The institutionalization of professional communities: Insights from studies of professionals in Hungary

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Doctoral Dissertation

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LIST OF ABBREVIATIONS

	general terms			
BA Business association				
BIA	Business interest association			
CEE	Central and East European			
CEU	Central European University			
EU	European Union			
IF	Impact factor			
MTMT	Hungarian Scientific Bibliography			
NIE	new institutional economics			
PA	Professional association			
PPS	Purchasing power standard			
PS	political science			
QF	Quality factor			
R&D	research and development			
SME	small and medium-sized enterprises			
TA	Trade association			
WoS	Web of Science			
	seed industry terms			
HSA	Hungarian Seed Association			
PVPN	Plant Variety Protection Non-profit Ltd.			
GPA	Grain Producers' Association			
HMC				
HSoyA Hungarian Soybean Association				
Jan 19	logistics terms			
IFKA Public Non-profit Foundation for Industrial Development				
II A I DINA	Hungarian Association of Logistics, Purchasing and Inventory			
HALPIM	Management –			
HLA	Hungarian Logistics Association			
LCF	Logistics Consultative Forum			
HACA	Hungarian Association of Customs Affairs			
AHF	Association of Hungarian Forwarders			
AHLSC	Association of Hungarian Logistic Service Centres			
ARTF	Association of Road Transport Firms			
NRTA	National Road Transport Association			
HRTA	Hungarian Road Transport Association			
NiT				
Hungary Federation of National Private Transporters				
HUNGRAI				
L Hungarian Rail Association				
HSF				
HFDP				
HFIWFF				
HCCI	• • • • • • • • • • • • • • • • • • • •			
HEALS				
CLD Club of Logistics Directors				
NLA	National Logistics Alliance			

1 INTRODUCTION

This chapter has two main goals. First, it introduces the research program on professional communities within which the articles of this portfolio dissertation were conceived. Starting from the main research problem and its relevance, section 1.1 introduces the three overarching questions of the research program. Section 1.2 defines the key elements of the conceptual framework of the program, while 1.3 and 1.4 review key points in the related scientific literature, identifying the most relevant research gaps.

The second goal of this introduction is to provide an overview and justification for the five articles which comprise the dissertation from the perspective of the overarching questions, highlighting their contributions to the research program. Section 1.5 connects the overarching questions and the identified research gaps to the theoretical ambitions and the specific research questions of the dissertation. Section 0 introduces and justifies the empirical approaches of the studies in the context of the approaches found in the literature, before listing the empirical ambitions and methodological choices of each chapter. Section 1.6.6 explains and justifies our case selection strategy for the four empirical studies of the dissertation in light of the empirical literature and the research ambitions.

1.1 Research problem

It is a widespread observation in contemporary societies that professionals organize their economic and political activities jointly, not only through private economic organizations (such as firms) but through forming professional communities. These communities can remain informal, but they often involve the creation and maintenance of formally institutionalized elements. Data on membership in formally institutionalized professional community organizations attest to the prevalence of these communities. Based on the World Values Survey data summarized in Table 1, globally a significant 10-20% minority of economically active individuals are members of at least one professional community, while around half of those are active members in their own assessment. While there is a major fluctuation in involvement, there is a significant increase in professional association membership from around 10% to 18.7% in the past two decades.

Table 1: Membership in professional community institutions among economically active WVS respondents [source: (Inglehart et al., 2020)]

Time period	1981- 1984	1989- 1993	1994- 1998	1999- 2004	2005- 2009	2010- 2014	2017- 2020
Inactive member of professional organization	8.5%		10.0		9.9%	8.2%	9.4%
Active member of professional organization	4.4%		8.2%		8.5%	5.6%	8.2%
Belong to professional association		10.2		9.9%			18.7 %
Did voluntary work for professional association		4.2%		4.9%			

Membership in these communities has its costs in terms of formal membership dues, the time and effort of voluntary work as well as other contributions. Yet, a significant part of professionals takes steps to create and maintain them. What is the rationale behind these decisions to institutionalize professional communities? This question was the main motivation behind my research program.

The existence of an institutionalised profession generally entails a dense institutional complex of informal networks, intellectual orders and more or less formalised associations. These institutions contribute both to the working of the professional community (e.g., to market coordination, trust building, or information sharing) as well as to the governance of the policy area (through self-regulation and through mediating between the government and the community).

There are three layers to this puzzle with three corresponding overarching questions of the research program. The first concerns what these professional community institutions contribute to their communities that make them willing to spend resources on their maintenance. Second, to truly understand what professional communities contribute to our societies, we also need to look beyond the what question and turn to how they are able to contribute in possibly beneficial or detrimental ways. Third, we need to understand how these institutions develop to achieve the above. The three overarching questions are strongly connected: rational stakeholders will only invest in these institutions if they expect them to contribute to their goals while existing institutional features of communities constrain both their future development and what they are able to provide.

1.1.1 What do professional community institutions contribute?

The overarching question of (i) what do professional community institutions contribute? is a crucial starting point in understanding these phenomena. As Coates et al. (2011)

emphasise, one of the most important tasks ahead of us in the study of interest groups is to explain the diverse activities of associations – the typical central institutions of professional communities – along with their relationship to economic development. Different strands of scholarship have distinctly different views of the functionality of professional community institutions, and they often neglect alternatives, assuming the central importance of roles that best fit their theoretical frameworks.

Scholars working in the traditions of public choice (Coates & Heckelman, 2003; Knack, 2003; Pyle & Solanko, 2013) see these communities as vehicles of redistributive rent-seeking. New institutional economists approach them as an additional level of transaction enabling institutions, complementing the private and public orders (Doner & Schneider, 2000; D. Duvanova, 2007; B. R. Schneider, 2010). Organizational studies (Bennett, 1995, 2000) and governance scholarship (J. Greenwood, 2001, 2003; Ivanova, 2018; Streeck et al., 2006) often sees professional community institutions as community-level providers of shared informational and interest representative services.

The available empirical evidence demonstrates that each of the theories of functionality is relevant in some cases (Doner & Schneider, 2000; Saitgalina et al., 2016) but offers limited help in deciding on the scope of their validity. We know that professional communities can institutionalize in various ways to contribute to various social and economic goals but studying when and how they do so require us to dig deeper. This dissertation is a collection of studies that aim to develop existing theories in a way that enables us to better account for some key institutional issues surrounding professional communities. The five articles which make up this portfolio dissertation contribute in various ways to this general goal of the research program, complementing each other. The first overarching ambition is to move beyond descriptive accounts of what professional communities do, building explanatory theories of what and how they might contribute to governance.

1.1.2 How do professional community institutions contribute?

The second overarching question is (ii) how are professional communities institutionalized to fit the needs of their members – and society in general? Approaching this question requires us to build upon the theories on specific roles, situating professional community institutions in the mechanisms of governance.

By drawing on new institutional economics and transaction cost theory (Greif, 2008; Greif et al., 1994; Ménard, 2004) we can explain the transaction enabling roles of

professional communities as they institutionalize mechanisms in between spontaneous private order and public order governance. Theories of industrial organization and business collective action can be used to explain the self-regulatory activities of professional communities (Héritier & Eckert, 2009; Marques, 2017), as extensions of organizational governance strategies to the community level. Public choice theories can shed light on the roles of professional community institutions in influencing public policy decisions (Jordan & Halpin, 2004; Pyle & Solanko, 2013), where they act to orient and enforce collective action to achieve club goods.

The main ambitions of the dissertation connected to this question are hypothesis-testing (Chapter 3) and theory-building (Chapter 4) around the transaction-enabling role of professional community institutions. The selection of that role can be justified by its crucial nature to successful professional community institutionalization: governing the basic professional activities within the community seems to be a precursor to successfully meeting other collective challenges (Mike & Megyesi, 2018). To better understand the contributions of professional communities (first question) or their processes of institutionalization (third question) we need a firm theory of how they contribute to the governance of (broadly understood) transactions.

1.1.3 How do professional community institutions develop?

The third overarching question concerns when and how professional communities can institutionalize those structures. This piece of the puzzle also has a rather fragmented scientific literature. Institutional economics and political science both rely on the theory of collective action (Olson, 1971) as a point of departure in explaining the underlying institutional issue, complemented by the exchange-based theories of institutional logics (Bennett, 2000; Schmitter & Streeck, 1981/1999), by transaction cost theory (Bennett, 1996) and population ecology (Berkhout et al., 2015; Streeck et al., 2006).

The theories in use highlight different contextual elements as key to the institutionalization process, linking them to specific institutional features. We have a few competing propositions on when each of these perspectives would be more relevant in explaining institutionalization, and a lot of empirical evidence on some typical institutions — mostly business associations — of professional communities, but that knowledge is not well organized and integrated into broader theories of political science and institutional economics.

This dissertation intends to clarify a few elements of this fragmented field, corresponding to an explanatory theory-building research ambition. I cannot put forward an integrated grand theory of professional community institutionalization but hope to develop certain aspects of our understanding, while suggesting future avenues for theoretical synthesis.

1.1.4 Relevance of topic

The collective action of professionals is a classical topic of public choice studies, as these institutions are typical elements of interest representation and lobbying, connecting private actors to governments (Knack, 2003; Olson, 1971). The study of professional communities is also relevant to scholars of public policy and governance, as they provide one of the major institutional alternatives to problems of policy implementation and governance. The internal governance of these communities as a sort of local politics has been a fruitful topic of analysis for political science scholars (Ostrom, 2007, 2010). If we are seeking to understand whether a given social goal should be governed through private or public institutions or some combination of the two, we need to know the possible extent, roles, and prerequisites of private governance at the community level. The institutions of professional communities can also be relevant beyond their direct governance roles, acting as intermediaries between private and public actors involved in governance.

Despite their importance, our scientific knowledge of these institutions is somewhat lacking and mostly fragmented. In political science, the theories of collective action and governance both build upon the existence of organised interest groups but have very little to say about the way potential groups become institutionalised, coherent communities, or about their motivations in doing so. This also leads theories of governance to often neglect the elements of professional communities which are not directly related to policy making.

The practical relevance of the topic comes from the widespread nature of business and professional associations. A more accurate evaluation of these institutions from the perspective of economic development might form the basis of supporting or hindering their development for both economic actors and policymakers. My research also aims to explore the institutional and contextual factors which contribute to the successful institutionalisation of professional communities. These results could be useful for both potential and existing professional communities as well as policymakers looking to design or facilitate governance solutions involving these communities.

1.2 Conceptual framework

This section defines the basic conceptual framework of the dissertation, starting with professional communities and the various elements of their institutionalization, then proceeding to their central formal institutions which are professional associations.

1.2.1 Professional communities

A *professional community* consists of individuals bound together by a common identity (with reasonably clear limits), sustained by a common language, shared values, defined roles, and a common training or socialization process (Goode, 1957, p. 194). Three mutually linked core elements define such a community: the common activities of its members, the knowledge base of such common activities, and the shared values or interests stemming from the first two.

Although most research focuses on strongly formalized communities which are often called *the professions*, I define professional communities in the broad sense, as not only formally organized professions, but *also partly informal communities of people engaging in professional activities within a given area of knowledge*. This is a generalization of Mike's earlier definition of professional communities, which focused on the more traditional economic activities of *trades*, *crafts*, *lines of business*, *or industries* (Mike, 2017, p. 9), whereas my conceptualization includes other epistemic communities, such as communities of scientific disciplines.

1.2.2 What institutionalization means for a professional community

Professional communities perform various joint activities. Some of this activity is coordinated at a spontaneous level, as is the case with informal networks or ad-hoc interest coalitions, but it often takes on institutionalised forms, which contributes to the stability of solutions to coordination and collective action problems.

I approach the institutionalization of professional communities through the *institution* concept common to new institutional economics and political science: institutions are the rules of the game of societies, structuring social interactions by defining incentives and sanctions attached to various actions, thus reducing uncertainty about interactions (Moe, 2005; North, 1990). Institutionalization for a community means the creation and maintenance of institutions thus understood to structure and shape the activities of community members within and outside of it. These institutions can be both informal habits and implicit expectations related to professional practice, or formally defined organizational rules and policies.

Institutional economics commonly conceptualizes institutional statements as parts of solutions to typical collective action problems, that is, action situations where actors would collectively be better off under successful cooperation compared to the outcome obtained from individual optimization. Two main structures of collective action problems and their combinations are crucial here. Coordination problems concern situations where participants need to find a common, coordinated solution, but having found one, follow it based on their individual rationality without the need for further incentives. Cooperation problems involve situations where it would be individually rational not to cooperate even if a coordinated solution is found, creating a need for cooperation incentives to achieve collectively optimal outcomes (Ostrom, 2005).

Several possible collective action problems requiring institutional solutions have been proposed in the context of professional communities. These communities often cultivate goods that can be considered common pool resources, such as their shared reputation, or public goods, such as the benefits of successful self-regulation or influencing public policy decisions (Héritier & Eckert, 2009). The collective provision of these goods can be organized in a spontaneous (ad-hoc) fashion under favourable circumstances (Olson, 1971), but they often require institutionalized collective action. Institutions add three important elements to the resolution of collective action problems.

The first way in which institutionalized structures contribute to collective action is rather simple: they help synchronize expectations by defining more-or-less stable solutions. While institutions are certainly malleable, they provide defaults and focal points to stakeholders, making it easier for them to find common solutions. Having an institutional statement of a shared expectation is often enough to resolve coordination problems, but cooperation problems typically need more elaborate solutions (Ostrom, 2005).

Economic theories of collective action highlight the second addition of institutions to collective action problems: they define and structure the enforcement of sanctions (Greif, 2006). By introducing negative or positive sanctions into the action situation, individual payoffs can be changed to make cooperative strategies individually rational, aligning individual and community interests. Although sanctioning could develop spontaneously, institutionalized sanctions have multiple advantages, as they are more permanent, therefore better known and possibly perceived as more legitimate. Embedding a sanction in a broader institutional framework of governance can also provide solutions to the problem of second-order sanctioning, where actors are incentivized not just to comply, but also to enforce compliance by others (Ostrom, 2005).

Institutions also reduce the transaction costs of collective action in two main ways. They give structure to the intellectual debate that is essential to successful collective action. A professional community is not just a group of individuals and their organizations trying to obtain shared economic benefits, it is also a common search for professionally good ends and means (Mike, 2017). Actors need to understand and accept (at least implicitly) the professional community's goals and rules, which requires a shared understanding of what is professionally acceptable or desired by the community. By providing a stable, institutionalized structure to these professional debates, communities can reduce the costs compared to ad-hoc discussions. This intellectual side of professional institutionalization mirrors the more commonly studied instrumental side of collective action. Although a shared knowledge base, identity, and a shared understanding of goals and interests could be conceptualized as public goods for the community, they have a special role in enabling all other meaningful collective action.

This understanding of professional communities as institutionalizing intellectual and instrumental aspects at the same time is similar to the conceptualization of epistemic communities (Dunlop, 2012; Haas, 1992) in policy studies. The main difference is that since our perspective approaches these communities from below, it focuses more on their internal governance structures.

The intellectual aspect of professional institutionalization leads us to the final – but in some sense primary – role of institutions: they help construct a professional identity (Caza & Creary, 2016; Roberts & Dietrich, 1999). Institutions contribute to professional identity building foremost through defining the borders of a professional community. Having well-defined community borders enables collective action by reducing the costs of finding other actors, while also excluding those who do not comply with the shared expectations from the benefits of cooperation. These community borders might correspond to the formal membership of a professional association, where institutional structure becomes the key defining element. Even if they do not, any proposition about shared interests or values put forward in a professional intellectual debate will include (even if implicitly) a definition of an underlying professional community. These potentially competing propositions on what a professional community includes also develop in parallel with the joint activities of communities.

1.2.3 Layers of institutionalization of professional communities

Most political science research on professional communities focuses on their professional associations, as they are the main, formal elements. While our starting point was also that

of associations, the dissertation tries to reflect the fact that a real professional community typically features many nested and interlinked situations of collective action, with different institutions contributing to the resolution of various problems. When organizing our knowledge of the different forms of professional community institutions, it is useful to distinguish the layers of institutionalization within a community. Combining Greif's (2008) typology of institutional mechanisms with Schmitter & Streeck's (1981/1999) foundational conceptualization of interest organizations, we can distinguish the layers by how they relate to the individual community members and other institutions.

Note that throughout the dissertation I distinguish the *levels* of professional community institutionalization, referring to the institutional development stage or institutional strength of each institutionalized unit (such as an association), from the *layers* of professional community institutionalization, which refer to where they are located in the complex of governance institutions. Section 2.4.2 describes the different levels of institutionalization for the case of a central group of professional community institutions, business associations.

Table 2 below lists the identified typical layers of institutionalization along with their main features.

Table 2: Layers of institutionalization [author's edit]

Layers of	Institutional forms		
institutionalization			
membership layer	informal institutions of cooperation private hierarchies: firms, organizations horizontal cooperation: contractual partnerships, alliances, business groups & networks around a private central actor		
associational layer	3rd parties at the community level: professional associations, networks with an association at their centre		
associational system / community layer	professional meta-associations, horizontal cooperation of professional associations		
policy community layer	officially recognized associations and meta-associations, governmental organizations, associations of other stakeholders		

The overview of institutions in this section begins at the layer of individual members and their horizontal relationships, proceeding to the highest institutionalized layers of the governance of professional communities.

1.2.3.1 Membership layer: formal and informal private solutions

Starting from the most basic units, individual professionals can form both informal professional relations with each other and join private organizational hierarchies (mostly firms). I refer to this layer as the *membership layer* of professional communities, as it comprises the individual and organizational units of a community. Although this layer is traditionally the topic of sociology, business studies, and organizational studies, I consider it an important piece of the governance puzzle. Both informal institutions and organizational governance mechanisms can be important substitutes and complements to community institutionalization, therefore we included them in our data collection when possible.

1.2.3.2 Associational layer: professional associations

The second *layer* to distinguish is that *of associations* formed by individual or organizational economic units. Professional associations usually correspond to a specific professional community, even if their membership does not cover it completely. Although a single association may cover an entire professional community, it is generally narrower than that, based on segments of the profession.

The basic distinguishing features of professional associations are that they are separate, somewhat formalized third-party organizations, distinct from both the individual and organizational members of the professional community and their ad-hoc alliances or even institutionalized forms of bilateral cooperation (Doner & Schneider, 2000; Lindberg et al., 1991). What also differentiates them from other professional organizations, such as business corporations is that they are not profit-oriented, but rather intended to further the interests of their underlying professional community (Prüfer, 2016). Professional associations are distinct from governmental organizations of professional governance in that they feature voluntary, private cooperation of professionals and their organizations. This includes semi-voluntary or mandatory membership organizations if they also institutionalize voluntary cooperation, and are thus not entirely public-order governmental institutions.

There are many related concepts used in political science and economics for institutions that belong to this category: business, professional, sectoral, industrial, and cluster associations, all sorts of entrepreneurial and rotary clubs, as well as chambers of commerce. The two key concepts that I use in this dissertation are professional and business associations. Professional associations are the more general category, which may include business associations. They are based on professional communities in the broad

sense, which may include professions and other narrower occupational communities, but also communities of professionals from different occupations or trades, sharing some more general traits. The most prevalent example would be professional groups of entrepreneurs, who often form communities without more specific occupational foci. Business associations are narrower in that they are based on communities of businesses or entrepreneurs, which are subsets of all possible professional communities.

A main defining feature of all professional (or business) associations is their underlying community, with its interests and perspectives that they are intended to further. Following Schmitter and Streeck (1981/1999) we can distinguish five different dimensions along which professional associations can define their associated communities:

- Occupations or goods: trade associations, industry associations, general entrepreneurial associations
- Geographical limits: local, regional, national, and international associations
- Membership patterns: individual membership, organizational (or firm) membership, meta-association (members are other associations)
- Business segments: organization (firm) size, profit orientation (e.g., associations
 of not-for-profits), ownership patterns of members (e.g., associations of foreignowned or domestic firms)
- Individual characteristics (of professionals of business owners): age, gender, status, value-orientation (e.g., associations of Christian/young/female entrepreneurs)

The five dimensions can intersect in various ways, defining many types of associations.

Throughout the research program, we use the term *professional association* to mean all the above institutions which fit our criteria. The term *business association* is used to refer to professional associations with an underlying business community comprised of firms or individual professionals, excluding associations of not profit-oriented professional communities.

1.2.3.3 Community layer: meta-associations and associational systems

At the *layer of* a whole or broader *professional community*, we are more likely to find what are called meta-associations, which are associations of associations, providing a higher level of coordination. It is worth mentioning that individuals or organizations can

be members of meta-associations directly if they are key actors within the professional community, so the institutional hierarchy is often not so straightforward.

Following Schmitter and Streeck (1981/1999) we can conceptualize associational systems along two main dimensions. The first, *differentiation* refers to how associations relate to each other: how they position themselves to meet the coordination and other governance demands of a community, and whether they compete or cooperate horizontally. These features link the dynamics of the associational layer to that of associational systems.

The second dimension is that of *integration*, which refers to the formal institutional structures created by associations – and possibly other actors from other layers – at the community level. Associational integration can take on many forms, from looser institutionalized cooperation to the complete hierarchical coordination of the whole community. The most common institutional units at this level are meta-associations, which are associations of associations. The structures and dynamics observed for this layer are expected to be determined by features at the membership and associational layers, as well as the broader governance context (Berkhout et al., 2015; Schmitter & Streeck, 1981/1999).

Depending on the local or global features of professional activities and regulations, we might find an even higher level of international or global (meta-)associations. International associations are generally meta-associations with national or regional associations as members, but individual or organizational level membership is also possible. Whether they formally organize and channel the activities of lower layers of professional communities or define their own, looser *international professional communities* depends on the underlying intellectual orders and the governance context which determines their public policy involvement (Berkhout et al., 2017; J. Greenwood, 2001). In more internationalized professional communities subject to supranational governance, these higher-level institutions can replace most of the roles typically fulfilled by local or national professional associations.

1.2.3.4 Policy community level

Turning to public order institutions, we find the *policy community level* of professional institutionalization. The institutional mechanisms at this level involve several stakeholders that are not part of the professional community but regularly interact with it for policymaking purposes. Typical actors at this level would be governmental and

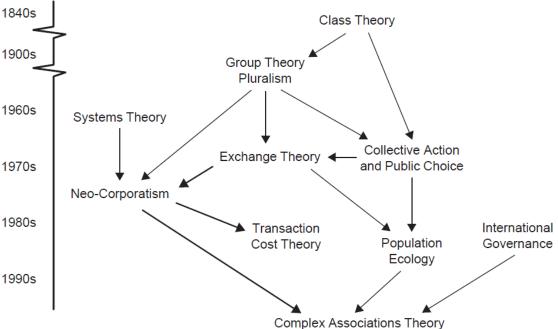
international organizations, state-owned enterprises, and representatives of stakeholder groups affected by the activities of the professional community. The distinction between this level and the community level of institutionalization can be blurred in two ways. First, associations and meta-associations might receive an official public status while also institutionalizing voluntary collective action, thus belonging to both institutional levels. Second, government professionals and organizations can become members of national or international professional (meta-) associations, participating in the communities directly.

1.3 Overview of literature on professional community institutionalization

What do we know about the institutionalization of professional communities? We can structure our knowledge with an overview of theoretical developments in political science on this topic in Figure 1. This figure was created for a review of theories of business interest associations, which are probably the most studied elements of professional communities. This means that with a few additions, it can include most strands of political science which are relevant to our overarching questions.

Figure 1: Overview of the evolution of theories of business association [source: (Lang et al., 2008, p. 18)]

Class Theory



1.3.1 Classical approaches to interest organization

The classical theories of the organization of business interests (class theory, group theory & pluralism, neo-corporatism) generally approached professional communities as vehicles to attain and wield structural power and influence over social decisions. This means that they generally assume that the role of professional community institutions is

to enable their communities to increase their economic rents, making these perspectives less useful for studying the first overarching question.

The meta-analysis of the literature on professional and business associations conducted for this dissertation only turned up a handful of relevant contributions from these classical strands, which highlight the combined roles of policymaking macro-structures and market structures in determining the influence of organized business interests (Bell, 2006; Paster, 2015).

These approaches are also severely limited in answering our big questions on professional community institutionalization, as they focus on how macro- and meso-level structures influence the power or influence of specific groups, without digging into their institutionalization. Class theory assumes that certain social structures (classes) are more or less fixed elements of institutionalization and that these macro structures influence how professional communities organize themselves. Pluralism and neocorporatism both assume certain actors, such as interest groups and government regulators are more or less given elements, along with their typical patterns of institutional interactions.

More recent theoretical developments in the study of business communities have proven more successful in opening up the black box of institutionalized communities, by studying which professional communities are institutionalized and how that happens.

1.3.2 The economics of professional collective action

The most influential of these developments has been the theory of collective action in public choice theory. The typical explanation in public choice theory echoes the suspicions against any congregation of businesspeople, which have been present in economics since Adam Smith (1776/2003). Followers of this tradition usually conceptualise professional communities as vehicles of extractive rent-seeking (Ekelund & Tollison, 2001). As found in Olson's (1971) seminal study, collective action by groups of professionals can be a tool for gaining influence over policy-makers, thus allowing even smaller firms and individual professionals to obtain economic rents from policies.

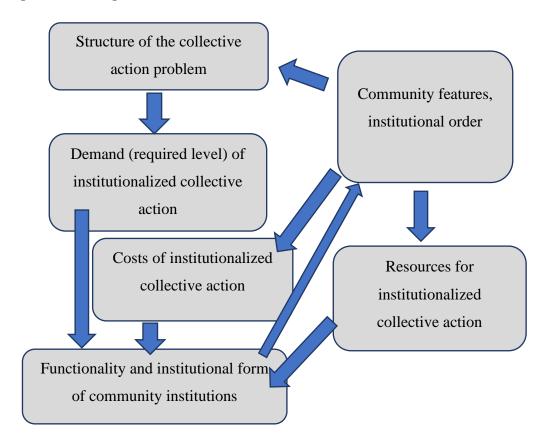
As public choice scholars have approached the institutions of professional communities through their rent-seeking role, their contributions to the functionality puzzle centre around whether they fulfil this role, and what broader social effects that leads to. More recent contributions to this theory have largely kept the negative point of view, even as they reconsidered the possible effects of association activity on social productivity (Mitchell & Munger, 1991). The empirical evidence has been mixed on whether

associations contribute to socially detrimental rent-seeking, or whether they provide benefits due to enabling trust between community members (Barnett, 2013; Battisti & Perry, 2015; Coates et al., 2011; Coates & Heckelman, 2003; D. Duvanova, 2007; D. S. Duvanova, 2011; Knack, 2003; Perry, 2012; Pyle & Solanko, 2013; Ville, 2007).

Regarding the puzzle of how professional communities are institutionalized, public choice theories build upon Olson's (1971) famous theory of collective action. According to this theory, group features (mostly size and heterogeneity) strongly influence the possibilities of community-level cooperation, but the impediments facing larger groups can be overcome through the introduction of selective incentives by political entrepreneurs. These theories have found a place for institutionalization in the study of professional communities, by analysing institutions as repeatedly applied, more-or-less stable elements of collective action situations, which are put in place to change pay-off structure, allowing for mutual cooperation. In this sense, institutionalized collective action differs from ad hoc collective action in the relative stability of its patterns.

Figure 2 below outlines the main elements of the theories of institutionalized collective action.

Figure 2: Conceptual map of the elements of institutionalized collective action [author's edit]



While empirical studies have demonstrated that the features of underlying communities and the attainable collective goods do explain the level of institutionalized collective action of professional communities, results on the relative importance of these factors have been mixed (Barnett, 2006, 2013, 2018; Jordan & Halpin, 2004; Newbery et al., 2013, 2016).

There are two major limitations of public choice theories of professional community institutionalization. The first concerns the sources and institutionalization of the selective incentives central to institutionalized collective action: what sort of goods can be provided by these community institutions, and how are they able to provide them? The second stems from the empirical observation that there are many institutionalized professional communities without significant influence over policy decisions. Are these failed attempts at rent-seeking, or do they provide more to their members than what public choice theories commonly hypothesize?

1.3.3 Exchange theory and the 'logics of association'

The exchange theory of business interest organization provides a broader, more comprehensive, and more positive view of what these institutionalized communities can

provide. It focuses on professional institutions as the central elements of these communities, theorizing that they enter into transactions with various stakeholders, offering different goods and services to each in exchange for resources (Schmitter & Streeck, 1981/1999). Associations then use these resources to further develop their institutional autonomy, seeking a balance between the different groups between which they act as intermediaries. Figure 3 provides an overview of these exchanges and their corresponding institutional "logics of association".

The Logic of Effective Implementation Firm Government "Sell Compliance" "Provide Services" through by means of Monopoly Goods Selective Goods Services Control to over Members Members The Logic of Characteristics The Logic of Characteristics Organizational Properties^a Membership of State Agencies of Members Influence Participation Representation of for Members Members "Exert Pressure" "Create Consensus" around Solidaristic Goals Public Goods Club Movement The Logic of Goal Formation

Figure 3: Schmitter and Streeck's competing "logics" of associative action [source: (Schmitter & Streeck, 1981/1999, p. 21)]

a Choice of present organizational properties restricted by past organizational properties.

