to displaced workers is based on loans provided largely by the state-owned Japanese Development Bank.\(^2\)

\(^1\)"The Visions of MITI Policies in 1980s", in: News from MITI, March 17, 1980.

To dampen the rise of protectionism against Japanese imports into Western countries, the Japanese have started a policy of joint ventures in their major export target countries. Under this policy the Japanese companies seek to limit their export activities to supplying investment goods and component parts, and leaving major production to plants in the host foreign countries.

**West Germany** - In West Germany, as mentioned, the thrust of industrial policy has also been to modernize and rationalize industry so as to maintain and extend international competitiveness. In contrast to Japan, however, the state intervenes less into the process of change in the industrial structure. Instead, the course of structural change is much more left to market forces.

The state, in principle, limits its engagement into the adjustment process by the general promotion of capital and labor and to issuing rules and standards which have to be observed by private industry. Exceptions to this rule are made where the market process generates abrupt development, large frictions or other socially unacceptable outcomes, as has been the case for the steel and shipbuilding industries. In shipbuilding, a conversion of the product program in the direction of diversification and specialization has been facilitated by state subsidies and loans. Similarly, in the steel industry modernization and reorganization have been promoted in areas which face disadvantages in terms of their location relative to suppliers and markets.

With respect to some of the troubled industries, national industrial policies are superseded more and more by international policy making. Thus, there have been growing efforts during recent years to develop common industrial policies throughout the EEC. Such policies tend to have a strongly interventionist slant, including the determination of production or capacity-quotas, subsidies for maintaining operations in some regions of the EEC, and minimum or recommended prices for products. At present, "crisis cartels" are in force in basic steel and synthetic fibers industries which specify a planned reduction of capacity as well as production and sales quotas.
In the area of social policies the Commission of the EEC has proposed such measures as the reduction of weekly working hours, expansion of parttime work, introduction of a fifth shift, early retirement and limits to overtime work.

Special incentives are provided as part of German industrial policies for industries which are regarded as being of key importance for future technological advancement, and for enterprises undertaking investments of general interest but with a high risk for returns, as is the case for the aerospace industry. Such incentives are based either on tax reduction for research and development or on direct grants for particular projects. Most of these incentives are of limited duration and have a declining scale of payments.

To facilitate the growth of the export-oriented, high technological sector of the West German economy (including machine tools, equipment, vehicles, chemicals and electronics) the state has also promoted training of the labor force with the objective of improving average skill levels. Despite increased unemployment, aggregate shortages have continued to exist for skilled workers in the face of more sophisticated technology and the need for rapid reorientation towards new developments in the product market. Skilled workers, it is felt, exhibit greater abilities to accommodate to these new conditions.

While in comparison to Japan the state in West Germany keeps a much lower profile in directing the course of industrial development, there has been a similar widespread consensus among business, trade unions and the government that the modernization strategy is of vital significance for maintaining economic growth and social security. This social consensus has greatly supported cooperation between the major groups on the enterprise level as well as on the industry and macro levels of economic and industrial policy. One might conceive of this cooperation as a kind of productivity deal in which both labor and capital earn benefits from productivity improvement. The workers receive high wages and social security in return for their readiness to go along with a productivity
policy. Correspondingly, the employers' *quid pro quo* is the cooperation of labor in industrial change, in return for the employers' making of commitments to worker participation and worker security.
PART V

PROGRAMS OF POSITIVE ADJUSTMENT

Introduction

Having established the notion of an integrative strategy, one that reconciles both capital and labor considerations, we can consider four program areas for carrying out the integrative approach.

In this section we complete the shift in emphasis to the employment side of the equation. We will not ignore completely the capital side but it will be only considered in relation to the employment side of the picture.

The four categories can be classified in terms of the earlier distinction between internal and external changes and between emphasis on jobs and on workers.

The following table lays out the four possibilities:

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| **Target of Programs** |*
| Jobs | Workers |

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Since we will devote a separate section of the report to each of these program areas, we will confine ourselves at this point to some introductory comments.

Internal restructuring can focus on either jobs or workers (or a combination of the two). The focus on jobs, what we call enterprise viability may involve an improved organization and utilization of productive resources and, as a result of cost saving, gaining or regaining profitability and competitiveness or the adjustment of capacity to business fluctuation. A fair proportion of the productivity bargains concluded in Britain during the period of incomes policy in the
1960s and 1970s fit into this category.\(^1\)

Another case in point is represented by the reorganization of the Swedish shipbuilding industry in the 1970s in reaction to increased competition from Japan. In Sweden the objective was to increase productivity both through mergers of shipbuilding operations and through taking an assembly-line approach to production.

By contrast the focus on people, means the continued utilization of the existing work force as a result of using a variety of human resource planning and program techniques. Japan stands out among the industrialized nations in practicing this type of internal conversion approach very effectively within its large industrial enterprises. The emphasis given to internal adjustment is related to the practice of life-time employment, especially in large enterprises. Despite a career employment relationship for a large proportion of their employees Japanese firms manage to achieve considerable flexibility in the deployment of the work force through internal worker mobility, change of worker assignment, and expensive reliance upon company education and training.

The human resource approach in Japan is promoted by institutional/industrial relations factors which foster bargaining and conflict resolution on the enterprise level. One such factor is the enterprise-based labor union.

The external approach to jobs emphasizes the creation of new employment in the same regions where some industries are declining so that employment is available to ameliorate with what would otherwise be a situation of high structural unemployment. Regional policy involves promoting the growth of highly productive and competitive industries.

With respect to the adjustment of labor on the worker side, the corresponding policies are usually termed labor market or manpower policies. They aim at cushioning the loss of jobs for workers, firms and communities, and facilitating the transition to new employment by income maintenance, training and retraining.
Enhancing the Viability of the Enterprise

Introduction

The first of the four programs that we would like to consider in some detail comes from that corner of the matrix where the emphasis is on internal restructuring, that is, workers stay with the same company or enterprise, and large scale work force displacement are either prevented or minimized by enhancing the viability of the enterprise. Something is done to make the operations of the business more competitive.

The variations on this theme are many and can be categorized as follows. First, there are the changes to the cost structure of operations as they exist. We limit our consideration to those measures that stem from employee/union initiatives or have some relationship to the worker side of the organization. One response that appears to be occurring more and more frequently in the United States as economic restructuring threatens more and more jobs is that of "rollbacks" in established wages and fringe benefits. A second category and one that also operates on the cost side of the existing enterprise involves productivity improvements - we are especially interested in those that emerge through labor-management discussions. Both rollbacks and productivity improvements have the potential for lowering costs to the point that the jobs which might have been in jeopardy can be saved, as least for the short run, or perhaps even for a longer period of time.

Another program that protects jobs for incumbent workers can be labelled alternate products for the operation that is in jeopardy. Some companies approach the challenge of restructuring with a view that their existing work force and their attachment to the local community are assets to be tapped and related to new business ventures. This approach will be illustrated both for the United Kingdom and United States and the approach also appears to be emerging in
several other countries.

The final possibility we term "re-planting" of operations. In situations where economic change represents an updating of the plant and equipment the location decision about the modernized facility can consider the existing labor market area as a leading alternative.

Throughout this section we will be attentive to certain patterns or differences that exist across countries with respect to enhancing the viability of the enterprise. In some cases the action will be taken early on, while in other cases the remedial steps only will be taken later as the crisis deepens. Also, we can distinguish between efforts that are aimed at protecting a core of remaining jobs, versus efforts to protect employment for all workers. Generally speaking, efforts in the United Kingdom and France appear to fall into the second category whereas there are many examples in Germany, the United States and Japan that fall into the first category.

For example, the development of the Jamestown, New York Labor-Management Committee came only after a long period of job loss and the emerging conviction on the part of key leaders in the community that the challenge facing them was to enhance the viability of the remaining businesses rather than just trying to find new businesses to fill the vacant factories that had occupied the scene for sometime. Similarly, a very active productivity improvement program is currently under way at Crucible Steel in the United States that is aimed at keeping Crucible solvent and protecting the jobs that remain -- a substantial reduction from those that this company numbered in the early 1970s before the shakeout occurred in the steel industry.

Rollback of Established Wages and/or Benefits

This response to impending displacements appears to have mainly occurred
in the United States and primarily during the past several years.

While no precise statistics are available, it is estimated that at least 50 instances of rollbacks have occurred in order to prevent job loss. By far the most publicized and the most important has been the series of cuts that Chrysler workers have accepted, as part of the refinancing and survival program for this major auto company. Estimates for the latest rounds of cuts puts the annual cost per worker at somewhere between $3 and $6,000 per year. These cuts represent reductions in existing take-home pay, as well as a freeze of projected increase in cost-of-living adjustments.

Most of the rollbacks that have been implemented have occurred in industries such as steel and rubber which have faced severe economic problems. The form of the rollbacks are usually a freeze on anticipated benefits with agreement on a schedule for reestablishing the benefits at a future date. For example, at Uniroyal, workers took a cut of $.58 an hour for the last five months in 1980 and deferred an upcoming cost-of-living increase with the parties agreeing that "give backs" would be restored at future dates during the life of the agreement.

Generally speaking, workers and their local union leaders are more willing to consider rollbacks than top union leadership. This is because the trade-offs impact differently as between the local and central levels. Members are more concerned about jobs and, when it appears that a plant shutdown is in the offing they are much more willing to offer up concessions. By contrast, central union leadership, concerned about the stability of the pattern and being afraid that one breakthrough will force them to accede to other breakthroughs, tend to be much more resistant to these deviations. For example, recently, the workers at Kaiser Steel voted to accept a range of concessions; yet this package was disapproved by the United Steelworkers leadership in Pittsburgh. Another illustra-
tion would be the staunch opposition by the top UAW leadership to reopening contracts with General Motors and Ford -- they have tried to isolate what they have done at Chrysler as a response to a very special situation and they are resisting any move by these other companies to negotiate similar concessions.

The willingness of unions to go along with rollbacks is related to the probability of demise. The closer to the "brink", then the more apt workers and also top union leaders are to accept some job-saving concessions. Thus, Braniff Airlines, experiencing substantial financial difficulties, has had no difficulty in getting its workers to accept a pay cut. The workers at the Bridge Division of United States Steel, having voted in the negative about concessions, changed their minds when the Company announced that it was going ahead with plans to shut the plant down.

Productivity Bargaining

This approach to avoiding job loss has been practiced quite heavily in the United Kingdom over the past two decades and has been increasingly important in the United States. As mentioned earlier we can find examples in other countries, such as Sweden and also to some extent in West Germany.

To capture the flavor of this approach, as it is presently practiced, it is helpful to consider a few examples. In the United States the United Rubber Workers have agreed in a number of cases to abandon piece work, to accept continuous shift operations and to conduct operations on weekends without special premium pay. All of these steps enable the new capital equipment, especially for radial tire production, to be much more fully utilized.

Turning to the United Kingdom, recently at the Glengarnock Works of British Steel the skilled work force agreed to drop all demarcation barriers among the different crafts as a way of preventing the closing of the plant,
thereby saving several hundred jobs.

The function of productivity bargaining, as can be seen from the foregoing, examples, is to achieve a better match between the work organization, the deployment of the work force and the technological requirements of the operations. In some cases the adjustment is fairly minor; in other cases the adjustment is quite major and represents a type of surgery, that is, the cutting away of a whole series of practices that have grown up over time and impede the full utilization of plant and equipment.

The results from productivity bargaining have generally been positive, that is, productivity is improved. Whether the improvement is enough to save the jobs over the long run is another question. In many instances the net effect of productivity bargaining is to give the operation a lease on life, but the overriding competitive and environmental circumstances may be too adverse for the enterprise to survive indefinitely.

The important question to be asked is the following: What is the range for improving the viability of the operation through productivity bargaining and how does this potential contribution compare to the overall gap that exists between the plant in question and competition elsewhere? In a number of instances workers and unions have been motivated to improve operations through productivity bargaining and have made a substantial contribution -- only to learn that the problem was much bigger than the improvements they worked so hard to achieve. This leads to considerable worker frustration. For example, in the case of several plants of British Steel slated to be closed, local groups have worked hard to improve operations, thinking that such efforts would make a difference eventual only to learn that the inland location rendered these operations obsolete. The same sequence of hope, problem solving, shutdown and bitterness has been
played out at the Youngstown Works of United States Steel, where a local program under the direction of the plant manager, with the full cooperation of the workers and local union, succeeded in lowering costs substantially, but again, it was not enough to keep the operation from being closed down.

In summary, productivity bargaining can be seen as a useful tool where the competitive problems are not overly immense. We will have more to say about the process aspects of productivity bargaining later on when we talk about the participation of workers and their representatives in maintaining the viability of the enterprise.

Development of Alternative Plans

An approach that has been tried quite regularly in Japan (e.g. shipbuilding) is the development of alternate products or new enterprises to which excess workers can be transferred. In the case of Japan this is made feasible by the conglomerate nature of many of the large corporations.

The idea has been pushed with some passion in Britain, for example, a group of shop stewards at Lucas Aircraft spent several years compiled a compendium of ideas that the company could engage in as a way of preventing massive dismissal. But no new products were introduced and Lucas has continued to shed labor.¹

In the United States several examples can be cited of where companies have taken the initiative to find products that have had the net effect of keeping

¹It is instructive to review the employment decline of Lucas Aerospace. In 1970 it employed 18,000 workers. By 1974 employment was down to 13,000. It was during this period when the combine was developed and presented an alternate corporate plan to the company which was rejected. In 1977 a labor surplus of 1,000 jobs was announced. Total employment in 1978 was down to 12,000 and at that time the company announced additional redundancies. These cutbacks were curtailed after considerable protest, but in June 1980 the company proceeded to implement 2,000 redundancies. By 1981 employment was under 10,000, almost half of what it had been ten years earlier.
existing work forces occupied. For example, International Silver, when it went out of the business of producing tableware, looked around the Connecticut area and decided that it could enter the stainless tubing and assembly-equipment refitting businesses. It retrained several hundred craftsmen and as a result has been able to continue manufacturing operations in a community where it represents a "household name."

