A simulation of the development of prices and incomes without monetary-agricultural policy shows that at the medium-term, low currency countries might remain handicapped as compared with high currency countries. Until European currency exists, a true Common Market concerning pork necessarily depends on the stabilization of exchange rates.

Pig herds in cereal cultivation areas: application of a financial model to the analysis of different production systems

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As only few studies have been devoted to an analysis of the relationship between animal production and farm structure, we decided to examine this problem in a particular regional context involving several types of pig herds in order to estimate their impact on the financial output of the farms.

This study was made during the first three months of 1978 by the Department of Economics of the Chamber of Agriculture and the E.D.E. of Loir and Cher, as well as the I.T.C.F. together with a group of farmers. The technical references used take into account the regional data.

Among the models studied, we chose a farm structure including 30 hectares of arable soil subjected to the usual rotation of that region: winter wheat, (15 ha) winter barley (7.5 ha) rapeseed (3.7 ha), maize (3.8 ha). In the models including pigs, the rapeseed was replaced by maize cultures representing in that case 25 p. 100 of the total surface. The yields and subsequent gross margins examined corresponded to average values recorded in the Loir et Cher. This farm exhibited a relative financial autonomy as shown by its own capital/permanent capital ratio of 68 p. 100. It was used as a reference model for the different simulations.

Five pig producing farms processing their own cereals were studied. The different feeds were manufactured on the farm, except the starter feed for piglets and the formulation of the diets was based on I.T.C.F. data. Farm I was a classical pig fattening farm with an animal production of 800 pigs subjected to restricted feeding and consuming almost 100 p. 100 of the farm's cereals. Farm II of the same capacity as farm I was also specialized in pig fattening and used the Belgian system of accumulated beddings. Farm III was specialized in piglet production with a total of 42 sows. The piglets were sold at 25 kg live weight. In farm IV, the piglets were both reared and fattened, the piglets being produced in the same conditions as in farm III and the bacon pigs fattened in a piggery of the Belgian type (farm II). Farm V was also a piglet rearing farm like farm III, but the piglets replacement came systematically from outside.

The different results obtained during this study show the advantage of using the pig as a processor of the cereals produced on the farm. Thus, the income of a 30 ha farm only specialized in pig production will be about 2-3 times improved as compared to the cereal production provided that the technical results obtained are very good. In terms of financial risks it seems more advisable to begin with production of fattening pigs and then breeding sows three years later.

The influence of the technical choices on the result is very important. The advantage of ad libitum feeding as compared to feed restriction essentially depends on the type of pigs produced. A 17 p. 100 growth gain with this technique is sufficient for its application.

In the piglet rearing farms and in comparison with production of replacement piglets on the farm, the systematic purchase of future breeding animals requires an animal production gain of 1.90 piglet per sow.

(**) I.T.C.F.: Institut Technique des Céréales et des Fourrages.