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AGRICULTURE IN THE CENTRALLY PLANNED ECONOMIES

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From a number of viewpoints the agricultures of most centrally planned economies performed well from about 1950 to the mid-1970s. Agricultural production grew more rapidly in Eastern Europe and the Soviet Union from 1950 until the early 1970s than in Western Europe or North America (USDA, 1981). Per capita production of meat and other livestock products increased, in some cases at an unparalleled pace, with each of the East European countries increasing per capita meat consumption by approximately 20 kilograms per year between 1965 and 1975 (USDA, 1982a).

But since the mid-1970s the agriculture and food economies of Eastern Europe and the USSR have faltered and, in some cases, stagnated or even declined in terms of production (USDA, 1981). Any pretense of self sufficiency in food and agriculture has had to be abandoned. In one country strikes, riots and martial law were responses, at least in part, to an unsatisfactory food situation. In another country bread rationing has had to be introduced--an almost unbelievable response in a world in which wheat is so abundant and cheap. In still another, meat has essentially disappeared from retail stores with its distribution now largely controlled by employers and trade unions. And in almost all countries the financial costs of food price subsidies have been or are now a major budgetary element and source of actual or potential disequilibrium in the markets for food.

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The sharp increase in grain imports by the centrally planned economies during the 1970s was associated with the rapid increase in meat production achieved in Eastern Europe, though the even more striking growth of grain imports by the USSR and China must be explained on other and more complicated grounds. For some of the CPEs the increased grain imports were made possible, if not actually paid for, by credits extended by Western banks and governments. Now that the credit worthiness of several of the East European economies has been questioned, the growth of grain imports has slowed down and may well be reversed in some countries. The enormous overhang of debt, some of which has figuratively been eaten, poses serious problems for several economies for the decade ahead.

I have for some time argued that the primary source of the difficulties of socialist agriculture is that such agricultures are found in socialist economies. I mean this--it is not intended as a facetious remark. It now seems quite evident that any form of land tenure can be made efficient And socialized agriculture, in its most general terms, is a land tenure system. Elsewhere I have discussed what would be required for a socialized agriculture to be an efficient agriculture (Johnson 1980). A set of well defined property rights is required; in terms of efficiency it makes little difference whether the land is owned by the state--all of the people--or by the members of the collective farms. What matters is that each party to the tenure relationship has well defined rights to the fruits of one's efforts or one's contribution to the output. There is no economic reason why the state cannot be a reasonable landlord who promotes efficient use of resources. Unfortunately the policy makers in the centrally planned economies have not learned the lesson of how to be

good landlords, though China may now be giving some evidence to the contrary.

But it is no longer enough to have well defined property relationships to have an efficient agricultue. Modern agriculture is very dependent upon its economic relations with the rest of the economy, through its use of nonfarm purchased goods and services and its need for efficient, reliable and low cost marketing services.[1] When input markets and marketing services are poorly organized it makes little difference how agriculture is organized, be it as private, collective or state farms.

The output performance of Polish agriculture, which is three-fourths private, has not been any better than the other Eastern European agricultures that are fully socialized. But there is no reason to expect better performance from a private agriculture unless the policy setting within which the agriculture operates is supportive and non-threatening. But in Poland the Communist Party has been unwilling to rescind its long-run objective of a socialized agriculture or to adopt an even-handed treatment of private and socialized farms in the allocation of machinery, fertilizer or other farm inputs. But I must hasten to add that in most of the CPEs the policy setting of socialized agriculture can hardly be described as supportive of a low cost and efficient agricultue.

I use the term "policy setting" in a very broad sense to include the significant relationships between farms and the state--output and input prices (the terms of trade), procurement requirements, the planning process and other aspects of decision making. I also use it to include an intangible element--the extent of mutual trust and confidence that exists between the state, as represented by the numerous agencies that deal with farms, and the farms. Mutual trust goes beyond matters of

honesty and includes the attitudes of governmental officials about the competence of farm people to carry out their functions efficiently and responsibly. Where these elements of mutual trust are circumscribed, other and more objective aspects of the policy setting may have less than expected effects upon outcomes.

