

ISSUES INVOLVED IN FORMULATING A STRUCTURES POLICY FOR U.S. AGRICULTURE

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On March 12, 1979, Secretary of Agriculture Bob Bergland issued a call for a full-scale national dialogue on the structure of American agriculture. According to USDA, "Reaction to the speech has been widespread and, in the main, highly positive." The main factor contributing to this "widespread highly positive" response has been the ambiguity of the subject matter. Farmers, along with special interest groups of all types and persuasions, have eagerly jumped on the structures bandwagon to blame/praise one or more particular aspects of agricultural structure for all the evils/blessings currently within their fields of vision. This broad range of comments and opinions on structure can be attributed to the extreme extent to which the structure of agriculture pervades and is interwoven with the national economy and society in general. Unfortunately, some unreasonable expectations apparently have also emerged concerning which of agriculture's ills can be alleviated via a structures policy. The aim of this article is to attempt to give some perspective to the structures issue.

There are many types and categories of agricultural policies, most if not all of which have at least some effect on structure. Indeed, policies aimed at problems which mainly affect nonagricultural sectors may ultimately alter the structure of agriculture. A definition of exactly what constitutes a "structures policy" is clearly needed. For purposes of this article, a structures policy is taken to be an attempt to alleviate specific problems in the agricultural sector by regulating or influencing the number, size, and/or distribution of farms. It is this means of attacking the problem that distinguishes a structures policy from other types of policy actions which may have an incidental effect on the structure of the farm sector. After a brief review of some of the problems frequently seen as related to structure, I discuss what forms a structures policy might take and toward what ends. It then remains to be seen which problems are amenable to treatment via a structural approach.

TRENDS AND ASSOCIATED PROBLEMS (REAL AND/OR IMAGINED)

This section constitutes a review of major aggregate trends and possible problem areas and is very brief for two reasons. First, most agricultural economists are already familiar with these items. Second, a thorough treatment disaggregated by region and product would be quite lengthy and, in many instances, inconclusive as there is little consensus regarding the extent and/or seriousness of many problem areas. Further discussion of major problem areas is included elsewhere in the article.

As always, farm numbers continue to decline while average farm size increases, though both figures show a declining rate of change. From 1950 to the late 1970s farm numbers declined more than 50 percent to less than 2.7 million farms and average farm size increased from 215 acres to more than 400 acres. Relative changes in total receipts per farm (in constant dollars) have been comparable to changes in farm size. Cropland used for crops has shown little trend since the early 1900s, fluctuating between 325 million acres and 390 million acres. Data on farm size distribution (measured by either acres or sales) indicate that a relatively small number of large farms account for a large proportion of agricultural productivity. Currently some 200,000 large farms provide more than two-thirds of all production. This fact suggests that more than 2 million mostly small farms are largely outside the mainstream of the commercial agricultural production industry. Farms operated by part owners are more than three times the size (acres) of full-owner farms although full owners outnumber part owners by two to one. In terms of total land in farms, part owners control about 500 million acres and full owners control 350 million acres (prior to the late 1950s, part owners controlled fewer total acres than full owners). Since 1960 there have been fewer full tenants than part owners and, though the farm size operated by full tenants

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continues to grow, total land controlled by full tenants is declining toward the 100 million acre mark. Corporate farm ownership has attracted attention in recent years. The number of incorporated farms is small but they tend to be large operations. In 1974, 2 percent of farms with sales of \$2,500 and over were incorporated (as opposed to 89 percent individually owned) but they controlled 11 percent of the total farmland acreage and accounted for 18 percent of agricultural product sales. However, three-fourths of these corporations were classified as family operations.

In terms of resources used in farming, capital inputs have increased dramatically while labor has decreased. Land resources as a percentage of total resources have remained fairly constant. In 1977 capital resources (machinery and chemicals) accounted for 43 percent of total resources and labor accounted for only 14 percent. Family labor has declined more rapidly than hired labor, both in absolute terms and in relative terms, but still holds a two to one advantage.

Per capital income of the farm population, when adjusted for inflation, has shown wide fluctuations but little increase since the early 1960s. The nonfarm income of farm people has been greater than their farm income in most years since the mid-1960s. The value in constant dollars of farm physical assets (land, machinery, buildings, livestock, and stored crops) increased more than 65 percent in the 1960-78 period (Schertz).

