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The Relationship between Agriculture and the Economy: Issues for National Level Policy

1. INTRODUCTION

Economic policy or a system of policies is composed of aims, objectives and instruments or means. These terms are not used with exactly the same meaning through different economic systems, but broadly we have a concensus. Policy means government action in pursuit of certain national *aims,* which have an overall nature extending to a greater or lesser extent beyond the bounds of the economic aspect, and may differ with the political ideologies. The scope of the "economic" aspect can be defined more broadly or narrowly depending on whether a "social" aspect is included. Within this range we can recognise *objectives* of economic policy which specifically concern economic affairs and can be handled in economic terms. To achieve its objective a government takes certain actions, which we call *instruments* or means.

In applying such conventional concepts and terms to the problems of agricultural policy, the assumptions I would like to make are as follows:

(i) "The relationship between agriculture and the economy" is not the same as "The relationship of agriculture with the rest of the economy". What is intended by the theme selected is to treat agriculture *in* the overall context of the national economy. In this context, macro-economic policy of any kind, in terms of objectives and instruments, is all relevant to agriculture, which is one of the industrial sectors of the economy. Each sectoral component of the economy has its own characteristics, just as agriculture does. Despite these varied characteristics, macro-economic policy is designed to work based on its own logic (for example, fiscal and monetary policy). Within this framework, sectoral (or partial) objectives and their instruments of implementation in relation to the overall ones are taken up.

The relation of agriculture *with* the rest of the economy, on the other hand, is a theme of an approach of sectoral dichotomy. It has often been presented in terms of agriculture versus industry or the non-agricultural sector – well-known in a two-sector model approach. Intellectual knowledge drawn from research results of this kind no doubt actually contributes a great deal to our understanding of agricultural policy problems. However, conceptually this approach should be distinguished from the previous one

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particularly for policy discussion. The problem here is the relation between objectives and instruments at the sectoral level (for example, competitive allocation of scarce resources between agriculture and industry). Actually, the need to make such distinction between the two differs for different stages of economic development: it is stronger for DCs, weaker for LDCs. I presume that the real issues for us are raised by the programme-makers in a varied complex combination of these two dimensions.

(ii) "The characteristics of agricultural policy common to all nations" needs qualification and specification. First, "common" does not mean a sweeping generalization. Instead, dissimilarities as well as similarities will be the point at issue. With respect to different economic systems, my knowledge is limited in respect of experience of the non-market economies and a bias thus produced will hopefully be remedied by other papers so as to arrive at a "balanced" discussion. However, so far as the objectives, if not the aims, are concerned, possible difference from the market-based economies may not be essential. The problem rather lies at the level of implementing procedures and machinery – instruments in a broad sense. Among varying stages of economic development, surely the problems vary and the task of clarifying the differences is important. However, I believe, that, rather than merely emphasizing the dissimilarities, an integrated understanding is useful and may be possible.

(iii) The time dimension is related to longer-term policies, in the sense that short-term (in particular counter-cyclical) policies will not be discussed. In the DCs based on the market-economic system, there has been rapid progress in policy-making during the postwar period. Most of them, however, pertain to aggregate demand adjustments of a short-run nature. Economic planning of an indicative nature in various degrees has also been introduced into a number of DCs as well as LDCs, bringing forth the structural, and hence longer-term, aspect of policy-making. Yet, in my view, most of them appear to be weak in the implementation process: between objectives (and targets in their quantitative indicators) and instruments less cohesion is recognised than is generally expected. Integration of agricultural policy into the process of economic planning in most cases seems to occur only in a loose way. Therefore, systematic empirical evidence for the longer-term dimension is limited except for a few cases – in contrast to non-market economies. Despite its importance, this aspect of the problem is not specifically discussed here.*

2. HOW AND WHAT HAS BEEN THE EXPERIENCE?

Let us first look briefly at what has taken place in the postwar period. The major objective of agricultural policy in DCs of the market economic system

* I want to acknowledge the encouraging comments received from Professor Dr. Schmitt and Professor Britton on this part of my earlier draft. It is a regret that because of the limits on length, special care could not be taken to introduce "concrete illustrations drawn from actual events to bring the paper to life", to meet Britton's suggestion. Schmitt's emphasis on the importance of different instruments in achieving even the same objective, among others, is a good point. Yet I could not well cover this point, hoping for fuller discussion in his paper, in particular regarding European experience.

