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SOME CONSTRAINTS OF INTRODUCING FREE MARKET REGULATION INTO PRIVATE FARMING IN POLAND

by

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# SOME CONSTRAINTS OF INTRODUCING FREE MARKET REGULATION INTO PRIVATE FARMING IN POLAND

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The task of this article is to explore the effects of economic reform implementation on private farming in the national economy of Poland. In the broadest sense, the implementation of economic reform in Poland involves adopting a market economy mechanism of regulation to take the place of administrative methods derived from Central Plan regulation. The essence of economic reform is in creating the opportunity for state-owned enterprises to be economically independent, self-financing, and fully autonomous and sovereign in the decision-making process.

Private farmers have always operated in accordance with the economic reform principles which are now being implemented on a wider economic level in Poland. This puts the private farmer in a unique position because all economic operations of the peasant farmers are financed by their own means (but subject to input rationing). Economic reform implementation in the private sector primarily concerns changes in the economic environment of this sector.

Most importantly, the approach used to settle farm input and output prices must change. With economic reform implementation, market mechanisms must replace administrative methods and direct government involvement in farm-gate and farm-input prices formulation.

The process of conversion from administrative to free market based regulation is not easy. It involves a number of problems and uncertainties which must be solved over a short period of time.

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Government price policy for the means of production and farm supplies is widely criticized because it results in disequilibrium on the supply side market. This policy leads to extended administrative distribution of many basic production inputs and means of production. Farmers wait in long lines to receive the tractors and other machinery they ordered in advance, as well as waiting in lines for other current critical production inputs such as fertilizer, chemicals, and coal. (This situation involves corruption to some extent.)

From an economic standpoint, the most important fact is that some of the inputs and means for production are purchased by farmers whose operation is least effective. On the other hand, the most productive farmer cannot obtain them. Due to this method of allocation of inputs and means of production which are scarce, resources in agriculture are not utilized at an optimal level.

Some economists believe one solution to this situation is to allow prices of inputs and means of production to be formulated by market sources. Under current conditions in the relation between supply and demand of production inputs, this results in equilibrium prices for the majority of inputs and factors of production being very high. Assuming that no protection is implemented, this has the potential to fuel a bitter selection process among private farmers and socialized farms. In the end, the new economic conditions created by equilibrium prices would lead to the expansion of the most productive farms at the expense of farms with lower levels of productivity. From the perspective of agrarian policy, who could ask for more? But in practice, serious obstacles exist.

There is no question that there is a need for equilibrium prices in farm supply markets (Ghatak, Ingersent 1984). But the problem remains: how to accomplish this while at the same time avoiding undesired results in farm output. One can dispute whether disequilibrium on this market results primarily from an insufficient supply of means of production or from exceeded demand for farm inputs. Many economists, especially industrial economists, claim that disequilibrium is caused by demand which is too high. The core issue surrounds the method used to interpret equilibrium prices within the current conditions of the farm supply markets in Poland.

The farm's supply market has the following features:

1. The two most important inputs, mechanical technology, i.e., machinery, tractors, and other equipment, and biological technology, i.e., fertilizers, chemicals, and protein foodstuffs, are in short supply. Producers of inputs are not interested in quality improvement because it is more profitable to produce old-type equipment. Under conditions of short supply, it is easy to sell any quality of inputs; consequently, farmers don't have opportunity to choose among an extended variety of the production inputs they need, and they are forced to buy a less than desirable product.
2. The production of inputs in Poland for farming is highly monopolized as in the areas of industry producing mineral fertilizers, tractors, combine harvesters, and specialized machines and equipment.
3. The prices of most industrial inputs are determined on a cost basis, which causes producers of inputs for farming to adjust

their prices to their own individual costs of production. The price is repeatedly adjusted to meet the individual producer's costs and the latter is not verified by the market. This is particularly pronounced in conditions of an unbalanced market, where demand exceeds supply and the production of farming inputs are monopolized. Producers of inputs are not forced to decrease the cost of production because the growth of prices easily covers the increment in the cost of production. This directly impacts agricultural production costs in private and socialized sectors.

