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I. Major responsibilities of the research institute in 2014

In 2014, the institute continued to implement the objectives of its research strategy. It complied with its obligations undertaken under research contracts and agreements. Its major tasks included the compilation of the 2013 Hungarian and English language volumes of "Verseny és szabályozás" (Competition and Regulations) and "Munkaerő-piaci Tükör" (Labour Market Yearbook), the time-proportionate implementation of the research projects supported by Framework 7 of the European Commission and the continuation of research studying the game theory, corporate strategies and competitiveness under HAS Lendület (Momentum) programme.

II. Major research results and results of other types in 2014

a) Major research results and results of other types

MACROECONOMICS AND GROWTH

A summary assessment of the convergence of Hungary's economy over the past two decades measured against the country's initial potential and the benchmark of the Visegrád countries is that the country has grossly underachieved. The fact that longer-term growth of GDP per capita was somewhat higher in Hungary than in the EU15 countries is attributable to trends in the denominator: while population shrank in Hungary, it increased in the EU15 countries. The trajectory of Hungary's European convergence was strikingly different from that of the other three Visegrád countries. Convergence accelerated significantly between 2001 and 2005 with both the public and the private sector becoming heavily indebted. Reduction in the budget deficit after 2006 and reduction in private sector debt after the global economic crisis in 2008 and 2009 put a brake on the convergence of Hungary's economy. Contrary to the other three countries, Hungary's convergence had been based on the indebtedness of the public and the household sector, which proved unsustainable. Nevertheless, convergence is a complex process that is not necessarily reflected in the relative growth of GDP or GDP per capita. With trends in income indicators and indicators of available resources borne in mind, it is safe to say that the position of Hungary's economy measured against that of the economies of other three countries has been significantly better over the past decade than could be inferred from GDP, owing mainly to heavy reliance on EU transfers. Accelerated economic growth suggests that substantial expansion in resources thanks to EU transfers was about to bear fruit in 2014: it contributed to the improved overall performance of the economy. However, a high rate of growth relative to 2013 H1 notwithstanding, GDP was still lower in 2014 than in 2008. This suggests that economic processes are being shaped by some delayed post-crisis "restoration period". When the output gap between actual and potential GDP is closed, which was the case in 2014, GDP accelerates temporarily. However, in order that economic convergence can be boosted over a longer term, the rate of potential growth should be higher, which is hardly

feasible without a reversal in trends reflecting deterioration in the quality of Hungary's institutions.

In fact, Hungary's export surplus, which is impressive in a European comparison, and the country's resultant significant net lending mirror a massive capital outflows and a slow-down in the indebtedness of the private sector and the country. However, what underlies these processes is discouraging trends in income, consumption and investments. This is exactly why presenting export surplus as a success and grieving over the outflow of capital and a low (declining) rate of investments are equally unjustified. In fact, these phenomena are about the same story told from different perspectives and are linked together by simple balance sheet interconnections rather than economic theories. Major capital outflows in 2012 are sometimes interpreted as "capital flight". However, this is not substantiated by any data. By contrast, hardly any attention has been paid to the fact that net private sector investments (amortisation excluded) sank to an all-time low amounting to 1% of GDP. If a change in investments fails to materialise, neither sustained export growth nor a pick-up in economy is a likely scenario. However, a much-hoped-for increase in investments and household consumption will entail a rise in imports, which may, in turn, sap export surplus and thus hinder economic growth temporarily.

EMPIRICAL INDUSTRIAL ORGANISATION

A study analysing co-operation between companies and publicly funded research institutions for R&D and innovation purposes suggests that underlying motivations for companies and publicly funded research institutions can be completely different and companies of differing types are interested in differing types of co-operation. Therefore, if policy measures supporting co-operation are to succeed, they need to reckon with such differing types of co-operation. The evaluation system applied to researchers at publicly funded research institutions needs to be modified so that barriers to more efficient co-operation can be removed.

A study evaluating the safety of East European gas supply analysed the supply disturbances an escalating Russian Ukrainian conflict may cause in the gas markets in Central East European countries and the role that liquid gas imported from the US may play in mitigating such disturbances. The impacts on social welfare of the various scenarios for the magnitude of restrictions on gas supplies from Russia to Europe and that of liquid gas supplies from the USA were quantified with a gas market simulation model covering Europe.