has been towards giving farmers "income parity" with people in the rest of the economy – although the means and the scope have varied from one country to another. Such an equity objective for a particular sector of the economy has never before been so systematic and conspicuous throughout the long history of modern economic growth. This has recently also been the case for some socialist countries though to a lesser extent. An income policy for agriculture with an equity objective in DCs is a historical development of prewar price stabilization policy. It is to be noted that during the postware phase of high growth rate, this objective has been more or less accepted in most countries in association with realizing near-full employment in the economy. Conflicts did take place, however, with respect to instruments of implementation. Apart from detailed differences in the means used to effect income transfers, the major conflicts at the political and administrative level have concerned (i) internally, the costs to be paid by consumers and tax-payers and (ii) externally, the inconsistency with free trade policy of the protection and/or export subsidies benefitting agriculture. The agricultural surplus produced as a consequence of this policy has been, of course, of great significance to subsequent policy-making, although its magnitude has differed from one country to another.

There is a large literature on this notorious topic, most of it being critical as we well know. For the purpose of this paper, the following points are suggested:

(i) The basis of this policy is a recognition that the mechanism of both output and factor markets cannot operate in favour of farmers in achieving income parity, taking the urban level as the standard of comparison – which is an acceptable basis in highly industrialized countries.

(ii) Transfer payments of various kinds became feasible basically because farmers had become numerically – though not necessarily politically – a minority group in the entire economy.

(iii) Alternative means were less feasible and attractive to farmers.

A well-known alternative is a "structural" policy: a serious issue for Europe and Japan. May I add a few words about Japan to a fuller statement on Europe given below in Schmitt's paper. The so-called "structural policy" pursued under the terms of the Basic Law of Agriculture could not replace price support policy despite government efforts. This is due to the continuing lower productivity in agriculture despite its rapid pace of technological progress and labor outflow to the rest of the economy during the postwar upswing phase. This suggests the political importance of a time dimension in selecting and evaluating the instruments and their operation for meeting farmers' needs, though, of course, the policy aimed at avoiding the distorting economic effects of price policy operation and the like.

On the other hand, in most of the LDCs, after their political independence, economic objectives have been focussed on development – on transformation and modernizing the traditional economy. Agricultural policy is a major part of this, aiming at output and productivity growth. Income parity has not been the major issue. Such a dichotomy, DCs and LDCs, is of course too

simple. A fairly wide diversity in varying stages of economic development and, accordingly, in agricultural policy should be kept in mind. For example, in a few LDCs with a socialist system like Sri Lanka, an equity objective has been planned for introduction to the agriculture-related field. In a market economy like Thailand, an income transfer policy has recently been tried for raising the farm price of rice. Furthermore, a number of LDCs has a minimum price support policy for the major farm product. Implementation in these cases seems to have met with difficulties. The objective between DCs and LDCs appears to be similar but we have to identify certain limitations in choosing objectives due to the practical effectiveness of the available instruments in LDCs.

In most of the LDCs during their initial phase of modernization, there have been serious conflicts in formulating the national plan with respect to the allocation of scarce resources – in particular, over allocation of investment between industry and agriculture, related infrastructures included. As a result of adopting for example, the "import substitution" policy, agricultural development has been discouraged in a number of LDCs. Sectoral terms of trade became favorable to industry (a historical counterpart of such a policy can be seen in the early industrialization phase of DCs of both economic systems). Even after these nations shifted to an "export promotion (substitution)" policy, mostly during the latter part of the 1960s, there were indications of policy bias towards industrialization and growth particularly in view of the previously discouraged state of agriculture and of society's tolerance for inequity and poverty. This is particularly so for the most seriously affected countries (MSA).

By now there is a large literature on these problems. For the purpose of this paper, the following points are suggested as being central.

(i) A balanced growth of agriculture with industry as the major objective and, except for a few nations, this objective has not been achieved.

(ii) One of the major reasons is failure in allocating scarce resources – the grounds of sectoral conflict.

(iii) Since the majority of people are engaged in agriculture, the problem of policy decision-making for agriculture is far more important to them for overall development than for DCs.

A few words may be added to qualify the objectives for LDCs. Recently, as suggested before, equity and social problems have increasingly become important in LDCs in forming development strategy, as exemplified by proposed "integrated rural development" (IRD, to be discussed later). This is a reaction to the diverse effects of "Green Revolution" for various classes within agriculture, but more than that, to the conventional pattern of development policies.* The problem for us here is an *ex post* recognition of the new issues arising as a result of carrying out certain policies – like the farm product surplus in the case of DCs.