Figures such as these can be used to paint a rather bleak picture of the rural scene. As farm numbers decline the rural population declines, decimating rural communities. This in turn decreases services and amenities available to rural people and in general makes it more difficult and expensive to maintain a lifestyle comparable to that available in more heavily populated areas. The high price of farmland and large capital requirements of modern farming pose such formidable barriers to entry-level farmers that the most promising avenues into farming appear to be marriage and inheritance. Small farm operators wishing to expand their operations face many of the same obstacles and are increasingly forced to rely on off-farm work to gain a decent level of living. And pervading this situation is the feeling that farmers no longer have control of their destiny. The labor of the farmer and his family, which once contributed so much to a successful operation, are now completely overshadowed by the influence of the banker, big business, government programs, outside investors, new marketing channels, OPEC, and even Afghanistan. Many, if not most, of the current crop of farm problems have developed along with changes in the structure of agriculture. Thus

has come the idea of a causal relationship—e.g., alter the structure and alleviate the problems.

STRUCTURES POLICIES

Though the U.S. does not have an explicit structures policy, such policies do exist in other countries and some generalizations of these programs might be instructive. Policies aimed at structural changes are usually associated with one of two types of situations and are generally referred to as land reform. The first situation is one in which large tracts of land are owned (or controlled) by a small group of people who are not concerned with increasing agricultural productivity and/or efficiency. The primary goal of land reform in this situation is increased output through intensified use of land and resources. The hope is that replacing large estates with many small farms will increase aggregate output. It can be argued that such a condition did at one time exist in the U.S. and that it was successfully altered via land reform policies. However, there is little evidence of a parallel in today's agriculture sector. The larger farms today tend to use intensive practices and to be highly productive.

The second situation in which land reform has been applied is nearly the opposite of the first, i.e., a situation in which there are many small and fragmented farms. Such farms are typically labor intensive and have neither the required size to make use of technology nor the financial means of obtaining such technology. Thus production is low. Land reform policies in this case attempt to increase production by establishing larger farms with more intensive production practices. There may well be potential for this type land reform in areas of the U.S. where small farms are predominant.

Other reasons for structures policies which may sometimes be incorporated with one of the two cases described include a desire to give land to landless peasants, decreasing foreign ownership of land, and maintaining a minimum population within a given area either for economic or political reasons.

One final point should be mentioned concerning the chances of success of land reform policies. To be successful a land reform policy must produce some minimal level of economic/social gain to society. There are tradeoffs between economic and social factors, and between the economic/social package and the extent and time frame of the reform. An ambitious reform program must have strong political support and must promise large economic gains. A program which aims at changes in a small number of factors over a long period of time requires less economic/political support.

Establishment of an ambitious structures policy for U.S. agriculture would involve a number of measures which have a high cost—either economic and/or psychic. A simple rule (such as a size limit based on acreage) might be viewed as equitable and acceptable when passed but could become completely unacceptable over time. For instance, a maximum size farm in a particular wheat-producing area might be defined as, say, 10,000 acres. But if technology and economic conditions later make it possible (profitably) to raise hogs in the area, a 10,000-acre hog farm might be viewed as a bit much. To allow for changes in technology and production shifts, farm size regulations, if they are to continue to serve their original purpose, would need to be supplemented by land use regulations which might be much less acceptable to farmers. More complex formulas perhaps based on sales volume or net returns would be difficult to formulate, difficult and expensive to administer, and difficult to evaluate in terms of performance.

This is not to say that a structures policy for the U.S. is an impossible undertaking. But in most cases in which ambitious structures policies have been implemented, political and social pressures were strong and equity was not of major concern. In the U.S. today, the reverse situation likely prevails. Thus we should probably be thinking in terms of limited structural changes aimed at specific areas over a long period of time. Whether such an approach deserves the name “structures policy” or simply represents “business as usual” is debatable. The prospects for a structures solution to four broad problem areas are discussed hereafter.

