WORKING PARTY ON STRUCTURAL ADJUSTMENT
AND TRADE POLICY

Exchange of Information on the Experience of all Contracting Parties with Regard to Structural Adjustment

Addendum

1. At the meeting of the Working Party on Structural Adjustment and Trade Policy on 2 July 1981, it was agreed that the secretariat should invite all contracting parties to provide by the end of 1981 the information required in paragraph II(b) of the Annex to L/5120, taking into account the objectives outlined in paragraph I of the Annex and the work already done (L/5177, paragraph 10). Paragraph II(b) of the Annex to L/5120 states that one of the tasks to be undertaken is "consistent with the GATT and the results of the MTN, an exchange of information and discussion on the experience of all contracting parties with regard to structural adjustment, along with an overall analysis of the experience".

2. Contracting parties were invited in GATT/AIR/1742 of 13 July 1981 to provide the requested information. The submission of the United States is reproduced in the Annex to this document.

3. Some participants have underlined that, with a view to the usefulness of the exercise, they attach considerable importance to the fact that all members of the Working Party fulfil their obligation and make written contributions. These participants have also indicated that they would be prepared to participate in an examination of their contribution in the Working Party only when notifications of the other contracting parties participating in the Working Party have also been received.

4. Delegations which have not yet submitted information are requested to do so as soon as possible.
UNITED STATES

PAPER SUBMITTED BY THE UNITED STATES TO THE GATT WORKING
PARTY ON STRUCTURAL ADJUSTMENT AND TRADE POLICY

I. Introduction

Domestic and international policymakers increasingly are focussing their attention upon the need for structural adjustment and upon policies for achieving adjustment. No nation can afford to waste scarce resources by resisting the economic changes required to achieve the most efficient allocation of resources. All nations share the objective of increasing the living standards of their respective societies. Structural adjustment can contribute to the achievement of this goal.

Economic developments during the past several years have provided additional impetus to policymakers' concern with adjustment issues. Clearly, the most important factor has been the tenfold increase in the price of petroleum over the past seven years. An increase of this size in the price of a commodity that affects virtually every aspect of production cannot help but trigger the need for broad and deep adjustments in a nation's economy. The prices of other important commodities (e.g., copper, aluminium, sugar, coffee and cocoa) also have fluctuated widely in recent years, causing both producing and consuming nations to adjust policy directions. In addition, there have been rather sudden and dramatic shifts in relative growth rates of individual sectors among countries, in part reflecting the emergence of the newly industrializing countries (NICS) as increasingly competitive producers of manufactured goods. Many countries have found it difficult to accommodate such realignments of international production patterns. In part, these changes have resulted from a sharp acceleration in the movement of some factors of production, including technology, within and among countries, which ensures that innovations and other changes in one economy are felt quickly in other economies.

While these factors have focussed greater attention on the need for timely adjustment, the difficulty of adjusting has been increased by the recent slow-down in overall economic growth in many countries, particularly in the industrialized countries. The temporary dislocation of factors of production that occurs during structural adjustment becomes much more difficult to manage when the prospects for re-employment of these factors are diminished by sluggish macro-economic performance.

United States view of structural adjustment

Open market economies are best able to respond efficiently to secular changes in the domestic and international economies. In such economies, structural adjustment is a continuous process that is the outcome of millions
of individual decisions by workers, managers, owners and investors. Moreover, in large diversified economies such as the United States, most of the adjustment occurs within the domestic economy. Certainly government policies have an important effect upon the overall economic climate and upon the range of alternatives facing individual economic factors, but the Government is not the principal agent of change in an economy with such diffused economic decision-making. In fact, the rationale for this decentralized form of economic organization is that it offers a favourable environment for ensuring timely adjustment to economic change.

The actual operation of market economies is not always as smooth as theory predicts; governments often take steps to resist, diminish or divert market forces when those forces threaten the achievement of other important social, economic, and political objectives. Nevertheless, the record of market economies in facilitating structural adjustment has been impressive. A few examples from the United States experience illustrate this point.

Labour is the resource whose movement or lack of movement seems to attract the most attention in international discussions of structural adjustment. During the past two decades, the United States economy has accommodated very large shifts in the composition of employment. For example, in 1960 manufacturing accounted for 31 per cent of United States non-agricultural employment, and services accounted for 13.6 per cent; by 1979 the share of employment in manufactures had fallen to 23.4 per cent, while the share in services had risen to 19 per cent. During the same period the share of employment in durable goods fell from 17.5 per cent to 9.3 per cent. The data are even more striking when one examines individual industries or product categories. Substantial absolute declines in employment have occurred during the past twenty years in leather and leather products (-123,600 workers), basic steel products (-165,500), food and kindred products (-108,100), textile mill products (-68,600), tobacco manufacturing (-24,300), petroleum and coal products (-23,200), and most dramatic of all, agriculture (-2,625,900). Meanwhile, employment has expanded significantly in non-electrical machinery (+747,200 workers), electric and electronic equipment (+637,600), rubber and miscellaneous plastics products (+376,600), fabricated metal products (+381,500), scientific instruments (+250,300), printing and publishing (+312,500), and finance/insurance/real estate (+2,240,600). Labour market changes of this magnitude

1 The other non-agricultural sectors and their respective shares of United States non-agricultural employment in 1979 are as follows: wholesale and retail trade (22.5 per cent), government (17.4 per cent), transportation and public utilities (5.8 per cent), finance, insurance and real estate (5.5 per cent), construction (5.2 per cent), and mining (1.1 per cent).
are not the mark of an economy that is resistant to structural adjustment, nor have these adjustments been costless to all elements in society. In addition, it must be remembered that changes in the occupational mix of the labour force are not the only form of structural adjustment in employment; equally dramatic changes in the geographic distribution and sex composition of labour have occurred simultaneously with the inter-industry adjustment.

Labour is not the only factor of production that must be reallocated in response to change. Vastly different rates of growth in capital stock among various industries demonstrate that investors have rearranged their resources to effect structural adjustment. From the mid-1950s to the mid-1970s, for example, gross capital stock (in constant dollars) increased at an average annual rate of 11.8 per cent in electronic components and by 9.4 per cent in machine shop products but increased by only 0.7 per cent in footwear, 1.8 per cent in primary iron and steel manufacturing and 1.8 per cent in fabric, yarn and thread. These statistics do not amount to a comprehensive appraisal of the United States economy's capacity for structural adjustment, but they do suggest that a high degree of government direction is not necessary to achieve very substantial structural change.

Trade flows have contributed importantly to these changes, as evidenced by the facts that the ratio of United States imports to final sales of goods increased from 9.3 per cent in 1970 to 21.2 per cent in 1979 and the ratio of United States exports to final sales of goods increased from 9.3 per cent to 17.3 per cent during the same period. Furthermore, as shown in charts 1 and 2, the developing countries have nearly doubled their share of United States imports of manufactures during the past decade. Whereas United States imports of manufactured goods from developed countries grew at an average annual rate of 1.6 per cent between 1970 and 1979, manufactured goods imports from developing countries grew by 25.2 per cent per annum. In selected consumer goods categories, the shift in sources of United States imports has been even more dramatic. Chart 3 depicts the growing importance of the developing countries as suppliers of United States imports of various labour-intensive consumer goods. Again, these trends do not prove that the United States has adjusted to the optimum extent, but the data do indicate that the structure of production, employment and trade has undergone substantial change during the past ten years in directions that are consistent with intuitive notions of the changing international pattern of comparative advantage.