Exchange theories offer a detailed answer to what professional community institutions can provide for their members and external stakeholders. They can exhibit firm-like features as they provide services to institutionalize selective incentives for collective action. They can be club-like in that they create consensus through participation among members to guide collective action. They can institutionalize interest representation for their members, acting as a political movement. They can institutionalize control over their

members, allowing them to facilitate policy decisions and implementation, exchanging that for resources with government organizations.

Schmitter and Streeck (1981/1999) propose four main logics which explain the institutional development of professional associations. The first is the logic of *membership*, which concerns the transactions between the members and the organization. While associations might achieve economies of scale, the theory proposes that this logic also constrains their expansion, as a larger membership means more heterogeneous service demands. The second is the *logic of influence*, which concerns the relations between associations and government organizations. Generally, the larger an association, the stronger its claim to represent a significant community of interests, increasing their influence. This would lead to associations looking to expand, until the costs of doing so outweigh these benefits. Two other logics relate to these costs of institutional growth. The logic of goal formation parallels our discussion of the intellectual sides of professional communities, as it concerns the internal dialogue of the community, without which institutionalized collective action would not be possible. The final proposed pattern is the logic of effective implementation, which concerns the other side of the transactions between associations and government, that is, how associations can contribute to the implementation of public policy. While the relationship between implementation and group size is not clear-cut, generally both of these logics define limitations on the size and heterogeneity of a community that an association is able to coordinate and represent.

Combining the logics to explain institutionalization patterns, Schmitter and Streeck (1981/1999) theorize that associations need to strike a balance between them, calculating the benefits (mostly in influence) from an increase in size versus the costs of coordinating and responding to the needs of a larger membership. This balance can be used to explain the growth, differentiation, and integration patterns of community institutions, as a growing empirical literature attests (Bennett, 1995, 1999a, 1999b, 2000; Hedberg, 2016; van Waarden, 1992; You & Guzman, 2019).

While exchange theories highlight the importance of various roles of professional associations, they do not account for what associational functions correspond to those roles and how these institutions contribute to governance. Those questions lead us to another theoretical strand based on transactions between individuals and organizations.

1.3.4 New institutional economics: the institutions in-between

Another strand of literature, based on new institutional economics [NIE], also sees professional community institutions in a much more favourable light than public choice theory. This strand is labelled transaction cost theory in Figure 1, as that is one of its core elements (Williamson, 1979), but it also includes other elements from NIE, such as information asymmetry and the problem of credible commitments, as well as the governance structures of transactions.

Studies in this tradition found that the institutions of professional communities pursue many other goals besides 'rent-seeking' and that they function as complex institutions comprising many more elements beyond selective incentives. In this view, the collective action of professionals may contribute to maintaining the necessary conditions for functioning markets against the perils of government failures (Doner & Schneider, 2000; Prüfer, 2016; B. R. Schneider & Doner, 2000) or of public and private opportunism (Greif et al., 1994; Larrain & Prüfer, 2015; Masten & Prüfer, 2014; Pyle, 2005, 2006a). These activities of associations lead to lower transaction costs, therefore to more value-creating economic activity, which is in stark contrast to the view of associations as rent-seeking devices.

While these findings enhanced our knowledge of professional communities immensely, they also mean that simple answers to the puzzle of functionality are rather unlikely. The more fruitful research direction has been to assess how these institutions are able to fulfil their various social roles. A key element specific to professional community institutions is that they are located between organic (spontaneously developed) private-order institutions and public-order (governmental) institutions in systems of governance. Table 3 illustrates this by situating professional associations in Greif's (2008) typology of contract enforcement mechanisms: they are designed, private-order institutions along with private organizational hierarchies.

Table 3: Professional institutions in the typology of contract enforcement mechanisms [adopted from (Mike et al., 2018), based on (Greif, 2008)]

	Institutional design	
Actor operating		
mechanism	Organic	Designed
Private-order	Moral rules	Corporate hierarchies

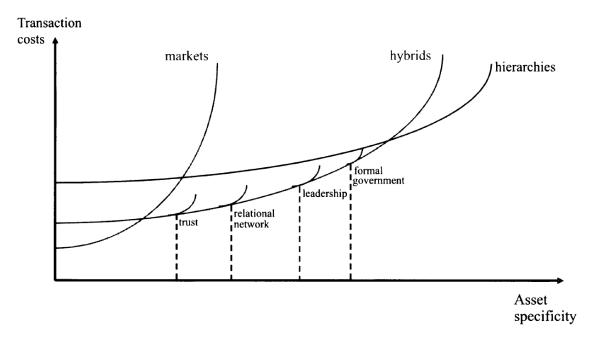
	Social norms Reputation Informal relational contracting	Professional associations (business, trade & industry associations, entrepreneurial clubs, cluster associations etc.)
Public-order (government)		(Civil) law Regulation by agency

This location in-between means that professional associations build upon the spontaneous private order of markets and professional communities but are also able to overcome some of their limitations due to their planned nature. They also differ from public-order institutions in that they are private, voluntary institutions. Thus, we can expect professional associations to act as bridges connecting informal community structures and private economic units to the formal public order.

The main direction in which NIE scholarship attempted to provide an answer to the puzzle of how professional communities are institutionalized is to link their institutional development to specific social or economic roles. According to the NIE of professional communities, we can expect their economic roles to be influenced by the limitations of the alternative governance mechanisms. This was famously formalized by Ménard's (2004) theory of hybrid organizations illustrated in *Figure 4*.

Figure 4: Ménard's typology of hybrid organizations [source: (Ménard, 2004, p. 369)]

A Typology of Hybrid Organizations



This group of institutions (including professional associations) is expected to be relevant when the costs of market coordination are high but maintaining formal hierarchies would be too costly. Ménard identified four main elements which are institutionalized by these organizations: trust, relational networks, leadership, and self-government. As hybrids progress towards developing formal government, they take on more formalized coordination roles, increasing their transaction costs (Bennett, 1996; Yu et al., 2006).

A more recent theory within the NIE of professional communities goes beyond the transactional elements of these institutions, drawing on the sociology of professions (Roberts & Dietrich, 1999). Adopting the concept of intellectual orders from Polanyi (1951/2010), Mike (2017) approached professional communities as the institutionalized sides to the ongoing debates which are inherent to professional activity. In this view, professional associations are not simply adapting to features of their underlying communities, but provide institutional structure to debates on how a community defines itself, its shared values and goals, and the acceptable ways of achieving those goals (R. Greenwood et al., 2002). This professional debate is more than interest articulation, as it concerns the basic questions of the given community's identity.

According to Mike (2017), a professional community needs to institutionalize three sets of rules to successfully engage in these debates. The rules of competition define who can participate in the debate (essentially the extent of the professional community). The rules

of consultation define the acceptable ways of putting forward arguments (how the professional debate happens), while the rules of persuasion define the shared forums for debate. The theoretical framework of professional communities as intellectual orders provides an important piece of the puzzle of how these communities are institutionalized along the transaction-based theories of NIE, but we have very limited results on how such intellectual differences influence institutional features and vice versa.

1.3.5 Population ecology

Theories of population ecology were used to explain changes in associational populations, analysing the extent and trends of associational development at higher (sectoral or national) levels (Berkhout et al., 2015). A major novelty of this approach is that it allows for the inclusion of networks of associations and governance networks in the analysis (J. Grote, 2008; Lang, 2008; Schmedes, 2008). Their most important contribution is to highlight how the network structure of associational systems and of the underlying communities determine the patterns of differentiation and integration in professional community institutionalization together with the broader governance frameworks. Although it does not include intellectual elements, this approach is able to integrate structural features of governance in its theories from all layers of institutionalization, making it a suitable starting point for quantitative analyses of professional communities.

1.3.6 Recent developments: international governance & complex association theory

Two more recent theoretical developments are worth mentioning in the study of
professional community institutionalization. Theories of international governance react
to recent developments in the globalization of governance structures. Their key
contribution is explaining the various strategies that national and regional professional
communities adopt to deal with the challenges of globalization. They highlight that the
challenges of global governance drive both increasing differentiation at the national level,
and an increasing integration at the international level of associational systems. (Ibsen &
Navrbjerg, 2019; Lehmkuhl, 2005; Streeck et al., 2006). More recent studies in this strand
adopt the so-called complex association theory perspective, which combines theories of
neocorporatism, exchange theory, population ecology, and international governance
(Berkhout et al., 2017; J. Grote, 2008; Schmedes, 2008). They consistently find that
service-provision aspects of associations become more important as their policy influence
shrinks, moving them closer to the logic of membership.

Similarly to other strands analysing professional community institutions from a top-down perspective, most of these complex theoretical frameworks still do not account for the

internal institutional complexity of these communities. They also typically overlook the intellectual sides of professional communities, as their analysis focuses on formal institutional configurations.

1.3.7 Overview of theoretical strands, results, and limitations

Table 4 below summarizes the overview of the literature elaborated in this section. It also features the main limitations identified for each strand of literature. The next section turns to the discussion of those limitations which are most relevant for situating the contributions of this dissertation.

Table 4: Strands of literature, main results, and limitations [author's edit]

	Approach to roles	Elaborated mechanisms:		Empirical scope:	
Strands of	of professional	what they add to the how		level and typical case	Main limitations: what
literature	communities (what)	questions	Main arguments	selection	they do not include
Classical		How formally			Determinants and
theories: group		institutionalized		Meso and macro	processes of community
theory,		communities exercise	Market structure and macro-structures	levels: formal	institutionalization
pluralism,		influence and power over	of policy making determine the power of	institutions of	Identity and intellectual
neocorporatism		policymaking	organized professional interests	governance	orders
		Whether a community is			Institutional roles beyond
		able to organize the			influencing policy
	Assumes that their	provision of public goods	Successful collective action depends on	Membership and	decisions and
	role is to influence	such as policy influence	the distribution and size of potential	community levels:	institutionalization beyond
Collective	public policy	How community	benefits, the costs of organization, and	professional	selective incentives
action & public	(redistributive rent-	institutions contribute to	the institutionalization of selective	communities with	Identity and intellectual
choice theory	seeking)	collective action	incentives.	clear policy goals	orders
			Associational development reflects a		
			dynamic balance between the logics of		The roles of community
			membership and influence		institutions (services and
			corresponding to the two assumed		influence for what?)
	Assumes that their	How professional	functions.		How community
	role is to provide	associations develop	Associational system dynamics are	Associational level:	institutions fit into
	services internally or	How associational systems	explained by the segmentation of the	Populations of	governance frameworks
Exchange	to influence public	are formed at the	community and the costs of internal &	associations (mainly in	Identity and intellectual
theory	policy	community level	external coordination.	developed countries)	orders

	Approach to roles	Elaborated mechanisms:		Empirical scope:	
Strands of	of professional	what they add to the how		level and typical case	Main limitations: what
literature	communities (what)	questions	Main arguments	selection	they do not include
	Assumes that their				
	role is to provide				How professionals,
	solutions to				organizations, and
	coordination and		Professional institutions are hybrids	Membership level:	professional communities
New	cooperation	Whether community	filling a gap between spontaneous,	professionals (and	contribute to and shape
institutional	problems hindering	institutions are needed for	private mechanisms and public-order	firms) facing market	public policy decisions
economics:	economic	transactional governance	mechanisms in governance.	challenges in	(beyond constraining
transaction	transactions (rent-	& how they fulfil their	They are required where the transaction	developed, transitory,	coercion)
costs & modes	seeking through	transaction supporting	costs of (simpler) governance	or developing	Identity and intellectual
of governance	value-creating)	roles	alternatives are higher.	economies	orders
			Professional identities are constructed		
	Assumes that their		through the dynamics of community		
	role is to provide the		membership (agency), formal	Community level:	
	institutional		institutionalization (structure), and	Novel or transforming	
Sociology of	framework for	How community	mutually recognized activities	professional	
professional	defining the	institutions and the	(performance).	communities where	
identity and	community, value-	underlying professional	Community institutions need to provide	identity is crucial or	Economic and political
intellectual	concertation, and	debates influence each	the rules of competition, consultation,	where goals are	drivers and limits of the
orders	goal setting	other	and persuasion.	contested	institutionalization process
			The path-dependent network structure of		
Population			associational systems and of the	Associational level:	
ecology of		Whether community	underlying communities determine the	Populations of	
professional		institutions emerge, grow,	differentiation and integration of	associations (mainly in	
organizations	_	shrink, or disappear	associations	developed countries)	
	1.		Challenges of global governance drive	Associational and	Institutionalization at the
Complex	Assumes that their		the increasing integration and	community levels:	community level, identity,
association	role is to provide	How community	internationalization of associational	populations and	and intellectual orders
theory &	services internally or	institutions develop and fit	systems. Service-provision aspects of	networks or	How associations fit into
international	to influence public	into the broader	associations become more important as	associations (mainly in	broader institutional
governance	policy	governance framework	their policy influence shrinks	developed countries)	frameworks of roles

1.4 Partial answers and research gaps

1.4.1 Approaching the what question

Chapter 2 lays the foundations for the empirical studies in the dissertation by providing a critical review of the literature centred around our two overarching questions: what do professional communities contribute and how do they contribute? This section provides a summary of the main findings for the what question.

A key finding of my review is that we need a clear analytical distinction between two concepts which are often used inconsistently in the literature: functions and roles. I define institutional *functions* as the activities, facilities, events, and rules which these institutionalized units (mostly associations) organize or do themselves. Typical examples of professional community institutions' functions from the empirical studies are organizing a forum or trade fair, sending out a newsletter, maintaining club facilities, and providing professional counselling or mediation.

I refer to the economic *roles* of institutions as the goals to which they contribute through their functions, that the members or other stakeholders get out of the operation of community institutions. Typical examples of the roles of professional communities are improving access to information on market developments or facilitating credible contractual commitments.

By distinguishing what these institutions do from what that means for the underlying professional community, we can avoid simplistic approaches such as identifying all lobbying activities as redistributive rent-seeking or all information sharing as socially beneficial coordination. A function can contribute to the fulfilment of multiple roles even at the same time for the same community. This makes it difficult to study institutional developments meaningfully, as what lends itself to observation easily (formalized activities of institutionalized communities) does not provide us a complete picture of the roles of those institutions.

Chapter 2 reviews the empirical literature on professional associations from this perspective of economic roles, arguing for a novel typology based on how their roles are linked to the individual goals of members. This contrasts with most earlier approaches that linked the roles of community institutions to the traditional normative dimension of institutional economics, that is, whether they contribute to socially beneficial value-creating or socially harmful redistributive efforts. I argue and demonstrate utilizing the

review of available empirical evidence that the normative dimension is orthogonal to that of roles, as any of the proposed roles can (and at times did) contribute to either value-creating or redistributive activities.

I propose to classify the roles of professional associations into three groups. *Vertical economic roles* contribute to coordination and cooperation between members of the professional community and their partners along value chains, making their core professional activities possible. The two main vertical roles are the protection of property rights and the reduction of transaction costs. *Horizontal economic roles* contribute to coordination and cooperation within the professional community allowing for the provision and coordinated use of common pool resources (such as reputation) and public goods (such as their knowledge base) by the community. *External economic roles* contribute to coordination and cooperation with other stakeholders. This could refer to social and economic conflicts arising from the professional activities themselves (such as regulating externalities), or the involvement of the professional community in achieving broader social or economic goals (such as development or employment policy).

The review in Chapter 2 demonstrates that all of the above roles are relevant for some professional associations, providing a rather broad answer to the question of what they do. The main empirical puzzle remaining is to determine when each of the different roles is fulfilled by professional community institutions. The first general research ambition of my project was to contribute a few empirical data points to this puzzle, contributing to possible future syntheses. The main message of Chapter 2 concerning this was that it was time to look for more productive approaches, elaborating theories that could explain when each of the roles would be relevant.

1.4.2 Linking institutional forms and roles

The most recent review of professional associations from a NIE perspective comes from Doner and Schneider (2000), who conclude that they need institutional strength to fulfil socially beneficial roles. They argue that for developing this institutional capacity, associations need to achieve high membership density, institutionalize extensive selective benefits and effective interest mediation, and develop their own organizational hierarchy with highly trained professional staff and offices. In Chapter 2 I argue that this is not necessarily the case, as professional associations can use their positions in-between to fulfil socially beneficial and important roles without developing strong institutional capacities.

In order to test this proposition, Chapter 2 provides a typology of four ideal typical *levels* of institutionalization, corresponding to four different levels of institutional strength. The basis of the typology is my understanding of the basic roles of professional community institutionalization: their contributions to stable collective action at the community level. Institutional strength corresponds to how much a community can rely on a central institutions, such as a professional association to guarantee successful collective action. This depends on what mechanisms associations are able to institutionalize to coordinate the collective action of their communities. Simpler forms such as *information* intermediaries can still contribute by reducing transaction costs, but do not articulate explicit norms. Associations institutionalizing what I called associational governance articulate norms at the community level, but the enforcement of those norms is left to informal mechanisms. Associations achieving self-regulation are able to incentivize compliance by institutionalizing their own sanctions, while associations in arrangements of co-regulation can rely on the government's formal sanctioning for enforcement.

The empirical evidence reviewed in Chapter 2 on the activities of professional associations is organized by these levels of institutionalization (reflecting different degrees of institutional strength in Doner and Schneider's (2000) theory), the types of economic roles, and its links to socially beneficial (value-creating) or harmful (redistributive) goals. The review demonstrates the lack of a straightforward connection either between the level of institutionalization and economic roles of professional associations or between the level of institutionalization and their contributions to socially beneficial or harmful goals. This means that although there could be a connection between institutional strength and successful institutionalization to respond to certain community challenges, the empirical evidence does not corroborate a general relationship between levels of institutionalization and roles.

1.4.3 Roles and normative questions

What could determine whether the roles of professional community institutions correspond more to the public choice expectations of redistributive rent-seeking or the NIE perspective of value-creating transaction enabling? The review of empirical results in Chapter 2 found support for the proposition formulated following Doner and Schneider (Doner & Schneider, 2000), that professional communities — as all rational actors — will always aim for broadly understood rent-seeking activities, and whether they do so in socially beneficial ways depends on the institutional constraints.

Two main types of institutional constraints on the activity of professional community institutions can be identified. The first is what I call *internal constraints*, that is, constraints defined by the professional community itself. The internal associational structure of the community could also limit its activities, as competing subgroups within the broader community could monitor and sanction each other. More importantly, the underlying intellectual order of a community could lead to limitations on what goals and means are acceptable in seeking economic rents. These can result in formal constraints on conduct institutionalized and enforced by the community.

The second group of limitations are *external constraints*, which are created by actors outside the specific professional communities. These are mostly public order institutions that regulate how professional communities can institutionalize and what they are permitted to do. The logic of constraints by competition also appears for these institutional orders, as alternative professional communities could compete for the same social or economic resources, forcing each other to be more responsive to the needs of the broader community (or whichever actor distributes those resources), and monitoring each other's activities.

1.4.4 Further directions

The relevance of the above-described institutional constraints to answering our overarching questions points to the need to broaden the theoretical framework from professional associations in three directions.

First, we need to connect formal institutions to their membership and their underlying professional debates. I argue for a theoretical perspective that is able to connect intellectual and instrumental elements. Beyond their roles as internal constraints, a few studies (R. Greenwood et al., 2002; Mike, 2017) noted that the intellectual elements of communities can be crucial in successful institutionalization, especially in transitory contexts. There is, however, a lack of studies on how they influence the instrumental collective action elements of institutionalization and vice versa.

Second, there is a surprising lack of theoretical progress on the associational system layers of professional community institutionalization since the seminal study of Schmitter and Streeck (1981/1999). While their theoretical framework on the associational layer's institutional logics has motivated plenty of research (Bennett, 1995, 2000; Jordan & Halpin, 2004; You & Guzman, 2019), very few studies contributed to our understanding of associational systems (Berkhout et al., 2015, 2017).

Finally, we need to include the broader governance context in which these institutions are embedded. I propose that the perspective of the professional community offers a suitable starting point to these approaches, as it is able to include all theoretically relevant layers. A limitation of this theoretical perspective is that it treats policy-making actors and processes as external, whereas the theory of epistemic communities approach incorporates them into the analysis. I consider that an acceptable concession in order to better capture the internal dynamics of the governance of professional communities.

In constructing this theoretical starting point throughout Chapters 2-6 I adopt a combined perspective of new institutional economics and exchange theory on the institutionalization of professional communities. The two perspectives are compatible in their common starting point of individual transactions between community members, associations, and government actors. They also both incorporate the results and factors of classical collective action theory in explaining the possibilities and obstacles of community institutionalization. I attempt to link these two theoretical strands along the lines of what Doner and Schneider (2000) did in their review of business association functionality, which included results from both NIE and the exchange theory 'institutional logics' literature.

Two further additions to this theoretical framework appear in the dissertation. In Chapter 5 I integrate the theory of intellectual orders into the study of the associational system of a profession. This enables us to explain institutional dynamics which the instrumental perspectives alone could not. In Chapter 6 I take a first step towards integrating this perspective with more recent approaches to professional communities, as I adopt a modified population ecology perspective to studying the identity-building of a professional community.

1.5 Research questions

This section reviews how each article of the portfolio contributes to the research ambitions of the program by introducing their specific research questions and ambitions. The focus here is on theoretical ambitions, as the empirical and methodological approaches are the topic of sections 0 and 1.6.6.

1.5.1 Digging into theories of associations' roles (Ch. 2)

Chapter 2 proposes a way to structure our knowledge of business and professional associations, clarifying the questions and the existing answers related to both the puzzle of what these institutions contribute and the puzzle of how they are institutionalized to be

able to fulfil their roles. The main ambition of the literature review is to test whether a few widespread propositions are corroborated by empirical evidence.

The chapter asks three questions that directly correspond to the main puzzles of this dissertation: (1) What are the economic roles of BAs? Is about what associations, a key element of the institutionalization of professional communities provide. The second research question of (2) How are BAs institutionalized? is an important piece of the puzzle on the patterns of professional community institutionalization, while (3) What drives BAs to engage in socially beneficial or harmful activities? Is about the institutional factors behind their broader social contributions.

The chapter also contributes to theory-building, by proposing to structure our knowledge by separating economic roles, associational functions, and the question of economic efficiency (i.e. whether a role is beneficial or not). It also provides questions and directions for future study, guiding the subsequent analyses in my research program.

1.5.2 Testing NIE theories of the transaction supporting role (Ch. 3)

Chapter 3 is a joint quantitative effort together with Károly Mike and István Boza, seeking to test whether specific groups of professional community institutions – in our case business associations – really fulfil a transaction supporting role. This explanatory hypothesis-ambition is justified as understanding whether and under what conditions these institutions fulfil specific roles contributes to answering the puzzle of what professional communities contribute to their members, and also to the normative question of which institutional features of professional communities enable them to contribute in socially beneficial ways.

Chapter 3 studies the transaction enabling roles of business associations, focusing on their contributions to establishing trust and credible commitments in their members' market relationships. It asks the questions (1) Do members of BAs perceive them as effective in increasing the credibility of their members?; (2) Do members of BAs trust in the contractual commitments of their business partners more compared to non-members?; and (3) Are members of BAs better able to engage with business partners from outside their personal and local networks?.

1.5.3 Theory-building on the NIE of professional associations (Ch. 4)

Chapter 4 adopts a qualitative, single case study approach, which enables it to dig deep into the puzzle of how professional communities are institutionalized for a single role, that of enabling market transactions. It asks the questions (1) What transaction-enabling

roles do professional associations fulfil within a professional community? and (2) What factors influence whether a professional association plays a role in the transactional relationship between two businesses?

The study situates professional associations in the complex governance structures of transactions on which professionals rely in supporting their relationships, uncovering how professional community institutions interact with other institutional alternatives. The novelty of the approach is studying how different institutions interact in the governance structures of contracts. This allows the study to go beyond listing how professional community institutions could contribute, assessing whether and how they actually do it from the members' perspective. The corresponding research ambition is explanatory and hypothesis-generating.

1.5.4 Integrating collective action, logics of association, and identity (Ch. 5)

Chapter 5 zooms in on the factors influencing the development paths and relations between associations, looking to clarify alternative theories and their relationships. It has descriptive and explanatory theory-building ambitions, for which a complementary theories congruence analysis approach was selected, with a single case study at the professional community layer of institutionalization. The main goal of the chapter is to provide theoretical clarifications on the question of how professional communities are institutionalized, at the professional community layer (as opposed to individual associations), which is a rarely found approach in the NIE of professional communities.

It asks the questions (1) What factors explain the different patterns of institutionalization of professional associations within a professional community? and (2) What factors explain the patterns of cooperation between professional associations within a professional community?, seeking to address which elements of professional community institutionalization are explained by exchange-based theories and which by intellectual debate-based theories. It aims to take a step toward a synthesis of those theoretical strands, where intellectual and exchange-based mechanisms interact during the institutionalization process. It also seeks to assess which elements of institutionalization are determined more by features of the underlying community and which by features of the broader governance context.

1.5.5 Connecting identity, activity, and institutions (Ch. 6)

Chapter 6 is a joint effort with Gabriella Ilonszki in connecting the research on political science as a scientific field to the study of professional communities. It adopts a slightly

different approach from the previous case studies, as it tackles the questions of (1) How did the political science community expand during the last three decades? and (2) How did the publication performance of the professional community evolve over the last three decades? Turning to a population ecology approach at the micro-level of individual professionals allows this chapter to connect the performance of a professional community with its patterns of institutionalization, an element of the puzzle in question.

Although the main contributions of the chapter are methodological and empirical, it also serves to test descriptive expectations by applying a partially novel theoretical approach. Shifting the focus to the community members from the institutions allows us to uncover the dynamics of the two additional elements behind its identity: membership composition (agency) and professional activities (performance).

By combining the scientometric approach to performance patterns with the theories of professional communities, this chapter is a first step towards the integration of NIE-based theories and theories of population ecology and network analysis. It is worth noting that the original hypothesis-generating and hypothesis-testing ambitions of this research could not fit within the limitations of this journal article. The proposed next steps toward constructing and applying a theory of professional community institutionalization building from the perspective of the chapter are described in section 7.6.

1.5.6 Overview of research questions and ambitions

Table 5 below provides an overview of the central chapters of the dissertation and how they contribute to our understanding of the overarching questions.

A major limitation of the theoretical approach of this portfolio is that it does not provide the basis for comparative conclusions, as the different empirical cases were approached from partly different theoretical perspectives and along the lines of different research questions. The research program introduced in the dissertation is not at the stage where I could offer a theoretical synthesis. Its modest contribution is mostly to point toward theoretical refinements and suggested future research approaches.

Table 5: Overview of chapters' theoretical approaches and ambitions [author's edit]

Ch	Theoretical research gap / motivation	Theoretica l approach	Empirical approach	Overarching questions	Research questions	Ambitions
	Conflicting theories of associations' roles	Public choice,	Review of existing	i. What do professional community institutions contribute?	(1) What are the economic roles of business associations [BAs]?	
2	Few conditional theories connecting institutional form and roles	New institutiona	from multiple	iii. How do professional community institutions develop?	(2) How are BAs institutionalized?	Explanatory theory-building
		economics	novel structure	i. What do professional community institutions contribute?	(3) What drives BAs to engage in socially beneficial or harmful activities?	
3	Conflicting theories of associations' roles	New institutiona l economics	Large-N empirical: outcome-based study of one role of professional associations, controlling for individual context & alternative institutions	i. What do professional community institutions contribute? ii. How do professional community institutions fulfil their roles?	(1) Do members of BAs perceive them as effective in increasing the credibility of their members? (2) Do members of BAs trust in the contractual commitments of their business partners more compared to non-members? (3) Are members of BAs better able to engage with business partners from outside their personal and local networks?	Explanatory hypothesis- testing
4	Developing conditional theories of associations'		Case study, qualitative: zooming in on one role of	ii. How do professional community institutions fulfil their roles?	(1) What transaction-enabling roles do professional associations fulfil within a professional community?	Explanatory theory-building

Ch	Theoretical research gap / motivation	Theoretica l approach	Empirical approach	Overarching questions	Research questions	Ambitions
	roles, Lack of theories on how associations fit within the broader framework of transactional governance		professional institutions, interactions with other institutions		(2) What factors influence whether a professional association has a role in the transactional relationship between two businesses?	
5	Multiple theories on the institutionalization processes to be integrated	New institutiona l economics, Exchange theory, Professiona l identity & intellectual orders	Case study, qualitative: interactions between formal professional institutions & their temporal dynamics	iii. How do professional community institutions	 (1) What factors explain the different patterns of institutionalization of professional associations within a professional community? (2) What factors explain the patterns of cooperation between professional associations within a professional community? 	Descriptive & explanatory congruence analysis for theory-building
6	Connecting the study of professional identities with the study of professional community institutionalization	Professiona l identity & population ecology	Case study, quantitative: identity construction from individual features, activities & linkages of members	develop?	(1) How did the political science community expand during the last three decades?(2) How did the publication performance of the professional community evolve over the last three decades?	Testing descriptive expectations , testing methodolog y

Chapter 7 summarizes the main findings of the dissertation, then discusses the most relevant open questions and suggested theoretical approaches.

