

AN OUTLINE OF LIVESTOCK PRODUCTION AND CATTLE TRADE FROM HUNGARY TO WESTERN EUROPE IN LATE MIDDLE AGES AND EARLY MODERN PERIOD (XIVTH-XVITH CENTURIES)*

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Abstract

Agriculture – particularly of grain and wine – was an important sector in the economic structure of the Kingdom of Hungary since the twelfth century. Nevertheless, it was the livestock breeding to maintain a central economic role. The Hungarian lands produced and exported mainly raw materials, as mentioned agricultural products and livestock, but also minerals and metals such as iron, copper, salt, gold and silver. Goods of great importation were instead the luxury ones: textiles, jewels and fine crafts from the West; hides, wool, textiles, wax and spices from the East. Part of the imported goods merely transited in the Hungarian lands to reach eastern or western Europe. Between late Middle Ages and early Modern Period, the general characteristics of the production and exchange structures of the Kingdom remained almost unchanged. Although the Hungarian products had a slow but steady increase in prices, these prices remained lower in respect of those of similar goods from western Europe: so the exchange between the Hungarian raw materials and Western products remained very profitable. In this context, in spite of wars and general rise in prices, breeding and cattle trade offered great economic opportunities both in investment and profit for many operators, local and otherwise.

Keywords: trade, livestock, Kingdom of Hungary, Western Europe.

The twelfth-sixteenth centuries sources, in particular those of narrative character, agree to describe the Kingdom of Hungary as a fertile land, rich of waters, pastures and woods, where farming and cattle-breeding were practiced with good results. Generally there was great land availability, and most villages had at their disposal a vast area of seeding, pasture and woods. The agriculture (grain and wine) represented an important economic sector in the Kingdom's economic structure since the twelfth century. Nevertheless it was cattle-breeding (above all equine and bovine) to maintain a fundamental economic role, in relationship with the Hungarian nomadic and semi-nomadic traditional forms of organization, and the abundance and wealth of forests and pastures. Hunting and fishing were other notable natural resources, and in general not precluded to the peasants, staying only in some areas of absolute regal and nobiliary pertinence¹.

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¹ See for instance the affirmations of: Abu-Hamid, in Ivan Hrbek, *Ein arabischer Bericht über Ungarn (Abū Hāmid al-Andalusī al-Garnāṭī, 1080-1170)*, in "Acta Orientalia Academiae Scientiarum Hungaricae", V/3 (1955), pp. 205-230: 208-209; Al-Idrisi, in *Géographie d'Édrisi*, Pierre-Amédée Jaubert (transl.), *Recueil de voyages et de mémoires publié par la Société de Géographie*, II, Paris, 1840, p. 377; Otto of Freising, in *Gesta Friderici I Imperatoris*, Roger Wilmans (ed.), *Monumenta Germaniae Historica, Scriptores*, XX, Hannoverae, 1868, p. 369: "Sunt autem predicti Ungari facie tetri, profundis oculis, statura humiles, moribus et lingua barbari

For instance, at the beginning of the fourteenth century, an anonymous Dominican who travelled a lot in East and Central Europe reported that the Realm of Saint Stephen were rich not only in salt, gold and silver, but also in cereals, meat, fish and wine. So the anonymous chronicler deduced that the ancient names of *Messia* and *Pannonia* derived from abundant harvests and bread availability in Hungarian lands².

In the thirteenth century, the extension of Kingdom was about 250,000 square kilometre, and the population average density hardly exceeded 4 or 5 inhabitants per square kilometre (therefore total population had to be included between a million and a million and a half inhabitants). Some areas were more inhabited, but in general there was a great land availability, and most villages had at disposal a vast area for seeding, pasture and woods. Moreover, in this period urbanization was not so evolved. In the eleventh and twelfth centuries most free lands were colonized thanks to the arrival of *hospites* coming, above all, from the Holy Roman Empire territories. Colonization proceeded until the fourteenth century, but at the beginning of this century the Kingdom of Hungary was still not densely inhabited. Only few settlements were clearly identified as *civitates*³. Density remained low, with 5 or 7 inhabitants per square kilometre, even if with great differences among Hungarian territories⁴.

Cereal production was an important sector in the economic structure of the Kingdom of Hungary, stimulated above all by the internal market. Principal cultivations were wheat

et feroces, ut iure fortuna culpanda vel potius divina patientia admiranda est, quae, ne dicam hominibus, sed talibus hominum monstis tam delectabilem exposuit terram"; Constantine Manasses, in *Oratio*, Gyula Moravcsik (ed.), *Fontes Byzantini historiae Hungaricae aeo ducum et regum ex stirpe Árpád descendunt*, Budapest, Akadémiai Kiadó, 1984, p. 158. In the middle of thirteenth century, in his *De proprietatibus rerum*, the franciscan Bartholomeus Anglicus remembered that in the Kingdom of Hungary "*sal etiam optimum in quibusdam montibus effoditur*"; see Anton Emanuel Schönbach, *Des Bartholomaeus Anglicus Beschreibung Deutschlands gegen 1240*, in "Mitteilungen des Instituts für Österreichische Geschichtsforschung", XXVII (1906), pp. 54-90: 55 and ff. At the end of the same century, importation lists of Bruges noted that "*Dou royaume de Hongrie vient cire, or et argent en plate*"; see *Inventaire des Archives de la ville de Bruges*, I-IX, Louis Gilliodts-van Severen and Edward Gailliard (eds.), Bruges, Gailliard, 1871-1885: II, pp. 225-226. See the following notes.

