Studies in Agricultural Economics

Volume 115, Number 1

Contents

Manuscripts should be prepared in English and sent via e-mail to the Editor-in-Chief at studies@aki.gov.hu.

1463 Budapest, POB 944, Hungary
https://www.aki.gov.hu/studies
HU ISSN 1418 2106 (printed)
HU ISSN 2063 0476 (electronic)
Established 1962

Foreword

It has been suggested[1] that, since the 1970s, agricultural economics has primarily focused on seven broad topics: technical change and the returns to human capital investments; environmental and resource issues; trade and economic development; agricultural risk and uncertainty; price determination and income stabilisation; market structure and the organisation of agricultural businesses; and consumption and food supply chains. The eight papers in this issue address many of these aspects of agricultural economics.

The first two papers deal with the topic of insurance risks in agriculture. Using a financial methodology and data from Ukraine and the United States, Tarasov shows that high interest rates may create certain conditions under which some alternatives to insurance become more appealing, thereby decreasing a financial incentive to insure. He concludes that it would require considerable government subsidies, in addition to informational support, to facilitate the development of agricultural insurance markets in emerging economies.

Kemény *et al.* assessed the territorial differentiation of damage to agricultural crops in Hungary caused by drought, heavy rain and spring frost. They found that there are extremely high differences in the probabilities of damage in different LAU1 micro-regions. Therefore the design of agricultural insurance products should be based on different absolute deductibles and different insurance premiums for micro-regions. In the long term only a *bonus-malus* system developed for individual agricultural producers can mitigate different risks.

In practice, many farm households in the European Union (EU) do not depend solely on farming for their income. The study of Polish farms of 2 to 8 ESU by Augustyńska-Grzymek *et al.* showed that the income of farms with off-farm activities was 2.2 times higher as compared to the holdings generating income only from agricultural activity. The low availability of non-agricultural jobs to persons residing in rural areas acts as one of the major barriers to rural development and agricultural modernisation.

Török and Jámbor analysed the effects of EU enlargement on the competitiveness of fruit spirits in six Central and Eastern European countries by using the theory of revealed comparative advantages. Their results indicate that these countries are losing their market positions in their traditional fruit spirit sector in the EU-15 beverages market in spite of the fact that the majority of these products have a geographical indication. By contrast, Italian grappa is shown to be competitive in terms of both price and quality.

Continuing on the theme of agricultural markets, but at a much more theoretical level, Abunyuwah demonstrates the conceptual limits of current empirical market integration time series models by using specifically generated data sets. The nature of the true underlying data generation process, resulting from inter-market rent dynamics, may not follow the threshold effects as the model assumes. Additional non-linear attributes and dynamics can lead to different results and conclusions if they are not taken into account.

Environmental and resource issues are the theme of the paper by Takács-György *et al.* They calculate that the savings in pesticide use across the EU-27 following the adoption of precision plant protection can be 30,000 tonnes per annum. The authors also show that in Hungary the rates of uptake of the different elements of precision crop production vary, and that larger farms are more likely to adopt the technology. This environmentally friendly farming practice can enhance the future 'green' component of Pillar 1 of the Common Agricultural Policy.

On the topic of consumption patterns, Grzelak and Maciejczak found that students from the United States and Poland, countries with different levels of organic market development, have different perceptions of organic products. Where there is a higher level of development (such as in the United States), consumers already have a basic knowledge about the products, such as origin or organic label, and are more focused on their qualities, such as taste or variety. The opposite applies in Poland.

Finally, regarding trade and economic development, Jablanović proposes a theoretical framework of how externalities can influence long-run agricultural monopolistic competitor equilibrium. This is done by constructing a relatively simple chaotic long-run monopolistic competitor's agricultural output growth model that is capable of generating stable equilibria, cycles or chaos.

This issue of *Studies in Agricultural Economics* brings together the results of researchers from Hungary and four other European countries. I trust that their findings will prove to be of use to you in your own work.

Andrew Fieldsend
Budapest, January 2013

[1] C. Ford Runge (2006): Agricultural economics: A brief intellectual history. Working Paper WP06-1. St. Paul MN: University of Minnesota.

Extended summary

KESZTHELYI Szilárd and PESTI Csaba

Results of Hungarian FADN Farms 2011

The Hungarian Farm Accountancy Data Network (FADN) system consists of 1537 individual and 388 corporate sample farms. These farms are representative of the approximately 106 thousand Hungarian agricultural commodity producers in terms of farm type, economic size and legal form. The Research Institute of Agricultural Economics (AKI) is responsible for the continuous operation, central data processing, publishing and dissemination of information, and development of the system, and for maintaining contacts with the European Union. Each year valuable micro-economic data are collected on the costs and incomes of the farms in the framework of FADN. The results of this work are published annually by AKI in book form. The publication may be downloaded in Hungarian or English from the AKI website (www.aki.gov.hu) or requested in printed form from aki@aki.gov.hu.

