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Anatomy of a Lobby Group:
The National Hungarian Economic
Society at the end of the
19th Century

Balázs Thaler

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Anatomy of a Lobby Group: The National Hungarian Economic Society at the End of the 19th Century

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Abstract:

This study investigates the effectiveness of the National Hungarian Economic Society (NHES) in representing agricultural interests in late 19th-century Hungary. As Hungary's leading agricultural interest group, the NHES shifted its focus in 1879 toward representing sectoral interests, responding to increased international competition and tensions in international trade. By analysing parliamentary records and NHES publications, the study found that while the NHES actively lobbied for agricultural interests, it often struggled to achieve its objectives, particularly in high-profile cases. External factors, such as strong Austrian interests and limited state capacity of Hungary, contributed to these challenges. However, internal issues also hindered the organisation's capacity for collective action. An analysis of NHES membership data revealed the organisation likely struggled to integrate a diverse membership, which included landholders and non-farmers with varied interests. Disproportionate representation, weak norm enforcement and favouritism in lobbying efforts further weakened the cohesion of the organisation. The NHES lacked a comprehensive strategy to counter free rider issues and foster greater cooperation among members. Consequently, both external constraints and internal fragmentation weakened the NHES' ability to effectively represent the Hungarian agricultural sector.

Introduction

Topics of Budapest newspapers in the 1890s would seem eerily familiar to present-day Hungarian readers: the spectre of war, tension in the Balkans, constant political bickering within an uncomfortable political alliance, and talks about trade protection and tariffs. But while today manufacturing dominates Hungarian headlines, 19th-century readers were more preoccupied with agriculture. After decades of almost uninterrupted growth, the sector faced its most serious challenge in decades due to faltering exports. While the economy and agricultural sector of late 19th-century Hungary have been covered in many

studies, relatively few works have investigated the intersection of politics and agriculture.

This dissertation aims to at least partly fill this gap. Accordingly, the study examines the case of the National Hungarian Economic Society (hereafter NHES), the country's most influential agricultural association, and investigates whether the NHES effectively functioned as an interest group at the end of the 19th century. For the expectation is that farmers tried to cooperate and influence policy, especially in such perilous times.

The NHES and its countryside partner organisations were the descendants of the Europe-wide economic society movement, albeit established with a considerable delay. While most economic societies formally focused on improving local agricultural practices, the NHES explicitly rebranded itself as a lobby group just when trade barriers and heightened international competition seemed to upend the Hungarian agricultural sector's boom. What is less clear is whether the NHES delivered on its promise of representing Hungarian farmers' interests.

The study's key conclusion is that the NHES did function as an interest group and was frequently attempting to influence policy, however, its efforts to represent sectoral interests often failed, sometimes in some high-profile cases. Although the organisation could count some of the largest landholders and more than 200 politicians in its ranks, its ability to influence matters was limited. External constraints, such as a complicated array of interests within Austria-Hungary or the lack of state capacity in Hungary, were further exacerbated by internal weaknesses. A diverse membership, a leadership not providing proportional representation, weak norm enforcement and lobbying efforts only favouring parts of the membership were likely limiting factors of the organisation's influence.

The study has used a two-pronged approach to investigate the NHES' capacity for collective action. First, it examined the outputs of the NHES, its lobbying

efforts. Minutes and documents of the Hungarian National Assembly as well as the annual reports of the NHES were parsed to locate and categorise mentions of the organisation and its partner associations. Second, the study investigated the inputs of the NHES, the members whose interest the NHES intended to represent, by examining the organisation's annual reports and additional data from the 1895 land survey of Hungary. Two theoretical frameworks were applied: Mancur Olson's collective action theory to assess the services the organisation offered to its members; and a social capital approach to assess trust and cooperation by using the membership list extracted from primary sources. Where relevant, these sources were supplemented with articles from the NHES' weekly magazine, the *Köztelek*.

The dissertation is organised as follows: Section 1 provides an overview on economic societies, the Hungarian economy and agriculture, and establishes the theoretical frameworks used for assessing the collective action capacity of the NHES. Section 2 summarises sources and methodology. Section 3 assesses lobbying efforts of the NHES, while Section 4 investigates its membership. Section 5 discusses and elaborates on the results of Sections 3 and 4.

1. Overview of literature and historical background

1.1 Economic societies in Europe and in Hungary

19th-century Hungarian economic societies (hereafter: HES) were primarily the intellectual and practical descendants of a pan-European movement launched in the 18th century. Earlier European economic societies were patriotic associations across Europe with the aim to improve local economic practices by using scientific methods. These economic societies were the products of their age: they were built on the ideas of the Enlightenment, mainly that scientific methods can and should help societies improve living conditions, including higher and more stable agricultural output.¹ As studies collected by Stapelbroek and Marjanen

¹ Koen Stapelbroek and Jani Marjanen, 'Political Economy, Patriotism and the Rise of Societies', in *The Rise of Economic Societies in the Eighteenth Century. Patriotic Reform in Europe and*

show, economic societies were established from Dublin to St. Petersburg, but despite this geographical diversity, their activities showed remarkable similarity across the continent.² Economic societies ran experiments, launched prize competitions, organised exhibitions, surveyed economic phenomena, published journals and established libraries focused on practical issues.³ These activities almost exclusively focused on agriculture due to the pre-industrial nature of 18th-century European economies.⁴ In practice this meant the exploration of new crops, methods and tools for crop production and animal husbandry, as well as the dissemination of such knowledge via journals and books.⁵ More formally, economic societies aimed to decrease the access costs to useful knowledge, knowledge that could be readily used to generate economic gains.⁶ Quantitative studies have revealed economic societies were indeed successful in improving local economies.⁷

However, the nature of influence of economic societies may have been more complex than what these works would suggest. A case in point is Krueger's study on the Bohemian experience, where 18th-century agrarian and economic societies' primary contribution "was not agricultural but social and political".⁸ While the associations in the Czech Lands may have improved agricultural practices, the debates fostered by them helped the political education of the rural population and facilitated a society-wide discussion over national issues. Examining

North America, ed. Koen Stapelbroek and Jani Marjanen (London: Palgrave Macmillan, 2012), 4–8.

² *Ibid.*, 12–17.

³ *Ibid.*, 12.

⁴ Henry Ernest Lowood, 'Patriotism, Profit, and the Promotion of Science in the German Enlightenment: The Economic and Scientific Societies, 1760-1815' (Thesis, University of California, 1987), 124; Stapelbroek and Marjanen, 'Political Economy', 5.

⁵ Stapelbroek and Marjanen, 'Political Economy', 10.

⁶ Francesco Cinnirella, Erik Hornung, and Julius Koschnick, 'Flow of Ideas: Economic Societies and the Rise of Useful Knowledge' (München: CESifo Working Papers, 2022), 34, doi:10.2139/ssrn.4163325.

⁷ Cinnirella, Hornung, and Koschnick, 'Flow of Ideas'; James Dowey, 'Mind Over Matter: Access to Knowledge and the British Industrial Revolution' (Thesis, London School of Economics and Political Science, 2017); Gregori Galofré-Vilà, 'The Diffusion of Knowledge during the British Industrial Revolution', *Social Science History* 54, no. 4 (2023): 167–88, doi:10.1017/ssh.2022.49.

⁸ Rita A. Krueger, 'Mediating Progress in the Provinces: Central Authority, Local Elites, and Agrarian Societies in Bohemia and Moravia', *Austrian History Yearbook* 35 (January 2004): 50, doi:10.1017/s0067237800020944.

Spanish economic societies, Street also points out how these institutions were able to counter the opponents of progress, namely the traditional power centres of the Catholic Church and the landed aristocracy, by building schools, disseminating useful knowledge, and forcing widespread tax reform in favour of the poor.⁹

The eclectic nature of economic societies' impact is also confirmed by the Hungarian experience. Here, economic societies did not become widespread until the 1880s, and their delayed development led to a different organisational profile. HES could trace back their roots to the European movement, but they were markedly different in their mixed focus, balancing between spreading useful knowledge and representing agricultural interests.

While Western European economic societies flourished in the 18th century, their Hungarian counterparts only existed on paper at that time: in 1770 a royal decree instructed Hungarian counties to establish at least one economic society per county with the aim of improving the local economy.¹⁰ However, contemporary sources agree that this attempt was unsuccessful, and that the first notable entity, the NHES (*Magyar Gazdasági Egyesület*, later named *Országos Magyar Gazdasági Egyesület*, *National Hungarian Economic Society*), only emerged in the decades leading to the 1848/49 revolution.¹¹ The aims and activities of the NHES, founded by Count István Széchenyi, were identical to their Western counterparts: it organised competitions and fairs, ran experiments, and published journals. Its membership included large sections of the Hungarian landowning elite, and the overlap with the nobility and political elite was significant.¹²

⁹ Donald Street, 'The Economic Societies: Springboard to the Spanish Enlightenment', *Journal of European Economic History* 16, no. 3 (1987): 569–85.

¹⁰ Károly Galgóczi, *Az Országos Magyar Gazdasági Egyesület története keletkezésétől az 1876-dik évig* (Sándor Kocsi, 1880), 1.

¹¹ *Ibid.*, 1–6.

¹² *Ibid.*, 16–18.

By 1847, 22 associations were established in the countryside.¹³ However, a wider movement failed to emerge not least due to the 1848/49 revolution: according to an 1883 survey of HES, in the following 30 years after the revolution all economic societies, except for the NHES, had to be re-established due to inactivity or political pressure.¹⁴ Finally, the 1860s brought a notable uptick in membership counts and organisations.¹⁵ But economic societies, while claiming to work on the advancement of agricultural practices, often served a different purpose: local landowning elites, merchants, and politicians used them as cover organisations to discuss political matters, as the Austrian government strictly limited most forms of civic activity.¹⁶ Unsurprisingly, when Austria and Hungary finally reached a political settlement in 1867, the so-called Compromise, membership of economic societies plummeted again.¹⁷

It was the 1879 National Agricultural Congress and subsequent meetings which transformed the NHES into the primary representative of agricultural interests as well as the formal head organisation of the economic society movement.¹⁸ The congress, organised by the NHES, was already the result of widespread unrest in the sector: cheap grain from the US, Russia and Romania decimated Hungarian agricultural exports, and at the same time a series of key issues remained unresolved, including the lack of financing opportunities, the need for a dedicated ministry of agriculture or the overproduction and overreliance on grain production.¹⁹ While the congress did not bring definitive solutions, it nevertheless reshaped HES: as a direct consequence of the discussions, the NHES explicitly stated that its primary task was no longer to improve

¹³ Ibid., 78.

¹⁴ 'Az országban létező gazdasági egyesületek létszámának és működésének áttekintése 1882. év végén.', *Közgazdasági Értesítő* 30, no. 2 (26 July 1883): 757–840.

¹⁵ A Gazdasági Egyesületek Ezredéves Kiállításának Rendező-bizottsága, *Gazdasági egyesületek monográfiái. Az 1896-ik évi ezredéves országos kiállítás alkalmából.* (Budapest: Pátria Irodalmi Vállalat és Nyomdai Rt., 1896), 17.

¹⁶ Ibid.

¹⁷ Ibid., 102.

¹⁸ Károly Galgóczy, *Az Országos Magyar Gazdasági Egyesület története, Második Rész, 1876-tól az 1897-dik évig* (Budapest: 'Pátria' Irodalmi Nyomdavidallalat és Nyomdai Részvénytársaság, 1898), 41–45.

¹⁹ Ibid., 20–29.

agricultural practices but to represent the interests of farmers.²⁰ From this point onwards, both the number of economic societies and their membership rapidly increased. An 1883 survey already mentions 78 economic societies and 30 other specialised agricultural associations (e.g., apiary associations, winemakers' associations), which, despite the rebranding of the NHES, were still preoccupied with experiments, exhibitions, and publishing activities.²¹

Despite the increase in membership figures, economic societies did not develop into a wider political movement. In fact, its leaders were fiercely proud of their non-partisan attitude, and expressed distaste toward populist ideas.²² This was in sharp contrast with several European countries' experience where the agricultural upheaval of the late 19th century led to the creation of powerful political movements.²³ For example, in Germany the most powerful agrarian organisation, the *Bund der Landwirte*, played a significant role in bringing down the German government whilst pushing for higher tariffs.²⁴ A potential explanation for this tepidity is proposed by Kane and Mann, who surveyed European agrarian political movements in the Pre-World War I period.²⁵ In their view two forces prevented political escalation in Hungary: first, elites were careful not to upset the political bargain of Austria-Hungary which preserved Hungary's pre-eminence over other nationalities of the Empire.²⁶ Second, landless peasantry lacked the means to organise themselves and to challenge the elites.²⁷ Vári, the leading expert of Hungarian agricultural movements in the 19th century, has also hinted at this: Hungarian elites feared that political

²⁰ Ibid., 40–41.

²¹ 'Az országban létező gazdasági egyesületek létszámának és működésének áttekintése 1882. év végén.'

²² For example, see: Galgóczy, *Az Országos Magyar Gazdasági Egyesület története, Második Rész*, 38; A Gazdasági Egyesületek Ezredéves Kiállításának Rendező-bizottsága, *Gazdasági egyesületek monográfiái*, 89.

²³ Anne Kane and Michael Mann, 'A Theory of Early Twentieth-Century Agrarian Politics', *Social Science History* 16, no. 3 (1992): 447–50, doi:10.2307/1171390.

²⁴ Herman Lebovics, "'Agrarians' Versus 'Industrializers': Social Conservative Resistance to Industrialism and Capitalism in Late Nineteenth Century Germany', *International Review of Social History* 12, no. 1 (1967): 43, doi:10.1017/S0020859000003266.

²⁵ Kane and Mann, 'A Theory of Early Twentieth-Century Agrarian Politics'.

²⁶ Ibid., 442.

²⁷ Ibid.

attacks could destroy the fragile constitutional framework of the 1867 Compromise, a framework which preserved their political supremacy over other nationalities of the Hungarian Kingdom.²⁸ These views were shared by Péter Hanák as well.²⁹ HES did not go down on the populist road, but at the same time whether they influenced politics through different channels has been less clear.

1.2 Overview of the Hungarian economy (1870-1913)

The fact that not much is known about HES is all the more puzzling, as the Hungarian economy, dominated by the agricultural sector, went through rapid growth in the period between 1870 and 1913. On the surface, the period represented something of a golden age for Hungarian economic convergence, especially toward Austria: GDP per capita grew by 1.38% p.a. from the 1870s to the 1910s, while Austria's average growth was only 0.98% p.a.³⁰ Multiple studies have confirmed that the Hungarian economy was indeed going through a period of unprecedented expansion. Berend has shown that, even though the country's political, social, and demographic environment was a drag on the economy, Hungary experienced rapid growth in this period.³¹ Komlos reached the same conclusion by looking at the economic interrelationship and growth patterns of Austria and Hungary.³² Pollard contrasted Austria-Hungary's growth rate to other European states and highlighted that Hungary's was one of the most rapidly growing economies in the region.³³ Schulze's output estimates for Austria-Hungary present a more nuanced picture, as they put Hungary in the

²⁸ András Vári, 'Magyar és német agráriusok, 1849-1909', *Korall* 28–29, no. 8 (2007): 104–5.

²⁹ Péter Hanák, 'Hungary in the Austro-Hungarian Monarchy: Preponderancy or Dependency?', *Austrian History Yearbook* 3, no. 1 (January 1967): 300, doi:10.1017/s0067237800004161.

³⁰ Michael Kopsidis and Max-Stephan Schulze, 'Economic Growth and Sectoral Developments, 1800-1914', in *The Economic History of Central, East and South-East Europe*, ed. Matthias Morys (Routledge, 2020), 46.

³¹ T. Iván Berend, 'Hungary: A Semi-Successful Peripheral Industrialization', in *The Industrial Revolution in National Context: Europe and the USA*, ed. Mikulas Teich and Roy Porter (Cambridge University Press, 1996), 265–89.

³² John Komlos, *The Habsburg Monarchy as a Customs Union* (Princeton University Press, 1983).

³³ Sidney Pollard, 'Chapter 6. The Industrialization of the Periphery to 1914', in *Peaceful Conquest. The Industrialization of Europe 1760-1970* (Oxford University Press, 1981), 226–29.

European mid-range in terms of growth, but his results also confirm the country's superior performance within the Empire.³⁴

However, underneath the aggregated figures lies a more complicated story of the Hungarian agricultural sector. The following paragraphs highlight three economic phenomena, which also provide clues on the dynamics that shaped the agenda of the NHES and its partner organisations, who joined these associations and what their members wanted. These developments were 1) agriculture's dominance in Hungarian output; 2) large landholders' favourable position especially within the sector; and 3) the changing tariff dynamics of Austria-Hungary.

First, agriculture preserved its dominance in Hungarian output, but its export orientation drastically changed by the end of the period. Just when Western European countries began their industrialisation processes, Hungarian agriculture stumbled into unparalleled opportunities: the 19th-century transport revolution opened new export markets for Hungarian agricultural products.³⁵ This primarily (but not exclusively) meant grain, which, in terms of value, accounted for 21.5% of all Hungarian exports in the period of 1882-1901.³⁶ The sector's overall size and “[s]trong international terms of trade effect in favour of farm commodities” led to relatively high growth in agriculture.³⁷ In the 1870s-1910s period, agriculture grew by 2.08% p.a., and its overall GDP contribution was 46.8%.³⁸ But this export-driven agricultural success story could only continue until transport prices of Hungarian exporters were falling more than

³⁴ Max-Stephan Schulze, ‘Patterns of Growth and Stagnation in the Late Nineteenth Century Habsburg Economy’, *European Review of Economic History* 4, no. 3 (2000): 322, doi:10.1017/S1361491600000095.

³⁵ Michael Kopsidis, ‘Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973’, in *Agriculture and Economic Development in Europe Since 1870*, ed. Pedro Lains and Vicente Pinilla (Routledge Taylor & Francis Group, 2008), 291, doi:10.4324/9780203928776; Péter Gunst, ‘Agricultural Exports in Hungary (1850–1914)’, *Acta Historica Academiae Scientiarum Hungaricae* 35, no. 1/4 (1989): 65.

³⁶ Miklós Szuhay, ‘The Capitalization of Agriculture’, in *Hungarian Agrarian Society from the Emancipation of Serfs (1848) to the Reprivatization of Land (1998)*, ed. Gunst Péter (New York: Columbia University Press, 1998), 119.

³⁷ Kopsidis and Schulze, ‘Economic Growth and Sectoral Developments, 1800-1914’, 56.

³⁸ *Ibid.*, 48.

international market prices for grain.³⁹ From the late 1880s this was no longer the case: in Hungary, marginal transport cost savings decreased, as the key transport infrastructure of the country was completed.⁴⁰ At the same time, large agricultural commodity producers' output, mainly American, Russian and Romanian grain, also became available on the world market, a phenomenon called the grain invasion.⁴¹ Consequently, Hungarian grain exporters were gradually priced out from international markets, and increasingly turned to the tariff-protected Austrian market: while in 1882, 67.8% of the Hungarian grain exports went to Austria, by 1895 this share was already 92%.⁴² However, instead of changing their product mix, Hungarian producers doubled down on grain production.⁴³ With its positions preserved, even in 1910 agriculture represented ca. 50% of total output and 73% of total employment.⁴⁴

Second, not all farmers benefited equally from the agricultural boom. Large estate holders, landholders with at least 1,000 cadastral holds,⁴⁵ were particularly well-positioned to exploit the export boom and later to counter negative trends. Compared to family holdings, large estate holders were always better situated to benefit from the export boom due to their better market access and scale. But it was their access to cheap labour and land that supercharged their export capabilities. Cheap labour was the direct outcome of failed reforms: instead of empowering small family holdings, serf emancipation after the 1848-49 revolution transformed serf labour into wage labour.⁴⁶ As Hungarian industry and other state-led infrastructure projects were unable to absorb this excess

³⁹ Ibid., 56.

⁴⁰ Kopsidis, 'Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973', 295.