Different Socialist Economies, Different Agricultures

It is not possible to progress very far in a discussion of socialist agricultures without recognizing the differences, as well as the similarities, that can be observed among different countries or groups of countries. I shall discuss three countries or groups: USSR, Eastern Europe and China. Even within Eastern Europe there have been and are significant differences in organization, policies and performances. My comments can only highlight a few things about each.

USSR

I start with the agriculture of the USSR because it was the first of the socialized agricultures and there is now more than a half century of experience with what can and cannot be achieved under socialism. The output record for 1950 to 1970 was a very good one compared to Western Europe or North America. By 1950 Soviet agriculture had recovered from WW II except for the impact upon the farm labor force which at that time consisted very largely of women and older men. Given the composition of the labor force, the performance of Soviet agriculture during the 1950s was quite remarkable.

With the death of Stalin the rapacious exploitation of rural people by their government was largely brought to an end. Prices paid to farms

in 1958 compared to 1952 were increased severalfold--the grins by six times; livestock by eleven times; sunflowers by eight times, and sugar beets doubled. Milk prices in 1958 were four times the 1952 prices (Strauss, p. 201).

Khrushchev undertook several bold and risky agricultural measures --the New Lands program which brought 36 million hectares of marginal land under cultivation, the corn program which increased the planted area of corn from 4 million hectare to 37 million hectares in 1962 though the maximum area harvested for grain was just 7 million hectares, the abolition of the Machine Tractor Stations and the introduction of a single procurement price for each product. While Soviet agriculture responded positively to some of the measures, it may have been success that undid Khrushchev. In part because of measures adopted and in part due to favorable growing conditions, 1958 was a bumper crop year. It was then that Khrushchev abolished the MTS in the expectation, widely shared outside the USSR, that this step would significantly improve productivity by making the collective farms more responsible for the use of their resources and by providing greater incentives. Like all too many agricultural reforms, this one was poorly planned and executed. Repair services were not adequately provided for and the machinery was transferred to the farms under unfavorable terms for the farms A new burden replaced an old one and farm incomes declined after what could have been a constructive move.

Agriculture performed far below the belicose Khrushchev's expectations--to catch up and overtake the United States in meat and milk production by 1965. Several of the goals for 1965, announced in 1958, still have not been met, including the critically important one for meat. While

farm output grew by 43 percent between 1952 and 1958, for the next six years the output increased by just 17 percent (USDA, 1981). At least in part due to the poor performance of agriculture and the need to import 10 million tons of grain in 1963/64, Khrushchev was replaced by Kosygin and and Brezhnev in 1964. Some of the personal and politically liberalizing measures introduced by Khrushchev may have assured his physical if not his political survival.

The new administration carried out a major reform of agricultural policies--farm prices were increased, an enormous fertilizer production program was inaugurated, investment in agriculture was increased sharply, wages were introduced for farm workers and a pension system for members of collective farms was introduced. These were clearly sensible measures and were expected to have resulted in a revitalization of agriculture.

But hardly any other aspect of the agricultural policy inherited from Khrushchev was changed. Moscow still maintained tight control over the minutest details of farm operations--crop areas, plowing dates, seeding dates and rates of seeding, harvesting, delivery quotas and the annual and five-year plans for each farm. Nothing was done to achieve trust or respect of the planning or other governmental officials by farm people and thus, of course, confidence in those officials among farm people remained at a minimal level.

Given the material resources devoted to agriculture, it would have been reasonable to expect rapid and continuing output growth. For a time, from 1964 to 1970, it appeared that the program was being successful since output grew at an annual rate of 3.9 percent. But the 1970s saw a much slower growth rate of agricultural output--at an annual rate of 1.2 percent, with an even lower growth rate after the mid-1970s; 1980 output was

the same as in 1973 and 1976 (USDA, 1981).