A major factor in the realignment of international production has been the continuing trade liberalization conducted under GATT auspices. Substantial tariff cuts during the 1960s and 1970s, have provided an

---

1The average annual growth in United States nominal GNP during the same period was 10.3 per cent.
environment in which industrializing countries of the third world encounter progressively more open world markets for their new production capabilities. As a result of the Kennedy Round, the United States average tariff on industrial products fell by approximately 35 per cent, and it is expected that United States industrial tariffs will fall an additional 32 per cent during the MTN implementation period. The agreements on non-tariff barriers will help to prevent recourse to NTBs for protection as the tariff barriers fall. If trade flows are to continue to serve as prods to structural adjustment in all countries, it will be necessary to maintain the momentum of liberalization that was achieved during the MTN.

Investment plays a central rôle in the process of adjustment, both domestically and internationally. The extent to which private investors are permitted to select investment opportunities from the full range of economic activities and locations will determine in large measure the extent to which adjustment proceeds efficiently. Capital is more likely to be available, of course, if the trading opportunities are apparent and are not foreclosed by trade restriction, but capital flows also can be impeded or distorted by investment restrictions and incentives imposed by host countries. These investment incentives (e.g. subsidies) and trade-related investment restrictions (e.g. export performance and local content requirements) are as much an obstacle to efficiency-promoting structural adjustment as are trade barriers. Both sets of policies are designed to divert investment from those activities and geographic areas that market forces would indicate to be the most efficient uses of scarce resources.

While free trade and unrestricted capital flows are the major ingredients in a theory of successful structural adjustment, all governments have social and political responsibilities that cannot be ignored and that may cause them to interfere with the free flow of goods and factors of production. Developing countries have important goals of diversifying their economies, providing remunerative employment for rapidly growing populations and meeting basic human needs. Likewise, developed countries have responsibilities to address issues of poverty and economic or social disadvantage in their own societies. All countries face difficulties in distributing the burdens of adjustment equitably among the various elements of their societies. Thus, it is not possible for any country to pursue structural adjustment purely in accordance with neoclassical economic theory.

II. United States industrial adjustment

General policy

Structural adjustment occurs in the United States every day, seldom with much public notice, largely as the result of thousands of decisions independently arrived at by individuals and enterprises. Measured against
the change provoked by this self-interest, little adjustment has been brought about by government prodding or assistance, particularly in that part of the economy loosely categorized as the industrial sector.

The economic philosophy and tradition of the United States explains why this is so. The forces of the market, not the hand of Government, have always been accepted as the principal determinants of United States economic development and performance. For this reason, the United States Government has relied primarily on macroeconomic policies and undifferentiated microeconomic policies to influence the course of industrial development and change. Of course, the Government importantly shapes the environment within which industrial activity takes place through its antitrust, trade, and regulatory policies. Undeniably, the consequences of these laws and policies bear more heavily on some industrial sectors than others.

Still the intent of United States Government is not to shape industry characteristics independent of market forces, and market competition is the first principle against which industry-related public economic policy is judged.

These considerations bear upon the Government's attitude toward structural adjustment. The United States Government accepts the notion that structural change is essential to maintain a healthy industrial sector, but rejects the notion that federal intervention should be a primary agent inducing such change. Still, United States policy and experience is generally consistent with the principles of structural adjustment. The United States has long sought to avoid policies or actions which would discourage the flow of resources from less productive to more productive sectors within the economy. It has also been our policy to avoid permanently sheltering inefficient domestic industries from the pressures of import competition.

This is not to suggest that every United States action is consistent with these broad policy objectives. There is no denying that the United States has been subject to increased protectionist pressures, just as have most other GATT member States. A rising level of manufactured imports, especially over the last decade, has created major adjustment demands on our economy. There is also no denying that there are areas where federal policies have been designed to blunt adjustment pressures or to benefit specific groups or sectors of the economy.

Moreover, growing imports of manufactured goods in sectors in which the United States has traditionally enjoyed great strength have not been the only source of increasing pressures for adjustment. Rising incomes leading to changes in spending patterns, the emergence of new technologies,
the continuing flow of labour from the farms to urban and suburban areas, major population shifts between regions of the country, the sharp rise in the level of federal regulation over the past decade, and, most recently, the unprecedented increase in the price of energy have all been factors which have severely tested our adjustment capabilities.

The United States experience: an historical perspective

In the last several decades structural adjustment has been commonplace within the manufacturing sector. The adjustment has occurred in response to changes in basic conditions in the domestic and international economies. For the most part, the adjustment reflects the operation of market forces, not directives by the United States Government. However, there have been a number of Government policies - for example, programmes to reduce international trade barriers, and to control environmental pollution - that have necessitated changes in the behaviour of manufacturing firms.

The following are a few of the most notable structural adjustments that have occurred in the manufacturing sector:

- within the industrial sector overall employment has grown more rapidly in non-manufacturing sectors than it has in manufacturing. Manufacturing accounted for only 24 per cent of total non-agricultural employment in the late 1970s compared with 32 per cent in the latter half of the 1950s.

- Employment has declined sharply in some individual manufacturing industries but has grown in others. During the 1960s and 1970s, for example, there were major reductions in employment in steel, textile mill products, leather footwear, tobacco, petroleum, and coal products, and food and kindred products. Major increases in employment occurred in instruments and related products, rubber and miscellaneous plastics products, electronic components and accessories, and drugs.

- Most of the growth in the manufacturing sector has occurred outside the older industrial areas of the country. The southern and western states experienced substantial increases in manufacturing employment during the 1960s and 1970s, but manufacturing employment declined in the Middle Atlantic States and remained unchanged in New England.

- Despite substantial reductions in manufacturing employment in several of the major metropolitan areas, total employment has generally increased in these areas. For example, in the New York area, employment in manufacturing fell by almost 25 per cent, whereas total employment rose by about 15 per cent between 1957 and 1978.
- There has been a movement of resources, including human resources, out of many of the manufacturing industries in which import competition has increased over the years. For example, employment fell 16 per cent between 1967 and 1976 in the case of a sample of industries in which imports as a per cent of new supply rose by 5 percentage points or more in the 1967-76 period and in which imports accounted for at least 10 per cent of supply in 1976. In contrast, manufacturing employment as a whole declined by 4 per cent between 1967 and the recession year of 1976.

- The manufacturing industries which have been strong competitors in export markets have generally experienced greater than average growth in employment. For example, employment grew by 4 per cent from 1967 to 1976 in the case of a sample of industries in which exports accounted for 10 per cent or more of domestic output in 1976 and exports as a per cent of domestic output rose by 5 percentage points or more in the 1967-76 period. This contrasts with the 4 per cent decline in employment in manufacturing as a whole in that period. Export and employment growth were especially strong in the 1967-76 period in oil field machinery, medicinals and botanicals and vegetable oil mill products.