BROAD PROBLEM AREAS

Agrarian Values

Much of the support voiced for structural reform stems from references to vaguely defined agrarian values from the past. Every Agricultural Act passed by the U.S. Congress since 1930 has contained a section affirming congressional support for the “family farm,” yet no definition of exactly what constitutes a family farm has found general acceptance. Still the idea of a family owned and operated farm has come to typify many values of today’s society—*independence, hard work, family unity, close knit communities, etc.* It is frequently argued that society today owes much to these basic values and that the agrarian heritage of the country has been highly instrumental in preserving and inculcating the values in succeeding generations; ergo, maintenance of agrarian attitudes and the family farm is vital to the value system of society.

When a large portion of the population lived either on farms or in rural areas, values engendered by the rural way of life had a strong effect on the values of society as a whole. This influence may have continued to be felt more recently as large numbers of rural people migrated to urban areas. But the prognosis for the future must surely be a reversal of this transfer of values. The proportion of the population employed in agricultural production is no longer large enough to have a strong impact on societal values and the past migration of rural people to urban areas may well be reversed. Representation of the farmer’s viewpoint in Congress has declined, not only as a result of declining rural population but also as other problems have increasingly gained the public eye. The public media inevitably transfers urban values to rural people. The child in New York City does not watch TV programs that are made in an Iowa corn patch. Rather the child in rural Iowa watches TV programs that are produced in New York City and are concerned with urban situations, problems, activities, etc. Perhaps the values of society in the year 2000 will not differ greatly from those of 1950, but those values, whatever they are, will be formed in urban society and transmitted to rural society—not vice versa. Arguments for agricultural structural reform based on agrarian values have little merit.

Declining Rural Communities

Small rural communities in general can be divided into two categories, those that have ceased to decline and are now growing, and those that are probably destined to remain small for the foreseeable future. Many smaller rural communities are growing at a faster rate than large rural communities. During the period 1970 to 1973, nonmetropolitan places with a population of 10,000 or more increased in population by 2.6 percent whereas nonmetropolitan places with a population of less than 10,000 increased by 4.9 percent. Brown gives three apparent reasons for these trends: (1) a decentralization of nonfarm employment, (2) a preference by many people for rural living, and (3) the general modernization of rural life. He goes on to state, “The greatest changes in farm technology and organization, and in transportation have already occurred and small towns and villages have adapted accordingly.... The national and regional dominance of nonfarm people in the total rural and small town population is expected to grow. . .the major part of the demographic exodus from the farm is finished.” Many of these rural communities may be in need of programs and/or assistance in some areas—health and sanitation

services, transportation, etc.—but such assistance should be aimed at the particular problems involved, not at structural changes in the agricultural part of the local economy.

There are (and probably will continue to be) numerous small communities that are not well integrated with the nonfarm economy. These communities tend to be in extensive farming areas, are often isolated from population centers, and seem to have little prospect for nonagriculturally related growth. If agricultural production is to continue in such areas, it is desirable that the local residents have access to amenities roughly equivalent with those available in more heavily populated areas. Two alternative methods can be utilized to provide such amenities: (1) a structural approach aimed at keeping a sufficient number of people on the farm to support the rural community, and (2) direct subsidy of the desired services and amenities. An example of the structural approach is found in the Hill Farming Directive of the European Common Market countries (Bray et al.). This program is aimed at maintaining minimum population and income levels, and economic and social structures in resource-poor regions via direct income supplements to farmers. Though residents of included regions are not prohibited from participation in other government aid programs, it is anticipated that their need for special assistance will be reduced given adequate population and income levels. Policy in Australia provides a good example of attacking the nonproduction-related problems of isolated rural communities via direct subsidies. Rural Australians receive subsidies in many forms, including communications, education, health and medical expenses, transportation (both surface and air), and even entertainment (the Sydney Symphony Orchestra makes road tours which include stops in towns of less than 10,000 population).

Whether direct subsidy or the structural approach is the most efficient method of providing an acceptable lifestyle to isolated rural communities has received little research attention. The most efficient method would likely depend on the particular situation being analyzed. In a region where extensive farming methods result in low population density but where low income levels are not a problem, direct subsidization of amenities might be the better approach. In resource-poor areas where both low population density and low incomes predominant, direct subsidy coupled with structural reform to improve earned-income prospects could have appeal. In terms of structures policy for U.S. agriculture, problems of isolated rural communities constitute a relatively small portion of the overall agricultural scene.