4. The percentage share of imported inputs for farming on the domestic market is marginal. This is due to the lack of hard currency available to be imported. There is no real competition to domestic industries producing inputs for farming. Since the exchange rate is fixed by the government, this is not a factor which influences market competition.

5. The production of many basic and important inputs and means of production is subsidized and donated. In 1986, almost 70 percent of the total costs of mineral fertilizer production was subsidized, about 40 percent of protein feedstuff's production was subsidized, and about 50 percent of agricultural chemical production was subsidized. It is difficult to determine if the high percentage of subsidies is due to the low level of input retail prices which exists in Poland, or the exceptionally high costs of production and the poor performance of industry.

In the conditions of the farm supply market described above, the equilibrium prices are very high for most inputs, machinery and equipment.

The disequilibrium and monopolized production of these inputs, coupled with the lack of imports causes the production costs of monopolistic producers is of decisive importance. The monopolistic producers will not have motivation to lower the cost or to increase production and to improve the quality of products.

If we assume that monopolistic manufacturers would like to extend and increase their production, it is likely that they would face many constraints which would limit their expansion caused by the lack of hard currency. Under these conditions, there is a shortage of investment sources, raw materials, and other materials required to expand and change the structure of the fixed assets in this industry.

In addition, the allocation of resources is determined by the assumptions and decisions of the Central Plan. In this respect, which is contrary to a market-based way of capital allocation, the higher prices, and therefore the higher profits, don't result in higher investments allocated to this branch of industry. The goals of the Central Plan differ from the realities created by the market. Another obstacle of the Central Plan's directed system is that there is no capital market and regulation for the creation of new competitive manufacturers. The major part of the available capital earned by state-owned enterprises is accumulated by the government through a direct taxation system. The structural investment allocation, although to a diminishing extent, remains a right reserved exclusively for the Central Planner. On the other hand, the competition over these limited investment sources, is very intense.

Hence, taking into account the above-described features of the current economic system in Poland, we can conclude that very high equilibrium

prices of farm inputs, machines, and equipment don't necessarily result in a larger supply which meets the demand of the farmer. In this condition of an unbalanced market where demand exceeds supply, coupled with highly monopolized farm input production, monopolistic methods of price setting dominate over administrative methods of price setting. Consequently, Central administrative rules are replaced by rules imposed by overcontrol composed of monopolistic manufacturers.

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Small scale peasant farmers are in a very weak position in relation to the monopolistic manufacturers and farm supply organizations. The organizations representing private farms, which includes the political influences of the United Peasant party, are not strong enough to adequately protect the interests of the peasant farmer.

An additional issue involves the cost effect of input price increases. The increase of the cost of agricultural production caused by the growth of free market prices of farming inputs is too high and farmers are not able to overcome it by improving their technical efficiency. Thus, a high growth rate of farm output prices can be predicted. It is important to emphasize, that within this framework, the pressure to improve productivity is on the peasant farmer and not on the industrial producer of inputs for farming.

The implementation of market rules in the above-stated conditions on the farm supply market in Poland poses a difficult challenge; the solution cannot be to simply let prices jump up. The real solution is to develop methods which increase the production of farm inputs, machines and equipment. Theoretically, one can decrease demand by inducing high market

prices to achieve a certain level of equilibrium on this market. This will induce structural change in private farming, by decreasing the number of farms and at the same time increasing the farm size. But, this works only where machine or technical equipment is concerned; the demand for current inputs such as mineral fertilizers, protein feedstuff, chemicals and fuel would be even higher in these conditions. Disequilibrium in this section of the farm supply market is simply not a question of exceeded demand; it is a question of short supply.

Growth in the production of inputs which are scarce, would resolve this situation. In addition to increasing production in state-owned enterprises, individual entrepreneurship which includes bringing in foreign capital in the form of joint venture companies should be encouraged (Wos, 1988). Efforts should be undertaken to achieve de-monopolization of production in the industry in question. Creating a competitive market is the foundation for achieving objective costs of production of inputs for farming; however, the use of administrative methods price controls of inputs, should also be accepted temporarily (Roe 1986).