The shift in resources to agriculture can only be described as enormous. During 1961-65 the percent of national investment allocated to agriculture was 19; during 1976-80 this percentage had increased to 27 percent. If the investment in agriculturally related industries is included, the percentage increases to 33 for 1976-80. Annual rates of investment increased from 9 billion rubles in 1961-65 to 34 billion rubles in 1976-80. Fertilizer deliveries to agriculture, in terms of nutrient content, increased from 6.5 million tons in 1965 to 18 million tons for 1976-80. There were significant increases in the delivery of farm machines, but due to high scrappage rates inventories increased slowing during the 1970s.

Some of the recent output performance of Soviet agriculture can be attributed to poor weather--grain production from 1979-81 may have been 13 percent less than it would have been with normal or average weather--actually 179 million tons instead of 205 million tons. But the effect of the low production of grain and other feed supplies was partially if not wholly offset by grain imports averaging 36 million tons for the three years. The level of grain imports was greater than the shortfall in grain production from trend levels for these years. Thus the fact that per capita meat output in 1981 was the same as in 1975 should not be attributed wholly or even primarily to poor climatic conditions. Milk production in 1981 was below the absolute level in 1974. Milk production per cow in 1981 was 2,040 kilograms, compared to 2,260 kilograms in 1977 and 2,110 in 1970 (USDA, 1982). This decline in milk output per cow is a remarkable development and can hardly be accounted for on rational grounds. Current milk output per cow is among the lowest in Europe.

The very high rate of investment in agriculture and the increase in the purchased inputs over the past two decades has not resulted in a marked decrease in the use of labor. Between 1965 and 1980 employment in agriculture declined by just 15 percent to an annual level of about 27 million. Quite remarkably, even this enormous number of farm workers--Soviet agricultural output is some 20 percent less than U.S.--has not been sufficient. In 1979 some 15.6 million nonagricultural workers were sent from the city to the countryside to help with various farm operations, primarily harvesting. This is approximately double the number of such nonfarm workers sent to the farms in 1960 and some 40 percent more than in 1970 (Current Digest, No. 8, 1982).

Nor does the immediate future look much brighter, either in terms of increased production or greater efficiency and lower production costs. By Soviet estimates the percentage increases in costs of producing (excluding land costs and interest on capital) was 38 percent for grain, 58 percent for meat and 50 percent for milk between 1969-71 and 1978-80 on collective farms.[2]

The cost increases have been responded to by higher procurement prices, including significant price increases in 1979 and 1982 and the extension of the 50 percent bonus for deliveries in excess of actual deliveries during 1976-80 to all farm products. The average procurement prices for all farm products were increased to include the bonus payments paid in earlier years.

The increase in procurement prices have occurred in the setting of a policy of holding fixed the retail prices of major food products, especially meat, milk and potatoes. The policy of subsidizing consumer prices was introduced as an emergency measure in 1965, based on the expectation

that the new agricultural measures would result in such a sharp increase in production and in significantly lower costs that the subsidies could be eliminated. But some seventeen years later the annual cost of the food price subsidies is at least 35 billion rubles ($45 billion at the official exchange rate) and will almost certainly increase in the years ahead.

The policy of fixed prices for food in the face of slowly growing supplies, relatively high income elasticities of demand for meat and milk, and significant growth rates in money wages has had results that are having seriously adverse effects upon the functioning of the Soviet economy. Meat has almost disappeared from state stores; an alternative distribution system centering on places of employment has emerged not only for meat but for many other products in short supply, including such necessities as pickles, catsup and plum jam (Current Digest, No. 2, 1982). The prices of food in the collective farm market in 1980 were almost double the official prices, up from an excess of just 50 percent in 1970.

In October, 1981 Brezhnev called attention to the central role of food in the Soviet Union: "The food problem is, economically and politically, the central problem of the whole five-year plan." He went on to note the necessity to improve the management system (Current Digest, No. 46, 1981): "The collective farms and state farms themselves should have the final say in deciding what should be sown on each hectare and when one job or another should begin." But in May 1982, in announcing the much heralded new food program, there was almost complete silence about the transfer of such authority to the farms.