EDUCATION ECONOMICS

The study "Social Transformation and the Transition from Vocational Education to Work in Hungary: A Differences-in-Differences Approach" studies the effect of employer-provided training on youth labour market entry. Since the "dual system" combining school-based vocational education with employer-provided training is often praised for effectively integrating young people into the labour market, it is often recommended for countries with high youth unemployment. However, in most countries there are no incentives for employers to be involved in vocational education. Therefore, dual training either cannot evolve or even if it does, it soon transforms into a system with a non-dual structure as was the case during the transition from socialism to capitalism in Hungary. When employers exit vocational education, school-provided training represents a viable alternative. To date we have known little about the relative effectiveness of school- vs. employer-provided training. Studying changes between 1994 and 2000, the paper showed that the number of vocational

school places decreased at a lower rate than did the number of employer-provided training. This means that vocational schools had to offer more places to substitute for fewer employer-provided training opportunities. In addition, such substitution took place at different rates in the individual counties. Using the "difference-in-differences" method, the paper uses the differences between the individual counties to assess the impact of this substitution of training places on the labour market entry of vocational graduates. Based on the Hungarian Labour Force Survey, results indicate that the shift in training provision from employers to schools between 1994 and 2000 increased vocational school graduates' unemployment rate significantly by close to 10 percentage points, but only for males. Impact on job status was not significant. Thus, it is safe to say that during the transition vocational training at schools could not provide the same benefits as vocational training at companies did.

Using the panel data of the Hungarian Life Course Survey from 2006 through 2012 researchers analyze the educational attainment of a cohort of Hungarian Roma and non-Roma students. This cohort started high school in 2006. High school dropout rate is 10 percent among non-Roma, whereas nearly 50 percent among Roma students. 75 percent of the non-Roma students take a final maturity exam, and the college attendance rate is 35 percent among them. The corresponding figures for Roma are 24 percent and 5 percent, respectively. The ethnic difference in high school attainment and college attendance are strongly related to the skills gap emerged before high school. However, almost half of the ethnic difference in high school dropout rate remains unexplained. This residual difference in dropout rate is influenced by social isolation: among those with one or more close contacts with high-status peers the dropout gap is much lower.

LABOUR MARKET RESEARCH

Studying pre- and post-incarceration labour market careers, gives insights about labour market employment prospects of former convicts. For convicts with a single prison spell, researchers find initially negative effect on employment that turns positive after about one year. The impact on wages is permanently negative, however. A comparison with recidivists suggests that these results are driven by a drop in the reservation wages rather than discrimination. This is corroborated by further data showing that the ex-inmates, on average, make increased effort to find a job.

Researchers studied the extent to which the availability of free child care services encouraged mothers of children of 3 years of age to return to the labour market. Results confirm that child care services have a beneficial effect on mothers' labour supply. Nevertheless, other age-related factors (e.g. preferences regarding separation from the child) also affect mothers' labour supply.

Politics plays an important role in the allocation of subsidies from the structural and cohesion funds of the European Union. The objective of the research was to identify this phenomenon in Hungary and to analyse the types of subsidies where politics wields a considerable clout and those in which politics is less interested. According to the results of the research, local councils whose political hue is identical with that of the central government have access to more funds. This, however, varies by tender type. Politics affects the allocation of funds when projects are visible (typically construction or infrastructural development) more than when they are not. Subsidies to local councils are subject to a more distorted allocation than those to corporations or private individuals. Higher amounts of fund-

ing are the result of the fact that local governments under tight political control file more applications and for higher amounts of funding rather than their higher success rate.

PUBLIC ECONOMICS AND PUBLIC POLICIES

The most important study of the group addresses the social and labour market status of those at the periphery of the labour market, with special regard to public works. The study establishes that most households on the periphery of the labour market are seriously deprived. Neither the range nor the structure of their consumption helps them recreate their ability to work or raise their children in appropriate circumstances. Income redistribution is poorly targeted: the amount of the social transfers to the top 3 income deciles is higher than that of to the bottom 3 deciles. Public works employment has a dual role in Hungary: on the one hand expanding employment, and on the other hand the provision of social welfare assistance to a large number of people. These considerations are conflicting and often incompatible on many levels, their simultaneous existence creates a special public works trap. Expenses on public works is over twice the expenses on all other active labour market programmes together despite that the efficiency of the public works is very low. The rate of entry into the open labour market decreases as time passes, hardly exceeding 10%. The more often one is employed as a public worker, the slimmer are the chances of reemployment on the primary labour market. Public works has created feudal type dependence in numerous parts of the country and may crowd out micro-enterprises from the market. The study points out that without any further intervention Hungary is heading towards a strongly segmented labour market. The continued existence and reproduction of such situation, the consolidation of a dual labour market can lead to increased social tensions and substantial potential losses in competitiveness and growth.

