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Domestic or Regional Price-Income Policies for Farmers in Relation to International Trade

A common feature of agricultural policy and of trade policy is that well established economic principles in both areas are more often violated than in other fields of economic activity. Both policies in the domain of agriculture are closely interrelated and frequently the deviations from economic standards in agricultural policy are the cause for distortions of trade policies for agricultural products. The interdependence of both fields of policy have attracted extensive consideration due to the increased importance that agricultural policy has regained in the process of economic development in many parts of the world, and due to the substantial shifts that throughout the past decades occurred in the direction of international trade flows of agricultural products.

Under the contraints of space and time for presentation given for a paper at this conference it cannot be expected that the agricultural and trade policy problems can be taken up in full detail. Difficulties in coping with this topic are enhanced by the basic differences that exist in the policy approach under different economic systems and at different stages of economic development. The antagonistic poles being represented by market economies and centrally planned economies on the one hand, and by the degree of industrialization and overwhelming reliance on agriculture on the other. Moreover, there exists a large body of literature pertaining to both agricultural and trade policies where theoretical as well as operational aspects have been treated in every possible detail. Finally, problems of both areas of interest have been recurrent themes of contributions to previous conferences of this association such that most participants are well aware of many of the relevant details. The paper, therefore, concentrates on a discussion of policy objectives, characterizes the policy performance of important countries or regions and tries to summarize the impact of growth and equity. This takes into account the basically different position and tasks of the agricultural sector in industrialized and developing countries.

OBJECTIVES OF PRICE-INCOME POLICIES

Agriculture, as any other economic sector, is required to contribute to economic growth and to make the necessary adjustments to achieve optimal growth. Agricultural policies, therefore, should be designed to facilitate this process by providing guidance for positive adjustment. That is, policies with respect to agriculture need to be considered in relation to broad economic objectives and action taken in the pursuit of agricultural policy objectives have to reconcile the macroeconomic conditions and constraints under which the economy is operating (OECD, 1965). It is widely accepted that optimal recourse allocation throughout all subsectors of an economy is a prerequisite of economic growth and economic welfare. Efficient resource use is a fundamental issue because ultimately the level of efficiency determines what incomes society has available to pursue its objectives. There are, however, basically different views with respect to the type of economic system that is most appropriate to achieve optimum efficiency.

Countries with market economies operate on the basis of liberal doctrine and under a system of decentralized decision-making, that is, the basic decisions are taken by individuals and the market forces help to co-ordinate them. Principally, thus, the interaction of prices, costs, profits and losses should determine what is produced and how the rewards are distributed. Under this perception the pricing mechanism fulfils the basic task of product valuation, resource allocation and distribution of income and does also provide the necessary incentives for dynamic change and growth. Theory suggests that in this way the most efficient resource use and optimal distribution of factor income is to be attained, given that certain assumptions hold.

Protagonists of centrally planned economies hold that the complex economic decisions cannot be left to the vagaries of the market because not only efficient allocation of resources is impossible to achieve in this way but, as a consequence, the distribution of rewards would be inequitable and unjust. Therefore, the production objectives, the methods employed and the distribution of income have to be determined by the central government.

In economic reality neither of the two approaches is practised in all its rigour. Especially in market economies many exemptions from pure economic requirements are made on the basis of equity and social justice considerations and with the objective of counteracting imperfections of the market system in these areas. Agriculture is a case in point. There is hardly any country with completely free markets for agricultural products and perhaps no other group of products for which market policies deviate more strikingly from the principles of the free enterprise system. The specific features of the agricultural sector including its dependence on natural conditions, the fact that food is a fundamental human requirement and the adjustment pressure which dynamic economic growth exerts especially on farm labour create special efficiency problems. In addition, agricultural markets over time have shown considerable price instability with consequential low returns to resources employed in the farm sector. Differential income levels and income distribution have raised concerns about equity within and between farm and non-farm sectors.