⁴¹ Kevin H. O'Rourke, 'The European Grain Invasion, 1870-1913', *The Journal of Economic History* 57, no. 4 (1997): 775–801, doi:10.1017/S0022050700019537.

⁴² Pál Sándor, 'Die Agrarkrise am Ende des 19. Jahrhunderts und der Grossgrundbesitz in Ungarn', in *Studien zur Geschichte der Österreichisch-Ungarischen Monarchie*, ed. Péter Hanák, vol. 51 (Magyar Tudományos Akadémia, 1961), 180.

⁴³ Kopsidis, 'Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973', 295.

⁴⁴ Kopsidis and Schulze, 'Economic Growth and Sectoral Developments, 1800-1914', 50.

⁴⁵ Most 19th-century sources as well as secondary literature use the 1000-hold mark to differentiate large landholders. 1 (cadastral) hold equals ca. 0.575 hectare.

⁴⁶ Kopsidis, 'Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973', 293–94.

workforce, large estates had access to cheap labour.⁴⁷ Meanwhile, land availability increased. This was partly the result of new river control measures and the conversion of fallow land into ploughland.⁴⁸ Austria-Hungary's customs union from 1850 also increased land availability, as it induced further agricultural specialisation in Hungary, leading to the conversion of forests to croplands.⁴⁹

Admittedly, intensive growth also took place, but it remained limited. Due to the 1873 financial crisis and the subsequent weakening of the Austrian economy, Hungarian agriculture gained access to excess Austrian capital during this period.⁵⁰ While improving the sector's capital/labour ratio could have been an adequate reaction to tougher market conditions, the availability of cheap labour and land proved to be the easier option. Consequently, widespread mechanisation, the usage of fertilisers or rebalancing of the production mix (i.e. moving away from grain) did not take place until the very end of the century.⁵¹ Instead, large estate holders largely continued extensive farming. Moreover, they could partially rely on favourable trade policies, a notion shared by many in the literature.⁵²

This then leads to the final issue: the period was characterised by the reappearance of protective tariffs across Europe, which also shaped Hungarian

⁴⁷ Ibid., 295.

⁴⁸ Szuhay, 'The Capitalization of Agriculture', 106; Komlos, *The Habsburg Monarchy as a Customs Union*, 137.

⁴⁹ Jennifer Alix-Garcia et al., 'Tariffs and Trees: The Effects of the Austro-Hungarian Customs Union on Specialization and Land-Use Change', *The Journal of Economic History* 78, no. 4 (December 2018): 1171, doi:10.1017/S0022050718000554.

⁵⁰ Kopsidis and Schulze, 'Economic Growth and Sectoral Developments, 1800-1914', 54; Gunst, 'Agricultural Exports in Hungary (1850-1914)', 85; Iván T. Berend and György Ránki, 'Economic Factors in Nationalism: The Example of Hungary at the Beginning of the Twentieth Century', *Austrian History Yearbook* 3, no. 3 (January 1967): 173, doi:10.1017/s0067237800007700.

⁵¹ Kopsidis, 'Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973', 291-92.

⁵² Scott M. Eddie, 'Cui bono? Magyarország és a dualista Monarchia védővámpolitikája', *Történelmi szemle* 19, no. 1-2 (1976): 165; Scott M. Eddie, 'The Terms of Trade as a Tax on Agriculture: Hungary's Trade with Austria, 1883-1913', *The Journal of Economic History* 32, no. 1 (1972): 310, doi:10.1017/S0022050700075525; Hanák, 'Hungary in the Austro-Hungarian Monarchy: Preponderancy or Dependency?', 276; Oszkár Jászi, 'The Tragedy of Free Trade', in *The Dissolution of the Habsburg Monarchy* (Chicago: University of Chicago Press, 1929), 194-201.

agricultural interests – an issue which has been extensively covered in the literature.⁵³ After the 1873 financial crisis most European states replaced liberal trade policies with increasingly high tariffs, and Austria-Hungary was no different.⁵⁴ Incoming tariffs on Western export markets created new obstacles for Hungarian farmers. Furthermore, the representation of Hungarian agricultural interests faced challenges. To begin with, the political process in which Austria-Hungary negotiated its trade treaties was complicated at best. The issues were due to the constitutional setup of the Compromise: not only the terms of the two countries' customs union had to be renegotiated every ten years, but also external trade policy, as a common matter, required coordination.⁵⁵ This created a maze of commissions and processes, with national and sectoral interests influencing various decision-making bodies.

The other significant complication was that interests did differ across the border and across sectors. Industry-centred Austria preferred high tariffs on Western imports, mainly machinery, and loose tariffs policy toward Eastern countries to aid Austrian industrial exports.⁵⁶ Meanwhile, the Hungarian landowners preferred no or low tariffs on Western imports, so that their Western export markets could be maintained, but high tariffs on Eastern agricultural imports, so that cheap grain from Romania and Russia did not impede Hungarian production.⁵⁷ This was in turn against the interests of the relatively powerful Hungarian milling industry, which was campaigning for low input (i.e., grain)

⁵³ For example, see: Scott M. Eddie, 'The Terms and Patterns of Hungarian Foreign Trade, 1882-1913', *The Journal of Economic History* 37, no. 2 (1977): 329–58, doi:10.1017/S0022050700096960; Eddie, 'The Terms of Trade as a Tax on Agriculture: Hungary's Trade with Austria, 1883-1913'; Hanák, 'Hungary in the Austro-Hungarian Monarchy: Preponderancy or Dependency?'; Komlos, *The Habsburg Monarchy as a Customs Union*.

⁵⁴ Peter Alexis Gourevitch, 'International Trade, Domestic Coalitions, and Liberty: Comparative Responses to the Crisis of 1873-1896', *The Journal of Interdisciplinary History* 8, no. 2 (1977): 282–83.

⁵⁵ Eugen von Philippovich, 'Austrian-Hungarian Trade-Policy and the New German Tariff', *The Economic Journal* 12, no. 46 (1902): 177–81.

⁵⁶ Sándor, 'Die Agrarkrise am Ende des 19. Jahrhunderts und der Grossgrundbesitz in Ungarn', 181–83.

⁵⁷ *Ibid.*

prices irrespective of their source.⁵⁸ In this complicated array of interests, as Sándor notes, Hungarian farmers irrationally believed that the country's Western market positions could be recaptured if trade was not disrupted either by financial crises or by protective policies.⁵⁹ It was only in the 1890s when Hungarian producers finally gave up on their Western ambitions and turned completely toward the Austrian market.⁶⁰ By this time, they desperately needed protection, and grain prices show they succeeded: in the last third of the 19th century "while world market prices of grain dropped by about 30%, the export price level of Hungarian grain increased by around 20%".⁶¹

To conclude, this and the previous sections have introduced the broad economic background in which HES and their leading organisation, the NHES, operated. As the overview has shown, Hungarian agriculture grew rapidly thanks to favourable international market conditions: widespread improvements in transportation made Hungarian commodity exports competitive on Western markets. However, by the end of the 19th century, the very same phenomenon put pressure on Hungary's exports, as other countries, primarily the US, Russia and Romania also gained access to European markets. Consequently, Hungarian grain exporters, mainly larger landholders, changed their stance on measures to defend sectoral interests through protective policies. These events coincided with the transformation of the NHES, the country's main agricultural associations. HES, which originated from an 18th-century Europe-wide movement, still mostly focused on the improvement of local agricultural practices. However, from 1879, the NHES, the movement's main association, declared representing the sector's interests as its main responsibility. In the coming years, both the number of economic societies and their membership ballooned.

⁵⁸ Judit Klement, 'How to Adapt to a Changing Market? The Budapest Flour Mill Companies at the Turn of the Nineteenth and Twentieth Centuries', *Hungarian Historical Review* 4, no. 3 (2015): 845–46.

⁵⁹ Sándor, 'Die Agrarkrise am Ende des 19. Jahrhunderts und der Grossgrundbesitz in Ungarn', 182.

⁶⁰ Ibid.

⁶¹ Iván T. Berend, 'The Hungarian Economy and the World Market in the 20th Century', *Acta Oeconomica* 24, no. 1/2 (1980): 2.

1.3 The NHES as a vehicle of collective action

Approaching these phenomena from the economic societies' point of view, one must wonder: did the NHES and its countryside partner associations play a role in shaping agricultural policy? To what extent could they protect to large landholders' privileges? Were they key in shaping trade policies? Did they contribute to the dominance of large landowners by maintaining the skewed structure of landownership? In 1895, large estate holders' share of total lands was 'only' 32.3%, compared to 52.3% of small estates (estates under 100 cadastral holds), however, the number of small estates constituted 99% of all estates while the share of large estates was only 0.2%.⁶² The lack of representation of these small landholders could have maintained the status quo.

Interestingly, this has rarely been examined in studies about HES.⁶³ Three signs from the 1880-1895 period suggest the movement may have influenced key political decisions. First, as we have seen, landholders, especially large landholders, were more and more squeezed by international competition. Second, from 1879 the NHES explicitly repositioned itself as an interest group. Finally, the membership of HES was ballooning, suggesting that agricultural stakeholders were suddenly more open to join. It seems the NHES had the motive, means and opportunity to act as a lobby group.

Consequently, late 19th-century economic society movement in Hungary may be better understood not as vehicles accumulating and disseminating useful knowledge but as interest groups representing agricultural interests. As such,

⁶² Peter Gunst, 'Politisches System Und Agrarstruktur in Ungarn 1900-1945', *Vierteljahrshefte Für Zeitgeschichte* 29, no. 3 (1981): 404.

⁶³ For example, see: Ferenc Fodor, 'Gazdasági egyesületek Szeged környékén', *Acta Acad. Agriensis*, no. 38 (2010): 149–58; Zsuzsanna Kiss, 'A Zala Megyei Gazdasági Egyesület megszervezése a neoabszolútizmus korában', *Korall*, no. 13 (2003): 107–24; Zsuzsanna Kiss, "'Proper Values" in Agriculture: The Role of Agricultural Associations in Knowledge Dissemination in Hungary, 1830–1880', in *Agricultural Knowledge Networks in Rural Europe, 1700-2000*, ed. Yves Segers and Leen Van Molle, 1st ed. (Boydell & Brewer, Incorporated, 2022), 172–96; Lóránd Balla, 'Temesvár egyesületei a dualizmus korában, különös tekintettel a regionális identitást előmozdító egyesületekre' (Thesis, Eötvös Loránd Tudományegyetem, 2017). A notable exception is Vári, see: András Vári, *Urak és gazdászok. Arisztokrácia, agrárértelmiség és agrárius mozgalom Magyarországon 1821-1898* (Budapest: Argumentum Kiadó, 2009); Vári, 'Magyar és német agráriusok, 1849-1909'.

the NHES could be interpreted through the lens of collective action theory, a framework previously not used by researchers of HES. The theory of collective action, originally proposed by Mancur Olson, postulates that common interests of a group, the public good in this context, can only be advanced by the coordination of individuals. Olson posits that this coordination cannot be achieved without members being positively or negatively incentivised to contribute to the collective effort.⁶⁴ Without such incentives, members of larger groups are inclined to let others work for the shared good, and free ride on the collective effort.⁶⁵ The larger the group, the more susceptible it becomes to free riding, as the number of participants makes it more difficult for members to verify each other's contributions. If this line of thinking is shared by many group members, collective action can fail. To counter free riding, groups must offer private goods exclusively offered for members who actively support the group's aims: Olson calls these 'selective' incentives, benefits which are only available for members.⁶⁶ These can materialise in economic but also in non-economic forms, such as prestige (i.e. belonging to the group commands respect).⁶⁷ Furthermore, Olson also claims that collective action groups primarily exist to provide individual goods, and common goods are just the by-products of their existence.⁶⁸

Olson's collective action theory has since been refined with the expansion of social capital research.⁶⁹ While Olson assumed individuals were always self-interested and decided whether to cooperate in a social vacuum, studies have shown neither of these held always true.⁷⁰ Second-generation collective action theories emphasise the importance of social trust: cooperation is more likely

⁶⁴ Mancur Olson, *The Logic of Collective Action. Public Goods and the Theory of Groups* (London: Harvard University Press, 1965), 51.

⁶⁵ *Ibid.*, 16.

⁶⁶ *Ibid.*, 51.

⁶⁷ *Ibid.*, 60.

⁶⁸ *Ibid.*, 132–35.

⁶⁹ Todd Sandler, 'Collective Action: Fifty Years Later', *Public Choice* 164, no. 3–4 (April 2015): 195–216, doi:10.1007/s11127-015-0252-0.

⁷⁰ Elinor Ostrom and T. K. Ahn, 'The Meaning of Social Capital and Its Link to Collective Action', in *Handbook of Social Capital. The Troika of Sociology, Political Science and Economics*, ed. Gert Tinggaard Svendsen and Gunnar Lind Haase Svendsen (Cheltenham: Edward Elgar Publishing Limited, 2009), 21.

where trustworthiness of people, networks and institutions is widespread.⁷¹ In other words what matters for collective action is the extent to which individuals can trust that others' incentive structure, enforced by others, networks and institutions, supports cooperation instead of free riding.

To understand whether collective action can be successful, Pinto has proposed four dimensions to be analysed, which are 1) the degree of social identification; 2) the relative power position; 3) the degree of norm enforcement; and 4) the degree of symmetry of inputs and outputs.⁷² The degree of social identification dimension builds on Putnam's differentiation of bridging and bonding relations: bridging relations create social connections between social groups with different backgrounds, while bonding relations strengthen connections within a social group.⁷³ Studies have found that groups where bonding relations can be formed due to members' homogeneity may be better suited for collective action: one must feel a sense of collective identity, a bond, to be ready to participate in collective action.⁷⁴

Relative power position concerns whether power differentials exist within a social group.⁷⁵ Vertically structured groups are those in which hierarchical relationships dominate between members. In contrast, horizontally structured groups do not have such distinction. Vertical groups are not necessarily inferior in their collective action capacity: a well-organised bureaucratic system may be more effective than a grassroots movement. However, they may lead to exclusion and dependence, eventually damaging the organisation.⁷⁶ By the degree of norm enforcement Pinto understands a group's ability to prescribe and enforce rules

⁷¹ Ibid., 22–31.

⁷² Pedro Ramos Pinto, 'Social Capital as a Capacity for Collective Action', in *Assessing Social Capital: Concept, Policy and Practice*, ed. Rosalind Edwards, Jane Franklin, and Janet Holland (Newcastle: Cambridge Scholars Publishing, 2007), 60–62.

⁷³ Robert D. Putnam, *Bowling Alone. The Collapse and Revival of American Community* (New York: Simon & Schuster, 2020), 22–24.

⁷⁴ Donatella Della Porta, *Social Movements, Political Violence, and the State: A Comparative Analysis of Italy and Germany*, 1st ed. (Cambridge: Cambridge University Press, 1995), 205–6, doi:10.1017/CBO9780511527555.

⁷⁵ Pinto, 'Social Capital as a Capacity for Collective Action', 61.

⁷⁶ Ibid., 61.

for cooperation.⁷⁷ Groups that are able to enforce their internal rules without alienating members prevent slacking, and signal competence to their members. Finally, the degree of symmetry of inputs and outputs examines the extent to which efforts (inputs) and gains (outputs) related to cooperation are equally shared among group members.⁷⁸ If only certain members of an interest group benefit from its lobbying, others may be discouraged to participate.

Pinto posits that the four dimensions influence collective action through two channels: individually and in combination.⁷⁹ Influence constitutes both the likelihood of collective action taking place and its direction. For example, strict norm enforcement makes collective action more likely, as the probability of free riding is low. However, combined with a powerful vertical power position, strict norm enforcement can result in exploitative collective action, such as an agricultural interest group enforcing only its leaders' will. Although the four dimensions are not necessarily easy to quantify or assess, they nevertheless provide an analytical framework in which interest groups can be examined.

2. Sources and methodology

The previous section has introduced the broad economic background in which HES and their leading organisation, the NHES, operated. It has also established the analytical framework of collective action to interpret the role of the NHES during this turbulent time. Within this framework, the analysis assesses whether the NHES effectively functioned as an interest group at the end of the 19th century. To answer this question, it examines both the lobbying efforts of the organisation (i.e. the outputs) and its members to which it provided representation (i.e. the inputs).

⁷⁷ Ibid., 61.

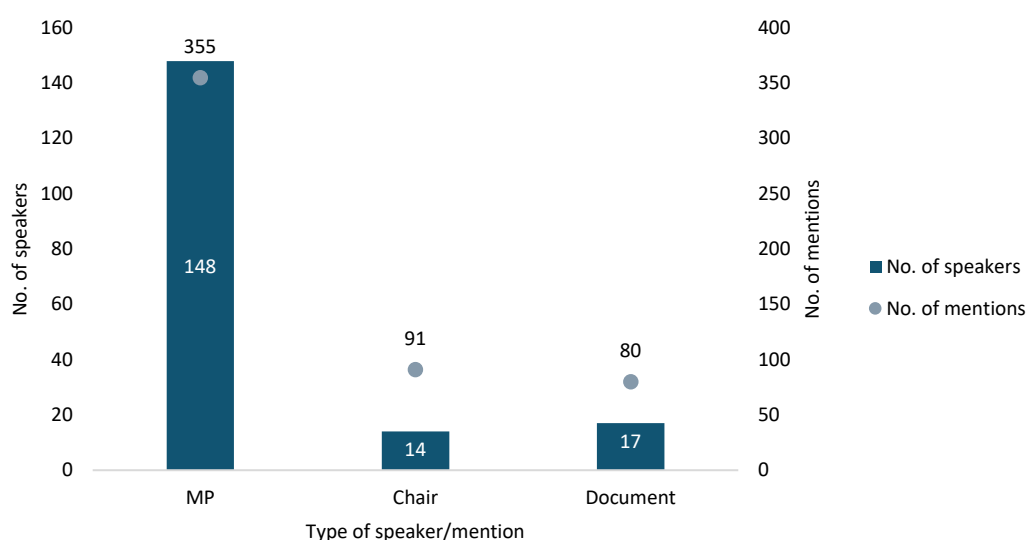
⁷⁸ Ibid.

⁷⁹ Ibid., 64–65.

2.1 The outputs: lobbying efforts of the NHES

Starting with the identification of NHES' lobbying efforts, the analysis utilised mainly two types of primary sources: 1) verbatim minutes of debates in the lower and upper houses of the Hungarian National Assembly and related preparatory documents for the period between 1/1/1879 and 31/12/1895⁸⁰; 2) NHES yearbooks for the period of 1893-1895.⁸¹ In both cases the aim of the analysis was not only to quantify the number of occasions on which the NHES actively represented sectoral interests, but to learn about the quality, nature, direction and outcome of these efforts, and understand how contemporaries viewed economic societies.

Figure 1: Number of mentions of the NHES & HES and number of individual sources by type of speaker or mention.



Note: Chairs may have been different individuals; their task was to introduce requests to the National Assembly. Document column contains mentions with unspecified authors.

Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

Accordingly, the text-searchable and online available parliamentary materials were parsed to identify mentions of the NHES, and to gain deeper

⁸⁰ 1879 marks the NHES' official declaration to become an interest group. 1895 corresponds with the timing of other primary sources used in the dissertation.

⁸¹ For a full list of reviewed documents, see Appendix 1.

understanding, mentions of other HES were also added to the sample.⁸² As a result, a total of 153 mentions of the NHES were identified in the parliamentary records. Additionally, 390 mentions of other HES were added, bringing the total pool of mentions to 526.⁸³ These mentions were then categorised in the following dimensions:⁸⁴

- Perception of economic societies: whether the speaker or mention considered the NHES or HES as representatives of sectoral interests or as an organisation providing some kind of service to the state, be it information or other service provision.
- Subject of mention: the main subject in which the NHES or HES was mentioned.
- Segment focus: identifies whether the mention focused on agriculture as a whole or only on a subsegment.
- Sentiment: categorises mentions based on their stance toward the state and HES.

⁸² Mentions were identified by searching for the Hungarian terms „gazdasági egyesület”, „gazdasági egylet” or a combination of „gazdasági”, „egyesület” and „egylet”.

