4. The concept of competitiveness and the role of the government in improving it[1]

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4.1 Introduction

In this contribution the concept of competitiveness will be clarified and the role of government in strengthening the competitiveness of the agricultural sector will be discussed. This chapter starts with briefly indicating the main factors determining competitiveness according to mainstream economic literature. Next, the role of government in improving the competitiveness of the sector is identified and elaborated. The guiding principle for government intervention is whether the market functions properly or not. The final section considers potential problems affecting competitiveness that may affect commodity sectors and reflect on whether and what type of government action may be most appropriate to overcome them. Please note that although the situation in Poland is sometimes referred to as an example, the issues discussed are not specific to the Polish case but may hold for every country.

4.2 Factors determining competitiveness

The issue of competitiveness is highly complex and elusive. Competitiveness embraces issues of resource endowment and the quality of these resources (labour, capital land, human resources), but also the organisation and use of resources. Managerial capabilities and performances are important too, like international demand and supply conditions, and unpredictable physical conditions like climate. Also, the consequence of policy interventions affects competitiveness. Further, competitiveness can be assessed at the levels of a country, sector or firm. It can be also assessed at different market levels.

A very brief reference to the economic literature on this subject may act to illustrate the various approaches that can be followed to indicate competitiveness. Trade theories are so-called macro-economic theories focusing on reasons of international trade between countries. All trade theories emphasise costs and efficiency of resources, yet modern trade theories also indicate that economies of scale, product differentiation and innovation are important drivers of international trade and therefore important factors determining competitiveness. Theories from the industrial economics approach refer mainly to sector level. Well-known industrial economists like Porter and Grant distinguish six factors determining competitiveness: 1) production factor conditions; 2) demand conditions; 3) related and supporting industries; 4) firm strategy, structure and rivalry; 5) chance; and 6) government. Strategic management theories emphasise the importance of competitive advantages linked to available resources on firm level. According to these theories firms should improve their level of knowledge and skills to face competition in future. Marketing, then, assumes a market-oriented approach in obtaining competitive advantage and stress aspects like prod-

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uct innovation, service and quality. Institutional economics highlight the impact of institutional structures (like markets, firms and governments) on economic performance. Institutions (defined as a set of formal and informal rules including their enforcement arrangements) affect incentives and the specific economic choices people make. Clearly the economic literature offers no general theory about competition; many factors may influence the competitiveness of a country, a sector or firm. Consequently, there is no single indicator of competitiveness.

Furthermore, competitiveness is a dynamic concept, meaning that changing market conditions change competitive positions. Market conditions change with changes in demand (due to higher incomes or changing preferences) but also with changes in government policies. For instance, when the EU market opens up and import tariffs and duties are abolished, the Polish exporter may be able to sell at lower prices and will be more competitive vis-à-vis the EU producer. In the *static* sense, therefore, a freer trading environment results in more opportunities for the exporting sectors which are likely to expand, and increased competition for the import-competing sectors which are likely to contract. This conclusion, however, is over-simple (although it may be true in the short term) because it neglects the dynamics of freer trade. Since, freer trade increases the flow of ideas and capital between countries. Cost structures of the industry respond to new techniques, new management methods, new sources of raw material supply and possible substitutes. In addition, the exposure to new products and marketing methods can lead to new cost-reducing approaches to the market and more innovative products being developed. It is, therefore, usually impossible to predict which sectors in the long term will be the winners and which will be the losers in a more liberal trade environment.

Further, it should be acknowledged that competitiveness has different implications for an individual farm than for a sector or industry as a whole. An industry can be competitive (in the sense that under changing market conditions, it can maintain or increase its sales) while individual businesses within the sector may be highly uncompetitive. Similarly, an uncompetitive industry may have highly competitive firms within it. Therefore, it is not possible to assert the sector's competitiveness from average numbers (like productivity, cost of production, farm price levels, and measures of protection), although this is mostly what is done in studies on this subject.

4.3 Competitiveness and the role of government

More important than the exact measure of competitiveness is to determine the reasons for a potential lack of competitiveness. In other words, it is not necessary to measure the competitiveness of an industry precisely in order to identify problems that reduce its current and future competitiveness.