In *developed market economies* the questions relating to income levels, income growth and equity for the rapidly declining agricultural populations is at the root of the farm problem. Most of the complex agricultural price/income stabilization and support programmes of industrialized countries focus on the farm income objective with formulations such as:

- to attain a level of real income for farm labour equal to that earned by comparable labour in other sectors of the economy, or
- to offer equality of economic and social opportunity for farm people.

Agricultural price/income stability is also seen as a contribution to general economic stability and frequently it is argued that the rate of change of major economic variables has to be kept within socially acceptable bounds. This is, however, to be achieved with the efficiency objective in mind. The programme objectives, therefore, do not fail to require also:

- to achieve a pattern of production that will make the most efficient use of farm resources in meeting the demands and needs of the consumer.

Finally, food and in particular the regular provision of national food requirements from domestic sources is considered as a matter of national security. It has to be maintained, therefore, even at a cost (Heidhues, 1979).

For the OECD countries the broad objectives which constitute the common framework of agricultural policies have been formulated as follows (OECD, 1975):

- the level and distribution of incomes accruing to farmers;
- the stability, adequacy and safety of the supply of basic farm products to consumers at reasonable prices;
- the productivity and efficiency of farm production and marketing;
- the contribution to balanced regional development and safeguarding the environment;
- the contribution to macroeconomic objectives relating to economic growth, balance of payments, inflation and employment.

These objective are often complemented at the national level by other objectives which reflect the special problems of individual countries. Agriculture is often considered as a major factor contributing to rural infrastructure including non-agricultural needs.

In *centrally planned economies* the decision processes and planning priorities usually are not discussed in public. But it is quite evident that ideologically motivated Marxist objectives have preference over other economic and social objetives. In the area of agricultural policy overriding ideological motivations have led to the collectivized structure of agriculture in these countries. Within this framework the planning objectives in the agricultural sector so far have been uniquely directed towards production and productivity increases.

In the *developing countries* agricultural policy objectives are cast in the equally broad perspective of economic development and thus depend very much on the respective stage of development. In the early stages of take-off, agriculture is the most important sector of the economy and progress in growth and development depends heavily on the performance of agriculture. The overriding goals, therefore, encompass expansion of agricultural output and exports, substitution of imports, accumulation of productive capital and the provision of a pool of labour for sectors other than agriculture. In later stages when sustained growth or semi-industrialization are achieved, policy emphasis should change towards acceleration of growth and increases of productivity. It is at such stages that problems of social equity, which play such a dominant role in the agricultural policy formation of developed countries, are gaining weight. The arising conflicts can become especially severe when food price policies that are no longer consistent with the state of development are pursued further. Interference with agricultural prices for purposes other than agricultural development is characteristic of the agricultural policy situation in many of the developing countries. As specific objectives the following are frequently encountered:

- price intervention in agricultural product markets either to extract from agriculture the capital required for industrial growth or to raise government revenues;
- high cost for agricultural inputs to protect domestic industries;
- provision of low cost food for urban consumers.

Specific income policies for the agricultural population in developing countries are rarely found.

TRADE POLICY OBJECTIVES

Trade policies comprehend all national and international measures that affect the conditions for commodity exchange among countries. The national attitudes towards international trade largely determine whether trade flows are allowed to move more or less unrestrictedly or not. Within a setting of liberal trade policies it is expected that:

- the expansion of international trade on the basis of economic specialization and division of labour leads to higher levels of welfare in the participating countries;
- co-operative solutions to important international economic and political problems are arrived at (Johnson, 1950).

It has been shown that these general objectives need not be in contradiction to national agricultural price income goals (Johnson, 1950 p. 8).

The liberal trade stance is supported by a considerable body of elaborate theories (Bhagwati, 1981; Chenery, 1961). Based on the principles of comparative advantage and under logical, consistent and rather general assumptions it has been proved many times that there are gains from allowing nations to trade and that restrictions in the free movement of goods ultimately lead to losses of welfare. Empirical evidence, especially in the post-World War II period with high growth rates in the volume of world trade and sustained economic growth, also supports the hypothesis that free trade conditions contribute to economic welfare. This extends also to the developing countries which, on balance, have profited much from favourable trading conditions. The specific advantages of pro trade policies for the development process over and above the expansion of output and subsequent income gains through specialization and improved utilization of resources are to be seen in:

- utilization of scale economies;
- introduction of new products, new technologies, new opportunities for learning and improvement of human capital;
- stimuli and pressures from international competition which can be a major source of motivation.