What has been described above is merely an illustrative sketch to induce

* On this point I am indebted to Prof. S. Sawada's comment on my earlier draft.

comprehensive discussions by experts here. And yet it suggests that in discussions of agricultural and macro-economic policy conflicting objectives and instruments are involved and that these have been "solved" through policy-makers choosing one of the possible alternatives – for example, for DCs, alternative instruments such as promoting education and migration of farmers internally and free trade externally, and for LDCs alternative objectives such as more balanced growth between agriculture and industry (in particular in view of the recent policy of the Peoples Republic of China) and/or more equity than growth. I am not suggesting these alternatives were all feasible but merely intend to point out the fact of "choice" of certain objectives and instruments in the light of various conflicts. The system and machinery of carrying out these choices differ a great deal between countries of market economies and the centrally-planned economies. However, in both systems the final decision is made at the political level. The preferences of a political party or parties are decisive. The preference of the administration cannot be ignored in influencing decision-making in respect of objectives and in some countries administration is powerful in selecting policy instruments. The influence of interest groups is great in respect of objectives which concern particular groups, regions and industrial sectors of the economy. It is widely known that agricultural policy is most influenced by political preferences, and decisions are most likely to be made by judgement and compromise.

With regard to the instruments and their consistency with objectives, a few words may be in order particularly in comparison between DCs and LDCs. Technical precision, in conventional economic terms, cannot be expected for LDCs, unlike DCs, because of their different requirement for inducing technological progress in agriculture. For example, institutional innovations required for LDCs are one of the major instruments, but quantification of their effects, even apart from the difficulty of implementing them, is almost beyond our capability. Too-sophisticated methods may not help much as tools for decision-making in practice.

Such a brief decription, I am afraid, may lead to misunderstanding a complex process of decision-making related to the formation of agricultural policy. It is true that in both economic systems technical knowledge has increasingly become influential in the national plan and policy-making and such machinery as councils and committees has been organized to provide opportunities for economists to serve policy-decision-making. It is intended, however, to suggest that the professional functions and actual influences which economists could achieve have been rather limited.

3. THE CHARACTER OF AGRICULTURAL POLICY: SOURCES FOR DISAGREEMENTS

Now I would like to take up a subject of "the character of agricultural policy" which specifically relates to the last point. The reason for discussing such a seemingly obvious subject is that there is not necessarily a consensus between economists and policy-makers, and this has important influences on

forming views, determining objectives and selecting instruments for agriculture. In largely abstract theory, for example, an optimum resource allocation principle can be applied to agriculture; a component of the economy, as a basis for planning sectoral policy. Because of the characteristics of this particular sector, however, the real problem is far too complex. How and to what extent? Answers to this question seem to differ widely.

First, natural endowment – land and climate in particular in relation to population – is the basic factor of agricultural production and it differs widely among nations. Despite types of technological progress adapted to the given conditions, this difference places varying restraints on output and productivity growth in agriculture at the national level (compare, for example, the U.S.A. and Japan). To what extent should this restraint be taken into consideration in forming national policy? Answers vary widely. If we can assume near competitive markets for both output and factors internally and near free trade externally, the natural endowment restraint would essentially disappear in forming national policy. On the contrary, if world-wide food supply appears to be unfavourable or its instability substantial, the restraint would be a serious matter for policy-making, particularly for food-importing nations. Security as an objective, rather than productivity growth, would be dominant and instruments for achieving self-sufficiency in food would be pursued. During the postwar upswing phase of near-full employment with surplus supply of food product, touched upon in 2, the latter assumption has been irrelevant. Quite recently, however, the situation has seemed to change and conflicts began to take place due to different judgements on the coming situation in food-importing nations. This suggests that the general optimum resource allocation principle would be modified to a considerable extent, depending upon the forecast one may make. Yet demand–supply forecast cannot be precise enough for this at the present level of technique.