1.6 Empirical and methodological ambitions

Table 6 below provides an overview of the dissertation's contents highlighting their motivations, the empirical approaches, and their main methodological choices.

1.6.1 Reviewing the evidence for the form-roles theory (Chapter 2)

Inspired by the contradictory empirical results on the functionality of professional community institutions, Chapter 2 serves to set the stage for later chapters by providing a critical review of the literature on business associations in the NIE tradition. Its main ambition is to provide a structure to our knowledge of the functionality puzzle and to find out which theories of professional community institutionalization seem to hold up in the face of growing empirical evidence.

1.6.2 New approaches to studying institutionalization

Most political science and economics scholarship on the institutions related to professional communities focuses on individual formal organisations or their statistical samples (see section **Hiba! A hivatkozási forrás nem található.** for some notable exceptions). This means that the study of professional communities in political science is centred around various kinds of professional associations. This focus on formal institutions for data availability purposes is reasonable, and most of the studies in this dissertation (except for Chapter 6) also adopt it. However, all empirical chapters (3-6) argue for – and attempt to demonstrate the applicability of – an approach where the broader institutional context of associations is also included in the analysis.

Chapters 4 and 5 go beyond that in explicitly adopting an approach of looking at a professional community through its associations, but not excluding its other institutional features, while Chapter 6 shifts the focus onto individual professionals instead of formal institutions. This partial shift in perspective is due to the strong functional complementarities and developmental linkages between formal and informal institutions of professional communities, and their socio-political contexts. I argue that by adopting a community-first approach, the researcher is forced to consider all that complexity instead of simply analysing what is relatively easy to assess, that is the formal features of association.

1.6.3 A quantitative study of a key role (Chapter 3)

The empirical literature on professional community institutions mostly focuses on their institutional forms and functions (what they look like and what they do). If we wish to

understand the economic roles of these institutions, we need to look beyond what they formally do and try to assess the impact that they have on stakeholders. That is precisely what our study in Chapter 3 intends to do, by utilizing detailed member-level survey data to test how membership in professional associations affects members' economic activities. The Chapter provides novel, survey-based quantitative results on what a central group of professional community institutions, business associations provide to their members in the context of a semi-peripheral economy with a well-functioning legal order. It assesses whether they contribute to the establishment and maintenance of contractual relations of their members.

The study relies on a survey of Hungarian SMEs, utilizing multiple regression methods with members as units of observation. This approach of studying BAs' effects at the micro-level is rarely found in the literature, yet it provides for the statistical control of various alternative factors explaining transactional strategies and their success. The novelty of these quantitative analyses also lies in testing the theories of associations' functionality in a semi-peripheral economy with a well-developed public (legal) order. Previous contributions on the transaction-enabling roles of associations focused on transitory, Eastern European contexts, while most of the data on the rent-seeking roles of associations comes from highly developed, Anglo-Saxon countries.

1.6.4 In-depth case studies to broaden the institutional horizon (Chapters 4&5)

Chapters 4 and 5 focus on the puzzle of how professional communities are institutionalized through qualitative case studies. Chapter 4 offers an in-depth look at how and when professional associations fulfil a transaction supporting role. The qualitative research design allows for a more detailed description and analysis of the most relevant institutional solutions to the problems of transactional uncertainty than what was available in the existing literature. Doing so required the selection of a case where a professional community is institutionalized to an observable degree while facing major obstacles to market transactions, which is how the seed industry community was selected.

Chapter 5 features a qualitative in-depth case study on the institutionalization of the Hungarian logistics community. Besides providing a first scientific account of the complex associational system of the case, it used document analysis and semi-structured stakeholder interviews to study the dynamics of institutionalization. The descriptive & explanatory congruence analysis approach based on multiple theoretical frameworks required data collection on various proposed drivers and barriers of associational development and the ways in which associations interact.

1.6.5 Examining the evolution of professional identity (Chapter 6)

Finally, Chapter 6 aimed to contribute new empirical evidence to the literature on scientific professional communities, while also proposing a novel approach and method to the study of how professional communities develop their identities. It starts from a population ecology perspective to study Hungarian political scientists based on microlevel data, demonstrating that identity-building – and the related institutionalization – of a professional community can be fruitfully approached from the level of individual members. This approach required (and was partially motivated by) the existence of reliable and comprehensive data on the activities of each individual member of the community.

A major methodological and empirical accomplishment of Chapter 6 was the operationalization of the different groups of professional community members and stakeholders based on professional background, formal organizational position, and performance. The main limitation of our approach was that introducing the methodology and comparing its results to descriptive expectations based on earlier studies exhausted the space constraints of a journal article, leaving explanatory data analysis for later.

Our data collection resulted in an unusually rich dataset of community members and their activities which we intend to combine with data on formal community institutionalization to develop explanatory models of professional performance, career paths, and network development. The chapter also seeks to build on Chapter 5's result that the way in which a community defines its identity is crucial for its institutionalization, uncovering how this identity is constructed for the case of a relatively new community struggling to institutionalize itself autonomously. This next step of connecting our knowledge of institutionalization with the study's results of membership composition and performance will contribute to answering question iii. on how professional communities are institutionalized.

1.6.6 Overview of empirical and methodological approaches

Table 6: Overview of approach and methodology of each chapter [author's edit]

Ch	Empirical research gap / motivation	Empirical approach	Ambitions	Unit of analysis	Case selection	Unit of observation	Sampling	Methods of analysis
2	No comprehensive review of associations' roles from a political science / NIE perspective	Review of existing empirical evidence from multiple strands within a novel structure	Explanatory theory- building	Professional associations (combinations of institutional form and economic role)	Social science literature on BAs / PAs / TAs	Populations of professional associations	Scientific database search & snowball until saturation	Traditional literature review
3	Few outcome- based studies of the transaction supporting role	Large-N empirical: outcome-based study of one role of professional associations, controlling for individual context & alternative institutions	Explanatory hypothesis- testing	Professional association memberships of professionals / organizations	Hungarian SMEs and their executives / owners	Professionals / firms	Representative survey sample	Linear and logistic regression
4	Lack of evidence on how associations interact with other institutions of transactional governance	Case study, qualitative: zooming in on one role of professional institutions, interactions with other institutions	Explanatory theory- building	Governance frameworks of contractual relationships between professionals / firms	Seed industry community in Hungary	Professionals, firms, professional associations	Theoretical sample of key stakeholders and representatives of segments	Semi-structured interviews + documentary analysis

Ch	Empirical research gap / motivation	Empirical approach	Ambitions	Unit of analysis	Case selection	Unit of observation	Sampling	Methods of analysis
5	Lack of studies of associational system dynamics from a CEE context	Case study, qualitative: interactions between formal professional institutions & their temporal dynamics	Descriptive & explanatory congruence analysis for theory-building	Professional associations & their associational system	Logistics community in Hungary	Professionals, firms, professional associations	Theoretical sample of key stakeholders and representatives of segments	Complementary theories congruence analysis, semistructured interviews + documentary analysis + event analysis
6	Novel approach: Construction and evolution of professional identity from individual (member and activity) level, quantitative observations	Case study, quantitative: identity construction from individual features, activities & linkages of members	Testing descriptive expectations, testing methodology	Professional community	Political science community in Hungary	Professionals, professional activities (publications, authorships)	Complete list of all community members	Descriptive comparative and time-series statistical analysis

Chapter 7 provides a summary of the main results from these chapters, formulates conclusions, then discusses the limitations along with the implied future research directions.

1.7 Case selection

1.7.1 Professional communities in Hungary

In the empirical chapters, we selected cases from among national professional communities and their associations in Hungary. This first level of case selection was motivated – in addition to data availability – by the economic and social context of Hungary. Most studies in the literature on professional community institutionalization have focused either on highly developed (mostly Anglo-Saxon) countries or on transitory, Eastern European (mostly Russian) contexts, leaving the semi-periphery in-between largely unknown.

Hungary also experienced important political and economic developments over the last three decades. The democratization and marketization processes led to major disruptions and a general coordination vacuum in most economic and social sectors, an important challenge to address and a possibility for professional communities looking to institutionalize themselves. The second shockwave affecting Hungarian professional communities came with the processes of European integration and globalization, which again redefined the possibilities and brought forth increased international competition. How these communities were able to respond to these challenges while still being relatively newly institutionalized after the transition period of the 1990s should serve as an animating backdrop for empirical analyses, as we are unlikely to find very stagnant or stable institutional configurations.

Table 7 addresses the question at a general level based on the World Values Survey data on Hungarian professional community membership.

Table 7: Active/Inactive membership of professional organizations in Hungary among economically active (employed, self-employed, or unemployed) respondents [source: (Inglehart et al., 2020)]

year	Not a member	Inactive member	Active member
1998	84.5%	6.0%	9.5%
2009	92.5%	2.4%	5.1%

We can observe that while formal professional community membership has been in decline in Hungary, a significant part of professionals is still involved in these institutions. This leads us to the questions of which professional communities have been more successful in their institutionalization in this rather challenging context, and what factors explain these differences.

We know that despite the decline at the level of national averages, some professional community institutions are still important in Hungarian governance. We have a few detailed results along the lines of the NIE of professional community institutions, which point to the relevance of at least a few strong associations, mostly at the layer of meta-associations and chambers with mandatory membership (Bognár, 2011; Bognár & Balás, 2010). These associations fulfil various roles successfully, offering diverse solutions to the problems of professional collective action.

A few even closer antecedents to my research look at specific professional communities, also from a NIE perspective. Mike and Megyesi (2016; 2018) study the institutionalization processes of local communities of Hungarian winemakers. They find that successful institutionalization of self-governance requires a shared understanding of the goods provided by successful collective action, leadership, and the existence of market-supporting institutions. Continuing the study of local communities of winemakers, Kucsera and Mike (2020) find that successful institutionalization depends on the features and activity of the institutional entrepreneurs initiating and guiding the institutionalization process.

1.7.2 SME owners and managers

The quantitative study in Chapter 3 is based on a survey of small and medium enterprises in Hungary, which is representative of the SME population for major economic sectors (industry, commerce, services excluding agriculture) and Hungary's seven regions. While there is a potential — maybe latent — professional community of SME owners and managers in Hungary (as evidenced by their common membership in the chamber of commerce), the survey chiefly offered a cross-section of many professional communities.

The focus on SMEs was motivated by the comparability of their contractual challenges as well as the collective action problems which they face. Large firms generally have more non-community-level private solutions to rely on due to their resources, reputation, and political salience. By excluding them from the sample we lose some generalizability but are better able to focus on the professionals for whom the (contractual or public policy) issues potentially resolved by community institutions are most pressing and most challenging to overcome.

1.7.3 Three diverse communities

The case studies of the dissertation analyse three further Hungarian professional communities: seed producers, logistics professionals, and political scientists. The selection of these cases applied four main criteria.

The first criterion was data availability. My research program was developed within the structures of two larger research projects. The first was a COST Action on the Professionalization and Social Impact of European Political Science¹ which provided access to a complete catalogue of the political science community in Europe, including a novel comparative survey. The unusually well-documented nature of academic work also meant that political science could be used to test a bottom-up quantitative approach to studying professional identity building, which would have been much less feasible for professional communities without central registers of professional performance. The second project was titled: 'Institutional developments for intelligent specialization at the Székesfehérvár Campus of Corvinus University of Budapest'², which provided a framework for studying professional communities that are relevant for that given region while allowing for the extension of those community cases to the whole of Hungary. The regional aspect did not constrain case selection too much, as Central Transdanubia is home to parts of arguably all major Hungarian professional communities.

The second criterion is related to data availability, as it concerns the existence of community institutions to be analysed. The theoretical framework and the chosen approaches of the research feature those as both outcome and explanatory variables, which combined with the theory-building ambitions described above led to the selection of communities with at least partial success in formal institutionalization. While studies of when professional communities are able to institutionalize would require cases of lack of institutionalization for comparison, our studies focusing on what and how they contribute required institutions to be observed.

Third, we were looking for professional communities which experienced major challenges to their operations and possibly even their identities. Preliminary research confirmed that all three cases featured communities that had been undergoing transformations. This was relevant because it allowed for within-case comparisons of different states of the communities.

¹ COST Action CA15207: http://proseps.unibo.it/

² Project number EFOP-3.6.1-16-2016-00013

The fourth criterion was the diversity of cases.

Table 8 below provides a comparison of the key features of the three selected communities.

Table 8: Comparison of main features of the three professional communities [author's edit]

Ch. & professional community	Ch. 4: seed industry community in	Ch. 5: logistics community in Hungary	Ch. 6: political science community in Hungary
Community	Hungary	Trungary	in Hungary
Professional activities	R&D, seed production, seed trade, additional services	Logistical consulting & integrated services, Handling & shipping, Transport, Customs services	Scientific knowledge provision, teaching, advice & consulting
Goods created	knowledge- intensive, high added value, complex, (partly) experience goods	ranging from simple, standardized services to high added value, complex services	knowledge-intensive, high added value, complex, experience goods
Challenges and success	Acute challenges of Europeanization	internationalization / glob	palization /
in overcoming them	-	nal competition / very	Partial success in international competition / somewhat competitive
	Partial successes in f	ormal institutionalization	
Patterns of	Long-standing intelle	ectual traditions with tran	sformations to identity
institutionaliz	Existing institutional	basis, disrupted by trans	formations
ation	Knowledge base part strong practical elem	Knowledge base highly institutionalized in education, with strong practical elements	
	Compulsory chamber of agriculture + Central professional association with compulsory membership + some voluntary associations	Compulsory chamber of commerce + Many voluntary associations	Voluntary academy of sciences + Central professional association with voluntary membership

Ch. & professional community	Ch. 4: seed industry community in Hungary	Ch. 5: logistics community in Hungary	Ch. 6: political science community in Hungary		
Typical units at the membership layer	for-profit firms, public organizations	for-profit firms, individual professionals, public organizations	individual professionals, universities & research institutes (mostly not-for-profit), public organizations		
Community size	several hundred individuals, a few hundred organizations	several hundred individuals and organizations	few hundred individuals, a few dozen organizations		
Market structure	strong concentration (dominant, large organizations), with large numbers of smaller organizations occupying smaller niches				
Homogeneity	strong segmentation: orientation, position	lower heterogeneity: global/local orientation, subdisciplines			

The three communities share the broader governance and social context of Hungary in the past three decades, which contributes to their comparability. While their main professional activities are different on the surface level, they have similar features from an institutional economics viewpoint, as they feature (mostly) knowledge-intensive, complex experience goods with a high added value and major uncertainties about quality. These features contributed to the importance of institutional solutions to transactional problems, one of the typical strands of research about professional community institutions.

Beyond their basic similarities, the three communities also shared experiences of challenges from the democratic and capitalist transformations of 1989-91, through Europeanization driven by Hungary's accession to the EU in 2004 to an accelerating general trend of internationalization of their activities. All three communities were able to respond to those challenges at least partially, as they all kept – even if in transformed ways - their identities and formal institutions, while also exhibiting signs of being competitive internationally. Logistics and seed production are clear success stories of the Hungarian economy, and while the extent of 'market success' is debatable in the case of political science, signs of high-performing subgroups are also visible there.

Between the challenges and the outcomes, our theoretical frameworks feature institutional developments. Although they all have long-standing intellectual traditions and could rely on formal institutional antecedents when tackling the listed challenges, the

three cases are rather diverse in their institutional structures. While all three communities have an important scientific background, the connection to academic knowledge and structures is much more formalized in the case of political science, which is primarily an academic discipline, with added non-academic activities. The seed industry and logistics have developed their secondary and tertiary educational bases, but they are primarily practical fields with important underlying intellectual debates. This corresponds to a difference at the membership level, where political science features mostly individual professionals and not-for-profit academic institutions, whereas the other two prominently feature for-profit firms along with individual professionals.

The most striking institutional difference concerns the associational populations and systems of the communities. The seed industry's institutionalization features a strong central association with compulsory membership, complemented by some more specific voluntary associations. The logistics community lacks a compulsory membership organization but has institutionalized a multitude of partly competing, partly cooperating associations along different segments and logics. Members of the political science community only maintain one weaker voluntary association, mostly relying on international, public order, and informal institutions.

Theoretically, we would expect different community features underlying the diversity of formal institutional solutions, which is partially observed in our three cases. The seed industry and logistics communities involved several hundred individuals, while only around two to three hundred academic political scientists could be found in Hungary. The difference is larger at the level of organizational units, where a few hundred firms could be found for the first two, with only a few dozen organizations having a political science profile. The different sizes correspond to different levels of heterogeneity, where political science — with all its subdisciplinary, methodological, and organizational fractures — can be considered more homogeneous than the other two, strongly segmented communities.

While I acknowledge the limited generalizability of the case study results, the selected communities and their institutionalization are rather different, contributing to the robustness of any results which would be shared by all three cases. Although comparative studies of the three communities could not fit within the limitations of this dissertation, it can be argued that they are parts of a diverse case approach.

2 WHAT DO BUSINESS ASSOCIATIONS DO?³

Abstract

This article provides a review of the literature on business associations (BAs) in line with the following questions: (1) What are the economic roles of BAs, (2) How are BAs institutionalized, and (3) What drives BAs to engage in socially beneficial or harmful activities?

Challenging the popular distinction between beneficial, market-supporting, and harmful, rent-seeking (lobbying) goals of BAs, we demonstrate that there are three major economic roles of BAs, all of which can involve activities linked to the private order and the public order, and all of which can be socially beneficial or harmful. We also challenge the proposition that institutional strength is needed for BAs to fulfil beneficial economic roles, highlighting that BAs have three main institutional functions, and the level of institutionalization of each of the functions can be different in relation to their beneficial economic roles. We suggest that whether BAs tend toward engage in in socially beneficial or harmful activities depends on their private-order and public-order institutional limitations.

Keywords: business associations, institutional order, collective action, trade associations, industry associations

2.1 Introduction

What do business associations do? For a long time, economists viewed BAs as "interest groups" engaged in rent-seeking by influencing public decisions (Ekelund & Tollison, 2001). As for their functioning, the crucial question appeared to be whether they could develop appropriate internal incentives for overcoming free-riding and promoting collective action. As Olson famously argued (Olson, 1971), for most of them this typically meant the introduction of "selective incentives" for participation by a "political entrepreneur." In the 1990s, scholars in the "new institutional" tradition started to challenge this received view (Greif, 2008), leading to the explicit attack mounted in a pair of articles by Doner and Schneider (Doner & Schneider, 2000; B. R. Schneider & Doner, 2000). The former authors argued and illustrated using several examples that business associations pursue many other goals besides "rent-seeking."

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What do BAs actually do? Empirical studies based on the subjective evaluations of stakeholders have demonstrated the importance of several distinct activities of BAs in different contexts, but have not led to clear conclusions (Battisti & Perry, 2015; Bennett, 1998; Bennett & Ramsden, 2007; McCormick et al., 2008; Rochlitz, 2016; Yakovlev et al., 2014). We suggest that the contradictory nature of such empirical results is explained by business associations fulfilling various economic roles that are relevant to a different extent in different contexts. Furthermore, the same activity may fulfil different economic roles at the same time, such as is the case with providing information to policy makers to obtain benefits for an industry. There can also be significant differences between the economic roles observed by those participating in collective action, and perceptions of the actual effects of collective action (Ville, 2007).

The standard approach of most studies has been to look at the *presence of certain activities* or the *presence of certain outcomes related to these activities*. Our goal is not to argue for any specific theory of BA functionality. Instead, we employ a model approach, in which we suggest starting with an analysis of the institution and its main goals, and then structuring the manifold activities that are identifiable along these lines. This article provides a review of the literature on BAs within a new conceptual framework. Its goals are twofold: (1) to highlight the common features of these diverse institutions and what we know about them, and (2) to challenge two widespread propositions about their economic roles.

Our starting point is that the main research question should be divided into three further sub-questions:

- 1. What are the economic roles of BAs?
- 2. How are BAs institutionalized in order to fulfil their economic roles?
- 3. What drives BAs to engage in socially beneficial or harmful activities?

Following these lines of questioning, we provide some structure for our knowledge about the subject, point out the gaps therein, and identify potentially fruitful directions for future research, while challenging two widespread propositions about the economic roles of BAs.

In section two, we provide a conceptualization of BAs as an umbrella term for private, formalized, non-commercial organizations that are intended to further the business interests of their members. We highlight the position of BAs as planned, private-order institutions positioned in-between spontaneous and public-order institutions.

In section three we deal with our first question by providing a typology of the many economic roles of BAs based on how they contribute to fulfilling their basic goals.

Following a review of the literature in this area, we seek to challenge the widespread distinction between the beneficial-, market-supporting- and the harmful-, rent-seeking/lobbying goals of BAs by demonstrating that (1) all of the studied economic roles of BAs can involve activities linked to the private-order and the public-order, and that (2) all of the studied economic roles can be linked to both socially beneficial and harmful activities.

Section four reviews our knowledge in relation to the second question concerning institutionalization. We suggest that BAs have three basic institutional functions in relation to solving collective action problems: (1) information-sharing, (2) rule-articulation, and (3) incentivizing compliance. These institutional functions can be institutionalized at different levels, constituting four distinct ideal types of institutional forms of BAs: (1) intermediary, (2) associational governance, (3) self-regulation, and (4) co-regulation. Reviewing the literature from this perspective, we challenge Doner & Schneider's (2000) claim that a business association needs a certain level of institutional strength to be able to fulfil beneficial, "market-supporting" economic roles by demonstrating that beneficial contributions are possible at each of the different levels of institutionalization in relation to each of the economic roles of BAs.

Section five structures our rather limited knowledge about the topic of the third question. We propose that whether BAs institutionalize socially beneficial economic roles depends on the institutional incentives by which they are affected. Five main drivers of the beneficial roles of BAs emerge from the scarce evidence. Private-order constraints on BAs include (1) market pressure on the membership of BAs, (2) internal governance solutions to principal-agent problems, and (3) the competition between BAs and other similar institutions. Public-order constraints of BAs depend on (4) political accountability, and (5) the monitoring capabilities of public-order institutions.

Section six concludes and points out what we consider the most important avenues for further research on BAs.

2.2 The nature of business associations

2.2.1 The main features of BAs

There are many related concepts used in political economy for the institutionalized collective activities of businesspeople: business-, professional-, sectoral-, and industrial associations, all sorts of entrepreneurial and rotary clubs, as well as chambers of commerce belong to this group. We adopt Prüfer's (2016) synthesis of earlier definitions, whereby business associations are [considered] private, formalized, non-commercial

organizations, intended to further the business interests of their members. BAs are private institutions, based at least partially on the voluntary cooperation of their members. They include semi-voluntary or mandatory membership organizations if these also institutionalize voluntary cooperation, and thus are not entirely public-order, governmental institutions. BAs are formalized institutions, which means that they have their own rules about membership and decision-making, and are long-term structures in contrast to ad-hoc coalitions of collective business action (Doner & Schneider, 2000, p. 280).

Since BAs are intended to further the business interests of certain groups of businesses, they are distinctive in relation to the business communities that exist behind these organized interests (Saitgalina et al., 2016). Business communities can be defined by their common knowledge base, common interests or common values, and goals. The former can result from (1) being engaged in similar occupations or in similar markets and industries, (2) being embedded in similar institutional orders due to geographical proximity, or by (3) belonging to similar communities outside of business, such as religious or political groups. The three dimensions can intersect in various ways, defining various forms of associations. Associations can be linked to specific occupations (professional associations), industries and interests (industry, trade, and cluster associations), or the broad occupational group of entrepreneurship (entrepreneurial associations and business clubs). They might involve underlying value-based communities, such as Christian business clubs or Lions clubs. They can be local clubs, regional or national associations, or even international or global associational confederations. In our review, we use the term business association for all the above institutions insofar as they fit our criteria.

2.2.2 BAs as planned private-order institutions

Business associations are planned, private-order institutions positioned somewhere between spontaneous and planned public-order institutions (Greif, 2008). This means that BAs build upon the spontaneous private order of markets and communities, but are also able to overcome some of the limitations of the former due to their planned nature. They also differ from public-order institutions in that they are private, voluntary institutions. This position means that BAs are bridging organizations that connect informal community structures to the formal public-order. Their economic roles are determined by the limitations of each alternative, but they can also build upon the resources of their informal base or their public-order relations. The distinguishing feature of BAs among

planned, private institutions is that they feature a separate, non-commercial form of central organization and multilateral relations, instead of bilateral relations structured by a profit-oriented central actor (Lindberg et al., 1991).

2.3 The economic roles of business associations

2.3.1 Business associations as rent-seeking

A widespread approach in the literature distinguishes between the beneficial, market-supporting and the harmful, rent-seeking role of BAs, the latter which is often associated with lobbying (Battisti & Perry, 2015; D. Duvanova, 2013; Marques, 2017; Sukiassyan & Nugent, 2011; Ville, 2007). We suggest that it is perhaps better to approach the issue starting with the understanding of BAs as institutions intended to further the goals of a business community. This means that BAs are inherently "rent-seeking" institutions in the broad sense that their basic goal is to increase the economic rent of a community of firms.

In the broader economic sense, rents are returns in excess of the opportunity costs of resources spent on an activity (Tollison, 1982). Rent-seeking as the pursuit of economic rent thus understood is the essential driving force behind all economic activity. In this sense, rent-seeking is not necessarily a negative term, as rents can be obtained by value-creating activities such as developing a new product or reducing production costs. Such innovative rent-seeking activities lead to increased market power and higher returns or lower opportunity costs, increasing the innovator's economic rent.

Rent-seeking in its public-choice sense generally refers to non-value-creating, redistributive ways of obtaining economic rent. Classic examples include increasing market power through reducing competition through entry barriers, and seeking transfers from other groups by influencing public decisions (Tollison, 2012). These activities redistribute rents from other individuals instead of creating new value, and are therefore harmful to society in that they lead to wasted economic effort. We can associate the socially beneficial economic roles of BAs with value-creating, rent-seeking activities, while their socially harmful activities are those aimed at redistributive rent-seeking.

By reviewing the economic roles that business associations fulfil from this perspective, we seek to illustrate that it is possible for both "market-supporting" and "lobbying" types of activities to represent beneficial, value-creating, and harmful, redistributive rent-seeking. In order to do this, we demonstrate – based on previous studies – that (1) all of the studied economic roles of BAs can involve activities linked to the private-order and

the public-order, and that (2) all of their economic roles can contribute to both valuecreating and redistributive rent-seeking.

There are three main types of economic role, defined by the three ways through which BAs can contribute to value-creating rent-seeking. The first type may be called the *vertical economic role*, because it is mainly concerned with transactions along the value chain. This economic role enables more value-creating transactions by reducing transaction costs and protecting the rents obtained from those transactions. The second type may be called a *horizontal economic role*, because it concerns the cooperation that occurs within business communities aimed at securing public goods for themselves. These public goods contribute to value-creating rent-seeking by lowering costs and enabling innovative economic activities. The third type is that of the *external economic role*, as it is concerned with the relations of business communities to other social groups. By contributing to the resolution of social conflict, it enables the community to protect its economic rent. We do not consider redistributive rent-seeking to be a separate economic role of BAs, but instead propose that any of the economic roles of the latter can involve redistributive elements, if the institutional context allows this.

2.3.2 Vertical economic roles: enabling more value-creating transactions

BA activities in the first group are defined by their economic role in improving the transactional order of the business community. These concern vertical relationships along value chains that may be found inside or outside the community. While the other economic roles of BAs also contribute to better functioning markets, in the former cases collective action directly enables value-creating transactional solutions.

2.3.2.1 Protecting property rights

BAs have an economic role as private, planned, coercion-constraining institutions (Greif, 2008). By sanctioning breaches of property rights, such as public expropriation or violent takeover of assets, these activities increase the incentive of private actors to invest in economic activities, thus enabling more complex forms of cooperation (D. Duvanova, 2007, 2013; Hedberg, 2011; Pyle, 2011; Rochlitz, 2016; Yakovlev et al., 2014). Association activities related to this economic role include spreading information about violations of rights, coordinating sanctions against violators through suspending transactions (Kazun, 2015), and pressuring the government to guarantee property rights (Mikamo, 2013).

2.3.2.2 Reducing transaction costs

The other basic transaction-enabling role of BAs involves reducing transaction costs. Business associations may help lower transaction costs in a variety of ways (Recanatini & Ryterman, 2001a), resulting in more value-creating transactions. These can include lowering search costs by providing information about potential partners, lowering bargaining costs by coordinating common contractual frameworks, or lowering enforcement costs by improving existing contract enforcement mechanisms or institutionalizing new ones.

By providing platforms for information-sharing and the development of informal ties, associations reduce the cost associated with finding business partners, as well as the cost of contracting (De Clercq et al., 2010). Associations contribute to increasing credible commitment in contractual relationships by both improving the spread of information about rule-breakers and helping coordinate sanctions against them (McMillan & Woodruff, 2000). These institutions can enable decentralized, reputation-based contract enforcement (Prüfer, 2016; Pyle, 2005, 2006b), as well as reduce the costs associated with formal contract enforcement through offering arbitration services. Sanctioning opportunism can be expected to increase the credibility of both members' promises and promises made to members (Johnson et al., 2002). BAs can also institutionalize professional and ethical regulations for dealing with reputation commons (Barnett, 2006). Similarly to the case of credible commitments, business associations contribute to the latter through facilitating information sharing, which enables third-party or community enforcement, or by institutionalizing this enforcement themselves (Lenox & Nash, 2003).