On the other hand, there are diverging developments. For one thing it is not to be overlooked that actual trade policies of the majority of countries participating in international trade have become more protectionist. At the same time scientists have become more restrained to generalize the policy and welfare implications of their theoretical findings (Corden, 1974; Schuh, 1981). It is recognized that the general proposition always to expect positive gains from trade cannot be upheld in all circumstances. Moreover, the awareness has grown that neoclassical trade theory is preoccupied with problems of allocative efficiency and has more or less neglected questions of distribution and equity (Warley, 1976).

INTERRELATION OF AGRICULTURAL AND TRADE POLICIES

There is a basic conflict between agricultural price-income policies and liberal trade policies. To the extent that agricultural price policies are designed to maintain certain price levels independently from developments in international markets, interference with international commodity flows becomes unavoidable, that is price support schemes with prices fixed above world market prices cannot work without trade interventions for the respective commodities. With the aim of stabilizing the domestic price level and to prevent repercussions of world market price fluctuations on the domestic market a considerable arsenal of policy instruments is available to bridge the gap between the differing price levels. Domestic markets can become almost completely isolated from price movements on world markets and price competition between domestic and international supplies may become almost eliminated.

Thus, the level of protection has become one of the basic factors in the determination of agricultural production and this in turn determines what possibilities exist for international commodity flows. The methods used to bring about protection in this connection have a decisive influence on the degree of competition as well as on stability in international markets. The way in which protection is granted determines whether foreign competition may or may not exert an influence on the volume and price levels of national agricultural production. In this respect over time a gradual escalation towards higher and more sophisticated forms of protection has taken place. Up to the 1920s import tariffs were the commonly used trade policy instruments. Tariffs basically increase the import value but are rarely prohibitive and do not level out the impact of price fluctuations from external markets. Beginning in the world economic crisis of the 1930s agricultural protection increased in scope and effectiveness. Governments began to introduce a number of other trade regulating instruments, among them import quotas and export subsidies as the most prominent. Later on these were followed by deficiency payments and the famous variable import levies and export restitutions (Bale and Lutz, 1979). This had the primary effect that the chances for arbitrary and discriminatory action became greatly enhanced. Effective protection of any desired degree became a practical reality. Secondly, the possibility of trade protection for export products weakened the political support for a liberal trade policy (Johnson, 1950). The incentives for protection of the agricultural sector in total were considerably increased by the inclusion of export commodities.

While the instruments are available it still makes a difference whether and in which way they are used. A distinction can be made between short-term price stabilization efforts and permanent price support schemes.

Short-term price stabilization aims at eliminating erratic fluctuations of market prices while following more or less the underlying long term price trends. If carried out properly such policies permit farmers to make resource allocation and production decisions according to the long-term market price perspectives. Such price stabilization schemes which make only limited use of subsidies can support farm incomes in periods of depressed international prices and may thus avoid a serious deterioration of existing production and export potentials. The preservation of a country's agricultural potential can be considered as positive with respect to an international division of labour and resource allocation.

The influence of permanent price support measures on trade is more serious, since lasting distortions of allocation and production are to be expected. The experience of countries that have adopted such policies have shown that domestic support prices tend to be fixed above market clearing prices. Therefore, agricultural production is attracting more production resources and the resulting volume of production is higher than otherwise would be the case. Higher production in combination with tight import controls has negative effects on the volume of trade. Moreover, in cases where high domestic price levels have led to high surplus production there is a tendency to dispose of such surpluses on international markets by means of public support. This then leads to trade disturbances to the detriment of other exporters. The result is not necessarily a larger or smaller volume of trade but primarily a problem of distorted competition between domestic and foreign producers. In addition governments have tended to supplement or substitute price policies by more selective aids of a structural, regional or environmental character, which have counteracted more cautious price policies to a considerable extent. More recently proposals to replace price policies by direct income transfers to farmers have come into discussion in order to reduce the supply stimulating effect of price support while maintaining the relative income position of producers. Direct income support measures, however, are likewise hardly production neutral. This is evident in such cases where the payments are linked with the volume of production or with the use of certain factor inputs. But, unless the level of direct income support is restricted to guarantee a bare minimum existence, undesired production and allocation effects result also from schemes where support is extended on a personal basis.