Why might a particular sector NOT be competitive? There are several possibilities:

1. on-farm technical efficiency might be low because of:
- low quality inputs (e.g. breeding livestock, seeds, land in areas with major climatic or physical disadvantages);
- lack of economies of scale;
- low managerial efficiency (because of lack of experience, training, education);

- lack of investment.

2. marketing efficiency might be low because of:
- lack of experience in marketing;
- lack of economies of scale;
- lack of investment in on-farm storage and grading facilities;
- inadequate information about market prices and supply levels.

3. market efficiency might be low because of:
- little competition exists at certain stages of the marketing system, leading to exploitation of market power which raises prices of farm inputs and/or lowers prices of farm outputs;
- inadequate competition gives rise to inflexible organisations unresponsive to market requirements;
- price signals in the market are suppressed: farmers are not paid on the basis of the quality of their products (as perceived by consumers) and in the end do not produce what the consumer wants;
- no commonly accepted grading systems exist which allow producers and buyers to sell/buy on the basis of description and to interpret market information regarding prices and supplies.

4. government regulation and intervention may impose unnecessary costs on domestic producers; or
5. the industry might suffer none of the above specific disadvantage but is uncompetitive because of a different price structure (e.g. for labour) and/or inferior natural resources compared with those in competing countries.

Some of these problems are clearly within the realms of government responsibility but some clearly are not. Government cannot make each and every farm in any sector competitive, and neither can it expect necessarily to maintain the size of a sector (in terms of output) when market conditions change. Adopting different levels of protection and prices usually means some sectors expanding and some contracting. However, the size of any contraction can be minimised and the size of any expansion can be maximised by ensuring that, in those areas where government does have responsibility, barriers to competitiveness are eliminated. Thus, while individual farmers are responsible for their own production and marketing decisions and the efficiency and cost-effectiveness of their own operations, government is responsible for creating the right environment in which farmers (and wholesalers, processors, distributors, etc.) can operate effectively. The government, therefore, will increase competitiveness by ensuring the proper working of the market[1].

If market failures exist, the market outcome (production levels, technology used, production costs) is unlikely to be the most economically efficient at present. If not corrected, these market failures will also adversely affect the competitiveness of Polish agriculture on accession. There are three types of market failures of relevance to the competitiveness of Polish agriculture:

[1] The assumption here is that real competitiveness from a national perspective is the objective. From a farmer's perspective, an extra subsidy will always make him more competitive, but this will reduce rather than increase national welfare.

a) Monopoly or inadequate competition at different stages of the marketing system

Most agricultural production is characterised by large numbers of relative small businesses, so that at this level the exploitation of monopoly power is hardly a problem. However, farmers buy from and sell to industries, which are much more concentrated. In countries like Poland this is potentially an important source of market failure if the centralised state institutions involved in supplying inputs or purchasing farm output still exist to some extent and can wield considerable market power in certain regions. Privatisation of a state monopoly may not solve the problem: if the monopoly still exists, then the monopoly power is only removed from the state and given to a private firm, and there is no necessary improvement in market efficiency. Market efficiency will only increase if there are several competing companies in the market.

b) Public goods

Some goods or services would never be provided if it was left to the market. These public goods have the characteristic that it is impossible (or prohibitively expensive) to confine the use of the good to those that pay for it. Because people who do not pay can also enjoy the good, in the end nobody is willing to pay for the good, and therefore nobody provides it. Another characteristic of public goods is that the use of the good by one group often does not diminish the stock of the good for use by others. Examples of public goods in agriculture are the establishment of a market information system, or investments in research, extension, education and skills training, or investments in land reclamation projects. If left to the market, investment for these goods may be much lower than the optimum because those who pay for it may not be able to recoup their costs.

c) Market externalities

Correcting all market failures does not necessarily lead to an increase in efficiency and competitiveness. If farming or food processing produces negative external effects, then correcting them will impose costs on producers. Market externalities exist when the costs and benefits of production (or consumption) activities affect those who are not directly involved in the market. For example, intensive pig farming may produce slurry which pollute water or air, to the detriment of neighbours or even people living a long way off. The farmer receives no market signals to reduce or eliminate the pollution which reduces the welfare of others, because there is no price penalty for producing pollution. When government intervenes to reduce pollution through either the imposition of regulations or taxes, production costs will increase. On the other hand, some externalities are beneficial (for example, the landscape produced by particular types of farming activity; grazing livestock or certain mowing regimes on pastures which produce a particular type of ecosystem). If government encourages the production of these positive environmental externalities through various payments (as the EU does increasingly) then effectively the costs of *agricultural* production are reduced. With respect to future competitiveness it is important to consider whether Polish agriculture will face any increase in production costs due to (future national or EU) environmental, animal welfare and food safety regulations or may benefit from payments for positive externalities.