² *Anonymi Descriptio Europae Orientalis: Imperium Constantinopolitanum, Albania, Serbia, Bulgaria, Ruthenia, Ungaria, Polonia, Bohemia anno MCCCVIII exarata*, Olgierd Górka (ed.), Cracoviae 1916, p. 43: "[Et est] notandum, quod regnum vngarie olim non dicebatur vngaria, sed messia et panonia. Messia quidem dicebatur a messium proventu, habundat enim multum in messibus, panonia dicebatur etiam a panis habundantia; et ista consequenter se habent, ex habundantia enim messium sequitur habundantia panis"; p. 46: "Est enim terra pascuosa et fertilis valde in pane, vino, carnibus, auro [et] argento, copia autem piscium excedit fere omnia regna, preterquam norvegiam, ubi pisces comeduntur pro panibus, vel loco panis. terra est comuniter plana, colles parvos permixtos habens, alicubi tamen habet montes altissimos: in partibus transilvanis sunt maximi montes de sale et de illis montibus cavatur sal sicut lapides et apportatur per totum regnum et ad omnia regna circumadiacentia"; see also pp. 47-48.

³ *Anonymi Descriptio*, pp. 48-49: "Preter [Buda, Esztergom, Győr, Zagabria, Veszprem, Pécs, Alba Iulia, Tîrnov, Bratislava, Baia] non sunt plures civitates in tota vngaria, preter quinque alias circa mare in dalmacia; sunt tamen multa opida, [castra] seu fortalicia et ville innumerales in dicto regno, et cum hoc [toto] videtur prefatum regnum esse omnino vacuum propter magnitudinem eiusdem". See Andrea Fara, *La città in Europa centro-orientale tra Medioevo ed Età moderna (secoli X-XVIII) - Nota bibliografica*, in *La storia di un riconoscimento: i rapporti tra l'Europa Centro-Orientale e la Penisola italiana dal Rinascimento all'Età dei Lumi*, Cristian Luca and Gianluca Masi (eds.), Brăila-Udine, Istros-Campanotto, 2012, pp. 15-62.

⁴ István Szabó, *Magyarország népessége az 1330-as és az 1526-os évek között*, in *Magyarország történeti demográfiája. Magyarország népessége a honfoglalástól 1949-IG*, József Kovácsics (ed.), Budapest, Közgazdasági és Jogi Könyvkiadó, 1963, pp. 63-113: 97-98; Erik Fügedi, *The demographic landscape of East-Central Europe*, in *East-Central Europe in Transition from the Fourteenth to the Seventeenth Century*, Antoni Maczak, Henryk Samsonowicz and Peter Burke (eds.), Cambridge-Paris, Cambridge University Press - Éditions de la Maison des Sciences de l'Homme, 1985, pp. 47-58: 53; Gyula Kristó, *Die Bevölkerungszahl Ungarns in der Arpadenzeit*, in *Historische Demographie Ungarns (896-1996)*, Herne, Tibor Schäfer, 2007, pp. 9-56; Pál Engel, *Probleme der historischen Demographie Ungarns in der Anjou- und Sigismundszeit*, in *Ibidem*, pp. 57-65; András Kubinyi, *Die Bevölkerung des Königreichs Ungarn am Ende des 15. Jahrhunderts*, in *Ibidem*, pp. 66-93; Pál Engel, *The Realm of St. Stephen. A History of Medieval Hungary (895-1526)*, London-New York, I.B. Tauris Publishers, 2001, pp. 328-330. About colonization in East and Central Europe, see Charles Higounet, *Les Allemands en Europe centrale et orientale au Moyen Age*, Paris, Aubier, 1989; with particular reference to Hungarian lands, see Andrea Fara, *La formazione di un'economia di frontiera. La Transilvania tra il XII e il XIV secolo*, Napoli, Editoriale Scientifica, 2010, pp. 59-106 and ff.

and barley, also used for the production of beer; rye, economically less relevant; millet and oats, especially to maintain the cattle; and the vine, which was cultivated in much of the country, even in those regions where the environmental conditions were not entirely favourable. Nevertheless, compared to livestock farming, cereal production had a marginal economic role⁵. In fact, it was the livestock production and cattle trade to maintain a key role, given the abundance of pastures, especially in the so-called Great Plain. For late Middle Ages and early Modern period, it is estimated that an average property had at its disposal about 30 large animals, which means that in a single village there were hundreds of animals, used as a labor force, for manuring operations, such as an article for both direct consumption and exchange. In most of the Kingdom of Hungary meat consumption remained very high and considerably higher than the average in Western Europe: if in the Hungarian lands the average annual consumption of cereals was around to 112 kg (well below the European average estimated at 175 kg), the consumption of meat was very high, 63 to 69 kg per capita (well above the 50 kg of Nuremberg, the 47 kg common in the cities of southern Germany and 26 kg in the south of France). Moreover it is to mention the large size of animals, which were well known for the quality and the taste of their meat. Between tenth and twelfth century, Hungarian cattle lacked those special traits that distinguished him in the sixteenth century, that is the large size and the large horns: these features were probably the product of a selection of species, even for commercial purposes, which occurred during several centuries; so, in the middle of the sixteenth century, an average Hungarian ox stood about 300-350 kg, to reach often the 450-500 kg at the beginning of the seventeenth century, while the European standard was 200 kg⁶.