Large-Scale Commercial Farming

The large-scale, capital intensive nature of commercial farming has brought to attention several “problems” associated with the big business aspect of many farming operations. Three such problem areas are considered here.

The flow of outside capital into the agricultural sector can raise land prices and decrease the control of farmers over the production decision-making process. Though there may be little consensus among researchers concerning whether or not land is overpriced in relation to the returns generated, there is little debate that tax regulations encourage capital inflow to agriculture. Nonfarm ownership of agricultural resources has both advantages and disadvantages. Nonfarmer investors can reduce the amount of capital required by farmers and can reduce the risk inherent in farming. Though nonfarmer control of agricultural resources may be distasteful to farmers, there is little evidence that it has a negative impact on production or on the consumer. There is little research to indicate that farmer-owners are better custodians of farmland resources than are nonfarm owners, and fears of the consequences of allowing the farm sector to share control of resources with nonfarm entities remain largely unsupported by research. If farmer ownership and control of production resources are deemed desirable, achieving this end would likely be more efficient through means other than structural reform. Tax regulations can be revised to eliminate incentive for outside investment in agriculture; ownership of farmland can be restricted to specified classes of people; some countries not only require that the landowner actually farm the land but also require him to live on or near the farm. Though such measures constitute departure from past norms, they are much less drastic measures than controlling structure.

Difficulties of entry-level farmers are compounded by increasing capital requirements. These capital requirements rise as resource costs increase and as the long-run average cost curve shifts to the right, thereby requiring even larger farming units in order to gain economies of size. Limiting farm size would have little effect on entry-level farmers because they are typically on the other end of the size distribution. We now have both federal and state programs for assisting small and entry-level farmers. In other countries such programs are combined with farm amalgamation programs to create farms of competitive size, to assist entering farmers in getting established, and to assist leaving farmers in retraining and/or resettlement.

The existence of a large number of small farms and a smaller number of highly produc-

tive large farms creates problems of unequal access to input and output markets. Large farms are more likely to be able to take advantage of large volume input purchases and to sell produce via forward contracting arrangements. These transactions may have benefits in monetary terms and in risk reduction. If farms were of more nearly equal size, they would presumably have more nearly equal access to various marketing channels. Nonstructural policies to increase farmer access to markets could include expanded use of cooperatives and establishment of an export marketing authority with which the farmer could deal directly. Export marketing authorities are used in many countries and can yield benefits to the nonagricultural national economy as well as to farms of all sizes.

Small Farms

The major problem of most small farm operators is that they do not control enough resources to support an acceptable lifestyle. Net returns per acre on small farms would have to exceed those of large farms by a wide margin to compensate for fewer acres and thus provide sufficient income for the farm family. The prospects for achieving such high returns per acre are dim, with or without additional government assistance. Structural policies in this area should be aimed at amalgamating small farms into larger ones, and providing training and relocation assistance to persons leaving the farm. Programs of this type in some European countries are long term and voluntary—i.e., there is no forced amalgamation. Rather, when farms are sold, bidding is restricted to persons who can show that, after the additional land has been acquired, they will have a farm of sufficient size to be competitive. If there is an insufficient number of qualified bidders, the government can buy the land and hold it in custody until it can be combined with other available small farms to make a larger farm. This larger farm is then sold to private individuals who may receive additional government help in getting started in farming, if the case merits such treatment. In any event, the original small farm owner is not obliged to accept the government's bid for his land if he feels the price offered is too low, and if he so desires he can sell the farm but retain ownership of a house and two acres. This provision allows nonfarm workers to continue to live outside urban areas (James). Such a program would have benefits in terms of both increased agricultural production and increased labor productivity of persons leaving the farm. Although changes in structure would be long term, the cost of such a program would be minimal.