As far as the farm supply market is concerned, it is important to know in advance the input price responsiveness of private farming output. Since peasant farmers are free to choose how to handle their incomes, they are able to increase their consumption while decreasing their inputs and investments, thereby reducing the level of inputs used to keep costs down to maintain consumption on the same level (Ghatak 1987), resulting in a decrease of farm output. This produces, given the present conditions of a high foreign debt and a not-fully equalized food market, an undesirable effect on market-oriented economic reform implementation. Unfortunately,

the effect of rapid growth of input prices can be assured since weak currency and disequilibrium on the non-farm consumption market is the case in Poland, but, on the other hand, this could lead to selecting out only the more productive farms.

It is difficult to assert that the productivity growth of even the most efficient farmers would overcome the decline in the rest of farm production. It is not always advantageous to accumulate money in the economy; the current market is not equipped to supply the consumer with desirable goods. Often in these conditions, surplus currency is not converted to needed goods. Agricultural production can drop because there is inadequate pressure to earn money. This hypothesis also can be supported by the fact that demand still exceeds supply in the food market, leaving room for possible further price increase in agricultural output. (The latter is a question open to a discussion rather than a conclusion.)

Assuming the resultant growth of farm input prices is obvious, our attention is shifted to the possible alternatives farmers have in adjusting to these conditions. We will investigate the possibilities of neutralizing the growth of the cost of production caused by the increase of input prices against the conditions existing on the farm output market. Currently, the prices on this market are partially administratively regulated for basic commodities and the remaining prices are subject to market regulation. The goal of economic reform is for all farm output prices to eventually become free market prices.

One can say that there are a couple of ways private farming can adjust itself in response to input price increases. The most desired way is to increase the physical efficiency of resource use (productivity) in

accordance to the growth of input prices to hold the unit cost of production down and therefore the profitability up (Rembisz, Gemma, 1989). Another option is to increase the output farm-gate prices (prices received). Different pictures emerge depending whether we examine this issue from a macro or micro point of view. The price system formulation on the farm output market determines which option is more relevant and more likely to happen. Assuming that the system of price setting on this market is not going to be altered, it seems more likely the latter option is easier to accomplish. This can be supported by the opinion that the output farm price policy is determined on a cost basis and also by the fact that the food market is balanced, however not balanced deeply enough. It is sometimes said that the farms' lobby is relatively influential, so raising farm prices is an easy process, but this is true only from a macro point of view.

When it comes down to the farm level, the situation is quite different. The peasant farms as a unit of production do not have the means to adjust the output price level in response to the growth of their individual costs of production due to the increase of input prices. Farm output prices, those derived from free market or decreed by the Government, are exogenous for a peasant farm when considered as a productive unit. Hence, peasant farmers cannot simply raise output prices, but must adjust their technology to hold costs down or decrease their income consumption.

There are about 2.7 million peasant farms in addition to a couple thousand state and cooperative ones, making the conditions on the farm output market resemble the conditions of a so-called "perfect market." Hence, the situation of peasant farmers is entirely different from the

present conditions of monopolistic industrial producers of inputs for farming.

This reasoning remains at the macro level despite the fact that the Government claims the farm output price level for main products is determined on the basis of the growth of production costs caused by the increase of input prices. Some economists claim that the price policy is adopted in the favor of farmers and is the same as in the case of industrial producers; however, this policy, of course, creates inflation. It is often forgotten that the sources of inflation are not created in the private farming sector, but originate in the industry which produces inputs for farming. It is also often forgotten that calculations for farm price adjustment are conducted for average conditions at the macro level. This calculation is obviously not aimed at satisfying each private farm. It is not true that the Government farm policy covers the cost increases of private farms. In fact, it has never happened that the growth of production costs, due to the increase of input prices has been covered by an official increase in the level of farm output prices. Since the year 1982, a minus effect of farm price and fiscal policy can be observed. In this year, due to official farm price formulation, the money income of peasant farmers was increased 246 billion zlotych, but at the same time, the production cost increase, caused by the growth of farm input prices, amounted to approximately 410 billion zlotych. Past comparisons of income to production cost increases are as follows: in 1980 the ratio of income increase as compared to production cost increase was 80 billion zlotych to 163 billion zlotych; in 1984 the ratio was 97/115, in 1985 the ratio was 100/138, and in 1986 the ratio was 145/225. Because of the difference in

price and cost increases, a part of the added value earned by peasant farmers was taken away, resulting in decreased profitability of production and decreased farm incomes. This occurred despite the Government's officially declared policy of income parity.