In total, therefore, it can be summarized that as far as the price income policies of developed market economies are concerned these often have the effects of shifting the disequilibria from the factor markets to the product markets. In the absence of supply control measures the combined results often lead to increased instability in international agricultural markets and to distorted competition among the participants in these markets. On the other hand there is little indication that the adjustment problems in the agricultural sector are diminishing. It is known that only under very narrow short term conditions can trade restrictions lead to positive economic effects. In the long run, almost inevitably, protectionist measures will result in losses of economic efficiency. The incentives for structural adjustment are reduced so long as the price distortions are maintained and support prices guarantee higher returns and higher incomes than competing non-protected production. Under the influence of agricultural policy objectives stated earlier many countries evidently are prepared to accept such losses of economic efficiency and there are prospects that such tendencies may, with the advent of slower growth and more constrained labour markets, even become more pronounced.

As a consequence of development strategies prevailing over the last decades the internal agricultural terms of trade in developing countries in many cases turned against agriculture (Johnston, 1970). The domestic agricultural policies of most of these countries were designed to lower the prices of food and agriculture products and to increase the prices of manufactured products. Import and export controls, foreign exchange policies, taxation, direct price and other market control measures, such as restrictions of interregional commodity flows, have been used as instruments for such purposes. The underlying economic rationale was mainly based on the assumptions that:

- small-scale agricultural producers are not very responsive to price incentives and that large-scale farmers would benefit most from higher prices;
- higher food prices would adversely affect the low income urban consumers;
- policies that result in low agricultural prices and increase prices of industrial goods will result in more rapid economic growth and in the end lead to an improved distribution of income.

Nowadays every one of these assumptions has become severely questioned. More and more it became apparent that as a result of such policies the potential of the agricultural production capacity remains underutilized and that lagging agricultural output increasingly constitutes an impediment to overall economic growth. The reduced rate of food supply is the most important reason why, in the long run, low price policies tend to be of limited success in reaching their primary purpose, that is to enable a rapid industrial growth through provision of sufficient low price food, the major wage good in a low income economy (de Haen, 1981). Opportunities to improve developing countries' positions in the export markets cannot be exploited fully because of insufficient supply. Within the agricultural sector, employment may become restricted when price relations are biased against labour intensive products. Finally the desired distributional effects may not work out as expected. For one thing, low prices increase the rural-urban income gap and the benefits from low food prices frequently do not reach the urban poor but serve to increase profits and/or improve the income situation of the middle and higher income groups. By now it is also sufficiently documented that agricultural aggregate output is more responsive to price incentives than sometimes was postulated (Schultz, 1978). Based on such evidence a number of countries have initiated a reorientation of their respective price policies which is leaning more towards efforts to co-ordinate agricultural, trade and development policies.

POLICY PERFORMANCE

We find today that the problems arising out of increasing agricultural protectionism are at least of as much concern among developed countries as they are affecting the relations between developed and developing countries. The EEC has emerged as a major importing region for agricultural products, whereas the North American countries nowadays are the main suppliers of exports of temperate zone products. The developing countries have a tendency to fall back to their role of suppliers of tropical products. As a rather new phenomenon the central plan countries have appeared as regular customers on the international markets of temperate zone agricultural products.