⁸³ Several records contained both mentions of the NHES and HES as well, hence $153+390 \neq 526$.

⁸⁴ As some mentions could have had multiple labels within a dimension, actual groupings indicate the most prominent attribute of the mention.

Table 1: Categorisation of NHES and HES mentions in parliament records.

Perception of economic societies	Subject of mention	Segment focus	Sentiment
Representative of sectoral interests	Assistance to state	All segments	Critical with HES
Service provider	Education	Livestock farming	Critical with state
Information provider	Financing, state aid	Farming in general	Critical with HES, state
Miscellaneous	Infrastructure	Grain producers	Neutral
	Other	Other	Positive with HES
	Regulatory matters	Tobacco	Positive with state
	Social activity	Wine and other alcohols	Positive with HES, state
	State administration		
	Taxation		
	Trade and tariffs		
	Traditional activities of economic societies		

Similarly, the NHES' annual reports for the period of 1893-1895 were parsed to identify interactions with the state. These were also categorised, albeit less extensively, as the reports did not always reveal the full extent of communications. As a result, a total of 118 government interactions were identified.

Admittedly, these sources do not cover the full spectrum of potential lobbying channels of the NHES. To partially remedy this, the analysis also highlights three high-profile cases related to trade agreements which were examined through a mix of primary and secondary sources. These were the NHES' stance on trade negotiations with Hungary's more important trade partners, namely Germany in 1891, Romania in 1894 and Russia in 1894, the state funding of HES, and the organisation's conflict with the milling industry. Finally, two more considerations indicate the examined sources already provide an adequate basis for the analysis: first, parliamentary records reveal there were several MPs who were rather pessimistic about the usefulness of HES or opposed its efforts to favour agricultural interests. Thus, it can be assumed that if the NHES or other

HES had been involved in significant lobbying activities, these would have been highlighted in parliamentary debates. Second, the primary audience of the NHES annual reports was the organisation's members, consequently the NHES was inclined to demonstrate the organisation's usefulness to its audience.

2.2 The inputs: membership of the NHES

As described, the first part of the analysis examines the NHES as part of a wider political landscape, and by doing so, it provides insights about the external factors shaping the organisation's ability to represent agricultural interests. However, these tell very little about the internal factors, the organisation's inner workings. Consequently, the second part of the analysis focuses on the organisation itself, primarily on its membership. To understand whether the organisation's capacity for collective action was high or low, 1) selective goods enticing members to actively participate and 2) social capital dimensions indicating trust (or the lack of it) were examined. To create the basis for such analysis, the membership of the NHES was categorised based on various attributes of the members. Then, based on Olson's theory, selective goods were identified and examined whether these could successfully counter free riding. Finally, Pinto's social trust dimensions were calculated based on various indicators.

2.2.1 Membership data

In terms of data sources, the dissection of the membership relied on three primary sources: 1) the 1895 NHES annual report containing the list of members, including the members' occupation, rank in the Hungarian nobility and residence; 2) various contemporary journals, state publications; and 3) the 1895 Land Survey of the Kingdom of Hungary providing additional details on NHES members who were landowners or tenants.

First, members listed in the 1895 membership list (in total: 2,606 members) were grouped by occupation, landholding status, nobility, address and political or state connections based on the information they had provided on the

membership list. To compensate for omitted attributes or in some cases misrepresented details and to improve the categorisation, additional primary sources, such as journals and state publications, were used. As a result, only 82 members' occupation (3.1% of all members) and only 6 addresses (0.2%) could not be determined.

Table 2: Summary of identified records.

Source	Total	Completely identified (#)	At least partially not identified (#)	Share of identified (%)
NHES membership list	2,606	2,518	88	96.6%
Land survey	1,455	1,148	307	78.9%

Then, members who were landowners, tenants or both were linked with land survey data. The 1895 land survey recorded estates with at least 100 holds, identifying its user, owner, and both the owner's and user's occupation. More importantly, it also provided data on total land size for each type of land (e.g. ploughland, woods; eight types of land in total), number of permanently employed servants (but not day labourers) as well as the number of tools used (eleven types of tools in total) and the number of farm animals (four types).⁸⁵ As a result, a total of 1,455 farmers were identified (54% of the members), out of which 1,148 could be connected to land survey data (79% of all farmers). Various factors may explain why identification in the land survey was not higher: members could own plots smaller than 100 holds, the survey's lower limit; unintentional omissions in the land survey; differences in spelling of names or non-direct ownership; imperfect text recognition in the digitised source. Nevertheless, such a rich data source provided a detailed overview of the NHES' membership.

⁸⁵ For details of the land survey, see Appendix 6.

Therefore, members' identity was examined through the following attributes:

- Occupation: occupation indicated in the annual report's membership list or match found in additional primary sources. Occupational groups were based on the NHES' own categories but were adjusted to better fit the current study's purposes.
- Location: place of residence indicated in the annual report or match found in additional primary sources. Members with multiple locations were matched to their first identifiable location, assuming they provided these in the order of importance. Locations were matched with the official list of settlements of the Kingdom of Hungary and were connected to official districts and counties to enable grouping.
- Connection to politics and state, nobility rank: membership of the lower house, upper house, position in the government or state administration or nobility rank indicated in the annual report or match found in additional primary sources.
- Land size category (farmers only): members using or owning less than 1,000 holds were categorised as 'medium', 'large' was applied to farmers with 1,000 to 10,000 holds, and the 'latifundia' category was applied to members with at least 10,000 holds of land under ownership or use. Small landholders (below 100 holds) were not recorded in the land survey. These categories largely follow the categories used in the 1895 land survey and by Eddie et al.⁸⁶
- Landholder status (farmers only): members were categorised as either 'tenant', 'owner' or 'user and owner' of land.
- Land type (farmers only): members with ploughland reaching at least 30% of total land used were categorised as 'involved in arable farming'; members with more than 50 animals were categorised as 'involved in livestock

⁸⁶ Magyar Kir. Központi Statisztikai Hivatal, *A Magyar Korona országainak Mezőgazdasági statisztikája. A gazdaságok megoszlása jelleg és nagyság szerint*. (Budapest: Pesti Könyvnyomda-Részvénytársaság, 1900), 4–5; Scott M. Eddie, Ingrid Hutterer, and Iván Székely, 'Fél Évszázad Birtokviszonyai: Változások a Trianoni Magyarország Területén, 1893-1935', *Történelmi Szemle* 32, no. 3–4 (1990): 302, 3rd footnote.

farming’;⁸⁷ members with more than 10 cadastral holds of vineyards were categorised as ‘involved in winemaking’.

- Farming intensity (farmers only): the ratio of number of tools to land size and number of employees to land size were calculated for each farmer. The higher the values are, the more intensive land cultivation is assumed.

Admittedly, the above-mentioned grouping thresholds of farmers-only attributes can be set differently, however, the purpose of the categorisation was not to create perfect delineations among members. Furthermore, as results reveal, differences among them were significant enough to justify the above-described grouping strategy.

2.2.2 Selective goods

The next step was the assessment of selective goods provided by the NHES. In the context of Olson’s theory, the public good for which coordination was required is the agricultural sector’s interest, while free riders were those farmers or other benefitting groups who did not join the NHES. Consequently, the NHES had to provide selective goods to entice stakeholders to join the organisation and to maximise its ability to provide public goods to the represented. Members helped finance the NHES, but more importantly the higher membership count increased the organisation’s political influence. To examine whether the organisation provided adequate selective goods, the analysis used the NHES’ annual reports and weekly journal, the *Köztelek*, to identify financial and non-financial goods members received for their membership. If the NHES provided many exclusive goods to its members, not only it could increase its membership, but it could better keep in touch with its members through its various channels of services. As a result, it could be assumed that the NHES’ capacity for collective action was high. However, if the organisation failed to provide such goods, its capacity for collective action was likely to be low. To provide further

⁸⁷ The limit of 50 animals was set as a threshold from which a farmer may possess enough animals to have an impact beyond its own estate or the local markets. A higher or lower limit can be set, but this does not significantly change the categorisation.

context, the study also compared the NHES' portfolio to two peers' services, the German Bund der Landwirte and the Vác County HES.

2.3.3 Social trust dimensions

Finally, social trust dimensions were examined. Pinto's qualitative framework was augmented with various quantitative indicators. These indicators were calculated based on data obtained from the NHES annual reports and its weekly journal. Table 3 summarises these indicators as well as their evaluation thresholds. Although both the definition of indicators and their evaluation are challenging in the absence of established benchmarks, due to lacking data for more complex analysis (e.g. network analysis of the members), this approach was still pursued, as indicators still had the potential to provide insights into the organisation's collective action capacity. As presented in Table 3 altogether six indicators were defined and calculated for as many years in the 1891-1895 period as possible.

Degree of social identification

In the case of the degree of social identification, an indicator was defined to assess whether relationships were rather bonding or bridging in nature based on the members' occupation and location. These two primary attributes were used because the NHES membership list contains them for almost all members. However, data availability also suggests that the organisation, its members or both found occupation and place of residence the two most important identifiers. The primary attributes were used to identify subgroups with potentially differing interests: farmers may have different priorities than non-farmers (e.g. estate managers or merchants). Similarly, while certain matters, such as a trade agreement, would affect all members, other issues like river control or railway construction may be more local. As minutes of the National Assembly attest, both the NHES and HES dealt with such local matters.

For landholders, primary attributes were supplemented with secondary measures, which were assessed to verify results obtained from primary

attributes. The secondary attributes were land size, land type, landholder status, and farming intensity. These were also used to categorise members into subgroups to reveal heterogeneity or homogeneity of farmers. While defining exact thresholds at which they can be evaluated was not possible, they nevertheless provided additional insights about the membership's heterogeneity. Land size serves as a proxy for market access and elite status, assuming larger landholders were more connected in both dimensions. The size and share of the eight land types within farmers' holdings may indicate differing foci: large vineyards or pastures may have inclined certain members to be more sensitive to issues related to winemaking or animal husbandry. Landholders' status can also be relevant: members who only rented out their lands may have been less concerned about yields or pests. Finally, landholders may have differed in the intensity of their farming techniques: to examine this, two ratios were calculated, the number of tools deployed to land size and permanent employees employed to land size. Admittedly, the interpretation of these ratios is difficult. For example, the number of permanent employees may have been influenced by local employment conditions, wages and availability of labour. However, these may still provide insights about the differing attitudes toward intensive farming or different financial backgrounds.

Regarding the evaluation of the social identification indicator, the analysis created membership subgroups, and a threshold of 50% was set for primary attributes. This meant that if a subgroup of the members represented at least 50% of the total membership, the factor indicated homogeneity. The reason for using only 50% as a threshold defining majority and therefore homogeneity is the NHES' statutes, which only required a simple majority for electing the organisation's leadership. Thus, social identification is considered rather bonding, if its largest subgroup can elect the organisation's leaders. Admittedly, this is a rather soft requirement, as a theoretical 51-49% balance of two subgroups would be deemed as a group where bonding relationships can dominate. However, it can be argued that such a setup already enabled the

largest faction to avoid costly negotiations to form a decisive majority. Secondary attributes were not evaluated based on a threshold.

Relative power position

Relative power position was measured by examining whether the composition of the NHES leadership in 1895 proportionately represented the overall composition of the whole organisation. The defined indicator compared the representation of occupational groups, subgroups by location, the nobility and politically connected in the NHES leadership to their representation in the membership. NHES leadership was defined as the organisation's management and its main assembly, altogether 97 individuals. If these groups were proportionately represented in the leadership, it can be assumed that the organisation did not have subgroups that were left out of its decision-making, or in other words: horizontal relations dominated instead of vertical ones. Therefore, members could trust the organisation not to favour particular subgroups beyond their membership share.

Degree of norm enforcement

The degree of norm enforcement was investigated using three indicators. To quantitatively examine the NHES' norm enforcement ability, the study considered the NHES' sole formal requirement to its members, their duty to pay membership fees, and participation rates at general assemblies. Members' willingness to participate in the main decision-making body, albeit not mandatory, provides a proxy for the enforcement of more informal norms. Similarly, members' reaction to norm enforcement was also measured in a reduced form, through churn rate, the annual rate of leavers. Thresholds indicating strong norm enforcement was set at <10% for members with late payments and churn rate, and 50%< for the participation rate. In reality, norms, their enforcement and members' reactions were likely more complex, often involving informal channels, but these are difficult to quantify. Moreover, results even in this reduced form already show that the organisation faced challenges in terms of norm enforcement.

Degree of symmetry of inputs and outputs

Finally, the degree of symmetry of inputs and outputs was measured by comparing the occupational groups' share in the membership with their share in the NHES' communications with the government. In this context inputs were defined as the members, and outputs as the public good of the NHES, its lobbying efforts. It is possible that certain public goods of the NHES were only benefitting landholders, hence they were public goods for landholders, while other groups were excluded. To evaluate the indicator, a proportionate lobbying was assumed. A theoretical example to illustrate the calculation: livestock farmers represented 20% of the membership, but 50% of NHES communications were related to animal husbandry, which demonstrates a 2.5x imbalance in inputs and outputs. Results of the four indicators were then assessed together was well.

Table 3: Summary of social trust dimensions, defined indicators, evaluation thresholds and data sources.

Dimension	Indicator(s)	Threshold for high likelihood of collective action	Data source(s), year(s)
1) Degree of social identification	1) Primary attributes: Share by occupation, and location, Secondary attributes: Share by land size, land type, landholder status, farming profile, farming intensity. <i>Only for 1895</i>	Rather homogeneous, if at least 50% of members belong to the same category.	NHES annual report, land survey. 1895.
2) Relative power position	2) Share of occupational groups, geographical subgroups, the nobility and politicians/state employees in the leadership of the NHES compared to the share of these groups in the overall NHES membership.	Ratio of 1.0x or less	NHES annual report. 1895.
3) Degree of norm enforcement	3) Share of members with late payment of membership fee. 4) Membership churn rate. 5) Participation rate at NHES assembly.	Less than 10% of late payment and churn rate. 50% or higher participation rate.	NHES annual reports, <i>Köztelek</i> articles. 1891-96.
4) Degree of symmetry of inputs and outputs	6) Share of NHES proposals sent to the government benefitting only a subgroup of the NHES.	Less than 1/3 of proposals benefitting subgroups.	NHES annual reports. 1894-95.

3. Analysis of the NHES' lobbying efforts

This section describes the main results regarding the lobbying efforts of the NHES and other HES. As suggested in Section 1, these associations may have played a role in shaping Hungary's agricultural policy. Parliamentary records have unequivocally proven that the NHES and its county-level partner organisations were indeed representing sectoral interests and actively lobbied in the National Assembly of Hungary for more state funding, regulatory protection, and changes in other state administrative matters.

3.1 Mentions of lobbying

Out of the 153 NHES mentions, 99 (65% of all) were either explicit requests of the NHES to the National Assembly to consider a certain matter or described the NHES' role as the representative of sectoral interests. An almost identical picture arises considering HES: out of 390 mentions 226 (58%) contained requests of HES or portrayed HES as interest groups.⁸⁸ Most of the 314 lobbying-related mentions (60% of all mentions) of the NHES and HES concerned state financing (99, or 32% of lobbying-related mentions), regulatory issues (49, or 16%) or trade and tariffs issues (47, or 15%). To cite a few examples of such matters, in 1879 the NHES introduced a request to the lower house asking for the quadrupling of state funding for agriculture and arguing that even this was a low estimate compared to the needs of the sector.⁸⁹ In 1887 the organisation was lobbying for a new weather station,⁹⁰ while in 1894 it launched several attacks against proposals of the Romanian and Russian trade agreements.⁹¹

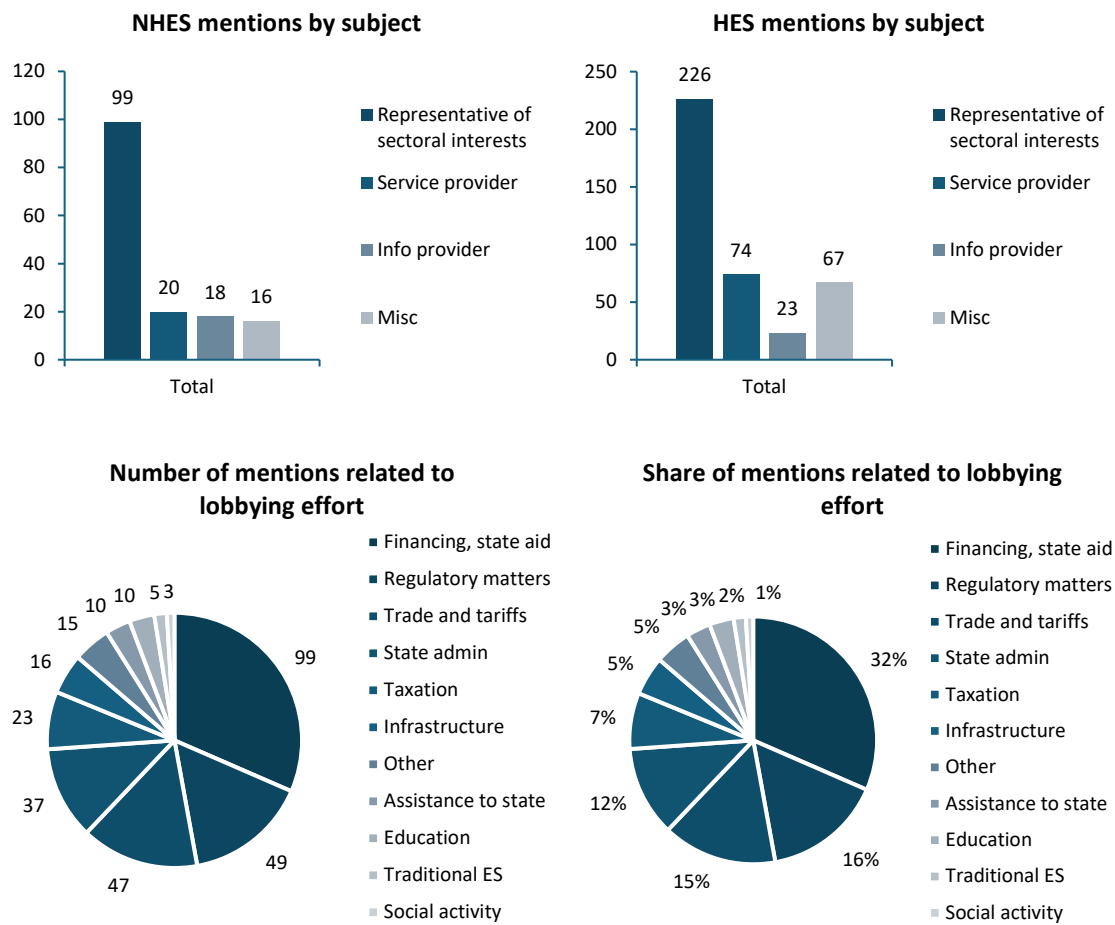
⁸⁸ Mentions of the NHES and other HES sometimes overlap, explaining why the total count is lower than the mentions of NHES and mentions of HES.

⁸⁹ Képviseleőházi napló (1878, IV.), 325.

⁹⁰ Képviseleőházi napló (1887, XV.), 178.

⁹¹ For example, see: Képviseleőházi napló (1892, XVII.), 207; or Képviseleőházi napló (1892, XVIII.), 173.

Figure 2: Summary of NHES and HES mentions in parliament records by subject (top), summary of all mentions related to lobbying by subject (bottom).



Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

The lobbying efforts of HES highlight a more locally focused approach: for example, in 1887 the Abaúj-Torna County HES was asking the government to establish a tobacco trading agency in the town of Miskolc and to provide tobacco production licences to locals.⁹² However, HES also wrote to the National Assembly regarding matters of national concern. Moreover, this often happened in concert with other HES, indicating that HES were either aware of their fellow HES' requests or were coordinated by the NHES. Both seems possible, as such matters were covered in the NHES weekly newspaper, and the NHES often invited HES to explain their stance on matters. These matters included for

⁹² Képviselőházi napló (1887, IV.), 158.

instance the creation of a separate ministry of agriculture,⁹³ requests to provide preferential treatment to agriculture in trade negotiations with Russia and Romania,⁹⁴ a request to amend the taxation of alcohols,⁹⁵ but even the reorganisation of a school of agriculture in the town of Kassa.⁹⁶

The NHES' annual reports show a similarly active representational effort: the organisation was in frequent contact with key ministries, including the ministry of agriculture, commerce and finance.⁹⁷ Matters ranged from the seemingly banal, such as progress reports of experiments concerning may bug extermination, to more consequential issues, such as tax reform. While only a fraction of the listed communications was detailed enough to ascertain a policy-influencing goal, they nevertheless confirm frequent contact.