Similarly, the Winnebago Company, maker of recreational vehicles, has mailed out a 35 page booklet describing its manufacturing capabilities to 1,000 large companies in the United States and has received a variety of subcontract orders, thereby keeping a good number of its workers employed.

But the above examples are the exceptions rather than the rule. In most instances, management is not interested nor does it feel that it is competent to enter into new lines of business solely for the purpose of keeping its existing work force occupied.

Where this approach is pursued, there seems to be a number of facilitating factors. For one, management feels a commitment to provide continuity of employment for the current work force and to remain in the local community. Secondly, management possess an entrepreneurial spirit which means that they are willing to go out and look for new businesses and take the high risk of getting into new lines of work. Finally, some type of capital infusion must be available from retained earnings or from other financial institutions.

Thus, it would seem that where employment continuity is considered a must as it is for many regular workers in Japan, then companies will reach for this alternative as a way of making good on their mandate. However, in countries such as the United States where such a commitment is not manifest, then the use of this alternative will be quite rare.
A good summary of the perfunctory way which this alternative is considered can be seen in the following announcement when a large company closed a Scottish plant in mid-1977. "We have investigated the possibility of putting new products into the plant and a considerable amount of detailed work has been done, but projections finally showed that there would not be sufficient business in the foreseeable future. There is therefore no alternative but to close the factory in mid 1977." ¹

Re-Planting of Facilities in Existing Areas

This program option address the question: Should the new facility be located in a new or in the existing geographical area? The assumption is that restructuring often means that the plant will be modernized and altered to the extent that it essentially represents a new operation. Certainly, in some industries such as steel, where there is an integrated complex, modernization may only apply to a part of the facility, e.g. the coke ovens or the blast furnace -- consequently, the new operations have to be physically located on the same premises.

Our interest is in those situations where the potential of some digression exists. A good example of this would be the automobile industry where a new parts plant or an assembly operation could be located almost anywhere. In fact, given the modern layout of an auto plant, which requires a lot of space on one floor it is probably preferable for the plant to be located in a "green field" site and away from existing facilities (which are usually in crowded urban areas).

Quite significantly, a number of instances have occurred where new

¹Taken from an unpublished study by John Purcell, Manchester Business School.
facilities have been constructed near old facilities, *when the company might have preferred to locate the operation on a "green field site."* For example, General Motors in closing down its Cadillac assembly plant in Detroit committed itself to remain in the Detroit area and currently is in the process of obtaining a parcel of 300 acres through urban renewal arrangements in the center of Detroit. General Tire has committed to build itself to the union and the community to build its next new tire facility in Akron, Ohio. Similarly, Goodyear has said that it will build a small rubber plant to meet the needs of its laboratory facility in Akron.

In other cases, the building of new plants commenced without employment commitments but through collective bargaining the parties developed transition arrangements. For example, Ford Motor closed down an iron foundry as part of its River Rouge complex. The workers were given transfer rights to a new casting plant at Flat Rock, approximately 25 miles away. Similarly, in the Cincinnati area, transfer arrangements have been developed between a terminated transmission plant and some new facilities being established in the same geographic area.

The replanting of the new facilities in the same area represents a clear gain for the current work force. It also represents a gain for the community and in some ways this latter dimension is the dominant factor. The decision of General Motors to remain in Detroit must be seen in terms of its headquarters location in that city and its close identification with Detroit as the automobile capital of the world. As far as union leaders are concerned, if they know that the new plant will be organized (and this is certainly the case with the automobile industry in the United States), then they probably are indifferent as to whether the new plant is in the old area or in some new area of the country.

The choice is not as available in Europe or Japan where space for new
facilities is not readily available, where there is much more pressure to provide continuity of employment for existing workers, and where changes, that is modernization arrangements, take place more slowly and are more likely to be done to existing operations rather than the development of new facilities from "scratch."
Introduction

This section considers another internal coping technique. This time instead of emphasis being on the job or cost side of the enterprise, the attention shifts directly to the work force and methods employed to assure continuity of employment, while at the same time achieving the advantages of change and restructuring. This approach has received various labels such as continuity of employment, full employment and deployment of available human resources.

In essence, the approach protects the individual by maintaining the individual's employment, even though the job or operation has been eliminated or rearranged. In most of Europe this approach is followed assiduously; and a combination of legislation, collective bargaining agreements and cultural understandings discourage or even prohibit firms from laying off or declaring workers redundant. For example, in the European Coal and Steel Community enterprises are required to make efforts to insure that "no interruption in employment occurs".

Even in the United States, where there has been much less willingness to avoid lay off and where in the face of cyclical (and certainly in the face of secular changes), companies quickly export the instability to the larger labor market, there appears to be a growing interest in the use of human resource techniques for avoiding as much as possible these disruptions in the continuity of employment. For example, a number of large companies, such as IBM and others in the high technology industries, have stated as a matter of basic personnel policy that they will do everything possible to maintain continuity of employment. In essence, these companies view job security as a number one business objective.

Then too, it must be noted that in many situations the principle of attrition has been followed de facto, because the size of the work force in many
companies and industries has been steadily reduced over an extended period of
time. Typically, the number of workers affected by the final shutdown
represents only a small fraction of these employed at the peak. We do not
have complete data to buttress our contention about the slow deterioration
process but our surmise is that during the 10 or 15 year period preceding the
actual plant shutdown that a combination of attrition and staged layoffs
occurred, so that the final complement is only a small portion of the total
number of people who have been affected by the deterioration process. In this
sense, some form of human resources management has been practiced as these enter-
prises have come slowly down the "slopes of decline."

A number of studies have demonstrated that for most European countries em-
ployment levels are much more stable than would otherwise be indicated, given the
ups and downs of the economy. Specifically, for Japan, West Germany and some
other OECD countries there is little connection between the cyclical performance
of the economy and changes in employment levels. However, it is one thing for
employment to be stabilized in the face of cyclical changes; it is another for this
to happen in the face of very basic secular changes. And, this is the challenge
that human resource management attempts to meet. In the face of vast and per-
vasive restructuring, enterprises are able to avoid layoff by a variety of
human resource policies and programs.

Background Factors

There are several reasons why an emphasis on human resource management has
become important in dealing with the consequences of economic restructuring.
Certainly, from an historical point of view the movement towards career employ-
ment has been steady and uninterrupted. Just 20 or 30 years ago in the United
States, for example, considerable emphasis was placed on paying people by the
hour or even by shorter unit measures, namely, piece work reimbursement. Then as companies became larger and orientations changed a shift took place away from piece work and towards salary systems and even in some cases, as a result of the interest in unions, in the direction of guaranteed annual employment programs. But regardless of the label placed on the development, the movement has been towards the view that workers are employed by the enterprise for an extended period of time. This development has been carried to its ultimate for about half of the workers in the Japanese economy, who enjoy career employment with their parent company.

Economists prefer to explain this development in terms of human capital and the advantages accruing to both sides from an orientation to career employment. In Europe the development has also been spurred by legislation and various other incentives that have shaped the employment relationship. For example, inducements have come from protection instituted against dismissal and downgrading and from public policies of job maintenance. To the extent that these efforts have imposed legal restriction on work force reduction (layoffs) or have increased the cost of layoffs, they have contributed to the fixed-cost character of labor and, thus, have contributed to a more careful and long term orientation of businesses towards human resource management.

For example, in a survey on the impact of employment protection legislation in the United Kingdom, some of the managers held that as a result of these legal requirements, they devoted more attention to human resources and were more systematic and explicit in their evaluation and use of human resources. Job specification, selection and appraisal of performance had been improved and more regard was paid to ensuring that people were properly trained. Personnel considerations were more salient and the influence of the personnel function had
Evidence for this proposition concerning the upgrading of human resources management as a result of job security measures and worker participation in personnel planning is also available for West Germany. It has been shown that firms with well developed systems of personnel planning and worker codetermination had lower rates of work force reduction during the recession of 1974, 1975. And, furthermore, the firms practicing personnel planning were less prone to resort to dismissals during economic downturns. Instead, they used softer measures, like recruitment freeze, severance pay contracts and early retirement to lower the size of their work force. In addition, greater emphasis was placed in these firms on varying working time (through overtime and short time work) and on stabilizing the work volume or creating new demand for manpower, through such measures as building up inventories, increased training, and preventative repair and maintenance work.

Program Techniques for Achieving Continuity of Employment

Conceptually, the various measures that are used by firms to implement a program of human resource management can be divided into three categories. The first deals with the direct reduction of the number of workers needed. In some ways this can be viewed as the management of excess personnel. The second broad category has to do with balancing the amount of work available to the number of persons on hand. Finally, there are a series of measures that are


aimed at moving personnel to other sections of the business or to other lines of work in order to keep them productively employed.

Reducing the number of workers - Firms in West Germany and Japan quickly engage in what has been called hiring stop, not filling vacancies or reducing the number of new recruits. For large German firms about 60% of them resort to this method. For Japanese firms it is even higher, over 70%. Another technique that is used more and more frequently, especially in West Germany is that of early retirement. This has not been used as frequently in Japan where the retirement age is built into the career employment situation.

(1) Use of a hiring stop - The advantages of this measure can be quickly summarized. The advantages are the general advantages of any human resource management program, namely, enhancing the morale and putting confidence in the current organization to be able to handle the challenges that are ahead. The disadvantages involve the loss of "new blood" and the fact that shortages will develop in certain high turnover occupations as a result some people will be required to work overtime and there will be a general feeling of fatigue when it is not possible to hire replacements to help with the workload.

(2) Early retirement - Depending upon the demography of the work force, it may be possible to achieve a reduction in the number of personnel through the institution of early retirement. Some organizations are top heavy with long-service workers. For example, it has been estimated that the United States Post Office which is facing some dramatic changes in technology and style of operations has approximately 40% of its work force in the over 50 age group, thereby, giving it considerable potential for bringing about a rapid reduction in the number of personnel employed.

The Ford Motor Company of West Germany recently
induced about 10% of its workers to retire on a voluntary early retirement program.

One of the big drawbacks to this approach is that often the best people are lost as a result of an early retirement program. This is true of any voluntary program: the company cannot control who steps forward to accept the proposal of early retirement. For example, in the case of the French steel companies, the 50,000 franc program was subscribed to mainly by younger skilled workers.

Finally, the concept of early retirement is becoming increasingly difficult to implement since it is not in line with societal trends that permit people to continue working longer and longer. As a result people who take early retirement typically move on to start another career.

Various measures to balance the operations - One can envision the adjustments as a type of priority list. The first item is the reduction of overtime. For large West German firms 100% institute this measure, while for comparable Japanese firms about 80% employ the measure.

The next step, and one that is a natural buffer, is the recall of subcontract work. For large West German firms over 50% institute this measure. The IBM Corporation attempts to buffer its inside employment on a one-to-one basis for the work that is in the hands of subcontractors. The Boeing Corporation, after its bad experience with cutbacks in the 1970s, increased the amount of subcontracting from 30% to 50% of all its activities.

A third line of defense has to do with work sharing. For large West German firms over 70% follow this procedure. In the United States, work sharing is not used as much since most workers would prefer to have the junior members on layoff, drawing some type of unemployment insurance, while the more senior workers continue
to work full schedules.

It must be recognized that short time working only serves as a temporary solution; and as is the case for most other devices mentioned in this chapter, in the context of large-scale work force displacements, work sharing represents a "holding action" until attrition and other ways of reducing the permanent size of the work force can be instituted.

Finally, the last line of defense involves moving work to where available workers are employed by the company. Few instances of this measure can be found, although IBM and several other full employment companies will institute this measure as a last resort.

Out placement of personnel - Japanese firms appear to be the most frequent practitioners of transferring workers to subsidiaries, to other plants, or to elsewhere within the enterprise. About 60-70% of the large enterprises use this measure. The practice is not as prevalent in West Germany and does not exist too frequently in other OECD countries.

Generally speaking, workers do not like to change their place of employment. They are even less willing to change their place of residence. Consequently, unless the alternative is layoff, then very few workers are likely to volunteer for redeployment to other employment/residential situations. For example, Lord Robens talks about how difficult it was to get mine workers to move from one pit to another, and many of them would have rather accepted redundancy payments, "Miners at closing pits would not go near our employment vans for fear of being offered suitable alternate employment, and thereby losing their redundancy payments."¹

On the other hand, a number of recent experiences from Japan and West Germany suggest that if management is on "top of the situation" it may be possible to transfer workers as a way of avoiding layoff. For example, in the work and loan program used in Japan steelworkers who have been displaced have been reassigned to work in car factories. In the case of West Germany the firm of Daimler-Benz also has used the "loan" concept. Specifically, a group of workers from a shipbuilding firm are working temporarily in the car concern.

Evaluation of Human Resource Management

Where human resource measures can be employed, they appear to work effectively and they can make a substantial difference in the number of people who are actually displaced. Clearly, certain circumstances facilitate the use of such techniques. Where the pace and nature of the change is such that the displacement is gradual, then a much more efficient application of the techniques can take place. The steady introduction of new technology, the shift to larger plants on a gradual basis -- these represent circumstances wherein human resource management can make its mark. However, if the loss of markets takes place rapidly, if an outmoded plant needs to be abandoned, if there is no employment base left within which to bring about the re-allocations, then the scope for these measures is much more limited.