So the low density of population and the vastness of available land made extensive breeding practices, particularly in the Great Plain, easy and profitable. The Hungarian lands produced and exported above all raw materials, agricultural products and livestock, metals and minerals (gold, silver, iron, copper and salt). Vice versa, importations consisted especially of luxury goods (from the West: Italian, French and German cloth, jewels and

⁵ In general, P. Engel, *The Realm of St. Stephen*, pp. 56-58, 271-277, 326-328; more specifically, Márta Belényesi, *Der Ackerbau und seine Produkte in Ungarn im XIV. Jahrhundert*, in "Acta Ethnographica Academiae Scientiarum Hungaricae", VI (1958), pp. 256-321; László Mákkai, *Agrarian Landscapes of Historical Hungary in Feudal Times*, in *Études historiques hongroises 1980 publiées à l'occasion du XV^e Congrès International des Sciences Historiques*, I, Budapest 1980, pp. 193-208; András Kubinyi, *Mittelalterliche Siedlungsformen in Westungarn*, in *Siedlungsnamen und Siedlungsformen als Quellen zur Besiedlungsgeschichte Niederösterreichs*, Helmuth Feigl (ed.), Wien 1986, pp. 151-170; József Laszlovsky, *Einzelsiedlungen in der Arpadenzeit*, in "Acta Archaeologica Academiae Scientiarum Hungaricae", XXXVIII (1986), pp. 227-255; Idem, *Field Systems in Medieval Hungary*, in *The Man of Many Devices, Who Wandered Full Many Ways. Festschrift in Honor of János M. Bák for his 70th*, Balázs Nagy e Marcell Sebők (eds.), Budapest, CEU Press 1999, pp. 432-444; see also Ferenc Maksay, *Das Agrarsiedlungssystem des mittelalterlichen Ungarns*, in "Acta Historica Academiae Scientiarum Hungaricae", XXIV (1978), pp. 83-108.

⁶ László Mákkai, *Economic landscapes: historical Hungary from the fourteenth to the seventeenth century*, in *East-Central Europe in Transition*, pp. 24-35; István N. Kiss, *Agricultural and livestock production: wine and oxen. The case of Hungary*, in *Ibidem*, pp. 84-96; Jerzy Topolski, *A model of East-Central European continental commerce in the sixteenth and the first half of seventeenth century*, in *Ibidem* pp. 128-139; Ian Blanchard, *The Continental European Cattle Trades, 1400-1600*, in "The Economic History Review", XXXIX/3 (1986), pp. 427-460; László Bartosiewicz, *Cattle Trade across the Danube at Vác (Hungary)*, in "Anthropozoologica", XXI (1995), pp. 189-196; Idem, *The Hungarian Grey Cattle: a traditional European Breed*, in "Animal Genetic Resources Information", XXI (1997), pp. 49-60; Idem, *Animal husbandry and medieval settlement in Hungary. A review*, in "Beiträge zur Mittelalterarchäologie in Österreich", XV (1999), pp. 139-155; Idem, *Turkish Period Bone Finds and Cattle Trade in South-Western Hungary*, in *Historia animalium ex ossibus. Beiträge zur Paläoanatomie, Archäologie, Ägyptologie, Ethnologie und Geschichte der Tiermedizin*, Cornelia Becker, Henriette Manhart, Joris Peters e Jörg Schibler (eds.), Rahden/Westf., VML, 1999, pp. 47-56; Richard C. Hoffmann, *Frontier Foods for Late Medieval Consumers: Culture, Economy, Ecology*, in "Environment and History", VII/2 (2001), pp. 131-167; László Bartosiewicz e Erika Gál, *Animal Exploitation in Hungary during the Ottoman Era*, in *Archeology of the Ottoman Period in Hungary*, Ibolya Gerelyes e Gyöngyi Kovács (eds.), Budapest, HNM, 2003, pp. 365-376; László Bartosiewicz, *Animal Bones from the Medieval Settlement Otok (Gutenwerth) near Dobrava pri Škocjanu, Slovenia*, in "Arheološki vestnik", LVII (2006), pp. 457-478; Lajos Rácz, *The Price of Survival: Transformations in Environmental Conditions and Subsistence Systems in Hungary in the Age of Ottoman Occupation*, in "Hungarian Studies", XXIV/1 (2010), pp. 21-39; Andrea Fara, *Il commercio di bestiame ungherese verso la Penisola italiana tra tardo Medioevo e prima Età moderna (XIV-XVI secolo)*, in "Mélanges de l'École française de Rome - Moyen Âge", en ligne, CXXVII/2 (2015), in press. See note 18.

handicraft products; from the East: cloth, skins, wool, wax and spices), demanded by the Crown, by the regal court and, with a different proportion, by the *nobilitas*⁷. Quite a huge quantity of these goods were destined to be exchanged between the East and the West. Thanks to a rather favourable geographical position, Hungary maintained profitable exchanges with a great part of Europe: from Venice to Florence, from Wien to Nuremberg, from Cracow to L'vov, from Wallachia and Moldavia to the Black Sea ports and the East. From the fourteenth century, exchanges between Hungary and Western Europe grow a lot, privileging the contacts with the Italian Peninsula (above all with Florence, at least up to 1432, also to counteract the supremacy of Venice in the Adriatic Sea), the Habsburgs and the Holy Roman Empire. But the contacts with Italy were complicated by the rivalry with Venice, which often did not permit normal trade from and for Hungary by closing the Adriatic ports. Vice versa, the relationship with the territories of the Habsburgs (*in primis* with Wien), with southern Germany (above all with Nuremberg), and with Wallachia and Moldavia and with the Black Sea ports through the cities of Transylvania (mainly through Sibiu-Nagyszeben-Hermannstadt, Braşov-Brassó-Kronstadt and Bistriţa-Beszterce-Bistritz) took an enormous development. These commercial routes towards West and East had already been profitable in the Anjou period, but more and more they characterised the Hungarian market and its orientation towards foreign countries. Between late Middle Ages and early Modern Period, the Kingdom of Hungary maintained almost unchanged the general characteristics of its production and exchange structures. With the passing of time, a notable maturation in the internal market occurred, defined by a greater use of money and a meaningful increase in the commercial activities in short, middle and long distance. Moreover, although the prices of the Hungarian products had a slow but constant increase, potentially these prices remained lower in comparison with western ones: this made always profitable the exchange between the Hungarian raw materials – and livestock *in primis* – and the western or oriental products, textiles in particular. In other words, the difference in price between local and imported goods offered the possibility of numerous and profitable bargains⁸.

