



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

**BULLETIN**  
**of the Szent István University**

**SPECIAL ISSUE**

**PART I.**

Gödöllő  
2008

Editorial Board

Prof. György Füleki CSc. – *Chairman of the Editorial Board*

Prof. Miklós Mézes DSc. *editor*

Prof. Béla M. Csizmadia CSc.

Prof. Tamás T. Kiss CSc.

Prof. Gyula Huszenicza DSc.

Prof. Gábor Reischl DLA

Prof. István Szűcs DSc.

Edited by the Guest Editorial Board

Katalin Takács-György CSc, – *Chairman of the Guest Editorial Board*

József Lehota DSc

István Takács PhD

László Villányi CSc

With the support of

Faculty of Economics and Social Sciences, Szent István University

Management and Business Administration PhD School of Szent István University

Szerkesztőség

Szent István Egyetem

2103 Gödöllő, Páter Károly u. 1.

Kiadja a Szent István Egyetem

Felelős kiadó

Dr. Solti László egyetemi tanár, rektor

Technikai szerkesztő

Szalay Zsigmond Gábor

Felelős szerkesztő

Dr. Mézes Miklós egyetemi tanár

ISSN 1586-4502

Megjelent 380 példányban

## Contents / Tartalomjegyzék

### Part I. / I. kötet

#### Agricultural and rural development and international view

##### Agrár- és vidékfejlesztés, nemzetközi kitekintés

ÁCS, SZ. – DALLIMER, M. – HANLEY, N. – ARMSWORTH, P.: Impacts of policy reform on hill farm incomes in UK .....	11
BIELIK, P. – RAJČÁNIOVÁ, M.: Some problems of social and economic development of agriculture .....	25
BORZÁN A. – SZIGETI C.: A Duna-Körös-Maros-Tisza Euro régió gazdasági fejlettségének elemzése a régiók Európájában .....	37
CSEH PAPP, I. Regionális különbségek a magyar munkaerőpiacon .....	45
NAGY, H. – KÁPOSZTA, J.: Convergence criteria and their fulfilment by the countries outside the Euro-zone .....	53
OSZTROGONÁCS, I. – SING, M. K.: The development of the agricultural sector in the rural areas of the Visegrad countries .....	65
PRZYGDZKA, R.: Tradition or innovation – which approach is better in rural development? The case of Podlasie Region .....	75
TAKÁCS E. – HUZDIK K.: A magyarországi immigráció trendjei az elmúlt két évtizedben .....	87
TÓTHNÉ LŐKÖS K. – BEDÉNÉ SZŐKE É. – GÁBRIELNÉ TŐZSÉR GY.: országok összehasonlítása néhány makroökonómiai mutató alapján .....	101
VINCZE M. – MADARAS SZ. Analysis of the Romanian agriculture in the period of transition, based on the national accounts .....	111

#### Agricultural trade and marketing

##### Agrárkereskedelem, marketing

ADAMOWICZ, M.: Consumer behavior in innovation adaptation process on fruit market .....	125
FÉNYES, T. I. – MEYER, N. G. – BREITENBACH, M. C.: Agricultural export and import assessment and the trade, development and co-operation agreement between South Africa and the European Union .....	137
KEMÉNYNÉ HORVÁTH ZS.: The transformation of market players on the demand-side of the grain market .....	151
LEHOTA J. – KOMÁROMI N.: A feldolgozott funkcionális élelmiszerek fogyasztói szegmentálása és magatartási jellemzői .....	159
LEHOTA J. – KOMÁROMI N.: Szarvasgomba fogyasztói és beszerzési magatartásának szegmentálása és jellemzői .....	169
NYÁRS, L. – VIZVÁRI, B.: On the supply function of the Hungarian pork market .....	177
SZAKÁLY Z. – SZIGETI O. – SZENTE V.: Fogyasztói attitűdök táplálkozási előnyökkel kapcsolatban .....	187
SZIGETI O. – SZENTE V. – MÁTHÉ A. – SZAKÁLY Z.: Marketing lehetőségek az állati eredetű hungarikumok termékpályáján .....	199
VÁRADI K.: Társadalmi változások és a marketing kapcsolatának modellezési lehetőségei .....	211