2.3.3 Horizontal economic roles: providing public goods

BAs can facilitate the provision of public goods, enabling more value-creating transactions through reducing costs and encouraging innovative business activity.

2.3.3.1 Maintaining the knowledge base of the community

Associations can play various economic roles in relation to the provision of knowledge required for a business community. Firms can organize and co-fund training and certification activities through business associations (Maennig et al., 2015; McCormick et al., 2008). This helps to overcome the free-rider problem inherent in the spread of onthe-job training and non-specific, transferable knowledge, as firms can funnel-in employees from other companies who have invested in knowledge, leading to low-effort equilibrium. An important aspect of business associations' capacity for spurring innovation is their ability to foster information sharing, whether through channelling

scientific results into the professional community (Luna & Tirado, 2008) or through developing networks (Schwartz & Bar-El, 2015). Due to knowledge spillover effects, participants in these networks have positive external effects on each other (De La Maza-Y-Aramburu et al., 2012).

The successful participation of professionals in the exploratory processes of innovation and governance requires more than gathering and applying information. Business associations can create the institutional settings for the development of professional identities, shared intellectual foundations, and professional solutions, all of which are required for the successful adaptation of an industry to changing conditions (R. Greenwood et al., 2002; Nordqvist et al., 2010). Mike (2017) applies Michael Polányi's (1951/2010) concept of *intellectual order* to conceptualize the underlying institutionalized communities behind an industry or profession. An intellectual order entails more than information sharing, as it institutionalizes a shared search for truth in the form of professional solutions, new ideas, and the ethos of professionalism, as well as mediating between industry and related intellectual fields of science and technology.

2.3.3.2 Joint provision of infrastructure

By collectively developing and maintaining infrastructure, BAs can take advantage of external economies of scale without having to give up their autonomy (Kingsbury & Hayter, 2006). This allows them to reduce their costs, leading to higher economic rent. Examples include jointly organized, capital-intensive R&D activities (Lamberg et al., 2017), as well as maintaining shared sales infrastructure (Hashino & Kurosawa, 2013; McNamara, 1993).

2.3.4 External economic roles: Coordinating solutions to social conflicts

In such cases, collective action goes beyond the direct goals of the business community and involves coordinating relations with other groups in order to protect rent, or to obtain external resources. Social conflicts arise from differences between the economic rationality of the business community and the goals of other social groups. Conflicts can be resolved by engaging with the other stakeholders directly or through government policy.

2.3.4.1 Resolving social conflicts

BAs can be used for resolving conflicts that arise from the external effects of the business community's activities on other social groups. Marques (2017) provides a recent review of the social-responsibility-related activities of BAs. These might allow for structured engagement and bargaining with stakeholders (Dickson & Arcodia, 2010), defining and

enforcing professional standards for dealing with external effects (Font et al., 2019; King & Lenox, 2000), or generating self-regulation that helps maintain a shared social reputation (King et al., 2002; Tucker, 2008).

2.3.4.2 Coordinating involvement in (development-, economic-, social-, etc.) policies
Business associations can be involved in the formulation and implementation of various
government policies. Areas such as development policy (Hashino & Kurosawa, 2013)
and economic stabilization policies (B. R. Schneider & Doner, 2000) may benefit from
the involvement of private institutions. Associations can also aggregate the opinions of
their members and transmit them to policymakers. This contributes to the public good of
having more informed, higher quality policies (Chappin et al., 2008). Business
associations can help with overcoming horizontal coordination problems associated with
economic development, such as the acceptance of technological and quality standards (B.
R. Schneider & Doner, 2000). These coordination activities do not necessarily replace
market competition, but are able to elevate it to new levels (Berk & Schneiberg, 2005).

2.3.5 Redistributive rent-seeking

There are four ways for BAs to engage in redistributive rent-seeking, none of which necessarily involve lobbying or even engaging with the public-order, as they can also rely on the private-order.

BAs can be platforms for (1) *collusive practices*, whereby firms reduce competition through agreements (McMillan & Woodruff, 2000, pp. 3, 38). Reduced competition leads to redistribution from potential entrants and consumers. Collusive practices can be organized under the pretence of any joint activities, but they are most relevant for economic roles that involve horizontal coordination, whether for providing public goods or for resolving external conflict. Collusion can also result from the coordination of contractual rules, which belongs to the transaction cost-reducing role. These arrangements can only be stable if entry barriers are present, or entrants are incentivized to join such agreements. (2) *Entry barriers* are mainly related to ethical and professional self-regulation, which are elements of vertical and external economic roles.

Both collusion and self-regulation require selective benefits to become stabilized, while these benefits themselves can lead to (3) *exclusive institutional orders* (Johansson & Elg, 2002). When property rights or contracts are only selectively enforced, or access to public goods and external mediation is selectively provided, this can lead to entry barriers for agents external to BAs, therefore lessening competition. The intellectual orders of business communities can also be barriers to change if they are closed in nature (Mike,

2017), thereby protecting the entrenched interests of incumbents, instead of supporting more efficient solutions. Selective access to resources can be based on any of the listed economic roles, if they are allowed to become exclusive in their institutionalization.

The textbook case of redistribution involves (4) *coercion* in relation to obtaining resources from other groups, which in contemporary polities is exercised through the state. In the absence of an effective public order, mafia-like BAs can extract resources directly from other groups through private-order coercion. Redistribution through coercion is mostly related to the external economic roles of BAs, but it can also involve activities linked to protecting property rights.

2.4 How are BAs institutionalized?

Doner & Schneider (2000) propose that there is a relationship between the beneficial contributions of BAs and their institutional strength, claiming that a certain level of institutionalization is needed for a business association to be able to fulfil beneficial, "market-supporting" economic roles. While it is true that associations at different levels of institutionalization contribute in different ways, the relationship does not seem to be that straightforward. It is perhaps better to approach the question from the perspective of the institutional functions underlying the economic roles of BAs. We distinguish three institutional functions of BAs, and propose that each of them can be institutionalized at different levels, constituting four typical institutional forms. From a review of the literature regarding this approach, we seek to demonstrate that beneficial contributions related to each of the economic roles of BAs are possible at each of the different levels of institutionalization.

2.4.1 How can BAs contribute?

How can BAs contribute to solving the various collective-action problems in which they are involved? Collective-action problems generally require institutional solutions, and different levels of the former require different levels of institutional arrangements to support stable cooperative solutions. Pure coordination problems only require the institutionalization of common knowledge that is created among actors. Coordination problems with a conflictual element require some form of institutionalized rules of compensation. Rules in this context can be defined as "shared understandings by participants about enforced prescriptions concerning what actions or outcomes are required, prohibited, or permitted" (Ostrom, 2005, p. 18). Prisoner's-dilemma type

problems require the institutionalization of rules and sanctions in order to overcome freeriding concerns.

BAs can contribute to each of these institutional solutions by supporting any of the three main institutional functions that are involved: information-sharing for the creation of common knowledge, rule-articulation for defining compensatory institutions and creating focal points which increase commitment to solutions, and institutionalizing sanctions for incentivizing compliance with rules.

2.4.1.1 Information-sharing

BAs can institutionalize information-sharing by (1) providing a forum for their community, (2) sharing information themselves as central intermediaries, (3) structuring and formalizing information-sharing, and (4) incentivizing structured information sharing by community members. These activities allow community members to become aware of collective action problems, the actors involved in collective problems, and the goals of stakeholders who are involved. This institutional function does not change the set of stable solutions that are available, but reduces the costs associated with coordinating solutions and incentivizing compliance through other institutional mechanisms through equalizing the information available to each actor.

2.4.1.2 Rule-articulation

BAs can contribute to rule-articulation at various levels. They can (1) provide a common platform for members to articulate rules, (2) institutionalize rule-articulation to provide common processes, or (3) provide formalized ways of defining rules. These functions allow community members to better coordinate solutions to collective problems without changing the set of stable solutions itself, and by institutionalizing focal points for harmonizing expectations about what others are going to do.

2.4.1.3 Incentivizing compliance

To incentivize compliance with rules, BAs can either (1) improve the functioning of sanctions provided by other institutions, or (2) institutionalize their own associational sanctions. By incentivizing compliance, BAs can modify the set of stable solutions that is available for managing collective action problems.

2.4.2 Levels of BA institutionalization

Based on the analysis of institutional functions in the previous section, we can derive four distinct institutional forms of BA. These theorized forms are ideal types. Although subsequent levels build on each other, the order reflects the level of institutionalized collective action, not a development path. Several different forms might co-exist within

the same community. The following subsections describe each ideal type in terms of the institutionalization of each of the three institutional functions, while Table 1 provides an overview of the four institutional forms.

2.4.2.1 Intermediary association

The first level of institutionalization corresponds roughly to what Galambos (1966) in his theory of BA institutionalization called a "dinner-club association." An information intermediary BA provides a platform for sharing information that "greases the gears" of other institutional mechanisms. It provides no formal rules or incentives at the BA level, instead relying on those provided by other institutions. It is useful for harmonizing beliefs and expectations within and around the business community that foster spontaneous contract enforcement mechanisms based on ethics, social norms, and reputation, or for facilitating information to and from public-order institutions in order to improve their functioning. Information intermediaries do not create stable solutions to collective action problems themselves, but might reduce the transaction costs of coming up with and maintaining solutions.

2.4.2.2 Associational governance

In addition to sharing information, associational governance means that common rules are articulated at the BA level. Associational governance is exercised through a process of structured bargaining (Ville, 2007), which means that it is not self-regulation yet, as at this level the BA itself does not institutionalize sanctions related to compliance. It rather contributes to harmonizing expectations about what actions are considered right within the community, and providing focal points for solving collective action problems, without changing the incentive structure of a situation itself. Its economic role as a rule-setting platform provides a BA with a natural central position as an information-sharing institution as well.

2.4.2.3 Self-regulation

The term "self-regulation" is often used to mean solutions at any of the first three levels of institutionalization. For our purposes, we define a self-regulatory association as one in which, in addition to information-sharing and rule-articulation, incentivizing compliance with the rules of the community is also institutionalized at the associational level. This requires the BA not only to articulate but also to formalize common rules and create sanctions at the BA level that are backed by their own selective incentives. These incentives are tied either directly to rule-compliance or to membership itself, with membership being tied to rule-compliance. This allows the self-regulatory BA to change the payoff structure of collective action problems, changing the set of feasible stable

solutions at the community level. Sanctioning at the associational level also tends to require BAs to formalize some information sharing in order to fulfil their monitoring function, while it also provides them with the tools to incentivize compliance with the procedures of information sharing.

Self-regulation does not necessarily imply a lack of public-order regulatory mechanisms, but merely that privately designed regulation mechanisms operate without direct reliance on the former. Nor does self-regulation mean a lack of reliance on informal mechanisms. The dividing line is the existence of institutionalized sanctioning mechanisms at the collective level.

2.4.2.4 Co-regulation

The final institutional form is co-regulation, which represents an alternative solution to the problem of institutionalizing selective incentives. A co-regulatory association receives the backing of the public-order in the form of the legal sanctions or resources on which its sanctions are based (Muraközy & Valentiny, 2015). These often include mandatory membership or participation, or granting official legal status to rules and decisions of the association. These additional resources might provide co-regulatory BAs with even greater capacity to restructure problems of collective action. Co-regulation is also expected to institutionalize information-sharing and rule-articulation, even if it tends to include public-order rules and information sources. Co-regulation often blurs the line between voluntary and mandatory association, as related activities are not necessarily all backed by public legal sanctions.

Table 9: Level of institutionalization of the three main institutional functions for the four typical forms of institutionalization

Level of collective action	Information-sharing	Rule-articulation	Incentivizing compliance
Intermediary association	Platform + (possibly central) information intermediary	Provided by other institutions	Provided by other institutions
Associational governance	Platform + Central information intermediary	Articulated (and formalized) at the association level	Provided by other institutions
Self-regulation	Platform + Central information intermediary + Formalized, possibly compulsory information-sharing	Articulated and formalized at the association level	Associational sanctions based on membership benefits and services

Level of collective action	Information-sharing	Rule-articulation	Incentivizing compliance
Co-regulation	Platform + Central information intermediary + Formalized, possibly compulsory information-sharing	Articulated and formalized at the association level + some have official public status	based on membership benefits and services +

2.4.3 Levels of institutionalization and the economic roles of BAs

Doner & Schneider (2000) propose that a certain level of institutionalization is needed for a business association to be able to fulfil market-supporting economic roles. We suggest that each of the four levels of institutionalization is relevant for each of the proposed economic roles, as BAs with different levels of institutional strength can contribute in different ways. In the following sections we provide an overview of the economic roles which BAs at different levels of institutionalization are able to fulfil, attempting to highlight that (1) all institutional levels, even including simple information intermediaries, can be beneficial, and that (2) higher levels of institutionalization can enable harmful forms of rent-seeking, not only beneficial coordination.

If *intermediary BAs* can rely on spontaneous or public-order sanctions, they are able to coordinate various forms of collective action. They can enable value-creating transactions by spreading information about business partners and regulations (Betton et al., 2018; Cai & Szeidl, 2018; Johnson et al., 2002; Leonidou & Katsikeas, 1997; Pyle, 2005, 2006b; Recanatini & Ryterman, 2001a), and about breaches of property rights (Pyle, 2011; Rochlitz, 2016). They can improve knowledge-sharing (Costa et al., 2017; Kirby, 1988; Luna & Tirado, 2008; Pyle, 2006a; Qiao et al., 2014) and reduce the transaction costs of coordinating shared infrastructural projects (McNamara, 1993). They can also reduce the cost of engagement with stakeholders in relation to externalities (Dickson & Arcodia, 2010) and on developing and implementing public policies (B. R. Schneider, 2010; Stolz & Schrammel, 2014).

BAs at the level of *associational governance* can articulate common goals and rules, which enable them to orient collective action in various cases if they can connect these to other institutional incentives. They can coordinate contracts and knowledge-sharing to reduce transaction costs (Herrigel, 1993; Lane & Bachmann, 1997; Rademakers, 2000), to facilitate joint investment in public goods (Berk & Schneiberg, 2005) and innovation (Faulconbridge, 2007; McCormick et al., 2008; Nordqvist et al., 2010; Perez-Aleman, 2003). They can enable community reputational mechanisms in contract enforcement

(Masten & Prüfer, 2014; Prüfer, 2016), the protection of property rights (Dixit, 2015; Hedberg, 2011; Nugent & Sukiassyan, 2009), and in dealing with social conflicts (Font et al., 2019; King & Lenox, 2000). They can also articulate community-level interests to improve policymaking.

The presence of formal sanctioning and monitoring capacities enable *self-regulatory BAs* to institutionalize solutions to the problems of free-riding and preference heterogeneity. They can help enforce the self-regulation of ethical and professional standards for contract enforcement (Bernstein, 1992, 2001; Dentoni et al., 2012; Gehrig & Jost, 1995; Gunningham & Rees, 1997; McMillan & Woodruff, 2000; Ville, 2007), the protection of property rights (Larrain & Prüfer, 2015) and resolving external conflicts (Christiansen & Kroezen, 2016; King & Berchicci, 2007; Tucker, 2008). They are able to institutionalize the community provision of public goods by incentivizing contributions (Kingsbury & Hayter, 2006; Lamberg et al., 2017), and to formalize knowledge networks for innovation (R. Greenwood et al., 2002; Kahl, 2018; Schwartz & Bar-El, 2015). They are also able to enforce community-level deals with external stakeholders and policymakers.

Public-order incentives allow *co-regulatory BAs* to tackle most conflictual prisoner's-dilemma types of collective action problems. They can institutionalize even stronger sanctions to support quality and ethical regulations, contributing to contract enforcement (Coleman, 1989; Muraközy & Valentiny, 2015), property rights protection (Mikamo, 2013; Yakovlev et al., 2014) and the management of social conflicts (Bartle & Vass, 2007; Héritier & Eckert, 2009; Marques, 2017; Rees, 1997). They can combine public and private resources to provide public goods related to infrastructure and knowledge provision (Athreye & Chaturvedi, 2007; Hashino & Kurosawa, 2013). They can also enable the implementation and enforcement of even contentious policies to improve outcomes (B. R. Schneider, 2010; B. R. Schneider & Doner, 2000).

This review, along with Section 3.5, demonstrates that stronger institutionalization does not necessarily lead to more beneficial (or less harmful) activities, while BAs with simpler institutional forms are also able to fulfil beneficial roles, depending on the collective problems and contexts at hand.

2.5 What drives BAs to ENGAGE IN socially beneficial or harmful activities?

We have suggested that the beneficial or harmful nature of the activities of BAs in relation to economic development is not explained by the presence of specific, non-market-oriented activities, nor by the institutional strength of BAs. What then, does explain the beneficial or harmful orientation of BA activity? We agree with the proposition of

Reveley and Ville (2010) that whether the institutional capacity of BAs is used for beneficial or for harmful purposes mainly depends on the institutional constraints of the latter and the BAs' own institutional governance solutions. It is possible to classify institutional constraints by their sources. Here, the starting point that BAs are positioned between private-order and public-order is once again helpful, as the former constraints stem from the private-order of the community underlying the BA, or the public-order in which a BA is embedded. We provide an overview of the scarce literature on the institutionalization of BAs that goes beyond the issue of selective incentives, highlighting what we consider the four most important questions and the gaps in our knowledge about them.

2.5.1 Community (membership) constraints on rent-seeking

As a BA is constituted by its membership, the goals of the underlying business community are expected to influence its goals. The first question related to this is (1) "when is the underlying business community incentivized to pursue value-creating transactions?" The members of a BA are expected to opt for redistributive rent-seeking instead of value-creating transactions if doing so increases their economic rent. Competitive pressures can create oversight and encourage productivity (Doner & Schneider, 2000), as less productive rent-seekers might fall behind in market competition.

It is not enough for members to be motivated to pursue value-creating activities; the issue of control is also involved. The second question is thus (2) "when is the business community able to incentivize the BA to pursue its activities in line with the community's goals?" Without some control, BA officials can pursue their own goals (Moore & Hamalai, 1993), or become co-opted by powerful subgroups. The first way for members to control BAs is hierarchically, which depends on the success of the internal governance solutions of the BA at resolving principal-agent problems. Several elements of institutional strength identified by Doner and Schneider (2000) are related to this issue. To avoid being controlled by narrow interest groups, BAs need to be able to mediate between members with different interests, for which they need transparency and institutionalized forms of internal discourse. Studies about the failure of self-regulation also call our attention to how business associations need to find institutional balance in representing different member groups in order to avoid their capture by the most influential group for their own rent-seeking purposes (Aldrich, 2018; Barnett, 2013; Yue et al., 2013).

The second way for members to control BAs is indirectly through inter-association competition. Ville (2007) demonstrates that competition between BAs encourages productive roles instead of redistributive, rent-seeking efforts. Hock and Gomtsian (2018) propose that a lack of competition was a major factor in the development of harmful rent-seeking practices in the case of FIFA. Control by other associations can also emerge through the counter-organization of affected stakeholder groups (Reveley & Ville, 2010; Schneiberg, 1999).

2.5.2 Public-order constraints on rent-seeking

The other source of institutional constraints on harmful rent-seeking is the public-order (Doner & Schneider, 2000; Reveley & Ville, 2010). This constraint depends on the willingness and the capacity of the public-order to steer BAs toward productive activities. Therefore, the third question is (3) "when are the agents of the public order incentivized to be responsive to the interests of the broader community?" This is a question of political accountability, which is outside of the scope of this review. We have some evidence in the Russian case that political competition and political accountability incentivize policymakers to pay more attention to more encompassing interests (Govorun et al., 2016). The final question is (4) "when are agents of the public order able to control the activity of the BA?" There is a fundamental problem of information asymmetry here, as a business community inevitably knows more about its workings than any regulatory agency. There is a further issue of regulatory capture here: as government agents develop closer relationships and more capacity to understand and monitor business communities, they become increasingly likely to internalize their goals instead of enforcing the interests of the broader political community (Dal Bó, 2006; Levine & Forrence, 1990). If the interests of the business community and the polity do not align, multiple layers of principal-agent problems can result, whereby the relative successes of private and public-order actors determine the activities of BAs (Mattli & Büthe, 2005). We suggest that further research is needed about all four issues.

2.6 Conclusions and the way forward

In this article we suggest that, in order to understand what business associations really do, we need to approach them not in terms of observable activities, but rather in terms of their underlying institutional rationality. We formulated three questions stemming from our main research question. (1) What are the economic roles of BAs, (2) How are BAs

institutionalized in order to fulfil their economic roles, and (3) What drives BAs to engaging in socially beneficial or harmful activities?

We claim that BAs are "rent-seeking" institutions broadly understood, as their main goal is to increase the economic rent of a community of businesses. There are three main economic roles through which they can enable value-creating rent-seeking: (1) vertical economic roles, which enable more value-creating transactions along the value chain, (2) horizontal economic roles, which enable the provision of public goods which can contribute to economic rents, and (3) external economic roles, which allow for coordinating the goals of business communities with those of other social groups in order to protect economic rent. We challenge the widespread approach in the literature which distinguishes between the beneficial, market-supporting, and the harmful, rent-seeking / lobbying roles of BAs by demonstrating that (1) all of the proposed economic roles of BAs can involve activities linked to the private-order and the public-order, and that (2) all of the economic roles can contribute to both value-creating and redistributive rent-seeking.

Regarding the institutionalization of BAs, we suggest that they have three basic institutional functions in relation to solving collective action problems: (1) information-sharing, (2) rule-articulation, and (3) incentivizing compliance. These institutional functions can be institutionalized at different levels, with four distinct ideal types of BA institutionalization emerging: (1) intermediary BAs, (2) associational governance, (3) self-regulation, and (4) co-regulation. We challenge the proposition by Doner & Schneider (2000) that a certain level of institutional strength is needed for a business association to be able to fulfil beneficial, "market-supporting" economic roles, by highlighting that beneficial contributions from each of the economic roles of BAs are possible at each of the different levels of institutionalization.

After proposing that the socially beneficial role of BAs is not explained by the presence of specific, non-market-oriented activities, nor by the institutional strength of BAs, we give an overview of our limited knowledge concerning what drives BAs to engage in socially beneficial or harmful activities. We suggest that *the institutional incentives* created by the private-order and public-order context explain the orientation of BAs. We hypothesize five main drivers of productive orientation: (1) market pressures on the membership of BAs, (2) internal governance solutions to principal-agent problems, (3) the competition between BAs and other similar institutions, (4) political accountability, and (5) the monitoring capabilities of public-order institutions.

We cannot claim that the typologies of our literature review are exhaustive or sufficiently detailed for in-depth empirical analysis. The main contribution of this study is to highlight that economic roles, institutional functions, and drivers of social productivity are distinct, and that instead of conflating them in our theories, we should approach them at the level of underlying institutional logics in order to link them.

How does distinguishing between the three questions contribute to addressing the original puzzle about the nature of BAs? Distinguishing roles allows us to go beyond observed activities and to analyse the functional requirements for each role in its specific institutional context. Distinguishing functions allows us to analyse the institutionalization of each function and then link them to the requirements of each role. The issue of social benefit also needs to be tackled separately for each economic role by linking them to the general institutional constraints of BA activities.

BAs are positioned between the private-order institutions of business communities and public-order institutions of governance, and can complement or compete with either. Private-order institutions such as firms, alliances, and contractual solutions determine the kinds of collective problems facing BAs, as well as their resources for dealing with them. We can also expect different BA features to be relevant in neo-corporatist versus pluralist systems, and at the supranational, national, and local level, mainly due to the resources and constraints provided by the relevant public-order institutions. This means that empirical analyses of functionality and institutionalization must deal with both the external institutional context and the private-order contexts of business communities. Any comparative or natural experiment-based analysis of BAs needs to focus on either specific role (such as contract enforcement), specific business communities (industries or professions), or specific systems of governance (policy areas or polities) to deal with the problems of embeddedness and multifunctionality.

For a comprehensive understanding of BAs, we need to go beyond specific functions and theorize about the relations between the different functions: do their underlying institutional logics complement each other, or do they result in organizational tensions and trade-offs? Answering these questions can shed light on the institutional dynamics, development paths, and institutional equilibria for BAs. There has unfortunately been little progress on this topic since Schmitter & Streeck's (1981/1999) pioneering work on the logics of association. The institutionalization typology of this paper presents ideal types for structuring our review and challenging some of the claims in the literature, but we invite scholars to come up with more nuanced theories about the levels of BA institutionalization and the factors underlying its processes. Doing this will require more

in-depth, interdisciplinary studies about the institutionalization of business communities and their associational systems that draw on economics, business history, and political science, following the steps of Galambos (1966), Greif (2006), and Reveley & Ville (2010)

3 DO BUSINESS ASSOCIATIONS SUPPORT CONTRACTUAL RELATIONSHIPS? EVIDENCE FROM FIRMS IN A WELL-FUNCTIONING LEGAL ORDER⁴

Károly Mike, István Boza, Gábor Tamás Molnár⁵

Abstract

Institutional economists have recently stressed the potential role of business associations in supporting contractual relationships, particularly beyond informal ties. While there is supporting evidence in developing and transitional contexts, it is unclear if this role persists under a highly developed legal system. We contribute to filling this gap by using data from a managerial survey of small and medium-sized firms in Hungary and investigating the links between firm membership in business associations and the credibility of contractual commitments in interfirm relationships. We find that business associations are important elements in the institutional landscape of contract enforcement, if perhaps not as robust as the literature implies. Many associations appear to play no such roles and even those that do tend to fail to facilitate doing business with unknown or geographically distant partners. Their most important contribution is that, through information sharing about business behaviour and the ethics-based selection and control of their members, they contribute significantly to their members' ability to establish credible commitment in their relationships.

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3.1 Introduction

The widespread existence of business associations (BAs), defined as private, formalized, non-commercial organizations, intended to further the business interests of their members (Prüfer, 2016, p. 306), provide several puzzles for social science scholarship, chief among which is the question of their functionality: what do they contribute to their members, and how do they fit into the institutional framework of economic development? The traditional view of BAs as rent-seeking organisations (Olson, 1971; Rowley et al., 1988) is increasingly challenged by institutional economists who stress their more beneficial functions (Doner & Schneider, 2000, p. 200; Prüfer, 2016). Self-governing associations of businesses can support contractual relationships by reducing transaction costs in various ways, such as supporting reputational mechanisms, enforcing social norms, and adjudicating disputes. They can also help protect property rights in business against criminals or intrusive governments (Greif et al., 1994; Pyle, 2011). Thus, they can function as both contract-enforcing and coercion-constraining institutions (Greif, 2008). In this perspective, supporting unproductive rent-seeking may not be their primary function. Indeed, by reducing the costs of creating value for customers (through betterprotected property rights and contracts with lower transaction costs), they may even make rent-seeking from the government less attractive compared to engagement in market competition, while enabling more contestable markets.

But do business associations really perform the transaction-cost reducing roles attributed to them? If yes, how and to what effect? We have very limited evidence that pertains to these questions, and most of what we do know dates from the rather special transitional context of Eastern Europe, especially Russia. Arguably, BAs may perform socially more productive functions when government are failing in the provision of a reliable legal order (D. S. Duvanova, 2011; McMillan & Woodruff, 2000; Pyle, 2011). However, government failures are also widespread in institutionally developed countries and private organisations may, in principle, have several advantages in terms of information and motivation to provide market-supporting services for firms. This is especially likely to be true of contract enforcement, for which a broad range of non-state mechanisms are widespread and important in any context (Brousseau & Raynaud, 2006; Williamson, 2002). The goal of this paper is to investigate empirically the activities of business associations and their effects on business contract enforcement under a developed and stable legal order.

This study uses a managerial survey covering small and medium-sized firms in an EU member state (Hungary), which provided detailed data on both firm membership in

business associations and the credibility of contractual commitments in interfirm relationships. This allowed a unique opportunity to test the theoretical conjectures of institutional economics in a setting characterised by a well-functioning legal order for contract enforcement, while controlling for characteristics of firms, their contractual relationships, and the institutional alternatives they rely on in.

Section two begins by sketching the problem of credible commitments and the possible roles of business associations in its institutional solutions. A review of related literature follows, laying the groundwork for our research questions and hypotheses, which conclude the section. Section three offers explanations of our data collection and operationalization choices, as well as an overview of the key variables in our dataset. The empirical analyses in section four begin by analysing how managers perceive the role of BAs in establishing their credibility. It then turns to four ways of assessing the effect of BA membership on the credibility of contractual commitments of members' business partners: perceived credibility, the provision of trade credit, and the willingness to enter contracts with previously unknown or geographically distant partners.

Our results do *not* support the view that BAs *in general* increase credible commitment among business partners in this context. However, BAs *with functions relevant* for contract enforcement do have significant effects, if perhaps not as robust as the literature seems to imply. In particular, they do not seem to facilitate doing business with unknown or geographically distant partners. We also find significant differences between different types of BAs – chambers, professional and local business associations. Our findings call for a more nuanced theory of the contract enforcement role of BAs.