3.2 Mentions of other activities

However, not all matters of the NHES and HES concerned lobbying in the National Assembly: in 129 mentions (25% of all) these organisations were perceived as either a consultative body of experts to which the state could reach out or the arms of the state through which policies could be implemented, data could be collected. For example, in an 1886 speech MP Ignác Darányi highlighted that the NHES, among other organisations, also examined the issue of waterways control (the subject of the debate Darányi commented on).⁹⁸ Similarly, in a report attached to an 1887 draft bill on veterinary regulation Pál Széchenyi, then minister of agriculture, noted, among other organisations, he had consulted HES as well.⁹⁹

⁹³ Képviseelőházi napló (1887, XI.), 74.

⁹⁴ Képviseelőházi napló (1884, XVI.), 130.

⁹⁵ Képviseelőházi napló (1881, XV.), 298.

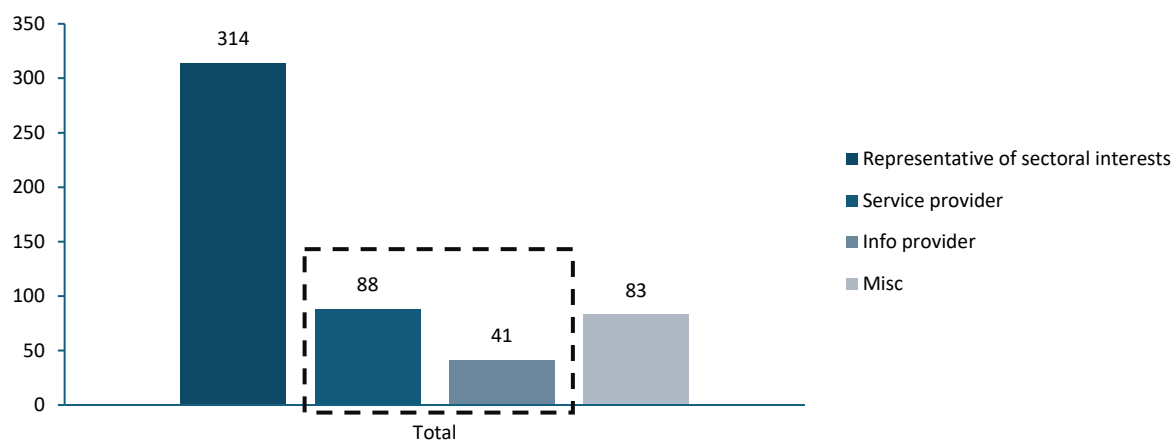
⁹⁶ Képviseelőházi napló (1884, IV.), 360.

⁹⁷ For example, see: *Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre*, (Budapest: Pátria Részvénytársaság Nyomdája, 1895), 22-24.

⁹⁸ Képviseelőházi napló (1884, VI.), 204.

⁹⁹ Képviseelőházi irományok (1884, XXIII), 77.

Figure 3: Combined mentions of NHES and HES by perception of economic societies.



Note: Highlighted area indicates mentions (total of 129) when the NHES or HES were perceived as information or service provider, and not as interest groups.

Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

In these cases, the involvement of the NHES and HES were highlighted to emphasise a professionally well-founded piece of legislation. In another mention from 1892, András Bethlen, then minister of agriculture, noted that the Temes County HES operated a renowned pest control research station sponsored by the government.¹⁰⁰ An MP in the same year also supported the idea that the industry association and the NHES should jointly study export opportunities for rural craftsmen.¹⁰¹ Such mentions demonstrate the government was ready to utilise the NHES and HES also in the implementation of policies. Some went even further: in a case from 1882, an MP explained that the role of the HES should be to organise and improve local agricultural activity and report to the ministry.¹⁰² Furthermore, the speaker also urged the minister to instruct (!) HES to establish local storage spaces for produces. In another mention in 1883 from the upper house of the National Assembly, the speaker urged the government to instruct the HES to improve small landholders' access to finance.¹⁰³

¹⁰⁰ Képviselőházi napló (1892, III.), 124.

¹⁰¹ Képviselőházi napló (1892, IV.), 123.

¹⁰² Képviselőházi napló (1881, IV.), 48-50.

¹⁰³ Főrendiházi napló (1881, II.), 92.

Although these mentions represent only a minority of all cases, they reveal a more nuanced picture about the role of the NHES and HES. It seems the direction in which requests and instructions were flowing was rather bi-directional. While the government's outreaches likely let the organisations influence decisions, here the NHES and HES are not portrayed as feared lobby groups, but rather as institutions to provide services to the state. In this sense MPs saw the NHES and HES as tools to compensate for a lack of state capacity, especially in the countryside. Considering that a separate ministry of agriculture was only established in 1889,¹⁰⁴ and county-level administrative bodies were underdeveloped at the time, this may have been necessary to implement legislation. This also indicates that the transformation in the organisations' main goals was only partial: they still maintained the profile of the traditional, 18th-century economic societies, which were primarily focused on improving agricultural productivity through scientific methods.

3.3 Sub-sectoral focus

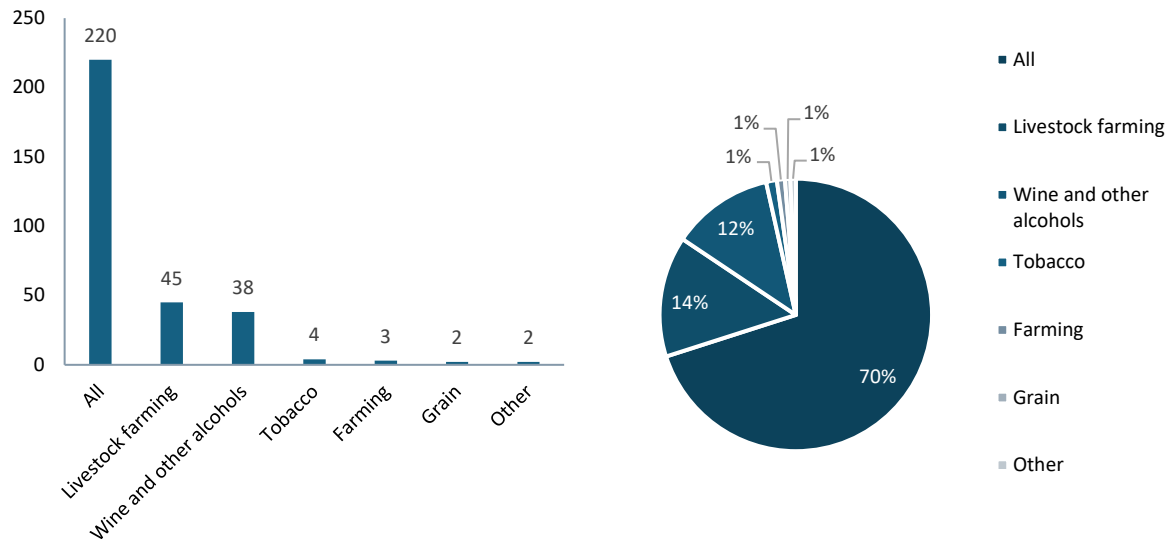
Surprisingly, in terms of sub-sectoral focus, mentions do not reveal a systematic influence of grain producers: only the matter of the processing trade, the milling industry's right to import cheap grain for processing, was mentioned in speeches related to the NHES, while other HES had no mentions focusing on grain production.¹⁰⁵ Meanwhile, livestock farming and wine & other alcohol production were mentioned in 45 and 38 lobbying-related cases respectively, which represent 14% and 12% of all lobbying-related cases. These sub-sectoral interests however are clustered around only a few issues, weakening the case of some sort of sub-sectoral dominance: 38% of livestock farming-related lobbying mentions were in connection with a single proposal of several HES for mandatory livestock insurance. In the case of winemakers, 47% of specific lobbying mentions covered the issue of large-scale production of low-quality wines, hurting Hungarian

¹⁰⁴ György Kövér, 'A magyar gazdaságpolitika - és lehetőségei (1867-1914)', *Egyetemi Szemle* 1, no. 1 (1979): 69.

¹⁰⁵ At the same time, issues related to trade agreements were primarily affecting grain producers due to the structure of Hungarian imports and exports, thus, these could be deemed to focus on a particular sub-sector.

winemaking, and another 32% arose from proposals to amend alcohol taxation. Instead of specific focus, most speakers and documents talk about issues that seemingly affected all farmers: unfavourable trade agreements; lack of state funds provided for HES; lack of access to cheap financing; or the issue of field policing (an agriculture-focused policing force).

Figure 4: Lobbying-related mentions by sub-sector.



Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

3.4 Accomplishments of the NHES

But was the NHES a successful pressure group? Can it be claimed that it effectively represented sectoral interests? While the organisation did seem well-connected with decision-makers (not least because some MPs were members of the NHES), actual results paint a picture of a much weaker organisation. Key topics often resurfaced over the examined period indicating the NHES and its partner organisations failed to induce decisive action. For instance, the first proposal against the issue of counterfeit or low-quality wine production was introduced in 1876, but, despite the complaints of the NHES and various HES, the government was unable to pass an adequate bill and enforce it up until

1892.¹⁰⁶ The field policing act was similarly slow to be passed.¹⁰⁷ Other issues were outright ignored: in 1887 an MP complained about his request on weather forecasting stations, sent through the NHES, being ignored for at least seven years.¹⁰⁸ Countryside HES were in no better position: the Arad county HES requested the repurposing of a state vineyard into a viticulture school for years.¹⁰⁹ Another MP mentions the case of the HES of South Hungary, which had requested letting soldiers go for harvest holiday: the minister of war promised to allow this, but nothing materialised in the end.¹¹⁰

A crude sentiment analysis of the records also reveal that MPs were often critical of the government's approach toward the NHES and its partner organisations: 88 mentions (17% of all) cover the lack of state funding, slow progress with key legislation, the absence of a coherent agricultural strategy or the preference of industrial over agricultural interests. Interestingly, 17 of these mentions argued that due to the lack of state support, the HES were underperforming or outright useless. This opinion was shared in 8 other mentions which did not criticise the government but stated that due to a lack of willingness among farmers to organise themselves HES were not effective organisations. These 25 mentions were from the speeches of 22 different MPs. As one of them put it: "It pains to say, but we lack the social spirit England has. Therefore, economic societies must be supported [by the state] so that they can fulfil their beneficial and important role."¹¹¹ Finally, the relatively large number of mentions (526 in total) also hides the fact that throughout the 1879-1895 period only nine NHES requests and 90 HES requests were mentioned (altogether 97 due to overlaps). Even these were only related to 37 issues, as many requests only indicated the support for another HES' request. In other words, the NHES and its partner organisations could raise only 2 issues per year on average over the examined 16-year period.

¹⁰⁶ Képviseelőházi napló (1892, III.), 26.

¹⁰⁷ Képviseelőházi napló (1887, XIX.), 277.

¹⁰⁸ Képviseelőházi napló (1884, XV.), 178.

¹⁰⁹ Képviseelőházi napló (1878, XII.), 175.

¹¹⁰ Képviseelőházi napló (1892, XV.), 42.

¹¹¹ Képviseelőházi napló (1887, XII.), 24.

3.4.1 High-profile failures

However, slow legislative process, ignored requests, the general complaints against the state's treatment of HES or the small number of requests are only indirect pieces of evidence for a lack of influence. Thus, the analysis considers three key issues of the period in which the NHES could have defended farmers' interests but failed to do so. These are the following: 1) a series of unfavourable trade agreements 2) decreasing state aid for HES 3) the failure to repeal the processing trade of the milling industry.

Trade agreements with Germany, Romania and Russia

Trade agreements signed with Germany, Romania and Russia paint a bleak picture regarding the NHES' ability to sway matters into the agricultural sector's favour. In the case of the German trade agreement of 1891 stakes were high: Germany remained one of the last Western export markets of Hungarian farmers, and gaining a competitive edge against other exporters was a key target.¹¹² Accordingly, agricultural interests were in the focus of the negotiations: to prepare for the series of meetings with Germany, the Hungarian government established a tariffs committee with the representatives of industry and agriculture, including the NHES.¹¹³ While Germany did not decrease import tariffs on wheat and rye as much as Austria-Hungary wanted, it was nevertheless a favourable outcome for Hungarian agriculture. However, the very same conditions were soon given to the US in 1892, Romania in 1893 and Russia in 1894, thus, Hungarian grain producers were struggling again with strong international competition.¹¹⁴ The treaty's gains were therefore effectively nullified.

This case shows that even when the NHES was able to insert itself into the chain of negotiations, it could not escape constraints of the wider political

¹¹² Ákos Kárbin, 'Agrárlobbi a Monarchia Magyarorszáján. A Német Birodalom és az Osztrák–Magyar Monarchia tárgyalásai az 1891. évi vám- és kereskedelmi szerződés kapcsán', *Agrártörténeti Szemle* 59, no. 1–4 (2018): 34–37.

¹¹³ *Ibid.*, 39.

¹¹⁴ Sándor Matlekovits, *A vámpolitika mai helyzete* (Budapest: Politzer-féle Könyvkiadó Vállalat, 1905), 31.

context, namely that Austria-Hungary's negotiation strategy had to accommodate both sides' interests, the empire was not equal partner to Germany, and German industrial and agricultural lobby was more organised and consequently more powerful. This likely played a major role. However, the fact that the tariffs committee also faded looks more ominous for the NHES' role: in 1894 *Köztelek* extensively covered the sessions of the NHES' committee of economy on trade agreements during which the opening article proposed the formation of a tariffs committee.¹¹⁵ A few days later another article reporting from the committee's next session mentioned that the tariffs committee existed, but agriculture was under-represented in it compared to industrial interests.¹¹⁶ A week later the economic committee's meeting minutes show someone noting that the tariffs committee did exist, but the government had stopped listening to it altogether.¹¹⁷ Finally, a *Köztelek* report summarising the demands of the third agricultural congress in 1895 contained a request to reorganise the tariffs committee.¹¹⁸ Based on these sources, the NHES either did not manage to maintain its hold on an important institution or the tariffs committee had only limited influence from the beginning. Either way, sectoral interests were eventually not defended.

The Romanian and Russian trade agreements which were both signed in 1894 represent even larger setbacks for the NHES. In contrast with the German case where the aim was to increase access to the German market, here Hungarian agricultural interests dictated high barriers against Romania and Russia. Based on the treaties' outcomes, this was not achieved: contemporaries agreed that Hungarian agriculture suffered defeats, and industry, especially Austrian interests, profited from the agreements.¹¹⁹ From the perspective of Hungarian

¹¹⁵ 'Kereskedelmi szerződéseink és vámpolitikánk. Rubinek Gyula előadói javaslata a közgazdasági szakosztály január 30. ülésén' in *Köztelek*, 31 Jan. 1894, 142-49.

¹¹⁶ 'A közgazdasági szakosztály ülése' in *Köztelek*, 03 Feb. 1894, 155.

¹¹⁷ 'A közgazdasági szakosztály ülése' in *Köztelek*, 14 Feb. 1894, 206.

¹¹⁸ 'III. országos gazdakongresszus. Harmadik nap (május 22.), A kongresszus tárgyalásai', in *Köztelek*, 25 May 1895, 886.

¹¹⁹ For example, see: Lajos Láng, *A vámpolitika az utolsó száz évben* (Budapest: Politzer Zsigmond és Fia, 1904), 359–66; Soma Mudrony, *A vámkérdés megoldása* (Budapest: Országos Iparegyesület, 1896), 8.

agriculture, even the signings of these agreements were defeats, as its exports were negligible toward the east, and only the increase of import tariffs could have been a potential upside for the sector. As the executive secretary of the NHES, Gyula Rubinek, put it in an article in 1894, Hungarian agriculture could have only profited from a trade war with Russia.¹²⁰ Still, both agreements were signed, and both agreements contained tariffs and clauses benefitting Russian and Romanian agricultural exports, mainly grain.

That lobbying against the agreements failed was not for the lack of protesting: National Assembly records (total of 27 mentions) and coverage in *Köztelek* show the NHES and several HES intensively complained about the direction of the negotiations, which, according to their views, were favouring industrial interests over agriculture's. However, these complaints were simply swept aside: reacting to the NHES' demands, the lower house's committee of economy rejected the NHES' complaints, and dryly noted that protecting a young Hungarian industry was more important for the government.¹²¹ Furthermore, in a lower house speech Béla Lukács, then minister of commerce, criticised the NHES' requests for higher grain tariffs or stricter control on livestock import as measures that would have only complicated the negotiations but would not have given any meaningful protection to Hungarian agriculture.¹²² A short article in *Köztelek* from May 1894 paints an even more damning picture: the article reported that the Nyitra County HES expressed its disappointment regarding the Romanian trade agreement, and that the government had "completely ignored" farmers' interests.¹²³ The author also added a resigned note: "if only all of our economic societies had had the same agility and virtue to at least say something about the agreement."¹²⁴ This indicates the NHES and HES were unable to show strength or energise farmers to take tangible action.

¹²⁰ 'Ideiglenes szerződés Oroszországgal' in *Köztelek*, 17 Mar. 1894, 371-72.

¹²¹ Képviselőház irományok (1892, XIX.), 82.

¹²² Képviselőházi napló (1892, XIX.), 215.

¹²³ 'A román kereskedelmi szerződés ellen' in *Köztelek*, 5 May 1894, 626.

¹²⁴ Ibid.

The failure to prevent agreements was not just due to farmers' indifference though. As Vári notes, Austria put considerable pressure on the Hungarian government regarding the Russian agreement to accept conditions unfavourable for Hungarian agriculture in return for favours for Austrian industrial exports.¹²⁵ This would then show parallels with the German agreement, where the NHES was not necessarily weak in absolute terms but only in relative comparison to other lobby groups. However, Vári adds that such pressure was not present in the Romanian case, and still, the agreement was signed without tangible opposition from the NHES or other HES. Most likely these agreements could have been signed in their eventual forms due to the combination of factors: the NHES was weak both in relative (compared to other lobbies) and absolute terms.

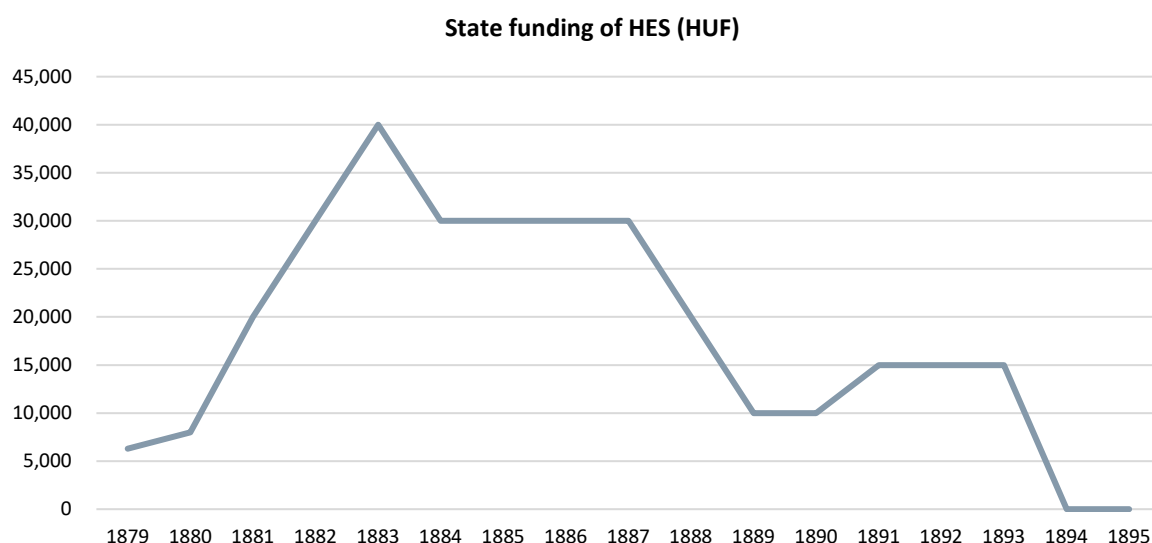
State funding for the NHES and HES

Based on state budget records, state aid for economic societies showed a rising trend between 1879 and 1883, increasing from HUF 6,300 to HUF 40,000 p. a., but then gradually decreased and eventually was removed from the state budget by 1894. Even at its peak, this amount was almost unrecognisably small: in comparison, the ministry of agriculture's budget for 1883 was almost HUF 9,000,000.¹²⁶

¹²⁵ Vári, *Urak és gazdászok*, 453.