Another facilitating condition is financial support in the form described earlier under employment stabilization policies. Given the need to "bide time" until attrition can absorb the excess workers, it may be necessary for the firm to receive financial support from government to hold people who would otherwise be displaced.

Another key ingredient is the skill of management in laying out the data and
techniques for achieving human resource objectives. For example, the following list describes the role of personnel planning in the West German steel industry and this list could be applied more generally as a requirement for making this approach work.

**Instruments of personnel planning in the West German steel industry**

1. Extensive data banks on personnel and jobs.
2. Short term, medium term and long term projections on sales, production capacity, capacity utilization, and need for labor.
3. Intra- and inter-company coordination of plans on vocational training, anti-cyclical policies on vocational training in line with federal and state policies.
4. Working committees for the exchange of information among companies on sales, employment, output, working time and earnings.
5. Joint labor-management committees on economic and personnel planning in accordance with Sections 12 and 106 of the Plant Constitution Act. Combination of information and consultation on employment measures.
6. Joint planning of working time, vacation, worker assignment, short time work, overtime working, and transfer.
   - Extensive social plans in case of work force reductions;
   - ergonomic committees in accordance with Sections 90 and 91 of the Plant Constitution Act; including consultation between management and labor over quality of work criteria and safety for new plants.

Finally, a positive response from the unions involved helps make human resource planning techniques operate more effectively. And this stance is not always present. Many union leaders prefer to have the workers accept redundancy or for the union to negotiate a special severance pay plan (wherein
the union leaders can demonstrate the benefits they have achieved in behalf of the workers about to be displaced. A human resource management program does not present visible gains that labor leaders can be associated with and they may feel very uncomfortable watching a work force and their membership slowly shrink into oblivion. Nevertheless, the rank and file usually prefer a gradual decline to redundancies and for this reason most union leaders "look the other way", when management adopts the strategy of reducing the work force by attrition.

Examples of Human Resource Management

We close this section with some illustrations of human resource measures from the two countries where the approach appears to be most fully developed: West Germany and Japan.

West Germany - An interesting example of human resource management occurred several years ago when Opel reduced employment by 10% in the face of a 20% cut in output. The 5,000 excess workers fell into two categories: about half, 2,300, took early retirement, age 59 and above, and received one year's extra pay as severance. Approximately 3,000 younger workers were severed with a "golden handshake". In the case of another auto firm, Ford of West Germany, the cost per worker severed was almost $13,000. The management of Rochling-Burbach, a division of Arbed, negotiated a social plan with the union that provided for the displacement of approximately 8,000 individuals. Many in this group were covered by early retirement programs which provided special severance pay and bridging payments until normal retirement arrangements would take effect.

Japan - Examples of redeployment by human resource management are quite numerous. For example, over the decade of the 1970s employment in coalmining dropped from over 100,000 to 37,000 with 80% of the displacements taking place
into other businesses within the same conglomerate groups.

In shipbuilding, where there have been substantial declines, of the magnitude of 60,000 workers, early retirement and hiring freeze programs have been relied on heavily. Many workers have been supported until they could find other jobs. The number who have actually been laid off has been a small fraction of the total number who have been transferred or allowed to leave via normal attrition.

Another example comes from the steel industry, specifically, Nippon Steel. About ten years ago employment was over 85,000 and today it is down to 70,000. This reduction has taken place without layoffs/with a number of people shifted to other industries. More importantly about 1,000 workers have been loaned to the booming automobile industry.
Introduction

With this section we come to policies and programs that deal with external restructuring. Remembering the earlier discussion about the essence of external restructuring, this positive strategy occurs against a backdrop where economic changes require the shifting of workers from the declining to the growing industries. The changes are of such a pace and such a scope that workers cannot be accommodated within the existing industries, either through competitive improvements or through slow phase out strategies.

Of the countries in the study, probably the United States makes most frequent use of this strategy. Today, the number of workers in the United States who face the need for re-engagement is much larger than those who have been laid off as a result of plant shutdowns. We are referring to several hundred thousand who have been laid off "subject to recall" but will never be recalled. Not all workers who are laid off end up being candidates for redeployment. Indeed, over several decades the tradition of layoff "subject to recall" has developed wherein approximately 2/3 to 3/4 of workers laid off in manufacturing can expect recall, usually within several months. However, this situation has changed and many workers on long term layoff from auto, steel and rubber find themselves, de facto, in the category of permanently displaced.

As with the previous section where the emphasis was on the worker and on programs to help the worker (as distinguished from the emphasis on the job side) we will consider various measures that are undertaken to help workers re-engage with other employment. Various perspectives or roles in this process can be identified. First, there is government and its agencies, there is the employer of "last repose", and finally, there is the worker and his or her
resourcefulness.

Overview of the Process of Re-engagement

Conceptually, the readjustment or re-engagement process can be divided into several steps. First, there is the important step of targeting jobs and developing jobs to which the displacees can be moved. We will consider for the most part this subject subsequently, as part of the next section dealing with regional economic development policies and efforts by government agencies and other groups to secure employment opportunities for those leaving declining industries.

The second step deals with the motivation and preparation of displaced workers to move into the labor market and to seek other employment. In this category, we include a variety of counseling and "hands on" programs that instill motivation and equip the worker to make the transition. Training programs play an especially important role.

Next, we consider the linkages that make it possible for workers to identify opportunities and, if necessary, to move geographically to obtain new employment. This step involves the "good offices" of the employment service and other agencies that will help workers move from one job to another.

The above steps all deal with the substantive process of re-engagement. There are two other important procedural or threshold conditions. One of these is the subject of notice and consultation that provides a period of time for planning during which the workers can confront the reality of the change and their representatives can negotiate social plans. One other key facilitating condition is income support, often referred to as redundancy payment or severance programs. Here we will be considering various arrangements to cushion the
economic loss that is inherent during the transition period.

**Hiring Displacees**

Since the purpose of any readjustment program is to achieve reemployment of the displacees, we consider those measures that target this group for special attention. In a later section we will consider programs aimed at job creation (with the presumption - not necessarily true in practice - that the new position will benefit the displacees.)

**Japan** - In Japan a number of public measures were legislated in 1978 to assist the reemployment of workers displaced from the structurally depressed industries and areas. The industries and areas were designated by the Ministry of Labor in close consultation with ministries responsible for industrial policy. As of August 1980, the industries designated include textiles, sections of iron and steel, aluminum refining and shipbuilding.

Under these new programs, employers who have hired as regular workers those displaced from the selected depressed industries and who have conducted their education and training for them, receive payroll subsidies of between 1/2 and 2/3 (in the case of small and medium-sized enterprises) and a certain portion of the training costs are granted for six months. Subsidies are also granted for employment creation of middle-aged or older workers in selected depressed areas.

**West Germany** - In West Germany, in line with a greater emphasis on regional concentration of active labor market policies, job creation has been promoted in the sector of social and community services under a special program started in 1979 by the federal government for high unemployment areas. This program has been created with the twin objective of a positive employment effect, resulting from labor intensive service employment, and the improvement of the
quality of life in the depressed region. The services sponsored by this scheme included social work for elderly and disabled persons, care for children of foreign workers and social counselling. The subsidies provide for public payment for up to 18 months of 80% of the wage costs of previously unemployed persons and for 24 months of 100% of the wage costs for individuals who had been unemployed for more than six months.

Worker Preparation

Our purpose is only to touch the highlights of what companies and other agencies undertake in order to help workers be better prepared to shift jobs. In many countries, the employer of last repose is held accountable for preparing workers to be in a state of readiness to enter the labor market.

Even in the United States where there is no formal requirement on the part of the discharging employer, more and more companies have been holding counseling sessions, hiring consultants, helping workers write resumes, conducting awareness classes and generally playing a catalytic role so that the workers are motivated to adopt a positive frame of mind in seeking other employment. While training sponsored by the "last employer" has not occurred in the United States, as frequently as in Europe, nevertheless, some companies with enough lead time have been running in-house training programs to help workers get ready for opportunities that exist in the labor market. For example, Brown and Williamson has conducted, with the help of the local vocational school system, skill-broadening sessions for a group of mechanics whose experience was limited to the cigarette industry and needed some training so that they could fill mechanic positions in other companies in Louisville, Kentucky.

With respect to training, federal funds are available in a number of countries, such as in France, West Germany and Sweden, that make it possible
for the discharging employer to play a key role in preparing workers for other employment opportunities in the local labor market.

**Linkages**

A variety of experiences can be cited as "best practice" in this important aspect of re-engagement. Case studies illustrate the wide range of devices that can be utilized to help identify opportunities and to move displaced workers along the right channels.

One large employer in the United States sent out letters to 3,000 employers in a 50 mile radius to help 400 of its displaced workers identify opportunities. In general, a variety of employment rostering devices have been used to acquaint workers with opportunities in local communities and nearby areas.

Some experts in the United States have noted that the single most important variable affecting the overall success of a readjustment effort is the presence of a vital community organization that can serve as a convening point for the reemployment activities of the local labor market. In Binghampton, New York a task force that was formed after a large firm closed, established special outreach committees that identified opportunities, worked with the displaced employees, and generally performed a broker function.

In Sweden positive results have been obtained from the cooperation of employment exchange offices, trade unions and enterprises in regard to so-called adjustment groups. In essence this involves a group of persons from the above institutions taking responsibility for the integration into the work process of disadvantaged groups through a flexible planning procedure. There are some 4,500 groups of this nature formed all over Sweden in establishments with more than 50 employees. The functions of the groups are as follows:
- Influencing public opinion as well as the personnel policy of enterprises through information creation and dissemination.
- Measures to promote the recommitment of aged and handicapped workers.
- Use of ergonomists, physicists and psychologists to develop new ideas about adequate work organization.
- Measures to employed individuals for promotion.
- Guiding new capital investment in terms of their suitability for employing aged and handicapped workers.

The Swedish experience with these groups in the area of employment of disadvantaged workers could be applied also in the area of work force reduction and job creation.

The possibility of geographical movement is another aspect of creating linkages. In the United States, approximately 5-10% of a given displaced group usually are willing to move to another geographical area if jobs are in the offing. For example, Brown and Williamson has been able to interest 300 to 400 workers out of a displaced group of 3,000 in Louisville to move to Georgia to continue employment with the company. Some years ago, General Foods, in closing down a plant in New England, was able to interest 30% of its workers, many of them white collar and managerial workers, to move to its new operation in Delaware. The figures for Europe would appear to be substantially lower. One recent example involves 40 British workers who had been idled from a Dunlop tire factor on Mercyside who transferred to another facility of the company in Holland. However, such an example is rare. Geographical mobility is not a very fruitful measure for achieving re-engagement.

**Importance of Notice and Consultation**

Almost all countries require some period of notice and consultation, except
the United States. The advantages of a time period for reckoning, for
discussion, for planning, do not need to be elaborated. It would appear that
an interval of approximately three months would be ideal; providing a period
of time long enough for concrete steps to be planned but not so long as to
provide a period of idleness and unproductiveness.

Compensation and Income Protection

One area where the approaches and philosophies appear to differ substan-
tially across countries is income support and other systems of compensation for
workers who have been displaced by economic change. We can distinguish
between countries such as Britain and the United States where compensation is
one of the major elements of the readjustment package, versus France where it
plays a small role in the overall plan for readjustment. Further, we can
differentiate between countries where compensation is paid to sever employment
arrangements, such as in the United Kingdom and where compensation is paid to
keep a person supported, and attached to the existing employer, as is the case
in the United States with the payment of supplemental unemployment benefits.

The advantage of presenting an explicit compensation package, as is the
case in Britain, is that it induces workers to leave the industry. It would
appear that over the past half dozen years about four times the number of
workers have been declared redundant in Great Britain as in the United States.
Whereas, many workers in the United States have been laid off "subject to recall"
and as a result still think of themselves as steelworkers or automobile
workers -- yet, their chances of recall are very dismal. So in this type
of situation, the severance or redundancy approach possesses a strong ad-
that it
vantage in/encourages workers to be "bought off" and to look for other
work.
On the other side of the ledger, the severance pay approach has the limitation that the money paid is not related to any functional steps that help workers move on to other employment via retraining and/or relocation. During the latter months of the Carter administration, a demonstration project was started in the Detroit area that provided special payments to induce workers to take up retraining, rather than relying solely on unemployment assistance or Trade Adjustment assistance. It is too early to tell what the results of this experiment will be.

Because of the seductive quality of a large "golden handshake" (amounting from £ 15,000 to £ 20,000 for some workers who have been recently released from the steel industry in Britain) many people refer to it as "fool's gold". For example, Arthur Scargill, President of the Yorkshire area of the National Union of Mineworkers, recently said: "No one has the right to sell off the job opportunities of future generations, and we must not fall into the trap of accepting revised payments in exchange for permanent unemployment." Considerable controversy exists over the propriety of large severance payments that induce workers to leave an industry "voluntarily," only to later find themselves in considerable difficulty.

Finally, there is the drawback that once a severance payment program has been introduced, workers may not be willing to move within the industry, because to do so would be to forego the alternative of a handsome cash settlement. This has been the case in British Steel, where skilled workers are needed in other locations and yet, few will take the transfer because they do not want to forego the large buyout.

Model Programs

In this section we would like to consider a number of programs that tie
together the pieces that we have been presenting in this part on labor market re-engagement activities.

**Operation by employer** - On several occasions we have made mention of a model program operated by Brown and Williamson. To summarize, the company has put in place a variety of instruments that together add up to a very constructive approach. The company has given 18 months advance notice. Three to four hundred openings in Macon, Georgia have been earmarked for individuals desiring to transfer from the Louisville facility. For those remaining in Louisville, a variety of retraining efforts and counseling sessions have been instituted. In conjunction with the local vocational education systems, the company has been offering some skill expansion to a group of machinists. Beyond this, several hundred people have completed a high school equivalency program and have been using the resources of the company to secure other work in the Louisville area. A large group has taken advantage of early retirement, and severance compensation exists for the remainder.