- Pollution abatement programmes have recently had major effects on several manufacturing industries. For example, in the period 1975-78, capital expenditures for pollution abatement accounted on average for 15 per cent of the annual capital outlays by the primary metals industries and 13 per cent of the capital outlays by the paper industry.

- Some increase has occurred over the years in the proportion of the total manufacturing jobs held by women. This increase has not been as great, however, as the increase in the proportion of all non-agricultural employment accounted for by women. In the period 1964-78, there was an increase from 26 per cent to 30 per cent in the proportion of manufacturing employment accounted for by women. The comparable figures for non-agricultural employment as a whole are 34 per cent for 1964 and 41 per cent for 1978.

Even casual observation of the basic economic forces at work within the United States domestic and the world economy at large suggests that certain predictable structural changes should be occurring in the United States. The trends identified above, though hardly conclusive evidence, confirm that the United States, with little in the way of government prodding, is adapting to these basic economic forces.

Federal Government action

Broad economic adjustment policies: the economic recovery programme

Necessary structural adjustments in response to pressures such as technological advance, regulatory reform, and increased energy prices are especially difficult to take in an environment characterized by slow economic
growth. The United States - like many of its major trading partners - has experienced slow economic growth in recent years, with severe declines in the rates of investment and productivity growth. In response to this situation, the current administration is implementing a programme for economic recovery.

The economic recovery programme aims at creating a more stable, healthy economic environment in which necessary structural adjustments can occur without direct government intervention. The programme is designed to restore vitality to the industrial sector by increasing saving, stimulating investment, reducing inflation and - in turn - improving the rate of productivity growth and increasing international competitiveness. The programme has four major elements:

1. Budget reduction. The programme will reduce the proportion of GNP consumed by government spending. Reductions in the Federal budget will ease pressure on capital markets, and allow more resources to go into productive investment, without fuelling inflation.

2. Tax reduction. The programme lowers both individual and corporate tax rates. Such cuts are intended to stimulate saving and productive business investment. Acceleration and simplification of the depreciation schedules, increased R & D deductions and further liberalization of the investment tax credit also are directed at increasing business investment.

3. Regulatory reform. The programme is reducing the excessive regulations imposed on the industrial sector. Such actions will increase the attractiveness of investment opportunities by reducing future operating costs.

4. Monetary policy. The programme supports the Federal Reserve's efforts to establish stable growth in the money supply and restore healthy financial markets. Such a policy is necessary to reduce the high rate of inflation which has been a major deterrent to investment.

Trade-related adjustment policies

The United States Government has, in addition to its general policy, legislated two responses to special adjustment problems resulting from foreign trade competition: escape clause relief or safeguard mechanisms, and trade-adjustment assistance. While these are notable as exceptions to the general "hands-off" trade and economic policy, it is important to note the intentional consistency of their detail and administration with our overall free-trade policy.
Escape-clause relief

Background of the United States escape-clause experience

The escape clause in trade agreements has a long history in the United States. In the 1940s, under Presidential direction, an escape clause was included in bilateral trade agreements to allow either government to suspend tariff concessions if it was later found that the concessions had the effect of "prejudicing an industry or the commerce of that country".

In 1951 when Congress passed the Trade Agreements Extension Act of 1951 the escape clause ceased being a subject of executive policy and became a law. Section 7 of the Act contained the first escape-clause law establishing procedures and conditions for withdrawing tariff concessions previously granted by the President. The Act was amended twice, in 1955 and 1958, and rewritten as Section 301 of the Trade Expansion Act of 1961. It was rewritten again as Section 201-203 of the Trade Act of 1974.

Under the current escape clause law, Sections 201-203 of the Trade Act of 1974, firms, trade associations or groups of workers representing an industry may petition the United States International Trade Commission (USITC), an independent governmental agency composed of six commissioners, for import relief. Upon receipt of such a petition, the USITC investigates the background facts; holds a public hearing, during which any interested party may present evidence focusing upon the question of whether increased imports are causing or threatening "serious injury" to the industry; decides whether there is injury or threat of injury caused by imports and issues a report on the case. If the Commission decides there is injury, it must also recommend a remedy. If, on the other hand, the Commission determines that there is no injury or threat of injury, the case is terminated.

In cases where the Commission finds injury, or when it divides equally in a tie vote, the final decision as to whether to provide import relief is

---

1 The USITC, formerly called the Tariff Commission until 1974, was created in 1916. It is a quasi-judicial, fact-finding body.

2 The criteria used for determining injury or threat of injury are: (1) with respect to a threat of serious injury: a decline in sales, a higher and growing inventory and a downward trend in production, profits, rates or employment (or increasing underemployment) in the domestic industry concerned; (2) with respect to serious injury: the significant idling of productive facilities in the industry, the inability of a significant number of firms to operate at a reasonable level of profit, and significant unemployment within the industry.
left to the President. His choices are to accept the Commission's recommendation for import relief, not to grant import relief, or alternatively to grant relief but alter the remedy recommended by the Commission. In making his decision the President can choose between a tariff increase, a quota, a tariff-rate quota, an orderly marketing agreement, or any combination of these measures. He may also opt for adjustment assistance instead of import relief, or in conjunction with import relief.

Whatever he decides, the President issues a public statement explaining his decision. If the President chooses not to implement the Commission's recommendation for import relief, he must promptly report his reasons to Congress. Under the law, Congress has the option of responding with a concurrent resolution, passed by a majority vote in both houses of Congress, ordering that the Commission's recommendation take effect.

Since 1951, when the United States escape-clause procedures were established in law, 183 investigations have been instituted at the Commission (see Table 1). Of these, 166 investigations have been completed and seventeen discontinued. The commissioners found injury or were equally divided in a split vote in seventy-six cases, and the President proclaimed import relief in twenty-seven of the cases. Congress has never overridden a Presidential decision not to follow the Commission's recommendation.

The escape clause and adjustment

While the rôles of the USITC and the President in administering the escape-clause provisions have remained essentially the same since 1951, the specific provisions of the law have changed considerably with regard to the ease with which industries may qualify for relief, and the duration, type and degree of relief available to the injured industry. To some extent these changes reflect the enhancement of the rôle of adjustment.

Originally the purpose of the escape clause was to provide a means of avoiding or remedying injury caused by trade agreement concessions. The remedy was considered a temporary emergency measure and not a permanent change in the United States tariff schedule. To emphasize the temporary nature of escape-clause relief, industries receiving protection under the escape clause in the 1950s and 1960s were reviewed annually to determine if they still needed relief.

The President is directed to take into account: information and advice from the Secretaries of Labor and Commerce with regard to adjustment assistance; the probable effectiveness of import relief as a means to promote adjustment; the industry's efforts to adjust import competition, actual or potential; the effect of relief on consumers; United States international economic obligations; social consumers; United States economic obligations; social and economic costs which may be incurred by taxpayers, communities and workers if import relief were, or were not, provided. The President may also take into account other considerations which he deems relevant.
In the current Escape-Clause Law, Section 201-203 of the Trade Act of 1974, the causal link between increased imports and trade agreement concessions was removed. At the same time, however, the role of adjustment in the escape clause was enhanced by several provisions of the law:

1. A petition for escape-clause relief must include a statement describing the specific purposes for which import relief is being sought, which may include adjustment facilitating the orderly transfer of resources to other uses and other means of adjustment to new conditions of competition.