**Sustainability and competitiveness**  
**Fenntarthatóság, versenyképesség**

BARANYAI ZS. – TAKÁCS I.: A hatékonyság és versenyképesség főbb kérdései a dél-alföldi térség gazdaságaiban.....	225
BARKASZI L.: A kukoricatermesztés hatékonyságának és eredményességének vizsgálata 2003-2006 évi tesztüzemi adatok alapján.....	237
JÁMBOR A.: A versenyképesség elmélete és gyakorlata .....	249
LENCSE S. E.: A precíziós gazdálkodás ökonómiai értékelése .....	261
MAGÓ, L.: Low cost mechanisation of small and medium size plant production farms.....	273
SINGH, M. K. – KAPUSZTA, Á. – FEKETE-FARKAS, M.: Analyzing agriculture productivity indicators and impact of climate change on CEECs agriculture.....	287
STRELECEK, F. – ZDENĚK, R. – LOSOSOVÁ, J.: Influence of farm milk prices on profitability and long-term assets efficiency .....	297
SZÉLES I.: Vidéki versenyképesség-versenyképes vidékfejlesztés: AVOP intézkedések és azok kommunikációjának vizsgálata .....	303
SZŐLLŐSI L. – NÁBRÁDI A.: A magyar baromfi ágazat aktuális problémái .....	315
TAKÁCS I. – BARANYAI ZS. – TAKÁCS E. – TAKÁCSNÉ GYÖRGY K.: A versenyképes virtuális (nagy)üzem .....	327
TAKÁCSNÉ GYÖRGY K. – TAKÁCS E. – TAKÁCS I.: Az agrárgazdaság fenntarthatóságának mikro- és makrogazdasági dilemmái.....	341
<b>Authors' index / Névjegyzék.....</b>	<b>355</b>

## Part II. / II. kötet

### Economic methods and models

#### Közgazdasági módszerek, modellek

BARANYI A. – SZÉLES ZS.: A hazai lakosság megtakarítási hajlandóságának vizsgálata	367
BHARTI, N.: Offshore outsourcing (OO) in India's ites: how effective it is in data protection?	379
BORSZÉKI É.: A jövedelmezőség és a tőkeszerkezet összefüggései a vállalkozásoknál	391
FERTŐ, I.: Comparative advantage and trade competitiveness in Hungarian agriculture	403
JÁRÁSI É. ZS.: Az ökológiai módon művelt termőterületek nagyságát befolyásoló tényezők és az árutermelő növények piaci pozíciói Magyarországon	413
KODENKO J. – BARANYAI ZS. – TAKÁCS I.: Magyarország és Oroszország agrárstruktúrájának változása az 1990-es évektől napjainkig	421
OROVA, I. – KOMÁROMI, N.: Model applications for the spread of new products in Hungarian market circumstances	433
REKE B.: A vállalkozások egyensúlyi helyzetének változáskövető vizsgálata	445
ŠINDELÁŘ, J.: Forecasting models in management	453
SIPOS N.: A környezetvédelmi jellegű adók vizsgálata a fenntartható gazdálkodás vonatkozásában	463
VARGA T.: Kényszerű „hagyomány”: értékvesztés a mezőgazdasági termékek piacán	475
ZÉMAN Z. – TÓTH M. – BÁRCZI J.: Az ellenőrzési tevékenység kialakítási folyamatának modellezése különös tekintettel a gazdálkodási tevékenységeket érintő K+F és innovációk elszámolására	485

### Land utilization and farm structure

#### Földhasználat, gazdaságstruktúra

FEHÉR, I. – MADARÁSZ I.: Hungarian land ownership patterns and possible future solutions according to the stakeholders' view	495
FEKETE-FARKAS, M. – SINGH, M. K. – ROUNSEVELL, M. – AUDSLEY, E.: Dynamics of changes in agricultural land use arising from climate, policy and socio-economic pressures in Europe	505
LAZÍKOVÁ, J. – BANDLEROVA, A. – SCHWARCZ, P.: Agricultural cooperatives and their development after the transformation	515
ORLOVITS, ZS.: The influence of the legal background on the transaction costs on the land market in Hungary	525
SADOWSKI, A.: Polish land market before and after transition	531
SZÚCS, I. – FARKAS-FEKETE M. – VINOGRADOV, S. A.: A new methodology for the estimation of land value	539