Second, the unit of production is predominantly family enterprise, implying self-employed, and mixed income in most DCs as well as LDCs of the market economic system – except for modern enterprises in a few DCs and plantations in LDCs. This characteristic is not excluded in relation to some of the socialist countries where collective production units are dominant. In the case of mixed income of the family farm in particular, its relation with the factor markets of the economy is blurred in association with the fact that farmers' income formation depends upon the prices of products they sell. This not only characterizes agricultural policies but also makes their nature differ between countries depending upon the varying situation of agriculture in the national factor markets. For example, in evaluating the objective of an income policy for farmers, one analyst may assume competitive factor markets for both capital and labor between agriculture and the rest of the economy in asserting that the income support policy for agriculture will automatically result in raising land prices which will benefit land-owners (a modern version of Ricardian doctrine), whereas another may assume a fundamental disequilibrium of the labor market in order to defend income support policy for farmers whose major income comes from compensation for their labor. Between these two extremes we can think of

intermediate cases of varying degrees, and whether the real situation of the country at issue is close to one of the assumptions thus made is a matter of debate. And yet, this is the basis for appraising the effects of income support policy: one asserts that it failed while the other defends it.

Third, as has previously been discussed, the characteristics of agriculture in the economy differ at varying stages of economic development. In DCs in pursuit of the equity objective, the income level in the non-agricultural sector is taken as a standard. In this sense it is really a partial objective, whereas in LDCs agricultural policy is a major integral part of the national development plan. The two characteristics mentioned above, therefore, imply greater significance than for DCs and accordingly different choices of its objective means of implementation would have more serious consequences for LDCs. Yet, with respect to the possible effects of agricultural policy measures, our professional knowledge based on reaearch results is more limited than it is in the DCs due, not only to data paucity, but also – and more important – to the different nature of the agricultural problem: structural transformation, institutional-organizational innovations, as touched upon before, in addition to the farmers' behaviour in respect of production response to output–input prices in association with possible technological progress. Coupled with the powerful influences of political preference, optimism versus pessimism, opinions about the rational behaviour of farmers, this situation would allow a large room for disagreement in formulating objectives and instruments consistently.*

Differing natural endowments, traditional production units represented by the family farm system, wider coverage of related areas – all these discussed above may be enough to illustrate the problems we face. Viewed from overall national policy, agricultural policy is characterized by these three features which are unique to this particular sector. The statement above may appear to emphasize dissimilarity of the problem between DCs and LDCs, but this is not the writer's intention. Historically, agriculture is the greatest traditional sector. During a long process of modern economic growth, irrespective of different economic systems, it has been modernized through its decline in relative shares in output and labor in the national economy. It is quite natural, therefore, for the objectives and instruments of agricultural policy to tend to differ correspondingly to the various stages of development. Technological and

* With respect to the last point, I would like to draw your attention again to the IRD – a "renewed" approach of rural development, characterized by its "integrated strategy and programme-making". This seeks to cover not only agricultural development but also all other aspects and factors relevant to improving rural life. As a reaction to a failure of the past development strategy focussed on output and productivity growth. The planners assert that the overall objectives thus aimed at should be acceptable. The critical view, however, is that the issues are found in the means of implementation to be designed in an "integrated" way. They appear difficult to make operational enough. The IRD pertains specifically to community and regional level, where it has problems closely related with other sectors of the economy. As seen from the standpoint of agricultural policy at the national level, however, it presents a widened coverage of both objectives and instruments, including interdisciplinary fields. One may say this is a new challenge to both policy-makers and researchers. Can we minimize disagreements?

institutional adaptation to the given natural resources tends to be underdeveloped in LDCs. The effects of changing supply–demand situation for food on forming policy at the national level may be even more serious, being aggravated by the pressure of foreign payments deficits (a problem outside the scope of this paper). The dominance of family farms calls for a "renewed" attention as the core of rural development.

Finally, in relation to the last point, I would like to touch briefly on the controversial issue of "trade-offs between growth and equity" – a central problem to-day, not in general but in particular regarding agriculture. On the one hand, the trade-off concept has often been applied to this particular sector, emphasizing the importance of equity both within the sector and to the rest of the economy. On the other hand, application of this concept to agricultural problems is rejected, beyond merely asserting that output growth is the primary objective. As far as the choice of objectives is not assumed to be "given" for us, we have to know the possible feasibility of the instruments relevant to the choice we may have to make. As has previously been suggested in discussing rural development strategy this aspect of the controversy may require much more discussion in order to arrive at its solution. In this respect, I wish to draw your attention again to the family farm. Output growth and income (Welfare) equity are, in principle, complementary in this case, both within agriculture and in relation to the rest of the economy. Fuller utilization of land and labor towards a higher output level can be expected and this brings forth a higher level of their mixed income towards parity with urban people. Furthermore, regarding the procedures and instruments for implementation, our accumulated knowledge is relatively rich and can be used once the programme is set in an operational way.