No wonder then that western sources agree to describe the Kingdom of Hungary as a land in which it was possible to realize notable profits with the exchange between western luxury products and local livestock, precious metals, spices and the other levantine articles⁹. And, in this context, numerous are informations about livestock production and cattle trade.

⁷ György Székely, *Niederländische und englische Tuchten im Mitteleuropa des 13.-17. Jahrhunderts*, in "Annales Universitatis Scientiarum Budapestinensis. Sectio historica", VIII (1966), pp. 11-42; Samuel Goldenberg, *Commercio, produzione e consumo dei panni di lana nei paesi romeni (secoli XIV-XVII)*, in *Produzione, commercio e consumo dei panni di lana. Atti della Seconda Settimana di Studio, 10-16 aprile 1970, Istituto Internazionale di Storia Economica "F. Datini" di Prato*, Firenze, Olschki, 1976, pp. 633-648; László Mákkai, *Commerce et consommation de draps de laine en Hongrie aux XII^e-XVII^e siècles*, in *Ibidem*, pp. 649-654; see also Walter Endrei, *A textilipari technikák termelékenységének története, XIII-XX. század*, Budapest, Akadémiai Kiadó, 1993.

⁸ Zsigmond Pál Pach, *Levantine Trade and Hungary in the Middle Ages (Theses, Controversies, Arguments)*, in *Études Historiques Hongroises 1975 publiées par la Commission Nationale des Historiens Hongroises*, Budapest, Akadémiai Kiadó, 1975, pp. 283-307; Idem, *Le commerce du Levant et la Hongrie au Moyen Age. Thèses, polémiques, arguments*, in "Annales Economies Sociétés Civilisations", XXXI/6 (1976), pp. 1176-1194; Idem, *La politica commerciale di Luigi d'Angiò e il traffico delle «mercanzie marittime» dopo la pace di Zara*, in *Rapporti veneto-ungheresi all'epoca del Rinascimento. Atti del II Convegno di Studi Italo-Ungheresi promosso e organizzato dalla Fondazione Giorgio Cini, dall'Accademia Ungherese delle Scienze, dall'Istituto per le Relazioni Culturali di Budapest. Budapest, 20-23 giugno 1973*, Tibor Klaniczay (ed.), Budapest, Akadémiai Kiadó, 1975, pp. 105-119; see collected paper *Hungary and the European Economy in Early Modern Times*, Aldershot, Ashgate, 1994. See also Balázs Nagy, *Transcontinental Trade from East-Central Europe to Western-Europe (Fourteenth and Fifteenth Centuries)*, in *The Man of Many Devices*, pp. 347-356.

⁹ With particular reference to Italians merchants in the Kingdom of Hungary, see: Dionisio Huszti, *Mercanti italiani in Ungheria nel Medioevo*, in "Corvina", III (1940), pp. 10-40; Samuel Goldenberg, *Notizie del commercio italiano in Transilvania nel secolo XVI*, in "Archivio Storico Italiano", CXXI/2 (1963), pp. 255-288; Idem, *Italiani şi ragusani în viaţa economică a Transilvaniei în secolul al XVI-lea*, in "Studii. Revistă de istorie", XVI/3 (1963), pp. 591-619; Vittore Branca, *Mercanti e librai fra Italia e Ungheria*, in *Venezia e Ungheria nel Rinascimento. Atti del I Convegno di Studi Italo-Ungheresi promosso e organizzato dalla Fondazione Giorgio Cini, dall'Accademia Ungherese delle Scienze, dall'Istituto per le Relazioni Culturali di Budapest. Venezia, 11-*

In the thirteenth century, in Buda worked a well organized butchers' guild involved in these sectors¹⁰. In 1305, Nuremberg documents remembered the so-called *corria hungarica*; and in 1358 a merchant from the same city bought bovines in Buda. In 1327, Hungarian oxes were mentioned in the Wrocław customs; in 1473 and in 1492, they were available in Basel and Cologne¹¹. In 1348, in his *Cronaca*, the Florentine Matteo Villani described the particular relationship between horse and Hungarian people, some Hungarian alimentary habits and the importance of cattle-breeding in local economy: "*Li Ungheri hanno le gregge di cavalli grandissime, e sono non grandi, e co' loro cavalli arano e governano il lavoro della terra, e tutte loro some sono carrette, e tutti li nudriscono a stare stretti insieme, (...), e il loro nudrimento è l'erba, e fieno e strame con poca biada (...). (...) Di loro vivanda co' lieve incarico sono ne' disert bene forniti, e lla cagione di ciò e lla loro provizione è questa; che 'n Ungheria cresce grande moltitudine di buoi e vacche, i quali no- lavorano la terra, e avendo larga pastura, crescono e ingrassano tosto, i quali elli uccidono per avere*