**Innovation, education**  
**Innováció, tudásmenedzsment**

BAHATTIN, C. – PARSEKER, Z. – AKPINAR BAYIZIT, A. – TURHAN, S.: Using e-commerce as an information technique in agri-food industry.....	553
DEÁKY Z. – MOLNÁR M.: A gödöllői falukutató hagyományok: múlt és jelen .....	563
ENDER, J. – MIKÁCSÓ, A.: The benefits of a farm food safety system .....	575
FARKAS, T. – KOLTA, D: The European identity and citizenship of the university students in Gödöllő .....	585
FLORKOWSKI, W. J.: Opportunities for innovation through interdisciplinary research....	597
HUSTI I.: A hazai agrárinnováció lehetőségei és feladatai.....	605
KEREKES K.: A Kolozs megyei Vidéki Magyar fiatalok pályaválasztása.....	617
SINGH, R. – MISHRA, J. K. – SINGH, M. K.: The entrepreneurship model of business education: building knowledge economy .....	629
RITTER K.: Agrár-munkanélküliség és a területi egyenlőtlenségek Magyarországon .....	639
SZALAY ZS. G.: A menedzsment információs rendszerek költség-haszon elemzése.....	653
SZÉKELY CS.: A mezőgazdasági vállalati gazdaságtan fél évszázados fejlődése .....	665
SZÚCS I. – JÁRÁSI É. ZS. – KÉSMÁRKI-GALLY SZ.: A kutatási eredmények sorsa és haszna .....	679
<b>Authors' index / Névjegyzék.....</b>	<b>689</b>

**AGRICULTURAL TRADE AND MARKETING**

**AGRÁRKERESKEDELEM, MARKETING**



## THE TRANSFORMATION OF MARKET PLAYERS ON THE DEMAND-SIDE OF THE GRAIN MARKET

KEMÉNYNÉ HORVÁTH, ZSUZSANNA

### Abstract

The aim of the study is to review the vertical and horizontal reshuffling that took place in a specific area of the Hungarian grain product cycle, i.e. raw material production, and its effect on the demand-side power structure. The answers derived from questionnaires and in-depth interviews allowed the classification of buyers using cluster analysis, and also the modeling of their decisions during the price negotiation. The completed analysis shows us that on the grain market, price leaders are primarily among the large trading companies and holdings, which can be attributed to their size, storage capacity, logistical capabilities and strategy. Processing (mills, feed mixers, seed-sellers), integrator, retail and other companies on the grain market are price-adaptive. The intervention price level affects the price negotiations and market strategies of demand-side players significantly, which suggests that in the future, the modification of the intervention system may prove to be a main force behind vertical and horizontal changes. Structural changes can be further emphasized by the switch to the SPS system and the increased grain demand resulting from the commissioning of bioethanol-producing plants.

**Keywords:** grain sector, process chain, price leaders, cluster analyses

### Introduction

Wheat production has a millennium-long history in Hungary, while corn production began in the 17<sup>th</sup> century. At the beginning of the 20<sup>th</sup> century, these two crops occupied 50% of all plough-lands and today they account for up to 60%. Throughout this study, therefore, the term "grain market" refers to the market for these two crops. During the last decades the structure of the grain market experienced a significant change. A historical review, the precise understanding of market structure and the characteristics of market players is important because present-day market players were born out of these segments, so their current existence and strategies are closely related to their past functions. The market structure, even though in a still rudimentary form, begins to resemble the structure seen in the large grain-producing countries of the EU. The deepening of horizontal links between producers, the decrease in the number of demand-side players (compared with the heavily fragmented, complex pre-1989 and post-accession structure) points to a simpler and more consistent market structure as well as a more market-oriented attitude. The entry of multinational companies in ever increasing numbers is a sign of globalisation in Hungary that is promoting not only simplification and homogenization of the market structure but also the homogenization of grain prices.

### *Historical Review*

At the beginning of the 1960s the only actor authorized to buy and sell grain was the Gabona Tröszt (Grain Trust) or Malomipari és Terményforgalmi Tröszt<sup>1</sup> (Milling Industry and Grain Trading Trust). Grain crops were distributed among consumers (domestic and foreign trade players) through administrative authorities, ignoring the laws of market [Mohácsi, 1990].

---

<sup>1</sup>This trust included 19 regional grain trading and milling companies with a total of 480 sites.

Foreign trade was operated by Agrimpex Külkereskedelmi Vállalat (Agrimpex Foreign Trade Company).