Of course conventional instruments may have certain limits, unless they are combined with institutional innovations, including land reforms – in particular in the case of heterogenous agrarian structure. Yet with this illustration I am suggesting the possibility of finding the area of least disagreement.

4. CONCLUDING REMARKS

By way of concluding remarks, I would like to take up two points; one concerns the pattern of policy and plan-making and the other a way of making professional contribution to it.

First, as has been touched upon earlier, the postwar rapid progress in economic policy with respect to instruments has mostly been realized in fiscal, monetary and trade aspects of the market-orientated economy. In theoretical terms they are mostly characterized as post Keynesian type. As compared to the past, this policy has recently become much more difficult to implement because of the emergence of the conflicts between the two objectives – full employment and price stability. Agricultural policy appears to have a new problem in being consistent with anti-inflation policies. However, what is much more concerned here is another aspect of the macro policy. With respect to the supply–production side, macro-economic policy has made less progress, despite experience of indicative medium and long-term

planning by the use of a system of social accounts with econometric model approaches. Application of a similar approach to LDCs' development plans has also built up our knowledge on experience of both success and failure. What has been observed regarding the character of agriculture may lead us to state that a more systematic approach, in particular in designing policy instruments, is desirable in the context of overall policy in long-term planning. Integration of this request to the macro-economic policy cannot be effectively done, however, in the light of the present pattern of policy-making. From the agricultural side, therefore, it is suggested that macro-economic policy should be strengthened towards improving the long-term, production-structure, aspect of the economy. My knowledge is limited regarding countries in the non-market economic system, but in view of the recent performance of agriculture in Soviet Russia, for example, they may have a similar problem.

Second, what has been stated in Section 3, though illustrative, may contribute to indicating a high possibility that our insufficient knowledge – and/or disagreements on interpretation – of the facts and their future nature might be one of the important causes for providing wide scope for greater influence of political preference on decision-making. It is thus important to improve our professional knowledge in the direction of minimizing our disagreement so as to rationalize the process of policy-making through limiting the influence of political and administrative preferences. Progress in our research on the characteristics of agriculture, I believe, is an indispensable need for deeper understanding of the inter-relationship between this particular sector and the rest of the economy. I dare say this is reviewing the past experience of both the government planning touched upon before and the academic model analysis. In the latter, for example, in using a two-sector (agriculture and industry or non-agriculture) model approach, both theoretical and econometric, disagreements have tended to relate particularly to the performance of agriculture and farmers. To the various reasons mentioned in Section 3, perhaps our limited knowledge about evaluating dynamic processes of resource allocation should be added. To be more realistic in interpreting the relationship of agriculture and the economy towards improving policy-making, we need much more knowledge about the real process of the dynamic interaction mechanism in a two-sector approach, not only in terms of demand–supply relationships in the product market but also in terms of the choice of technologies which directly pertain to the factor market. I believe that much more complementary, instead of competing, relations between the two sectors can be created by choosing more appropriate strategies.

In this regard, it is desirable to have more communications through exchange of research results and analytical views, not only among agricultural economists, but also with general economists. Let them know about the real situation of agriculture. And we have to ask that industrial and/or macro-economic policies to be formulated with more regard to the viewpoint of agriculture. On the other hand preferably such macro-sectoral knowledge should be linked more closely with micro-analysis. For example, the conventional

cost–benefit calculation used in evaluating and selecting individual investment projects, may not be without problems in taking fuller consideration of agricultural characteristics combined with the problems of income distribution and employment. This implies a desirability of much more co-operative study in related areas.

These efforts on the professional level may, I hope, lead us to making contributions towards solving the problems we face.

DISCUSSION OPENING – D. Bergmann, *France*

Being on the whole in extensive agreement with Professor Okhawa I intend to limit my comments to a series of remarks on three particular aspects.

In developed countries, agricultural and general economic policy conflicts with regard to employment are usually solved in favour of the dominant non-agricultural sectors of the economy. The task of agricultural policy is to regulate the decline of the farm population. When the economy is buoyant, industry draws heavily on farm labour. In a recession, agriculture is expected to take care of a larger number of its children and keep them fed and partly busy at no cost to the Unemployment Compensation Fund. This buffer-stock role of agriculture, which is the servant of industrial growth, appeared in the French Plans of the Fifties and Sixties and is visible in Polish planning according to the special group paper prepared on that theme. Such are the facts. Their consequences are not entirely negative. Partial employment on an overpopulated farm may be better than unemployment in a city. The consequences for the average farm income per active person in farming should, however, not be underestimated. Agriculture's role in serving as a labour reservoir should not be forgotten when budget funds are allocated for agriculture.