14 giugno 1970, Vittore Branca (ed.), Firenze, Olschki, 1973, pp. 335-352; Zsuzsa Teke, *Rapporti commerciali tra Ungheria e Venezia nel secolo XV*, in *Rapporti veneto-ungheresi all'epoca del Rinascimento*, pp. 143-152; Hermann Kellenbenz, *Gli operatori economici italiani nell'Europa centrale ed orientale*, in *Aspetti della vita economica medievale. Atti del Convegno di Studi nel X anniversario della morte di Federico Melis*, Firenze, Arian, 1985, pp. 333-357; Neven Budak, *I fiorentini nella Slavonia e nella Croazia nei secoli XIV e XV*, in "Archivio Storico Italiano", CLIII/4 (1995), pp. 681-695; Bruno Dini, *L'economia fiorentina e l'Europa centro-orientale nelle fonti toscane*, in *Ibidem*, pp. 633-655; Tomislav Raukar, *I fiorentini in Dalmazia nel secolo XIV*, in *Ibidem*, pp. 657-680; Zsuzsa Teke, *Operatori economici fiorentini in Ungheria nel tardo Trecento e primo Quattrocento*, in *Ibidem*, pp. 697-707; Eadem, *Egy firenzei kereskedő a Jagelló-korban: Raggione Bontempi 1488-1528*, in "Századok", CXLI (2007), pp. 967-990; Krisztina Arany, *Success and Failure - Two Florentine Merchant Families in Buda during the Reign of King Sigismund (1387-1437)*, in "Annual of Medieval Studies at CEU - Central European University Budapest", XII (2006), pp. 101-123; Eadem, *Firenzei kereskedők, bankárok és hivatalviselők Magyarországon (1370-1450). Protopográfiai adattár*, in "Fons - Forráskutatás és Történeti Segéd tudományok", XIV/3 (2007), pp. 483-549; Eadem, *Siker és kudarc - Két firenzei kereskedőcsalád, a Melanesi-k és Corsini-k Budán Luxemburgi Zsigmond uralkodása (1387-1427) alatt*, in "Századok", CXLI (2007), pp. 943-966; Eadem, *Firenzei-magyar kereskedelmi kapcsolatok a 15. században*, in *Gazdaság és gazdálkodás a középkori Magyarországon: gazdaságtörténet, anyagi kultúra, régészet*, András Kubinyi, József Laszlovszky and Péter Szabó (eds.), Budapest, CEU Press, 2008, pp. 277-296; Francesco Bettarini, *I toscani al servizio della città di Ragusa (Dubrovnik) nella prima metà del Quattrocento*, in "Medioevo Adriatico", I (2007), pp. 135-150; Idem, *Mercanti fiorentini ed artigiani pratesi a Ragusa (Dubrovnik) nel Quattrocento*, in «Mercatura è arte». *Uomini d'affari toscani in Europa e nel Mediterraneo Medioevale*, Lorenzo Tanzini and Sergio Tognetti (eds.), Roma, Viella, 2012, p. 97-114; Katalin Prajda, *Florentine merchant companies established in Buda at the beginning of the 15th century*, in "Mélanges de l'École française de Rome - Moyen Âge", en ligne, CXXV/1 (2013), URL: <http://mefrm.revues.org/1062>; Cristian Luca, *Dacoromano-Italica. Studi e ricerche sui rapporti italo-romeni nei secoli XVI-XVIII*, Cluj-Napoca, CST, 2008 (collected papers); Andrea Fara, *Italici in Transilvania tra XIV e XVI secolo*, in "Annuario dell'Istituto Romeno di Cultura e Ricerca Umanistica di Venezia", VI-VII (2004-2005), pp. 337-351; Idem, *Attività di carattere imprenditoriale dei mercanti italiani nel regno d'Ungheria tra tardo Medioevo e prima Età moderna (XIV-XVI secolo)*, in *Imprenditorialità e sviluppo economico: il caso italiano (secoli XIII-XX)*, Atti del Convegno SISE - Società Italiana degli Storici Economici, Università "Luigi Bocconi" di Milano, Milano 14-15 novembre 2008, Franco Amatori e Andrea Colli (eds.), Milano, Egea, 2009, pp. 1071-1089; Idem, *Italian Merchants in the Kingdom of Hungary in late Middle Ages and early Modern Period (XIIIth-XVIth centuries)*, in *Italy and Europe's Eastern Border (1204-1669)*, Iulian M. Damian, Ioan-Aurel Pop, Mihailo St. Popovic and Alexandru Simon (eds.), Frankfurt am Main, Berlin, Bern, Bruxelles, New York, Oxford, Wien, Peter Lang Verlag, 2012, pp. 119-133; Idem, *Le besoin d'expertise. Capacité professionnelle et choix des opérateurs économiques italiens sur les terres hongroises aux XIII^e et XVI^e siècles*, in *Expertise et valeur des choses au Moyen Âge. I. Le besoin d'expertise*, Claude Denjean et Laurent Feller (eds.), Madrid, Casa de Velázquez, 2013, pp. 205-219.

¹⁰ *A budai és pesti mézszáros céhek ládáinak okiratai 1270-1872*, Béla Bevilaqua Borsody (ed.), Budapest, Franklin-Társulat, 1931, doc. 1.

¹¹ Othmar Pickl, *Der Viehhandel von Ungarn nach Oberitalien vom 14. bis zum 17. Jahrhundert*, in *Internationaler Ochsenhandel (1350-1750). Akten des 7th International Economic History Congress Edinburgh 1978*, Ekkehard Westermann (ed.), Stuttgart, Klett-Cotta, 1979, pp. 39-81: 40; István N. Kiss, *Die Bedeutung der ungarischen Viehzucht für Ungarn und Mitteleuropa vom 16. bis zum 18. Jahrhundert*, in *Ibidem*, p. 83-123: 105; Wolfgang von Stromer, *Zur Organisation des transkontinentalen Ochsen- und Textilhandels im Spätmittelalter. Der Ochsenhandel des Reichserbkämmerers Konrad von Weinsberg anno 1422*, in *Ibidem*, pp. 171-195: 173, 188; Sergij Vilfan, *L'alimentation des villes dans les confins germano-italo-slaves du XIV^e au XVII^e siècle*, in *L'alimentation des villes de l'Europe occidentale au Moyen Âge et aux Temps Modernes*, Auch, Centre Culturel de l'Abbaye de Flaran, 1985, p. 53-74: 61, 64; see also Francis W. Carter, *Trade and Urban Development in Poland. An Economic Geography of Cracow, from its Origins to 1795*, Cambridge, Cambridge University Press, 1994, pp. 241-251.

