



Mini-review

SOME RELATIONSHIPS EXIST IN THE INTEGRATED FARM INDUSTRIES

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ABSTRACT

The purpose of this paper was to review the organisational structures among farm producers within the EC Market and East European Countries (EEC). The main emphasis was on organisational structures rather than the entrepreneurs. More explicit attention was focused on the buyer and seller relationship in the upstream segment of the food processing industry. We found numerous impediments in the bargaining processes from the purchasing firms' negotiations for resources in foodstuffs. This paper hypothesises that the causes for this imbalance in transactural trades are due to: (1) ownership structural differences; (2) buyer and seller bargaining power inequalities. Such industry characteristics warrant careful examination.

Key words: farm industries, buyer and seller relationship, transactural trades, productive efficiency

INTRODUCTION

Over the last three decades, farm system in the EEC, with particular reference to the case of Bulgaria, have undergone unprecedented changes in firm development. In particular, firm expansion occurred in the following branches of the food industry: food packaging, food distribution, food wholesale and food retail [11,16].

The evolutionary process of the farm's business structural development has lagged behind modern industrial entrepreneurship advancement. We found that most farm businesses in Europe and the EEC have a production configuration similar to tenure government structure.

The firms in the food industry are heterogeneous in their structure. Small family-run farm holdings and multinational manufacturing firms compete among themselves in this market. The upstream part

of this industry contains two branches of firms: (1) first branch includes the firms that produce intermediate supplies to the farmers, that is, chemicals, fertilisers and farm equipment. These firms are multinational enterprises (MNEs) and their market share shows evidence of being oligopolistic in nature; (2) second branch consists of the farm firm that supplies raw foodstuffs to the food processing firms. In general farm firms are usually small to medium in size, family-run businesses producing homogenous goods, whereas the downstream buyers are usually large multinational enterprises, which maintain a substantial market share in the food processing, packaging or retail segment of this business.

Traditionally, agricultural economic research has been strongly oriented toward studies that fall within the boundaries of industrial organisation [3, 9, 14, 15]. Researches in the past have been particularly interested in the question of the productive efficiency of the farm enterprises but surprisingly little detailed studies of the industries that supply intermediate inputs to agriculture or the food industry have been researched [13]. Information asymmetries or boundaries of firm, or bargaining power

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imbalances or knowledge impediments have been little recognised in agricultural economic research. But the general consensus in economics is that these types of transactions play an important role in the organisational arrangements between buyers and sellers [6, 19].

The emphasis here is on the fact that these inequalities between buyers and sellers may alter institutional arrangements. Furthermore, a call for centring attention on the internal organisational fragment of the farm firm is needed. The main subject matter of this paper will attempt to highlight the complexities of the upstream and downstream organisational structures of the firms in the food manufacturing industry.

NATURE OF THE FIRMS ORGANISATIONAL STRUCTURES

The behaviour of individual farm firms and factors influencing the organisational activities are at the heart of this paper. Some simplifications of what we mean by industry structure is needed in order to make direct comparisons between firms. The organisational structure of the multinational food manufacturers can be described as a matrix-hierarchy. The design of the matrix-hierarchy has two major features: (1) procedures are established for channelling and processing the information flows and (2) shared knowledge flows are formed from patents or managerial skill or joint research development projects. Relationships among individual firms within any organisation may take different forms. Such relationships however, take time and effort to establish, as this alliance requires extensive knowledge of each production system, if they are to carry out long-term trade exchanges. In this section we analyse the following two buyer and seller relationships:

Relationship 1 - farm producer with the intermediate suppliers

Relationship 2 - farm producers with the downstream food market centres

The locations of resources and the ownership-transfer rights between these groups of buyers and sellers prohibit a simple dichotomy - firm and market, as this will not illustrate the depth or the internal forces of such an organisational design.

Historical Perspective

Until sixty years ago, farming business in Europe was a small-scale activity mainly directed towards supplying local needs. The farm businesses, particularly in France and Eastern

European countries, were highly fragmented structures, while in the remainder of Europe the farm producing firms were small with a few medium-size firms dominating the local regions. The most usual form of farm organisations was the family-run, owned or rented by the farmer who made his own decisions as to the manner in which the land was cultivated and what combination of crops or livestock would provide him with the highest profit on the market. Such farm types, characterised as peasant farms, consisted of thousands of scattered business holdings. Great diversity in the average holdings in each country arose from the inheritance law.