The existence of any market failure provides a *prima facie* case for potential government action to improve the workings of the market, or substitute for the market if the market does not exist.

4.4 Potential sources of uncompetitive ness due to market failures

This section considers potential problems affecting competitiveness that may affect the different commodity sectors and whether and what type of government action may be most appropriate to overcome them.

4.4.1 Low technical efficiency

Problem analysis

Lower technical efficiency can be indicated by lower levels of physical output relative to inputs, compared with performance elsewhere. It may be that the market is better at solving the problem rather than government action. The key issue is the reason for the low technical performance. It may be that some inputs (like genetic material or machinery) are of low quality. Upgrading the inputs would improve economic gains but the question is who should encourage and finance the upgrading? In a normal functioning market, the encouragement to upgrade comes from the financial incentives from better economic performance. If a farmer believes that genetically better livestock or plants would give better returns then the farmer invests in this more expensive input and subsequently derives the benefit. The benefit is a private one and the cost of the investment should be private too. There is little argument for government involvement here. If the farmer has not the foresight to invest, then he or she will eventually go out of business.

If, however, the market is not functioning normally then there may be a case for government intervening in some way to correct the market failure. Lack of investment in better genetic material or in better equipment may be due to the farmer not being able to borrow from a bank or because the farmer is not aware of alternative technologies. If the farmer cannot borrow from financial institutions, then the question is naturally 'why not?' The problem at present may be 'solved' by the use of credit subsidies, but this does not address the question why farmers cannot borrow from the banks on normal terms, and it is at best a temporary solution. Very often, credit problems at the farm level can be traced to problems in the credit market itself and the perceived creditworthiness of the farmer.

Creditworthiness depends *inter alia* on the borrower's collateral, the legal environment that makes it possible for the lender to obtain back his money if the farmer defaults on the loan, and the perceived profitability of the proposed investment. The first two are legal problems (ensuring the farmer's title to land is complete and secure, and ensuring contracts can be enforced). The third is linked to many issues, not least of which is the efficient operation of the market discussed later.

Options for government action

Clearly, the government has responsibility for the legal environment and correcting any failures in it would assist the functioning of the credit market - and with it the access of farmers to credit. The other side of the credit problem might lie with the banks themselves.

Since they are relatively new to the ways of the market, it may be that they are not operating competitively. Large loans to organisations with historic connections may still count for more than an objective view of profitability and a balanced portfolio of loans. This is a reminder that problems in one sector might arise from problems in other sectors.

Another reason for low technical efficiency may be poor managerial skills. Farmers who have moved from a planned to a market economy may not have the managerial skills to operate efficiently and effectively. These skills take time to acquire. The process of acquiring these skills and the knowledge about modern farm management can be speeded up by appropriate state-financed schemes, as *education* is often considered as a public good.

Finally, in this sub-section, there is the possibility that farms are too small to produce economically. Whatever the reason for the existence of these small farms, there is little that can be done to overcome this particular problem. In the long term, these farms will merge with others to form larger more economic viable units. Provided it does not conflict with any rural social policy that the government might have, the most appropriate policy is *to develop a rural policy which encourages non-agricultural employment* in rural areas and which will provide the incentive for the less efficient farmers to leave farming.

4.4.2 Low marketing efficiency

A farmer may be technically efficient at producing goods, but the benefit of this may be lost if the marketing is poor. This may occur because of a lack of economies of scale in the distribution of the product, which increases unit costs excessively, or the farmer may not be producing the product that the market wants. If the former, then governments can often *assist the formation of producer groups* so that farmers can combine to get the necessary scale economies. Certainly, in the EU, producer groups are seen as an important way of reducing marketing costs (because there are scale economies in the shared use of storage and grading facilities and marketing expertise) as well as giving producers countervailing power in the market. Government help in establishing producer groups helps to overcome a market failure[1].