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The first victim of the rapid implementation of economic reform that primarily focuses on the attainment of equilibrium farm input prices is the private farmer. The possibilities for relevant growth of farm output prices are very limited even when the free market farm output prices are imposed. Since the farm output market is significantly more equalized than the farm input market, output prices will not be commensurate with input prices gross.

The potential growth of farm output prices is also impeded by the Government's control of retail food prices. The Government's purpose in controlling these prices is to maintain a reasonable standard of living for workers employed in non-agricultural sectors. Food prices have become a hot political issue since the average Polish consumer spends about 50 percent of earned income on food. In conditions of an entirely free market regulation of farm output prices, it is reasonable to assume that these prices will not grow as fast as the prices of farming inputs grow. This is supported by the experience in the fruit and vegetable market, where all the prices are free market prices, and almost no increase in price level can be observed. It is also significant that the food retail market is relatively better balanced than the non-food retail market despite that the unsatisfied demand on the non-food market is overpowered

into the food market, making it more difficult to maintain equilibrium on the food market.

Assuming farm output prices are determined on a demand and supply basis, private farming comes up the loser in economic reform implementation. As a result, income parity policy, which is a main focus of government agrarian policy, is adversely affected. Parity policy has primarily been implemented for political reasons, but it also has its economic advantages because this policy promotes farm output growth. On the positive side, if farm output prices cannot keep pace with farm input prices, structural change and productivity growth is forced to occur. As it is known, productivity growth caused by technical and structural change in agriculture is the main source of overcoming the effect of input price increases.

Nevertheless, the question remains of how to achieve an adequate level of productivity growth. The high growth rate of input prices will lead of course, to the productivity selection of peasant farmers, but it is not certain it will lead to productivity growth and a higher output for the private farming sector. In the case of a lack of a real possibility to increase the productivity, caused by conditions provided by the research system and available technology and technical progress, this would result in a lower than expected increase of farm productivity for farmers which could afford to buy expensive inputs (Hayami, Ruttan 1985). This might not be enough to overcome a decrease of production for the majority of farmers because they would be forced to reduce their inputs. This majority, primarily composed of small farmers, would not be able to adjust to the

high growth of input prices through attaining higher labor productivity growth caused by technical change (biological technology).

Assuming output prices will rise very high, private farmers as a result have the following options in theory: (1) intensify the composition of production including vegetables, labor intensive crops, and animal production; (2) reduce inputs, keeping consumption at the same level; (3) reduce consumption, increasing expenses for inputs; (4) quit farming. However, there are constraints in the Polish national economy which hinder the private farmer's freedom to have these choices in reality. Intensifying composition of production and higher yields requires a higher level of inputs than currently exists. This is especially evident in the areas where inputs are in extreme short supply. The option of farmers quitting their jobs and moving into the city for work is not easy since the shortage in urban housing continues to be a serious problem and job opportunities in industry and in the service sector are scarce.

The process of structural change in agriculture, which is considered as one of the basic sources for productivity growth, is difficult to accomplish. Accelerating the process of structural change requires a greater supply of machines, equipment and current industrial inputs. Research has shown that 60 to 65 percent of the Polish national farmland is found in the sphere of low or even negative agricultural productivity, although through better allocation and use of resources the productivity growth rate could improve. Statistics point out that in the first half of the 1980s, the effectiveness of use of all resources and inputs increased 6.5 percent per year in Poland. But this figure is deceptive because the first year in which the data collection began, 1980, marked the bottom of a

crises. This figure indicates the possibility of a more sustained productivity growth rate, but the percentage is falsely high because this rate of productivity growth was highly differentiated. Among the smallest peasant farms (below six to seven acres of farmland area), the effectiveness rate was negative; and the statistic increases in a direct proportion to farm size.