The family - run farm business produced homogenous goods. The degree of technology and skilled human capital employed were relatively low during these early periods. Competition in this sector was atomistic in nature and new entrants were relatively free of barriers. The small to medium size farms were very much material-oriented and labour-intensive industry. Inter-firm trade between buyers and sellers in the earlier stages of this industry cycle was competitive in nature.

The Modern Firm Structure in the Upstream and Downstream Segments.

A) Main Players

The farm firms in Europe and East Europe represent the upstream producers. These firms developed and commercialised very slowly during the 1950's and well into the 1990's. Within the farm system, more specialised types of farming have emerged and, in part, replacing the more labour-intensive and traditional form of mixed farming. It was only during the early 1980's, that farms witnessed a steady stream of changes in technical and commercial processes (1, 2, 5, 7, 8). The Western European agricultural system developed an internal structure more suitable for the development of modern technology inputs and modern intra-firm competition (4, 6, 10) although France, Irish Republic, Southern Germany and The Netherlands, arguably, still suffered from extreme fragmentation and scale disadvantages. The structural characteristics of the EC farm firms are based on the average-utilised agricultural area per farm (ha); On the other hand, the structural characteristics of the East Europe farms range from small farm firms in Poland to large private collective farms in Bulgaria, Romania and Hungary.

B. Structure of Bulgaria Farm System (2)

Historically, Bulgarian farms had faced high

fragmentation, which continued as of the period prior to 1945. Private farms in Bulgaria averaged less than 50 hectares with few private farms producing at industrial farm levels. Currently, the downstream segment of the food-processing branch is still under state control, and this may impose price impediments for smaller farm producers. Additionally, there is no farm association to protect local farmers from poor bargaining conditions.

Since 1989, the Bulgarian farm industry has been undergoing extensive transformation. During this period, total private farm output has increased by 58.6 %. Agricultural production in 1994 represented 11 % of the total labour force in Bulgaria and these farmers utilise organic production methods.

Growth in the private farm firm development has been substantial in the past six years. An example is the shift to private farm animal production: meat in 1990 (50.5%) - vs- 1993 (71.5); milk in 1990 (28.3%) - vs - 1993 (71.1%); honey in 1990 (87.3%) - vs - 1993 (91.6%); sheep wool production in 1990 (33.5%) to 1993 (76.7%). This is also the case for plant production in 1993 - 68% from corn, 88% tomatoes, 97.2 % potatoes, 57% from peach, 72% from cherries and 75.2% from grape plant production.

However the production yield of Bulgaria's total farm industry has decreased from 1985 until 1994 by more that 28%. A decrease of 15% occurred in livestock production yield. One of the main reasons for this decrease was the exportation of prime animal stock to Western and Arab markets, where these animals were highly priced for their good breeds. Furthermore, the decrease resulted from poor technical know-how in the control of diseases.

C. Firm Structure

The processes in farming are evolving to a highly technical-oriented and capital-intensive business. Such a framework requires high cost expenditures on seeds, on fertilisers, tractors, combined research and development for the environmental biotechnology designer food products, information input and other farm-related equipment. Much of the enhanced productivity in modern agriculture is attributed to these high technology inputs employed [12, 18]. These factors are inputs designed for large-scale agriculture production process.

There are substantial economies of scale in farming and most of the gains stem from efficiency of managerial skills employed in the farm business. Previously, farm acreage was an adequate measure of scale but nowadays, with the

increasing importance of capital investment and reliance on technology inputs, it is more appropriate to consider the market share size and the fundamental market characteristics. The leading internal forces that affect the firm in this industry are the wide range of ownership and product market share differences. The difference in ownership control, product market share, capital stock and management bargaining power between the buyer and sellers are fundamental. EC farm businesses are mainly based on single ownership structure. On the other hand, Eastern countries diversified between the private collective ownership and state enterprises. The size of the farm business and the legal ownership forms are largely fragmented throughout both the Eastern and Western parts of Europe. There is, in consequence, a constant need for incremental innovation and product differentiation in order to hold or increase market share in this segment of the industry.