Estimates measuring the impact of raising the age of retirement on employment suggest that the raise of the early retirement age limit for women led to an immediate 7 to 10% exogenous rise in youth employment. Research did not confirm any crowding-out effect. The proportion of the elderly does not affect the wage of the youth in most years.

The most important finding of a study on motivation underlying job-seeking while employed is that employees experiencing a wage cut at their current employer's are more willing to quit and seek a new job while still at work. Therefore, in order to avoid fluctuation, employers refrain from wage cuts, which is one of the explanations for real wage rigidity.

One of the major findings of research addressing health policy issues is that the extremely high mortality of the working-age male population in Hungary is fundamentally influenced by factors related to the level of education, the special past structure of the economy typical of the socialist system (a low standard of the services provided officially) and resultant way of life detrimental to health. The factor mentioned last includes the relatively low price of alcoholic beverages and tobacco products and their resultant widespread consumption, a high rate of employment in the informal economy and unemployment after the system change. International comparison reveals that although health care expenses can reduce mortality significantly, they cannot counterbalance lifestyle-related impacts detrimental to health. Socio-economic and lifestyle-related factors proved more harmful in the case of men than women.

Research on corruption conducted partly at the institute reveals that data on public procurement should be collected consistently, related databases should be set up and econometric methods can be used to analyse the data collected. The results of research on public procurement between 2005 and 2010 suggest that simple traditionally structured cartels (a

collusion of bidders to exclude market competition) are being replaced by the type where cartelisation is combined with corruption. This leads to a situation where traditional actions by the competition authority is less and less efficient and effective because its methods to identify cartelisation no longer work in the case of cartelisation combined with corruption. These traditional methods must be supplemented and institutions (the public prosecutor's office and the competition authority) should co-operate more closely.

AGRICULTURAL ECONOMICS AND RURAL DEVELOPMENT

A study of the spatial integration of the EU's agricultural markets reveals that market integration is the closest in the pork market followed, in this order, by milk, egg, beef, poultry and lamb markets. A network analysis of spatial integration suggests that Germany is the most important trading partner for each analysed market. Of the new members, Poland is the only major actor in the egg and beef markets. An analysis of agricultural producers and food price indexes in the new EU member states indicates that pork and egg prices converge strongly; by contrast, the producer prices of beef and poultry only converge in a few new member states. Horizontal market integration and the convergence of producer and food price indexes fall short of expectations. Results show that neither price adjustment nor market coordination in the EU's common market is effective.

An analysis of the applicability of biodiversity indicator for policy-making purposes reveals that the use of ecosystem-level indicators for other purposes is already common. However, in their current form, they are not suitable for measuring the state of biodiversity in general. Nevertheless, compliance with certain principles may improve their applicability for environmental policy purposes. Rather than identifying certain ecosystems, standardising the manner of selection would make more sense during monitoring. Furthermore, in addition to the current expanse of the selected habitat types, the original cover as a benchmark should also be taken into account.

GAME THEORY

Risk allocation games with liquidity constraints have been defined, which may help to evaluate the performance of managers of illiquid portfolios. It was shown that the class of transferable utility games coincides with that of totally balanced games. Results imply that even if risk considerations are taken into account, a stable allocation of risk is always possible. However, simulation studies confirm that the three fairness requirements – the requirements of stability, equal treatment and incentives – cannot be satisfied simultaneously. We need to relinquish one.

The definition of the core is rather a complex task if externalities exist, and the calculation of the recursive core is difficult already in the case of 6 to 8 players. If, in the course of evaluations, probabilities can be assigned to the individual outcomes, coalitional deviations can be regarded as a risky investment where the original capital is the initial payoffs to members and the value of invested assets depends on the outcome of the residual game seen as the state of the world.