3.2 Literature review and theory

3.2.1 Credible commitments and institutional solutions

As all economic transactions involve contractual promises, the partners involved need to obtain credible commitments from each other. The main institutional solution to this challenge of cooperation is to rely on mechanisms sanctioning contractual breaches, which can be defined externally or by the partners themselves (Williamson, 1979). Sanctions need to be commonly known and understood, as well as economically feasible to apply in the case of breaches, which is why they are always embedded in social institutions (North, 1990). Following Greif (2008) institutions of contract enforcement can be classified by their sources (organic or designed, also referred to as planned) and the actors operating the related sanctions (private-order or public-order institutions). Besides the organic private-order institutions of morality, social norms, reputation and

informal relational contracting, and the designed public-order institutions of law and government regulation, designed private-order institutions are often overlooked in economic analysis. This group of privately run but designed institutions include firms when they define their own set of rules for internal transactions (Williamson, 2002) hybrid institutions such as clusters and cooperatives (Ménard, 2004) and business associations. Table 10. provides an overview of the three types of institutions. It is worth keeping in mind that these institutions interact in various ways, as designed institutions never completely replace organic ones, often complementing or strengthening them instead. Conversely, civil law and designed private-order institutions can rely on morality, professional norms, reputation, and relational mechanisms in enforcement.

Table 10. A typology of contract enforcement institutions [adopted from (Mike et al., 2018), based on (Greif, 2008)]

Actor operating	Institutional design	Institutional design						
mechanism	Organic	Designed						
Private order	Moral rules Social norms Reputation Informal relational contracting	Corporate hierarchies Professional associations (business-, trade-, industry associations, entrepreneurial clubs)						
Public order (government)	_	(Civil) law Regulation by agency						

Actors in a developed economy rely on a broad range of contract enforcement institutions (Mike & Kiss, 2018), because such mechanisms are fragile and offer insufficient insurance by themselves. Organic mechanisms are constrained by their reliance on personal relations, communities, and geographical proximity. While they are able to reduce transaction costs in narrow circles, they might not facilitate – or even inhibit – the development of business partnerships beyond them (Kranton, 1996). Public-order mechanisms maintained by the government serve to enable these broader circles of contractual relationships, but often in less convenient and more costly ways, mainly as a last resort (Dixit, 2004; Masten & Prüfer, 2014).

3.2.2 The roles of business associations in contract enforcement

Business associations can facilitate economic transactions in various ways (Doner & Schneider, 2000; Knack, 2003; Prüfer, 2016). They can contribute to the broader institutional framework of transactions – especially where formal legal order is lacking – by protecting property rights from governmental or criminal predation (D. S. Duvanova,

2011; Pyle, 2011). Turning to contractual relations, McMillan and Woodruff (2000) draw on a long (if thin) line of research in economics (Cooter & Landa, 1984; Greif, 1993), law (Bernstein, 1992; Ellickson, 1991) and anthropology (Geertz, 1978), in arguing that BAs play a role as private order organisations capable of providing information about partners and contractual breaches, and also organising responses to them. They can reduce the costs of finding new partners, define professional standards to facilitate contracting, support reputational mechanisms through information-sharing and control of members, and provide dispute resolution services.

Formalized associations can thus complement existing informal networks, helping members transcend the limitations of organic private-order mechanisms (Greif, 2008). Prüfer (2016) offers formal models of BAs as intermediaries of information about business partners and arbitrators of business disputes with endogenous membership decisions. His results demonstrate that BAs offer value even to members already embedded in social networks. BAs can complement private-order mechanisms of contract enforcement, allowing their members to go beyond existing personal ties in developing business partnerships. Johnson et al. (2002) consider trade associations as alternatives to formal courts in contract enforcement through providing information on prospective business partners and conflict arbitration. Pyle (2005) theorises that BAs can be effective in facilitating relational contracting as institutionalised solutions to information-sharing about business partners. Pyle (2006b) further emphasises that this indirect nature of BA impact on contract enforcement is important even if direct involvement of BAs in dispute resolution is insignificant.

BAs can improve the credibility of commitments even in relationships where one party is not a member (Greif, 2002; Greif et al., 1994; Recanatini & Ryterman, 2001b). Outside partners are more likely to trust in members of an association which selects trustworthy applicants or sanctions members' breaches of trust. On the other hand, if members might have more sanctions at their disposal against outside offenders, they are more likely to trust their partners.

Newbery et al. (2016) survey 313 members of English local business associations to understand the bundles of benefits which they seek from them. Their results highlight the strong relevance of information sharing activities of BAs, but also point to a demand for networking and reputational benefits. Bennett and Ramsden (2007) survey the functionality British BAs, finding that information tends to be the main motivation for membership, while networking is also a relevant function, especially among business clubs. Battisti and Perry (2015) survey SMEs in New Zealand to study their BA

membership benefits. Improved access to potential business partners was found to be among the top two membership benefits for both trade and sectoral associations.

Sukiassyan and Nugent (2011) study the effects of BA membership on firm performance in 28 transition economies. Information sharing and contacts seem to have a robust positive effect, while dispute resolution only does for the 2005 data set. Pyle and Solanko (2013) analyse a 2004 survey of Russian regional BAs, finding that in that context, lobbying activities are much more relevant than dispute resolution, networking or professional or moral control. (Ivanova & Neumayr, 2017) reach a similar conclusion regarding various types of Russian BAs, finding that they are more engaged in policy advocacy than in business community building.

Quantitative empirical studies of these proposed effects are few and far between. At macro level, using cross-country analysis, DeClercq et al. (2010) find that higher participation in voluntary associations is associated with a higher rate of new business activity. They attribute this effect to the ability of BAs to spread information about business partners and support private contract enforcement, especially in countries with weak formal institutions or higher regulatory burden. Danis et al. (2011) replicate these results on an extended dataset, adding that this relationship is stronger in emerging economies than in developed ones, which points to the relevance of institutional development for assessing the effects of associations. Wang and Tan (2018) study the effects of local business associations on new entrants, finding a curvilinear effect, where the prevalence of local business associations encourages new entry up to a point, then may become an instrument for incumbents to keep new entrants away.

Firm-level analyses are concentrated on the Central and Eastern European context. Recanatini and Ryterman (2001b) analysing the behaviour and features of firms during the economic transition in Russia conclude that BA membership mitigated drops in firm performance significantly under harsh conditions through information sharing about potential partners. Hendley et al. (2000) found that although 28% of Russian firms in their sample were members of BAs, direct intervention by BA officials played a negligible role in contract enforcement and dispute resolution. However, they note that BA membership complemented third-party and informal inter-enterprise enforcement mechanisms, which were found to be among the most relevant elements of contract enforcement. This suggests a possibly important indirect role for BAs. Murrell (2003) and Hendley and Murrell (2003) surveying the transactional strategies or Romanian firms found that bilateral and formal legal solutions were widespread, while reliance on BAs for contract enforcement was relatively unimportant. Murrell's (2003) conclusion is not the complete

irrelevance of such third-party institutions, but the lack of capacity or incentives for firms to utilise them in such transitional settings. Broadman et al. (2004) found a similarly minor role of BAs in the Balkans, where 0-10% of members reported significant contributions of associations to resolving their contractual disputes.

In-depth econometric analyses of transactional strategies mostly rely on a survey of SMEs in Slovakia, Poland, Romania, Ukraine and Russia conducted in the late 1990s (Johnson et al., 2000). McMillan and Woodruff (2000) show that BA members are more likely to be informed about other members' contractual disputes, but they are not more able to inform their partners' partners about their own contractual disputes. Building on their analysis, Pyle (2005) demonstrated that BA membership has significant positive effects on inter-firm flows of relational information, even while controlling for pre-existing communication, although not in the case of local business partners. These studies yielded contradictory results on whether BAs enable firms to bridge geographical distances in developing contractual relations. While BA members were not more likely to have distant relationships (McMillan & Woodruff, 2000), they were more successful in enforcing their financial claims from distant partners (Pyle, 2006b), which presumably increased their willingness to engage at a distance. Johnson et al.'s (2002) highly cited study found that association membership had a weak positive effect on the propensity of firms to provide trade credit to partners. They also demonstrated that membership in a BA which provides information on business partners or arbitration services significantly reduced the probability of rejecting a new partner's more advantageous offer due to low credibility. Both of these indicate that BA members are more able to trust the commitments of their partners, enabling wider contractual networks and higher levels of competition.

While the generalizability of results from post-socialist transitional contexts is debatable, they highlight that BAs facilitate contractual relations mainly by spreading credible information among and beyond their members rather than resolving contractual disputes themselves (Pyle, 2005). This is supported by Cai and Szeidl's (2018) field experiment in China, where they studied the effects of participating in exogenously created business networks on firm behaviour. They found that participants in active networks had higher turnover and profit levels, more new business partners, and higher formal and informal credit, owing mostly to the ties developed with and the references received from network members. This latter mechanism hints at the role of associations in increasing trust in members beyond their membership.

3.2.3 Research questions and hypotheses

We identified four main effects of BAs on contractual relationships: (1) they can increase trust between their members, (2) they can increase the trust of non-members in their members, (3) they can increase the trust of members in non-members, and (4) they can enable members to find new potential partners. We also need to consider that establishing credibility in contractual relationships often relies on combinations of private-order and public-order mechanisms (represented by the dashed lines), which may be enabled by BAs (represented by the dotted lines), but can also work independently from them (Prüfer, 2016; Pyle, 2005). Our first research question concerns the effect of BAs on trust in members:

RQ1: Do members of business associations perceive them as effective in increasing the credibility of their members?

This relates mostly to effects (1) and (2) of BAs. The possible contributions of BAs are twofold: informal membership benefits which are relevant for every active membership, and functions which relate directly to contract enforcement. We formulated two hypotheses, where the first refers to BA membership in general, while the second relates to BAs with directly relevant functions:

Hypothesis 1: Members of business associations perceive them as effective in increasing the credibility of their members.

Hypothesis 1': Members of business associations engaged in activities supporting contract enforcement perceive them as effective in increasing the credibility of their members.

Going beyond overall perceptions into effects on actual contractual relations, we followed the main line of empirical studies (Hendley et al., 2000; Johnson et al., 2002; McMillan & Woodruff, 2000; Pyle, 2005, 2006a; Recanatini & Ryterman, 2001b) in asking whether BA members trust their partners more than non-members:

RQ2: Do members of business associations trust in the contractual commitments of their business partners more compared to non-members?

This effect (3) of BAs is again hypothesized for membership in general and for membership in BAs with directly relevant functions:

Hypothesis 2: Membership in a business association helps create business relationships with a higher degree of credible commitment.

Hypothesis 2': Membership in a business association that is engaged in activities supporting contract enforcement helps create business relationships with a higher degree of credible commitment.

There is a significant endogeneity problem in comparing the credibility of business partners between members and non-members because firms select the types of partnerships in which they are willing to engage based on their available contract enforcement alternatives. Therefore, the positive effects of BAs could enable their members to establish relationships with partners who would otherwise not be sufficiently credible due to private-order and public-order mechanisms being more costly or less applicable to them. This means that we could observe similar levels of credibility among members and non-members, but for different kinds of partnerships.

Our third research question therefore relates to partnerships where private-order alternatives are more costly:

RQ3: Are members of business associations better able to engage with business partners from outside their personal and local networks?

The ability to transact with partners outside of personal and local networks stems from all four effects of BAs. Effect (4) relates to the costs of finding distant potential partners, while effects (1)-(3) contribute to the willingness of both members and their partners to establish such relationships.

We formulated similar pairs of hypotheses as previously for enabling partnerships without prior acquaintance and for enabling partnerships at greater geographical distance:

Hypothesis 3: Membership in a BA supports the establishment of new business relationships without prior acquaintance or network relationship.

Hypothesis 3': Membership in a BA that supports contract enforcement helps the establishment of new business relationships without prior acquaintance or network relationship.

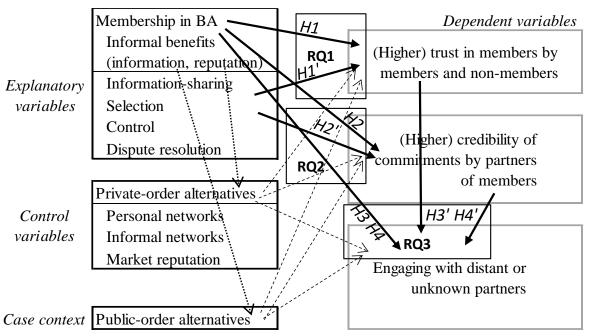
Hypothesis 4: Membership in a BA supports establishment of new business relationships at greater geographical distance.

Hypothesis 4': Membership in a BA that supports contract enforcement helps the establishment of new business relationships at greater geographical distance.

The effects of BA membership in H3 and H4 include both direct (4) and indirect (1)-(3) effects, while the effects of the presence of contract enforcement functions in H3' and H4' are mostly indirect through the previously hypothesized effects in H1-H2'.

Figure 5 summarizes the related theoretical conjectures of institutional economics to situate our research design. Bold lines represent effects central to our study, while dotted lines represent additional possibilities through organic private-order, and public-order institutional alternatives.

Figure 5. Research design and questions



3.3 Data and methods

3.3.1 Case selection and data

Our case, Hungary belongs to those former Soviet-occupied countries in East-Central Europe where a functioning institutional order of markets emerged roughly by the turn of the millennium (Beck & Laeven, 2006; Campos, 2000; Crafts & Kaiser, 2004; Murrell, 2008). By now, Hungary has a highly developed legal system (Murrell, 2008), ranked 8th in the world in the category of 'enforcing contracts' by the World Bank's Doing Business Survey in 2016,⁶ although trust in the rule of law is lower than in Western Europe (Kaufmann et al., 2009). We can assume that the firms in our sample have similar, moreor-less functioning public-order mechanisms available to aid their contractual relationships. In economic development Hungary is one of the less well-off countries in the European Union, with per capita GDP at 68% of the EU average (in 2016, in PPS). Our empirical research design parallels Johnson et al.'s (2002) Central and Eastern European survey from the late 1990s. The main data source was a survey conducted among managers of firms with 5-250 employees, representative of major economic sectors (industry, commerce, services excluding agriculture) and Hungary's seven regions in 2016 (for details of the dataset, see (Mike et al., 2018). Survey questions covered firms' contractual relationships as well as their experience with business associations. Managers were asked to describe and evaluate two of their firm's business

⁶ See http://www.doingbusiness.org/rankings (accessed 10.02.2017).

relationships: one with a seller and another with a buyer. Half of the sample were asked to think of their oldest buyer and seller while the other half reported on their most recent buyer and seller. This method ensured a great versatility in terms of the age and maturity of relationships, factors that are bound to influence credibility. Table 11 provides an overview of the respondent firms' and their business partners' characteristics.

Table 11. Variables of firm, business partner and transaction characteristics

Variable	N	Woighted N	Moon	Std Dov	Min	Mos
CHARACTERISTICS OF RESPONDENT FIR	N MS	Weighted N	wiean	Siu. Dev.	IVIIII	IVIAX
Firm size ⁷						
Sales in previous year (2015, HUF)	738	732.2	308.17	743.33	1	8000
Number of employees		782.3	21.18	30.34	5	249
Log sales		782.3 782.3	2.58	.85	1.61	5.52
Log number of employees		732.2	4.73	1.36	0	8.99
Location in	736	132.2	4.73	1.30	U	0.77
Capital city (Budapest)	792	782.3	.27	.44	0	1
- · · · · · · · · · · · · · · · · · · ·		782.3 782.3	.24	.43	0	1
City Small town		782.3	.24	.43	0	1
Village	102	782.3	.12	.32	0	1
Ownership and management	770	767.0	06	24	0	1
>10% foreign ownership	770		.06	.24	0	1
>10% state ownership	772	771.8	.02	.14	0	1
Top manager with higher education	782		.72	.45	0	1
Age of top manager	762		52.65	10.93	25	78
Age of firm	778	778.7	19.69	11.14	1	132
Integration in global markets						
Share of exports in total sales (%)		782.3	.28	.45	0	1
CHARACTERISTICS OF BUSINESS PARTN						
Seller (1)/ Buyer (0)	782	782.3	.50	.50	0	1
Business partner with >50						
employees	782	782.3	.35	.48	0	1
Sector of partner						
Industry		782.3	.37	.48	0	1
Trade	782	782.3	.29	.45	0	1
Services	782	782.3	.34	.47	0	1
Same sector as respondent	782	782.3	.51	.50	0	1
Partner's location outside county	734	733.2	.45	.50	0	1
Majority owner of partner						
Foreign	728	726.3	.20	.40	0	1
Hungarian state or municipal	728	726.3	.08	.28	0	1
Hungarian private	728	726.3	.69	.46	0	1
Other	728	726.3	.02	.14	0	1
AGE OF RELATIONSHIP (months)		699.9	105.18		0	408
Transaction features (binary variable				- · -		
Own assets are transaction-specific		731.7	.62	.49	0	1
Partner's assets are transaction-	, 51	, , , , , ,	.52	• • • •	3	•
specific	726	726.5	.52	.50	0	1
specific	120	120.5	.54	.50	U	1

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⁷ All regression models feature log-transformed firm size variables.

Variable	N	Weighted N	Mean	Std. Dev.	Min	Max
Market alternatives are available for						
respondent	723	720.6	.40	.49	0	1
Market alternatives are available for						
partner	735	734.6	.46	.50	0	1
Strategic partnership (share of						
partner in firm's annual						
sales/expenditure)						
<1/3						
>1/3	701	702.2	.25	.43	0	1
not yet known	701	702.2	.12	.33	0	1
Frequency of transactions						
more than once a week	705	705.6	.30	.46	0	1
every 1 to 3 weeks	705	705.6	.29	.45	0	1
every 1 to 3 months	705	705.6	.28	.48	0	1
every 3 to 12 months	705	705.6	.07	.26	0	1
less than once a year		705.6	.06	.24	0	1
Efficient way of implementation is						
uncertain	728	726.7	.67	.47	0	1
Performance is difficult to measure	730	728.1	.28	.45	0	1

The data cover the business relationships of a broad range of Hungarian firms. The sample of partners is dominated by privately-owned domestic SMEs, but larger, state-owned, foreign-owned and foreign partners were also included. It also shows variables that capture those aspects of the relationships that are likely to influence the possibility of opportunism and ultimately credible commitment. We follow the general assumptions of transaction cost economics that asset specificity, recurrence and uncertainty are the key transaction features that affect opportunism (Murrell, 2003; Williamson, 2002).

3.3.2 Membership and functionality of BAs

For our main explanatory variable, managers reported on their membership in business associations, including chambers, other professional associations, and local business associations. The questions covered three categories of BAs: (1) chambers, (2) voluntary professional associations and (3) local business associations. Chambers in Hungary are hybrid institutions. While they have a public legal status and are partially financed by compulsory fees, active membership is voluntary, and their activities are largely based on the (often subnational) self-organisation of their members. This justified their inclusion in the analysis.

Table 12. Firm membership in different categories of business associations (N=391)

Membership in	Ratio (number) in the sample
Professional association (at least one of the following)	95% (370)
• Chamber	92% (359)
 Organisations other than chambers 	37% (144)
 Sectoral association 	18% (70)
 National entrepreneurial association 	17% (66)
 Other professional association 	25% (97)
Local association (at least one of the following)	22% (87)
 Local business club, organisation 	13% (51)
• Other, non-business, civic initiative, association	14% (54)
Other local association	6% (25)

We do not know if the business partners belonged to the same BAs as the respondents. Some of them probably were. Nonetheless, we have reason to expect that BAs supported credibility even in relationships with non-members. Membership in a BA could help a firm extract more credible commitments by providing access to more information about other firms (even non-members), helping spread news about a partner's defection and thereby damage his reputation, and providing adjudication services in case of a dispute. The reliability of BA members enhanced by their BA membership may make credible information sharing about non-members more effective, too. Another limitation of our data is that they do not cover the credibility of the firms asked. Therefore, our results are likely to *under*estimate the positive effects of BAs on contract enforcement for two reasons: (i) we consider relationships with both members and non-members, and (ii) only examine the credibility of partners rather than the credibility of BA member firms in the eyes of their business partners.

Managers were also asked to focus on the business association that was most important for them and determine which functions characterised that association. Their answers enable us to identify BAs with functions that can help the creation of credible commitments in business relationships directly or indirectly (Table 13). Listed functions related to contract enforcement included information sharing, selection and control by ethical as well as professional standards, and business dispute resolution. These data enabled us to analyse the effects of membership in BAs with certain characteristics on credibility in business relationships. While almost all firms belong to at least one BA, only 59% said that any contract-supporting function was present. On average, 2 out of the 6 listed functions were observed.

The BA 'most important' to a firm is not necessarily one with functions relevant to it. Thus, we excluded from our sample those respondents who selected 'I do not consider any association membership important'. In this restricted sample, 76% of BAs have functions related to contract enforcement.

Table 13. Functions of business associations related to contract enforcement

Survey question.	Us the following statement two of	Ratio of 'Yes' (standard error)			
	'Is the following statement true of association that is most important	All firms (N = 391)	Firms which consider at least one BA important (N = 275)		
Information sharing	'Members obtain information about each other more easily than about non-members.'	32% (0.47)	40%		
Moral selection	'It accepts only applicants who behave ethically.'	40% (0.49)	52%		
Moral control	'It has a written code of ethics, which is enforced among members.'	35% (0.48)	42%		
Professional selection	'It enforces strict professional criteria upon enrolment.'	33% (0.47)	42%		
Professional control	'It regularly checks if members are up to professional standards.'	25% (0.43)	32%		
Business dispute resolution	'It has an official or body helping the resolution of business disputes.'	34% (0.48)	40%		
Presence of at le enforcement (Y/	ast one function related to contract N)	59% (0.49)	76%		
Number of enforcement (0—	functions related to contract 6)	mean: 1.99 (2.13)	mean: 2.82		

^a Excluding those who selected 'I do not consider any association membership important'. While the majority of BAs are reported to have functions related to improving trust in its members, our research questions relate to their effects on business relationships rather than mere presence. We utilize multiple approaches in assessing these effects.

3.3.3 Private-order institutions and establishing relationships

As noted above, an important issue of economic development is whether firms can establish trust and credibility beyond their existing circles of relationships governed by organic and informal mechanisms. BAs may play a particularly important role in this. Reliance on organic private-order institutions is reflected, among other things, in the ways in which firms come into contact with their business partners. The survey supplied information whether respondents relied on personal networks, informal business connections, formal business associations and fairs or their future partner's market reputation to find their oldest/newest buyer and seller (Table 14). These data partially

capture firms' reliance on organic institutions and enable us to control for their effects in our analysis. This means that we may underestimate the effects of BAs by excluding their indirect effects through enabling other private-order mechanisms from our estimations. Furthermore, it is possible to identify which relationships in the sample started without any previous contact or knowledge and examine the effects of BAs on firms' propensity to move beyond their existing networks. Hungarian SMEs proved very willing to go beyond their existing networks, as around 40% of the relationships began anonymously. It is notable that very few partners were found directly through business associations. While this is an important piece of information in itself, our basic assumption is that BAs positive influence on contract enforcement is far broader than direct partner matching. The main takeaways are that any observed effects of BA membership on the propensity to establish partnerships outside of personal and local networks are likely to be indirect, acting through the increased credibility of members and their partners.

Table 14. Use of institutions for finding business partners

What institutions supported the establishment of business relationships?	Buyer		Supplier		Most recent buyer		Most recei supp	nt
	%	N	%	N	%	N	%	N
Embeddedness in personal networks	4.6	36	6.3	50	2	5	7	14
'This partner is my relative or friend or was								
recommended by a relative or a friend.'								
Embeddedness in informal business networks	24.8	194	23.8	186	27	52	24	47
'This partner was recommended by a former	22.7	177	20.2	158	25	48	21	41
business partner or a familiar entrepreneur.'								
'This partner was recommended by my	2.1	17	3.7	29	2	4	3	6
accountant, lawyer or banker.'								
Reliance on market reputation	10.0	78	20.0	156	11	22	17	33
'This partner is (or was recommended by) a								
wholesaler or large company that is well-								
known in the market.'								
Reliance on business associations, fairs	6.8	53	8.1	64	6	12	10	20
'I encountered this partner at a professional	5.8	45	6.5	51	4	9	7	14
event or trade fair.'								
'I contacted this partner through a business	1.0	8	1.7	13	2	3	3	6
association (e.g. a chamber).'								
Lack of any previous contact or knowledge	40.3	315	35.6		40	79	37	73
'This partner called upon my enterprise without	23.9	187	12.4	97	27	53	16	31
any previous acquaintance (e.g. following an ad								
or via internet).'								
'I contacted this partner without any previous	16.4	128	23.2	181	13	26	21	42
acquaintance.'								<u> </u>
n.a.	13.5	106	6.2	48	13	26	6	12
Total	100	782	100	782	100	197	100	19
								7

How far away are firms willing and able to go to find a business partner? Information was gathered about the firm's distance to the location of each business partner. One third of partners were located in another Hungarian county, and 12% abroad (Table 15).

Table 15. Distance of business partners from firms

Distance of business	Most recent buyer		Most recent supplier		All partners	1
partner from firm	Percentage	N	Percentage	N	Percentage	N
1. Same municipality	34	67	23	44	30.5%	224
2. Same county	21	42	20	40	24.5%	180
3. Outside county, Hungary	24	48	37	73	32.6%	239
4. Outside Hungary	9	18	18	35	12.4%	91
n.a.	11	22	2	5		48
Total	100	197	100	197		782

Note that with a single cross-section we cannot assess whether the BA membership directly enabled or even preceded the reported business relationship. While it is also possible that establishing a relationship outside of existing networks motivates a firm to join a BA, both directions would mean that the strategies of going beyond established networks and maintaining membership in a BA are linked.

3.3.4 Perceived credibility

Managers judged the credibility of their partner's business promises in each relationship. Two fundamental aspects of credibility were investigated: (1) lack of the threat of opportunistic behaviour, and (2) willingness to cooperate beyond formal promises (cf. Sako (1998), Sako and Helper (1998)). An obvious issue whether the other breaks his explicit contractual promises out of opportunistic considerations. However, contracts tend to be incomplete and leave a lot of room for strategic manoeuvre (Hart & Moore, 1988; Williamson, 1979). In the non-contracted dimensions of cooperation, opportunism may also occur. But parties usually expect more than mere lack of opportunism. they expect their partners to be cooperative, helpful, and generally reliable in difficult situations (Kreps, 1990; Miller, 1992; Sako, 1998). Thus, there credible commitment may refer to a negative promise (no opportunism) as well as a positive promise (cooperativeness and reliability). We analyse the effects of BAs on the credibility of both types of promises as they may be present in varying combinations in different relationships.

Managers were asked to evaluate their experience with their oldest or newest buyer and seller, evaluating the truthfulness of the following statements as 1–4 Likert-type items.

As shown in Table 16, managers tend to have at least a moderate belief in the credible commitments of business partners.

Table 16. Measures of credibility in business relationships

	Negative aspect of cre	dibility	Positive aspect of credibility					
How characteristic is it of the business relationship?	advantage of an opportunity if it can increase its profit at		"Partner firm is very cooperative and ready to help if I face difficulties."		"I can safely rely on my partner's promises."			
	percentage	N	percentage	N	percentage	N		
Not at all (1)	9.6%	68	5.3%	38	3.3%	24		
Rather not (2)	12.3%	87	10.5%	75	7.5%	54		
Rather yes (3)	31.3%	220	48.3%	345	50.0%	358		
Completely (4)	46.7%	329	36.0%	257	39.1%	280		
Total	100.0%	703	100.0%	716	100.0%	715		
n.a.		79		67		67		
Mean	3.15	•	3.15		3.25			

Our theoretical considerations suggested that the three survey measures represent two basic aspects of credibility. The results of principal component analysis are consistent with this assumption. The principal component of the two measures of *positive* credibility contains 84% of their variance, while the principal component of all three measures would contain only 57% (Table 17). In our analysis, we use the principal component of two variables as a composite measure of positive credibility, and the single item on opportunism as a measure of negative credibility.

Table 17. Principal component analysis of credibility measures

	Principal con analysis for 2 variables	component analysis for 3 variables		
COMPONENTS	Eigenvalue	% of variance	Eigenvalue	% of variance
Component 1	1.68	0.84	1.72	0.57
Component 2	0.32	0.16	0.96	0.32
Component 3			0.32	0.11
COMPONENT 1 EIGENVECTORS "Partner firm is very cooperative and ready thelp if I face difficulties."	00.71		0.68	
"I can safely rely on my partner's promises."	0.71		0.69	
"Partner firm [does not take] advantage of a opportunity if it can increase its profit at mexpense"			0.26	
N	703		680	

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⁸ The survey question was inverted to make it comparable with the two measures.

3.3.5 Trade credit

In addition to subjective perceptions, we also used an alternative measure of credible commitment: managers were asked if they extended trade credit to their partners. Following Johnson et al. (2002), the presence of trade credit was interpreted to signal belief in credibility.