In Japan, employers who are in the structurally depressed industries such as steel manufacturing and shipbuilding must prepare plans concerning assistance to employees governing their reemployment and assist with their job-seeking activities including training allowances. On the other side of the market, employers who hire displacees receive subsidies for six months. Between January 1978 and May 1980, out of the 80,000 persons displaced from selected depressed industries, 50,000 persons have been reemployed through a variety of the measures focusing on the discharging as well as on the receiving employers.¹

Labor-management efforts - In the case of Portsmouth, Ohio, where a large steel operation closed down recently, a local labor management group has been working closely with the displaced steelworkers, taking them on trips to Texas (where job openings exist) and serving as a spearhead of activities for the affected workers.

A similar program exists in Canada wherein through the Office of Manpower Services, several hundred labor management committees have been established at plants slated to close. These committees play a hands-on role for those being permanently displaced. The Ministry of Labor provides half the funds and helps select the neutral facilitator and the other half of the funds are supplied by the company. To date, these efforts have helped substantially with the process of reengagement for displaced workers.

Merger of government and private efforts - A very interesting example of cooperation between government and private interests comes from "Project 80" wherein the Swedish shipyards, as they went through merger and restructuring, established a separate organization known as Project 80 to find permanent employment for approximately 1,600 employees who were no longer needed in the shipyards. As of March 1980, almost 35% of this group have acquired other employment, and an additional 15% have been undergoing training. In addition, another 25% have been engaged in miscellaneous production, a type of sheltered workshop arrangement. The work of Project 80 has been financed through the allocation of state funds.

Some indication of the scale of labor market policy measures used in Sweden can be gained from the fact that in the fiscal year 1979, 1980 the national labor-market boards annual budget accounted for 2.5% of the entire
gross national product.¹

PART V, SECTION IV

JOB CREATION AND REGIONAL DEVELOPMENT

Introduction

The need for public policies and measures to create new jobs and to facilitate the economic development of particular regions arises from uneven structural changes, leaving major labor market imbalances. Besides regional and local imbalances in job loss and job creation, changes may produce imbalances with respect to labor force groups, occupations and the sex or age composition of employment; the declining and growing job opportunities may have negative impacts on earnings or may deteriorate the quality of the job structure in an area.

For the United Kingdom, for example, it has been observed that the displacement component of industrial development is biased towards manual workers and concentrated in certain regions like the North, Wales, and parts of the Midlands, through a coincident decline of employment in textiles, iron and steel, coal and railways. Similarly, job creation has been biased towards non-manual employment and to regions different from the ones with a heavy concentration of declining industries. Thus, insurance and banking, fast growing sectors, have been mainly concentrated in the Southeast of Britain.

Labor market imbalances in terms of region, age, sex and occupation, if they persist, tend to produce reinforcement and consolidation or even deterioration, ending up with difficult problems for plant location, worker recommitment, and hard-to-employ groups in the labor force. Very often, we notice major job losses in an area, followed by a decline in the quality of the local labor force and erosion of community life.

Such inherent tendencies for aggravation of imbalances and mounting problems for redevelopment may be regarded as an important argument against "passive" solutions in the face of significant job loss to an area, as typified by the
outmigration of the young or skilled segments of the labor force. To keep an area economically viable and attractive for new business, the worsening of imbalances can be prevented through an active policy of countering the losses that have occurred and by strengthening the productive resources available.

Strategic Approaches

A variety of approaches can be distinguished. Some of the main approaches include: public financial incentives to encourage investment in particular regions of a country; financial aid to enterprises facing reduction in employment to encourage them to find alternate products; creation of jobs by government in the public sector; subsidies to private firms to create new jobs or to encourage relocation of workers to new jobs; and programs initiated and implemented by private firms to create jobs, using their own financial resources.

Some of the above categories have already been analyzed. For example, in the section on maintaining the viability of the business we considered the possibility of introducing alternate products. Other categories carry us far beyond the purposes of this paper, for example, the broad subject of public employment creation and public relief work. Without going into all of the reasons, our primary interest in this paper is in the creation of jobs in the private sector, or at least that sector that is for the most part considered private, even though in some countries the industry may be nationalized.

There are two important dimensions along which to analyze the general subject of job creation and economic development. The first relates to the target of the program and whether the emphasis is on creating jobs for those who have been recently displaced from declining industries or whether
the emphasis is on creating jobs for those who have been unemployed for a substantial period of time -- the latter involves programs for dealing with structural unemployment issues in depressed areas and regions.

The second dimension deals with the impetus, or the auspices for the job creation, and the source of financial support. Ultimately, the auspices for the creation of jobs will be the industry, i.e., the employer. Governmental agencies by themselves do not create jobs at least in the private sector. However, government can provide financial assistance and this then becomes the key distinguishing feature, whether public financial assistance is channeled to the firm undertaking the job creation efforts or whether the program is financed out of resources available to the enterprise.

In light of all of these distinctions and various permutations, we would like to concentrate our attention on two strategic approaches. The first is the well established category of regional economic development, which for the most part is financed by government and deals with long-term regional problems. The second category involves efforts initiated by enterprises to create jobs that may be ultimately (and hopefully) filled by workers that these same enterprises are in the process of displacing.

Regional Development

In general, looking at the design and application of these programs over the past twenty years, we notice some reorientation: first, a shift from subsidies for capital investment to subsidies to the employment of labor; and secondly, a shift from general or indiscriminate use of job creation subsidy schemes. The targeting of job creation has been induced by increased regional imbalances in the labor market during the 1970s as well as growing disparities
in employment opportunities for different groups of labor.

The greater emphasis placed now on employment subsidies instead of grants or other aid to investment of capital has been caused in part by the growingly uncertain or negative employment effects expected from investment schemes. As the share of investment for rationalization (within the total volume of investment) grows, the risk increases as well as the possibility that the promotion of investment in high unemployment areas may further contribute to a net decline in employment as a result of jobs being phased out in rationalization efforts and the introduction of more capital intensive production methods.

As far as the provision of public support selectively to particular regions or areas is concerned, there have been two different approaches to a "regionalization" of labor market policy. One is the concentration of public outlays in areas designated as "problem" or assisted areas. The other, and sometimes complimentary approach has been to decentralize the allocation and administration of regional policy funds.

**National approaches** - Britain has for a long time followed a rather generalized approach and has only in recent years concentrated more on a selective approach to subsidization. Successive governments in the 1960s and 1970s have viewed the use of general schemes of governmental financial support and subsidy, including tax incentives, investment grants, regional development grants, assistance under Section 7 of the Industry Act of 1972 and the Regional Employment Premiums, as the only practical way of proceeding on a large scale. It was felt that a program aimed at stimulating investment throughout the country, or towards helping the Assisted Areas could only be taken in a standardized
way. More specific or targeted aid was given where the government had more specific objectives in view. Thus, for example, the government brought forward tailor-made packages of assistance to preserve the big shipbuilding companies on the Clyde and the Mersey.¹

In Sweden, there has also been a tendency to move away from public employment creation in favor of promoting more employment in the private sector. In the areas affected by the decline of the Swedish shipbuilding industry, regional funds were created. Special regional aid, regional development funds and regional investment companies (Swedyard Development Corporation) were established. While the latter was geared towards the creation of new jobs in the shipyards, the former was directed towards new employment opportunities in the shipbuilding regions.

In the case of Germany one of the programs for regional development has been targeted towards areas with special problems such as the Ruhr and is called the "Special Labor Market Program for Regions with Particular Employment Problems." This program calls for special efforts to stimulate economic restructuring and to create new employment opportunities in problem areas, with the Ruhr being a primary example. Thus, in the case of West Germany a regional disparity in the functioning of the labor markets has been answered by policies that seek to deal with some of the underlying problems facing different labor markets.

For France, an example of regional development comes out of the much cited experience with Lorraine. As a part of helping the area (which during the late 1970s lost approximately 15,000 steel jobs), the government came forward

with an industrial adaptation fund of approximately $700 million. This money has been used to pay half the capital cost and to also provide interest free loans for new factories being constructed in the Lorraine area. Emphasis has also been placed on using the money on a per job basis and approximately $6,000 can be granted for each job created in the target area.

Job Creation Efforts by Enterprises

In the United Kingdom, the British Steel Corporation (BSC) has taken the responsibility to develop or assist new job opportunities in areas affected by major plant closures. BSC's commercial and marketing network is used for finding companies looking for industrial development sites.

Starting in 1975, British Steel focused its job creation efforts through a new subsidiary called British Steel Corporation Industries which had as its main purpose "to bring jobs to areas of the country where steel plants are being closed". Under the program, BSC does not provide direct financial assistance to firms in the steel making areas, but uses it "good offices" to focus financial assistance from other sources such as the government, the Common Market and financial institutions. BSC sees itself as a broker, a catalyst, a stimulator of interest and a provider of technical assistance.

Furthermore, BSC attempts to apply its own relatively diverse product range, its internal product development and its R and D programs to the creation of job opportunities in areas affected by closures - either directly or indirectly through joint ventures. Ebbw Vale represents one example where BSC established two job creating projects, and, also, persuaded one of its major suppliers to site its expansion in an area hit by closures.¹

One concept that has been pioneered is that of the "neighborhood workshop". BSC Industries has found space in buildings that might have otherwise been demolished and made available facilities for a range of small businesses. For example, in the Tollcross area over 54 small companies employing approximately 400 people moved into one of these buildings. Most of the businesses were new and were taking advantage of the space and the packaging help provided by BSC Industries.

In terms of overall results, by the end of the 1979 approximately 2,400 jobs had been created and BSC Industries estimated by early 1982 that another 5,000 jobs would be created.

Given the extensive amount of job loss and worker displacement in the United Kingdom it is not surprising that a number of other companies, usually large scale, have instituted job creation efforts in areas where operations are being terminated. For example, Tate and Lyle has put in motion a job creation plan which puts the company in the role of a merchant banker. The company will invest between £10,000 and 20,000 per job created in businesses that have good financial prospects and where the enterprises will give the employees being displaced from Tate and Lyle "first refusal". An example of this approach is the investing by Tate and Lyle of approximately £400,000 for the prospect of creating 150 jobs in the Port Glasgow area.¹

Massey Ferguson has used an industry search firm to forward over 1,000 letters to Chambers of Commerce and banks alerting them to the availability of space in its Kilmarnock facility where approximately 1,500 workers became redundant in early 1980. As of the time of the report, it was to early to tell whether any large firm or series of small firms would be interested in using the

space owned by the company.¹

Another example comes from the northwest area of Britain which has been hard hit by redundancies over the past several years. During the mid-1970s extensive cutbacks took place at Pilkington. Realizing that large companies and other economic interest groups could do something to enhance the long run viability of the area, a number of business leaders came together in 1979 to form St. Helens Trust with the largest backing coming from Pilkington in the amount of £ 50,000.

The Trust operates in a number of ways: first, it will finance new businesses with small loans, second, it will provide professional advice and training and finally, it will "run interference" with various government agencies in handling the red tape associated with getting new enterprises underway. In the first year and half of operation, approximately 500 full-time and 200 part-time jobs were created in the area.

Perhaps, the most ambitious program undertaken by a private firm in France is the efforts of Rhone-Poulenc which through its subsidiary Sopran has created about 700 jobs to help fill the gap created by some 3,000 displaced workers, made redundant as a result of the company closing down a number of its nylon and polyester fiber operations. Sopran offers financial resources to a new company as well as providing building and transportation facilities. It has also been able to entice firms to take up location near some of its ongoing facilities where products are complimentary.²

Evaluation

A full-fledged evaluation of various regional development policies and

¹Industrial Relations Review and Report, op. cit.
²Chemical Week, January 10, 1979.
programs is not in our comparative advantage, nor is it really part of the main focus of this paper. In attempting to assess whether regional development policies represent "good practice" one would need to take account of gross and net employment effects, displacements effects and other macro economic relationships. Nevertheless, a few comments in passing can be made about the two categories that we have given attention to in this chapter.

Regional economic development - Based on a range of evidence, it is our conclusion that regional economic development policies do not help directly (at least in the first instance) workers being displaced from their places of employment. Typically, what happens when new jobs are created in a region is that they go to younger workers in the labor market or to others who transfer into the area to take advantage of the new opportunities. The middle aged and older workers, who often represent the bulk of those displaced, usually fill other positions in the labor market that might be vacant, creating a type of secondary effect or benefit.

Another consideration is that jobs created in a regional economic development programs may not represent long term jobs. There is some evidence, especially from development areas in Scotland, that firms view the inducements to locate in an area and to create jobs as a type of asset which they deplete over a period of 5 to 10 years. At the end of this time period they "pick up stakes" and move onto some other development area to capture a new set of inducements. These points are speculative however, and we had better rest with the beginning point of the section, that the full evaluation of regional development policies should be left to the experts.

Job creation by enterprises - Certainly, it should be clear that the number of jobs created in the examples we have given represents only a small
fraction of the workers being displaced. It is just a fact of economic life that the small business, which tend to be the focus for job creation efforts, do not generate many jobs. This is despite the assertion that "Small is Beautiful" and the substantial interest that the subject of entrepreneurship and small business development has received over the past several years.