Conflicts between agricultural and non-agricultural interests are often acute with regard to land use and economic policies have often failed to recognise the agricultural interests in spatial planning. In Japan, for instance, the rate at which concrete has been poured over the paddy fields is appalling. In France, second homes are very numerous and their expansion is often detrimental to agriculture. It is important to note, for the benefit of those who believe in the advantages of free markets, that price mechanisms seem quite inadequate to ensure the protection of agricultural interests in land use. The only solution – and it is far from easy to manage – seems to be strict regulation such as is practised in a growing number of countries.

Lastly, a few remarks with a political science leaning. What are the factors determining the place given to agriculture in economic policy decisions?

In rich countries with a small and relatively declining agriculture, the importance still retained by farm policy is remarkable. This can be attributed to reasons of pure politics; the farm vote is, in several countries, able to tip the balance in favour of one of the two roughly equal parties or groups of parties. Also, in a country like France, farmers have invented highly

effective methods of exerting pressure on the government – for instance by disrupting road traffic with tractor barrages, or by more violent methods. Lastly, there is growing recognition of certain external advantages to society of many farm activities.

In most poor countries, on the other hand, the striking fact is the neglect of agriculture, or of most segments of agriculture, in the general economic policies and development strategies. A recent FAO study on the Sahel countries which was conducted under the authority of our colleague Dr. J. P. Bhattacharjee, will be used to illustrate this. In those countries, farm income per farm worker is only about 10 per cent of non-farm income per active person. What is worse, "inequality, already strong in 1960, has increased during the next ten years". In Sénégal "the value of the groundnut crop fell from 22 billion CFA francs in 1967/68 to 20,5 billions in 1972/73 but the share received by farmers fell from 66 per cent to 43 per cent of this total and government's share increased from 7 to 41 per cent".

This disregard by city technocrats for the peasants, these anti-agricultural policies, will lead to explosive situations and/or dramatic retreat of abandoned communities in autarchy and revolt. This is the result of excessively industrial development strategies which are a sequel of "Stalinist" anti-peasant doctrines. China is one of the few countries refusing this type of reasoning.

Happily, there has been, in recent years, a trend towards a more balanced approach. Let us hope that this Conference may help reinforce this tenancy.

DISCUSSION OPENING – J.S. Marsh, *U.K.*

1. An important and recurrent theme in Professor Ohkawa's paper is the relationship between the policy-maker and the professional advisor. In discussing the choice of objectives and instruments, he reminds us that "in both systems" – market and centrally planned – "the final decision is made politically". Again at the end of the paper he suggests that the professional's contribution to policy-making may be more effective through improving scientific knowledge than by direct participation.

The relationship between the economist (professional) and the politician (decision-maker) represents one of the more fragile aspects of modern economic systems. In mixed market economies at least we seem to have drifted into a situation in which the policy-maker is dependent upon expert advice about the options open to him and the instruments at his disposal. Having abandoned the traditional role of policy, responding to and correcting specific features of the outcome of market operation, modern governments in most economies offer positive policies which it is claimed will secure goals such as equity in incomes, repaid growth in per caput income, stable prices and full employment – even though these may be incompatible. Since each decision clearly does interact in complex ways with other elements in the political/economic system, the politican turns hopefully to his

"experts" for guidance. Sadly he is likely to be disappointed or misled. Not only is there no full understanding of the implications of the various actions open to him but also some of his mentors seem capable of thinking only along the tram lines of the particular set of jargon in which they have become expert. Within such a situation those professional advisors who wish to be heard must exercise considerable political skills. Not unnaturally one finds among the bureaucrats some of the consummate politicians.

For those who perceive that simple solutions of this difficulty such as a "return to free market economy" or the application of "socialist principles" are professionally inadequate and unsatisfactory, two lessons need to be learnt. First there must be a willingness to accept that problems come as a whole. There are not a group of special agricultural economic problems, which can be solved by our techniques alone, instead problems come complete with sociological, political, technological as well as economic aspects. Progress if it is to be made at all, requires attention to such interdisciplinary links. For instance the target of economic growth, if it is defined only in terms of our jargon and ignores other links, may prove disastrous for communities in both developed and less developed countries. It could be the case that some of the agricultural policies practised in developed countries in defiance of economic logic, have been attempting just such a balance.