The food program, as announced was shockingly unimaginative. It must have been the case that general agreement on what was required to

improve agriculture could not be reached. Instead, amid a mass of detail and numerous resolutions, what emerged was the creation of two new bureaucratic levels and a further sharp increase in prices paid to farms and, given the policy of fixed retail prices, an increase in food price subsidies of almost 50 percent. The increase in farm prices, including some special price increases for output produced under relatively poor conditions and unprofitable and low profitability farms, will cost 16 billion rubles a year starting in 1983. Thus the food subsidy bill will reach at least 51 billion rubles annually.

Instead of giving the collective and state farms "the final say in deciding what should be sown on each hectare and when one job or another should begin," agriculture was subjected to two new bureaucracies. One is the agro-industrial associations, organized at the district or province level, which is to be a single agency to manage all enterprises and organizations of agriculture, including the processing industry and input services. A higher level organization, called agro-industrial commissions, is to be created at the republic and union levels.

But hardly a word was said about the initiative or independence of the collective and state farms. The farms now have an additional master, who may or may not replace the others to whom each farm has had to be responsible. If one remembers that in all of the USSR there are but 46,000 collective and state farms with 24 million members and employees, it would be reasonable to assume that farms of such average scale could rather well manage their own affairs if given the opportunity to do so.

While Brezhnev apparently had to bow to the bureaucracies in his effort to give greater authority to the farms, he scolded the bureaucrats for their excessive meddling: "It's necessary to get rid of administrative

fiat and petty tutelage with respect to collective farms and state farms, which can rightfully be called the foundation of all agricultural production. No one should be permitted to demand that farms fulfill any assignments not envisaged by the state plan or to ask them for any information except as established by state reporting requirements" (Current Digest, No. 21, 1982, p. 7). At least, Brezhnev must be given credit for trying.

China

At the present time it is very difficult to describe the socialist agriculture of China. Revolutionary changes are underway and it is not obvious that any one in China knows when and how the changes will end. It is not at all clear, at least to me, how farming will be organized and administered in 1985.

As recently as 1977 on many, if not most, communes the members were directed in their daily activities by some official. Often times people were assigned tasks that were of little productive value, perhaps so no one would be idle. There was little or no relationship between work or effort and reward. Work points were allocated on the basis of time input and not on the amount of work performed. Learning from Dazhai, a production brigage with only 83 households, was a national campaign. It is perhaps typical of the cynical attitude toward farm people prevailing at the time that while Dazhai was claimed to have made a productive garden spot out of a hilly mountainside solely on the basis of their own resources and achieved a very high level of output, it has now been revealed that the brigade received substantial assistance from the state and that for a number of years the output data of the Dazhai brigade and the country in which it was located were falsified (Zhou).

Under the commune system and related policy positions, including a severe agricultural price scissors (Huang), grain production per capita in 1977 was the same as in 1957 and, shocking to some, as in 1936 (Johnson, 1982). Contrary to generally rosy views concerning the success in eliminating poverty, it has since been revealed that 100 million Chinese suffer from malnutrition and almost every year one or more parts of China suffer from famine or food stringency (Johnson, 1981). And recent analyses have revealed that the distribution of income in China is no more equal than in other developing countries. Much of the enormous inequality arises for two reasons: First, urban incomes are at least double those of farm people, and, second, there is very great income inequality within rural China--not just regionally but from one production team to another in the same commune. Mobility between farm and city, from commune to commune, or from one production team to another within the same commune is extremely limited. Mobility from farm to city is restricted as a matter of policy; mobility within agriculture is limited because there is no incentive for the better-off communes or production teams to accept new members.