¹²⁶ Állami költségvetés a Magyar Korona országainak részére az 1883. évre (Budapest: Magyar Királyi Államnyomda, 1882), 8.

Figure 5: State funding of HES (HUF) in the Hungarian state budget.



Note: Contains only funds explicitly given to HES for general use.

Source: Államköltségvetés a Magyar Korona országai részére, 1879-1895.

A potential explanation for the drop could be that state funds still flowed to HES but in different forms or that private funding (e.g., membership fees) replaced state funds, meaning that HES were at least as well-off as in 1883. However, Pál Széchenyi, then minister of agriculture, explained in an 1884 lower house session that the state funding of HES was cut due to some HES using solely the state funds to keep themselves afloat.¹²⁷ A budget overview for 1888 noted that fundings of HES were reduced among other agriculture-related expenses due to budget constraints and considerations that the state had already done enough to support HES.¹²⁸ Records from the lower house did not mention any protests from the NHES. However, it is unlikely the matter did not concern the organisation: for example, in its weekly journal in 1891 it extensively criticised the 1892 budget, *Köztelek*, for the lack of money the state had allocated for agriculture and HES.¹²⁹ Still, the budget was approved, and by 1894 state aid to HES was completely cut.

¹²⁷ Képviseelőházi napló (1881, XIV.), 138.

¹²⁸ Képviseelőházi irományok (1887, III.), 175.

¹²⁹ 'A földművelési tárca költségvetése 1892-re (folytatás)' in *Köztelek*, 17 Oct. 1891, 1-2.

Facing the milling industry

Finally, the issue of the processing trade also shows the limitations of the NHES. As noted previously, from 1882 the processing trade allowed milling companies to import grain if a similar amount of grain was milled and then exported as flour. According to Judit Klement, an expert on the 19th-century Hungarian milling industry, the processing trade was essential for the industry and was a major driver in its expansion and profitability. The regulation's greatest opponent was the NHES, which was afraid of cheap grain imports hurting Hungarian farmers.¹³⁰ The organisation could also count on the support of Austrian farmers as well as the Austrian and Czech industries in opposing the processing trade.¹³¹ However, the first mention of the processing trade issue in *Köztelek* only came in February 1893. Curiously, the article even explained to readers what processing trade was, indicating that the issue was not widely covered or understood.¹³² Similarly, records from the National Assembly only mention it in connection with HES from February 1893.¹³³ In 1894 NHES executive secretary Gyula Rubinek even claimed the issue of the processing trade was more significant than trade agreements.¹³⁴

While eventually the processing trade was limited from 1896 and in 1900 it was completely withdrawn, it is still remarkable that grain producers were unable to at least partially repel it for 14 years. Furthermore, as Vári notes, it is likely that processing trade was not significantly influencing grain prices or production in Hungary, as imported volumes under the scheme were too low. Whether the NHES recognised this is unknown. What is however clear is that they saw its symbolic value: in their view the scheme demonstrated that the government had sided with the capitalist-industrialist lobby and let down Hungarian farmers.¹³⁵

¹³⁰ Klement, 'How to Adapt to a Changing Market?', 840.

¹³¹ Ibid.

¹³² 'A román búza és malomiparunk' in *Köztelek*, 25 Feb. 1893, 275-76. Mentions before 1891 are missing, as *Köztelek* was only launched in that year. However, the fact that between 1891 and early 1893 the issue was not mentioned at all still indicates the NHES did not pay much attention to it.

¹³³ *Képviselőházi napló* (1892, IX.), 252.

¹³⁴ 'Mit kérnek a gazdák' in *Köztelek*, 25 Apr. 1894, 568.

¹³⁵ Vári, *Urak és gazdászok*, 474.

Whatever the case may be, the NHES does not come across as a strong interest group with its slow reaction.

3.5 Section summary

This section has examined the NHES' lobbying efforts through a combination of parliamentary minutes and documents, internal reports and newspaper articles. These sources clearly indicate that the NHES was actively lobbying for the protection of agricultural interests, requesting state funding, new legislation or amendments to trade agreements. The NHES was joined by HES which also sent requests to the National Assembly and were frequently mentioned in parliamentary speeches. However, mentions of the NHES and HES have revealed that the organisations were often considered to be extensions of the state: instead of lobbying organisations, MPs perceived them rather as service or information providers of the state, supplements for a limited state capacity. As such, the NHES and HES were often perceived as subordinates rather than fearful lobby groups.

Investigating the sub-sectoral focus, there were almost no records focusing solely on grain producers, as the majority of mentions dealt with issues affecting agriculture as a whole. Livestock farming and wine & other alcohol production were the most mentioned sub-sectors.

Finally, it has been demonstrated that the NHES was often not effective at representing sectoral interests: besides indirect signs such as slow state reaction, ignored requests, and MPs criticising the lack of activity from HES, several high-profile failures also prove this. The collapsing state funding of HES, short-lived trade successes or outright unfavourable trade agreements in the German, Romanian and Russian trade agreements, and the slow reaction to the processing trade all indicate the NHES was a vocal, but not necessarily successful lobby group. It would be unfair to blame all these on the NHES, or to claim the NHES was altogether unsuccessful in its lobbying efforts. For example, they managed to thwart the government's efforts to establish agricultural

committees in the countryside, which threatened the relevance of HES.¹³⁶ But these seem exceptional and limited in terms of sectoral impact, thus, the overall picture remains bleak.

4. Analysis of the NHES membership

As the previous section has shown, the NHES' lobbying efforts may have been limited by external factors. However, internal factors could have also constrained its ability to successfully represent sectoral interests. The second part of the analysis considers the organisation's internal dynamics to investigate its capacity for collective action, i.e. its capacity for lobbying. To do so, the selective goods the organisation provided to its members and social trust dimensions were examined in line with Olson's theory and Pinto's framework, respectively.

4.1 Analysis of the NHES' selective goods

For paying the annual membership fee, the NHES provided benefits to its members. They received NHES publications and the *Köztelek* weekly newspaper for free (non-members could subscribe to it for 10 Forints), and could purchase trees and vines with discount from the organisation's tree nursery; members could also use the NHES' library and could participate in the meetings of the organisation.¹³⁷ The NHES had an office dealing with transport fee complaints, where members could request reviews of their railway transportation costs if they suspected overpayment.¹³⁸ Additionally, the organisation offered an important intangible benefit as well: the prestige to be in the same club as the country's traditional landed elite. As Vári notes the sense of belonging to the top professional organisation and to the landed elite at the same time was indeed an aspiration for many.¹³⁹ Estate managers perceived their membership as a step-up in society, while intellectuals, politicians aspired for the association with

¹³⁶ Ibid., 428–37.

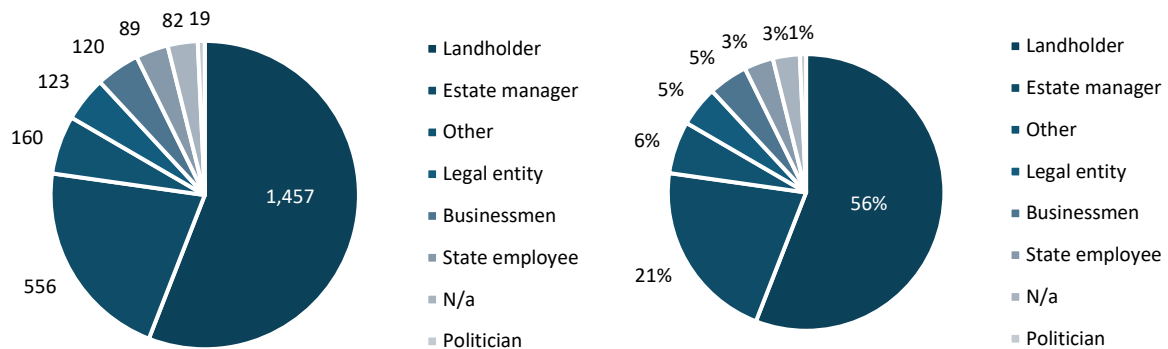
¹³⁷ Az Országos Magyar Gazdasági Egyesület Évkönyve 1890-ik évre, (Budapest: Brózsza Ottó Könyvnyomdája, 1890), 5.

¹³⁸ Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre, 21-22.

¹³⁹ Vári, *Urak és gazdászok*, 413–16.

traditional Hungarian nobility. Notably, several members claimed to be landholders while in reality only owned villas with larger gardens in the vicinity of Budapest.¹⁴⁰ This can at least partly explain why more than 300 members who identified themselves as farmers could not be found in land survey records.

Figure 6: NHES membership by occupation.



Note: left - number of members by occupation, right - share of members by occupation.

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', (Budapest: Pátria Részvénytársaság Nyomdája, 1895), 129-192.

Examining the occupational profiles of the NHES members, these services were likely highly relevant. Out of 2,606 members, 1,457 were farmers (56% share) and 556 were estate managers (21%). Furthermore, 123 legal entities (5%), mostly estates, agriculture-related companies and other HES, were members, while 120 businessmen (5%), merchants, managers and employees of various financial institutions and industrial companies, had also joined the NHES. For all these groups *Köztelek* was a useful publication, for its focus was on technical matters: new tools and techniques, experiments, fairs and other events, news about pests or economic developments in the world were extensively covered in its issues. At the same time, the newspaper also covered domestic politics relevant for agricultural interests, but this remained surprisingly limited: according to Vári, 90% of *Köztelek* articles were related to 'professional' matters

¹⁴⁰ Ibid., 415–16.

in this period.¹⁴¹ Based on the occupational shares, the other professional services mentioned could have also benefited members.

But were these services enough to entice members and to create capacity for collective action? While quantitative evidence is scarce, two signs indicate this was not the case. First, compared to the *Bund der Landwirte* (BdL), Germany's main agrarian interest group, the NHES' selective goods portfolio seems rather weak: the BdL also published its newspaper, but more importantly, members '...received free consultation, handled by the business office in Stuttgart, on all inquiries concerning legal, agricultural, insurance, and credit matters; the opportunity to purchase seed, fodder, artificial fertilizer, and farm machinery at reduced prices; plus the opportunity to secure special rates on insurance policies of every imaginable kind.'¹⁴² This was no caritative work on the BdL's side but a deliberate strategy to increase political clout through more members and more intense relations with them.¹⁴³ In contrast, the NHES did not pursue such a strategy, and offered rather little to its members.¹⁴⁴ Even some Hungarian HES were able to replicate the service portfolio of the BdL, albeit in smaller scale: the Vas County economic society published a local newspaper, maintained depots for fertiliser and a fund to purchase breeding animals, and acted as intermediary between farmers and various suppliers.¹⁴⁵ Unsurprisingly, it had 5,566 members in 1892 (more than double of the NHES in 1895).

Second, the organisation's crown jewel the *Köztelek* newspaper was hardly exclusive, violating Olson's selectivity criteria. The journal was available for non-members as well, and its separate subscription cost 10 Forints, the same as an annual NHES membership fee, whose members received the weekly for free. Either the NHES deliberately underpriced its membership, or it was assumed

¹⁴¹ Ibid., 414.

¹⁴² James C. Hunt, 'The "Egalitarianism" of the Right: The Agrarian League in Southwest Germany, 1893-1914', *Journal of Contemporary History* 10, no. 3 (July 1975): 518, doi:10.1177/002200947501000307.

¹⁴³ Ibid., 517–18.

¹⁴⁴ Vári, 'Magyar és német agráriusok, 1849-1909', 104.

¹⁴⁵ 'A vas megyei gazdasági egyesület működéséről' in *Köztelek*, 10 Feb. 1892, 190.

the membership did not offer much more than a *Köztelek* subscription. If it was the former, one would assume the organisation would promote its services at least in its own materials, but such mentions were not found in the examined sources. The latter scenario is also questionable: the NHES' annual report in 1894 praised the launch of *Köztelek* as the primary catalyst for rapid membership growth.¹⁴⁶ This indicates new joiners appreciated the combination of the newspaper subscription and the NHES membership, although it is unknown what the trend of non-member subscriptions looked like at the same time. The likely answer to this puzzle is that the leadership thought an NHES membership offered more than just the 10 Forints of *Köztelek* subscription, but a more deliberate services strategy was missing. At the same time members likely appreciated the above-mentioned services of the NHES, be it assistance in transport fee complaints or a perceived improvement in social status.

In summary, the services provided by the NHES were likely helping it gather more members; however, they were not as extensive as its German peers or other Hungarian economic societies'. Nor were they completely selective to members, as its flagship service, the *Köztelek* newspaper subscription was available for non-members as well. It is not entirely clear whether the leadership of the NHES understood the connection between services and membership numbers. As the largest and relatively well-funded organisation, it could have expanded its portfolio. In later years the NHES was trying to take control of large, active HES, suggesting it was aware of lagging behind.¹⁴⁷ Consequently, the selective goods offered by the NHES in the 1890-1895 period do not seem to suggest a strong capacity for collective action.

4.2 Analysis of social trust dimensions

The previous section has shown that based on Olson's theory the NHES likely did not offer sufficient selective incentives for would-be members to lend their

¹⁴⁶ *Az Országos Magyar Gazdasági Egyesület Évkönyve az 1893-94-ik egyleti évre*, (Budapest: Pátria Részvénytársaság Nyomdája, 1894), 57.

¹⁴⁷ Vári, *Urak és gazdászok*, 417–18.

support to the organisation. However, newer strains of the collective action theory suggest members' trust in each other and the organisation's institutions may be more important for collective action. Accordingly, this section examines the NHES' collective action capacity from the perspective of social trust. Based on the framework of Pinto, the following analysis examined the four dimensions of social trust, 1) the degree of social identification, 2) relative power position, 3) the degree of norm enforcement, and 4) the degree of symmetry of inputs and outputs by using quantifiable indicators which proxy these dimensions.

4.2.1 Degree of social identification

First, the degree of social identification was assessed based on the primary attributes of members' occupation and location. As mentioned in the previous section and highlighted in Table 4, 56% of the membership was either landowner or tenant, constituting the largest occupational group. Estate managers were a significant minority with 21% share, while other groups had a share in the range of 0-5%. With landholders reaching the 50% threshold defined for the indicator, occupational grouping indicates a group where bonding relationships can be formed, which are more likely to increase the capacity for collective action than bridging relationships. However, this comes with the questionable assumption that landholders were a monolith group whose interests did not differ. As the secondary measures later in the analysis reveal, this was far from true.

Table 4: NHES members by occupation.

Occupational category	# of members	% of total
Landholder	1,457	56%
Estate manager	556	21%
Legal entity	123	5%
Businessmen	120	5%
State employee	89	3%
Politician	19	1%
Other	160	6%
N/a	82	3%
TOTAL	2,606	100.0%

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192.

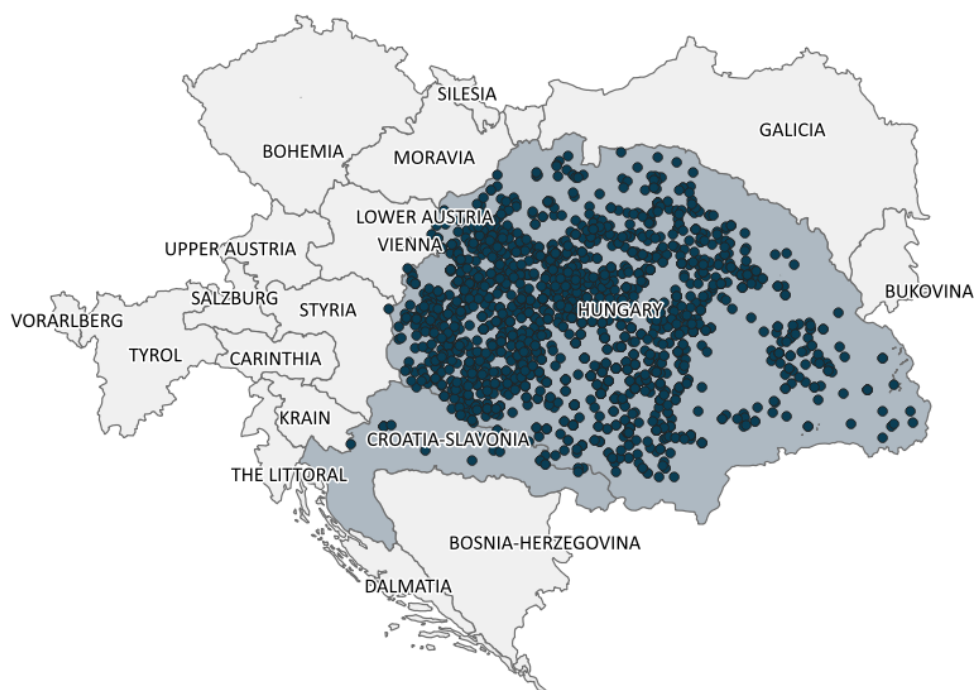
The second primary measure, geographical distribution of the members based on regions, indicates higher diversity. Even the grouping at the regional level shows that while most members were from the central Great Plains (Alföld) region, this was slightly less than 50% of the membership. This region also included members from Budapest, whose occupation and interest may have significantly differed from countryside members. Furthermore, county-level distribution (as seen on Figure 7) shows an even more dispersed membership. Consequently, the geographical distribution measure hints at an organisation with bridging ties, one that could create bonds across different geographical locations. Bridging ties do not necessarily impede collective action, but a more diverse membership likely made it more difficult to cooperate.

Table 5: Share of NHES members by regions of Hungary.

Region	No. of members	Share
Great Plains	1,256	48.2%
Transdanubia	650	24.9%
Upper Hungary	541	20.8%
Transylvania	120	4.6%
Croatia-Slavonia	18	0.7%
Foreign country	15	0.6%
N/a	6	0.2%
Grand Total	2,606	100.0%

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192; matching of settlements with regions using the map files of 'GISTa Hungarorum (OTKA K 111766)', https://www.gistory.hu/docs/1_MO-HOR_Shp/1_MO-HOR_Shp_EPSG3857/, (accessed: 31 Aug. 2024).

Figure 7: NHES members' location.



Note: Only members with Hungarian addresses are visualised (99% of members). 6 members could not be identified, and another 15 lived outside of Hungary.

Source: own projection; members' locations from membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192; coordinates of locations: 'GISTa Hungarorum (OTKA K 111766)'; base map: 'The Provinces of the Austro-Hungarian Empire', https://services1.arcgis.com/HmwnYiJTbZ4UkySc/arcgis/rest/services/Province_Map_WFL1/FeatureServer, (accessed 31 Aug. 2024).

As aggregated occupational and geographical categories may mask other differences among members, the main group, the landholders, was further examined using secondary attributes. These measures also confirm that the membership was rather diverse. In terms of land size, 44% of farmers were medium-sized landholders with less than 1,000 holds under use or ownership, another 48% were large landowners with lands between 1,000 holds and 10,000 holds, and 8% of them were landholders of latifundia. This shows that while some of Hungary's largest landowners were members of the NHES, the membership was more diverse. In terms of land type, for 88% of farmers, holdings consisted of at least 1/3 ploughland (unfortunately the exact crops were not recorded), indicating a strong focus on arable farming. Involvement in livestock breeding was similarly high, 94% of farmers possessed at least 50 animals, 86% at least 100.