The (risk) value of the coalitional deviation can be measured using risk measures, from which the definition of the core of the game follows naturally. Research also addressed the issue of how the constructed risk-based core depends on the distribution of the states of the world or the spectral weighting function of the risk measure applied.

A recursive core was also applied to network games where players can also modify networks in accordance with their own interest. A new network game form was introduced where coalitional payoffs were interpreted and stable networks and the related stable payoff distributions were identified. Stability has been interpreted as the generalisation of the recursive core.

Formalism describing externalities was expanded to include games with uncertainty. The introduced class of models can be applied to the description of energy trade over power networks where the co-operation corresponds to contracts between market actors and possible network breakdowns constitute the uncertainty.

A study on various lexicographic allocation rules offering solutions to co-operative games identified two universal hierarchies among these procedures. Limited to the class of assignment games, the study has proven that lexicographic maximising procedures aimed at (non-empty) cores or a set of dual rational payoff vectors results in the extreme points of an assignment game. By contrast, analogous maximising procedures have the same result only if an assignment game is exact.

Research aimed at the calculation of the per-capita nucleolus has confirmed that, in a balanced game, coalitions redundant in the dual description of the core need not be taken into account in calculating the per-capita nucleolus. This opens up the possibility that this solution can be calculated efficiently (and directly from basic data) mainly in costallocation problems in networks.

A study was conducted to see whether players in the assignment markets can increase their profits (and if yes, to what extent) under a centralised mechanism where the equilibrium prices of products were determined on the basis of some core allocation of the assignment games derived from the data submitted. The primary objective is to study whether fair equilibrium prices as the average of the lowest and highest prices and nucleolus-based equilibrium prices can be manipulated or not.

Contrary to earlier bank run models, the assumption was that depositors paid attention to earlier decisions. In such an environment, if observation is perfect, no bank runs occur in an equilibrium situation even if depositor types cannot be observed. Using a small-scale model involving three actors, a study of all possible information structures found that the observability of the decisions that were the first in the series is key to prevent bank runs. Experiments have, in part, substantiated this assumption. If the first decision in the series is made by an individual not facing liquidity constraints, he is most likely to continue to keep his deposits with the bank and no bank runs evolve later. If, however, the first depositor faces liquidity constraints and withdraws his deposit, this may trigger a bank run even if it is not expected theoretically. Experiments have also confirmed that there is no gender-bias in decisions on deposit withdrawals.

Using the public goods game, a model consolidating co-operation via public goods and competition á la Cournot has been developped. What has been investigated into is whether or not decisions change if competitors make interconnected or purely competitive decisions. It has been established that there is a major change in decisions because corporations contribute a positive quantity to public goods in an optimal situation, which expands the

market on which they compete. Results received at a theoretical level have, in part, also been underpinned by an experiment.

Researchers have analysed application procedures aggravated by joint applications of spouses. A new theorem has been provided for the calculation complexity of the problem and a description of the solution to the problem has been put forward. Its efficiency has been tested by way of simulation procedures. Furthermore, core consistent solution concepts have been studied for the stable roommates problem where the core may also be empty. An efficient algorithm leading to maximum internal and maximum internal matching still belonging to the absorbing set has been provided.

FIRMS, STRATEGY AND PERFORMANCE

One of the main objectives of the research pursued by the group was to assess trends in corporate mark-ups in the different markets. Researchers have found that the mark-ups of the companies that export are higher only if we ignore the fact that they are also engaged in importing. Imports seem to be more important than exports from this perspective. Researchers set up a model to explain this phenomenon. In this model only companies, whether importers or exporters, with higher productivity should enter foreign markets. These two activities affect mark-ups differently, though: Importing urges companies to produce better quality goods on which they charge higher mark-ups. Exporting, however, reduces mark-ups if competition is stronger in export markets.

The research points out that the prices that companies charge when they respond to foreign exchange rate changes are different from those set in response to the prices of competitors. This phenomenon suggests rigidity, e.g. long-term contracts in place, which treats exchange rate changes and price changes differently. Further research should be conducted for the exact mechanism to be grasped.