If the problem is that the farmer is not producing what the market wants, or the returns from the market do not reflect quality differences then this may be a symptom of a poor *market information system* or an inefficient market (discussed next).

4.4.3 Low market efficiency

An efficient market is one where prices effectively transmit information (about supply costs and consumer preferences) from one end of the marketing system (farmers) to the other end (consumers), and vice versa. An efficient market will also ensure that these prices are as low as possible. This ideal state of affairs is usually attained by ensuring the market is competitive. That is, there are a number of players competing in the market to drive the price down to its lowest possible level (consistent with organisations in the system earning a 'normal' return on their capital investment).

[1] However, this help should not go beyond assisting the group's establishment (for example, by helping with the operational costs of such groups) because this would undermine the competitiveness of the market by discriminating against private traders.

One way of obtaining a competitive market is to ensure that there are no barriers to entry into the market. Firms should be free to enter the market and compete on the same terms as existing firms. Thus, any health and safety standards should be identical for all firms, existing and potential, as should any other requirements that the government wishes to impose. Again, in order to ensure that opportunities exist for businesses to develop (and maintain a competitive market) the government has to create the right investment climate.

Where an existing organisation already has a considerable market power, additional measures are often necessary, such as limiting by regulation the size of the market (regional and national), which any one firm can control. Then, the government can improve market efficiency by *setting rules and drafting laws on competition* (Competition policy).

A further indication of an inefficient market is the lack of price differentiation for different products. Consumer preferences will never be transmitted to farmers (and farmers will stop supplying the goods that consumers prefer) if the prices for the preferred goods are similar to prices for non-preferred goods. Preferences can cover variety, appearance, size, even method of production (organic!), and prices at different stages of the marketing system should reflect supply and demand. If a market pays one price for a product, good or bad, large or small, the right incentive cannot be provided to farmers to produce what consumers prefer. Associated with this problem is the lack of grading schemes to classify produce. This is important not just for price differentiation purposes, but also to make buying and selling more efficient since goods can be bought and sold on the basis of description without necessitating a physical inspection. In both these areas, government may stimulate the establishment of grading or classification schemes and promoting their usage in the market.

4.4.4 Government regulation

Government has an important role in ensuring work practices and products meet certain minimum health and safety requirements. Government may also specify measures that an industry has to comply with for environmental reasons. Government, in fact, can require firms to do a large number of things for various reasons. If those requirements become very burdensome and if there are no comparable benefits to weigh against the costs imposed on firms, the government itself may be contributing to a lack of competitiveness. The provision of data for statistical purposes, obtaining export licences via complex procedures, and various registrations of activities can all consume an organisation's time, which would be better spent on their business activity. If regulations are complex and numerous, their existence can also provide an effective barrier to entry to an industry for new firms. Governments should therefore always consider the private costs of any of their regulations as well as the public benefits.

4.5 Concluding remarks

The competitiveness of agricultural production in Poland in an enlarged EU will depend upon the changes in the level and type of support measures and improvements in the efficiency in the production and marketing system. Support in the framework of market

organisation will be part of the Common Agricultural Policy. At the time of writing (September 2002) the Commission's proposal is to discriminate between farmers in old and new member states and pay farmers in EU-15 higher direct payments than those in CEECs. It is obvious that any inequality of market support inside the EU might affect the countries' competitive positions, yet it is impossible to say to what extent because – as emphasised in this paper - so many other factors play a role. One important factor is the efficiency of the production and market system. Improvement of market efficiency with government action as indicated above is largely in the realm of the Polish government itself. Therefore, in order to improve the competitiveness of its agricultural sector, it is very important for Polish policy and decision makers to identify the constraints (the market failures) to increased efficiency within each agricultural sub-sector and to identify what policies could help overcome them. To some extent the Polish government already considered the policy areas suggested in this note, yet there is probably room for improvement of policies implemented so far. This could be done with help from SAPARD and/or rural development programmes of the EU.