The Common Agricultural Policy of the EEC is known to be protectionist in character. Its objectives have been pursued primarily through policies of product price maintenance. While trading interests of third countries have not been entirely overlooked, they have been subordinated to the objectives of improving the economic and social position of farmers in the member countries. To this end, community farm prices have been set at levels in general above those prevailing for the same or comparable products on world markets. The predominant use of variable import levies as an instrument of agricultural protection has effectively isolated internal prices from the influence of external supplies. Imports from third countries have thus been forced into a position of residual supplies. As a consequence there has been a tendency within the community to give producers incentives for the increase of production which has resulted in an increase of export surpluses of such products that could not be sold on the internal market at the going market price. The system of protection is, however, not all comprehensive. A number of important import products are not or only minimally protected, among them vegetable oil and protein, certain feed products, agricultural raw materials and tropical products. This has contributed to the strong import position of the EEC in total agricultural trade. In international negotiations the EEC has adopted the position that expansion of agricultural markets must occur within the framework of a regulated international trading régime. Emphasis has been put on stabilization by long term agreements and access to supplies. External attempts to press for changes of the domestic farm support system have been resisted vehemently.

Other Western European countries have similar agricultural structures. The agricultural and trade policy approach, therefore, is not basically different from that of the EEC. The instruments used differ in scope and intensity but not in direction.

In the United States the core of the farm policy has been to find acceptable solutions whereby farm income objectives can be co-ordinated with the necessity to remain competitive on domestic and export markets and to adjust the continuing excess production capacity of her agriculture in order to keep carry-over stocks at manageable levels. Agricultural price stabilization and support efforts are high ranking objectives. The US farm policy is characterized by much formal legislation as is documented in the series of Agricultural Adjustment Acts since the 1930s. Measures of supply control, government purchase and domestic food programmes have been used in different combinations. Farm exports have become an important factor to maintain farm sector income. The United States has favoured liberal trade policies for that part of crop production where the competitive advantages of domestic supplies are particularly favourable, that is especially wheat, feed grains and soya beans. For such products the United States has followed rather aggressive strategies to expand foreign markets. Multilateral liberalization of farm products is considered as an optimum trade strategy with respect to a number of domestic policy objectives including price and income stability, sustaining the balance of payments and minimizing the need for government intervention and budget expenditures. On the other hand, some crop products and the bulk of animal production remained highly protected from international competition. As Johnson (1977, p. 298) has formulated, the US farm and trade policy has continued to be torn between the need to expand exports of some farm products – because otherwise the domestic adjustment problems could be met only by programmes that were too costly to be politically viable – and the unwillingness to reduce significantly its barriers to the imports of several farm products that are produced at a comparative disadvantage.

In exporting countries, such as Canada, Australia and New Zealand, with highly efficient agricultural production the relative importance of agricultural exports is quite large. These countries unanimously strive for better trading conditions on world markets. The dependence on agricultural exports is particularly distinct in Australia and New Zealand since high protection of other industries led to a loss of competitiveness on markets of manufactured products.

Agricultural price income policies in Japan are based on various schemes according to the products concerned. Rice marketing is under direct control of the government. For other crop products the government intervenes in the market to guarantee minimum prices for producers. For some other products deficiency payments are granted. The country has a considerable food import demand and thus has a major interest in access to supplies. Japan is, therefore, in favour of trade arrangements that would result in security of supplies at stable prices. Food security is also the main motivation for the high level protection granted to domestic agricultural production.

Agricultural policies of the USSR and other centrally planned countries as documented in the various recent 5 year plans are striving to increase food production to meet the growing demand for improved diets in these countries. Emphasis is placed on co-ordination of production functions and on improved linkages with supply industries and marketing channels. Food subsidies and investments to increase the production capacity of agriculture take a high percentage of budget appropriations. Recent shortcomings in the production performance gave rise to a number of incentives to encourage private sector production in most of these countries. Trade in agricultural products is used as an instrument to pursue the specific needs of domestic policy objectives (Paarlberg, 1976). However, since centrally planned economics have nearly complete government control over imports and exports, changes in trade flows are not solely a reflection of changes in basic economic variables. There is little participation in multilateral trading arrangements. Long term bilateral contracts are increasingly used to secure imports.