The implementation of free market prices has the potential to accelerate the process of reallocation of resources to bigger farms, thus eliminating small farms, which can't cope with the new economic environment. This process must be supported by the increasing accessibility of industrial means of production and farming inputs. This is vital since productivity is diminished as the size of farms increases. To avoid this pitfall, a higher input per unit of land has to become possible. Unfortunately, increasing inputs per unit of land causes higher capital unit costs. Thus, it is not entirely realistic to hypothesize that the growth of farm output prices could be overcome by accelerating the process of structural change in private farming.

It is possible, but not probable, that a higher growth rate in technical efficiency can be attained to offset the cost effect of input price growth, simultaneously achieving a lower output growth rate. The large shortage of inputs required to increase land productivity (biological technology) and increase labor productivity (mechanical technology), and lack of out-of-agriculture job opportunities, all contribute to the fact that even a high rate of improvement in technical efficiency could not neutralize the cost effect of rapidly growing prices. The growth of prices of equipment and current inputs for farming reflects the inflationary

process in industry. Inflation and poor performance in industries which manufacture means of production for farming is thus transmitted to the private sector (Ruttan, 1979). In fact, the growth rate of input prices was two digital, and sometimes even higher, as compared to the average growth rate of technical efficiency which was about one to two percent for the period from 1960 through 1985 (in real terms). Only during the periods of 1956-59, 1970-73, and 1980-85 did the technical efficiency growth rate double. Even so, the efficiency growth rate was not sufficiently high enough to keep production costs down even in times of modest growth of input prices. In fact, throughout most of these time spans, it was necessary to institute farm output price support policies. Even if the efficiency growth rate were three times higher, it would be difficult for agriculture to thrive.

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In conclusion, the approach for the expansion of a free market farm price system in Poland must include the following:

1. The process of introducing free market prices must be started at the retail level, not at the farm input level. Achieving equilibrium on the food market at the retail level is essential in balancing the farm input market.
2. The free market farm price system must reinforce technical efficiency growth not only in agriculture, but more importantly, in the industries producing inputs for farming.
3. The implementation of free market regulation must be treated as an ongoing process. Implementation should take into account the changing conditions of food and farm markets.

4. Some limited administrative intervention must be retained in the free market price system as is the case of agricultural price systems in most developed and developing countries.

Thus, the basic elements which should comprise the free market price system in Poland are:

Free equilibrium market prices must be dominant in the retail food market, the only exception being maximum prices on some very basic food items such as low fat milk, white cheese, and bread.

The prices of most agricultural output commodities should be a function of a demand-supply relationship. Government involvement in price regulation should be limited to establishing minimum state guaranteed prices to a maximum of two or three products. The criteria for determining these products should be based on their importance in attaining food self-sufficiency and income parity for farmers. The minimum state guaranteed price should not be interpreted as the actual market price. This price obligates the state to purchase selected agricultural products in the case of over-production and low current market prices, providing income security for the farmer. Farm to non-farm income parity is one of the goals of economic policy in agriculture. The introduction of free market price formulation on the farm market is unlikely to be a source of price increases in the food retail market. As was already mentioned, the conditions on farm output market resemble the conditions of a perfect market. This assumption is supported by the experience of the vegetable and fruit market where free market price regulation has existed for decades.

Free market prices on farming inputs should not be imposed all at once and the administrative body should be allowed to introduce maximum prices for monopolistic industrial producers of inputs for farming. The maximum prices or the maximum rate of increase should be imposed for a period of three to five years, for the purpose of adopting a cost-reducing technology of production. This is especially important in the case of the production basic types of mineral fertilizers, chemicals (pesticides and herbicides), tractors, combine harvesters, and specialized machines and equipment. A maximum price system imposes a harder financial condition, forcing industry to improve its production effectiveness in the conditions of a short supply and highly monopolized production of means of production for agriculture. As a result, inflation is curtailed, and the private farmer is protected against the rapid growth of input prices. These methods must be implemented in conjunction with de-monopolization efforts, and should strive to encourage individual domestic entrepreneurship and investment of foreign capital.

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