Second, if we believe we have a contribution to make, it is our duty to make ourselves understood not only to one another, but also to other experts, to politicians and to those upon whom the politician depends for power. Many issues are of technical complexity but that significance must be explained in terms which can enable those who have to take decisions to really appreciate the options open to them. If we fail to do this then, in an important sense, we either become the decision taker or our advice will be ignored. Neither situation should be acceptable to the professional advisor.

2. Professor Ohkawa directs our attention to the attempts of agricultural policy-makers to achieve income parity between farmers and other people in developed countries. As one point for discussion he suggests that the "basis of this policy is a recognition that the mechanism of markets, both output and factor, cannot operate in favour of farmers in achieving income parity, taking the urban level as standard – an acceptable request made in highly industrialised countries".

It seems at least possible that the almost universal failure of agricultural policies to attain this objective indicates that the policy-makers may not have well understood the economic mechanisms at work. Market mechanisms, in general, do not lead to equality of returns except amongst those factors which have equal marginal productivity. Where unequal returns exist for factors which are in all other respects similar, the market sets up pressures towards equality. Income gaps perform precisely this function. Two types of attack may, within the general framework of a market economy, be sustained. First, that the gaps in income are unduly large because the market does not give adequate information or because factors are prevented from

movement by institutional elements in the situation. Second, that the ultimate pattern of income distribution or the costs to the community of mobility implicit in the market mechanism, are too high. In the first situation we have too little mobility, in the second too much.

It is a source of confusion in agricultural policy that both criticisms are held to be simultaneously valid. Thus we have structural programmes designed to promote mobility and price policies which protect existing producers from the full blast of market processes. Certainly the overall effects of much of this "policy activity" is that markets for factors and outputs do not respond freely to changing supply and demand. On the other hand it is also true that the gap in incomes remains persistently high. At the same time massive dislocations occur in both domestic and world trade whilst exporting countries find that the income problems of farmers in prosperous countries deny them access to some of the largest markets in the world.

The possibility must be considered that, if we had decided which line of approach – more mobility or less mobility – was to be the route of attack on income problems, policies would have been more successful and less costly. Had we pinned our hopes more steadfastly to mobility, to attaining a better resource allocation, then market mechanisms would have provided higher incomes both for those who left and those who remained at the price of considerable, if short lived, discomfort. The greater total wealth at our disposal would ultimately have enabled us to deal generously with those who, through age, remoteness, etc., were unable to adjust. On the other hand, if we reject the shape of a modern society brought about by mobility, it would be more sensible to tax rather than to subsidise technical advance, to freeze the pattern of trade and to try to force prices up to keep pace with economic growth in general. Such a policy would, of course involve heavy and growing costs in the sense of lost opportunities for economic growth but it would tend to stabilise rural society and to maintain the incomes of the unprogressive farmers. Since in our society it is often the unprogressive who are the poorest, this, like the other approach might meet income goals reasonably well. It is a sad feature of much of our muddled approach to these problems that although we do transfer substantial amounts of real income, those who are poorest receive relatively little. Professor Ohkawa rightly cautions us about the complexity of the agricultural sector (p. 197) and the need in applying optimum resource allocation principles to take into account expectations about future market conditions as well as evidence about the recent past. Such caution is proper but should not obscure the need to work with, rather than against market forces; a neglect which has been the undoing of many agricultural policies.

3. Professor Ohkawa, in discussing the role of the family farm, towards the end of his paper, makes the thought-provoking suggestion that the "objectives and instruments of agricultural policy are modified corresponding to the varied stages of development".

For the moment, it must be left to others to spell out the details of a "layman's guide" to appropriate policies for different stages of development.

One guesses that the acceptable permutations are sufficiently numerous to be interesting. More important, perhaps, is the need to recognise that over time policies must change.

There is not inconsiderable risk, because of the politically determined character of much policy, that specific objectives or instruments will become sacred. Should this be the case, and Professor Ohkawa prove right – as I feel sure he is – then the development of policy may tend persistently to lag behind current realities. This seems to happen with the CAP of the EEC. It may well be true of our response to higher energy costs and to growth in world food demand. One important function for the professional agricultural policy-maker is to prompt responsiveness to change, to be sceptical about existing arrangements and to be constructive in offering alternatives.

In his far reaching survey Professor Ohkawa demonstrates just such an approach and encourages it in others.

Report of the general discussion

The breadth and depth of thought in Professor Okhawa's paper both occasioned comment to this effect from a number of speakers and led to the discussion taking the form of a number of separate lines of thought.