2. As an alternative to import protection, the USITC can recommend that trade adjustment assistance be expedited.

3. To the extent feasible, import relief for a period of more than three years shall be phased down, beginning not later than the end of the third year, and the duration and phasing out of relief can be related to adjustment.

4. In considering whether import relief is in the national interest, the President must consider the effectiveness of the relief to promote adjustment in the injured industry.

5. During the period of protection (which can last for a maximum of five years plus, with renewal, three more years), the Commission is directed to review the "progress and specific efforts made by the firms in the industry concerned to adjust to import competition".

6. In advising the President on whether to renew the relief, the Commission is required to consider the progress and specific efforts made by the industry to adjust to import competition.

To describe how the escape clause facilitates "orderly adjustment to import competition", adjustment itself must be defined. Generally speaking adjustment to imports can take two forms:

1. A contraction of the injured industry to a size at which the survivors are competitive, or

2. A modernization of the injured industry in which it improves its performance and becomes competitive without contracting.

For a contracting industry, temporary protection softens the impact of import competition and provides time for the redeployment or retirement of the factors of production. If modernization is possible, escape-clause relief provides a temporary respite from competition to develop and implement more efficient production processes.
An example of the adjustment orientation of the escape-clause provisions in the Trade Act of 1974 can be observed by looking at some of the cases. For example, the colour television industry first received import protection in 1977 in the form of an orderly marketing agreement with Japan, and the OMA protection was extended to Taiwan and Korea in 1979. In its review of the case in 1980, the Commission found that the industry had partially adjusted to its import injury and recommended that the OMA with Japan be dropped. The Commission found that during the three years of protection, the industry had cut costs and become more competitive with imports by reducing the domestic use of labour. This was accomplished by transferring some of the labour-intensive processes overseas and by automating others. The President accepted the advice of the USITC and terminated the OMA with respect to Japan. The OMAs with Taiwan and Korea were extended for two more years after which they also will expire.

Another case which demonstrates the adjustment orientation of the escape clause is non-rubber footwear. Since import relief began in 1977, imports of non-rubber footwear stabilized. Also employment declines slowed while profitability returned to a level close to the average of all United States manufacturing industries. As a result, when the President considered extending the period of protection in 1981, he chose not to continue the import relief.

2. Trade adjustment assistance

Foreign trade pressures have resulted in the creation of a United States Government programme where the goals of a structural adjustment policy - at least in principle - have been clearly articulated: Trade Adjustment Assistance (TAA). Trade Adjustment Assistance aids firms and workers in adjusting to increased international trade and competition.

Trade Adjustment Assistance in the United States was first provided under the authority of the Trade Expansion Act of 1962, on the premise that unemployment and market disruptions from liberalized trade should not be borne unaided by particular sectors of the economy. The act provides federal relief on a systematic basis to trade-injured firms and workers. In addition, to aiding firms and workers to adjust to new conditions of international competition, the act also had a clear thrust towards fostering structural change through a number of provisions aimed at assisting the orderly transfer of resources to alternative uses.

The administrative procedures specified in the Trade Expansion Act proved so cumbersome, however, and the conditions for qualifying for assistance so difficult, that little relief was actually granted during the first twelve years of the programme's existence, and little adjustment was effected. Largely in response to the perceived shortcomings of the programme,
the Trade Act of 1974 provided for substantial changes in trade adjustment assistance, principally through liberalizing eligibility requirements and simplifying application procedures.

Eligibility for firm assistance under the TAA programme is determined after the injured party submits petitions for certification. It must be established that the workers have been laid off or the business has suffered a drop in sales or production, and that imports of like or competitive articles have been an important cause of either the layoffs or the production drop. Importantly, firms within industries, or workers from firms within industries, are eligible targets for trade adjustment assistance.

As a general rule industries themselves, however, are not, save for some limited exceptions such as the footwear industry, TAA is not directed at solving problems on an industrywide basis. Rather its targets are the discrete elements of an industry.

The trade adjustment assistance program for firms, managed by the Commerce Department's international trade administration, provides for two kinds of assistance to cost of specialized consultants who help businesses with marketing, engineering, management and related studies. This money may be used for projects ranging from the design of better plant layout to a study of the feasibility of diversifying product lines. Technical assistance may also be used in the development of long-range adjustment plans, although most funds to date have centered on short-term projects. The second type of aid available to firms comes in the form of financial assistance, through which the federal government provides direct loans or loan guarantees for working capital, new machinery and equipment, new or renovated buildings, and similar purposes. Because of limitations on loan and loan guarantee amounts, trade adjustment assistance is oriented towards small firms. It is not a programme to effect structural change among large enterprises.

The TAA programme also provides assistance to communities affected by import-related job layoffs and plant closures in the form of grants to help plan for readjustment, help restore necessary infra-structure, and attract new industries. In fiscal year 1979, approximately $4.5 million in federal funds went to trade-impacted communities. The department of Labour administers the TAA programme for workers.

Background on adjustment assistance for workers

Congress establish the special programme of worker adjustment assistance in the belief that the federal government bears a special responsibility toward workers adversely affected by increased imports resulting from federal policies to encourage foreign trade. These policies may bring about
dislocations that differ somewhat in nature from dislocations due to other causes. Congress believed it necessary to provide a level of worker and firm assistance somewhat beyond what is available through state unemployment insurance or business assistance programmes.

During the tea period (1962-1975), only about 54,000 workers were certified as eligible for benefits. Total outlays for worker adjustment assistance certifications issued were about US$85 million.

**Assistance under the Trade Act of 1974**

In the Trade Act of 1974, the Congress sought to improve access to the worker adjustment assistance programme and to speed up the certification and benefit delivery process. The resulting worker adjustment assistance programme went into effect on 3 April 1975 and has a statutory termination date of 30 September 1982. Responsibility for the programme is centred in the Labour Department and qualifying criteria were substantially eased over the Trade Act of 1962. Under the Trade Act of 1974 by 30 September 1981, approximately 1.3 million workers were certified as eligible for benefits. Total outlays for trade adjustment allowances for certified workers were almost US$4 billion through 30 September 1981.

A petition for a certification of eligibility to apply for adjustment assistance may be filed with the Secretary of Labour by a group of workers or by their certified or recognized union or other duly authorized representative. If the requirements are met, a certification for adjustment assistance is issued by the Labour Department.

Under the 1974 Act the Secretary of Labour certifies a group of workers as eligible to apply for adjustment assistance if he determines (1) that a significant number or proportion of workers in such workers' firms or an appropriate sub-division of the firm have become totally or partially separated, or are threatened to become totally or partially separated, (2) that sales or production, or both, of such firm or sub-division have decreased absolutely, and (3) that increases of imports of articles like or directly competitive with the articles produced by such workers' firm or an appropriate sub-division thereof contributed importantly to such total or partial separations, or threat thereof.

Workers certified as eligible for adjustment under the 1974 Trade Act could receive:

1. A weekly trade readjustment allowance (TRA) for up to fifty-two weeks.
2. A full range of services offered by state employment security agencies, including testing, counselling, job placement and supportive services.
3. Training to acquire new skills or upgrade current skills in order to become suitably re-employed.