What are the revolutionary changes? The most important, by far, has been the introduction of the work responsibility system. The work responsibility system consists of a variety of arrangements designed to create a relationship between one's contribution to output--marginal productivity--and one's reward. Some of the more significant work responsibility arrangements are: (a) payment for a specific task, such as transplanting a given area with rice or harvesting a crop on the basis of amount harvested, each to be done according to an agreed schedule; (b) allocation of land, seed, fertilizer, machinery, draft animals and

tasks to a group, with work points allocated on the basis of the amount and quality of work, with the value of the work-points dependent upon output achieved; and (c) contracting with a household, or occasionally an individual, for the delivery of specific amounts of output to the state and supply of services by the production team which must be paid for with the contracting party retaining all output above that delivered to state or paid to the team.[3] The last--the household responsibility system--appears to be dominating all the others. In 1981 it was said that 20 percent of all farm households were on this system; in June 1982 it was said that 45 percent of farm households were participants. Originally the household responsibility system was to be restricted to poor and mountainous areas, but this restraint no longer seems in effect.

The household responsibility system is a tenant or rental system, with the rent calculated in terms of product rather than money. For the output delivered to the state the household receives the basic procurement prices and, possibly, higher prices for output in excess of the required sales or delivery quotas.

The responsibility systems, which seem likely to spread to almost all of agriculture, has greatly reduced the role of the commune and the production brigade as well. However, the production team (approximately 30 households) still has substantial influence because it continues to own and control the means of production other than labor, though there is evidence that some production teams have actually sold machinery, such as the small walking tractors, to their members. The ownership of the land remains with the production team and the team retains the authority to reallocate land among households. Land is generally allocated according to the size of family.[4] If this criterion is maintained, there must be

authority to reallocate land as total population and/or the sizes of individual families change.

The role of the commune may be changed under the new constitution by removing its political functions. Until now the commune has been both a governmental and economic institution.

Other changes have occurred since the fall of the Gang of Four in 1977. Prices of most farm products were increased by 20-25 percent and a bonus of 30 to 50 percent was to be paid for deliveries in excess of the required quotas. Of crucial significance to the quality of life in rural and urban areas was the permission to reopen rural fairs and urban free markets at which farm people could sell farm products and handicrafts; these markets had almost all been closed down during the insanity of the Cultural Revolution as representing the tails of the capitalist dog. Production brigades and teams were permitted and even encouraged to create nonfarm activities as a means of providing employment and income: such nonfarm sideline activities had been severely restricted in the late 1950s and early 1960s and almost abolished during the Cultural Revolution (Johnson 1982).

Most of the recent changes are likely to result in increasing the already high degree of inequality in rural incomes. High income production brigades and teams have the capital to invest in nonagricultural sideline activities, which are far more profitable than farming. The suburban agriculture areas have been high income in the past; the reopening of urban markets has added to their income earning potential. The more energetic, intelligent and educated can now come closer to receiving the value of the marginal product for their labor. The income inequality consequences is recognized in China; a headline in the China Daily on June 11, 1982 was: "Policy of Getting Rich with Honesty will Not Alter."

Eastern Europe

The agricultural policy and institutional setting in Eastern Europe varies so much from country to country that it is impossible to deal with each of the countries in a brief review. Agricultural performance, as measured by output growth, has differed significantly. The highest output growth rates during the 1970s were achieved in Romania (59 percent) and Hungary (33 percent); the lowest by Poland (3 percent). Bulgaria, Czechoslovakia and East Germany had approximately the same output growth rates, about 23-24 percent (USDA, 1981). Poland's very low gross output growth rate occurred in spite of much larger grain imports at the end of the decade than at the beginning.

All of the Eastern European countries, except Yugoslavia, have had a major policy in common, namely the subsidization of food prices. I have dealt with this subject at some length elsewhere so only brief note is made here (Johnson, 1981). But commitments to hold the prices of some or all food products constant in the face of rising costs of production, rising money wages, and increases in the general price level have had two significant disequilibrating effects. One has been to encourage increases in the quantity of food demanded as the real price of food in the state stores had fallen. This policy encouraged rapid growth of desired consumption of livestock products and was responsible, at least in part, for the large increase in grain imports during the 1970s. Such imports were required if the imbalance between the amount demand and supplied at artificially low retail prices was to be kept at politically acceptable levels.