For the large group of developing countries it is difficult to find a common denominator to characterize the national agricultural price-income policies. There are, however, two features that are to be observed rather commonly. One is, and this has been elaborated on already, the fact that real prices received by farmers in developing countries have been substantially lower than prices received by farmers in developed countries. According to Peterson (1979) differences in real farm prices of the order of magnitude of four to five times are common between the most and least favoured nations. Peterson (1979) also states 'the evidence also supports the hypotheses that the long-run aggregate supply elasticity for agriculture is greater than one and that unfavourable farm prices have reduced significantly agricultural output and economic growth in many LDCs'. In contrast to this, there seems to have set in another rather general trend in actual policy performance. The traditional export orientation (plantation crops and so on) of the agricultural sector in LDCs is increasingly supplemented by determined efforts to improve the domestic food situation. The reorientation is not confined to the price policy approach but is pursued in a much broader framework and puts equal emphasis on advances in the material and institutional rural infra-structures. Within the context of development approaches such as Leibenstein's (1957) concept of 'critical minimum effort' growth of farm income is considered an important precondition for the agricultural sector to contribute optimally to overall growth and development. Following such policies, encouraging responses have been observed in countries where agricultural resources are sufficiently available, population growth and density is within acceptable bounds and collective solidarity and social discipline are geared towards national development priorities. There is little indication, on the other hand, that the foreign exchange surpluses of the oil exporting countries are systematically used to expand the agricultural resource base in order to decrease the long term dependence on food imports of these countries. At the other extreme we find a number of low income countries which will have to rely on international support for a long time, no matter what changes in agricultural policies are adopted. In international negotiations the majority of developing countries have rallied behind the requests for a new international economic order (NIEO). In relation to agricultural trade the discussion of the NIEO concentrates on two main issues: (a) the stabilization of commodity markets and (b) the provision of aid.

ASPECTS OF GROWTH AND EQUITY

The developed countries during the 1950s and 1960s at high levels of GNP have had an extended period of strong overall economic growth which during the 1970s began to level off. The role of the agricultural sector and of particular policies in this process is largely inconclusive because of the many interdependent relationships involved. Looking at the growth rates it can be stated that agricultural growth in these countries was equal and often higher than economic growth. But there remain questions as to whether more positive adjustment could have been achieved by a different use of the given set of agricultural policy instruments that would have allowed for more international competition. The need for further adjustment has not diminished yet, especially in the European countries. With slow economic growth and reduced employment opportunities outside agriculture the conditions for adjustment have become more unfavourable. Expansion of agricultural output, therefore, is likely to attain even more importance as a means to reach the stated farm income objectives.

The growth performance of developing countries in terms of growth rates was likewise high, but the generally lower GNP levels have to be kept in mind. Moreover high population growth rates have caused income growth per caput to come out much more unfavourably. The growth objectives set for the first and second development decades thus in general were not met. But there is also considerable variability among countries. Given the large share of agricultural employment in these countries it is quite obvious that the performance of the agricultural sector has a large and direct influence on the overall growth record. There are countries where over the past 20 years agricultural policies have favourably contributed to integrate the agricultural sector into the overall growth and development process and there are others that have failed in this respect (for examples see World Bank, 1979 and 1981). To a substantial extent misconceptions about agricultural price-income policies have contributed to unsatisfactory growth results. In quite a number of countries the importance of agricultural growth for the development process has been underestimated and agricultural policies have failed to provide the required production incentives.

In spite of widespread agricultural protection in developed countries and frequently inadequate agricultural policies in developing countries, international trade in agricultural products has expanded. But its share in total world trade has declined and its structure and composition have shifted to the disadvantage of developing countries. As suppliers of tropical products the developing countries remain unchallenged. But traditional markets for such products are rather saturated, while the elasticity of supply is high. Consequently, as Lewis (1979) has formulated, for the LDCs as a whole the road to riches does not run in these directions. For markets of competing products in some cases comparative advantage has shifted to highly capitalized forms of production in developed countries (v. Urff, 1979; Houck, 1979). Development in mechanical and biological crop production technology has enhanced the efficiency of developed country suppliers in temperate zone food and feed grains as well as oilseeds. For these products developing countries are running import deficits which are increasing continuously.