Due to the rigid regulations and fixed prices, market players had very little room on the market for securing additional premix-production capacity. Fixed prices were adjustable officially by a certain percentage, but they could also be manipulated by quality parameters and speculations involving the withholding of produces. The introduction of the multi-channel sales system in 1968, and the system of free animal feed sales taking effect in 1970 brought about a significant change in grain trading. This boosted the associations operating in parallel with the Grain Trust. Their initial objective was independence from the milling industry and self-reliance, and later they appeared on the grain market as sellers (with separate distribution and sales channels) and competitors to the Trust. At the end of the 1980s, therefore, the supply side comprised of the agricultural plants (farmers' cooperatives and state farms), while the demand-side was made up of the Grain Trust and the before-mentioned feed-producing associations. The remaining players, like the trading arms of farmers' cooperatives and state farms, retailers and agents had a minor role, accounting for 3-4% of total turnover.

1989-1990 saw a major transformation of grain trading. The supply side became fragmented. Many farmers' cooperatives went bankrupt or were dissolved because of the loss of land and assets, sales difficulties for agricultural products, and the drying-up of credit opportunities. Only the most profitable associations with competent management could stay afloat, turning into corporations, providing the basis for today's agricultural companies. Fragmented market structure made product aggregation and distribution more difficult and costly, thus increasing the activity of traders. The introduction of the unrestricted price system, the termination of the Grain Trust, the extension of foreign trade licenses, the opening of the commodity exchange all helped turning the grain industry sector into a market [Borszéki, 1992].

In the period directly preceding the political changes and during the transformation, the situation of both grain producers and processors was aggravated by the developing economic crisis. The liquidity shortage after 1990 bankrupted many agricultural and processing companies, while the position of traders with enough capital to finance inventories had strengthened. In the contest for controlling grain distribution, some market players tried to supplant their competitors through higher prices or attachment to the production system, while foreign trade companies applied various buying strategies (consignment, storage) and a system of agents and middlemen for the same reason.

Further transformation took place in the middle of the 1990s affecting buying up, the market structure and the behaviour of market players as well. Following the separation of the main activities of the grain industry (milling, animal feed production, grain trading) milling products and feed production became parts of different segments [Guba, 2000].

In the period after the 1992 wave of privatisation, until 2003, the multi-player demand-side started to consolidate. A significant number of low-capacity, antiquated mills were closed down, many others were bought (and also closed down). In general, a process of concentration began among trading and processing players. With the consolidation fraudulent, non-paying traders disappeared, and unreliable, defaulting business actors went bankrupt. Small players lacking a clear survival strategy, unable to accumulate capital for reorganization, modern technologies and new domestic and foreign partnerships had less and less room to manoeuvre

Surprisingly, there are parallels between the system of limited market orientation operating from 1962 until 1990, and the current grain market EU regulation in spite of their conceptual contrasts. Governmental intervention price is fixed in both cases, heavily influencing the prices accepted on the grain market. Stockpiling plays a key role in both periods, making speculation possible for market players (large plants and associations having storage capacities can withhold their stocks, creating a shortage in the market and a slight price increase). Prior to the birth of the Hungarian commercial sector, multi-player grain market has already been established in the socialist era. This sector received a further boost thanks to the fragmented supply side and the financing difficulties of the other grain market actors. Brokering trade thus gained more weight compared to other product lines.

### *The intervention system*

On the EU accession, Hungary also entered the Common Agricultural Policy (CAP). This has placed the Hungarian agriculture and processing industry in a whole new market system, necessitating quick adaptation.

On the demand side of the grain market, the most important novelty was the free movement of commodities (like grain) within the EU, and the introduction of grain intervention. The intervention system became one of the most important tools of market regulation in Hungary, transforming supply and demand relationships, price development and the behaviour of market players.

In the first two years following the accession, a quarter of all corn and wheat production was bought through intervention, two-thirds of it being corn, which is not surprising in light of the decreasing domestic use of grain<sup>2</sup>. The large scale of offers is explained by the fact that the intervention regulations apply to every grain market player possessing grain. This is supported by the calculations published by Rieger [Rieger, 2006]. Rieger says there were a total of 981 offers in the 2004-2005 business year, during the intervention period. The four biggest offers added up to 21% of the total amount, the next 155 biggest offers comprising 55%, with the remaining 822 offers representing 24%. His study shows that the first two groups (159 offers altogether, with more than 5.000 metric tons each) were 76% of the whole. The population of grain producers was 200.000 according to the 2004 surveys, which means that most of them did not take part in the intervention offers. Therefore the companies probably bought a significant amount of grain from producers on the free market and taking part in the intervention as intermediaries.