The other effect was the pressure to increase agricultural output to keep up with the growth in the amount demanded. This necessitated keeping investment at a high percentage of national investment, though at much lower

levels than in the USSR. But more important, the increases in prices paid to farms had to be paid for in whole or in part from the public treasury, not by consumers. The burden of the food price subsidies increased to such levels by the end of 1970s that most of the countries had to take drastic steps and significantly increase food prices. The outcome of the Polish price increases announced in the summer of 1980 and generally delayed until early 1982 are well known. Price increases announced in 1970 and 1976 were almost all rescinded in the face of active and occasionally violent opposition. By 1980 the price subsidies for meat exceeded the amount paid by consumers and agricultural subsidies equaled at least 20 percent of the wage fund (Johnson, 1981).

Hungary increased food prices by a third in 1976 and by a fifth in 1979 though even these increases did not result in any decline in the absolute level of food price subsidies. Bulgaria increased food prices by about a third in 1979; Romania announced some price increases to take effect at the beginning of 1981, but public opposition resulted in postponing the increases; finally food price increases averaging 35 percent were put in effect in February, 1982. Now Romania has bread rationing, though it is possible its purpose is not so much to limit human consumption as animal consumption encouraged by a highly subsidized price. Other foods are also being rationed in Romania.

The burden of the food price and agricultural subsidies in Poland became greater than the system could support The viability of the economy depended upon increasing retail prices and nearly eliminating the price subsidies.[5] The price increases required were enormous, with retail food prices in early 1982 being double to quadruple the average prices for 1980. But even at these higher prices non-price rationing prevailed, either

officially or unofficially. In mid-1982 meat is officially rationed, with a ration for an ordinary citizen set at 2.5 kilograms per month. A year earlier the ration was 3.7 kilograms per month and in 1980 per capita meat consumption was about 6 kilograms per month (USDA, 1982d). The existence of unofficial rationing is indicated by the sharp increase in prices in the free markets. Wheat prices in early 1982 were four times the average 1980 price, with similar increases for other grains.

Price increases of the magnitude indicated were possible only after martial law was declared. While there were a number of explanations for the deterioration in the relations between the Polish government and the citizens of that country in 1980 and 1981, one important cause was the pressure that the government faced in greatly reducing or eliminating the food price subsidies. The earlier mismanagement of food price increases in 1970 and 1976 and the general lack of trust between the Polish government and many of its citizens exacerbated an extremely difficult and complex situation that it would have been hard to resolve, at best.

George Lazarcik has divided the Eastern Europe agricultures into two categories--centralized and predominantly decentralized agricultures. I agree with the distinction, which emphasizes control rather than ownership of land. The centralized agricultures are Bulgaria, Czechoslovakia and the German Democratic Republic (GDR). A possible surprise in the predominantly decentralized category is Romania, since for the rest of the economy it is the most centralized of these countries. Since either 1965 or 1970 output growth has been significantly greater in the countries with decentralized agriculture. Net product has also grown more rapidly--20 percent greater in 1979 than in 1965 or 1970 in the decentralized agricultures and from no change to a 5 percent increase for the rest.

Not too much should be made of the two-way classification. The agricultures differ in many other ways For example, the decentralized agricultural economies had a rather modest decline in farm employment between 1965 and 1979 of 22.5 percent while the other countries had a decline of 32 percent. The centralized agricultures were much more capital intensive having more tractors, for example, both per hectare of land and per worker.

But recent events in Poland will mean that the agricultural performance of the decentralized economies will lag beyond that of the centralized ones. Agricultural production in Poland in 1980 was almost a fifth below 1978 and declined further in 1981. What has occurred in Poland illustrates the role of the general policy setting and its importance compared to whether agriculture is predominantly private or socialized.

Concluding Comments

It is possible that in the not too distant future the performance of agricultures in several of the centrally planned economies will be of such a nature as to call for significant policy changes. As noted, China is currently undergoing what can only be described as revolutionary changes in policy and organization. The concern over the ability of the Eastern European economies to service their external hard currency debt will put substantial pressure upon several of these countries to undertake significant agricultural policy changes since output is unlikely to be increased during the 1980s through expanded imports of grain. Certainly it will be very difficult to borrow to purchase grain; the heavy burden of servicing even the current debt could put pressure upon the ability of some of the countries to maintain their current levels of grain imports.