It was less creditworthy firms that borrowed in Swiss franc and that many of those borrowing in euro used natural hedges. A demand and supply effect was also identified. Foreign exchange lending influenced the banks that companies opted for, which confirms the existence of the demand effect. Banks' foreign exchange lending affected the currency that their customers decided on, which confirms the existence of the supply effect. Thanks to the forint's lower depreciation against the euro and the better foreign exchange hedges of euro debtors, foreign exchange rate changes did not add to the riskiness of euro debtors significantly. Poorer performance by Swiss franc debtors was attributable to exchange rate changes and the companies' own risks.

Research was conducted to assess the impact of the 2008-2009 crisis and the resultant slump in demand on companies' strategic decisions. It found that companies hit more adversely by the crisis tended to centralise strategic decision-making compared with other companies. The study also points out that centralised decision making persists, and may, in the long run, affect innovation as well.

ECONOMICS OF NETWORKS

Researchers relied on the network research approach to linked data on corporate balance sheets, foreign trade and product statistics in order to identify a technological relatedness

of industries in respect of the period between 2003 and 2012. Results reveal that the technological proximity of industries plays a major role in the shaping of firms' product portfolios. Empirical evidence supports the fact that firms' product portfolios are more likely to include products together that belong to technological related industries. It has been further demonstrated that the role of technological proximity was intensified during the 2008 crisis. In the course of portfolio cleaning companies were more likely to cease or cut back the production of those products that were technologically far from their core activity.

The research project aimed to study the regional transformation of Hungary's economy during the period between 1995 and 2012. Two entropy-based economic indicators were used: Related variety as a measure for the technological proximity between firms in the region and a three dimensional entropy as a measure for the system synergies in the region. The key question was the impact of the foreign-owned companies established in the region on changes in the productivity and employment of the region. Results suggest that the technological proximity measured between foreign companies facilitated the development of the region from the very emergence of these companies. By contrast, regarding Hungarian-owned companies, the same impact was experienced only in a later (final) stage of transformation. As regards the synergies of regional innovation systems, foreign-owned companies played a major role in their evolvement only in a few counties.

A joint research with Swedish researchers offered a new empirical frame for studying the role of social networking in the growth of regional economies. An analysis of co-worker networks is especially useful because it helps to reveal the potential of local learning and offers a new explanation for differences in regional productivity growth. Furthermore, the study of cross-sectoral relations offers an insight into local knowledge externalities. First the co-worker relations were analysed in the whole Sweden's economy. Following this, the 50 most likely co-worker relationships were monitored between 1990 and 2008. The strength of the relationships grew as time spent together increased and weakened as time passed after the termination of the co-worker relationship. Results corroborated one of the central statements of economic geography, i.e. the density of social networks increases regional productivity. Co-worker networks are concentrated mostly within the same industry; this phenomenon appears rather in small regions. Networks between industries either requiring similar skills or completely unrelated are relatively more common in metropolitan regions.

Interconnections between information problems and social networks, thta is, the role that social network plays in managing the information problems emerging in market mechanisms were studied. First, an asymmetric information model was used to examine whether awareness of social networks can help mitigate information problems when firms do not know the consumers' willingness to pay, but they apply second degree price discrimination. The results of the model suggest that the use of consumers' social networks can mitigate the information problem that emerges during price discrimination because it changes conditional probabilities related to different types of customers. As a result, companies can design an incentive menu system that yields better results than if they had not known and used information on social relationships. The results suggest that social networks play a greater role in those markets where information problems are bigger and/or where other mechanisms of handling these information problems either have not evolved or do not function properly.

b) Science and society

The Institute's research portfolio contains both theoretical and applied empirical research in topical economic policy and welfare issues. A few examples of topics of this kind include the labour market situation of those employed under the public work scheme, biodiversity, pre-and post-incarceration labour market careers, the impact of crèches on mothers' labour supply, gas supply in East Central Europe and the main reasons underlying the dropping out of Roma students from secondary education.

The Institute sets great store by publishing the research results that society is likely to put to good use, raising awareness of them in the right forums and public events and making them available for the interested public at its website.

The results of labour market research are given publicity annually at a labour economics conference in Szirák. The key topic of the one in 2014 was "Public work, working abroad and the Hungarian labour market". Papers were delivered in five panel meetings: education, learning, training, public work and various migration-related issues.