Several speakers, especially from the centrally planned countries, emphasised a need to treat agricultural integrally with associated sectors. Thus it could be usefully treated as a sub-sector of the whole food supply system. Equally, it was argued that there should be an integrated approach to rural areas, guided by broad social and political aims. Others took a more generalised view, seeing society as a system of interlocking and interacting groups. Any decision which affects the structure of one unavoidably influences that of others. The relationship of the agricultural to the non-agricultural sectors can only be rightly understood by some such approach. Furthermore, decision-making is not solely concerned with ways to achieve previously established objectives, the selection of objectives was also seen as a role of the decision-maker.

The influece of power structure – including the balance between the agricultural and non-agricultural sectors – on the tenancy of economic policy was another aspect which attracted attention. In consequence, an important need was to make agriculture more powerful and harmonious with itself, so that the benefits of agricultural policy were spread more widely.

Some of those who spoke with developing countries primarily in mind seemed pessimistic about the scope for agricultural economists to be influential. Partly this seemed to be because they felt that agricultural economists had come on the scene rather late. "Pure" economists are probably nearer decision centres than are agricultural economists and one might hope that they would read Professor Ohkawa's papers. However, the whole agricultural sector was seen as getting reasonable attention only when industrial growth led to a shortgage of food. Sometimes parts of it were the victims of exped-

iency, as, for example, where funds accumulated in one fund – e.g. for groundnuts – have been used to buy imported foods, or export taxes or export taxes on groundnut oil has substituted for direct taxation which it was impracticable to administer: Such tendencies are reflected in an increasing share of value added assigned to the state compared to the farming sector.

The view was expressed that in respect to agricultural policy most European socialist countries lay somewhere between the developed and the developing countries. They resemble the LDC's in seeking development to DC levels but they are short of resources. They have achievements to show but have not solved their problems. The rate of development depends on resources available at different periods and the varying views of those in control about their allocation.

References to developed country experience underlined for the U.S.A. the two parts to the farm sector, namely the small farm sector where the key problems are low incomes and inadequacy of social services and the large farm sector where income stability is the main problem. It had been recognised that price policy was not the solution for both and the small farm problems have been attacked by way of farm job creation, vocational training, health services, etc. This seemed now the settled policy.

Output-reducing programmes with the aim of increasing prices had a variety of unintended results on consumer prices and the approach has changed fundamentally in the past three years to give a clearer run for farm production expansion. Farmers appear well satisfied with it but whether it was firmly established was unclear.

Participants in the discussion included: J. A. Akinwumi, *Nigeria*; P. C. Baillet, *France*; R. Benalcazar, *Ecuador*; A. Burger, *Hugary*; K. Jojima, *Japan*; V. I. Nazarenko, *U.S.S.R.*; D. Paarlberg, *U.S.A.*; G. Rocheteau, *France*.

K. Ohkawa (in reply)

I am grateful to all discussants, especially the openers, for their contribution to amplifying my paper either by presenting concrete examples of conflicts between general economic policy and agricultural policy or by extending in a much more thoughtful way what I stated with respect to the "problems of political preferences". There seems to be no serious disagreement with me. I share the view that in the developed countries with market economies industrialization creates a number of unfavourable effects on agriculture, particularly in relation to employment and land use.

Power structure is, of course, relevant to what I called the effect of political preferences, but with final decision-making at the political level this does not mean that power structure is the only determining factor. I recognize the "destructive" aspect of modern economic development, sharing Kuznet's view, but here we are concerned with the relation between agriculture and the economy and not the agricultural policy as such.

I have, myself, drawn attention to a possible shift of the relationship

between agriculture and industry from the early stage to the developed stage, so that I fully recognize the importance of the essential nature of the problems which may arise at the "intermediate" stage, as for instance, in Hungary. The comments should be extended in a more general way. What I said about "income parity" does not necessarily express my own policy preference. Instead, I mentioned it as an illustration of the conflicts and the different views in interpreting them. To set the objective "socially" in a more comprehensive way, as asserted by a Soviet friend, is quite acceptable and desirable, if it can be fully implemented. In this regard "integrated rural development" touched upon in my paper would deserve attention.

I understand the two distinct policies – one for small farmers and the other for commercial farmers, and clarified with respect to the U.S. case. Japan's case may be similar to the former. I am happy to learn that in developing countries there is no distinction or separation between agricultural economists and general economists. Perhaps in developed countries we may be at a disadvantage from having too much specialization among us.