For the intervention to fulfill its role and operate without problems, an adequate storage capacity and stockpiling is necessary. Its lack causes market disruptions. In Hungary, the stockpiling of intervention grain was basically a transfer to the nearest storage facility available after the contractual deliveries, and not a pre-planned, purposeful stock movement.

In Hungary, the grain market adapts to existing and newly built storage capacities and not the other way round. This means that it significantly affects the behaviour and price negotiation

---

<sup>2</sup>In the 2004-2005 and 2005-2006 business years a larger amount of wheat and corn was offered for intervention in 9 Hungarian counties (400-800.000 tons per county, as an average of these two years), representing two major geographic areas. One is the north-eastern region of the country (Szabolcs-Szatmár-Bereg, Hajdú-Bihar, Békés, Jász-Nagykun-Szolnok), the other is along the Danube (Tolna, Bács-Kiskun, Baranya, Fejér) plus Somogy.

of grain market actors, as the gravitational centre of producer prices is the intervention price since the accession.

A certain amount of discrepancy is induced by the supply and the differing buying and usage strategies of specific market organisations. The intervention price level is, however, only available for the storage owners. Producers and traders possessing storage capacities are integrating the intervention price into their calculations, and only opt for a different sales channel if the revenue this way exceeds the intervention price minus storage costs until delivery. When buying, traders also use the intervention price as a basis for calculation (they pay a price lower than this to the producers in order to secure their own profit). Producers without storage capacities have to sell their grain or store it in a rented facility until the beginning of the intervention, but then the rent is deducted from the intervention price received for the produce. At the same time, for traders and processors (in the presence of storage capacity) intervention results in a higher producer price level, because grain owners consider the intervention price as a minimum.

The opportunities provided by the intervention system are exploited by market players previously not active in grain trading. New types of companies appeared in the market. One such type is the company that is not operating in the grain market itself, instead providing transportation and logistical services. Such companies, possessing an adequate storage and transport capacity, undertook the delivery of intervention stocks, in the process locking out traditional grain market export companies of this new opportunity.

The other type is small companies trying to make revenue from offering and storing intervention-related grain (these are the companies of the fifth group of the cluster analysis, that formerly did not have enough capital, in some cases operating in agricultural production).

The intervention system provides a new opportunity and better prices for grain owners. For the buyers, however, this system and the increase of storage costs means higher producer and market prices.

## **Material and methods**

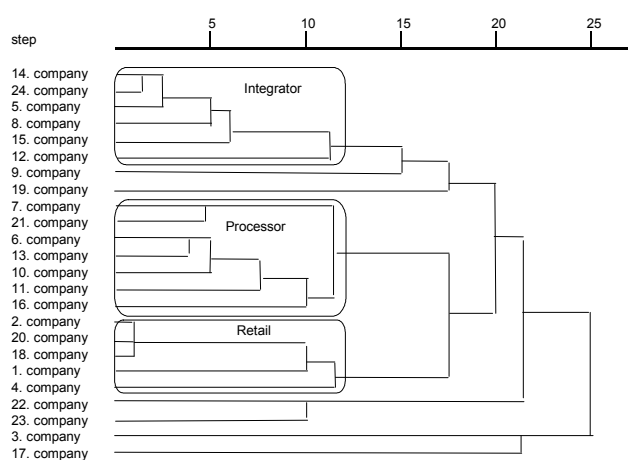
For the characterization of strategies and the identification of the intervention effect on prices, I have decided to use questionnaires and in-depth interviews, then processing them through cluster analysis. The aspects affecting buying and pricing policy (financial situation, company size, company type etc.) and the clusters made out of them provided the representative types on the demand side, as well as the pricing and market strategies of specific groups, and the related buying volumes.

The basis of the methodology was provided by the statistical data and analyses collected and published by the Market Price Information System operated by the Agricultural Economy Research Institute, and the answers of the questionnaires. The sample was made up of 24 representatively chosen companies (from the largest ones to the smallest). These companies included traders, processors, vertical holdings and integrators.