With respect to equity, industrialized countries have succeeded in maintaining comparable living standards for the agricultural population but are still beset by large discrepancies in agricultural income distribution. For example, in the United States mounting concentration of agricultural production in relatively few large scale commercial farms (in 1978, 6 per cent of the total number of US producers supplied 53 per cent of total sales) and the consequences for the large number of small farms is becoming a matter of serious concern (Humphries, 1980). Similar trends exist elsewhere. The main problem is that most of the farm policies in operation have an inherent tendency to favour large-scale producers.

In developing countries equity issues extend to include the major part of the total population. In the short run, changes in relative food prices affect directly the relative and absolute real incomes of low-income people. At the same time a high proportion of the population depends on agriculture for employment and income and is, thus, affected by the long-term direction of agricultural price policies. Consequently, there are important trade-offs and conflicts between short-run influences and long-term effects of price policies on the incomes of the rural poor. It is to be observed that over the past decades the living conditions of the rural poor have not improved and may have even deteriorated. An important factor contributing to this development was high population growth; but the impact of agricultural price and income policies was also considerable. There are no easy solutions to the problems of improving the economic situation of the rural poor and opinions about strategies vary widely. Most conceptions are rooted firmly in the belief that by reliance on productivity increase and expansion of production, favourable effects of high overall growth will eventually trickle down and reach the low income strata. To quote Schuh (1980): 'The lot of the world's poor might better be served with investment policies which put more emphasis on efficiency than on equity, especially if that policy focuses on human capital and new production technology.' Others contend that the trickling down is not likely to occur or would take too long and promote approaches to satisfy basic needs directly. Such issues are largely unsolved and require thorough further analysis. As Mellor (1978) has pointed out 'the interrelationships among price, supply of wage goods, pattern of production, and income distribution are so complex, (that) only a general equilibrium analysis can unequivocally determine the various effects of specific food price policies on income distribution'.

In the face of current slow growth and widespread overall economic stagnation which has greatly enhanced the difficulties of further agricultural adjustment, it would not be realistic to simply call for a return to liberalized international trade. Solutions for the multitudinous issues and contradictions of agricultural and trade policies will have to rely very much on international negotiation and specific trade regulations. The direction of such efforts should nevertheless be to achieve again more liberalization of trade.

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DISCUSSION OPENING – G. GAETANI-D'ARAGONA

The main points in the very stimulating paper by Professor Buchholz are the two following:

1 A frequent conflict does arise between internal policies to support farm prices and incomes on the one hand and efforts, on the other hand, to implement free international trade for farm products and commodities.
2 On the basis of the performance of agricultural policies, in particular in the less developed countries, Professor Buchholz is extremely concerned about lack of equity between farm and non-farm incomes and among farmers of different areas and locations. Governments of the advanced countries have been relatively successful in defending farm incomes in comparison with the incomes of the industrial and of the service sectors. Their record has, however, been a poorer one so far as equity *among* different farmers is concerned.

We certainly have to agree with Professor Buchholz on the validity and relevance of the above two points. However, while the diagnosis of the situation which has been performed is the right one, the writer of the paper has been extremely vague (or too cautious) in giving us an adequate and comprehensive prognosis. It is a bit like modern medical science which does wonders in recognizing diseases but frequently is not able to cure them. However, we strongly need a valid trade and agricultural policy to improve the overall welfare of the world economy and, at the same time, to provide farmers with a reasonable level of equity.

Some points, therefore, deserve to be further clarified and answered. First of all we have to admit that world wide expansion of a completely free international trade for farm products in every situation and under every condition is not at all the best way to produce overall economic welfare and at the same time achieve incomes equity, given the high short term variability of farm prices and of incomes from the export trade of farm products and the adverse unit and overall terms of trade which prevail in the world markets for agricultural commodities, particularly the tropical ones which are mainly exported by the developing countries.