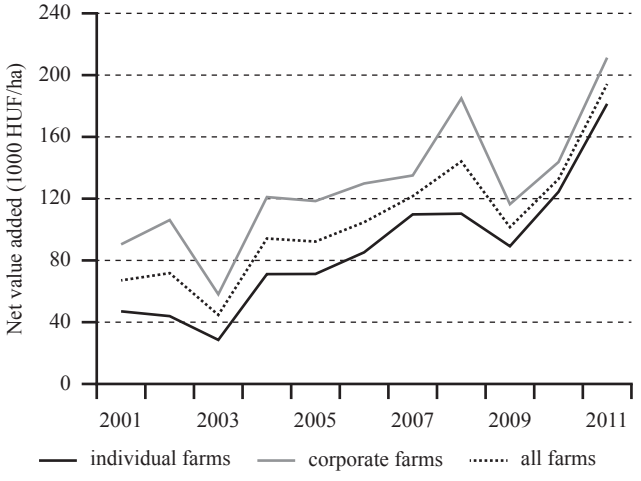
The book starts with a short introduction. This is followed by a descriptive section that defines the economic terms and indicators used and describes the method of deriving the economic results in agriculture. The next section deals with the profitability and the change in assets in the Hungarian agricultural sector as a whole. The results from individual and corporate farms are then described separately in different chapters, focusing on the factors influencing profitability. In the final chapter the development of land prices and land rental fees are studied across the different FADN regions of Hungary.

The book is supplemented in the annexes with a comprehensive set of tables that introduce aggregated FADN farm data broken down by legal form, region, type of farming and economic size.

The main findings of the book can be summarised as follows.

The increase in profitability of the agricultural sector following the decline in 2009 has further continued. Net value added in 2011 has reached a new peak of HUF 194.6 thousand per hectare, this being a 47 per cent increase over 2010 (Figure 1). The main cause of this significant improvement in 2011 was a concurrent increase in yields and prices. Costs went up by just 16 per cent. Bigger subsidies have also contributed to the growing profits. While the profits of individual farms increased by 71 per cent, in the case of corporate farms the rate of growth was 139 per cent – more than double – of the previous year's figure.

Figure 1: Net value added per one hectare for individual, corporate and all farms in Hungary, 2001-2011.



Profits have increased for all farm types except for field and indoor vegetables producers, due to the scare across Europe over cucumbers contaminated with *E. coli*. The highest increase was detected for wine producers and grape growers as well as for beef and sheep herders.

Across all farms, investments increased by 31 per cent while the accumulation of assets (net investment) grew nearly five times (HUF 16.3 thousand per hectare) but still did not reach the level of 2009. The recovery in investments was mainly induced by the significant growth in purchases of machinery and other technological equipment (64 per cent) but money was also put into buildings (27 per cent) and breeding animals (23 per cent). Unfinished investments have presented only moderate (5 per cent) growth. The level of investments – as in every year – is closely related to the availability of investment subsidies. The sum of investment subsides per hectare has risen by 7 per cent since 2010.

Investments in individual farms increased by 1.8 times and amounted to HUF 54.9 thousand per hectare meaning that in 2011 real technological developments took place. Investments in corporate farms have also increased and amounted to HUF 113.6 thousand per hectare. This amount was more than double the value of the individual farms.

The effects of the financial crisis on agriculture are still noticeable. Despite growing incomes, credit lending has fallen further. Investments have been financed by own sources at a growing rate.

The increase of land prices continued in 2011. The price of arable land went up by 13 per cent – well above the inflation rate – to HUF 534.8 thousand per hectare. In connection with that, land rental fees also grew, by 15.2 per cent. For renting one hectare of arable land in 2011, farmers had to pay on average HUF 30.8 thousand.

The findings of this book are mainly targeted at agricultural policy makers and researchers, but can also be of value to producers.

Abstracts of AKI publications

The results of AKI's research work are presented in detail in a series of Hungarian language publications. English language abstracts are reproduced below. The publications may be downloaded from the AKI website (www.aki.gov.hu) or requested in printed form from aki@aki.gov.hu.

JUHÁSZ Anikó, JANKUNÉ KÜRTHY Gyöngyi, KŐNIG Gábor, STAUDER Márta and TUNYOGINÉ NECHAY Veronika

Effects of the production of private label goods on the food retail trade and its suppliers

Agroeconomic Book, published 2010

The rapid proliferation of private labels can be viewed as a symbol of tension which displays all of the typical elements of competitive struggle between the buyers and suppliers in the food supply chain. Our secondary research aimed to collect and analyse the theoretical and empirical knowledge about the private label brand success story and also to describe the present situation with the help of statistical tools. Our primary research focused on understanding the strategy and views of food retailers and suppliers about private labels.