SUMMARY AND CONCLUSIONS

Current trends (many of them longstanding) in the structure of the agricultural sector include declining farm numbers, increasing average farm size, increasing specialization of production, and declining rural population. A number of problems have developed along with the evolution of structure. They include higher capital requirements for farming, increased flow of outside money (and control) into agriculture, reduced market access for some farmers, declining rural communities, and greater barriers for entry-level farmers. It has become increasingly popular to infer that many current problems can be alleviated via adoption of a structures policy for U.S. agriculture. This article considers the prospects of using structural reform to resolve several broad problem areas. In light of the discussion, the following issues can be identified as relevant to the prospects of implementing a successful structures policy.

- Causality. Are current farm problems the result of structural changes and, more important, is structural reform likely to reverse the process and thereby solve the problems?
- Feasibility. What would be the cost of structural reform in terms of departures from past norms, increased regulation, and loss of control to government regulations? Are the expected net monetary gains of structural reform sufficient to offset these costs? How ambitious a structural reform program can be enacted given the likely social and political support of both farmers and the rest of society? Would alternative programs aimed at specific problems be more effective and/or efficient than structural reform?
- Specifics. Given that the two preceding issues are answered at least partially in the positive—i.e. that some degree of structural reform would be acceptable to farmers and to society at large and that some farm problems do appear to be amenable to treatment via a structures approach—are those problem areas which are of interest also the ones for which an acceptable structures policy can be devised?

The prospects of devising an ambitious structural reform program which would be acceptable to farmers and to society in general appear dim at best. The costs in terms of increased government regulation in areas heretofore considered sacrosanct have been generally

overlooked and/or underestimated. There is little consensus among farmers concerning the specifics of structural reform. Congressional support for farm legislation is less than overwhelming. Public support for farm programs is primarily concerned with low food prices and perhaps increased agricultural exports, neither of which, at least in the short run, constitutes a major factor in the rationale for structural reform.

The prospects of solving a broad range of farm problems via an ambitious structures policy are equally dim. The problems of the agricultural sector are diverse and thus require a range of policies aimed at specific problem areas. The history of farm program performance leaves something to be desired—many programs have had unanticipated side effects which over time have become additional problem areas. Predicting the long-run effects of an extensive structural reform would be a formidable task.

Limited structural policies aimed at specific areas may have some useful applications. The most promising area appears to be amalgamating small farms into larger, more competitive units. Such an approach could be low cost and voluntary and, if combined with other forms of assistance, could also benefit entry-level farmers and farm leavers. Whether or not such a program would receive an adequate level of public support is unclear. Policies to assist certain types of declining rural communities and to restrict outside ownership and control of farm resources might partially rely on structural reform mechanisms.

Attempts to use structural reform to alleviate problems related to large-scale commercial farming would likely be unsuccessful and unpopular. Placing a very high ceiling on farm size (either in acres or dollars) might be politically feasible but would have little impact on the overall structure of agriculture and would solve few problems. Setting a somewhat lower

limit on farm size would arouse objections from a larger group of very vocal farmers and over time might prevent farms from gaining economies of size.

Preservation or restoration of traditional agrarian values, as a basis for structural reform, has no merit. If agrarian values and the "family farm" (whatever that is) do, in fact, survive, it will be because of factors much more basic to society than the number, size, and distribution of farms.

The preceding points do not mean that structure should be ignored in devising public policy. Agricultural programs should be designed to be effective, *given* the structure that exists or is evolving. One possible step toward more explicit tailoring of agricultural policies to fit structure would be to have two basic agricultural programs, one for small/part-time/hobby farmers and one for commercial farmers. The first could cater primarily to social needs whereas the second would be aimed at production. A farmer qualifying for both programs could choose which route he desires to follow.

Finally, events of the future will continue to affect the structure of agriculture, perhaps in ways analogous to results of land reform policies, but these events will come mostly from outside the agricultural sector. If we could anticipate some of the major forces and if we could get a consensus both within agriculture and in society concerning what constitutes an improved structure, we might be able to shape that structure to our liking. Though we can specify some areas that are likely to have a major effect on agriculture (fuel shortages, inflation, technological changes, perhaps worldwide food shortages, etc.), the implications of such forces for structure are unclear. Thus, given the realities of the present situation, it seems safe to predict that the structure of agriculture will continue to be largely evolutionary—not planned.

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