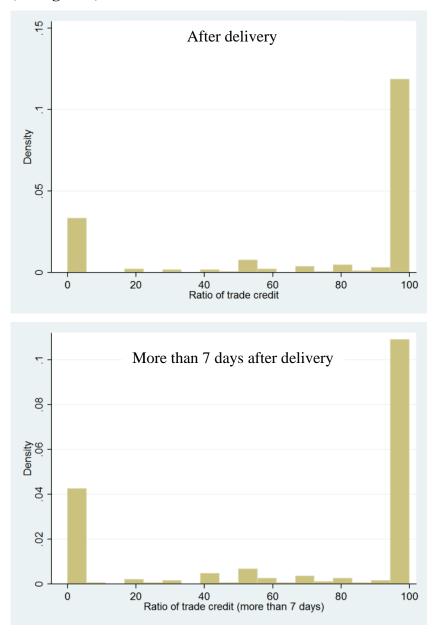
To assess the extent of trade credit, managers were asked when the buyer pays for delivery. 80% reported (at least partial) payment after delivery, and 75% more than 7 days after delivery (Table 18).

Table 18. Presence and size of trade credit (i.e. payment after delivery) in buyer relationships

	N	Minimum	Maximum	Mean	Standard deviation
Did the buyer receive any trade credit? (1=Yes/0=No)	350	0	1	0.80	0.40
What percentage of the price was paid after delivery? (%)	350	0	100	74.3	40.45
Did the buyer receive any trade credit for more than 7 days after delivery? (1=Yes/0=No)	350	0	1	0.75	0.44
What percentage of the price was paid more than 7 days after delivery? (%)	350	0	100	67.9	43.50

Since those who provided trade credit (for more than 7 days), mostly gave a credit of 100% of the price (see Figure 6), we selected two dummy variables as measures of credibility.

Figure 6: Ratio of trade credit extended to buyer (more than 7 days) after delivery. (Histograms)



A previous study on the same dataset found that even later payment is not an appropriate measure because it is likely to reflect involuntary credit due to opportunism (Mike & Kiss, 2017).

We checked if managers' subjective perceptions and the objective presence of trade credit are consistent with each other. As shown in Table 19, they are not really. Trade credit is only correlated with one aspect of perceived credibility (reliability of partner) but not with the other measures. As argued in Mike and Kiss (2017), this is likely to reflect the noisiness of the trade credit measure, which is influenced by several factors other than credibility. Nonetheless, the measure enables comparison with closely related literature (Johnson et al., 2002; Pyle, 2005) and is therefore included.

Table 19. Correlations between measures of credibility (Pairwise correlations with Bonferroni correction)

	Trade credit (Y/N)	Trade credit after 7 days (Y/N)	Negative credibility (lack of opportunism)	Positive credibility (cooperative ness)	Positive credibilit y (reliabilit y)	Positive credibility (principal componen t)
Trade credit	1					
(Y/N)	(352)					
	0.8472					
Trade credit after	***	1				
7 days (Y/N)	(352)	(352)				
Negative	-0.0412	-0.0731	1			
credibility (lack						
of opportunism)	(336)	(336)	(702)			
Positive	0.1047	0.0836	0.0714	1		
credibility						
(cooperativeness)						
	(336)	(336)	(688)	(714)		
Positive	0.1548					
credibility	*	0.108	0.1468***	0.6718***	1	
(reliability)	(340)	(340)	(689)	(703)	(714)	
Positive					0.9159**	
credibility	0.1482	0.1095	0.1197**	0.9127***	*	1
(principal						
component)	(333)	(333)	(680)	(703)	(703)	(703)

3.4 Results

3.4.1 Effects of BA membership on self-assessed trust

As a starting point for answering RQ1, Table 20. displays how managers perceive the effects of BA membership on trust in business partners. Thirty percent of managers reported being part of an association where members have higher trust in each other than in non-members, while 27% reported higher trust placed in them by non-members due to their membership in an association. These ratios are 42% and 35% among those who considered at least one BA membership important, suggesting that either these roles are significant when considering the importance of an association, or some common factor (such as active information sharing or self-regulation by the association) explains both.

Table 20. The perceived effects of business association membership on internal and external trust

Type of trust (agreement with)	All firms (N=391)		Firms which consider at least one BA important (N=275)			
	yes	no	n.a.	yes	no	n.a.
Trust within the association ('members	30%	52%	18%	42%	38%	20%
of the association turn to each other in	(117)	(203)	(71)	(115)	(104)	(56)
business issues with more trust than to						
non-members')						

Type of trust (agreement with)	All firms (N=391)		Firms which consider at least one BA important (N=275)			
	yes	no	n.a.	yes	no	n.a.
Trust in association members by non-	27%	57%	16%	35%	48%	17%
members ('being a member of the	(106)	(222)	(63)	(96)	(133)	(47)
association increases trust in you by						
business partners from outside of the						
association')						

H1 found partial support in our case, as around 30% of BA members reported increased trust in association members by members and non-members, which is a significant minority. In order to uncover which BA functions are related to increased levels of perceived internal and external trust, we estimated two types of binary logistic regression models.

The reduced-form equations were the following:

$$log\left[\frac{P(IT_i=1)}{1-P(IT_i=1)}\right] = \alpha + \gamma MBA_i + \beta CBA_i + \delta F_i + \mu_{ij}, \tag{1}$$

where IT_i is firm i's perception of higher trust within the association most important to it; MBA_i denotes i's membership in various kinds of BAs; CBA_i denotes the functionality of the BA most relevant for i; and F_i is a vector of firm characteristics.

$$log\left[\frac{P(ET_i=1)}{1-P(ET_i=1)}\right] = \alpha + \gamma MBA_i + \beta CBA_i + \delta F_i + \mu_{ij}, \qquad (2)$$

where ET_i is firm i's perception of higher trust in members of its most important association by non-members.

We estimated these models both for the complete sample and for a sample restricted to firms which consider at least one BA important, with similar results (Table 21).

Table 21. Logistic regression explaining the perceived effects of business association membership on internal and external trust. Log of odds ratio (Logit estimates)

Sample	All firms (N =	= 349)	Firms which consider at least one BA important (N = 249)			
Dependent variable	Higher trust within the association	Higher trust in association members by non-members	Higher trust within the association	Higher trust in association members by non-members		
Model	(1.1)	(2.1)	(1.2)	(2.2)		
Membership in						
Chamber	-0.534 (0.495)	0.302 (0.779)	-0.658 (0.603)	0.477 (0.819)		
Professional	-0.392	0.616	-0.195	0.781		
association	(0.551)	(0.503)	(0.650)	(0.565)		
Local association	1.660*** (0.446)	1.215*** (0.466)	2.077*** (0.478)	1.146** (0.498)		

Sample	All firms $(N =$	= 349)	Firms which consider at			
_			least one BA	A important		
			(N = 249)	•		
Dependent	Higher trust	Higher trust in	Higher	Higher trust in		
variable	within the	association	trust	association		
	association	members by non-	within the	members by		
		members	association	non-members		
Model	(1.1)	(2.1)	(1.2)	(2.2)		
Association function	ons related to co	ontract enforcement		,		
Moral selection	1.597***	1.641***	1.882**	1.813***		
Morai selection	(0.667)	(0.574)	(0.880)	(0.620)		
Manal santual	0.136	0.173	-0.269	0.251		
Moral control	(0.539)	(0.480)	(0.538)	(0.513)		
Professional	1.162**	0.356	0.980	-0.210		
selection	(0.564)	(0.530)	(0.625)	(0.541)		
Professional	-0.382	0.942^{*}	-0.472	0.934		
control	(0.523)	(0.564)	(0.521)	(0.581)		
Business dispute	1.242**	0.134	1.050^{*}	-0.158		
resolution	(0.527)	(0.441)	(0.560)	(0.488)		
Information	2.686***	2.512***	2.531***	2.630***		
sharing	(0.512)	(0.504)	(0.593)	(0.544)		
Firm	Yes	Yes	Yes	Yes		
characteristics ^a						
χ^2	127.69	121.87	114.02	95.93		
DoF	27	27	27	27		
P	0.000	0.000	0.000	0.000		
Pseudo R ²	0.545	0.532	0.526	0.494		

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

The results again only partially support HI', as only moral selection of members and information sharing show clear positive effects on both internal and external levels of trust. Looking at the complete sample, moral selection increases the probability of higher perceived trust by 13% and 14%, while information sharing increases it by 22% and 20% for internal and external trust respectively. The average marginal effects appear somewhat larger if we restrict the model to firms which consider at least one BA important. Business dispute resolution has a weaker positive effect on internal trust, while the rest of the functions do not have robust effects. Membership in chambers or professional associations do not show significant effects, but members of local associations report significantly higher internal and external trust. This suggests further caution with our results for HI, as the positive effects of membership could be confined to local associations.

3.4.2 Effects of BA membership on credibility of business partners

In order to answer RQ2 on the effects of BAs on the credible commitments of members' business partners, we utilized ordinal logistic regression models.

The reduced-form equation for testing *H2* was the following:

$$CR_{ij} = \alpha + \beta F_i + \gamma P_{ij} + \delta TR_{ij} + \varepsilon OI_i + \zeta MBA_i + \mu_{ij}, \qquad (3)$$

where CR_{ij} is the degree of credible commitment by business partner j to respondent firm i; F_i and P_{ij} are vectors of characteristics of the firm and its partner; and TR_{ij} are a vector of transaction features in their relationships that may influence the difficulty of credible commitment; OI_i denote organic private-order institutions used by the firm; and MBA_i denotes i's membership in various BAs.

For testing H2' we included BA functionality, resulting in the reduced-form equation:

$$CR_{ij} = \alpha + \beta F_i + \gamma P_{ij} + \delta TR_{ij} + \varepsilon OI_i + \zeta MBA_i + \eta CBA_i + \mu_{ij}, \qquad (4)$$

where CBA_i denotes the functionality of the BA most important for i.

Four types of regression models were constructed to explain the influence of BAs on the credibility of a business partner. Model (3) included firm membership in chambers, professional and local associations and control variables about the respondent firm, its partner and their transaction features. Model (4.1) further included the variables of individual contract supporting functions of the BA that was most important for the firm. Instead of individual functions, Model (4.2) used the composite (dummy) variable that showed if at least one function related to contract enforcement was present (Y/N). Model (4.3) used the alternative composite variable that counted the number of functions related to contract enforcement (on a scale 0–6).

All four models were used to explain the following measures of credibility: (i) perceived credibility of negative promise (lack of opportunism, on scale 1-4) (Table 22), (ii) perceived credibility of positive promise (principal component) (Table 23), (iii) provision of trade credit to buyer (Y/N), and (iv) provision of trade credit beyond 7 days after delivery (Y/N) (Table 24).

Table 22. Regression models explaining the negative aspect of credibility (lack of opportunism)

Control variables: firm characteristics, partner firm characteristics, transaction features^a

Model	(3)	(4.1)	(4.2)	(4.3)			
Dependent variable	Negative aspect of credibility (lack of opportunism) (1-						
Dependent variable	4)						
Regression method	Ord. logit	Ord. logit	Ord. logit	Ord. logit			
Sample	All relations	ships (N=532)					
MEMBERSHIP IN							
Chamber	-0.550	-0.797*	-0.643	-0.657			
	(0.412)	(0.421)	(0.421)	(0.432)			
Professional association	-0.274	-0.612**	-0.384	-0.475*			
	(0.232)	(0.247)	(0.248)	(0.259)			
Local association	-0.693**	-0.930***	-0.851***	-0.778***			
	(0.299)	(0.298)	(0.312)	(0.299)			
MEMBERSHIP IN A BA WITH							
At least one function related to			0.640**				
contract enforcement (Y/N)			0.640***				
			(0.281)				
No. of functions related to contract			, ,	0.12144			
enforcement (0-6)				0.131**			
,				(0.061)			
Moral selection		0.443					
		(0.313)					
Moral control		0.412					
		(0.374)					
Professional selection		-0.378					
		(0.377)					
Professional control		-0.082					
		(0.443)					
Business dispute resolution		-0.573*					
r		(0.313)					
Information sharing		0.882***					
		(0.296)					
X^2	136.16	186.07	136.47	151.69			
DoF	47	53	48	48			
P	0	0	0	0			
Pseudo R ²	0.1183	0.1364	0.1249	0.1233			

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Robust standard errors clustered at firm level.

Table 23. Regression models explaining the positive aspect of credibility (cooperativeness and reliability)

Control variables: firm characteristics, partner firm characteristics, transaction features^a

Model	(3)	(4.1)	(4.2)	(4.3)
Dependent variable		` '	` '	(4.3) l component)
	OLS	OLS	OLS	OLS
Regression method				OLS
Sample	All relations	ships (N=530)	<u> </u>	
MEMBERSHIP IN	0.001	0.115	0.115	0.126
Chamber	-0.091	-0.115	-0.115	-0.126
D C : 1 :::	(0.232)	(0.251)	(0.237)	(0.241)
Professional association	-0.176	-0.273	-0.198	-0.240
	(0.162)	(0.172)	(0.166)	(0.173)
Local association	0.179	0.090	0.150	0.148
	(0.183)	(0.175)	(0.188)	(0.184)
MEMBERSHIP IN A BA WITH				
At least one function related to			0.143	
contract enforcement (Y/N)				
			(0.165)	
No. of functions related to				0.045
contract enforcement (0-6)				0.043
				(0.036)
Moral selection		0.442**		
		(0.207)		
Moral control		0.353*		
		(0.193)		
Professional selection		-0.072		
		(0.220)		
Professional control		-0.093		
		(0.221)		
Business dispute resolution		-0.530***		
Dusiness dispute resolution		(0.175)		
Information sharing		0.001		
information sharing		(0.204)		
X^2	2.12	` /	2 27	2 26
	3.12	3.48	3.27	3.36
DoF	47	53	48	48
P	0	0	0	0
Pseudo R ²	0.2510	0.2909	0.2528	0.2544

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Robust standard errors clustered at firm level.

 $\begin{tabular}{ll} Table 24. Regression models explaining the provision of trade credit and trade credit beyond 7 days \end{tabular}$

Control variables: firm characteristics, partner firm characteristics, transaction features^a

Model	(3)	(4.1)	(4.2)	(4.3)	(3)	(4.1)	(4.2)	(4.3)		
Dependent variable	` ′	Trade credit (Y/N)				Trade credit beyond 7 days after delivery (Y/N)				
Regression method	Logit	Logit	Logit	Logit	Logit	Logit	Logit	Logit		
Sample	All rel (N=22	ationshij 8)	ps with	buyers	All relat (N=268)	_	with buye	ers		
MEMBERSHIP IN Chamber	0.623 (0.89 4)	0.434 (0.763)	0.600 (0.91 1)	0.580 (0.88 6)	0.357 (0.761)	-0.011 (0.695)	0.270 (0.765)	0.217 (0.757)		
Professional association	0.356	-0.179	0.275	0.121	0.465	-0.111	0.378	0.210		
455661441614	(0.59 5)	(0.723)	(0.65 7)	(0.59 2)	(0.523)	(0.593)	(0.546)	(0.533)		
Local association	0.538	0.382	0.353	0.390	-0.016	-0.155	-0.165	-0.202		
	(0.58 4)	(0.766)	(0.65 0)	(0.67 8)	(0.513)	(0.626)	(0.569)	(0.602)		
MEMBERSHIP IN A BA WITH At least one function related to contract enforcement (Y/N)			1.057				0.681			
,			(0.71 7)				(0.551)			
No. of functions related to contract enforcement (0-6)				0.221				0.195		
				(0.19 2)				(0.138)		
Moral selection Moral control		0.056 (0.979) -0.637 (0.766)				-0.268 (0.717) -0.249 (0.527)				
Professional selection		-0.369				-0.198				
		(0.945)				(0.707)				
Professional control		0.352				0.717				
		(1.022)				(0.748)				

Model	(3)	(4.1)	(4.2)	(4.3)	(3)	(4.1)	(4.2)	(4.3)
Dependent variable	Trade	credit (Y/ N)		Trade condense delivery	redit beyo (Y/N)	ond 7 day	s after
Business								
dispute resolution		0.335				-0.144		
		(0.725)				(0.615)		
Information		1.750*				1.406**		
sharing		*				1.400		
		(0.868)				(0.651)		
X^2	77.48	81.64	86.3	74.44	81.29	90.03	89.21	86.1
DoF	44	50	45	45	46	52	47	47
P	0.001 4	0.0031	0.000 2	0.003 8	0.001	0.0008	0.0002	0.0004
Pseudo R ²	0.402	0.4293	0.414 6	0.412 2	0.3498	0.375	0.3563	0.3593

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Robust standard errors clustered at firm level.

BA membership of a firm has no discernible positive effect on the credibility of its business partner (Models (3) in Table 22, Table 23 and Table 24). Thus, *H2* is not supported. To the contrary, membership in a local BA (and in some specifications membership in a chamber or a professional association) is associated with a greater degree of the threat of opportunistic behaviour by business partners, while it has no effect on perceived cooperativeness or the provision of trade credit. The negative association is surprising. A possible explanation is a selection effect: firms that are especially likely to face problems of credible commitments are more likely to join a BA. However, the models include a broad range of firm, partner and transaction features that are likely to influence the difficulty of creating credible commitment, and it is unclear which factors should be further included.

While BA membership did not have the expected positive effect, membership in a BA which is engaged in any contract enforcement was associated with a higher degree of credibility as measured by lack of opportunism (Model (4.2) in Table 22). More such functions also entail higher credibility (Model (4.3) in Table 22). While there is no such effect on the credibility of positive promises (Models (4.2) and (4.3) in Table 23) or trade credit (Models (4.2) and (4.3) in Table 24), certain individual functions do seem to matter. Model (4.1) in Table 24 shows that information sharing in a BA supports the provision of trade credit after delivery (a 16% increase according to average marginal effects) and also beyond seven days (a 15% increase). Ethics based selection of and control over BA members supports positive credibility (Model (4.1) in Table 23). Surprisingly, the

function of business resolution has an unexpected negative association with negative and positive credibility but not with trade credit, for which institutional theory suggests no explanation so far. Overall, we found partial support for *H2*'.

Informal organic institutional mechanisms have significant explanatory roles in several models. Embeddedness in both kinship or personal relationship-based and informal business networks increases the probability to provide trade credit. It is possible that formalized associations enable these networks through their information sharing function, which is more important than maintaining their own enforcement mechanisms.

3.4.3 Effects of BA membership on propensity to do business with unknown partners
Turning to the effects of BAs on the kinds of relationships (RQ3), we hypothesized that
BA membership in itself (H3) and membership in a BA with contract supporting functions
(H3') facilitates a firm's strategy to engage with unknown business partners. We
constructed binary logistic regression models to explain the occurrence of such business
partnerships.

The basic model of *H3* has the following reduced-form equation:

$$log\left[\frac{P(AN_{ij}=1)}{1-P(AN_{ij}=1)}\right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon OI_i + \zeta MBA_i + \mu_{ij},$$
 (5)

where AN_{ij} is a binary variable which takes the value '1' if the firm and its business partner had been unknown to each other before they embarked on their relationship, and '0' if they had direct or indirect ties through personal or business relationships; F_i and P_{ij} are vectors of characteristics of the firm and its partner; OI_i denote organic private-order institutions used by the firm; and MBA_i denotes i's membership in various BAs.

The models of H3' incorporating BA functionality have the following reduced-form equation:

$$log\left[\frac{P(AN_{ij}=1)}{1-P(AN_{ij}=1)}\right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon OI_i + \zeta MBA_i + \eta CBA_i + \mu_{ij},$$
(6)

where CBA_i denotes the functionality of the BA most important for i.

The same four types of models (using alternative operationalizations of BA functionality) as in the section on partners' credibility were constructed to explain a firm's likelihood to choose a formerly unknown business partner (Table 25).

Table 25. Regression models of propensity to do business without previous acquaintance

Control variables: firm characteristics, partner firm characteristics^a

Model	(5)	(6.1)	(6.2)	(6.3)
Dependent variable		` ′	` /	ntance (Y/N)
Regression method	Logit	Logit	Logit	Logit
Sample	0	onships (N=5		8
MEMBERSHIP IN		•	,	
Chamber	0.526	0.416	0.557	0.545
	(0.467)	(0.461)	(0.461)	(0.468)
Professional association	-0.125	-0.073	-0.096	-0.084
	(0.265)	(0.277)	(0.266)	(0.273)
Local association	-0.039	0.035	0.008	-0.011
	(0.278)	(0.278)	(0.285)	(0.280)
MEMBERSHIP IN A BA WITH				
At least one function related to			-0.198	
contract enforcement (Y/N)				
			(0.259)	
No. of functions related to contract				-0.031
enforcement (0–6)				
		0.000/hiteli		(0.061)
Moral selection		-0.998***		
N 1 1		(0.307)		
Moral control		-0.243		
		(0.266)		
Professional selection		0.089		
		(0.328)		
Professional control		0.663**		
D. I. J.		(0.295)		
Business dispute resolution		0.235		
T.C		(0.291)		
Information sharing		0.257		
***	10.55	(0.304)	40.05	12.72
X^2	43.55	59.76	43.85	43.72
DoF	28	34	29	29
\mathbf{P}	0.0308	0.0041	0.0379	0.039
Pseudo R ²	0.0848	0.1085	0.0858	0.0852

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Robust standard errors clustered at firm level.

Model (5) shows that *H3* is not supported, as BA membership is not associated with a greater likelihood that one's partner was unknown before the relationship had started. Results regarding *H3*' are mixed. In Model (6.1) while professional control by BA makes anonymously started relationships more likely by 14% on average, membership in a BA with moral selection is associated with a 21% lower probability of an anonymous start. The latter could result from a selection effect, where those relying more on moral control

are more likely to be members of an association with that function, while being less likely to establish relationships with unknown partners. Measured together, the presence of contract enforcement functions has no discernible effect (Models (6.2) and (6.3)). Overall, BAs do not seem to enable 'stepping into the unknown', except for those institutionalizing regular professional control of their members.

3.4.4 Effects of BA membership on propensity to do business with more distant partners Our final pair of hypotheses related to BAs enabling business partnerships over larger geographical distances.

To measure partner distance, a variable on an ordinal scale of 1 to 4 was constructed to describe the location of the partner compared to that of the respondent firm (1=same locality, 2=same county, 3=different county within Hungary, 4=different country). Ordinal logistic regression models were used to test *H4* and *H4*'. The same four types of models as previously were built, where the reduced-form equation for the simple model was the following:

$$\log\left[\frac{P(D_{ij}\leq k)}{1-P(D_{ij}>k)}\right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon OI_i + \zeta MBA_i + \mu_{ij}k \in [1,3], \tag{7}$$

where D_{ij} denotes the distance between the locations of the firm i and its business partner j; F_i and P_{ij} are vectors of characteristics of the firm and its partner; OI_i denote organic private-order institutions used by the firm; and MBA_i denote i's membership in various BAs.

The reduced-form equation for the extended models was the following:

$$\log \left[\frac{P(D_{ij} \leq k)}{1 - P(D_{ij} > k)} \right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon OI_i + \zeta MBA_i + \eta CBA_i + \mu_{ij}k \in [1, 3],$$
(8)

where CBA_i denotes the functionality of the BA most relevant for i.

Table 26 summarizes our findings. We did not find support for H4, as membership in chambers or professional associations had no influence on distance, while firms that are members of local BAs are less likely to have more distant business partners (Model (7)). The functions of BAs had little effect (Models (8.1), (8.2) and (8.3)), with the exception of professional control, which was weakly associated with a smaller rather than greater likelihood of contacting a more distant partner. H4 is clearly not supported.

Table 26: Regression models of propensity to do business with distant partners

Control variables: firm characteristics, partner firm characteristics^a

Model (7) (8.1) (8.2) (8.3) Distance between business partners (1=same locality, 2=same county, 3=different county, 4=different country)	
country)	ent
Regression method Ord. logit Ord. logit Ord. logit Ord. logit	
Sample All relationships (N=624)	
MEMBERSHIP IN	
Chamber -0.163 -0.129 -0.161 -0.171	
$(0.434) \qquad (0.404) \qquad (0.452) \qquad (0.441)$	
Professional 0.282 0.193 0.283 0.267	
association 0.262 0.173 0.263 0.267	
$(0.226) \qquad (0.269) \qquad (0.234) \qquad (0.251)$	
Local association -0.368*	
$(0.223) \qquad (0.237) \qquad (0.233) \qquad (0.231)$	
MEMBERSHIP IN A BA	
WITH	
at least one function	
related to contract -0.012	
enforcement (Y/N)	
(0.263)	
number of functions	
related to contract 0.011	
enforcement (0–6)	
(0.059)	
Moral selection 0.148	
(0.284)	
Moral control -0.104	
(0.225)	
Professional selection 0.436	
(0.285)	
Professional control -0.432*	
(0.258)	
Rusinass disputa	
resolution -0.049	
(0.218)	
Information sharing 0.008	
(0.245)	
X^2 148.11 158.21 149.99 150.76	
DoF 27 33 28 28	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Pseudo R^2 0.1182 0.1212 0.1182 0.1182	

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

Robust standard errors clustered at firm level.

We ran additional logistic regressions comparing pairwise local/non-local, intra/intercounty and national/foreign partnerships, recoding our distance variable into three binary variables along these cut-off values. We estimated the same four types of models as previously for each of the three dependent variables, where the simple model had the following reduced-form equation:

$$log\left[\frac{P(D_{ij}=1)}{1-P(D_{ij}=1)}\right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon OI_i + \zeta MBA_i + \mu_{ij}, \qquad (9)$$

where D_{ij} denotes whether the distance between the locations of the firm i and its business partner j is above the threshold; F_i and P_{ij} are vectors of characteristics of the firm and its partner; OI_i denote organic private-order institutions used by the firm; and MBA_i denote i's membership in various BAs.

The extended model including BA functionality had the following reduced-form equation:

$$\log \left[\frac{P(D_{ij}=1)}{1-P(D_{ij}=1)} \right] = \alpha + \beta F_i + \gamma P_{ij} + \varepsilon O I_i + \zeta M B A_i + \eta C B A_i + \mu_{ij}, \qquad (10)$$

where CBA_i denotes the functionality of the BA most relevant for i.

The estimates showed no significant relationship between membership in business associations and the propensity to do business with partners from outside the firm's locality. Results on the propensity to cross county and state borders are summarized in Table 27.

Table 27: Regression models on the propensity to do business with partners across county and state borders (logit estimates)

Control variables: firm characteristics, partner firm characteristics^a

Sample: most recent business partnerships (N=311)

Dependent	Business	s part	ner's	distance	Business	s part	tner's	distance
variable	(0=same	coun	ty, 1=	different	(0=same	coun	try, 1=	different
	county)				country)		
Model	(9)	(10.1)	(10.2)	(10.3)	(9)	(10.1)	(10.2)	(10.3)
Membership in	•							
Chamber	0.269	0.370	0.242	0.204	-0.393	0.171	-0.230	-0.367
	(0.595)	(0.518)	(0.613)	(0.583)	(0.821)	(0.835)	(0.962)	(0.859)
Professional	0.135	-0.1770	0.128	0.052	0.457	0.502	0.506	0.487
association	(0.375)	(0.409)	(0.375)	(0.375)	(0.502)	(0.532)	(0.517)	(0.520)
Local	-0.379	-0.957**	-0.415	-0.489	-0.224	-0.535	-0.070	-0.187
association	(0.416)	(0.484)	(0.433)	(0.440)	(0.488)	(0.654)	(0.515)	(0.513)
Membership in a	BA with							
at least one			0.103				-0.563	
function related			(0.389)				(0.531)	
to contract								
enforcement								
(Y/N)								
number of				0.084				-0.033
functions				(0.084)				(0.123)
related to								
contract								

Dependent variable	Business (0=same		ner's	distance 1=different			tner's trv,	distance 1=different
	county)		• /		country)		• /	
Model	(9)	(10.1)	(10.2)	(10.3)	(9)	(10.1)	(10.2)	(10.3)
enforcement (0-								
6)								
Moral selection		0.295				-0.506		
		(0.393)				(0.608)		
Moral control		-0.063				-0.866		
		(0.444)				(0.574)		
Professional		1.154**				1.657**		
selection		(0.534)				(0.770)		
Professional		-1.391**				-0.978		
control		(0.548)				(0.844)		
Business		-0.210				0.443		
dispute		(0.402)				(0.568)		
resolution								
Information		0.699				0.016		
sharing		(0.498)				(0.842)		
χ^2	65.07	61.18	65.51	63.26	81.62	96.30	78.30	81.75
DoF	27	33	28	28	27	33	28	28
P	0.0001	0.0020	0.000	1 0.0002	0.0000	0.0000	0.000	0.0000
Pseudo R ²	0.1910	0.2221	0.191	2 0.1937	0.2838	0.3116	0.2893	3 0.2842

^a See Table 11. for the list of control variables.

Robust standard errors in parentheses, *** p<0.01, ** p<0.05, * p<0.1

Robust standard errors clustered at firm level.

The results align with the ordinal regression models. *H4* is not supported, as the only significant relationship between BA membership and geographical distance is the negative effect of local BA membership on the probability of inter-county relationships in Model (10.1). A possible explanation is that firms with strategies focused on local markets are more likely to be members of local associations. Among BA functions professional selection increases the probability of crossing county borders by 21%, and of crossing country borders by 15% based on average marginal effects. Professional control on the other hand reduces the probability of crossing country borders by 15%. This hints at professional selection being a more effective signal of credibility over geographical distances than professional control.