FEKETE Géza and KISS György (eds)

Production data for the major Hungarian food products, 2010

Agroeconomic Information, published 2012

This publication presents data, for a wide selection of products, on the food processing industry's production costs and sales income in 2010 compared to the previous year. Firstly the price changes for the major food product groups are briefly summarised and secondly tabular data for individual food products are presented. These data show that in 2010 the production costs of meat products generally decreased. This is generally true for all products as the manufacturers aimed to reduce their production costs while trying to maintain or increase the sales price. But in the meat industry product group in 2010 there were mainly sales price reductions as well. In the poultry, dairy, and milling and baking industries, as well as the production of pasta products, increases in raw material costs, and more or less in total production costs too, compared to the previous period, can be observed. The results usually varied between products within sectors, with the exception of the milling industry, for example, where poorer results were associated with all of the products for which data are presented. However, a positive example is the production of pasta. As in 2009, all presented products produced a profit, but in addition in 2010 these profits were increased.

BÉLÁDI Katalin and KERTÉSZ Róbert

The cost and income situation of the major Hungarian agricultural products in 2010

Agroeconomic Information, published 2012

This publication examines the cost and income situation of the major agricultural products in 2010 on the basis of data from the farms of the Hungarian FADN system. The processed data concerns the so-called 'determinant producer farms' that provide the dominant part of domestic production. In addition to the mean data this book includes the results of different farming groups. The changes in the cost and income situation of arable crops, horticultural products (fruit and vegetables) and livestock products are analysed in separate chapters. Due to the extremely wet weather conditions the agricultural sector suffered serious damage and the average yield of arable crops and horticultural products generally decreased. In the case of arable crops the higher price mostly did not compensate for the increased unit cost that resulted from the yield losses. Despite this, owing to subsidies the per-hectare profit of enterprises significantly increased in the case of arable crops compared to 2009. The average sales price of fruit and vegetable products also increased in line with the increasing unit production cost, and almost all of the fruit and vegetable products realised an increased profit. In case of livestock products only the price of hens' eggs did not provide a margin of income over the costs of production, in contrast with the other major livestock products, all of which achieved a profit in 2010.

Studies in Agricultural Economics

Information for authors

Studies in Agricultural Economics publishes original research papers, review papers, policy analyses and book reviews on agricultural economics, rural development and related topics including: agricultural production and competitiveness, environmental resource management, agri-food supply chain management, markets and marketing, international trade, econometrics, rural economic geography, rural economy and sociology, and development of information and knowledge based society in rural areas.

Audience

Researchers, academics, policy makers and practitioners in agricultural economics and rural development, especially in eastern central and south eastern Europe.

Submission of manuscripts

Submission of an article implies that the work described has not been published in English in any other peer-reviewed journal, is not under consideration for publication elsewhere, and that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out. The author will retain the copyright of the article but agrees to identify AKI as the original publisher. Papers will not normally exceed 6000 words including the reference list and figure and table captions. Authors intending to prepare a book review should first consult the Editor-in-Chief and such a review should not exceed 2000 words.

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Manuscripts will be double-blind reviewed by at least two reviewers and may be returned to the author(s) for revision before acceptance for publication. The Editor-in-Chief will normally consider only one re-submission.

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- **Results.** Results should be clear and concise.
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Where it is not appropriate to use the above framework, you should finish the paper with conclusions.

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- **Author names and affiliations.** Present the authors' affiliation addresses (where the actual work was done) below their names.
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- **Abstract.** A single paragraph of 100-250 words should state the purpose of the research, the principal results and major conclusions.
- **Keywords.** Please provide a maximum of six keywords.
- **Abbreviations.** If necessary, define abbreviations that are not standard in this field on the first page of the article.

- **Acknowledgements.** If applicable, collate acknowledgements in a separate section at the end of the article before the references. List here those individuals and/or organisations that provided help, including financial support, during the research.
- **Nomenclature and units.** Follow internationally accepted rules and conventions: use the international system of units (SI) i.e. metre, second, kilogramme etc. or accepted alternatives e.g. day, litre, tonne.
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- **Reference to a journal publication.** Van der Geer, J., Hanraads, J.A.J. and Lupton, R.A. (2000): The art of writing a scientific article. Journal of Science Communication **163**, 51-59.
- **Reference to a book.** Strunk Jr., W. and White, E.B. (1979): The Elements of Style (3rd edition). New York: Macmillan.
- **Reference to a chapter in an edited book.** Mettam, G.R. and Adams, L.B. (1999): How to prepare an electronic version of your article, in Jones, B.S and Smith, R.Z. (eds), Introduction to the Electronic Age. New York: E-Publishing, 281–304.

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