## **Results**

Three groups can be identified clearly from the cluster analysis: integrators, processors and retailers (see picture). Group integration was carried on until the 13<sup>th</sup> step; further integration

was not justifiable. The six companies not fitting any of the three clusters could be divided into two other groups, one consisting of large buyers (trading and export companies), the other including small companies with an annual buying volume of up to 10.000 tons.



1. figure. The cluster structure of the 24 companies analysed 2005

Source: Hungarian Central Statistical Office, analyses collected and published by the Market Price Information System operated by the Agricultural Economy Research Institute, and the answers of the questionnaires

The first group consists of a handful of large players with a major influence on the domestic grain market. These are partly or wholly foreign-owned subsidiaries of global grain market companies, and a 100% domestically owned holding company. In 2005, they bought, on average, 850.000 tons of grain (700.000-1.000.000 tons). The volumes bought up in one transaction differentiate between the companies of this cluster. The multinationals are usually buying for their parent companies, with an export-orientation. 90% of all intervention stock was bid on and then transported to the destination countries by these firms. The reason behind this is that those companies have a logistical background, influence (on the EU and other companies) and capital that allows them to shape bidding prices for intervention stocks and profitably export them to distant importing countries (e.g. Bangladesh, that took in 100.000 tons of wheat from Hungary). This means multinational companies are interested in sources providing large volumes of grain in one place. Smaller, more fragmented batches were bought by the large grain buying companies within this first cluster. In 2005, they bought 70% from producers, 20% from producing/procurement and selling cooperatives, 10% from traders and integrators. They had a major influence on the producer price of wheat, and could be considered as price leaders. Their influence on corn producer prices was less significant: in this market they were sometimes price leaders, in other cases the intervention price or the prices of competitors were creating a minimum threshold. A significant difference could be seen between the types of contracts they applied. The mainly commercial companies made contracts of prompt payment in 50% of the cases. The holding company present in the north-eastern part of Hungary (including the Great Plain) offered skeleton agreements in 100% of the cases. For this holding company, the term of the contracts was year-long in 70% of the cases and prompt in 30%, while for trade-oriented companies the latter counted for 100%.

This is due to their different market role. The holding company is present in the whole vertical grain market, and uses 80% of the grain for its own purposes (making an even distribution necessary throughout the year), as opposed to the trading companies that re-sell 80% of their grain, mainly as export. Therefore their distribution activities are determined by export

markets and their trading is not continuous and projectable, unlike for the holding company that is involved in processing. That is why prompt contracts were dominant for trading organisations. In 2005, 15-20% of companies used intervention.

Mills, feed mixers and seed-sellers are included in the second cluster. They bought two-thirds of the produce they needed mainly in the harvest period. Their annual average buying volume is slightly more than 100.000 tons (20-300.000 tons), according to the sample. 45% of their grain is bought from producers, 17% from producing/procurement and selling cooperatives, 23% from traders and integrators, and 15% from other channels. They process a large portion, 82% of the grain, the rest is sold for intervention, export and domestic demand. More than half of their contracts are prompt, one-third are integrator-type, and about 20% are skeleton agreements and other types. This cluster has a small effect on producer prices; the acceptance of market prices is more dominant (88%), through the adaptation to intervention prices and the prices of competitors. They can determine producer prices when buying up grain from producers that have no storage capacities.

Integrators form the third cluster. Their role in the grain market is more limited. The average annual volume they buy up is less than 100.000 tons (10-300.000 tons). Two-thirds of their produce comes from producers, the remaining part from producing/procurement and selling cooperatives and other channels; they offer half of it for intervention. Another 30% is for their own use, and 10% percent is sold domestically and abroad each.

Their agreements are made mainly within the frames of integration contracts (82%), with a smaller percentage represented by skeleton agreements and other contract types. Similar to the cluster of processors, this group is characterised by a price-adaptive behaviour in the development of producer prices (92%), so they also have a limited scope for influencing producer prices in the grain market.

The fourth cluster is formed by the retailers, who buy an annual amount of 55.000 tons of grain on average (10-70.000 tons). 85% of this grain, which is bought primarily through prompt contracts, is then re-sold domestically, a smaller portion is offered for intervention or exported. This fourth group is not a determining force behind producer prices, either: acceptance of existing prices is typical for 75% of them.

The fifth group consists of those organisations that could not be classified into any of the previous clusters. Their average annual buying volume is hardly 10.000 tons. Their market behaviour is varied, their sales activities are local, and their continued presence in the grain market is doubtful in many cases. They exert practically no influence on producer prices on a national level.