Table 6: NHES landholders by land size.

Land size category	No. of farmers	Share of farmers
Medium	506	44%
Large	546	48%
Latifundia	96	8%
Total	1,148	100%

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192; land size records: Magyar Kir. Központi Statisztikai Hivatal (ed): A Magyar Korona országainak mezőgazdasági statisztikája. Második Kötet. Gazdaczintár, (Budapest: Pesti Könyvnyomda-Részvény-Társaság, 1897).

Winemakers were not as numerous, only 15% had more than 10 holds of vineyards. These suggest a strong alignment, i.e. strong homogeneity, on arable farming and livestock breeding, but a more heterogeneous membership regarding winemaking. Winemaking also seems an outlier compared to the mentions of the NHES in parliamentary records, where it was one of the sub-sectors receiving significant mentions. However, this can be partly explained by the severity of the phylloxera epidemic which was destroying large parts of Hungary's vines in the examined period. Landholders' status, whether they were tenants, owners only or users and owners, shows that only 67 members (6%), a

small minority, were passive landowners. At the same time, 200 tenant farmers (17%) and 881 users and owners (77%) were among the farming members. This indicates that most farmers had a direct stake in agricultural matters, such as regulation, international competition or disease control.

Table 7: NHES landholders by landholding status.

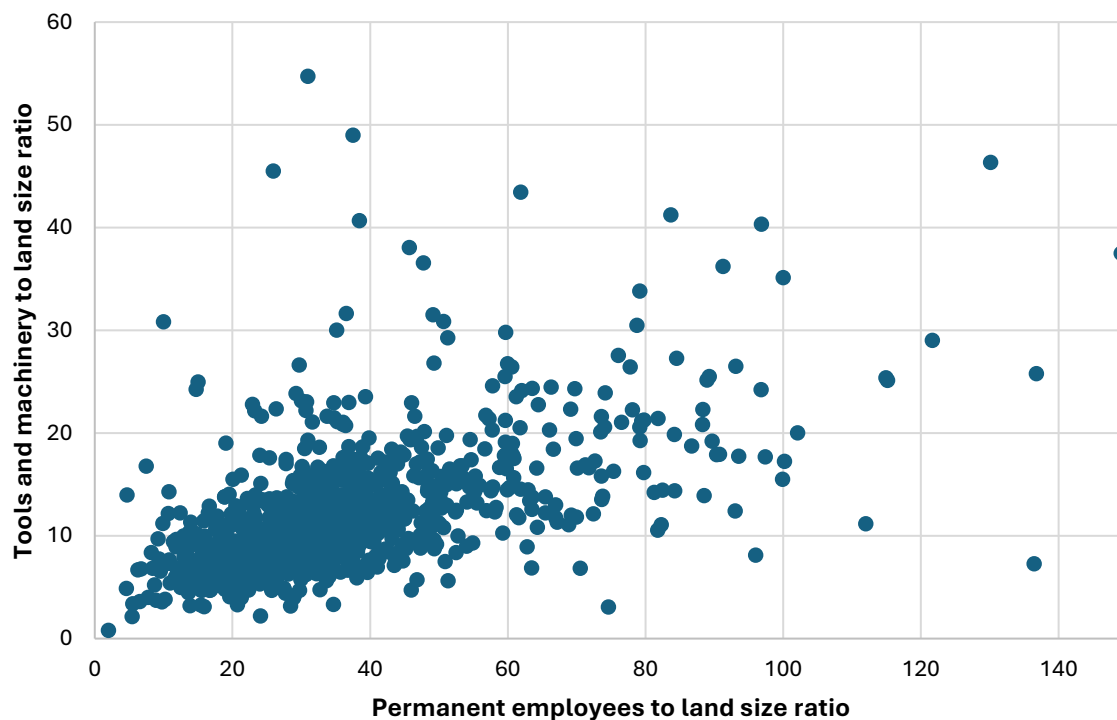
Category	No. of farmers	Share of farmers
Owner	67	6%
User	200	17%
User and owner	881	77%
Total	1,148	100%

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192; land size records: Magyar Kir. Központi Statisztikai Hivatal (ed): A Magyar Korona országainak mezőgazdasági statisztikája. Második Kötet. Gazdaczimtár.

Unfortunately, land survey data do not reveal estates' exact composition of crops or their yields, but at least the number of permanently employed servants and the number of tools were recorded and could be plotted for 1,069 farmers (73% of all farmers in the NHES). These provide approximate measures about the intensity of farming, albeit with some caveats.¹⁴⁸ As Figure 8 shows, farming members were not alike in their usage of tools, machinery or number of permanent employees: while it seems most had 15-40 employees and 5-17 machines and tools for each hold (606 farmers or 56% of the plotted), close to half of the examined farmers had different intensity measures.

¹⁴⁸ For example, the land survey did not record the average number of day labourers for the estates, therefore the total number of employees is unknown. Depending on local labour market conditions, farmers may have used more permanent or more day labourers, skewing the intensity measure.

Figure 8: Intensity measures of NHES landholders.



Note: For details of calculation, see Appendix 5.

Source: own calculation and projection based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192; land size records: Magyar Kir. Központi Statisztikai Hivatal (ed): A Magyar Korona országainak mezőgazdasági statisztikája. Második Kötet. Gazdaczimtár.

In summary, the first primary measure, grouping by occupation, suggested the organisation was rather homogenous with farmers being a majority, while grouping by location indicated heterogeneity, with members being scattered all around the country. Secondary measures suggest the largest occupational subgroup, the farmers, was diverse too. Landholder status, shared interest in arable farming and livestock farming were revealed as common attributes, but other secondary attributes, land size and intensity, suggested a more heterogeneous membership. Notably, to confirm homogeneity of the NHES, these measures would have had to reveal 90%+ supermajorities, as farmers only represented 56% of the total membership. Such categorisations are inherently difficult, as much depends on how one defines groups. This is no different for the above-presented secondary measures. Fortunately, at least from the perspective of this study, the majority of the attributes point toward a rather heterogeneous membership. Subgroups arising from combinations, e.g. farmers in the Alföld

region, could have further sliced the membership, but analysing these was beyond the scope of this study.

The above-presented differences do not necessarily mean such subgroups were explicitly formed or that cooperation was ruled out per se. The Romanian or Russian trade agreements likely hurt a latifundia owner as well as a tenant with medium-sized lands. Similarly, workers' unrest was an issue for farmers irrespective of the intensity of their farming techniques. These cleavages rather suggest that the organisation's capacity for collective action may have been limited or could have suffered 'a death by thousand cuts': the less homogenous the NHES membership was, the less likely it was that its members could create a shared identity and build coalitions needed for collective action.

4.2.2 Relative power position

Relative power position, the second dimension of social trust, concerns whether horizontal or vertical relationships characterise an organisation. As shown in Tables 8 and 9, landholders were slightly over-represented, while members of the parliament, the state administration, members with addresses in Budapest, and the nobility were significantly over-represented in the NHES' leading bodies.

Table 8: Representation of occupation groups in the NHES leadership.

Occupation	Leadership		Membership		Difference		Representation
	No. of members	Ratio	No. of members	Ratio	P. p.	X	
Landholders	63	64.9%	1,457	55.9%	9.0%	1.2	Over-represented
State employee	11	11.3%	89	3.4%	7.9%	3.3	Over-represented
Other	9	9.3%	160	6.1%	3.1%	1.5	Over-represented
Estate manager	8	8.2%	556	21.3%	-13.1%	0.4	Under-represented
Politician	3	3.1%	19	0.7%	2.4%	4.2	Over-represented
Businessmen	2	2.1%	120	4.6%	-2.5%	0.4	Under-represented
Legal entity	0	0.0%	123	4.7%	-4.7%	0.0	Under-represented
N/a	1	1.0%	82	3.1%	-2.1%	0.3	Under-represented
Total	97	100%	2,606	100%			

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192.

Table 9: Representation of politicians, state employees, noblemen and residents of Budapest.

	Leadership		Membership		Difference		Representation
	No. of members	Ratio	No. of members	Ratio	P. p.	X	
Member of Lower House	22	23%	110	4%	18%	5.4	Over-represented
Not member	75	77%	2,496	96%	-18%	0.8	Under-represented
Total	97	100%	2,606	100%			
Member of Upper House	20	21%	139	5%	15%	3.9	Over-represented
Not member	77	79%	2,467	95%	-15%	0.8	Under-represented
Total	97	100%	2,606	100%			
Member of state admin.	21	22%	116	4%	17%	4.9	Over-represented
Not member	76	78%	2,490	96%	-17%	0.8	Under-represented
Total	97	100%	2,606	100%			
Noblemen	25	26%	249	10%	16%	2.7	Over-represented
Not noblemen	72	74%	2,357	90%	-16%	0.8	Under-represented
Total	97	100%	2,606	100%			
W/ Budapest address	70	72%	613	24%	49%	3.1	Over-represented
W/o Budapest address	26	27%	1,993	76%	-50%	0.4	Under-represented
Total	97	100%	2606	100%			

Source: own categorisation based on membership list in 'Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre', 129-192.

The dominance of farmers is not unexpected due to having the majority in the membership. At the same time, members with political or state roles and nobility ranks were significantly over-represented. It is difficult to ascertain whether the over-representation of the nobility and other members with state and political roles was the elite's deliberate control mechanism over the organisation or just a practical outcome of the organisation's Budapest-centred operation: while only 24% of the members listed a Budapest address, 72% of the leadership was from

the capital. It is likely both factors played a role. This skewed leadership composition hints at the existence of three large under-represented groups, estate managers, countryside members and the members without noble rank.

The skewed representation suggests a degree of verticality and imbalance between members, highlighting that not all members were equal. While vertical relations do not necessarily limit collective action capacity, in the case of the NHES they seem to have done so. Theoretically, verticality may even have been advantageous for the NHES, as some could have joined for the prestige its elite members provided. However, estate managers and intellectuals could have received this perk without being relatively excluded from the leadership. Consequently, while one can only speculate based on the available evidence, it seems such verticality did limit the organisation's appeal to certain subgroups by hurting membership retention or expansion, for example for the estate managers.

4.2.3 Degree of norm enforcement

The third dimension of social trust considers the organisation's ability to enforce norms on its members without paralysing the organisation (e.g. expelling large sections of the members). To quantitatively examine the NHES' norm enforcement ability, the study measured late payments of membership fees, participation rate at the NHES' general assembly and churn rate of the members. These can indicate the extent to which members adhered to the basic rules of the membership.

Table 10: NHES members with late payments 1891-1896.

Year	Members with late payment	Members (end of period)	Share
1891	60	1,657	3.6%
1892	67	1,905	3.5%
1893	58	2,124	2.7%
1894	353	2,606	13.5%
1896	690	2,985	23.1%

Source: own calculations based on 1891: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1891-92-ik egyleti évre, (Budapest: Hungaria Könyvnyomda, 1892); 1892: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1892-93-ik egyleti évre, (Budapest: Hungaria Könyvnyomda, 1893); 1893: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1893-94-ik egyleti évre, (Budapest: Pátria Részvénytársaság Nyomdája, 1894); 1894: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre; 1896: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1896-97-ik egyleti évre, (Budapest: Pátria Részvénytársaság Nyomdája, 1897).

Table 10 presents the number of total NHES members as well as the number of members with late payments. The period of 1891-93 indicates the organisation had a very low ratio of late payments. But in 1894 late payments suddenly grew fivefold, and then they almost doubled again by 1896. What lay behind this trend? NHES assembly notes indicate that at the end of 1893 the organisation amended its statutes: unless members indicated their willingness to leave the NHES, their 6-year membership cycle was renewed. Previously, members were simply removed from the membership list.¹⁴⁹ The measure's likely aim was to further expand the membership or to prevent churning, as the *Köztelek* weekly was available for non-members as well. However, as a side-effect, late payments increased, suggesting the organisation struggled to enforce payment discipline.

Members' participation rate on general assemblies was very low: only two assemblies reached higher than 10% participation rate, and even the peak was slightly less than 1/3 of the membership. Notably, these two events were related to an unsuccessful coup attempt against the NHES' leadership, which was allegedly sponsored by then-minister of agriculture Andor Festetics and

¹⁴⁹ 'Közlemények az orsz. magy. gazdasági egyesület köréből. Figyelmeztetés' in *Köztelek*, 25 Oct. 1893, 549.

influential milling magnates.¹⁵⁰ On one hand it is not surprising that the general assemblies did not reach higher turnout: members were scattered across the country, and most of them may have struggled to leave work. On the other hand, the 1-3% turnout is very low even compared to Budapest-based members (23.5% of the membership). Such a low turnout implies that members did not find these meetings important or useful enough to participate. Finally, churn rates show no sign of the NHES facing an exodus: even in its worst year, in 1892, only 6% of the members left, while the total membership was steadily growing. From 1894 onwards churn rates were more difficult to assess due to the new 6-year rule.

Table 11: Churn rate of NHES members.

Year	Leavers	Members (end of period)	Churn rate
1891	74	1657	4%
1892	110	1905	6%
1893	65	2124	3%
1894	49	2606	2%
1895	120	2823	4%
1896	138	2985	5%

Source: own calculations based on: 1891: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1891-92-ik egyleti évre; 1892: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1892-93-ik egyleti évre; 1893: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1893-94-ik egyleti évre; 1894: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre; 1896: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1896-97-ik egyleti évre. Further calculations on leavers from Köztelek.

¹⁵⁰ Vári, *Urak és gazdászok*, 472–73.

Table 12: Participation rate of NHES general assemblies.

Date	Participants	Session type	Year	Membership	Participation rate
04/06/1892	45	Ordinary	1892	1905	2%
30/03/1892	20	Extraordinary	1892	1905	1%
04/06/1893	37	Ordinary	1893	2124	2%
31/10/1893	26	Ordinary	1893	2124	1%
28/10/1894	94	Ordinary	1894	2606	4%
11/11/1894	400	Extraordinary	1894	2606	15%
12/12/1894	800	Extraordinary	1894	2606	31%
17/11/1895	89	Ordinary	1895	2823	3%

Source: own calculations based on meeting minutes in Köztelek.

In summary, late payments and low participation rates suggest the NHES struggled to enforce its least complicated norms. At the same time low churn rates would hint at the opposite. But a more likely explanation is that even low churn rates may have been the result of weak enforcement, as the organisation could not have or would not have pushed out non-compliant members for it needed the high membership figures. On the balance of evidence, it is rather likely that the NHES' capacity to enforce norms was low.

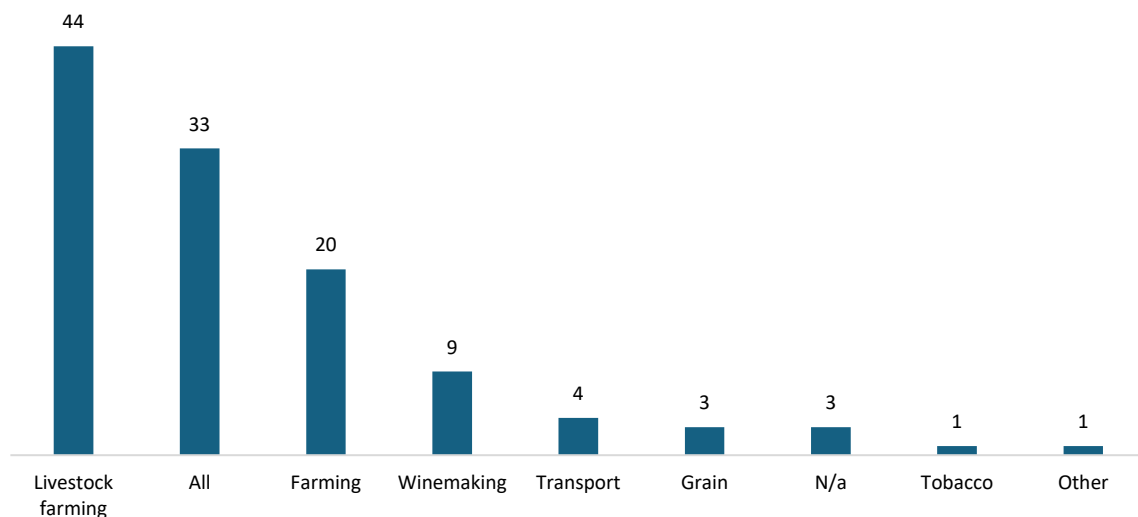
4.2.4 Degree of symmetry of inputs and outputs

The final social trust dimension, the degree of symmetry of inputs and outputs, encapsulates whether the organisation kept a balance between its members' investments and the public goods generated. Analogous to the larger structure of this study, this dimension was examined by comparing the membership's occupational structure, the inputs, to the lobbying efforts and communications with the state, the NHES main outputs.

Based on the 1893-95 annual reports, 118 pieces of communication shows that all issues focused on farmers, who only represented 56% of the membership. Even if one assumes that legal entities, another 5%, were also beneficiaries of the same communications, the combined share is still only 61%. On one hand, this constitutes an imbalance in inputs and outputs, as more than 1/3 of the

membership is left out. Especially estate managers with a membership share of 21% seem to lose out. On the other hand, they could have indirectly profited from successful lobbying. Moreover, the selective goods provided by the organisation suggest that many members were not primarily concerned by sectoral lobbying, or at least they were content with lending their support in return for a professional news source, the *Köztelek*, and for the social status of the NHES membership.

Figure 9: Communications sent to the government by the NHES in the 1893-95 period by subject.



Source: own calculations and projection based on 1893-94: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1893-94-ik egyleti évre; 1894-95: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre;

Could this arrangement have been net positive regarding the organisation's capacity for collective action? This solution may have increased the NHES' clout due to higher membership count and better financing. At the same time at least one-third of the membership was deemed second-rate, as they did not profit from the organisation's primary output, lobbying. A more conservative conclusion is that the NHES probably had higher capacity for collective action compared to an alternative scenario where under-represented members did not join in the first place. However, it is also likely that this arrangement led to lower capacity for

collective action than the ideal scenario in which membership groups have proportionate shares in government communications.

4.3 Section summary

What do membership records tell us about the NHES' capacity for collective action? In terms of selective goods, the organisation did provide exclusive services to its members, its members likely appreciated them, and its leadership understood the connection between such benefits and increasing membership figures, at least in the case of the *Köztelek* weekly.

However, the services portfolio of the NHES was not as extensive as some of its peers, and its newspaper was available for non-members as well, violating the selectivity criteria. While putting an exact number on the organisation's collective action capacity is beyond the scope of this analysis, these findings do indicate that the organisation could have done more to attract potential joiners by offering a more comprehensive services portfolio.

The organisation did not fare better in terms of social trust. In each of the four dimensions indicators hint at an organisation which faced challenges in terms of its capacity for collective action. Table 13 summarises the results of the indicators used. In terms of social identification, the organisation had a rather heterogeneous membership. Representation in the NHES leadership was unequal: politicians and state employees, noblemen and residents of Budapest were all significantly over-represented, while estate managers, members residing in the countryside and members without noble rank were under-represented. High rate of members with late payments and low participation rate on the general assemblies suggest norm enforcement was not strong either. Finally, the degree of symmetry of inputs and outputs presents an unbalanced picture: communications focused on issues of farmers without exception

Table 13: Summary of analysis on social trust.

picture: communications focused on issues of farmers without exception.