4. Job search allowances to seek employment within the United States if an unemployed worker cannot be expected to find satisfactory employment within the commuting area.

5. Relocation allowances for expenses incurred in moving to another locality to obtain employment.

Workers in a wide variety of industries have been certified under the Trade Act. Product groups most heavily represented since the programme's inception include: steel, automobiles, apparel, footwear, and electrical and electrical machinery. See table 3 for details.

Certified workers continued to utilize available service benefits in fiscal year 1981. About 1,800 workers were approved for relocation allowances, an increase of 186 per cent over fiscal year 1980; and some 1,400 workers were given job search allowances, up 50 per cent from 1980. Approximately 19,000 workers were referred to training, an increase of 100 per cent from the previous year.

Current programme

A number of significant changes in the programme of worker trade adjustment assistance occurred 1 October 1981, as a result of the Omnibus Budget Reconciliation Act of 1981 which amended the Trade Act of 1974. These changes represent a major programme reorientation away from income maintenance and towards adjustment to alternate employment for the long-term import-impacted unemployed. Reduced income maintenance benefits and stricter criteria for worker eligibility (which will apply to petitions filed after 9 February 1982) will result in sharp declines in import competition assistance as a separate programme.

The administration expects that an improved economic climate will help ease the adjustment problems of all workers, including those affected by imports.

The new programme sets forth stricter eligibility criterion: imports must be "substantial cause" (not less than any other single cause) of unemployment or under-employment. The new programme also provides lower weekly payments, and shorter payment period for trade readjustment allowances. Further, it aims at providing more effective placement services and other employment benefits at the disposal of unemployed workers with fiscal year funding set at US$25 million.
Given the facts that a revitalized TAA programme has only been in effect since April 1975 and that the bulk of activity under the programme, particularly on the firm side, has occurred in the past three years, few data exists which can provide a conclusive indication of TAA's overall effectiveness in encouraging structural adaptation. The goal of fostering structural adjustment has been clearly articulated throughout TAA's legislative history. Most analyses establish that TAA has aided in easing the short-term consequences of economic decline on individual firms and workers. Few, however, establish that TAA has resulted in substantial structural readjustment.

Industry specific adjustment

In addition to these policies that affect the adjustment process, there have been a few occasions of political and economic necessity when the United States Government has directed structural adjustment efforts toward specific industries. The steel, footwear and auto industries provide three examples of federal assistance to industries in the process of adopting to economic change.

1. The steel industry

This section summarizes the United States' principal policies and programmes currently affecting trade in steel products, and structural change within the domestic steelmaking industry. To provide proper perspective, the current policies and programmes should be viewed within the context of the long-term trends of the domestic steel industry.

From 1965 through 1981, total steel industry employment has declined from 584,000 to about 394,000 workers. Raw steel capacity increased from 139 million metric tons in 1965 to 145 million tons in 1977. Since then, capacity has declined to 141 million metric tons in the fourth quarter of 1981. The long-term decline in employment and the more recent decline in capacity have resulted from a basic restructuring programme that has been self-initiated by United States steel companies. The programme has included substantial plant closings and both the elimination of unprofitable product lines and the modernization of other facilities. Production and employment data suggest the programme is beginning to take effect. Although steel mill product shipments in 1976 and 1981 were in the 79 to 80 million ton range, total monthly average employment has declined from 454,000 in 1976 to an estimated 394,000 in 1981.

In 1977, just as the United States economy was recovering from the 1974-75 recession, growth in world steel demand slackened. A reduced volume of steel output in the United States, led to severe financial difficulties
among several domestic steel producers. One firm declared bankruptcy and closed its only plant. In addition, three other plants were closed by two major companies. As a consequence, a federal task force was formed to review the problems of the United States steel industry.

In December 1977, the task force recommended (in the "Solomon Report"), and the President approved, a comprehensive programme to assist domestic producers. The centrepiece of the programme was the creation of the "Trigger Price Mechanism" (TPM), a system that went into effect in February 1978 to identify possible sales of imported steel at less than fair value. If imports enter below the trigger price, the Department of Commerce (Department of the Treasury, before January 1980) examines the transactions to determine whether an anti-dumping or countervailing duty investigation should be initiated.

Trigger prices are based on the cost of producing steel in Japan plus the costs of bringing the steel to the major importing regions of the United States. They are calculated using data from public sources and confidential data submitted by Japan's Ministry of International Trade and Industry. Japan's steel industry was chosen because it is generally considered the world's most efficient. Basing trigger prices on the product cost of Japan's industry results in the lowest and, therefore, least restrictive trigger prices consistent with the United States anti-dumping statute.

The TPM was suspended in March 1980 pending adjudication of a major dumping complaint by the United States Steel Corporation, and reinstituted in September 1980 when the complaint was withdrawn. The TPM is considered a transitional mechanism to operate over a limited period during which the steel industries of the United States and certain foreign countries are expected to make substantial progress in the modernization and restructuring of their industries. The TPM is scheduled to terminate in October 1985.

Safeguard actions

On 14 July 1976, import restraints were imposed on certain stainless and alloy tool steels (i.e. certain specialty steels), for a three-year period in the form of a negotiated orderly marketing agreement (OMAS) with Japan and quotas for other foreign suppliers. The OMAS were imposed under the authority provided in Section 203 of the Trade Act of 1974. This safeguard action was consistent with Article XIX of the GATT, and appropriate notice was provided. These restraints ended on 13 February 1980.

The purpose of the specialty steel import restraint programme was to remedy the serious injury to the domestic specialty industry caused by large import quantities. Over the period of import relief, domestic specialty steel conditions improved and the restraints stimulated domestic industry investment.
for modernization. There was a 50 per cent increase in capital expenditures for modernization of melting and production facilities that was directly attributable to the import restraint programme.

**Domestic industry policies**

With the adoption of the Solomon Report, the United States Government also put in place several programmes to assist the domestic steel industry in the areas of restructuring and modernization. As in the past, however, the United States' Government is not presently pursuing policies to sustain domestic steel production or to stimulate steel production in times of weak demand.

**Adaptation of production structure through modernization, closures and reconversions**

One past United States' Government effort to aid the steel industry restructuring consisted of a loan guarantee programme. The loan guarantees, limited in total to an amount of US$550 million, were extended to steel firms that: (1) have plants located in areas of existing or threatened high unemployment; and (2) are unable to acquire conventional loans from private capital markets. This programme was established in February 1978, and is administered by the Economic Development Administration (EDA) of the Department of Commerce. To date, EDA has approved five loan guarantees totalling US$365 million.

Private participation, firm participation, and market interest rates are important principles underlying this programme. The actual loans were funded by private lenders to privately owned steel companies. The United States Government could guarantee up to 90 per cent of the lender's funds. However, it required the firm to have a 15 per cent participation in the project funding. The loans were made at the prevailing interest rates for preferred customers in the private capital markets. In view of current budgetary constraints no additional loans are anticipated. It should be noted, however, that the steel industry will benefit from the administration's economic recovery programme.