3.5 Conclusions

Our study focused on whether business associations contribute to establishing mutual trust required for business partnerships through institutionalizing mechanisms of credible commitment by firms. Data from a managerial survey in 2016 that covered small and medium-sized firms in all of Hungary's regions provided detailed data on both firm membership in business associations and the credibility of interfirm commitments. We

found that the majority of BAs institutionalize related functions such as moral and professional selection and control of members, business dispute resolution and perhaps most importantly information sharing. Our research questions related to the effects of BAs on the credibility of their members, on the credibility of their members' business partners and on the propensity of their members to engage with business partners from outside personal and local networks. As shown in Table 28, our results provide a cautious and limited support to the emerging view in the literature that business associations contribute to the establishment of credible commitment in business relationships between firms.

Table 28. Summary of results

RQ1.	H1: Membership → perceived credibility of	Partially supported
Credibility of	their members.	
members	H1': Membership + functions \rightarrow credibility of	Partially supported
	their members.	
RQ2.	H2: Membership → credible commitment of	Not supported
Credibility of	business partners.	
partners of	H2': Membership + functions → credible	Partially supported
members	commitment of business partners.	
RQ3.	H3: Membership → business relationships	Not supported
Willingness	without prior acquaintance	
and ability to	H3': Membership + functions → business	Mixed results
engage with	relationships without prior acquaintance or	
business	network relationship.	
partners from	H4: Membership → business relationships at	Not supported
outside	greater geographical distance.	
personal and	H4': Membership + functions → business	Mixed results
local networks	relationships at greater geographical distance.	

Note that our cross-section regression models do not provide proofs of causality, as endogeneity and omitted variable issues could explain some of the results. We could envision a firm being forced to provide trade credit by market pressures, therefore joining an association with information-sharing functionality or instigating the establishment of such mechanisms in one where it is already a member. More conclusive results could be obtained through the econometric analysis of panel data, controlling for temporality of associational and contractual choices. While causality is questionable, we have found some evidence that BAs are important elements of the institutional framework behind contractual relationships in our case. Around one-third of respondents reported increased trust in members of their most important BA by both members and non-members. Moral selection and information-sharing contributes to both perceived internal and external trust. Professional selection and dispute resolution contribute to internal trust, while professional control helps establish external trust.

Although the limitations of our data call for cautious interpretation, our results do *not* support the view, at least in this context, that business associations (BAs) in general increase credible commitment among business partners. However, BAs with functions relevant for contract enforcement do have such effects, if perhaps not as robust as the literature seems to imply. They do not seem to facilitate doing business with unknown or geographically distant partners. The main benefit of a BA with functions that support contract enforcement in direct and indirect ways seems to be to enable a firm to reduce the threat of opportunism with any business partner. Information sharing among members is particularly important. It is also associated with a greater willingness to provide trade credit, which can also be interpreted as a sign of credibility. This result aligns with earlier observations that BAs mostly contribute to contractual relationships in the region by sharing credible information (Pyle, 2005; Recanatini & Ryterman, 2001b). Morality-based selection and control of BA members is associated with a greater degree of credible promises that go beyond a mere avoidance of opportunism and comprise of cooperativeness and general reliability.

We find very little evidence and generally mixed results on whether BAs help firms move beyond their known circles or to find partners at greater distances. This suggests caution about the general validity of such claims advanced in the literature (Prüfer, 2016; Pyle, 2005). Professional control of members is the only associational function showing a significant positive relationship with the propensity to do business with previously unknown partners. Professional selection increases the probability of inter-county and international relationships, which suggests that it might be an effective long-distance signal of credibility.

Overall, business associations are important elements in the institutional landscape of contract enforcement in Hungary. It is important to take seriously the view advanced by institutional economics that careful attention should be played to their contract enforcement function. At the same time, their role must not be exaggerated. Many of them do not have such functions and even those that do have limited and ambiguous effects. While their services in formal dispute resolution are almost non-existent, information sharing about business behaviour and the ethics-based selection and control of their members contribute significantly to their members' ability to establish credible commitment in their relationships.

Our data only enabled a limited glimpse into how the formalized and informal functions of associations fit into the contractual strategies of firms. Further research is needed into the interactions between BAs and private- or public-order mechanisms behind contractual

relations. We might find complementarities and important indirect roles of BAs, leading us closer to agreeing with the more positive assessments of BAs in the literature. A second major open question regarding the institutionalization processes of BAs and the role of their members in those was outside of the scope of this study. Both proposed directions would lend themselves well to case studies of specific business and professional communities.

THE ROLE OF PROFESSIONAL ASSOCIATIONS IN THE 4 GOVERNANCE OF CONTRACTUAL RELATIONS – INSIGHTS FROM A HUNGARIAN INDUSTRY9

ABSTRACT

How do professional associations support interfirm contractual relations? I seek to answer two questions: (1) what contract supporting functions do professional associations fulfil? (2) what explains whether professional associations play a supporting role in a contractual relationship?. I study the case of a Hungarian industry based on fieldwork in the regions of Central Hungary and Central Transdanubia.

My starting point is that transactional features explain the basic governance structure which partners utilize to carry out contracts (Williamson, 1979). These are more-or-less coherent combinations of institutional mechanisms, into which professional associations need to fit. I conceptualize professional associations as network administrative organizations in-between spontaneous and public order institutions, expecting the limitations of those institutional alternatives to explain associations' roles in the governance structure. I conjecture that they institutionalize information-sharing and professional-ethical control, supplemented by coordination and sanctioning mechanisms. The case study supports my conjectures, uncovering the following relationships: (1) reliance on professional associations and long-term relational contracts or integration are substitutes, (2) reliance on professional associations is partially substituted by market reputation, (3) the use of market intermediaries can increase or decrease reliance on professional associations, (4) reliance on public order mechanisms is complemented by reliance on professional associations.

Keywords: professional associations, contract enforcement, network administrative organizations, governance structure, seed industry

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⁹ This chapter is a translated adaptation of the article: Molnár, G. T. (2019). A vállalkozói szerveződések szerepe a szerződéses kapcsolatok támogatásában. Egy magyar ágazat tanulságai. Vezetéstudomány - Budapest Management Review, 50(9), 66–80.

4.1 Introduction

How do professional associations support interfirm contractual relations? All business partnerships are built on the parties accepting each other as more or less trustworthy. This means that they expect the other party to deliver on their commitments. New institutional economics emphasizes the role of various contract enforcement institutions in establishing this credibility. These are the social 'rules of the game' which attach sanctions to breaking promises (Greif, 2002; North, 1990). One of the most important strategic decisions for managers it to embed their contractual relations in these institutional frameworks. (Poppo & Zenger, 2002; Williamson, 1979). Understanding these decisions is also important for policy makers as cannot assess the institutions supporting contractual relations without it. There is growing empirical evidence in scientific literature on private, formalized associations of professionals being important elements of that institutional complex.

The group of professional associations contains various industry, trade and other business associations intended to further the interests of their underlying communities (Prüfer, 2016, p. 306). They are possible institutional responses to the demand arising from the limitations of the spontaneous, informal mechanisms of long-term relational contracting, market reputation and community norms, and also those of the formal legal order. Associations are formal, consciously designed institutions, making them better able to transcend geographical and community boundaries than spontaneous and informal mechanisms. They are essentially (at least partly) private order institutions (Greif, 2008), which allows them to be more flexible, while making them less costly to rely on. We can locate professional associations among designed, private order institutions by situating them within the governance structures of business networks. Professional associations can be seen as associations that manage goal-oriented networks (Provan & Kenis, 2008), distinguishing them from institutions linked to networks with other governance structures¹⁰.

In principle, professional associations can contribute to the credibility of contractual promises in many ways. They can support the flow of information about the business activities and reliability of firms, institutionalize ethical or professional control, and help

¹⁰ Professional associations are distinct from the classical hybrid institutions listed by Ménard (2004, 2013) such as *joint ventures*, *strategic alliances*, *sports leagues*, *franchises*, *consortia*, because they do not necessarily entail a joint investment or coordinated production in the strict sense. Ménard (2013) however, includes networks in the list of hybrid institutions. Since professional associations can be understood as the central institutions of *network administrative organization governed interorganizational networks*, this definition of hybrids also includes them.

resolve business disputes. A survey of small and medium-sized enterprises (Mike et al., 2018), and a case study of firms participating in a value-based entrepreneurial association (Mike, 2018) confirmed that professional associations engage in such activities in the Hungarian economy.

But existing empirical studies also indicate that professional associations are not important institutions for all firms and for all business relationships. We know very little about what determines whether two firms choose to rely on this particular institutional arrangement in their relationship. On the other hand, not all associations perform the same functions. The aim of my study is to learn more about these two issues and thus gain a deeper understanding of the role of professional associations in market economies.

Using a case study of a Hungarian professional community, based on fieldwork in the Central Transdanubia and Central Hungary Regions, I seek to explain (1) What transaction-enabling roles do professional associations fulfil within a professional community? and (2) What factors influence whether a professional association plays a role in the transactional relationship between two businesses?. The professional community selected for this study is the Hungarian seed industry. Many different actors and many different types of business relationships coexist in the seed industry; and a large, long-standing professional association has developed, along with a few smaller professional associations.

The aim of this case study is primarily theory-building, in addition to improving our understanding of how an important domestic sector is institutionalized. Based on the literature, we only have conjectures on possible answers to our questions. The aim of the analysis is to formulate more precise theoretical propositions based on these conjectures, which can serve as sources of testable hypotheses in further, comparative studies. Answering the research questions will bring us closer to understanding how professional associations complement (or substitute for) their private and public alternatives in the governance structures of contracts. This may provide a piece of the puzzle for a functional explanation of the emergence and institutionalisation of professional associations, as supporting contractual relations is considered to be one of their core functions.

I conjecture that transaction costs economics can explain the choice of firms in whether and how they rely on professional associations when looking to support their contractual relations by embedding them in the institutional frameworks of contract enforcement. According to transaction cost economics, the characteristics of the transactions (repetition, pre-existing relationships between the parties, complexity, measurability and uniqueness of the goods) explain the basic 'governance structure' of the relationship, i.e.

the institutional framework in which the parties conclude and implement their agreements (Williamson, 1979). The selected governance structure is always a more-or-less coherent set of different informal and formal institutional mechanisms, not an arbitrary blend (Mike & Kiss, 2018; Williamson, 1979). The mechanisms institutionalised by professional associations must fit into these structures. I hypothesize that the role of professional associations in supporting contracts depends fundamentally on the governance structures of contracts that businesses tend to rely on. Exploring the roles of associations is complicated by the fact that the possible answer is twofold. (1) network (community) level coordination mechanisms may have advantages over the mechanisms of markets and government, making them the preferred alternatives. (2) In addition to their primary function of institutionalising network-level coordination, professional associations may complement market and state mechanisms, acquiring indirect roles.

My general proposition is that, since professional associations are situated between the institutions of spontaneous and public orders, it is mainly the limitations of these alternatives that explain the possible substitute or complementary roles of associations. A distinguishing feature among network governance structures is that associations provide a separate, formalized, central coordinative institution. The significance of this possibly advantageous element depends on the nature of existing relationships within the community, the number and distance of actors involved in the transactions, and the limitations of bilateral contractual solutions.

The case study finds support for the general conjecture, contributing the following, more precise propositions:

- 1. There is a trade-off between relying on professional community institutions and relying on long-term relational contracting (or integration) for the governance of contractual relations. The contract supporting functions of professional associations are mostly relevant for short-term, market based transactional relations.
- 2. There is a trade-off between relying on professional community institutions and relying on market reputational mechanisms for the governance of contractual relations. The information sharing functions of professional associations can support the reputational mechanisms of contract enforcement. However, the professional and moral control and dispute resolution functions of associations are less likely to be relevant for firms relying on their reputations.
- 3. Reliance on market intermediaries can both complement and substitute for reliance on professional community institutions for the governance of contractual relations. Intermediaries can rely on associations to establish new contractual

relationships, increasing demand for them. Intermediaries can enable relational and reputational mechanisms, creating a transactional governance structure that does not rely on associations.

4. The scope and type of government involvement in the governance of contractual relations determines the role of professional community institutions, as it both enables them and relies on them throughout the policy process.

4.2 The contract supporting and transaction cost reducing roles of professional associations

Institutions supporting the enforcement of contracts have two main functions: they provide information about the actions of the transacting partners to enable sanctioning mechanisms, or they provide their own sanctions to promote the enforcement of contractual promises. For the case of professional associations we can also speak of an additional contract supporting function, the coordination of contractual frameworks. This lowers the transaction costs of entering into contracts.

4.2.1 Information-sharing

The dissemination of information by associations can (1) reduce the search costs of finding potential partners, and (2) spread information about the past behaviour of potential partners. This information can be the membership itself, can be a rating provided by the association, or it can be in the form of experiences shared through the association. A professional association needs to define ethical and professional standards and maintain a shared reputation (Tucker, 2008) for membership to convey credible information by itself. Information-sharing and sanctioning are intertwined, since accepting or denying the membership of an actor, or granting an (un)favourable rating is already a sanction through the information being provided, if other actors consider the association credible. Associations (3) may also produce new information to be shared through investigating contractual disputes.

4.2.2 Sanctioning

To support the sanctioning of contractual breaches (1) associations can institutionalize their own mechanisms of dispute resolution. Access to these institutions can be less costly for the parties involved than relying formal legal enforcement, especially if they are members. Professional associations can also (2) sanction their own members if they misbehave. They may impose intermediate sanctions such as withdrawing a positive rating, fines or suspending membership, but the ultimate guarantee is always the

expulsion of non-compliant members. As associations are at least partly voluntary, they can only encourage members to accept or even consider their sanctions by withdrawing access to the goods and services that they provide to them. Professional associations may also be able to (3) sanction actors outside their membership by coordinating their exclusion by members, or by even sanctioning members who refuse to exclude non-compliant actors from their business partnerships.

4.2.3 Coordination

The informational and sanctioning mechanisms above are complemented by the function of coordinating expectations regarding contracts. This is based on the provision of commonly accepted and articulated contractual frameworks. The self-regulation of professional associations can extend to some general framework of contractual relations, thereby reducing the transaction costs of bargaining and contract specification (Macaulay, 1963). This can be a recommendation, but it can also impose explicit, sanctioned limits on the contractual relations of members through standard contracts, recommended prices, and quality standards.

4.2.4 Empirical studies

Mike, Boza and Molnár (2018) provide an overview of empirical results on the contract supporting role of professional associations, concluding that the literature finds this role relevant in many cases. Most of the findings are from an Anglo-Saxon context (Battisti & Perry, 2015; Bennett, 1998; Bennett & Ramsden, 2007; McCormick et al., 2008; Perry, 2009). They indicate that contract supporting functions are institutionalized, although generally secondary to interest representation. In post-socialist (H. G. Broadman et al., 2004; Hendley et al., 2000; Pyle, 2006b) and developing countries (Doner & Schneider, 2000) the contract supporting role of associations are more significant.

The broader institutional context may have an impact: in less developed institutional contexts, the sanctioning and coordination functions are more important, while in more developed contexts information sharing is the most relevant function. Studies on the credibility of business partners support the primary role of the information sharing function (Pyle, 2005), while sanctioning and coordination were found less relevant.

Results on Hungary fit this pattern. Mike (2018) demonstrates the contract supporting role of professional associations in the case of a value-oriented professional association, while Mike, Boza and Molnár (2018) demonstrate the role of professional associations in contractual relations based on a survey of Hungarian SMEs. In both cases, information

dissemination and ethical selection activities were the most important among professional communities' functions.

4.3 Professional associations in the governance structures of contracts

Which firms and in which business relationships rely on the contract supporting mechanisms of professional associations? This is not an isolated decision, as parties in their transactions develop more or less coherent governance structures (Williamson, 1979), which need to align with transactional features. The elements of these structures can be grouped according to their sources of institutionalisation (private or public) and of formalisation (spontaneous or designed). Spontaneous order institutions include mechanisms that rely on morality, self-enforcing contracts, reputational mechanisms based on sanctions by prospective partners, and norms enforced by communities. These might be supported by formal sanctions of public orders.

Professional associations as elements of designed, private-order institutional structures are located between spontaneous and designed, public-order institutions (Mike et al., 2018). Associations are relatively costly to create, maintain and access (Mike, 2018, p. 5). This means that business relationships are only expected to rely on them where alternative mechanisms of the private and public orders are too limited to fit the needs of the transaction at hand. Other designed, private order institutions could be substitutes for professional associations in filling this niche. They can be either private institutions of hierarchical coordination, such as integrated and quasi-integrated corporate hierarchies, or private firms that complement the spontaneous order by providing certification, information, standardisation, and enforcement services.

4.3.1 Professional associations as network administrative organizations

The links between professional associations and alternative institutional mechanisms can be structured by conceptualising business communities as specific business networks. It is along these network relations that actors organise their transactions, the production of collective goods (knowledge sharing, favourable regulation), and the community level mechanisms of contract enforcement (reputation, professional norms, formal sanctions). Three main types of these networks can be distinguished (Provan & Kenis, 2008). The first type is internal networks formed by actors within company hierarchies and business groups (Borbély, 2001). Narrower definitions of networks do not consider these as true business networks (Besser & Miller, 2011; Provan & Kenis, 2008), however, there is a

considerable literature that approaches the internal governance of international corporations as networks (Ghoshal & Bartlett, 1990; Harzing, 1999).

The two types of business networks which consist of multiple autonomous organizations are serendipitous and goal-directed networks. The former are formed as a result of personal acquaintances and bilateral business relationships, and are thus linked to mechanisms of spontaneous order. Goal-directed networks have an institutionalised network governance structure. Although this structure can also rely on the public order, business networks are generally linked to designed, private order institutions, because they are based on the voluntary participation of private actors.

We can distinguish three types of goal-directed business networks with their corresponding governance structures (Provan & Kenis, 2008). In case of shared governance, there is no organization designated to govern the network. Governance is carried out jointly by network members, which means that all actors need to be in contact with almost all other actors. In networks based on a lead organization, a central actor takes care of the tasks of governance. The network is then structured through bilateral relationships with the central actor, without a need for direct contact among other actors. In the third case, the actors jointly institutionalize a separate network administrative organization.

In the case of business networks, these organizations generally correspond to professional associations: formal, planned, non-profit private institutions designed to promote the interests of the members of the business network (Prüfer, 2016). This means that our knowledge on the governance of business networks and on the roles of professional associations can be connected. The links between professional associations and their institutional alternatives parallel the links between governance through professional associations as network administrative organizations and other governance alternatives of goal-directed business networks.

Table 29 gives an overview of the main types of business networks and their associated institutional control mechanisms.

Table 29: Types of organizational networks and related institutions [author's edit based on Provan and Kenis (2008)].

Network structure form	Institutional forms of control			
1. Spontaneously formed (informal)	Institutions of spontaneous order			
networks				
2. Goal-directed networks	Planned, private-order institutions			
a) Internal (intraorganizational)	Company hierarchies, business groups			
networks				
b) Interorganizational networks with	Strategic partnerships, joint ventures			
shared governance				
c) Lead organization governed	Quasi-integration, intermediaries,			
interorganizational networks	integrators			
d) Network administrative	Professional associations			
organization governed				
interorganizational networks				

4.3.2 Relationship with the spontaneous order

We can expect a greater role of professional associations where the constraints of spontaneous order are significant, making actors rely more on substitutes or complements. This is expected (1) where spontaneous personal and professional networks are sparser; (2) where relatively new and small businesses who suffer from a lack of market reputation cannot rely on mechanisms of morality, community norms and reputation in their contracts; (3) for contractual relations with a short history and a low likelihood of continuation; and (4) where contractual elements are difficult to specify, limiting the effectiveness of self-enforcing contracts. Product attributes can also limit the usefulness of reputational mechanisms, so that (5) the more difficult it is to define and communicate to consumers information on product quality, the more worthwhile it is for actors to jointly institutionalize some guarantee for it (Gehrig & Jost, 1995).

(6) Geographical distance between partners can be linked to the choice of enforcement mechanisms in two ways. Assuming that both parties accept a professional community as credible, the more distant they are, the less they can rely on informal relations, so the more they will rely on mechanisms of professional associations. Beyond a certain distance, however, professional associations are no longer relevant, while mechanisms based on self-enforcing contracts and reputation may still be. Greater distance between partners was found to be associated with a greater role for professional associations in post-socialist contexts (Pyle, 2005, 2006b) and specifically for the case of Hungary (Mike et al., 2018).

4.3.3 Relationship with the public order

Professional associations are expected to play a more relevant role where constraints on public order mechanisms are more significant. Transacting parties are less likely to rely on public enforcement (1) where access is costly or the outcome is unreliable. The unreliability of state mechanisms becomes more costly when timing is more critical for the transaction or the settlement. (2) Where there are specific contractual elements that are not adequately addressed by public enforcement, actors are less likely to rely on it. These include the presence of specific professional knowledge, and the presence of goods or forms of cooperation which are too volatile or hard to specify for the formal public order. The benefits of associations are greater the higher the information costs that a public official would face due to the innovative or unique nature of the goods in question. Professional communities that relied on private ordering – including central professional associations – generally sought to institutionalize the enforcement of such specific contractual elements (Bernstein, 1992, 2001). The public nature of government enforcement can also be an impediment to its usefulness. (3) If parties are bound to avoid public arrangements due to trade secrets or reputation considerations, they may prefer to rely on private order arrangements.

4.3.4 Relationship with the designed, private order

We can expect a greater role of professional associations where the limitations of their designed, private institutional alternatives are more significant. In the case of shared governance, a business network lacks a central actor, while for the cases of integration, quasi-integration and reliance on intermediaries that central actor is a profit-oriented firm¹¹. The distinguishing feature of governance by professional association is that BAs are jointly institutionalized central actors. This has the advantage that network members can rely on central coordination even when there is no universally trusted, central market actor to take the lead. This is expected to be most relevant where (1) transactions have shorter durations and are between alternating parties. The benefits of reliance on BAs as network administrators will be largest when (2) trust between network members is spread evenly at a medium level, (3) relationships are established between a large number of shifting parties, (4) where there is a general need to rely on community level mechanisms for successful contracting (Provan & Kenis, 2008). The designed, private alternatives of quality control providers are least likely to resolve these issues (5) where there are

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¹¹ See Spulber (1999)'s work on the role of intermediary firms in organizing markets and reducing transaction costs.

characteristics which are difficult to specify or there are trade secrets involved. This means that they face constraints similar to those of the public order.

4.3.5 Governance structures and professional associations

How do professional associations fit into the governance structures of contracts? We can formulate further expectations based on the previously observed institutional combinations.

- (1) If public order institutions are not up to standard in terms of their available information, professional knowledge and procedures, professional associations can take on the role of complementing the spontaneous order (Johnson et al., 2002; Nugent & Sukiassyan, 2009). This results in a governance structure based on bilateral and reputational mechanisms, complemented by designed private institutions (Francis et al., 2018; Hendley & Murrell, 2003) Extreme cases of reliance on private order are professional communities where a strong spontaneous order combined with professional associations completely substitute for public order enforcement (Bernstein, 1992, 2001).
- (2) If both private and public institutions operate but need to be complemented, professional associations can be elements of a comprehensive governance structure relying on multiple institutions (Lane & Bachmann, 1997; Murrell, 2003). The greater the risk of opportunism due to the characteristics of the relationship and goods involved, the more likely parties are to rely on a comprehensive governance structure (Lazzarini, 2004; Mike & Kiss, 2018), where professional associations often play important roles.
- (3) There is a specifically post-socialist alternative, where professional associations are built on networks arising from earlier public order relations, then substitute for elements of the private order (Hendley et al., 2000).

The roles of professional associations can be explained by the circumstances of their institutionalisation. If the private or the public order is very weak, its place in governance structures will be (partially) filled by professional associations, as long as they are able to rely on the other, existing element for their institutionalisation. If both are well developed, professional associations are institutionalised to complement each in a more marginal role.

4.4 Case selection and methods

The empirical part of this study is a theory-building case study (Eisenhardt, 1989). The research ambition is not hypothesis testing, but rather an in-depth analysis of how the many previously surveyed factors apply and interact for one specific case. This is

intended to lay the groundwork for more precise propositions and the formulation of hypotheses that could be the subject of subsequent comparative studies.

4.4.1 Case selection

was not feasible.

I have selected a case at the level of national professional communities. This was motivated by the expectation that members in such a community face roughly similar transactional challenges within a very similar public order context. The case selection strategy was based on demand and supply factors of community institutionalization: I was looking for a community which faced significant transactional challenges and was able to give an institutionalized answer to them. My selected case is the Hungarian seed industry. This community has faced hugely important transactional challenges, and was able to rely on significant informal and formal institutional traditions in handling them. This configuration makes it more likely for professional associations to play a prominent role, while also having to relate to alternative institutional solutions in the governance structures of contracts ¹².

Seed is a high-tech, precision-driven experience good, so trust is an important factor in both its production and sales. In the case of seed and, more broadly, the agricultural input sector, empirical research has identified trust as a high priority issue, while at the same time revealing a number of elements of governance structure, including professional associations, as institutional responses. In particular, researchers have found significant roles of reputation and bilateral contracting based on long-term partnerships in the enforcement of contracts in this industry (Burer et al., 2008; Kumar & Ali, 2010). The traditionally dominant role of public institutions in this sector come from the operation of registration systems that underpin both the enforcement of breeders' rights and quality control (Ghijsen, 2002; Louwaars, 2002a, 2002b).

In the contractual enforcement of breeders' property rights, second-party enforcement, i.e. the penalties and self-control built into the contract by the breeder-seller, is ubiquitous alongside public enforcement. The less the seller relies on the formal legal system, the more important second-party enforcement becomes (Monteiro & Zylbersztajn, 2015). Government intervention in the seed industry is a worldwide phenomenon, but in countries with limited government capacity, reputation-based mechanisms are also key to building contractual trust (van Gastel et al., 2002).

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¹² The original research ambitions included the analysis of the relationship between institutional forms and the contract supporting role of associations. During the fieldwork it became apparent that the role is centred around a single central association (HSA), that this comparative ambition

Professional associations typically have a role in quality control (van der Meer, 2002). International professional associations have had an increasing role both in improving public order enforcement and in organizing the community enforcement of quality standards (Buanec & Heffer, 2002). Self-regulation of the international seed trade goes beyond this, as the coordination of contractual frameworks and dispute settlement are carried out within the extensive framework of the International Seed Federation¹³ (Buanec, 2002).

The institutional traditions of the Hungarian seed industry date back to the 19th century. It has successfully weathered the storms of the 20th century, playing a special role in the socialist economic system (Izsáki & Lázár, 2004). The professional community has developed in cooperation with the public and private sectors, and several associations have emerged. Since the democratization, the industry has faced serious challenges due to the restructuring that accompanied the economic transition and the subsequent entry of international competitors. The Hungarian seed industry successfully overcame these obstacles: it is integrated into global value chains and is highly competitive at the international level (International Seed Federation, 2016).

Contractual trust and enforcement are also key issues for the Hungarian agricultural sector (Fertő, 2012b). One of the main problems facing the sector is how members of the fragmented Hungarian farming community can integrate into global value chains and compete with large international companies (Fertő & Bakucs, 2012a).

We have a few findings on trust in contractual relationships and the governance structure of contracts in the Hungarian agricultural sector. They show that the relevance of detailed, written contracts is increasing (Fertő, 2012a), but the legal enforcement of contracts is still slow and costly (Fertő & Bakucs, 2012b). This may suggest that the successful implementation of contractual relations imposes heavy costs on businesses.

Biró et al. (2015) provide an overview of cooperative arrangements in the Hungarian agricultural sector, including the professional and interprofessional associations that are the subject of this study. A general result in the literature is that cooperation is the key factor underlying the competitiveness of most agricultural businesses. The most studied institutions of that are cooperatives and other forms of producers' cooperation (Bakucs et al., 2012; G. G. Szabó, 2010), which are largely weak in terms of interest representation and in terms of their influence on contractual frameworks (Szabó G. G. & Baranyai, 2017).

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¹³ Source: International Seed Federation. (<u>https://www.worldseed.org/about/what-we-do/</u>Accessed: 2018.03.01.)

4.4.2 Methodology

The preliminary documentary analysis of the case provided the basis for the interview schedule and sampling by identifying relevant actors, institutions, and collective challenges. During the fieldwork, I conducted semi-structured interviews between February and June 2018 with nineteen entrepreneurs and leaders of associations involved in the governance of the community. The interviews focused on four topics: (1) understanding the association's activities and contractual relationships, (2) the main challenges facing the community and (3) the perceived success of institutional responses those challenges, (4) the role of professional associations in the governance structures of contractual relations.

As the research is not hypothesis-testing but theory-building in nature, the selection of interviewees was through theory-driven sampling (Eisenhardt & Graebner, 2007)¹⁴. The sampling had three main aspects: (1) interviewing key actors; (2) exploring specific aspects of segments (crops, legumes, hybrids, vegetables) and occupations (breeder, variety owner, producer, trader-integrator); (3) exploring the importance of regional factors. The interviews focused on the region of Central Hungary, which is a priority region for large companies, and on the region of Central Transdanubia, where there is a strong tradition of seed production. This allowed for assessing the impact of local networks as well.