A further factor is that not too many of the workers being displaced benefit from new jobs created directly or indirectly by their former employer. The closer the linkage between the displacee and the new job then the better the chance of a match. If the new job is created by the same employer, represents the same occupation and at the same location, then the gap is not great and there is a good chance that the workers will gravitate to the new positions. However, introduce a new employer (who would like to hire the best people available in the labor market) or the requirement that the displaced workers have to move to another section of the labor market (not to mention moving to another section of the country) or the fact that the work is different and requires retraining, then the chances of the new jobs benefitting the displacees becomes exceedingly small.

Maintaining a balanced perspective: or realizing that the glass is both half full and half empty - two areas that have been hit very hard by cutbacks in the steel industry, Corby, Britain and Lorraine, France illustrate the very mixed picture that regional economic development presents. Consider some of the general statistics for Corby. This is a town with approximately 55,000 inhabitants, wherein British Steel has cutback employment by 6,000 workers (with approximately 5,000 remaining employed). Most of the workers who have been displaced from the steel industry, even though they originally came from Scotland, have remained in Corby anticipating that jobs will develop to fill the vacuum.
The Corby Development Corporation along with BSC Industries and the government have moved ahead with a variety of programs to fill the gap created by the extensive cutbacks at BSC. The corporation estimates that to create jobs for the displacees would take land and factories and substantial new investments. The area has been designated as a Development Area by the government which should give it an edge in attracting new industry. Also, money is available from the European Coal and Steel Community to help with vocational training for those who are changing career lines. The positive view is that Corby because of its location will attract industry. One example of this is that Oxford University Press will move one of its main distribution operations into Corby, eventually employing some 200 people.

On the other side is the point of view that Corby will never return to its previous level of employment. Workers and their families will have to move out of Corby into other areas, primarily the southeast of Britain, where more growth is taking place.

A similar mixed picture can be derived for the Lorraine region where even larger cutbacks have taken place in steel employment. The French government planned to induce automobile companies to expand production in Lorraine but due to the fall off in demand for automobiles, this program has been modified substantially. Some jobs have been added to the area, but many of the workers have remained unemployed on a long-term basis.

How an area fares over the long term after experiencing substantial work force displacements depends on many factors, of which the relative size of the cutbacks is particularly important. We know of one instance where the cutback actually produced a positive shock effect on the economic development of the area. The layoffs were large enough to catch everyone's
attention and to mobilize special programs but not so large that the challenge could not be met.
Introduction

In this chapter we start the task of drawing together some of the patterns that describe the process of economic restructuring, as it is played out in a variety of industries and countries. In the first section we examine some of the patterns that can be best understood by reference to the nature of the economic restructuring that is taking place. Then we move to consider some of the relationships that appear to be characteristic of the adjustment cycle itself. Finally, we would like to draw some comparisons across countries and industries and to examine various strategies of change and relate these to the results.

The Precipitating Pressures

We can distinguish different types of forces that drive industries into some type of economic restructuring. First, there is the category of a sharp fall-off in demand; a situation characteristic of many industries today that suffer from over capacity. Second, there can be a fundamental change in the nature of the products and/or technologies being employed -- requiring some rapid adjustments to new modes of production. Finally, there is the classic problem of competitive pressures or high-cost operations that forces enterprises into a series of coping techniques in order to preserve market shares.

Drop in demand - This economic attribute characterizes a number of industries today and for several of them it is occurring on a worldwide basis. For example, shipbuilding activity has fallen off in every industrialized country. While the steel industry is not down in every country, it is down on an overall basis and for a number of countries (most of those in our survey) sharp cutbacks in operating rates have occurred.

One strategy that has been followed in a number of situations to
deal with excess capacity is the shrinking of the industry via consolidation and mergers. For example, this approach has been followed in Sweden in both the shipbuilding and steel sectors. In fact, generally speaking, this approach appears to have been the main response on the part of most countries to the plight of their shipbuilding industries.

In retrospect, it is not clear that the consolidation strategy has proved effective, given the size of the contraction that has been required. Merger and consolidation activities consume considerable time and effort and it might have been as effective to have eliminated large segments of the industry and allowed new and more efficient elements to develop "denovo." (We will return to the question whether a viable sector can be created more readily from segments of the existing industry or whether the best chances are with new ventures and new enterprises that emerge outside of the established traditions and arrangements of the existing industry).

The difficult task facing the parties / governments is how to come down the "slippery slopes of decline" without too much disruption and turmoil for the workers and the communities involved. Generally speaking, the approach that has been taken has been to use attrition and other human resource devices to absorb the excess workers, especially during the early phases of the crisis. However, as the crisis has deepened it has become necessary to sever workers. In this phase a variety of readjustment arrangements have been used, such as Project 80 (a type of sheltered-employment), as well as transfer to other enterprises as has been the case in Japan.

Given the depth of the crisis in shipbuilding, governments have had to play a role especially to help in the cushioning of the severe impact that such a sharp fall-off in economic activity has provoked. The unions for their part
have been generally cooperative, especially in the early phases of retrenchment. However, as the crisis has deepened and it has become clearer that the industry is in a "no win" situation for the workers, the unions have moved into either a defensive or aloof posture. For example, some of the unions in British shipbuilding have not been willing to join in discussions about further decline in that industry. In the case of Sweden, the unions first "looked the other way" and more recently have taken a harder line to further cutbacks. In the next part we will examine the very delicate role that union leaders are placed in as industry proceeds down the steep slopes of decline.

Changes in product and technology - This economic circumstance describes much of what has happened in the rubber industry, as well as in a large part of the automobile industry -- not to mention a variety of other industries that have adopted new technologies and new modes of production.

In most instances, new technology is labor saving -- indeed, it is via this avenue that increases in productivity have occurred historically. The question of interest to this study is whether the pace and the nature of the technological change is such as to create reasonably large numbers of excess workers. In most instances, technological change, per se, does not create large-scale displacement. However, in the past some instances have occurred and no doubt as the revolution of the "chip" continues to run its course, there will be other such groups of displacees.

One interesting illustration of the impact of the pace of change is the textile industry. Employment in this industry for most industrialized countries, has been sharply affected by increases in productivity, in fact, employment has been affected more from this source than from imports. Several countries
have moved aggressively to encourage textile industries to scrap outmoded equipment and this has produced a displacement of substantial workers in the industries. Japan seems to have followed this policy quite aggressively.

However, the program in the United Kingdom, operated in the 1960s, was not as successful. Thus, in the short run the displacement of labor was not as great as ultimately desired, since the industry remained more labor intensive than it could afford over the long run -- given competitive pressures from the development of modern operations in other countries, more displacement sooner might have forestalled even greater displacement later.

A situation where displacement is generated by new technology lends itself admirably well to the human-resource management approach, especially since a new technology usually requires the transformation of the skill base of a work force. In fact, some examples exist where industries over a period of time have adopted new technologies and have used a range of training programs -- as a result they have been able to adapt their existing work force to dramatically different technologies. The telephone industry certainly fits this description. Also, some of the developments in the automobile industry around the world, as robots and sophisticated electronics have been introduced, also fall into this category.

While many companies have developed the skills required by retraining their existing workers, others have used new workers for new methods, for example, where the new products and new technology require the erection of new plants, perhaps, in new areas of the country, as has happened with radial tire plants in the United States. Then the existing work force does not benefit from the changes, and we see a side-by-side phasing out of old plants (with readjustment programs to move workers to new industries in the same areas) and the
development of sophisticated training programs in "sunbelt" areas of the United States to train workers to handle the new technology involved in the new tire plants. This example is probably somewhat unique to the United States given the intra-country mobility patterns of industry and does not characterize as much the European members of OECD.

**High cost operations** - This factor describes a number of industries and is often present with some other economic pressures. The steel industry in the United States, United Kingdom, France, as well as several other countries, suffers from being high cost. The strategy that is appropriate for dealing with high cost operations is some form of productivity bargaining or rollback of benefits - i.e., some program that labor and management "hammer out," that comes to grips with the lack of competitiveness in the operations.

It is in these circumstances wherein the parties can be offensive and aggressive and move to eliminate the "fat", in order for the remaining operation to be as competitive and as viable as possible. The United Steelworkers of American recently has adopted a more aggressive stance to help solve some of their high cost problems of the industry. Unlike a crisis stemming from a drop in world demand, there is a chance in this context, for the enterprise or industry to hold its market share, if some of the underlining competitive problems can be solved. Hence, union leaders have something positive to deliver to their members, enhanced job security.

**The Adjustment Cycle**

In discussing the shipbuilding industry in the preceding section, we alluded to the fact that the crisis often runs through some type of cycle wherein the problems "seem to get worse before they get better". At this point we would like to generalize about this phenomena and introduce the concept of the
"S" curve, which is similar to the learning curve that has appeared in many pieces of literature about the introduction of new ideas and the diffusion of innovations.

When we use the concept of the "S" curve we are describing on one axis the needed displacement of workers versus time on the other. This concept implies that for the early stages of the crisis the needed displacement of workers may be small; then as the crisis deepens, the number of workers who should be displaced grows quite rapidly and finally as the crisis ends the displacement activity ends and the industry once again finds itself in equilibrium.

We would contend that this "S" curve describes the first form of economic pressure, namely, a drop in world demand. The configuration also describes a surge of new technology, since typically there is a period of tentative introduction, that is, trial and error -- it is during this period when many firms watch the initiators. As the technology becomes stabilized, a rush to introduce it takes place -- it is at this point in the cycle when the potential displacement of workers is greatest.

A good illustration of the "S" curve in operation is the textile industry over the past 15 or 20 years. Between 1963 and 1970 employment was declining about 0.5% per year, then it moved to 1% per year for the years 1970 to 1973 and for the latest period, 1973 to 1980, it has reached almost 3% per year. So it would appear that for this industry we are witnessing the steep portion of the "S" curve. It can be anticipated within the next five or ten years that the adjustment cycle would be over and the displacement rate would have dropped back to near normal levels.

A major complicating factor in this form of analysis is in making a prediction whether an industry is entering into an adjustment cycle or whether
it is just going through a cyclical fall-off in demand, soon to be followed by a restoration of markets. It is always easier to analyze the data ex post, as in the case of the textile industry; it is another to do it ex ante for an industry that is entering into some type of downturn.

Hindsight underscores the costs that come from delay, but there are also costs from closing down facilities and displacing workers if demand will return in the near future. For example, Ford Motor of Canada and Brown and Williamson in the United States, have both been cutting back on facilities and helping place workers in the local labor market, only to find out that demand (in these two situations) has come back much stronger than anticipated. As a result the companies have/to recall workers from other employment and to suffer poor public relations with other employers in the local communities who cooperated with the readjustment programs only to find many of their new workers attracted back to the companies that erroneously appeared to be in decline.

Some help in sorting out whether the displacement is likely to be permanent or not can come from the earlier analysis as to the type of economic pressure that is present. If the basic problem is one of high cost or introduction of new technology, then the displacement is likely to be permanent. The only category where there may be some doubt is the first category "fall-off in demand."¹

¹We should also note that when technological change or high cost pressures are the driving force, then the potential displacement is usually steady and can be phased into digestible groups of workers. Indeed, human resource management plays a very key role in planning and implementing programs for handling those who are no longer needed as a result of introduction of new technology or the improvement of productivity to deal with high-cost operations.
The situation where potentially a large-scale work force displacement is involved is precisely in the fall-off in demand and is in this circumstance wherein the parties may be most "in the dark" as to whether the drop is short or long term. Typically what happens is that the parties embark upon some type of human resource management -- and for the early phases of the crisis this is usually sufficient. It is also the case that attrition rates are higher or can be induced to be higher during the early phases of the crisis. Consequently, some match occurs between the techniques for handling excess workers and the early slope of the "S" curve that does not require too many workers to be displaced.

Subsequently, a type of scissors effect often develops as natural or induced attrition drops (those who can be retired early have departed) and, if at the same time the crisis deepens, then the need for potential displacement also increases. This is the critical phase which can be illustrated for several industries. For example, in the early phases of the retrenchment for British Steel, workers were retired and displaced on a gradual basis. This and came to be called the era of "change with a human face"/experts commented quite positively about the changes that were being made to cutback on capacity and the way in which it was being handled in a very sensible fashion with respect to the workers involved. However, that was the early 1970s. Today the industry is in such dire straights and the cutbacks so substantial that no one is talking about human resource management programs.

Similarly, the contrasting approaches taken at different points in the cycle over the past 20 years in Swedish shipbuilding provides a good illustration of the sequencing of different policies in line with altered market outlooks. As long as the difficulties were believed to be temporary, a reconsolidation approach through mergers and rationalization predominated. Thereafter, as the
long term business prospects turned worse, a planned attrition approach with the aim of avoiding layoffs was organized. In the latest phase of adjustment a plan of reorientation of the shipbuilding industry towards closing down facilities and developing new products and new markets has come to the fore.

In closing this section, we might take note of hindsight and underscore a dilemma that is faced by the parties at the point of cross over or what we have called the scissors effect. It is precisely at this point in the unfolding of the adjustment cycle, that the parties have in some instances backed off of further change, because of the extreme social consequences of declaring people redundant or in one way or another moving them out of the industry of their employment. In a number of situations, then, the day of reckoning has been delayed, only to return with more sever consequences at some future point. For example, the substantial adjustments currently taking place in British coalmining and in British Steel can in part be traced to the inability of the parties in the mid-1970s to continue the process of "shedding labor." The same point can be made about the recent difficulties in the French steel industry in the Lorraine district.

In defense of how these situations have been handled, it can be said that the parties genuinely believed that times would get better and that they had done a heroic job of cutting back on employment/modernizing the industries. But regardless, these industries stopped too early in the readjustment cycle -- probably because the workers and the communities that would be potentially affected were able to stop the process of transition through political means. As a number of commentators have said, if producers can get government on their side, then the consumers and the public in general do not have a chance of seeing the economic changes through until the crisis gets to the point
that public opinion says "enough is enough" and forces the process to continue.