il cuoio, e il grasso che ne fanno grande mercatantia, e lla carne fanno cuocere in grande caldaie; e com'ell'è ben cotta e salata la fanno dividere da l'ossa, e apresso la fanno seccare ne' forni o in altro modo, e secca, la fanno polverizzare e recare in sottile polvere, e così la serbano; e quando vanno pe' diserti con grande esercito, ove no· trovano alcuna cosa da vivere, portano paiuoli e altri vasi di rame, e catauno per sé porta uno sacchetto di questa polvere per provisione di guerra, e oltre a· cciò il signore ne fa portare in sulle carrette grande quantità; e quando s'abattono alle fiumane o altre acque, quivi s'arestano, e pieni i loro vaselli d'acqua la fanno bollire, e bollita, vi mettono suso di questa polvere secondo la quantità de' compagni che s'acostano insieme; la polvere ricresce e gonfia, e d'una menata o di due si fa pieno il vaso a modo di farinata, e dà sustanzia grande da nutrire, e rende li uomini forti con poco pane, o per sé medesima senza pane. E però nonn-è maraviglia perché grande moltitudine stieno e passino lingamente per li diserti senza trovare foraggio, che i cavalli si nutricano coll'erbe e col fieno, e li uomini con questa carne martoriata¹².

About horses, in 1376, the Florentine Bonaccorso Pitti was in Buda and, before he went back to Italy, he decided to invest money in six Hungarian horses. Their price on the local market was really convenient, while on the Western markets they were a very required article because of their fame and their virtues. During his travel home, Bonaccorso lost a horse, gave another as a present and sold two other, losing a part of his profits through gaming. Despite of this, he returned to Florence with two horses, one hundred gold florins and the full satisfaction of an excellent bargain. Unfortunately we do not possess the precise quantitative data, and the affirmations of Bonaccorso must be used with due prudence¹³. However, in 1433, also the Burgundian knight Bertrandon de la Broquière noted that in Hungary a horse of best quality cost around ten florins, while in West Europe it could cost even 50 florins. On the other hand, a cheap roll of Bohemian cloth could be at a price of seven florins, while same quantity of the best Italian cloth cost around 45 florins, that is the price of 10-15 oxen¹⁴.

Still at the beginning of the fifteenth century, the price of an ox in Hungary was around three or four florins, and a horse of average quality was not much more expensive. In 1525, the Venetian Vincenzo Guidotti described Hungary as "*tra i regni del mondo bellissimo*", where it is easy to get not only gold, silver, marcasite, salt and cereals, but also "*animali grossi e minuti d'ogni sorta in numero grandissimo*"¹⁵. And, during the sixteenth century, the "*magnus cornuotes boves Hungaricos*" are mentioned more and more¹⁶.

How said, the economic and commercial structure of the Kingdom remained nearly unchanged during the whole Middle Ages and during the Modern Period. And this even after the collapse of Hungary following the battle of Mohács in 1526 and the definitive partition of the Hungarian dominions among the Habsburgs, the Ottoman Empire and the Principality of Transylvania in 1541. So, despite the almost endemic wars and the general rise of prices, for Austrian, German and Italian merchants the Hungarian agricultural products, wine and livestock remained always easy to access and had competitive prices, guaranteeing ample profits (in contrast to the metals and minerals, whose extraction operations became more and more expensive)¹⁷.

In the course of the sixteenth century, due to a crisis in wine production, it was above all the Hungarian cattle trade to offer remarkable possibilities of investment and profits despite the wars with the Ottoman Empire; very soon it became a sector of great interest for the Italian operators, especially from Venetian territories. In average, the Hungarian lands exported about 100,000 heads of cattle per annum, with points up to 200,000 heads. In periods of strong demand more heads could be added from Moldavia and Wallachia

¹² Matteo Villani, *Cronaca*, Giuseppe Porta (ed.), Parma, Guanda, 1995, VI, 773-777.

¹³ Bonaccorso Pitti, *Ricordi*, in *Mercanti scrittori. Ricordi nella Firenze tra Medioevo e Rinascimento*, Vittore Branca (ed.), Milano, Rusconi, 1986, pp. 41-503: 366-368.

¹⁴ Bertrandon de la Broquière, *Voyage d'Outremer*, in *Recueil de voyages et de documents pour servir à l'histoire de la géographie*, XII, Charles Schefer (ed.), Paris 1892, pp. 233 and ff.

¹⁵ See U. Tucci, *L'Ungheria e gli approvvigionamenti veneziani*, p. 153, nota 4.

¹⁶ Sándor Milhoffer, *Magyarország közgazdasága*, Budapest, Franklin-Társulat, 1904, I, p. 74.

¹⁷ See note 8.

through Transylvania. About 80% of animals reached the Austrian, German and Moravian markets, while about 20% reached Venice (and thanks to these imports the *Serenissima* was able to satisfy a good part of its own food requirements). Only a modest number of heads was destined for the Ottoman lands (essentially to satisfy the demand of a part of armed forces). Exports to Austrian and German markets were regulated through distinct contracts among western and Hungarian merchants. In comparison, the trade to the Italian and Venetian regions was managed by an unique contract: a single merchant, alone or with a *societas*, got the monopoly in these traffics after having paid a huge amount of money to the Habsburg authorities, which tried to focus the trade in Wien; to the Transylvanians, who regulated the passage from Wallachian and Moldavian regions to the West; to the Venetians, who aimed to guarantee a constant provision of meat for Venice with similar accords; and sometimes even to the Ottomans, who were interested in the transit of livestock. Sources mention the Hungarian Zuan Pastor *di nation fiorentin* in 1513, Francesco Cicogna between 1559 and 1565, again in 1572 and between 1592 and 1594, Nicolino Martinoni da Riva and his partners between 1565 and 1570 and again between 1586 and 1592, Iseppo de Francesco between 1570 and 1572 and many others¹⁸.