In contrast, the downstream segment (or the buyers) consists of firms that are multinational enterprises that dominate the total worldwide sales of food manufacturing assets. The boundaries of these multinational enterprises are transnational in scope. The world's leading food and drinks companies are based in the USA and relatively few MNE producers are based in the EC (5). These MNEs produce heterogeneous goods in a wide range of food products. The structure of these firms varies in size, market share, research and development and innovative inputs.

D. How does the Market work?

Since Post World War II, numerous interrelated farm industries have emerged: marketing centres, retail production centres, food packaging centres and retail distribution centres. The products of one of these branches are the inputs of another product in the next processes of the food manufacturing industry. A special form of contractual relationships is formed between downstream firms to purchase from local farm firms. Such inter-firm transactions need knowledge not only about the price and quality of the product that will be produced, but also knowledge that can only be gained after repeated transactions have taken place. Therefore, it is costly downstream if its activities are not balanced or co-ordinated over time. We try to demonstrate how the upstream and downstream multinational enterprises co-exist with the upstream farm producers in a continuous web network. These linkages may be partially internal or external depending on the market as a whole or the

effect of the internalised arrangement.

Co-operation takes place within these firms (farm producers, intermediate suppliers, food manufacturers) as they rely on one another for raw material allocations, manufacturing or marketing co-ordinated activities. The food manufacturers and the marketing centres tell their suppliers (meaning farm producers) how much they would wish to buy from them, but the demand-sides also concern themselves equally with the organisational component of the raw material input.

The demand-side influences the aggregate farm channels in such ways as to indicate the need for a change in the specification of the product or the need to change the production processes toward, for example, biotechnology design food products. In this instance, the food-manufacturing firms give no formal assurance, in the form of a contract, to the specialised farm producers of biotechnology products. However, the specialised farm producers who commit themselves to new investments in technology and organisational expansion or redesign of the production processes, assume that past behaviour provides them with an assurance of getting further orders on acceptable terms.

E. Legal Influences to the Structure

Combining interrelated farm industries product market resources for production involves partial or outright transfers of property-rights in the form of a contract. With property-rights governing the transferable use of farm products market resources, the repeated use of contracts within inter-firm trade stipulates an important long-term firm relationship. Such loyalty ties both increase the value of the farm goods and decrease the transaction cost of supplying-receiving the farm goods.

Farm producers use a mix of transaction exchanges, from spot market to bilateral or unified governance arrangements. In first relationship, the choice between spot market sales or bilateral contracts, follows the variations in the importance in the factor inputs supplied, that is, the level of the asset specificity exchanged. The second relationships, the product demanded by the buyers determined the variations in the contract distribution. The choice of spot exchange is for farm products that are commodity in nature, while the more specialised farm product, that is, bio-designer foodstuff, induces a shift in transaction towards bilateral or unified governance relationships between buyer and sellers.

CONCLUSION

Rapid adaptation of output increasing technologies, coupled with the nature of demand, has resulted in major changes in the structure of the food manufacturing industry. This shift in production, reflects the fact that competition has become more and more based on cost and intensive supplier and buyer relationship. Such adaptation processes not only change the basis of competition but the relative position of the firm boundaries in the market, ownership structure and bargaining power of the established organisations or network alliances. Impediments to inter-firm competition stem from the lags in farm firm organisational development that have caused farm managers to increasingly become price takers instead of negotiators in this market. It therefore behoves farm managers to restructure their production mechanisms and maintain a close network alliance between their buyers and suppliers in order to establish a competitive market share position in this changing environment.

The challenge for the EC agricultural policy should foster real measures against the non-competitive pressures on small to medium size farm business, as the current situation creates a welfare loss to society. Furthermore, the policy needs to address the acute demand of markets for farm products from countries in Eastern Europe. Such additional farm output supplies cannot be accommodated within EC unless the output of the current farm producers is greatly reduced. Massive restructuring of the present agricultural production systems will be needed within the EC and countries in Eastern Europe in the near term.

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