Indicator	Result	Thres hold	Result	Decision	Data set
Degree of social identification					
Subgroups based on occupation (primary)	55.9%	50%	Above threshold	Rather homogenous	All members
Subgroups based on location (primary)	48.2%	50%	Below threshold	Rather heterogenous	All members
Land size	-	n/a	Below threshold	Rather heterogenous	Landholders
Land type	-	n/a	Above threshold	Rather homogenous	Landholders
Landholder status	-	n/a	Above threshold	Rather homogenous	Landholders
Intensity measure	-	n/a	Below threshold	Rather heterogenous	Landholders
Relative power position					
Share of politics and state-affiliated members in the leadership compared to share in overall NHES membership	3.9-5.4x	1.0x	Above threshold	Dominance of vertical relations	All members
Share of nobility in the leadership compared to share in overall NHES membership	2.7x	1.0x	Above threshold	Dominance of vertical relations	All members
Share of occupational groups in the leadership compared to share in overall NHES membership	N/a	1.0x	Above threshold	Dominance of vertical relations	All members
Degree of norm enforcement					
Share of members with late payment	2.7-23.1%	10% <	Above threshold	Weak	All members
Membership churn rate	2-6%	10% <	Below threshold	Strong	All members

Participation rate at NHES general assemblies	1-31%	50% <	Below threshold	Weak	All members
Degree of symmetry of inputs and outputs					
Share of NHES communications with the governments benefiting only subgroups of the NHES	100%	33% <	Above threshold	Unequal, benefiting farmers	All members

5. Discussion of findings

Did the NHES effectively function as an interest group at the end of the 19th century? It certainly attempted to represent the sector: the NHES and HES were regularly mentioned in parliamentary debates, and its annual reports show various communications with ministers and authorities. But sources also show that the organisation struggled to deliver in key moments.

External factors clearly played a role. As highlighted previously, the NHES had to navigate in a complex environment, especially when it came to trade agreements: industrial interests, differing political views about tariffs, Austrian interests and partner countries' strategies all competed with the NHES' agenda. Take the German trade agreement of 1891. Even if the NHES could have had overwhelming influence over government policies, it would have struggled opposing German interests simply due to Austria-Hungary's relative inferiority at the negotiations.

The NHES may have self-censored itself too: many of the organisation's members were also part of the traditional landed elite of Hungary. As Vári notes, they may have been afraid of radical changes which had the potential of upsetting the constitutional framework of the empire, of which they were significant beneficiaries.¹⁵¹ In this scenario applying more intense pressure on

¹⁵¹ Vári, 'Magyar és német agráriusok, 1849-1909', 104–5.

the government might have been theoretically possible, but the NHES may have been reluctant to do so.

However, certain patterns do not fit these two explanations. Slow legislative process does not seem as if it was the result of consecutive governments' foot-dragging or lack of NHES pressure. The problematic coordination in certain matters, be it trade agreements, the field policing act or complaints about the lack of agricultural strategy could be explained with a lack of competence on the state's side. Matters progressed with glacial pace not because the industrial lobby, or Austrian interests hijacked them, or because the NHES feared their constitutional impact, but simply because the state did not have capacity to deal with them. Lobbying can only work if there are resources, money or power, to be appropriated. Seemingly, this was not always the case.

As the analysis of Section 4 has shown, internal factors may have been equally or even more important in limiting the effectiveness of the NHES. Although the organisation provided several selective goods to its members, both tangible and intangible ones, these were rather limited, especially compared to German or local peers. The organisation did not fare better in social trust dimensions either: most indicators suggest the NHES was a rather heterogeneous group with imbalances in representation, low level of norm enforcement and unequal distribution of members' efforts and provided public goods. As Vári puts it, the NHES was "one club with various kinds of membership".¹⁵² It was not a farmers-only organisation: although its membership consisted mainly of landholders, theirs was a limited majority with only 56% share. In terms of geography, members were scattered. Even landholders differed in key characteristics: although arable and livestock farming concerned them all and most were both users and owners of their land, land size or farming intensity suggest differences. Furthermore, results did not indicate the NHES would have been the primary lobbying vehicle of larger grain producers either.

¹⁵² Vári, *Urak és gazdászok*, 410.

While the NHES and HES explicitly embraced most fundamental values and goals of 18th-century European economic societies, their predecessors' emphasis on equal representation was not one of these. Even at its foundation the NHES was almost exclusively the elite's project. Based on the skewed leadership representation in 1895, this remained largely unchanged by the end of the 19th century, mirroring Hungarian society's structure. The seemingly weak norm enforcement and asymmetries between occupational groups and provided public goods do not show organisational strength either.

The NHES was strangely two-faced: it was an organisation which wanted as many members as possible but not as many to launch a wider movement. It wanted to influence policy but wanted to avoid upsetting the constitutional framework of the empire. It was striving to serve the interest of farmers, but it provided only a few incentives for them to join. It was largely an elite-led club, but it had to cooperate with the wider strata of the Hungarian agriculture. What lay behind this?

One can only speculate, but the internal issues detected are eerily similar to accusations raised by several MPs: that agriculture's stakeholders seemed to be reluctant to cooperate, as the 'social spirit' was missing; and that the state had no long-term plans to solve the issues of the agricultural sector. The former put the blame on society, the latter on the state. However, examining the NHES one must wonder to what extent was the organisation ready to cooperate and whether they had a comprehensive strategy for the sector. It seems the NHES was suffering from the same maladies as its base and the state it so often criticised. All these indicate that instead of farmers' agency, it was rather the inertia of societal structures, e.g., skewed landownership, the preservation of the nobility's feudal privileges, that shaped Hungarian reactions to turbulence in late 19th-century agriculture.

6. Conclusion

This study has examined whether the National Hungarian Economic Society, Hungary's most influential agricultural interest group, effectively represented sectoral interests at the end of the 19th century. The NHES was the de facto leader of Hungarian economic societies, organisations which were descendants of a Europe-wide movement of associations. While most HES remained focused on spreading practical knowledge just as their European counterparts, in 1879 the NHES explicitly declared itself the representation of the sector as its primary goal. The timing of this shift was no coincidence, as agriculture's export-driven growth came under pressure due to increasing international competition and unfavourable trade policies.

To answer whether the NHES was able to represent sectoral interests, the study used various primary sources to investigate the organisation's outputs, its lobbying results, and its inputs, the membership.

Based on parliamentary meeting minutes and documents, mentions of the organisation and its partner associations were collected and categorised. These records have shown that the organisation (and HES in general) actively represented sectoral interests. Additional analysis of NHES publications also confirmed this. However, records also reveal that the organisation often struggled to achieve its aims. Several high-profile cases related to trade agreements, state funding and conflicts with the milling industry showed high-profile defeats of the NHES. These can be partly explained by external factors: Austrian interests, wider political considerations of the Hungarian elite or the lack of state capacity may have limited the organisation's influence.

However, internal issues could also explain the weak performance, as the second part of the analysis has shown, which examined the input side of the NHES, its members, from the perspective of collective action. The dataset of NHES members was supplemented with land survey records for landholders to gain additional insights. The subsequent analysis has used two directions to estimate

the organisation's capacity for collective action. First, selective goods were investigated to see whether the organisation did enough to counter free riders, stakeholders in agriculture who did not join the organisation, by providing exclusive services to its members. The benefits the NHES offered were identified based on its annual reports, and the analysis showed the organisation provided various services, and membership of the NHES was likely perceived as a status upgrade for many: estate managers or urban intellectuals could belong to a club where the traditional landed elite was also present. However, in comparison with some more dynamic peers, the NHES services portfolio seems very narrow. In conclusion, while members likely appreciated the provided services, the organisation seemingly did not have a comprehensive services-based strategy, thus, its capacity for collective action was limited.

The second direction concerned social trust. The analysis used a social capital framework to measure the NHES' capacity for collective action. Results have shown that the organisation's membership was rather diverse: while landholders represented a majority, 44% of the members were not farmers. Membership was also scattered across the country. Land survey records also revealed that farmers were not a monolith group either: while focus on arable and cattle farming, and active ownership were traits which connected them, in terms of land size and farming intensity differences were revealed. These indicate that the organisation had to formulate a shared identity and induce cooperation among a diverse membership, likely reducing its capacity for collective action. Disproportionate representation, weak norm enforcement and asymmetries in the lobbying outputs also indicated that the NHES was an organisation with rather low capacity for collective action. Thus, the analysis concluded that both external and internal factors hindered the NHES' efforts to successfully represent the Hungarian agricultural sector's interests.

Bibliography

- A Gazdasági Egyesületek Ezredéves Kiállításának Rendező-bizottsága. *Gazdasági egyesületek monográfiái. Az 1896-ik évi ezredéves országos kiállítás alkalmából.* Budapest: Pátria Irodalmi Vállalat és Nyomdai Rt., 1896.
- Alix-Garcia, Jennifer, Sarah Walker, Volker Radloff, and Jacek Kozak. 'Tariffs and Trees: The Effects of the Austro-Hungarian Customs Union on Specialization and Land-Use Change'. *The Journal of Economic History* 78, no. 4 (December 2018): 1142–78. doi:10.1017/S0022050718000554.
- 'Az országban létező gazdasági egyesületek létszámának és működésének áttekintése 1882. év végén.' *Közgazdasági Értesítő* 30, no. 2 (26 July 1883): 757–840.
- Balla, Lóránd. 'Temesvár egyesületei a dualizmus korában, különös tekintettel a regionális identitást előmozdító egyesületekre'. Thesis, Eötvös Loránd Tudományegyetem, 2017.
- Berend, Iván T. 'The Hungarian Economy and the World Market in the 20th Century'. *Acta Oeconomica* 24, no. 1/2 (1980): 1–20.
- Berend, Iván T., and György Ránki. 'Economic Factors in Nationalism: The Example of Hungary at the Beginning of the Twentieth Century'. *Austrian History Yearbook* 3, no. 3 (January 1967): 163–86. doi:10.1017/s0067237800007700.
- Berend, T. Iván. 'Hungary: A Semi-Successful Peripheral Industrialization'. In *The Industrial Revolution in National Context: Europe and the USA*, edited by Mikulas Teich and Roy Porter, 265–89. Cambridge University Press, 1996.
- Cinnirella, Francesco, Erik Hornung, and Julius Koschnick. 'Flow of Ideas: Economic Societies and the Rise of Useful Knowledge'. München: CESifo Working Papers, 2022. doi:10.2139/ssrn.4163325.
- Della Porta, Donatella. *Social Movements, Political Violence, and the State: A Comparative Analysis of Italy and Germany*. 1st ed. Cambridge: Cambridge University Press, 1995. doi:10.1017/CBO9780511527555.
- Dowey, James. 'Mind Over Matter: Access to Knowledge and the British Industrial Revolution'. Thesis, London School of Economics and Political Science, 2017.
- Eddie, Scott M. 'Cui bono? Magyarország és a dualista Monarchia védővámpolitikája'. *Történelmi szemle* 19, no. 1–2 (1976): 156–66.
- . 'The Terms and Patterns of Hungarian Foreign Trade, 1882-1913'. *The Journal of Economic History* 37, no. 2 (1977): 329–58. doi:10.1017/S0022050700096960.
- . 'The Terms of Trade as a Tax on Agriculture: Hungary's Trade with Austria, 1883-1913'. *The Journal of Economic History* 32, no. 1 (1972): 298–315. doi:10.1017/S0022050700075525.
- Eddie, Scott M., Ingrid Hutterer, and Iván Székely. 'Fél évszázad birtokviszonyai: Változások a trianoni Magyarország területén, 1893-1935'. *Történelmi Szemle* 32, no. 3–4 (1990): 301–57.
- Fodor, Ferenc. 'Gazdasági egyesületek Szeged környékén'. *Acta Acad. Agriensis*, no. 38 (2010): 149–58.

- Galgóczi, Károly. *Az Országos Magyar Gazdasági Egyesület története keletkezésétől az 1876-dik évig*. Sándor Kocsi, 1880.
- Galgóczy, Károly. *Az Országos Magyar Gazdasági Egyesület története, Második Rész, 1876-tól az 1897-dik évig*. Budapest: 'Pátria' Irodalmi Nyomdavállalat és Nyomdai Részvénytársaság, 1898.
- Galofré-Vilà, Gregori. 'The Diffusion of Knowledge during the British Industrial Revolution'. *Social Science History* 54, no. 4 (2023): 167–88. doi:10.1017/ssh.2022.49.
- Gourevitch, Peter Alexis. 'International Trade, Domestic Coalitions, and Liberty: Comparative Responses to the Crisis of 1873-1896'. *The Journal of Interdisciplinary History* 8, no. 2 (1977): 281–313.
- Gunst, Péter. 'Agricultural Exports in Hungary (1850–1914)'. *Acta Historica Academiae Scientiarum Hungaricae* 35, no. 1/4 (1989): 61–90.
- Gunst, Peter. 'Politisches System Und Agrarstruktur in Ungarn 1900-1945'. *Vierteljahrshefte Für Zeitgeschichte* 29, no. 3 (1981): 397–419.
- György Kövér. 'A magyar gazdaságpolitika - és lehetőségei (1867-1914)'. *Egyetemi Szemle* 1, no. 1 (1979): 63–76.
- Hanák, Péter. 'Hungary in the Austro-Hungarian Monarchy: Preponderancy or Dependency?' *Austrian History Yearbook* 3, no. 1 (January 1967): 260–302. doi:10.1017/s0067237800004161.
- Hunt, James C. 'The "Egalitarianism" of the Right: The Agrarian League in Southwest Germany, 1893-1914'. *Journal of Contemporary History* 10, no. 3 (July 1975): 513–30. doi:10.1177/002200947501000307.
- Jászi, Oszkár. 'The Tragedy of Free Trade'. In *The Dissolution of the Habsburg Monarchy, 185–214*. Chicago: University of Chicago Press, 1929.
- Kane, Anne, and Michael Mann. 'A Theory of Early Twentieth-Century Agrarian Politics'. *Social Science History* 16, no. 3 (1992): 421–54. doi:10.2307/1171390.
- Kárbin, Ákos. 'Agrárlobbi a Monarchia Magyarországon. A Német Birodalom és az Osztrák–Magyar Monarchia tárgyalásai az 1891. évi vám- és kereskedelmi szerződés kapcsán'. *Agrártörténeti Szemle* 59, no. 1–4 (2018): 31–52.
- Kiss, Zsuzsanna. 'A Zala Megyei Gazdasági Egyesület megszervezése a neoabszolutizmus korában'. *Korall*, no. 13 (2003): 107–24.
- . "Proper Values" in Agriculture: The Role of Agricultural Associations in Knowledge Dissemination in Hungary, 1830–1880'. In *Agricultural Knowledge Networks in Rural Europe, 1700-2000*, edited by Yves Segers and Leen Van Molle, 1st ed., 172–96. Boydell & Brewer, Incorporated, 2022.
- Klement, Judit. 'How to Adapt to a Changing Market? The Budapest Flour Mill Companies at the Turn of the Nineteenth and Twentieth Centuries'. *Hungarian Historical Review* 4, no. 3 (2015): 839–72.
- Komlos, John. *The Habsburg Monarchy as a Customs Union*. Princeton University Press, 1983.
- Kopsidis, Michael. 'Agricultural Development and Impeded Growth: The Case of Hungary, 1870-1973'. In *Agriculture and Economic Development in Europe Since 1870*, edited by Pedro Lains and Vicente Pinilla, 286–310. Routledge Taylor & Francis Group, 2008. doi:10.4324/9780203928776.

- Kopsidis, Michael, and Max-Stephan Schulze. 'Economic Growth and Sectoral Developments, 1800-1914'. In *The Economic History of Central, East and South-East Europe*, edited by Matthias Morys, 39–68. Routledge, 2020.
- Krueger, Rita A. 'Mediating Progress in the Provinces: Central Authority, Local Elites, and Agrarian Societies in Bohemia and Moravia'. *Austrian History Yearbook* 35 (January 2004): 49–79. doi:10.1017/s0067237800020944.
- Láng, Lajos. *A vámpolitika az utolsó száz évben*. Budapest: Politzer Zsigmond és Fia, 1904.
- Lebovics, Herman. "'Agrarians" Versus "Industrializers": Social Conservative Resistance to Industrialism and Capitalism in Late Nineteenth Century Germany'. *International Review of Social History* 12, no. 1 (1967): 31–65. doi:10.1017/S0020859000003266.
- Lowood, Henry Ernest. 'Patriotism, Profit, and the Promotion of Science in the German Enlightenment: The Economic and Scientific Societies, 1760-1815'. Thesis, University of California, 1987.
- Magyar Kir. Központi Statisztikai Hivatal. *A Magyar Korona országainak Mezőgazdasági statisztikája. A gazdaságok megoszlása jelleg és nagyság szerint*. Budapest: Pesti Könyvnyomda-Részvénytársaság, 1900.
- Matlekovits, Sándor. *A vámpolitika mai helyzete*. Budapest: Politzer-féle Könyvkiadó Vállalat, 1905.
- Mudrony, Soma. *A vámkérdés megoldása*. Budapest: Országos Iparegyesület, 1896.
- Olson, Mancur. *The Logic of Collective Action. Public Goods and the Theory of Groups*. London: Harvard University Press, 1965.
- O'Rourke, Kevin H. 'The European Grain Invasion, 1870-1913'. *The Journal of Economic History* 57, no. 4 (1997): 775–801. doi:10.1017/S0022050700019537.
- Ostrom, Elinor, and T. K. Ahn. 'The Meaning of Social Capital and Its Link to Collective Action'. In *Handbook of Social Capital. The Troika of Sociology, Political Science and Economics*, edited by Gert Tinggaard Svendsen and Gunnar Lind Haase Svendsen, 17–35. Cheltenham: Edward Elgar Publishing Limited, 2009.
- Philippovich, Eugen von. 'Austrian-Hungarian Trade-Policy and the New German Tariff'. *The Economic Journal* 12, no. 46 (1902): 177–81.
- Pinto, Pedro Ramos. 'Social Capital as a Capacity for Collective Action'. In *Assessing Social Capital: Concept, Policy and Practice*, edited by Rosalind Edwards, Jane Franklin, and Janet Holland, 53–69. Newcastle: Cambridge Scholars Publishing, 2007.
- Pollard, Sidney. 'Chapter 6. The Industrialization of the Periphery to 1914'. In *Peaceful Conquest. The Industrialization of Europe 1760-1970*, 219–51. Oxford University Press, 1981.
- Putnam, Robert D. *Bowling Alone. The Collapse and Revival of American Community*. New York: Simon & Schuster, 2020.
- Sandler, Todd. 'Collective Action: Fifty Years Later'. *Public Choice* 164, no. 3–4 (April 2015): 195–216. doi:10.1007/s11127-015-0252-0.
- Sándor, Pál. 'Die Agrarkrise am Ende des 19. Jahrhunderts und der Grossgrundbesitz in Ungarn'. In *Studien zur Geschichte der Österreichisch-*

- Ungarischen Monarchie, edited by Péter Hanák, 51:167–94. Magyar Tudományos Akadémia, 1961.
- Schulze, Max-Stephan. ‘Patterns of Growth and Stagnation in the Late Nineteenth Century Habsburg Economy’. *European Review of Economic History* 4, no. 3 (2000): 311–40. doi:10.1017/S1361491600000095.
- Stapelbroek, Koen, and Jani Marjanen. ‘Political Economy, Patriotism and the Rise of Societies’. In *The Rise of Economic Societies in the Eighteenth Century. Patriotic Reform in Europe and North America*, edited by Koen Stapelbroek and Jani Marjanen, 1–25. London: Palgrave Macmillan, 2012.
- Street, Donald. ‘The Economic Societies: Springboard to the Spanish Enlightenment’. *Journal of European Economic History* 16, no. 3 (1987): 569–85.
- Szuhay, Miklós. ‘The Capitalization of Agriculture’. In *Hungarian Agrarian Society from the Emancipation of Serfs (1848) to the Reprivatization of Land (1998)*, edited by Gunst Péter, 99–124. New York: Columbia University Press, 1998.
- Vári, András. ‘Magyar és német agráriusok, 1849-1909’. *Korall* 28–29, no. 8 (2007): 88–108.
- . *Urak és gazdászok. Arisztokrácia, agrárértelmiség és agrárius mozgalom Magyarországon 1821-1898*. Budapest: Argumentum Kiadó, 2009.