Strategies and Results

In this section we would like to pick up on a number of summary points about overall strategies and what seems to work and not to work.

(1) In a number of important instances the vital elements that emerge in the process of economic restructuring appear to be outside the established sector of the industry. For example, the breakthrough in Italian textiles has come from the smaller firms that have not been helped by the government, and not from the large firms in the established sector. In the United States the fastest growing segment of the steel industry is the "minimills" and they are being constructed, often in the sunbelt, very close to the growing markets. Usually they are not unionized. Some of the same points made about the growth of this element of the Italian steel industry.

Another illustration (also from the United States) is the experience of the meat packing industry, which was the subject of many surveys and projects in the 1950s (for example, the Armour Automation Committee). It appears that the major companies such as Armour and Swift have abandoned the business of meat packing. The market has been taken over by a new "breed" of companies that have moved closer to the source of supply, have established modern facilities and often operate on a nonunion basis.

(2) On the other hand, we can cite several examples wherein the established sector, viz. the large companies, have taken the lead and have been the force for revitalizing the industry. For example, in France a number of large dynamic and aggressive textile companies have acquired many smaller firms, thereby improving their overall line of products.
The same point could be made with respect to a number of large United States textile firms which have been prospering. They have introduced new technology, they have taken advantage of lower cost operations in the south and some of the economies coming from long runs. As a result they have been steadily capturing a larger and larger share of world markets.

Thus, the picture of reindustrialization is mixed as to whether the innovations and new currents are occurring primarily outside or within established sectors.¹

(3) Finally, we would like to turn to the employment side of the strategic question. One conclusion that emerges from our examination of a wide variety of adjustment programs is that the commitment to handle the employment consequences of economic change needs to rest at the highest levels of management. The firms that appear most successful in integrating "the economic must with the human ought" are those that factor employment consideration into long run business planning and actually reconcile the tensions between the capital and labor sides of the business on a strategic basis. A number of "high-tech" firms that operate worldwide have maintained continuity of employment, thereby eliminating

¹ It would take an economic historian to understand this contrast but superficially we feel the explanation rests with an analysis of the entrepreneurial spirit which appears to be so necessary to achieve some type of breakthrough. The entrepreneurial spirit applies to both the conception, that is the new idea concerning products and ways of organizing to produce those products as well as a certain toughness to change the established ways and to persevere against the inherent resistance to change.

The extent to which this entrepreneurial spirit exists within established groups or the extent to which it needs to find this expression in breaking out of old molds, is an interesting subject to contemplate. The United States would seem to favor the first mode, whereas, within West Germany and Japan there seems to be an entrepreneurial spirit within established firms to identify new markets, to tailor the organizations to meet these new markets and to move ahead in a steady and determined way to tap these opportunities.
some of the problems that we have considered in this monograph, by asking themselves, when they are embarking upon new business ventures: What are the employment consequences and will the firm be able to sustain its commitment to the workers over the long term as a result of undertaking this project? This integration has been developed to its best refinement within Japan, especially for the side of the economy emphasizing career employment.

Such a commitment to continuity of employment for the existing work force means that, as economic change occurs, ways will be found to retrain and re-deploy existing workers. The location of employment may change but workers can count on opportunities to work with the same firm. Such an approach can only work where the growing segments of the business can be tapped by the same firms that are experiencing decline. This describes large firms which are able to keep abreast of economic developments. It certainly does not apply to the development of new firms such as the mini-mills in the steel industry. The workers who come into these enterprises come from other sectors, often rural occupations; and those who have worked in the large basic steel companies are not the ones making the change over.

(4) Certainly, in many situations the changes in the environment are such (perhaps because of a sharp fall-off in demand) that the work force cannot be accommodated to the lines of business that are available. This provokes a crisis: a situation of excess labor. The factor of potential excess labor should not stop the introduction of new technology, nor the elimination of high-cost operations. The question is how to deal with the excess -- we have been discussing a variety of techniques that range from human resource planning, to layoff coupled with readjustment programs that help workers find other employment.

In passing, we might note that there have been many instances, in
many industries, in many countries where the potential of excess employment has stopped economic change and as a result not only are the workers initially at risk excess but over the long run many more workers become excess, because a "remaining core" has not been achieved that can be competitive and can make it in world markets. The concept used in Sweden of Project 80 wherein the excess workers are transferred away from the main enterprise and held in a sheltered arrangement makes very good sense. This is far superior to keeping the excess workers in the enterprise as has been done on the United States railroads and in many newspapers in the United States and in the United Kingdom.

The Steel Industry as a Microcosm of the Adjustment Cycle

The steel industry serves as a very good vehicle for summarizing a number of points that we have been making about the nature of the underlying economic pressures, the adjustment strategies undertaken, and the results achieved.

The nature of the economic problem - The countries that seem to have experienced the most difficulty with their steel industries, the United Kingdom, and France, are characterized by a history where the industries emphasized bulk steel in contrast to a greater development of "know how" and technologies for speciality products. The philosophy of "big is beautiful" imbued the thinking of top management in British Steel, and to some extent the counterpart companies in France (in the latter case, a key decision was made in the 1960s to expand employment and capacity of the steel industry in Lorraine.) Thus, the steel industries in these two countries not only face the general problem of the steel industry around the world, namely, decline in demand, but they face a particular problem since their capacity for bulk steel is greater -- it is this part of the market that has been dropping most
Response patterns - In terms of response, a number of companies have pursued the merger and restructuring route. For example in the United States, Youngstown Sheet and Tube was acquired by a conglomerate. In the case of Sweden, the steel companies have been merged. The question to be asked is whether merger will solve any of the basic problems? Does putting weak parts together create anything more than a weak merger?

The best response pattern appears to have taken place in West Germany, where the restructuring program has emphasized specialty steels and has involved a substantial amount of retraining of the work forces to exploit new opportunities.

Another strategy which has been employed successfully is the introduction of sophisticated new technologies. The productivity advantage of new technologies and new plants is perhaps of the order of four times as great as that existing in the older facilities. Consequently, a firm cannot remain in the market place without moving to modern technology.

In terms of coping with excess capacity aside from the point that "sooner is better", one approach that appears to be associated with success is the following: surgery to weed out the old plants and to take the cuts in a specified way rather than reducing operations across the board. Hence, Nippon Steel closed down an entire mill complex, similarly, British Steel is closing down a number of inland facilities. The same pattern of adjustment describes the United States, where major cuts have come in the Buffalo and Youngstown areas.

Japan appears to have a long view and to understand the life cycle of an industry such as steel. It is reported that they see themselves moving out of some aspects of the steel industry in recognition of the cost advantage that
other countries such as Korea and Taiwan will possess in the future. The Japanese example illustrates how planning by the firm coupled with help from government can anticipate changes at early stages, thereby initiating the adjustment in timely fashion.

Role of government - It would appear that the best results have come where government remains in the background and where management has taken the initiative to fashion a restructuring solution. This would describe the approach in West Germany. However, in the case of Japan the government has played a more direct role, although it is still a minor partner. This pattern is perhaps a clue about the balance to be achieved. Where the industry has been owned or dominated by government, as in Britain, Sweden and France, the economic difficulties of the steel industries seem to be much greater.

Readjustment approaches - As far as the out placement of the excess workers is concerned, the West German and Japanese experiences of emphasizing early retirement and transfer to other work within the control of the conglomerate seems to represent very effective strategies. By contrast, the approach taken in the United States of laying off workers and providing continuing support via unemployment insurance and trade adjustment assistance does not represent positive practice because there is little redeployment of the workers. Indeed, the workers continue to think of themselves as "steelworkers"; they remain in the communities; and they hope for that improbable event that they will be recalled to their former plants.

Countries with the Best Practice: West Germany and Japan

Since many of the examples of positive adjustment come from these two countries, a few more words should be said at this point about the condition
which have facilitated better results. As we have noted, in these countries the economic adjustment process has started sooner rather than later, and that workers have been accommodated in reasonably effective fashion.

What explains these better results? First, is the industrial structure of these countries. Businesses tend to be large and multi-industry in character. This has made it possible for redeployment to take place under the auspices of the large firm, for example, the movement of workers from the steel to the automobile sectors of a large Japanese conglomerate. Secondly, management generally has believed in the value of sharing information and involving unions, either through the structure of codetermination or through more informal processes of consultation.

The unions, for their part, have tended to take a constructive view of economic change and have recognized the importance of getting on with reindustrialization in order to preserve industry position in various export markets. The workers themselves, have been much more "export-minded" than their counterparts in other countries such as Britain and the United States.

The geographical dispersion and organization of industry has also made it possible for workers to change employment without changing residential areas. Thus, the location of the steel industry in West Germany and Japan, in their industrial heartlands, unlike its more remote location in the United States, the United Kingdom and France has made it possible for steelworkers to be more readily redeployed.

Finally, the institutions and traditions of the countries with respect to training and instilling new skills to keep abreast of new technology have also facilitated the adjustment process. It is here where the respective governments play a very important role in helping finance and guide the training and readjustment processes.
Introduction

In this part we would like to examine some critical features of the process itself and to what extent workers and their union representative are involved. The question is whether the adjustment process takes place strictly as a management undertaking or whether there is substantial participation on the part of workers and their representatives. This can be portrayed along a dimension from unilateral to multilateral decision making.

Unilateral versus multilateral decision-making - This dimension refers to the number and kind of actors or groups involved in developing and implementing dislocation policies at the various levels of decision-making; more specifically, how far and what ways are firms or management, unions (or worker representatives) and governments involved in finding and executing solutions? The participation of actors in decision making will be one major determining factor on the outcomes, in terms of the sharing of costs and burdens to various parties involved.

Thus, management may try to maintain discretion over structural change and adjustment; or more cooperative type solutions and procedures may be involved.

The Philosophical Orientation of Workers and Unions Towards Participation

On the one hand, a minority of unions do not want to be involved in any aspect of economic restructuring and the related processes of worker readjustment. The following kind of statement is made by some union leaders: "It is management's job to do the business of running the enterprise." Union leaders are understandably leary of getting involved in a process when the "news is all bad." Off the record, some of them confide that for unions to get involved only slows down the process of change with the possible result that the job security of the "remainder" becomes even more insecure. Hence, some union leaders without
openly saying it prefer management to take the initiative and to push ahead "with all deliberate speed." This perspective suggests that union leaders "look the other way" at times of economic crises.

While not too many leaders fall into the "aloof" category, there is a tendency for more of them to shift to this mode as the crisis deepens, that is, as the later and more critical stages of retrenchment are experienced, in terms of the cycle of readjustment. As we mentioned earlier, withdrawal by union leaders has occurred in the case of the Swedish shipyards as they have proceeded through successive cutback programs in dealing with a chronic over-capacity situation.

The predicament of participation - Helping shape business decisions presents an acute predicament for union leaders and worker representatives. They find themselves in a dilemma with sharply drawn disadvantages on each side. On the one hand, if they become involved, they may be viewed by the rank and file as having been co-opted by management and thereby suffer the stigma associated with business demise. These fears are well illustrated by the experience of some of the unions in British Steel who have been blamed by rank and file members and community representatives for having gone along with the decisions that have dismantled a large part of the steel making capacity. Worker directors, who have been "associated" with the decisions, have been treated as strangers in their home territories.

On the other hand, if union leaders do not get involved to challenge the business decision they will also be condemned; an illustration comes from the United States. The United Automobile Workers represented approximately 1,000 workers at a Dana Corporation plant in Wisconsin making front-end axles. In a survey conducted among the workers about a year after the plant closed down,
the workers expressed many more negative feelings about the union than about management. The workers viewed management as having made an inevitable decision to close the plant down in the face of a drop in demand that hit the recreational-vehicle industry. However, the workers felt that the union should have done more to force the company to transfer other work into the plant or to have put pressure on the company to close another plant. Union representatives are seen as having failed in their tasks, since it is their responsibility to make job security the number one objective. If job security is not pressed, then there can be a substantial backlash against union leaders.

Thus far, we have been considering the outlook of national union leaders. If we introduce local union leaders into the discussion, the interest in participation takes a different turn. Let us differentiate national versus local union leadership along two dimensions: economic understanding and economic stakes. With respect to the first variable, the extent of sophistication regarding the "economic facts of life," certainly, the national union leadership has the best picture and probably understands better the life cycle of decline and what is really in the offing in the industry. Thus, in an informational sense national leaders have the strongest reason to get involved. On the other hand, they may not stand to gain by getting involved, because the changes need to take place anyway and the overall position of union strength may not be altered by whether they are involved or not. This point of view has affected the thinking of many union leaders in the United States who know that the companies will be establishing modern plants in new areas of the country (hopefully, under union contract) -- and it may not make a great deal of difference to the central union leadership whether they represent workers in established urban areas or in new "sunbelt" areas.
By contrast, workers at the local level are much more apt to be concerned about the shape of the change and their desire to be involved stems from a need to protect their own position.

If we conceptualize and describe the variables as: willingness to get involved as the crisis deepens, versus the interest in making concessions to save jobs, we derive the following diagram. As the crisis deepens the national leadership is less likely to join the issue because it is a "no-win" situation for them, whereas the rank and file are more interested in getting involved to make concessions and to explore ways of saving the operation.

Trend of growing involvement - Despite the reluctance of some labor leaders (limited desirability) and despite the difficulty of labor leaders gaining access (limited feasibility), nevertheless, more and more leaders appear to be interested and involved in the process of economic change. For example,
leaders of the unions in the shipbuilding industry in Japan have committed themselves to greater involvement in the rationalization efforts going on in the shipyards.