The agricultural difficulties confronting the Soviet Union and Poland

are probably the most critical and difficult of solution. The recent extensive review of agricultural matters in the Soviet Union was unable to come up with any significant steps that would prevent further deterioration in the performance of Soviet agriculture. Poland is confronted with a significant reduction in per capita food consumption, something few nations at her per capita income level have ever been subjected to.

But very striking about the past and current difficulties of the agriculture and food policies of most of the centrally planned economies has been the role of one policy objective--namely that of stable nominal prices for major food items, such as bread, meat, potatoes and milk. This policy objective has had a major role in performance of the food and agricultural sectors during the past decade. It has generated rapid growth in desired consumption, a growth in demand that could not be met through expanded production. The policy objective ruled out the use of price, at least consumer prices, as the tool for equating demand and supply in the market. Experience indicates that it is exceedingly difficult to eliminate the food price subsidies. But until the subsidies are eliminated or reduced radically, agricultural policy problems will remain high on the agendas of economic and political groups in the centrally planned economies.

The real cost of the policy of stable nominal food prices is not solely the budgetary costs. Of equal or greater importance is that increases in prices paid to farmers require budgetary expenditures, often of enormous size as witness the increases in the USSR to become effective in 1983. This means that farm price adjustments lag behind changes in costs. In general it appears that price adjustments cover cost increases that have already occurred and take little or no account of cost increases that will occur prior to the next price adjustment. Thus for some or all farm products,

farms are caught in a price scissors most of the time.

As we know agricultural policies in every country are subject to controversy and in many countries the budgetary and resource costs are very large indeed. But there are important differences in the outcomes in the socialized agricultures and those of the industrial countries. In the industrial countries output is rather greater than desired and resources required to produce the actual output in terms of labor and investment are a minor fraction of the economy's total. In the socialist economies, output is less than desired and the resources used to produce that output represent a substantial drain upon the economy.

But some changes have been occurring in socialist agricultures. This is particular true in Hungary, Romania and China. Only time will tell if similar changes will occur in other economies. What does seem certain is that unless major changes do occur, agriculture will continue to be a major drain on economic growth and a source of dependence on others.

FOOTNOTES

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[1]A nearly identical view is expressed by Zheng Linghuang (p. 117), a Chinese economist:

> "Modern agriculture's level of forward and backward linkages is very high. Its level of production efficiency is also conditioned by economic activities outside of agriculture. For example, the quality, price and supply availability of production materials, the ability of credit structures to provide managers with money to buy production materials, etc., all can influence the production efficiency of agriculture.
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> ". . . raising agriculture's production efficiency is closely related to each agriculture's organizational abilities and quality of management, but the support for agriculture from the country and the national economy's other sectors cannot be ignored. Indeed, one can say that the latter is the more important aspect."

[2]On state farms the increases were 37, 55 and 53 percent, respectively. The percentage increase in costs of meat production is a rough average of the increases for beef and pork. For collective farms the increase in costs of producing beef was 66 percent and for pork 51 percent; on state farms the inyreases were 65 and 43 percent. The estimates are made by Soviet official agencies.

[3]Land is allocated to the family for its use; currently the land is apparently allocated for a single year. The production team provides certain services, such as plowing the fields, and makes available or sells current production inputs to the family.

[4]The rapid expansion of the work responsibility system, especially the allocation of land to families, weakened the campaign to enforce the goal of but one child per family. When income was directly allocated by the production team, payments could be made to a family that agreed to have but one child and penalties could be imposed on families that had more than one child. With the widespread adoption of the family responsibility system, the birth rate increased in rural areas. On a trip to China in 1982 it was noted that at least some production teams were supporting the one child per family campaign by refusing to allocate any additional land for any child in excess of one and by imposing a significant fine for the second or any additional child.

[5]Price subsidies remain for milk and milk products (USDA, 1982a).

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