In addition to the industrial loan guarantee economic recovery programmes, there are two other United States' Government policies or programmes affecting adaptation of production structure. One of these is a programme of technical studies funded by a US$1 million grant to Lehigh University. The subjects of the various studies include: (1) an evaluation of the potential for adoption of new steelmaking technologies, and (2) identification of alternative uses for closed steel facilities.

The other concerns United States anti-trust policy. Certain provisions of United States anti-trust laws are relevant to the issue of adaptation of production structure. These provisions (of the Sherman and Clayton Acts)
forbid a broad range of anti-competitive practices such as agreements among competitors to fix prices, allocate customers, divide marketing territories or product lines, and limit production or conduct boycotts. They also forbid monopolization or attempted monopolization of markets. United States anti-trust laws do not impinge upon the ability of individual steel firms to close facilities or alter production levels. However, these laws prohibit collusive actions among steel industry firms; they also proscribed mergers or acquisitions among steel firms the effect of which may be to substantially lessen competition in any market. Thus, as a result of United States anti-trust law and policy, the United States steel industry cannot set production or capacity on a co-ordinated industry basis. Rather, changes in industry structure are the result of independent actions by individual firms.

Re-adaptation of labour

Under the Trade Adjustment Assistance (TAA) programme, workers in the steel (and other) industries who are totally or partially unemployed as a result of increased imports receive trade readjustment allowances, job search relocation allowances, and can avail themselves of manpower services. The TAA programme is administered by the Department of Labour and co-operating state employment security agencies under the provisions of the Trade Act of 1974.

Through November 1981, 140,000 workers in the steel industry had been certified as eligible to apply for TAA. Since April 1975 (when the current TAA programme began), over US$340 million in TAA benefits have been paid to steelworkers.

In addition to TAA benefits, unemployed members of the United Steel Workers' Association (USWA) are also eligible for assistance under bargaining contract. These include: (1) Supplemental Unemployment Benefits (SUB) which augment federal government cash allowances and are intended to help steel workers withstand temporary unemployment pending recall, (2) relocation allowances, and (3) provision for early retirement. These USWA programmes are financed by employers without public finance or support.

Industry status

The steel industry shipped an estimated 80 million metric tons in 1981, representing only a moderate recovery from the depressed level of 76.1 million tons recorded in 1980. After a relatively strong first half, the demand for steel declined sharply in the last half of 1981 and the industry’s operating rate was under 60 per cent in the November-December period, compared to an average of about 77 per cent for the year. Despite the slow recovery from the 1980 recession, the industry continued its restructuring programme and has announced new capital investments amounting to US$5.5 billion.
2. The footwear industry revitalization programme

While the programme has ended, footwear provides a good example of federal involvement on a comprehensive basis in support of an industry clearly suffering from import competition. Building on a TAA base, which provides assistance to individual firms and workers, the footwear programme announced by the Department of Commerce in 1977, goes beyond TAA's discreet elements and directs federal funds in support of a number of industry-wide programmes. The goal of the footwear programme was to revitalize the American shoe industry, and to the extent possible, enable it to become competitive by international standards.

The domestic footwear industry - characterized by many small firms, low capital investment, rising input costs and decreasing productivity - had been in the process of structural adjustment for some time prior to the start of the programme. This process was characterized by a decline in United States production and an increase in imports, accompanied by a reduction in United States production capacity, profits, and employment.

The Footwear Industry Revitalization Programme (FIRP) was designed to modernize the manufacturing and marketing operations of the domestic footwear industry (including individual firm needs in these operational areas) and to undertake broader initiatives to confront the structural problems of the industry as a whole. The programme was designed to operate for three years at a total federal cost of US$56 million with shared funding responsibilities on the part of individual firms. Federal funding for FIRP was provided as part of the overall trade adjustment assistance programme. FIRP was initiated in conjunction with the negotiation of Orderly Marketing Agreements (OMAS) with Korea and Taiwan in June 1977 in order to provide a temporary period during which industry adjustment could proceed.

The co-ordination of a domestic industrial revitalization programme with temporary import restraint constituted a new approach in government assistance to industry. FIRP also differed substantially from previous adjustment assistance efforts in that it was industry specific; emphasized heavily technical and managerial assistance at the firm and industry level, in addition to financial assistance; and addressed industry-wide problems rather than only those of individual firms.

Headed by a specially created footwear industry team within the United States Commerce Department, the programme embodied several measures designed to revitalize the industry. One measure provided an expanded and more effective programme of trade adjustment assistance within commerce. The Department made a concerted effort to make firms in the industry aware of the benefits available under the Trade Act of 1974, and to expedite the Department's processing of petitions and applications for loans. As a result of these efforts, 126 firms applied for certification to receive adjustment
assistance as of May 1980, shortly before the end of the programme, and 100 of those were certified eligible for technical and financial assistance. Only thirty-one footwear firms had been certified by TAA in the fifteen years prior to the start of this programme.

Another part of the revitalization programme provided for government and industry co-operation in the form of specialist teams which supplied individual firms with technical assistance with the goal of greater operating efficiencies. This assistance could centre on problem areas in operations, technology, marketing or management. By May 1980, 153 of these projects had been started, and many firms have become more modernized and viable as a result.

As a means of extending and continuing technical assistance, the Department of Commerce worked with industry representatives in implementing a feasibility study designed to establish an American shoe centre. The centre would offer various services in research and development, testing, training, and education. The Department provided a one-time US$2 million start-up grant to the American shoe centre in the first half of 1980.

Another major part of the domestic programme was export promotion, an area virtually ignored by most United States manufacturers and which constituted a small portion of total sales. The footwear industry team and the American Footwear Industries Association joined in exploring opportunities for increased sales overseas, especially in Europe. This resulted in an export increase of more than 1.5 million pairs in 1978 over 1977. By the end of 1980, overseas sales had increased by 141 per cent from 1977. Exports in 1980 represented 3.4 per cent of United States production, a small amount but considerably more than the one per cent that had been the traditional level of exports.

The programme funding for the revitalization programme expired on 30 July 1980 and the footwear industry team has been disbanded. The results of the programme have been modest to date, but important achievements have been accomplished, and aspects of the programme will remain. The American Shoe Centre has begun operation in Philadelphia and participation by the industry in the Centre has increased steadily. Recently, the Centre has merged with the American Footwear Industries Association, the major industry trade representative. The new organization, known as Footwear Industries of America, will have a larger membership and include more functions. It will take several years to determine to what extent it receives the support of, and furnishes benefits to, the domestic industry. The export promotion programme will continue to operate within the Department of Commerce through the office of export promotion, but with a greater reliance on the industry for organization and funding. Plans are going ahead for American participation in several trade fairs in Europe as well as exploratory efforts in Latin America. In view of the gains achieved in export promotion in the three years of the programmes, the Department and industry look toward continued and greater success in the immediate future.
The Omas with Taiwan and Korea expired on 30 June 1981, one year after the domestic revitalization programme. Although the industry requested an extension of these Agreements, the President, after reviewing ITC advice and the views of his economic advisers, decided that the industry had shown reasonable signs of stability and some progress, and could continue to do so under the administration programme for economic relief.

Programme results

It is too early to assess either the effect of the recently enacted programme to help businesses or the loss of import relief.