Even in the United States, where unions have more times than not taken the first view of aloofness, there is growing evidence that unions are becoming more involved in the subject of economic restructuring. Without the involvement of the United Autoworkers and Doug Fraser on the Board of Chrysler, it is unlikely that the company would have been saved, that the concessions of substantial proportions would have been put through (thereby reducing $600 million from labor costs) and that the enterprise (without substantial restructuring) would have been placed on a viable basis for the long run.

Further, as a result of the United Auto Worker's involvement in Chrysler a committee has been established that will look at the shutdown of plants. As Fraser has said, "We can move on the decision before it becomes irreversible and the committee can consider alternatives, such as finding other uses for the plant, farming out the excess capacity to others, and exploring the prospects for workers purchasing the plant and possibly setting up programs for retraining of workers."\(^1\) Fraser credits the committee with scheduling more work for a glass plant instead of closing it down and keeping open four other plants in the Detroit area.\(^2\)

Similarly, the Steelworkers Union in the United States, which has heretofore taken a very distant attitude with respect to business decisions, has become much more involved in monitoring the maintenance and capital budgeting decisions of the large steel companies. The union realizes that the jobs of their membership are at stake and they are evidencing, although tentatively, a new involvement in this area.

\(^1\) N. Y. Times, August 31, 1980, p. 19.

No doubt, the involvement of unions and workers in economic restructuring and worker displacement has been developed to the greatest degree in West Germany and it is desirable at this point to enumerate the various forms in which co-determination and union involvement have taken place in that country.

On the micro level this cooperative-type exchange relationship is carried on within the institutional framework of co-determination. It involves communication with, consultation with and co-determination by the works council in such matters as personnel planning, working conditions and work force reduction. As part of their representation on the supervisory boards of corporations, employees and trade unions take part directly in crucial decision-making, including investment decisions.

On the supra-enterprise level employers, trade unions, the federal and state governments and communities are represented on the Board of the Federal Employment Institute, a self-governing body incorporated under public law and intrusted with the execution and administration of public manpower policy. This participation takes place in the national head office as well as in nine regional and 146 local employment offices.

With regard to industrial and general economic policy there has been consultation on vital courses of action taking place between the federal government, the employers federation and the trade unions. Legal stipulations requiring this sort of consultation exist under the Stability and Growth Act of 1967. For cooperation between government, labor and capital on a supra-firm level and the development of labor market and industrial policies, the relatively high degree of centralization of these institutions has been conducive. Moreover, the philosophy of the trade unions towards labor involvement in the management of enterprises, as well as on regional and national economic decision-making, has significantly contributed to the practice of consultation. The unions have tended to view jobs and job opportunities as a kind of "social capital", the management of which should be subject to control by the major social groups.
While the institutions of co-determination, on the firm as well as on the supra-firm level, have not been developed as far as the unions have called for, there is by international comparison a significant degree of de facto participation of labor in employment policies.

Content of the Discussions

At this point we are interested in exploring the role of participation in affecting the content of the decisions that are involved in economic restructuring and worker displacement. Starting with the highest level decisions first, capital and key plant decisions, we will consider a series of subject areas, including programs for worker readjustment.

Business decisions - Generally speaking, unions and/or workers' representatives are not involved in business decisions, except to the extent outlined above for West Germany (and to some extent this pattern also applies to Scandinavian countries). In some countries, such as the United Kingdom, unions would like to be much more involved by having parity representation on boards, but this has not taken place.

Even in West Germany, many union leaders feel that the co-determination machinery at the company and plant level has turned out to be of limited value in combating the social and economic consequences of rationalization to the worker. At best, works councillors have managed to cushion the impact of technical and organizational changes on earnings or to provide compensation for loss of job or position in the plant. (Thus the involvement has served the purposes of adjustment not modification of business decisions.)

A number of unions have called for indicative planning, that is, the spelling out of long-term goals and implementation arrangements. Naturally, unions and worker representatives would like to know the direction of the business and to have this elaborated in some type of document which they can examine and discuss. While there have been many efforts to move businesses in
this direction, very little has emerged.

Our view is that the emphasis on achieving co-decision authority over investment decisions is misplaced. The critical benefit of participation for unions and workers is an awareness and an opportunity to confront impending decisions concerning new directions for the business. This does not require parity representation but requires the presence of union or worker representatives at the highest levels. Since most decisions do not get made at any one point in time or made by any one person, but rather in the modern enterprise called the complex organization these decisions emerge over an extended period of time, it is important for union representatives to be in a position to know about these decisions and to present their points of view for consideration. Participation at the highest levels can shape the speed and some of the attributes of the decision, even though the basic decision may not be reversed. Hence, we would emphasize the presence, not parity, of union representatives, and a process of consultation, not necessarily co-decision-making.

Release of information about impending changes - Currently, the Parliament of the European Economic Community is considering a piece of legislation that would require corporations to disclose their capital plans on a regular basis. Such a requirement would go far beyond the general guidelines of giving notice to workers and their representatives about changes that affect particular operations. This code, if enacted, would require the release of information concerning the shift of a company's assets from one country to another or from one line of activity to another.

While the release of information about business plans would not in and of itself constitute any increased participation, nevertheless, unions and worker representatives, possessing such information, would be in a much stronger position to influence the plans and to talk concretely about the consequences.

Employment level agreements - Unions, if they seek to bargain about employment levels, may be successful, although the nagging question remains, whether
such a strategy is a desirable course of action over the long run. Unions, for example, in the Netherlands have sought to bargain employment levels to ensure that a given number of workers would continue to be used in a particular undertaking. Management views the objective of setting employment levels as adversarial, to wit, the battle that took place between British Leyland and the leader of the shop stewards' movement in that company, Derek Robinson. Ultimately, employment levels depend upon the viability of the enterprise. The effort to secure a given level of employment in the short run may result in compounding the problem of survival over the long run. In general, it would appear that unions can shape the timing and the distribution of employment changes, as the unions at Volkswagen have done on a number of occasions, but it is not generally desirable or feasible for employment contracts to be negotiated by unions.

Enhancing the viability of the enterprise - Almost by definition unions are heavily involved in productivity bargaining, rollbacks, discussions about alternate products and in developing other ways to keep the current work force usefully employed. Where unions are absent or weak at the plant level, such as in Japan and to some extent in France and West Germany, then the emergence of these subject areas that require vital local-level union organization may be somewhat limited. The most numerous examples of unions tackling these subjects come from the United States and the United Kingdom where there is a tradition of involved shop-floor labor relations.

Human resource programs - Management takes the lead in developing human resource plans and programs. The role of unions and their representatives is somewhat limited in this area. As we indicated earlier, unions do not derive very much in the way of explicit gains out of such programs. It is in West Germany where the subject is most developed and where unions are involved through the mechanism of co-determination and we present at this point some lessons from the practice of human resource planning in a number of firms in that country.
Under the revised Plant Constitution Act of 1972 in West Germany the works councils have rights of information, consultation and co-determination in matters of personnel planning on the firm and plant level. The general idea for this participation of worker representatives was to counterbalance the principle of pure profit maximization in the employment policies of enterprises and to place greater weight on worker needs and interests in decision making. Both trade unions and employers agreed to this principle of cooperation in a statement made in the course of joint consultation of employers, unions and the Minister of Labor in 1970.

While there have been demonstrations of clear-cut improvements in the rationality of firm employment policies--joint planning has led to a longer run orientation in the policies and to more socially acceptable ways of work force reduction--there has also been disenchantment with respect to what personnel planning on the enterprise level can achieve. In some quarters the works councils, after having gone through the experience of involvement in work force reduction, have reached the conclusion that it might be better to stay away from any involvement in "managing the reduction", since in effect they had become agents collaborateurs in activities over which they had only limited discretion.

From the experience there are at least three lessons that have been learned about the requirements necessary for making the participation of labor on the enterprise level work:

(1) Personnel planning at the firm cannot eliminate work force reduction as such. It cannot influence economic fluctuations or international product cycles and redevelopment. Thus, joint personnel policies on the enterprise level can only be part of multi-level policies to deal with employment problems.

(2) On the enterprise level the top executive has to take responsibilities in personnel planning. It is at the top level where basic conflicts between goals are resolved.
(3) To give sufficient weight to social considerations labor representatives have to enter the decision making-process at the formative and planning stage. Among other things, this means that they have to become aware of investment decisions. Frustration among works councillors arises when they are heavily involved in the implementation phase of work force reduction, but have little or no participation in the formative stage of business policies. This problem, in part, stems from the structures of participation specified by law which allows for far-reaching rights of co-determination for works councils in the later implementation stage and less and weaker rights in the formative stages.

Worker readjustment programs - The best examples of union involvement in helping shape and operate programs for worker adjustment come out of the United States, where there has been a tradition going back to the Armour Automation Committee of the 1950s down to the present time wherein companies readily bargain over the impact of economic change and willingly involve the unions in the implementation process in order to cushion the impact of the change for the workers involved.

One of the authors of this report was involved in a formal labor-management committee that applied some of the principles of the Armour Automation Fund to the public sector for some 10,000 workers who had been made redundant by the State of New York during the early and mid-1970s. Using a variety of techniques such as retraining, relocation and counseling, the committee initiated a series of programs that made it possible for workers to regain employment with the State in other positions and, in a limited number of cases, to move to the private sector.

In other countries, such as the United Kingdom, the operation of these transition programs is primarily in the hands of the government agencies and the corporations involved. This is particularly true for British Steel--it also
describes the auspices for readjustment programs in France and Germany.

In the case of West Germany, the role of the union has been to influence the transfer arrangements—even though unions view the worker readjustment phase as the last line of defense, with their primary interest focussing on preventing the displacements by being in a position to influence the overall shape of business plans. However, in view of the limited effectiveness of the co-determination system, unions have tried to reach industry-wide agreements not just to compensate workers for losses or disadvantages, but to avert changes in the production system which show detrimental effects for the workers in terms of skill level, wages and job security. In other words, by a new generation of agreements unions have attempted to exert an influence directly on the number and quality of jobs.

The most significant agreements of this kind were concluded in the printing industry and in the metal industry of North-Württemberg/North Baden. The agreements include provisions of preferential assignment of displaced workers, protection from downgrading and partial wage guarantees. The ultimate objective of the union, which was to fix the average level of pay grades of the workforce, was not attained, however.
Structural Adjustment—Both an Old and a New Question

"For the promotion of the fundamental economic and social objectives of continuing economic growth and rising living standards for the population, it is important that these innovations be made as smoothly as possible with due consideration of the people involved. Policy makers and administrators of an active manpower policy are therefore challenged to design policies, programmes, services and aids which will convert negative or resisting attitudes into positive or supporting ones. To achieve this objective both the initiators of change and the policy makers should be conversant with workers' attitudes towards change and to tools available for realizing a positive attitude and behavior."¹

This statement was written by Solomon Barkin in an introductory note to an integrated survey published by OECD in 1965. This survey took up the question of how to respond to the advance of mechanization and automation in the then rapidly expanding mass production industries and the concomitant problems of fragmentation of work, social disintegration, loss of employment and loss of worker control arising in the course of this process.

Barkin's statement is still valid for today's problems. Whether change is accepted or not depends, after all, on how the changes are brought about, who is involved, and what the distribution of risks, costs and gains from the changes are. The way of doing it and the cui bono are still the most crucial

issues involved in major structural transformations. In this sense periods of major changes are alike and it is useful to recall the insights and experiences from past episodes of structural adjustments.

Yet, there are also novel elements in each phase of structural change. The nature and scale of the problem has changed. This time, more than ever before, a global process of redivision of labor is at the root of the adjustment process. And the magnitude of employment which is at risk in national economies through structural adjustment is tremendous. For example, the automobile industry in Europe which at present is threatened by the Japanese imports makes up 1/10 of total industrial production. Automobiles account for between 8% and 12% of total exports of the European Economic Community. Total direct employment is two million workers. If the supplier industry is included, then more than eight million jobs in the EEC depend on automobile production. Moreover, the social institutions, the actors involved and the level of expectation and courses of action considered legitimate are different from the 1960s.

The old solutions are no longer adequate and need to be complemented or redeveloped. To a large extent the seeming intractability of today's problems stems from the limited usefulness of previous solutions, i.e. for the policies, rules and institutional networks developed in the 1950s and 1960s to cope with adjustment problems. It is not sufficient to extend, intensify or improve previous policies and measures, or, in other words, to develop existing policies in a linear and more comprehensive fashion, in order to resolve new crises. New instruments and new social organizations are needed for an effective solution. While the social challenges raised by the spread of mass production methods could be confronted within a national organizational framework, the issues raised by a worldwide redivision of labor, by their very nature, require transnational ways of dealing with them. There are both substantive policies as well as organizational arrangements which tend to be unique to each major cycle of change.
An essential ingredient of any positive (effective) solution is to first achieve an adequate understanding of the variables which are of key importance to structural change. In this regard there seem to be a number of misperceptions floating around at present. When it comes to explaining why some countries seem to cope better than others with the current employment crisis, the arguments put forward frequently have a very subjective slant. The ultimate explanation for the differences is sought in personality traits of workers or in their openness or willingness to accept innovations. While the British worker is regarded as "bloody-minded", being very resistant to any kind of change, the Japanese worker is, in the view of many analysts, extremely docile, disciplined and willing to accept any change introduced and the hardships associated with it. This attitudinal and behavioral uniqueness is, moreover, often related to some exotic cultural elements inherent in the Japanese family and other pre-industrial social institutions.

This type of subjective explanation does not only fail to account for significant changes within relatively short periods of time in a country's productivity, competitiveness and capacity to master new challenges--one should assume that personal or cultural traits are more stable and enduring--it also disregards the interconnection between worker behavior and the social organization within which processes of change take place.