Recent reports by the international organizations, such as the FAO, do focus on the severe decline in the real prices of most of the agricultural commodities which has been progressively going on in the 20 year period 1960–81. Declines as high as 60 per cent have taken place in the real prices of rubber, tea and of some textile fibres such as jute. If we turn our attention to the realities of international trade we discover that administered markets, not free markets, prevail in the trade of farm products and agricultural commodities. The value of farm exports, which at the present time takes place under administered markets, can be equal to or more than 60 per cent of the overall value of all the exports of farm products. As a matter of fact administered markets intensively regulate the internal and external trade of the farm products of the nine EEC countries, and the trade of the centrally planned economies of Eastern Europe and of South Eastern Asia, and the bilateral medium-term trade and sale arrangements between the main exporting countries of food and feed cereals (the United States, Canada and Australia) and the main importing countries (the USSR and China). Even on empirical grounds it seems to me that valid economic and political reasons exist and have to be credited for the growing expansion of administered markets for internationally traded farm products, both on a worldwide basis and on a regional basis. Arrangements for administered trade on a regional basis are more and more the rule for many large regional areas of the world. One of the reasons for expanding administered markets is, of course, the desire by Governments to defend farming from the short-term instability of farm prices which are by far higher, as we all know, than the variability of industrial prices. While free trade, in the long run, might lead to a better spatial distribution of different crops on the basis of comparative advantages, it is also true, unfortunately, that free trade does not protect farm incomes and export revenues from serious disruptions due to the extreme short term instability of agricultural prices.

However, a second relevant reason for the spread of administered markets is, in my opinion, the absence of any kind of economic and monetary international order after the end of the Bretton Woods monetary system in 1971 at the time of the Nixon administration. Moreover, in recent years the sudden conversion of important central banks to the gospel of monetarism, as evident in the policies of the Federal Reserve Bank in the United States and of the Bank of England, has led to extreme vagaries of real interest rates and of currency exchange rates and also to the monetary induced economic recessions, the 1975 one and the one which started in 1979, the most severe after World War II. A negative consequence of extremely high interest rates has been the very burdensome financial costs which are required to finance adequate stocks of supply for availability purposes in the markets of agricultural commodities. Stocks are also a prerequisite for the performance of commodity agreements between exporting and importing countries. A different situation prevailed in the 1950s and 1960s when adequate stocks of the main agricultural commodities contributed to a great extent to the stabilization of world commodity markets. As we know, the agricultural policy of the EEC has been exposed to severe criticism. However, let us recognize that a stable level of minimum prices which has been given to European farmers from the price policy of the Common Market has defended an important sector of the European economy, the agricultural one, from the disrupting effects on farm incomes of the 1975–6 world recession and of the more severe one which began in 1980 and which is not yet over. A worse happening, by comparison, has negatively affected the export revenues of the less developed countries which export agricultural commodities in the free markets. The slump of prices in the international markets, due to the economic and industrial recession, has severely reduced their incomes by adversely affecting the terms of trade of their exports, particularly of tropical commodities for industrial utilization.

Even if the advanced nations will ever be able in the future to return to some kind of monetary co-operation after the vagaries of interest and exchange rates of recent years, in my opinion, policies have to be implemented to defend farm export revenues from short term instability: such as the Common Fund for eighteen commodities of the UNCTAD agreements of 1980, multilateral commodity agreements relying on buffer stocks and quotas, financial schemes such as the Food Facility of the IMF and the Stabex mechanism which has been in operation between the EEC and the so-called ACP developing countries in order to compensate the export revenues of the latter countries from sudden decline.

Another point, adequate types of Government intervention on the domestic front have to be formulated in order to guarantee an acceptable level of equity not only *between* farm and non-farm incomes but also *among* farmers of different area and location.

On the basis of the experience of the agricultural institutions of the Common Market, a valid approach for the advanced countries might be an agricultural policy which relied less on the rigid support of farm prices and far more on direct income transfers and payments by the Government in favour of marginal farmers. Such a policy would give equity among farmers and would also reduce the damages of excess production of farm crops in the advanced countries, which have been very frequent in the last twenty years in the EEC countries as the result of a rigid support of farm prices at high levels.