3. The automobile programme

The package of policy measures directed at the domestic automobile industry, which was announced on 6 April 1981 represents the most recent attempt at sectoral-specific federal assistance. These policy measures are designed to complement or replace earlier government efforts to assist the nation's depressed automobile industry during a period of major structural transition. Developed as part of a comprehensive programme for domestic economic recovery, the auto package consists of actions in the areas of federal tax, regulatory, and workers adjustment policy as well as a trade monitoring programme.

During the past few years, the auto industry has been challenged by two serious developments. First, the oil price shock of 1974 and 1979 provoked a dramatic shift in consumer preferences toward small, fuel-efficient vehicles. While the auto industry has undertaken a massive investment programme to redesign its entire fleet to achieve better fuel efficiency, domestic capacity to produce small vehicles initially fell short of consumer demand. As a result, consumers turned increasingly to imported models during the past few years, with serious negative consequences for output and employment in the domestic industry.

Second, depressed economic conditions during much of 1980 and 1981 contributed to the decline in domestic automobile sales, production and employment, and thereby jeopardized industry recovery efforts. Sales of domestically-made cars were approximately 6.6 million units in 1980 and 6.4 million units in 1981, down significantly from the 9.2 million units sold in 1978. The number of indefinite layoffs at the five largest United States auto companies peaked at 250,000 workers in August 1980 and fluctuated between 150,000 and 200,000 workers during 1981. An estimated 650,000 additional workers were laid off by independent suppliers of the domestic auto industry during 1980 and 1981. Given the present economic outlook, a significant increase in industry sales and employment is not expected until the second half of 1982.
Auto industry programme

On 6 April 1981 the Government announced a programme to support industry and labour in their efforts to revitalize the depressed United States automotive sector. At the centre of this programme are tax and other policy measures designed to create the stable macroeconomic conditions that the auto industry needs to implement its own recovery plans. (See section on economic recovery programme.) In view of the industry's important economic rôle and the unusual circumstances surrounding its current difficulties, the Government has also adopted a more direct sectoral approach to encourage meaningful structural adjustment. Included in this effort are actions to reduce unnecessary regulation of the industry, make worker adjustment assistance programmes more effective, and monitor imports of passenger cars from Japan.

Principle elements of the auto relief programme include:

Direct financial aid

- The business tax provision of the President's economic recovery programme, which are effective as of 1 January 1981. These provisions permit both faster depreciation of buildings and equipment for tax purposes and the sale of accumulated tax credits and depreciation deductions under a special sale/lease back arrangement.

- Reorientation of the trade adjustment assistance programme to emphasize training, job search, and relocation benefits in order to encourage more effective adjustment efforts by unemployed workers.

Indirect financial aid

- Revision or elimination of thirty-four federal environmental and safety regulations to prevent further diversion of scarce industry resources from critical uses such as plant modernization. Approximately half of these regulations were revised or rescinded during 1981. Some of these will immediately reduce motor vehicle production costs, while others will have a more gradual effect.

- Elimination of prohibitions against the exchange of confidential information concerning emission control devices, certain co-operative research ventures, and joint presentations by the auto companies before regulatory agencies.

Automobile programme results

Since most elements of the auto support programme were only implemented during the second half of 1981, their effect on the industry's performance cannot be assessed at this time.
III. United States agricultural adjustment

Farming in the United States has become increasingly dependent on skilled labour, specialized machinery, chemical inputs and borrowed capital. It has also become more concentrated. In 1977, there were half as many farmers as in 1950. Twenty-five per cent of all producers generated more than 85 per cent of all cash receipts that year. These changes were encouraged by, but have also made more necessary, the adoption of adjustment policies - policies that encourage the specialization of agricultural output in line with comparative advantage.

Economic development and structural change in United States agriculture

Agriculture was once the dominant influence in the United States economy. It contributed a large proportion of the national output and employed most of the nation's people. Most of America's farms were self-sufficient in both labour and capital. As the population expanded and the industrial sector grew, a shortage of labour became the major problem facing agriculture. In response, labour-saving machines were developed to expand food and fibre production on the available land. Most of these machines were developed by the private sector, stimulated by patent laws which allowed inventors to reap the major economic benefits coming from their discoveries.

The adoption of such labour-saving machines, in combination with the closing of the western frontier around the turn of the century, led to rising land prices. Increasingly United States agriculture relied on the adoption of technology designed to reduce the need for land - primarily those technologies that increased yields.

In contrast with the labour-saving machines, land-saving technologies were more directly influenced by the Government through the Land Grant University System\(^1\) and the United States Department of Agriculture - including the co-operative federal-State extension service. These public institutions assumed the high costs of developing and then disseminating the new technology - costs that private entrepreneurs might not have assumed due to their high risk and often unpatentable nature.

The development and subsequent adoption of labour and land saving technologies increased the use of capital in United States agriculture. The capital-labour ration increased eightfold between 1940 and 1979, much of it occurring since the mid-1960s. Chemical use in agriculture has increased 50 per cent since 1967. Mechanical power and machinery use has increased 20 per cent.

\(^1\) In the mid-1980s the United States Government provided each State with a land endowment in return for an agreement to establish a university that was dedicated to furthering the development of mechanical and technical science including agriculture.
These adjustments were associated with changes in the number, size, and production characteristics of United States farms. There were nearly seven million farms in the mid-1930s. The number then decreased rapidly to about 2.7 million in 1978. Two thirds of those remaining have sales of less than $20,000. The 50,000 largest farms (less than 2 per cent) account for 36 per cent of all cash receipts. For practical purposes, there are fewer than 700,000 commercial farms in the United States today.

The post 1930s transformation of United States agriculture to an industrialized sector has been impressive. Although the direct contribution of farming to United States gross national product has declined two thirds since immediately prior to World War II, it has stimulated considerable economic activity in the processing and distribution of food products and production inputs. Export markets, once treated as a residual, now exert considerable influence on income distribution, factor returns, and market prices in the farm sector. Policies affecting labour, capital and financial markets in the general economy affect conditions in the farm sector more than in previous decades.

These changes did not "just happen". Primarily by easing the major constraints limiting productivity improvements, government policies encouraged the resource adjustments that have taken place in both product and factor markets. The interactions between government policy and the resource adjustments which occurred during the past four decades are analysed in the section which follows.

Major policies influencing positive adjustment

Research and education

The success of government policies supporting agricultural research and education is partly reflected in the productivity index of United States agriculture. That index doubled between 1940 and 1979.

During the 1940s, the diffusion of new technology enabled productivity to increase 20 per cent in response to wartime and post-war food needs. The introduction of hybrid seed which increased United States corn yields 32 per cent during the 1940s was an important factor. The use of improved seeds and other technological innovations accelerated during the 1950s enabling productivity to grow another 27 per cent. Productivity increases then slowed to 11 per cent during the decade of the 1960s.

The decade of the 1970s is accurately described as volatile for all agricultural economic indicators, including productivity. A corn blight infestation in 1970 caused a 16 per cent decline in yield that year. In
1971 per hectare yields increased 22 per cent on 12 per cent more area. Then, in 1974, corn yields plummeted again, falling 22 per cent. Since then, United States crop production per hectare has increased each year, on average by more than 4 per cent per year. These increases, though, were mostly a consequence of excellent weather.