## **Conclusions**

From examining the clusters, it becomes clear that the strategy based on a processing priority is different from the trader approach, even though both types of companies do their buying mostly in the period following harvest. During harvest, producer prices are declining due to the increased supply; the scale of this decline is affected by the intervention price. Traders are buying a large volume of grain within a short time frame (August-November) at a higher price level (1-2.000 HUF/ton premium) than processing companies. This grain is later exported or sold domestically at higher prices. Processors are also buying grain in this period, but at lower prices. Even though both types of players have an interest in maximising the margin between

buying and selling prices, the two strategies are different inasmuch as the mills are trying to achieve this through a lower buying price because flour prices are subject to a retail-side price pressure (but intervention price is keeping them from this).

Trading companies are selling the produce they bought where and when they can exert the highest price available, so they aim at raising sales prices, not cutting down on buying prices. This is valid in years with an average grain yield.

Primary processors (mills and animal feed producers) are the least able to enforce their interests in the market competition within the wheat production cycle. Producers' supply and intervention price are the dominant price influencing factors on one side, and from the other side a price pressure is felt because the business policy of retail chains calls for low consumer prices. The sales prices of processors are also affected by energy prices and other costs, as well as the demand represented by the baking industry, animal husbandry etc. More efficient processors can accept grain prices as they are, so they are also able to accept consumer prices dictated by retail chains. They achieve a higher profitability through special products, economies of scale and market expansion.

In the case of corn, the intervention price level is also a determinative factor in producer prices. The significant decline in livestock and the geographic distance of major markets are the reasons behind the decreasing use of this produce, so the effect of the intervention price on the domestic price level is even more pronounced. It is characteristic of the corn market that even wheat market price leaders are only able to determine corn prices to a 50% degree, with the intervention price providing a control threshold from the other side. The corn buying market is much more fragmented, there are more traders and integrators in the business of corn procurement, which creates strong competition explaining the lack of 100% price leading in the corn market.

The volume of grain offered for intervention in the 2006-2007 business year may decrease. One reason for this is the slight decline in international grain supply coupled with a surge in consumption; another reason is the tightening of EU corn intervention quality criteria (1572/2006/EC). In the future, the discontinuation of corn intervention expected in the 2007-2008 business year may cause a further decline in intervention stocks, which will also shape the strategies of grain market players. Newly commissioned bioethanol-producing plants (built in the proximity of regions with high intervention stocks) may prove to be a major buyer for corn. In the absence, or a more limited deployment, of bioethanol plants and chemical capacities an accumulation of corn surplus is expected as well as a price decline, mainly in the north-eastern region.

### **Acknowledgement**

I'd like to thank for my consultant, Kapronczai István, for my husband, Gábor and for my head of the department, Tunyoginé Nechay Veronika.

### **References**

BORSZÉKI É. [1992]: A gabonavertikum helyzete és szabályozása. (The situation and regulation of the grain sector). *Gazdálkodás /Károly Róbert Oktató-Kutató Kht.* (XXXVI. évf. 3. sz/ 5. pp)

- GUBA F. Z. [2000]: Transzferek és hatékonyságzavarok az élelmiszer-termékpályákon.. (Tranfers and efficiency anomalies in food product cycles. PhD thesis.) Doktori értekezés/ Budapesti Közgazdaságtudományi és Államigazgatási Egyetem. (55. pp)
- MOHÁCSI K. [1990]: A gabonapiac működése Magyarországon II. rész: A belföldi forgalmazás. (The operation of the grain market in Hungary, part 2: Domestic sales.) Konjunktúra-, Piackutató és Informatikai Intézet/ Kopint-Datorg Intézet. (10–47. pp).
- RIEGER L. [2006]: A 2004–2005. évi gabonaintervenció jellemzői Magyarországon. (Characteristics of the 2004-2005 grain intervention in Hungary.) Európai Tükör/Miniszterelnöki Hivatal. (XI. évf. 2. sz./ 64–78. pp).

**Author:**

Keményné Horváth, Zsuzsanna, PhD student, Product manager  
Agricultural Economics Research Institute  
1093 Budapest, IX. Zsil u. 3-5.  
[Horvath.Zsuzsanna@aki.gov.hu](mailto:Horvath.Zsuzsanna@aki.gov.hu)