Data analysed by Vera Zimányi for the northern regions of historical Hungary (today Slovakia) demonstrate that “before the “prices revolution”, in 1520s, for the price of an ox it was possible to have morave cloth [of average and largely accessible quality] sufficient for an item, an item and half, of clothing; after the differentiating effects of “prices revolution”, around 1580s, for an ox it was possible to buy cloth sufficient for 2 item and half of clothing, and, in 1600s, for 3 and 1/3. [...] The livestock breeding, therefore, introduced, temporarily, greater advantages than the cloth production”. It is calculated that in 1580 the total number of heads was about 3 million. This would mean that, at least for that year, the exports did not overcome 6% of the available livestock¹⁹.

Still in 1598, in his *Geografia*, Giovanni Antonio Magini (1555-1617) exalted the well-known Hungarian cattle, reminding that Hungary “è abundantissima di tutte le più prestanti cose, che può far natura, perché dà infinita copia d’ottimi frutti. [...] È tanto ricca d’animali domestici, come di pecore, e di buoi, che negli esterni paesi, e specialmente nell’Italia, e nella Germania, manda tante, e sì gran schiere di buoi, e di pecore, che è un stupore. Percioché sì come riferisce un certo, spesse volte un villano solo alquanti anni mantiene cento buoi à paschi, dove li vede à tre doppi cresciuti. Perché quasi tutta l’Europa potrebbe da questa sola Regione essere nudrita di carni”²⁰.

From the early seventeenth century, in relation to a new political, economic and social context, profits related to the traffic of livestock gradually began to shrink. This ruined especially Hungarian operators, whom mostly returned to perform just the function

¹⁸ Leonid Żytkowicz, *Trends of agrarian economy in Poland, Bohemia and Hungary from the middle of the fifteenth to the middle of the seventeenth century*, in *East-Central Europe in Transition*, pp. 59-83: 73-80; I.N. Kiss, *Agricultural and livestock production*, pp. 84-96; László Mákkai, *Der ungarische Viehhandel, 1550-1650*, in *Der Außenhandel Ostmitteleuropas, 1450-1650. Die ostmitteleuropäischen Volkswirtschaften in ihren Beziehungen zu Mitteleuropa*, Ingomar Bog (ed.), Köln-Weimar-Wien, Böhlau Verlag, 1971, pp. 483-506; Vera Zimányi, *Esportazione di bovini Ungheresi a Venezia nella seconda metà del secolo XVI*, in *Venezia e Ungheria nel Rinascimento*, pp. 145-156; Ugo Tucci, *L’Ungheria e gli approvvigionamenti veneziani di bovini nel Cinquecento*, in *Rapporti veneto-ungheresi all’epoca del Rinascimento*, pp. 153-171; Erich Landsteiner, *The Crisis of Wine Production in late Sixteenth-Century Central Europe: Climatic Causes and Economic Consequences*, in “Climatic Change”, XLIII (1999), pp. 323-334; Péter Sárközy, *Mercanti bovini - collezionisti di libri fra Italia e Ungheria*, in *Idem, Cultura e società in Ungheria tra medioevo ed età moderna*, Roma, Lithos, 2003, pp. 31-39; Andrea Kiss, Zoltán Sümeghy, Anett Czinege and Zoltán Karancsi, *Wine and Land Use in Nagymaros, Northern Hungary: a Case Study from the Danube Bend*, in “Acta climatologica et chorologica Universitatis Szegediensis”, XXXVIII-XXXIX (2005), pp. 97-109; see I. Blanchard, *The Continental European Cattle Trades*; A. Fara, *Il commercio di bestiame ungherese*. See also: Mária Pakucs-Willcocks, *Sibiu - Hermannstadt. Oriental Trade in sixteenth century Transylvania*, Wien-Köln-Weimar, BöhlauVerlag, 2007, *passim*; Florina Ciure, *Relațiile dintre Veneția și Transilvania în secolele al XVI-XVII*, Brăila-Oradea, Istros, 2013, pp. 143-211. See note 6.

¹⁹ V. Zimányi, *Esportazione di bovini Ungheresi a Venezia nella seconda metà del secolo XVI*, p. 148.

²⁰ Giovanni Antonio Magini, *Geografia cioè Descrittione Vniversale della Terra*, Venezia, 1598, I, p. 112; reported also in U. Tucci, *L’Ungheria e gli approvvigionamenti veneziani*, p. 153, note 5.

of breeders. Nevertheless, the structures of this trade quickly reconfigured themselves, and Austrians, Germans and Italians – with more capital – were able to replace almost completely the old brokers, continuing to export the Hungarian livestock until the mid-eighteenth century, albeit not with the same numbers and profits of the previous period²¹.

In this context, it is interesting to highlight the particular Hungarian alimentary regime, characterised by a not contradiction, and rather the thorough-penetration, between the agricultural and sylvan-pastoral activities, to the extent that between thirteenth and sixteenth centuries the Kingdom of Hungary was not stricken by usual and cyclical famines, that instead interested other regions of Europe, and the western parts of the Continent in particular. This not contradiction was reflected in a nutritional general quality, defining an “alimentary equilibrium” that characterized the Kingdom of Saint Stephen in the whole Middle Ages and most of the Modern Period. In comparison with other parts of Europe, in Hungary alimentary alternatives such as grain, meat and fish remained accessible to most of the population, so the inhabitants’ normal diet decidedly remained diversified and not entirely established on cereals, and on wheat in particular. The specific productive and exchange structures of the Kingdom of Hungary between late Middle Ages and early Modern Period permitted the maintenance of this “alimentary equilibrium” that, founded on an ample and diversified nourishing basis (and on meat in particular), prevented the rise of vast alimentary crises and famines, unless a shock such as war, climatic difficulties and so on occurred. In this regard, the “silence of the sources” suggests that in this period the famine, cyclically frequent in other territories of Europe, had been nearly – *but not at all* – unknown in Hungary. The absence of vast course famines is further proved by the Kingdom’s exchange structure. Keeping in mind the general gap in available documentation, there are very few traces of a request to import alimentary goods (while their export is possible instead), and very few indications of an intervention or regulation on prices and markets of alimentary commodities by the Crown or by another secular or ecclesiastical authority of the Kingdom²².