Increases in total productivity during the decade of the 1970s were also partly illusionary. A cattle herd liquidation from 1975 though 1978 contributed to the increase. Significant increases in broiler production also influenced increases in productivity and were aided by the relatively high beef prices in 1978 and 1979.

The increasing use of capital in agriculture during the post-war years meant that labour could be released for work in other sectors of the economy where its relative marginal contribution was higher. Employment in agriculture declined from 15 per cent of the total population in 1950 to under 4 per cent by 1976.

Outmigration was, however, impeded by the relatively poorer education among farm youth. Consequently, progressive education programmes were initiated in rural areas, including school consolidations and modernizations. Although these programmes have not entirely alleviated the educational disparity between farm and non-farm youth, they have improved the prospects of rural youth finding non-farm employment.

The transfer of labour out of the farm sector was also facilitated by a national commitment to achieve full employment. When excess capacity in agriculture was severe during the early 1960s, full employment in the general economy helped expand the non-farm labour market and was critical to the absorption of excess agricultural labour. Employment in agriculture has declined 20 per cent since 1967, a period of relatively high employment.

Price and income support programmes

Since the turn of the century, increased productivity has generally expanded agricultural output at a rapid rate relative to demand and has put downward pressure on prices. Following World War I, the pressure for government protection against price declines increased. Actions undertaken during the 1920s were not successful, however, mainly because they did not control production. In 1932, the net income of farm operators was one quarter of what it had been during World War I.

The Agricultural Adjustment Act of 1933 - the first comprehensive farm legislation - aimed to restore the purchasing power of agricultural commodities. Mandatory supply control programmes were authorized in order to support market prices at a level that provided an equality of exchange value consistent with the 1910-14 period, i.e. at 100 per cent of "parity".
Farm income increased more than 50 per cent during the next three years mostly a consequence of the government supply control programmes. But the increases in income were costly in a broader sense — crops were ploughed up before harvesting and in 1933, more than 6.4 million hogs were slaughtered and removed from regular marketing channels.

The supply control provisions of the Agricultural Adjustment Act of 1933 were declared unconstitutional in 1936. The mandatory nature of those programmes and visible waste they generated proved to be unacceptable as a way of supporting commodity prices. Even so, that Act established a framework for government policy in agriculture that continued for the next thirty-five years. Indeed, certain features of the Act remain in force today.

A new programme emphasizing the use of non-recourse price-support loans for farmers participating in voluntary supply controls was put in place in 1938. Acreage allotments and marketing quotas cut planted acreages considerably, but increasing yields per hectare (partly a consequence of hybrid seeds) resulted in generating large surpluses. Direct government payments were 35 per cent of net cash income in 1939. Only the exceptional demand for food in foreign markets during the war and post-war period delayed the need for further policy adjustments.

Excess capacity and restricted demand resulted in large stocks of major farm commodities following the post-war period.

In response, the real level of the price support loans was allowed to decline and new programmes to reduce production were put in place. Price support loan rates were allowed to fall still lower in real terms during the 1960s but, in return, price-support payments were made to producers who participated in even more extensive land retirement programmes. By the end of the decade, labour and land resources in agriculture were about in balance with domestic and export needs at the prices supported by government policy.

Following the dramatic changes in the international market after the 1972 Soviet crop shortfall, the Agriculture and Consumer Protection Act of 1973 set new directions to the process of adjustment in United States agriculture. Farm policy in the United States shifted from less reliance on the Government to more reliance on the market price to allocate products and factors. Instead of relying on rigid price supports to bolster farm income, a system of target prices and direct payments to farmers was established to provide minimum income protection. Market prices were thereby allowed to fluctuate in a manner that permitted adjustments toward equilibrium. Target prices gave the producer and consumer a greater degree of flexibility in adjusting to changing world market conditions rather than hindering their adjustments by distorting market price signals.
The Food and Agriculture Act of 1977 continued the evolution of United States Government policies toward resource flexibility in the farm sector. This legislation authorized farmer-owned grain reserves, which now allow grain stock to be managed in a way that reduces the nation's vulnerability to inflationary price stocks caused by crop or livestock shortages. Under the reserve programme, farmers are provided non-recourse government loans and storage payments in return for holding grain stocks from the market when prices are depressed. Farmers may not redeem the loans or sell reserve stocks within the contract period (usually three years) without penalty unless market prices reach a certain percentage of the loan rate (the "release" price). At that point, the Government ceases storage payments and farmers are allowed, but not required, to repay the loan. If market prices reach a higher percentage of the loan rate, the loans are "called"—that is, farmers are required to repay the loan or forfeit the grain.

The programme minimizes the likelihood that market prices will rise above the "call" price because grain is released from the reserve in stages. Thus, available supplies are balanced with changes in demand without the wide price fluctuations that disrupt planning and create increased volatility in agricultural production. Since market prices are allowed to move below the government target prices, there is less likelihood that grain reserve stocks will become excessive, even if there are successive record harvests.

The new grain reserve mechanism works in concert with other farm sector policy tools. The loan rate takes on increased importance as an "orderly marketing tool" providing loans to farmers during harvest time when market prices are typically the lowest. But it also serves as a source of cash for meeting current-year expenses when farmers put grain in the reserve. Direct income payments, tied to the target prices, continue as the primary way of giving grain farmers the income protection they need to continue even in years when good weather and subsequent bumper crops would be expected to depress market prices. If supplies become temporarily excessive, acreage-set-aside programmes can still be used to reduce production and hold government budget outlays to acceptable levels. This co-ordination of farm policy tools has been an important positive adjustment.

There are no trade protective measures either with regard to imports or exports. The United States acquires and releases its grain reserves in an open market in response to both domestic and international supply and demand.

Still, the transition to a market-based agricultural economy is not yet complete. Milk price supports continue to be based on the concept of "parity" which does not easily reflect changes in demand or productivity. Complicated rules still govern the minimum prices that must be paid for milk in the various geographic regions. Peanut and tobacco producer decisions are still heavily influenced by government actions regarding poundage and/or...
acreage allotments. And United States sugar cane and sugar beet producers still receive price supports to protect them from depressed conditions in the world market price for sugar.

The rationale governing the operation of these programmes continues in the pre-1973 mode—that is, income protection comes from government supported market prices rather than from direct transfer payments. In each instance, the Government stands ready as the buyer of last resort. In order to avoid government ownership of large surpluses, production is controlled either directly with acreage or poundage restrictions or indirectly with restrictions on the domestic production or importation of competing products.

Some progress is, however, being made in moving these commodities into more direct market competition for resources. The Peanut Programme, for example, was changed substantially in 1977 by the adoption of a two-step price support system. Poundage quotas are now established at a level that about matches the anticipated demand for the higher value edible peanuts at a support price that covers full cost of production. A separate, and lower, price support is established for "additional peanuts"—peanuts grown on the allotted acreage but in excess of domestic edible requirements. Price supports for these peanuts are set at a level that allows peanut-oil products to compete with other oilseeds. While further adjustments still appear desirable, some important progress has been made. The edible peanut poundage quota has been reduced 14 per cent since 1977. In real terms, the level of price support has been reduced 16 per cent since then and is now at a level about consistent with full costs of production.