Volume 14 of the Labour Market Yearbook presenting the topical characteristics of the Hungarian labour market and employment policy in Hungary and analysing various areas of this topic in detail was published in Hungarian and in English. The yearbook presents the characteristics of the processes in and the internal interconnections of the Hungarian labour market on the basis of available statistics, theoretical research and empirical analyses, in an easy-to-follow style and structure and in an international comparison. In keeping with the earlier practice adopted by the editors of the series, an area that is key to understanding labour market processes in Hungary and the success of fact-based employment policies was also selected for 2014. The In FocusClose-up chapter discusses the labour market characteristics of the public sector.

Volume 7, i.e. "Verseny és szabályozás 2013" ("Competition and regulations 2013"), published on 30 September 2014 focuses on presenting the legal framework and adopted practice of administered prices in electricity supply, postal services and water supply. Further studies made important findings on the possibilities of economic analyses regarding competition law issues, the role of competition and competition policy in economic growth as well as a shift in paradigms regarding the EU regulations of services representing general economic interest. The volume also addressed market opening in the railways, changes in the regulations of network-based public services and the cost benefit analyses of electricity transmission networks in East Central Europe in detail.

The Institute organised a conference entitled "Tudásexport - Szemelvények a 60 éves MTA (KRTK) KTI fiatal kutatóinak aktuális eredményeiből" ("Knowledge Export – A Selection of the Current Results of the 60-year old IE-(CERS)-HAS for the wider public as part of a series of events entitled "Magyar Tudomány Ünnepe" (Celebrating Science in Hungary)

The public procurement database was made publicly available and searchable by the researchers responsible for the topic.

A professional blog serving as a discussion forum for the Institute's research results (both existing and future), policy opinions and topical economic, public and socio-political issues is in place and is regularly used by the staff to disclose their opinions and papers thereby facilitating social interaction. News about the media presence of the staff is available in the Press Survey section. The website offers up-to-date information in both English and Hungarian on the main activities, publications and projects of as well as the conferences and seminars organised by the individual research groups.

III. National and international relations and co-operation in 2014

Researchers teach at nearly all Hungarian institutions of higher education (e.g. CEU, BCE, ELTE, DE and PTE, etc.) offering first and/or second degree courses in economics. Furthermore, they are engaged in PhD programmes at Pannon University in Veszprém, Szeged University and Szent István University under a co-operation agreement. They also teach at universities (Cardiff University, UK Open University) and work as external researchers in prestigious research institutes (CEPR, IZA) abroad.

As a result of the measures taken in the interest of establishing the professional integration of research in competition regulations, a forum has been set up for lecturers and professionals at universities, research institutes and institutions of public administration in Hungary and abroad dealing with competition regulations, the economics of network industries and the legal issues of regulations.

CERS-HAS and Corvinus University Budapest were joint organiser of EACES Biennial Conference held in Budapest during the first week of September. Invited key note speakers included János Kornai (Harvard University and Corvinus University of Budapest) and Klaus Meyer (CEIBS Shanghai and Copenhagen Business School).

The Institute organised the Summer Workshop offering a forum for economists studying or working abroad for the fourteenth time in 2014.

A conference entitled "Regional Integration Processes before and after the Global Economic Crisis" was organised jointly by the Institute and Kwansei Gakuin University as part of the JSPS EU-Japan Joint Workshop.

Staff members provide expert services for the Competition Office, the Central Statistical Office, TÁRKI, FIW and the Budget Council. A researcher joined a Forster Centre project entitled "Revealing the socio-economic potential of Cultural Heritage" and another participated in the methodological preparation of the "NEKIFUT" project (National Information Agency, National Research Infrastructure Survey and Roadmap), the development of the forward-looking methodology of the ForSEE project and the conduct of a study comparing R & D innovation expenses in the Baltic States and Hungary. Holding a right to comment, the Institute is represented on the Evaluation Committee of the National Strategy entitled "Let's Make Things Better for Our Children" and the Indicator Sub-committee.

Many researchers are founders or members of the presidium of the Hungarian Society of Economics and participate as members of the presidium in the work of the Hungarian Economic Association.

IV. A brief description of successful national and international applications in 2014

There were 26 OTKA project in progress in 2014. Research in 3 new topics was commenced. Regarding project applications, the HAS Lendület (Momentum) Programme, under which game theory research and research in corporate strategies and competiveness continued, is of key importance.