Also Western Europe had known a similar alimentary regime, characterized by a vast access to the resources and founded above all on meat, but only between the early and high Middle Ages²³. In the most developed and integrated markets of Western Europe between late Middle Ages and early Modern Period cereals and wheat in particular had nearly become an unique nourishing basis. The shortage of these goods, whose production had a strongly fluctuating course because conditioned by the seasonal rhythms and not – or not at all – by the times of market, implicated an increase of their price. Therefore, in reason of wage unelasticity and lack in “alimentary alternatives” that might be socially approved, and in case of inadequate provisioning politics, this shortage can easily bring to alimentary famines of large impact, such as to falling in demand and production of non agricultural goods and services, up to set a phase of economic crisis, of great proportions too²⁴. On the

²¹ See notes 6, 18-19.

²² Andrea Fara, *Guerra, carestia e peste nel regno d’Ungheria tra XIII e XIV secolo*, Viterbo, Settecittà, 2010, *passim*; Idem, *Crisi e carestia nell’Europa centro-orientale in epoca medievale. Alcune osservazioni*, in *Crisi alimentari en la Edad Media. Modelos, explicaciones y representaciones*, Pere Benito i Monclús (ed.), Lleida, Milenio, 2013, pp. 251-281; Idem, *L’impatto delle invasioni mongole nelle terre ungheresi: la guerra e la carestia attraverso il Carmen miserabile di Ruggero di Puglia (1244)*, in *Guerra y carestía en la Europa medieval*, Pere Benito i Monclús and Antoni Riera i Melis (eds.), Lleida, Milenio, 2014, pp. 65-86; Idem, *Produzione alimentare, crisi, carestie e politiche di approvvigionamento nel Regno d’Ungheria tra tardo Medioevo e prima Età moderna (XIV-XVI secolo)*, in *Crisi nel medioevo (III). Politiche economiche e per l’alimentazione di fronte alle carestie*, *Colloquio Internazionale Università degli Studi della Tuscia di Viterbo - DISTU*, Viterbo, 1-3 November 2012, in press.

²³ Massimo Montanari, *Campagne medievali. Strutture produttive, rapporti di lavoro, sistemi alimentari*, Torino, Einaudi, 1984; Idem, *La fame e l’abbondanza. Storia dell’alimentazione in Europa*, Roma-Bari, Laterza, 1993, 2005³.

²⁴ Luciano Palermo, *Sviluppo economico e società preindustriali. Cicli, strutture e congiunture in Europa*

contrary, although more and more integrated in the European markets, Hungary didn't suffer tragic moments of famine because it preserved an "alimentary equilibrium" and the free access to the great many part of the resources in most regions of the country. Undoubtedly, the wars – first of all against the Ottoman Empire – caused great damages and problems in food supplying; but more often the warfare allowed profitable bargains²⁵. Finally, from the early seventeenth century, in a different political, economic and social context, also in Hungarian lands alimentary equilibrium and free access to resources had been progressively restricted or negated, but not always with success, causing a differentiation in crises and famines impact, according to various territories. And exactly the complex economic interaction among crisis, famine, war and plague characterized the Hungary between late Middle Ages and early Modern Period as a market of increasing and notable maturation²⁶.

dal medioevo alla prima età moderna, Roma, Viella, 1997, 2001², pp. 225-282; Idem, *Scarsità di risorse e storia economica: il dibattito sulla carestia*, in *La scarsità delle risorse alimentari: una sfida di lungo periodo*, Guido Alfani, Luca Mocarelli, Donatella Strangio (eds.), in "Popolazione e storia", I (2012), pp. 51-77; Idem, *Il principio dell'Entitlement Approach di Sen e l'analisi delle carestie medievali*, in «Moia la carestia». *La scarsità alimentare in età preindustriale*, Maria Luisa Ferrari e Manuel Vaquero Piñeiro (eds.), Bologna, il Mulino, 2015, pp. 23-38.

²⁵ See for instance Gábor Ágoston, *The Costs of the Ottoman Fortress-System in Hungary in the Sixteenth and Seventeenth Centuries*, in *Ottomans, Hungarians and Habsburg in Central Europe. The Military Confines in the Era of Ottoman Conquest*, Géza Dávid e Pál Fodor (eds.), Leiden-Boston-Köln, Brill, 2000, pp. 196-228; see also Andrea Fara, *Economia di guerra, economia di pace, economia di frontiera. La Transilvania di Sigismondo di Lussemburgo (1387-1437)*, in *A Century in the History of Transylvania: The Later Crusades, Humanism, Church Union and Social Mobility at the End of the Middle Ages (1387-1490)*, Ioan Drăgan, Ioan-Aurel Pop, Tudor Sălăgean and Alexandru Simon (eds.), Cluj-Napoca, CST, 2008, pp. 55-98; Idem, *Le relazioni tra Giovanni Hunyadi e le comunità sassoni di Transilvania: aspetti politici ed economici (1439-1456)*, in *Extincta est lucerna orbis. John Hunyadi and his Time*, Ana Dumitran, Loránd Mádly and Alexandru Simon (eds.), Cluj-Napoca, CST, 2009 pp. 231-254; Idem, *Tra crisi e prosperità. Ciclo e congiuntura economica nel regno d'Ungheria tra tardo Medioevo e prima Età moderna*, in *A Century in the History of East-Central Europe: From the Political Hegemony of the Anjous to the Dynastic Supremacy of the Jagiellonians (Late 1300s - Early 1500s)*, Iulian M. Damian, Ioan-Aurel Pop, Tudor Sălăgean and Alexandru Simon (eds.), Cluj-Napoca, CST, 2008, pp. 285-325.

²⁶ See notes 6-9, 18 and 22.