We feel that it is still the social organization which is the decisive variable responsible for how change comes about, whether sudden and abrupt like natural disasters or smooth and deliberate. And it is, furthermore, dependent on the social organization and how the risks and gains are distributed among the principal groups. Both are decisive for the question of acceptability of structural change.

The main balance to be accomplished by the organization of change is one between the kind and speed of change, on the one hand, and the security, rights and needs of workers and the needs of communities on the other hand.
Goals and Standards for Change

There are a multitude of goals by which structural change should be guided or which should be regarded as minimum requirements for positive solutions to structural adjustment. These goals should include full employment; improvement or at least maintenance of the level of wages, working conditions and fair labor standards; and finally, improvement or at least maintenance of the quality of work. These objectives should be obtained by the participation and cooperation of the major groups in the productive process in an attempt to resolve conflicts and avoid industrial warfare.

Many OECD countries have, by now, written statements including these goals in their national labor market or employment policies. For example, Section Two of the West German Labor Promotion Act lists as objectives of public labor market policies:

- to prevent unemployment and underutilization of skills and qualifications of the labor force;
- to secure and improve the occupational mobility of labor;
- to avoid, compensate and eliminate disadvantages for workers from technical and economic structural change;
- to promote the integration of physically, mentally and psychologically handicapped persons;
- to promote the integration of women, aged workers and other disadvantaged worker groups;
- to improve the regional and industrial structure of employment.

These quantitative and qualitative objectives of employment policies should be seen as points of orientation as well as standards within which active solutions to employment problems are reached.

These objectives and standards should be defined or applied not only within local or national limits, but should be extended to an international scale.
The shift of employment from the old to the new countries along with a re-
division of labor would be questionable if the competitive advantages of the
production in new countries is built on the exploitation of a weak, non-organized
labor force, on excessive working hours, and on the use of child labor. Unions
in the industrialized nations have come to resent this type of unfair compe-
tition. In 1978, the leaders of the world's free trade unions called for "social
clauses" in trade agreements. Earlier, in 1976, the World Employment Conference
stated that "the competitiveness of new imports from developing countries should
not be achieved to the detriment of fair labor standards". As yet, there is
little progress to ensure that international standards of fair labor will be
maintained.

Solutions can be seen as improper that cut down unemployment in one country
at the expense of higher unemployment in another, thus merely shifting the
problem across national boundaries. Goal definition and goal attainment should
be applied, not narrowly, but on a global scale. This is not an illusionary or
idealistic conception, but can be understood in the context of mutual interests
and gains. Thus, for example, the strategy of advanced technology and moderni-
zation of the economies as applied by the mature industrial nations will only be
successful if there is sufficient inducement, buying power and financial
strength on the part of the less advanced or younger industrial countries in
order to allow them to acquire the advanced products. Thus, the advanced coun-
tries must take into consideration and allow for positive conditions for develop-
ment in the countries which are newcomers to the industrial scene.

Coordination and Integration of Policies, Policy-Making and Implementation

To elaborate and enhance policy instruments for handling employment dis-
location situations is one major task. Another one, possibly even more urgent
and effective, is the integration of policies and measures into more compre-
hensive and coherent strategies and the coordination of policy-making and
(1) **Horizontal integration and coordination of employment and employment-related policies** - Many different policies bear more or less directly and explicitly on employment: fiscal, economic, structural, regional, industrial, technology, education and training policies. In many countries the jurisdiction or responsibility for the creation and administration of these policies rests with different agencies and groups. Both the goal-setting and the effect of the instruments are not always consistent. The policies were frequently formed in response to some very specific subproblem. Often there is no coordination of these policies in terms of an integrated and comprehensive strategy.

(2) **The need for vertical integration and coordination** - Vertical integration refers to the substantive and procedural coordination of employment policies between different institutional or administrative levels:

- across different levels within institutions or organizations, such as different levels of governments, public employment offices, trade unions and employers;
- across different levels of policy formulation and decision making bodies.

Improvement in coordination may be expected from joint local or regional task forces or labor market conferences which include representation of enterprises, unions, communities, government and the employment offices. The task force or conference would be assigned the task of developing on a local or regional level medium-term employment concepts, drawing from existing proposals as well as the given public employment programs and instruments.

The potential effectiveness of these task forces or conferences would not primarily concern new policies, but rather lie in being more responsive to the particular local or regional conditions and to the different needs and capacities of local actors and agencies. This procedure would be more workable than having
pre-fixed and rather general and inflexible solutions offered by government, which have little potential for being adjusted and, thereby, have a "take-it-or-leave-it" character. In effect, in practice this will mean some decentralization of policy-making and implementation. This should be regarded as an important complement to the need for cooperation on a centralized (international) level that is required from the globalized nature of economic problems.

The Level for Policy-Making and Conflict Resolution

The proper level on which problems and conflicts of dislocation are to be resolved is a very crucial variable; it deserves at least as much attention as the type of policies to be applied.

An argument can be made that with the shift in the nature of competition a corresponding shift in the organizational structure of policy-making has to be made to deal effectively with the social outcomes and adverse effects of competition.

More specifically, it can be argued that under the present conditions of low overall economic growth and considerable decline of key industries in many countries, the capacity for decentralized problem and conflict resolution, i.e. resolution on the enterprise level, has narrowed; and that the solution is to be found by more centralized policy-making, i.e. policies on national and international levels in line with the more internationalized nature of competition.

A more centralized containment and resolution seems to be imperative as long as cooperative solutions are to be found. Under the condition of shrinking markets and fierce competition, a winner-loser situation is very likely to emerge if the competition remains unconstrained. The winner-loser outcome is not very satisfactory, even for the surviving firm or country; for long-run opportunity for growth in all countries depends very much on the development
of international trade. A decline in trade will hit everyone, with the only difference being in the timing.

During the period of significant economic growth in Western countries after World War II, there had been a tendency for decentralization of the industrial relations systems. In part, this tendency resulted from the spread and consolidation of enterprise internal labor markets, internalizing the major labor market functions of allocation, training and pricing of labor. Along with this shift, the company or the plant became the major locus of conflict and conflict resolution; and correspondingly, both employer and union organization showed tendencies towards decentralization with the powerful organizational representation residing in the plant. Major instruments of employment policy were developed on the company or plant level, such as personnel planning. This was an adequate response as long as the problems of excess labor and redundancy, if and where they occurred, were limited to a few firms or industries and could be absorbed by sufficient demand for labor elsewhere in the economy.

The contexts for effective policies are fundamentally different if dislocation occurs on a large scale and if the prospects for displaced workers (to be reintegrated by the growth sector) are poor. In this situation, enterprises face limited capacity to deal with the problems effectively and satisfactorily from a social point of view. They still can contribute to positive remedial action by cushioning the adverse consequences of work force reduction. And they can make increased efforts for restructuring. Yet, this by itself is unlikely to eliminate unemployment.

If, as is the case at present, large scale dislocation in key industries cannot be resolved by a decentralized economic order, national economic and social interests are at stake and the problem becomes very much a concern for national governments. It becomes likely that the situation is perceived as one in which national economies compete against each other.
A crossroads situation for strategic responses emerges in this situation. Governments can choose between nationalist, uncooperative and international, cooperative solutions. Both protectionism and the mercantilist strategy of subsidization to improve the competitive position of a particular country can be seen in this light as narrow nationalist strategies, with very large potentials and risks for harmful effects in the future.

The European steel industry demonstrates how non-coordinated extensive subsidization to production through national governments can create large overcapacity and thereby increase the international competition with the risk of more protectionism to come. If, as has been the case, all countries in a stagnating or declining market promote the modernization of steel production without cutting out capacity; and if the improvement of productivity can only be achieved through technical means that lead to increased capacity; then a kind of "rat-race" competition is likely to occur.

To resolve this dilemma, international cooperative arrangements seem to be required. The general objective of this arrangement should be some planned, socially acceptable retrenchment of production capacity. Some balance has to be struck between the principle of productivity (given the widely varying state of technological advancement across firms and countries) and the principle of job security, as well as regional and community needs.

A second predicament under which centralization of bargaining and policy-making may become necessary is the growing role of multinational companies in world markets. As typified by the world car, multinational companies can quickly shift production across countries in reaction to changes in production costs and other considerations of flexibility in "sourcing". This flexibility poses problems of different sort and scale. As the relocation of production facilities often can have large employment effects, significant local or regional dislocation may arise. A second problem is posed for trade unions, who tend to
see their bargaining position undermined, given the regional or, at best, national reach of collective agreements. Under these circumstances unions will be forced to adopt an international outlook and develop more international organization in order to counter the cross-national flexibility of multinational companies. In industries like chemicals and automobiles, moves have been made by trade unions from affected countries to develop some coordinated counter-strategies.

While there is a clear need for the centralization and coordination of industrial and employment policies at a supra-national level, there is also a need for centralization on a national level. The need is the greater the more decentralized and fractionalized the national political order. Centralization is required to avert the competition among states and municipalities to attract new business and employment through tax abatement, subsidies and other financial inducements. And where the luring away merely means a corresponding loss of employment elsewhere. Only a centralized industrial policy can prevent a "beggar thy neighbor" situation.

The Integrative Approach as an Alternative to Protectionist Thinking

In order to maintain and extend the economic and social standards achieved so far through technological progress and development of trade, the avenues of structural change should not be foreclosed. This requires the industrial countries to find constructive ways out of the present economic slump and protectionist mood; it also requires further contraction of employment in many traditional sectors in the advanced countries to accommodate the new industrial capacity of the developing countries. Turning away from this premise would mean shutting off the prospect of significant mutual gains from this cooperation in the future and would aggravate the risk of further divergence and conflict between the Northern and Southern hemispheres. 1

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A major obstacle to achieving economic progress has become the divergent conditions across the industrialized nations. Thus, the difference in strategy between the countries taking a forward planning or offensive stance versus the ones turning more towards defense and conservatism can to a large extent be traced to differences in basic economic conditions. A country like Japan leans more towards the offensive approach of restructuring because it needs large incomes from export to make good for the poor terms of trade as a result of a lack of energy and raw materials. Thus, it is a natural candidate for a free trade policy. In addition it does not suffer, as yet, from very high unemployment which is likely to raise resistance to structural change. In contrast, the United States meets more resistance to change due to pockets of high regional unemployment, but it can also afford more easily a reduction in international trade due to much larger domestic product markets.

There is further the question of whether a country with a large proportion of its industry sheltered from international competition can reasonably choose an offensive strategy of restructuring. Britain, for example, would risk losing a significant proportion of employment if it would suddenly scrap public support to various industries and protection of employment. Adjustment in industry was already lagging in the 1960s. Slow growth and repeated currency depreciation have further reduced the contribution of the production sector; deindustrialization has continued after the oil crisis of 1973.

At the same time it is clear that continued subsidization of the troubled industries in many nations, without plans and timetables for attrition, will spur the great danger not only of extending the life of non-competitive and very costly operations but, as is indicated at present in parts of the European auto and steel industries, may also lead to further overcapacities and consequently to very painful or brutal solutions at some future point.
A way out of this zero-sum game appears to be the multi-lateral negotiation of production agreements (with the effect of avoiding the rat race of national subsidization of production in declining product markets) with arrangements for sharing the cost of capacity cuts. Such agreements would have to find socially acceptable compromises between the interests of the declining and growing national industries, or between the principle of productivity and costs on the one hand and the principle of security of workers on the other hand. A reasonable solution could be a planned coordinated retrenchment of capacity to a scale which is more in line with long-run market prospects and, at the same time, modernization and/or specialization of the remaining operations with higher competitiveness emerging.

Such an approach through international negotiation and international agreement must include the following elements:

1. An agreed time-table for an orderly, socially acceptable process of shrinkage to cushion the social impact of the decline and to give lead time for alternative employment and redevelopment of the affected areas;

2. An agreement on the joint sharing of the costs of the solution. This will be inevitable if all the affected countries are to participate in the accord;

3. Agreements have to be worked out on the macro-level, i.e. some accord has to be reached on a central level by national governments or industries on the scope and shrinkage of production capacity and the restructuring of the remaining facilities; and agreement has to be reached on the micro-level of the individual companies, balancing the interests of management and labor, and the interests of business and the community.
The integrative approach—the difficulties—How difficult such international accords may be in view of vastly different conditions is illuminated by the crisis plan in which about 15% overall cut of steel productions capacity was agreed upon by the EEC steel producing countries on November 2, 1980. The negotiations proved very protracted due to different interests involved. The productivity and technological advancement of the steel mills diverges considerably across the EEC countries. Consequently, the countries clashed on the principle of equal sharing of the capacity reduction versus the principle of tailoring the capacity cuts according to the productivity and modernity of the operations.

The integrative approach—the potential—Efforts are under way by the European Economic Community and the EEC Parliament to come up with a common strategy to resolve the growing crisis of the automobile industry in the member states. In contrast to the recent regulation reached for the steel industry, the solution in the auto industry is to be less interventionist and include more cooperation between national auto producers.

One component of the strategy would be the encouragement of Japanese auto makers to exert voluntary self-restraint in exports. Thus, a European delegation of auto companies visited Tokyo at the end of January 1981, to convince the Japanese that moderation of the export drive would be to the mutual benefit of Europe and Japan.

The "internal" component of the crisis strategy would be the development of EEC-wide industrial and social policies for the auto industry. The plans include joint research and development, co-production and joint ventures to lower the costs through economies of scale (at the same time finding ways to meet environmental standards). In terms of cooperation in the social policy area, plans provide for joint efforts for training and retraining, mobility of labor, and new arrangement for working time and worker retirement. The costs of the social measures would be paid out of European Social Funds.