A project entitled "Társadalmi innovációk gazdasági tere" (Economic Space for Social Innovation) financed under the EU's 7th framework programme was launched. The projects entitled "Európai versenyképesség feltérképezése" (Mapping European Competitiveness), where the institution is responsible for coordination, and "Növekedés, innováció és versenyképesség: a kohézió elősegítése Kelet- és Közép-Európában" (Growth, innovation and competitiveness: Facilitating Cohesion in East Central Europe) continued. So did the

implementation of the project entitled "Agrár-élelmiszeripari termékpályák nemzetközi összehasonlítása: a versenyképességüket és teljesítményüket meghatározó tényezők az EU-ban és a nemzetközi piacokon" (An International Comparison of Agrarian-Food Industry Product Trajectories: factors determining their competitiveness and performance in the EU and international markets).

V. Major publications during the year

Books, chapters in books

Bakucs Z. - Fertő I.: Fejezetek a mezőgazdasági árak elemzéséből (Analysis of Agrifood Prices). Budapest: MTA KRTK Közgazdaság-tudományi Intézet, 2014. 166 p. (KTI Könyvek; 17.) (in Hungarian)

<u>Fazekas K.</u> - Neumann L. (eds.): The Hungarian labour market, 2014. Budapest: Centre for Economic and Regional Studies, Hungarian Academy of Sciences; National Employment Non-profit Public Company, 2014. 336 p.

<u>Fazekas K.</u> - Neumann L. (szerk.): Munkaerőpiaci tükör (Hungarian Labour Market), 2013. Budapest: MTA Közgazdaság- és Regionális Tudományi Kutatóközpont Közgazdaság-tudományi Intézet; Országos Foglalkoztatási Közhasznú Nonprofit Kft., 2014. 352 p. (in Hungarian)

Herrendorf, B. - Rogerson, R. - <u>Valentinyi Á</u>.: Growth and structural transformation. In: Aghion, P. - Durlauf, S. N. (eds.): *Handbook of economic growth:Volume 2B*. Amsterdam: Elsevier - North-Holland, 2014. p. 855-941.

<u>Valentiny P.</u> - Kiss F. L. - Nagy Cs. I. (szerk.): Verseny és szabályozás (Competition and Regulation), 2013. Budapest: MTA KRTK Közgazdaság-tudományi Intézet, 2014. 372 p. (in Hungarian)

Articles in foreign journals

<u>Biró P.</u> - Bomhoff, M. - Golovach, P. A. - Kern, W. - Paulusma, D.: Solutions for the stable roommates problem with payments. *Theoretical Computer Science* Vol. 540-541. 2014. p. 53-61.

Bojnec S. - <u>Fertő I.</u>: Export competitiveness of dairy products on global markets: The case of the European Union countries. *Journal of Dairy Science* Vol. 97. No. 10. 2014. p. 6151-6163.

<u>Csóka P.</u> - Herings, P. J.-J.:Risk allocation under liquidity constraints. *Journal of Banking* & *Finance* Vol. 49. 2014. p. 1-9.

Halpern L. - Oblath G.:A gazdagsági stagnálás "színe" és fonákja : Mivel jár együtt az exporttöbblet és az adósságcsökkenés? (The 'bright' and gloomy side of economic stagnation). *Közgazdasági Szemle* 61. évf. 7-8. sz. 2014. p. 757-800. (in Hungarian)

Havas A.: Mit mér(j)ünk? : Az innováció értelmezései - szakpolitikai következmények. (What to measure? The interpretation of innovation and its policy consequences) *Közgazdasági Szemle* 61. évf. 9. sz. 2014. p. 1022-1059.

Horn D.: A szakiskolai tanoncképzés rövid távú munkaerő-piaci hatásai. *Közgazdasági Szemle* 61. évf. 9. sz. 2014. p. 975-999.

Jakobi Á. - <u>Lengyel B.</u>: Egy online közösségi háló offline földrajza, avagy a távolság és a méret szerepének magyar empíriái. *Tér és Társadalom* 28. évf. 1. sz. 2014. p. 40-61.

Karsai J.: Fából vaskarika? Az állam mint kockázatitőke-befektető. *Külgazdaság* 58. évf. 9-10. sz. 2014. p. 3-34.

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