Appendices

Primary sources reviewed by the study

National Assembly minutes and documents:

- Főrendiházi irományok* (1878, I-X.)
- Főrendiházi irományok* (1881, I-IX.)
- Főrendiházi irományok* (1884, I-VII.)
- Főrendiházi irományok* (1887, I-XIV.)
- Főrendiházi irományok* (1892, I-XX.)
- Főrendiházi napló* (1878, I-II.)
- Főrendiházi napló* (1881, I-II.)
- Főrendiházi napló* (1884, I-III.)
- Főrendiházi napló* (1887, I-V.)
- Főrendiházi napló* (1892, I-VI.)
- Képviselőházi irományok* (1878, I-XXVI.)
- Képviselőházi irományok* (1881, I-XXII.)
- Képviselőházi irományok* (1884, I-XXIV.)
- Képviselőházi irományok* (1887, I-XXXV.)
- Képviselőházi irományok* (1892, I-XXXVII.)
- Képviselőházi napló* (1878, II-XIX.)
- Képviselőházi napló* (1881, I-XVII.)
- Képviselőházi napló* (1884, I-XVI.)
- Képviselőházi napló* (1887, I-XXVII.)
- Képviselőházi napló* (1892, I-XXVII.)

Állami költségvetés a Magyar Korona országainak részére az 1879. évre
(Budapest: Magyar Királyi Államnyomda, 1879).

Állami költségvetés a Magyar Korona országainak részére az 1880. évre
(Budapest: Magyar Királyi Államnyomda, 1879).

Állami költségvetés a Magyar Korona országainak részére az 1881. évre
(Budapest: Magyar Királyi Államnyomda, 1880).

Állami költségvetés a Magyar Korona országainak részére az 1882. évre
(Budapest: Magyar Királyi Államnyomda, 1881).

Állami költségvetés a Magyar Korona országainak részére az 1883. évre
(Budapest: Magyar Királyi Államnyomda, 1882).

Állami költségvetés a Magyar Korona országainak részére az 1884. évre
(Budapest: Magyar Királyi Államnyomda, 1883).

Állami költségvetés a Magyar Korona országainak részére az 1885. évre
(Budapest: Magyar Királyi Államnyomda, 1884).

Állami költségvetés a Magyar Korona országainak részére az 1886. évre
(Budapest: Magyar Királyi Államnyomda, 1885).

Állami költségvetés a Magyar Korona országainak részére az 1887. évre
(Budapest: Magyar Királyi Államnyomda, 1886).

Állami költségvetés a Magyar Korona országainak részére az 1888. évre
(Budapest: Magyar Királyi Államnyomda, 1887).

Állami költségvetés a Magyar Korona országainak részére az 1889. évre
(Budapest: Magyar Királyi Államnyomda, 1888).

Állami költségvetés a Magyar Korona országainak részére az 1890. évre
(Budapest: Magyar Királyi Államnyomda, 1889).

Állami költségvetés a Magyar Korona országainak részére az 1891. évre
(Budapest: Magyar Királyi Államnyomda, 1890).

Állami költségvetés a Magyar Korona országainak részére az 1892. évre
(Budapest: Magyar Királyi Államnyomda, 1891).

Állami költségvetés a Magyar Korona országainak részére az 1893. évre
(Budapest: Magyar Királyi Államnyomda, 1892).

Állami költségvetés a Magyar Korona országainak részére az 1894. évre
(Budapest: Magyar Királyi Államnyomda, 1893).

Állami költségvetés a Magyar Korona országainak részére az 1895. évre
(Budapest: Magyar Királyi Államnyomda, 1894).

NHES annual reports:

Az Országos Magyar Gazdasági Egyesület Évkönyve 1888-ik évre, (Budapest: Brózsza Ottó Könyvnyomdája, 1888).

Az Országos Magyar Gazdasági Egyesület Évkönyve 1890-ik évre, (Budapest: Brózsza Ottó Könyvnyomdája, 1890).

Az Országos Magyar Gazdasági Egyesület Évkönyve az 1891-92-ik egyleti évre,
(Budapest: Hungaria Könyvnyomda, 1892).

Az Országos Magyar Gazdasági Egyesület Évkönyve az 1892-93-ik egyleti évre,
(Budapest: Hungaria Könyvnyomda, 1893).

Az Országos Magyar Gazdasági Egyesület Évkönyve az 1893-94-ik egyleti évre,
(Budapest: Pátria Részvénytársaság Nyomdája, 1894).

Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre,
(Budapest: Pátria Részvénytársaság Nyomdája, 1895).

Az Országos Magyar Gazdasági Egyesület Évkönyve az 1896-97-ik egyleti évre,
(Budapest: Pátria Részvénytársaság Nyomdája, 1897).

Land survey

Magyar Kir. Központi Statisztikai Hivatal (ed): *A Magyar Korona országainak mezőgazdasági statisztikája. Második Kötet. Gazdaczimtár*, (Budapest: Pesti Könyvnyomda-Részvény-Társaság, 1897).

Newspaper

Köztelek

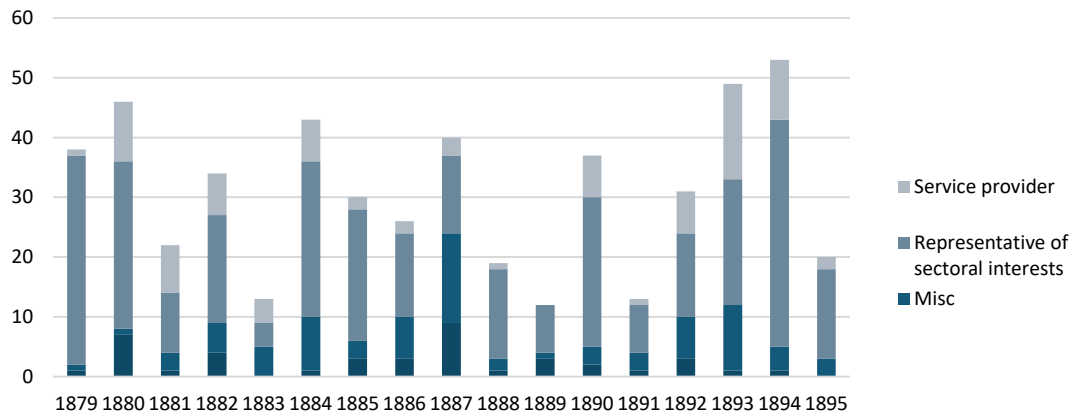
Dataset

'GISa Hungarorum (OTKA K 111766)', https://www.gistory.hu/docs/1_MO-HOR_Shp/1_MO-HOR_Shp_EPSG3857/, (accessed 31 Aug. 2024).

'The Provinces of the Austro-Hungarian Empire', https://services1.arcgis.com/HmwnYiJTBZ4UkySc/arcgis/rest/services/Province_Map_WFL1/FeatureServer, (accessed 31 Aug. 2024).

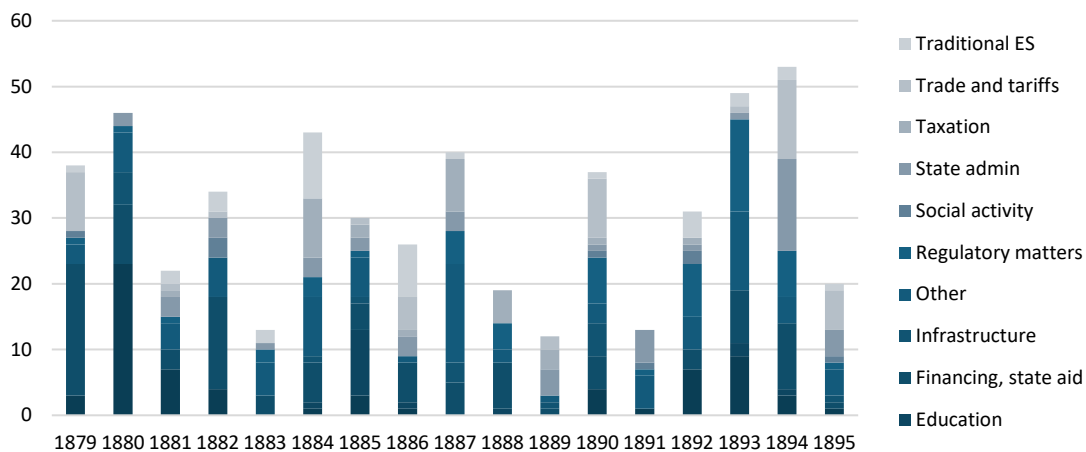
Supplementary figures related to parliamentary records

Figure 10: Mentions of the NHES and HES in parliamentary debates by year and perception of economic societies.



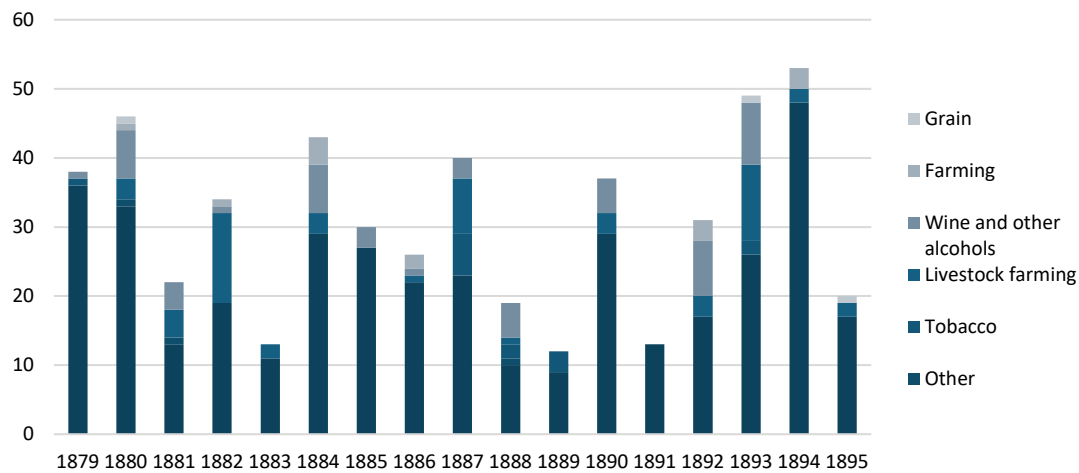
Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

Figure 11: Mentions of the NHES and HES in parliamentary debates by year and subject.



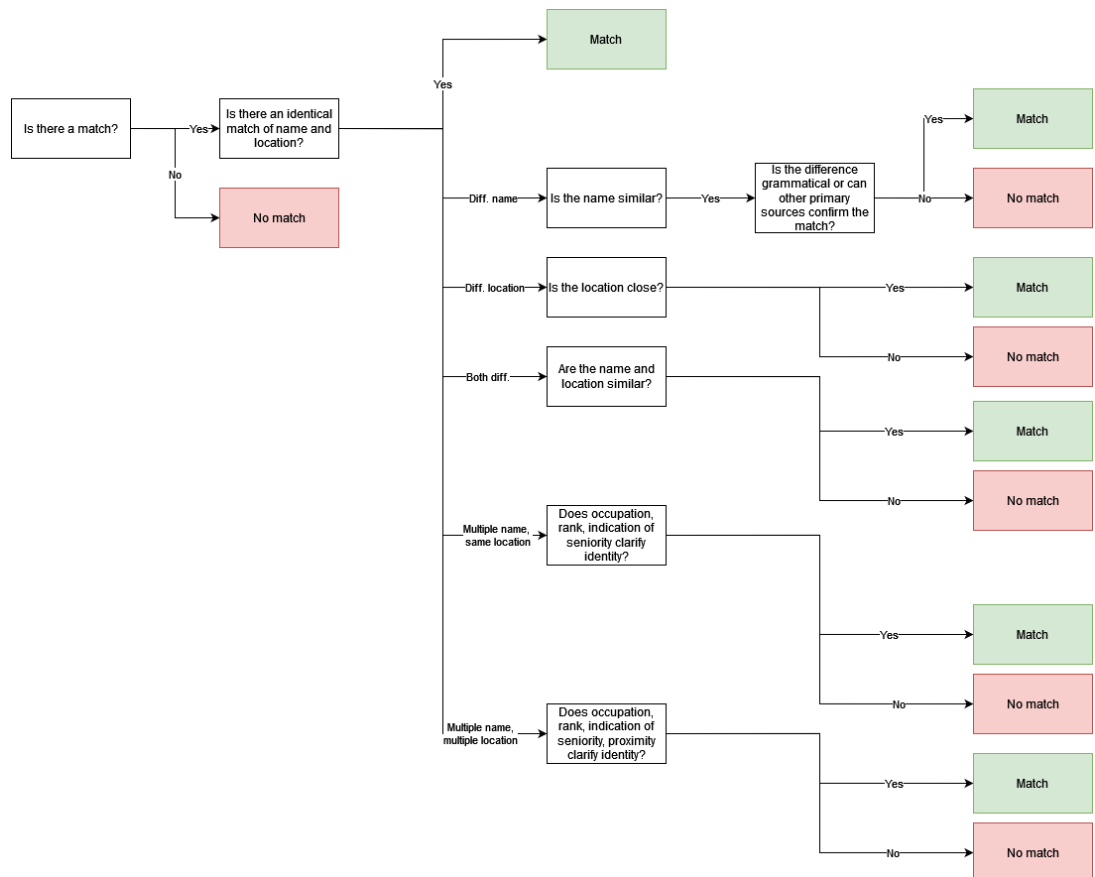
Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)

Figure 12: Mentions of the NHES and HES in parliamentary debates by year and sub-segment.



Source: own categorisation based on mentions in Főrendiházi irományok (1878 I.-1892 VI.), Főrendiházi napló (1878 I.-1892 VI.), Képviselőházi irományok (1878 I.-1892 XXXVII.), Képviselőházi napló (1878 II.-1892 XXVII.)
 Matching logic of the NHES membership list and the land survey of 1895

Figure 13. Matching logic used to identify NHES members in the 1895 land survey.



Sensitivity analysis for thresholds of land type calculations

Table 14: Sensitivity analysis for thresholds of land type calculations.

	Landholders with at least X% ploughland		
	X=20%	X=30%	X=40%
Calculated	1,076	1,008	893
Total	1,148	1,148	1,148
Ratio	94%	88%	78%

	Landholders with at least X animals	
	X=50	X=100
Calculated	1,081	983
Total	1,148	1,148
Ratio	94%	86%

	Winemakers with X cad. holds of vineyards	
	X=10	X=5
Calculated	171	280
Total	1,148	1,148
Ratio	15%	24%

Results indicate that, although there were no benchmarks for setting thresholds, calculations were not sensitive to the value of the threshold.

Calculation of farming intensity measures

Employee ratio: number of permanently employed employees / (size of ploughland + size of vineyards + size of gardens + size of plains + size of pastureland)

Machinery and tools ratio: number of tools and machines / (size of ploughland + size of vineyards + size of gardens + size of plains)

Excerpts of key sources

NHES membership list for 1895

As part of the annual report, the organisation disclosed its members' list. With a few exceptions, all members provided their occupation and location. Nobility rank and parliamentary role was often also noted.

Figure 14: Excerpt from the NHES membership list.

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		Tagdíj-hátralék	
		írt	kr.
	Andaházy Pál, fb., Nagy-Kolacsin, u. p. Dubnicz, Trencsén- megye	—	—
	Andráskovics József, földbirtokos, Nagy-Láng, Fejérmegye	—	—
30	Andrássy Sándor gróf, o. k., Velejte, Zemplénmegye, v. Buda- pest, Andrássy-ut 59.	—	—
	Andreae Emil, földbirt., Pölöske, u. p. Noszlop, Veszprémm. Andreánszky Gábor báró, Alsó-Petény, Nógrádm.	—	—
	Antal Ferencz, gt., Felső-Jattó, u. p. Tornócz, Nyitra megye	10	—
	Antal Sándor, fb., Jász-Apáti, Jász-N. Kun-Szolnokmegye	—	—
35	Apponyi Albert gróf, o. k., fb., Bpest, Egyetem-utca 2.	—	—
	Apponyi Géza gróf, fb., Hőgyész, Tolnamegye	—	—
	Apt Ödön, Pa-Kishalom, u. p. Adony	—	—
	Arany László, o. k., fb., a m. földhitelint. ig., Budapest, Bálvány-utca 7.	—	—
	Arián Károly, gazdasz, Putnok, Gömörmegye	—	—
40	Asztalos Nándor ifj., gazdasz, Kárász, u. p. Dencsháza	20	—
	Augusz Zsigmond dr., fb., Orosztony, via Gelse, Zalamegye	—	—
	Auspitz Ignác, Szolgaegyháza, Fejérmegye	—	—
	Auspitz Lajos, gazdasz, Clementina, u. p. M.-Kövesd, Borsod- megye, v. Budapest, Erzsébet-tér 13.	—	—
	Auspitz Kálmán, gazdasz, Budapest, Teréz-körut 24.	—	—
45	Auspitz Pál, birt., Szt.-János, u. p. Gönyő, Győrmegye	—	—
	Abrahám Hugó, fb., Apatin, Bács-Bodrogmegye	—	—
	Agoston József, főmérnök, fb., Budapest, Régi posta-utca 10.	—	—
	Arvay Ferencz, gazdatiszt, Ószöd, u. p. Falu-Nemes, Somogy- megye	—	—
	Ásványi Lajos, intéző, Kolozs-Monostor, Kolozsmegye	—	—
50	Baár József, fb., ur. tisztartó, Pa-Buzitó, u. p. Magyar-Czernya	—	—
	Babics József, urad. jószágig., Zsombolya, Torontálmegye	—	—
	Babochay László, kormányzó számtartó, Berzence, Somogy- megye	—	—
	Babocsay László, fb., Dubrova, u. p. Magasfalu, Pozsonymegye	—	—
	Bachár Antal, bérlő, Zala-Szántó, Zalamegye	—	—
55	Bahunek István, urad. kasznár, Somogy-Szobb	—	—
	Baich Milán br., fb., Szatumik, u. p. Lugos	—	—
	Baich Iván br., fb., Boesár, Torontálmegye	—	—
	Baik Gyula, gazdálkodó, Abony, Pestmegye	—	—
	Bajan Imre, urad. igazg., Nagy-Mihály, Zemplénmegye	—	—
60	Bajor József, gt., Rác-Almás, Fejérmegye	10	—
	Bajza Kálmán dr., fb., Duna-Tass, Pestmegye	—	—
	Bajzáth István, fb., Pészak, u. p. Nagy-Kikinda, Torontálmegye	10	—
	Bakay Dezső, urad. tisztartó, Nagy-Dorog, Tolnamegye	—	—
	Bakay Oszkár, gt., Zsigárd, Pozsonymegye	—	—
65	Bakó Gyula, fb., Felső-Rajk, Zalamegye	—	—
	Baksay Zoltán, fb., Nyir-Bogát, Szabolcsmegye	—	—
	Balás Árpád, (sipeki) k. t., gazd. akad. igazgató, Magyar- Óvár, Mosonmegye	—	—
	Balás István, (sipeki) kasznár, Kőbánya, Bánya-ut 17.	10	—
	Balás Iván, nagybirt., Elemér, Torontálmegye	20	—
70	Balás László, Mátra-Szöllős, u. p. Pásztó, Nógrádmegye	—	—
	Balási József, fb., Érkörtvélyes, Szatmármegye	—	—
	Balássy Árpád, fb., Csécsé, Nógrádmegye	10	—
	Balázs Izidor, gépészmérnök, Budapest, Andrássy-ut 48.	30	—
	Balázsovich Oszkár, fb., Jász-Monostor, Hatvan mellett	—	—

Source: Az Országos Magyar Gazdasági Egyesület Évkönyve az 1894-95-ik egyleti évre.

The 1895 land survey

The land survey collected all estates above 100 cadastral holds, their users, owners, the users' and owners' occupation, the user's legal basis for using the land (tenancy, ownership or beneficiary). Size of land types, permanently employed servants, tools and machinery, and the number of more important animals were also recorded.

Land type categories were: ploughland, garden, plains, vineyard, forest, reeds, other. Machine and tools categories were: locomobile, vehicle, threshing machine, seed drill, sieve, plough, trieur, chopper, harrow, cylinder, yoked wagon. Animals listed: cattle, horse, swine, lamb.

Figure 15: Excerpt from the 1895 land survey.

Source: Magyar Kir. Központi Statisztikai Hivatal (ed): A Magyar Korona országainak mezőgazdasági statisztikája.