4.5 The case of the Hungarian seed industry

4.5.1 Complex, experience goods

Imagine a world where printing and digitalisation are not available, so texts can only be stored on physical media. The writing on these platforms also fades rather quickly, so that the maintenance of information requires constant copying, which is highly imperfect, so that the content does not remain unchanged. If textbooks were the basis of teaching in this world, an imaginary textbook industry would provide a good parallel for understanding the contemporary seed industry. The value of a seed, like a textbook, is determined by the information it contains and the seed (book) that physically carries it, along with its suitability for the environment and the needs of the user. The quality of the carrier can be (relatively) inexpensively determined by measuring physical parameters

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¹⁴ During theory-driven sampling the researcher selects cases because they are relevant from theoretically important aspects and represent different segments of a population, instead of relying on a statistically representative, randomized sampling procedure.

during transactions, but the quality of the information contained inside can only be determined during use, making the seed (textbook) an experience good.

Before the development of the seed industry, farmers produced seeds for themselves and for each other. In addition to its experimental nature, an even more important limitation of that system was that if plants can be freely propagated, breeders are under-incentivised to produce new genetic material. A further challenge for producers is that society aims to control the plants that are put on the market to avoid ecological disasters.

The solution which emerged to these issues was the introduction and public recognition of intellectual property rights. In the case of seeds, plant variety rights define the exclusive, transferable right of the variety owner to propagate, adapt, import-export, sell and store the genetic material (seeds) of a variety. In the seed industry, the key economic issues are (1) how to provide the right information to farmers in the right form, (2) how to compensate plant breeders who create that information so that they are encouraged to supply it at an efficient level, and (3) how to motivate seed producers so that they are willing to produce the right quantity and quality of seed.

4.5.2 Processes and actors

As seen in Table 30, five core procedures follow each other in the seed industry value chain, which can be supplemented by the three steps comprising the so called informal seed industry.

Table 30: Seed industry procedures (author's edit based on the case study)

Activity	Result
Plant breeding	Superelite seed
Transfer of genetic material, maintenance	Elite seed
of varieties	
Seed multiplication	Second-/third-degree seed
Selection, handling, packaging	Verified seed
Sales, logistics	Seed at end-user
Further propagation, retaining	Retained seed
Selection, handling, packaging of retained	Non-verified seed
seed	
Sales, logistics of retained seed	Seed at end-user

The first important element is the compensation that the breeder receives, which has traditionally been implemented through public funding. Breeders then gave up their rights in exchange for a public remuneration, and the state-registered varieties were made freely available to producers. Currently, two dominant alternative solutions exist: either a) the breeder sells the rights to a variety owner or b) transfers the genetic material in-house to

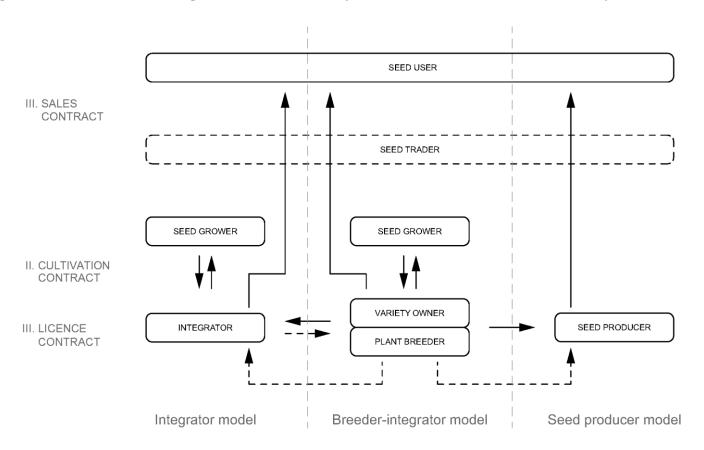
a variety owner, who then sells the rights to propagate and distribute the variety to others. Variety owners are entitled to receive royalties from producers utilizing their varieties for a given period of time, after which the genetic material becomes freely usable.

4.5.3 Transactional models

In order to clarify the roles of professional associations, we first need to understand the typical types of transactions to which associations may contribute for our case. Three main transactional hurdles need to be addressed in the seed industry. The first is the licensing contract, which always applies if the variety owner and the seed user are not the same firm or individual, because the latter must then acquire the right to propagate from the variety owner. However, license contracts may also extend to the transfer of rights of intermediate propagation and its complementary activities by the transfer of non-final seed (basic seed). The third and final transaction is the sales contract, whereby the transfer of the right to reproduce the seed is allocated to the seed users. In between, there may be a cultivation contract, whereby the seed producer outsources the multiplication of a specific batch before selling the results.

Three different models for organising these three transactions can be identified, complemented by the so called informal seed sector (see Figure 7).

Figure 7: Transactional strategies in the seed industry [author's edit based on the case study]



4.5.3.1 Seed producer model

The variety owner (I) sells the rights to propagate, process and market the variety to a seed producer in the form of basic seed. The seed producer (II) organizes seed multiplication and the related steps within its organizational hierarchy and then (III) sells the seed directly or through a trader.

4.5.3.2 Integrator model

The variety owner (I) sells the propagating, processing, and marketing rights to an integrator in the form of basic seed. The central actor in the process is the integrator, who then (II) outsources the multiplication process and parts of the related activities to its contractual partners, before (III) selling the seed directly or through a seed trader.

4.5.3.3 Breeder-integrator model

The plant variety owner (I) retains the rights within its organization, then (II) organizes the multiplication process directly or through an integrator. Variety owners usually do the post-multiplication processes themselves, before (III) selling the seed directly or through a trader.

4.5.3.4 The informal seed industry

The purchased seed is further propagated by the user, or the user retains the seeds from a batch of plants that are suitable for further propagation. The seed thus obtained is treated and then planted or sold by the user-producer.

4.5.4 The governance structures of contracts

What are the main transactional challenges in the identified contractual relationships and what governance structures have been developed to address them?

4.5.4.1 Licence contracts

A licence agreement is between the variety owner and the integrator or seed producer, where the former transfers the rights to propagate and market the variety in the form of elite or superelite seed. The party buying the licence has to trust in the quality of the genetic material and of the elite seed, while the variety owner has to trust that the buyer will transfer his licence fee. The direct element is the price of the elite seed, while the indirect element is that the use of elite seeds for multiplication remains within the boundaries set by the variety owner. In the absence of this control, the variety owner could lose its market position and face difficulties in collecting licence fees from seed producers using his varieties.

In the integrator-breeder model, this transaction is organized through hierarchical coordination within the plant breeding organization. These companies develop extensive, often global internal networks to exploit economies of scale and local opportunities. In these organizations horizontal and vertical integration go hand in hand. This extensively hierarchical solution is explained by the idiosyncratic, long-run R&D investments of plant breeding, in line with transaction cost theory (Williamson, 1979).

In both the integrator and the seed producer models, the licence agreement relies on some combination of bilateral contracting and reputation mechanisms. Bilateral solutions are based on the development of long-term partnerships and personal acquaintances, or, in their absence, on small-scale test contracts and detailed, well-specified contracts. The other key element is the variety owner's or the variety's reputation as a brand name. This reputation building is supported by so-called post-registration trials, which publicly compare the genetic potential of registered plant varieties, and by public certification and sealing of the elite seed to vouch for the quality of its physical carrier.

4.5.4.2 Cultivation contracts

In a cultivation contract, the variety owner or integrator entrusts the multiplicator with the exercise of his breeding rights, delivering the basic seed and later collecting the multiplied seeds. Here the variety owner or integrator is faced with a principal-agent problem (Jensen & Meckling, 1976), where they need to trust that the seed collected at the end of the process will be the right quality, while that depends primarily on the multiplicator's precise adherence to production processes and technology. They also need to trust that the breeder will retain only the amount of seed previously agreed upon and not keep or sell any extra results of his efforts in secret. The multiplicator on the other hand needs to have confidence in the quality of the basic seed supplied and the fair division of the result, which is often fraught with uncertainties.

This transaction does not occur in the seed producer model, because there the integrated seed producer carries out the entire process. In both the integrator and the integrator-breeder models, a combination of bilateral enforcement and reputational mechanisms provide the basis for enforcement. The community of reputable professional breeders is known to everyone in the industry (at least regionally), so building a reputation is key for them. Entering this elite circle is done by gradually deepening existing partnerships, so that cultivation contracts are based on long-term contracting, where the integrator also supports the multiplicator with advice and technology. The cultivation contract usually includes a sales component, where the multiplicator can retain a proportion of the seed, to ensure proper incentivisation. In the integrator model, this evolves into a quasi-

integrated network structure based on a leading firm. These networks also involve supplying inputs and even crop trade through the integrator.

Seed multiplication is often linked to local communities, so the complementary role of morality and shared norms is most important for these transactions. The role of professionalism is critical, because actors know that a serious seed producer takes pride in ensuring that they produce good results. The credibility of both parties is based on a combination of public guarantees and self-enforcing contracts. Government certification controls the quality of both the basic seed and the seed to be sold through official sealing, shielding both parties from some uncertainty. This is complemented by field inspections¹⁵ to monitor how multiplicators adhere to strict production processes. Integrators and variety owners coordinate these processes in a quasi-hierarchical relationship, giving detailed instructions and advice to their partners. They institutionalise their own systems of quality control, which prescribe stricter quality standards than state regulations.

4.5.4.3 Sales contracts

In a sales contract, the seed user physically obtains the seed together with the right to propagate it. The seller of that bundle of rights can be a variety owner, an integrator, a producer, or a trader who acts as an intermediary from one of the three varieties. The user must be able to trust in both the genetic and technical aspects of the seed quality, while the seller needs to control the reproduction while paying the price.

The governance structure of a sales contract in the seed industry's case is always based on some combination of bilateral arrangements and reputation. Slowly cultivating the trust of farmers is in a brand is paramount. In the absence of a previous relationship this is usually done through trial runs. All sellers seek to develop personal, long-term relationships with larger clients. News of a bad product or a poorly performing variety travel very quickly, so in addition to personal acquaintances, the reputation of companies and products is seen as the most important resource for sellers. Government registration and post-registration trials provide information on genetic quality, but companies' own standards and promises of higher quality are more important. Intermediary traders support these mechanisms by building their own reputations and contractual guarantees into the process, simplifying assessment by users.

The most important element of governmental verification is the sealing process, which applies to all legally sold seeds. It has several roles. It verifies that the seeds meet a legally

¹⁵ NÉBIH. [2016.09.23.] Vetőmag szaporítás szántóföldi ellenőrzésének módszertana [https://portal.nebih.gov.hu/-/vetomag-szaporitas-szantofoldi-ellenorzesenek-modszertana Accessed: 2018.02.01.]

defined minimal standard of quality, and also makes it possible to cultivate brand and firm reputation, while protecting variety owners and producers from counterfeit. It also aids the cultivation of a shared reputation for the whole industry by establishing a clear distinction between the formal and informal segments in customer's minds. Furthermore, as the price of sealed seeds contains variety owner's licence fees, it contributes to the enforcement of licence contracts.

Controlling the multiplication of retained seed is an important element of all three transactions, but is most evident in sales contracts, where the alternative of informal seed trade also presents itself. The latter is based on a shared morality supported by personal relationships, as it can hardly rely on formal legal enforcement.

There are complementarities between the formal and informal seed sectors (Almekinders & Louwaars, 2002), which stakeholders also acknowledged for our case. This is because informal seed trade typically meets demand for lower or locally specific qualities, which might not be profitable to meet for the formal seed industry. The so called Farmers' Privilege legislation¹⁶ of the EU also reflects this consideration, permitting further multiplication of retained seeds in small quantities for personal use. However, multiple stakeholders complained about even larger seed users trying to economize by avoiding licence fees.

Three principal solutions have emerged to the problem of licence fees. The first, technological solution is hybridisation, which guarantees a significant deterioration of the quality of retained seeds, thus undermining their profitability. Variety owners also operate their own control system for their larger business partners, based on both the establishment of norms of cooperation and on contractual sanctions. This is institutionalized at the level of the whole community by Variety Protection Nonprofit Ltd.

Sales transactions best fit the structure described above in the *seed producer model*. It has two main elements: on the one hand producers sell directly relying on their reputation, personal contacts and formal contractual guarantees. On the other hand, producers sell to a large extent through traders, utilising their reputation and contacts with seed users. The use of official sealing and government verification are most important in this model.

Two alternative structures are also typical of the *integrator model*. The first is the solution of quasi-integration described in the context of cultivation contracts. This structure is based on a long-term relationship linked to a production contract and benefit-sharing,

 $^{^{16}}$ Council Regulation (EC) No 2100/94 of 27 July 1994 on Community plant variety rights

complemented by advice and monitoring by the integrator. In the second structure the integrator also acts as a trader - possibly through other intermediaries - selling to users who are outside of these relationships. This relationship is similar to that of the seed producer model, except that the integrator is usually a larger, better known actor and can therefore rely more on its reputation.

Integrated plant breeding firms traditionally sell through intermediary traders, but variety owners' sales representatives are increasingly taking over the functions of traders, who are now only involved in organizing logistics and financial risk management. The main reason for this shift is the reliance on long-term partnerships, which encourages variety owners to establish personal relationships with all major customers based on the provision of personalised discounts, advice and comprehensive technological solutions. Regional representatives seek to build a reputation both at the personal and at the company level.

4.5.5 Professional associations

To study the roles of professional associations in the governance structures of contracts, first we need to identify the population of associations and their relevant institutional mechanisms. The professional community maintains a comprehensive association covering multiple professions, an issue-specific sectoral association, and multiple segment-specific associations.

4.5.5.1 Hungarian Seed Association¹⁷

The Hungarian Seed Association (HSA) was formed in 1993 through the merger of former professional associations of seed traders, producers, and breeders. Since its inception, the HSA sought to achieve coordination across the whole industry. Its membership is accordingly vertically comprehensive, allowing for contact between business partners and competitors alike. The main function of the HSA has been the dissemination of information within the industry and between government and the industry. It carries out these functions through face-to-face meetings (at committee and board meetings, delegates' meetings and professional events), a regular newsletter, and personal communications by telephone.

In addition, through its institutional membership, the HSA has connected Hungarian stakeholders to the international mechanisms of coordination, ethical and professional monitoring, and dispute resolution provided by the European Seed Association¹⁸ and the

¹⁷ Hungarian Seed Association. (http://www.vszt.hu/hu/rolunk/bemutatkozas.html Accessed: 2018.01.11.)

¹⁸ European Seed Association. (<u>https://www.euroseeds.eu/general-info</u> Accessed: 2018.02.03.)

International Seed Federation¹⁹. The HSA was officially recognised as a product council by the Ministry in 1994²⁰, which provided it with significant resources through compulsory membership and official government access. The main incentives for active participation beyond the compulsory membership have been access to information and the development of common policy positions. The HSA has been successful in establishing itself as a credible information broker. This required the inclusion of stakeholders from different market segments and firm types in its leadership, supported by an independent secretariat.

Mandatory membership has given a strong legal basis to the ethical control function of the HSA, which combines mechanisms of formal enforcement through a code of ethics and an ethics committee with informal exclusion. According to members, formal ethical procedures are seldom invoked, but they have made significant progress in curbing counterfeiting. The HSA also acts as an informal community dispute resolution body where members and their customers regularly submit complaints to its management, mainly about problems with product quality and sales practices. The board then investigates these matters, informally helping to resolve them or referring them to the ethics committee.

Following EU accession, and in line with the requirements of competition law, the HSA took on the form of an interprofessional organisation, which was officially recognised by the government in 2014²¹. This meant that the HSA institutionalized additional guarantees for its consensus-based decision-making and the balanced representation of different industry segments in it. The formal recognition provided a legal basis for more substantial coordination functions. The most significant of these is the annual setting of guide prices, which is the HSA's most important activity for many stakeholders.

The HSA together with the segment-specific associations organises comparative postregistration trials of registered plant varieties. These trials provide independent, reliable information on the genetic quality of varieties.

The HSA has also played an important role in the promotion of sealed seed. The first element of this was an outreach campaign conducted jointly with the government to convince farmers. The HSA also excludes cases related to non-seed sealed seed from its dispute resolution activities, thus steering users towards the formal sector. Despite these

¹⁹ International Seed Federation. (<u>https://www.worldseed.org/about/what-we-do/</u> Accessed: 2018.02.01.)

²⁰ Decree 2/1994 of the Hungarian Ministry of Agriculture

²¹ Decree of the State Secretary for Agricultural Economy ApF/5-4/2014.

partial results, the industry's attempts to include the use of sealed seed among the conditions for subsidies have only been partially successful, as it was only introduced as a condition for so called production based subsidies.²²

The collective goals of the association were not met in two other areas. The first relates to the authorisation to verify and seal seeds. This was originally a government function that could be also exercised under delegated authority by companies with an accredited laboratory. That option was abolished by the government with the exception of the vegetable seed segment, that - according to several stakeholders - resulted in significant losses. The presumed reason for this decision was that some parts of the industry were not ready to use the delegated power responsibly. This suggests that they could have retained the delegated function if they had had successfully self-regulated sealing practices. Another potential issue was the regulation of "unfair" market practices, understood primarily as the dumping of seed below cost and other market-distorting practices. No specific solution was identified for this issue, which may be due to the fact that a significant number of major stakeholders do not agree with market restrictions.

4.5.5.2 Plant Variety Protection Nonprofit Ltd.²³

The Plant Variety Protection Nonprofit Ltd. (PVPN) was founded in 2009 in eight variety owners, following the adoption of the European Union's plant variety protection regulations into Hungarian law. Its purpose is to collect licence fees and to provide informal dispute resolution. I justifies its fee collection activities by facilitating the declaration of seed propagation and the payment of licence fees by farmers, and reminds them of their obligations. PVPN primarily seeks to enforce variety protection on the basis of "fair play" through appealing to ethics²⁴, only turning to legal sanctions as a last resort. The organisation is inclusive, giving equal rights to founders and other members, which resulted in the vast majority of variety owners joining it. PVPN finances its operations out of the collected licence fees on a pro rata basis, so no additional membership incentives were needed. A select group of variety owners opted out, as they considered their own monitoring to be more efficient than the community solution due to the limited scope of their partners.

²² Decree 9/2015. (III. 13.) of the Hungarian Ministry of Agriculture

²³ Plant Variety Protection Nonprofit Ltd. (Fajtaoltalmi Nonprofit Kft). [2017]. Introduction [Bemutatkozás].

^{(&}lt;u>http://www.fss.hu/index.php?option=com_content&view=article&id=56&Itemid=204</u> Accessed: 2018.02.01.)

²⁴ Plant Variety Protection Nonprofit Ltd. (Fajtaoltalmi Nonprofit Kft.) [2010]. Fair play. (http://www.fss.hu/index.php?option=com_content&view=article&id=60&Itemid=220 Accessed: 2018.02.01.)

4.5.5.3 Segment-specific associations

The third group of professional associations of the industry were organised along the vertical value chains, including all major stakeholders of a product segment or an activity. They typically respond to the need for joint representation of interests and for the coordination of genetic quality and other product characteristics. Their members can be variety owners, integrators, seed producers and seed users, or even consumers of the resulting crops. They thus extend beyond the seed sector, but are also important for seed producers, especially through the key issue of genetic quality.

The Grain Producers' Association²⁵ (GPA) was founded in 2004 by various Hungarian grain producers, including grain seed producers. The founders' original motivation came from the growing importance of informational and interest representative functions in light of the EU accession.

The Hungarian Maize Club²⁶ (HMC) was founded in 2005 by Hungarian maize producers, also including maize seed producers. It had a similar original purpose in meeting the challenges of EU accession through improved information sharing.

The Hungarian Soybean Association²⁷ (HSoyA) was founded in 2016 by variety owners, seed producers and crop producers from the soy and protein crop segments. Its original functions include information sharing and interest representation.

The most important transaction supporting function of segment specific associations is information sharing. This primarily concerns the provision of information about potential business partners at professional events and meetings. They also institutionalize information sharing towards seed users about the quality of plant varieties. This is mostly done through post-registration testing, often co-organized with the HSA. They also provide ethical control over their members institutionalized through ethical codices and committees and informal, personal enforcement.

4.5.5.4 Contract supporting functions

Table 31 below provides an overview of the transaction enabling functions of professional associations uncovered by the documentary analysis and the interviews. The primary function of all associations seems to be information sharing, complemented by informal dispute resolution and the mostly informally institutionalized moral control. The HSA

²⁵ Grain Producers' Association (Gabonatermesztők Országos Szövetsége). (http://www.gabonatermesztok.hu/ Accessed: 2018.02.02.)

²⁶ Hungarian Maize Club (Magyar Kukorica Klub) (https://www.magyarkukoricaklub.hu/ Accessed: 2018.02.03.)

²⁷ Hungarian Soybean Association (Magyar Szója and Fehérjenövény Egyesület) (https://magyarszoja.hu/ Accessed: 2018.03.18.)

and the PVPN contribute significantly to seed sealing mechanisms, while segment-specific associations and the HSA are crucial to conducting post-registration tests, which a form of professional control.

Table 31: Transaction enabling functions of associations (author's edit based on the case study)

Functions	HSA	PVPN	Segment-specific
moral selection	-	-	-
professional	-	-	-
selection			
moral control	ethics procedure	-	ethical rules
professional	post-registration	-	post-registration
control	need for support and	control of sealing	-
	regulation of sealing		
dispute	informal	out-of-court fee	-
resolution		collection	
coordination	guide prices	-	-
information	professional events,	-	professional events,
sharing	newsletter		newsletter

4.5.6 Professional associations in governance structures

Which community members rely on the uncovered functions of professional associations, and for which of their transactions do they do so?

The formalized *information sharing* functions are mostly relevant for smaller firms and individual entrepreneurs, as larger firms usually have their own channels to access information. Informal, personal information sharing at professional events and association meetings are important for all participating stakeholders.

The *coordination* function institutionalized through determining guiding prices is considered by some to be the most important function of the HSA, but the majority of interviewees did not find them relevant to their contractual relationships. This could be explained by the reliance on personalized offers to larger business partners, where guiding prices have negligible roles on negotiations.

The *moral control* function of associations, institutionalized through ethical codices and committees were considered very useful by some stakeholders, but the majority considered them supplementary mechanisms, only applied for particularly egregious offenses. The rare application of these procedures could be the sign of their successful deterrent effects, but most stakeholders did not see it that way.

Several stakeholders highlighted the role of associations in enabling the seed sealing and quality verification mechanisms of *professional control* together with public organizations. Sealing is an essential guarantee for many actors, protecting variety

owners, seed producers, and seed users from reputation loss and counterfeit. It became such a basic element of governance structures, that even long-term partners include it in their transactions. The HSA achieved some important partial results both in the promotion of sealing practices and in harmonizing official quality standards with professional expectations. The PVPN institutionalizes a relatively successful, mostly voluntary solution to the problem of collecting licence fees, on which almost all variety owners rely to some extent.

Post-registration tests organized by associations are significant complementary mechanisms of *professional control*. Some actors considered them very useful in selecting variety and cultivating brand reputation, but the largest variety owners often abstained from them. They were able to rely on their existing reputation and partnership networks, while competitive tests always carry the risk of losing. Post-registration tests thus became most important for aspiring, but not yet fully established variety owners. They were able to rely on them as signals of high product quality in reaching new partners. Informal *dispute resolution* turned out to be a useful complementary function of the HSA, primarily for sales contracts. The activity of the PVPN is based on informal and out-of-court dispute resolution, as it very rarely turns to formal legal enforcement. This solution makes the cultivation of trust between variety owners and seed users who might practice seed retention more effective.

Table 32: Associational functions in the governance structures of contracts [author's edit based on the case study]

Functions	Licence contracts	Cultivation contracts	Sales contracts		
Information-sharing: events, newsletters	Very important in establishing reputation				
Coordination: guide prices	Indirectly contributes to reaching agreements		Contributes to reaching agreements		
Moral control: codices and informal exclusion	Complementary role in articulating and enforcing norms				
Professional control: support for sealing	Guarantee of	basic quality	Very important guarantee of reputation and quality		
Professional control: post-registration	Important complementary information about genetic quality				
Dispute resolution: informal, complemented by formal mechanisms	Rare		Contributes to cultivating consumer trust		

How can we explain the above pattern in reliance on professional associations? Relationships can be identified with four elements of the governance structures of contracts. The *more distant* the partners engaging in a transaction, the more important associations become. *Integrated firms* utilise hierarchical solutions to transactional problems, making them less likely to rely on the functions of associations. For interorganizational transactions actors who engage in *quasi-integration* or *long-term relational contracting* are less likely to rely on professional associations.

Interestingly however, the actors at the centre of such networks (integrators, large variety owners) are among the most active members of professional associations. There are two explanations for this. First, these actors frequently deal with stakeholders outside of their networks, and they rely on associations in establishing those relationships. Second, they are among the professional groups most affected by government regulations, motivating them to try exerting influence through associations.

In case of less frequent and more distant transactions, the key question is what the parties can include in the governance structures to complement the weaker bilateral mechanisms. The more difficult it is for an actor to access simple mechanisms of commitment and enforcement, the more likely they are to rely on mechanisms institutionalized by professional associations. A smaller group of firms manage to cultivate a selective network of partnerships without involving any third parties. They usually offer unique, higher-than-regulated quality products under personalized terms to these partners, which limits their expansion. Among organizations with wider range of partnerships, those large firms who are able to rely on their reputation are also unlikely to turn to professional associations. For every other stakeholder the mechanisms of professional associations are important complements in institutionalizing credible commitments.

For-profit market *intermediaries* and professional associations are both most relevant when new entrants or smaller firms look to establish partnership, but cannot yet rely on informal connections or reputation to do so. Market *intermediaries* utilize their own reputation and network of contacts to enable new contractual relations of their clients, substituting for what associations provide for sales contracts. The new contractual relationship between the intermediary and the producer selling seed to it suffers from similar limitations, however, potentially calling for the involvement of associations' mechanisms. This points toward a potential complementary relationship between the two groups of institutions. Professional associations are more relevant in the governance structures of previously unknown parties, and such transactions are often made possible by the inclusion of intermediaries.

Actors who rely on *governmental regulation* are more likely to turn to professional associations for two reasons. The coordinative and control activities of governmental organizations and professional associations both generally rely on setting minimal standards. While this makes them partial substitutes, they are typically relevant for the same group of stakeholders, i.e. those who do not chiefly rely on their market reputation. In addition, a substantial part of professional associations' activities take effect through improving the quality and enforcement of governmental regulation, making them complements.

4.6 Conclusions

The results of the case study mostly confirmed our theoretical expectations, but also drew attention to the importance of some factors that had been less prominent in previous analyses. The demand for the contract-enabling functions of professional associations is well explained by the limitations of alternative institutions of the private and public order. Their closest substitutes, the mechanisms of the planned, private order and of relational contracting had the largest effect on the demand for associations.

- 1. There is a trade-off between relying on professional community institutions and relying on long-term relational contracting (or integration) for the governance of contractual relations. The contract supporting functions of professional associations are mostly relevant for short-term, market based transactional relations. The choice between the quasi-integrated form of a lead organization governed interorganizational network and the network administrative organization governed interorganizational network with a professional association at its core is explained by the distribution of trust among partners and the extent of the network to be governed.
- 2. The presence of reputational mechanisms is also important in explaining the role of associations. There is a trade-off between relying on professional community institutions and relying on market reputational mechanisms for the governance of contractual relations. On the one hand, the information sharing functions of professional associations can enable the cultivation of reputation. On the other hand, the more professionals and their partners can rely on reputational mechanisms, the less likely they are to consider control and dispute resolution by association relevant.
- 3. Reliance on market intermediaries can both complement and substitute for reliance on professional community institutions for the governance of contractual relations. Intermediaries can rely on associations to establish new contractual relationships, increasing demand for them. Intermediaries can enable relational and reputational

- mechanisms, thus extending the possible reach of network administrative organization governed interorganizational networks, where professional associations have major roles.
- 4. The scope and type of government involvement in the governance of contractual relations determines the role of professional community institutions. Associations provide the most important channels for professional communities to articulate their views and needs in relation to regulations and their implementation, making government solutions more predictable and professionally acceptable. Professional communities often extent beyond business networks into the sphere of public organizations. It is recommended to include those structures in future analysis, to find out how professionals shape policy making and implementation.

Although this case study did not offer enough variance in associational features to study how institutional forms (such as voluntariness and legal status, type of membership, inclusiveness, leadership and decision making) affect the roles of professional communities, these relationships are promising avenues for future studies.

5 VARIETIES OF PROFESSIONAL INSTITUTIONALISATION – THE ASSOCIATIONAL SYSTEM OF HUNGARIAN LOGISTICS²⁸

Abstract

This study is about how communities of professionals and firms institutionalise. Despite the budding literature on professional associations (private, planned institutions intended to further the interests of business communities), we know little about how they form associational systems at the level of professional communities.

Adopting a complementary theories congruence analysis approach, I compare and combine the descriptive power of the central theories of the logics of membership and influence (Schmitter & Streeck, 1981/1999), and the recently proposed theory of the institutionalization of professional debates (Mike, 2017). Using document analysis and semi-structured interviews, I study the associational system of Hungarian logistics, a densely institutionalised professional community which faced substantial regulatory and market challenges.

The results highlight that the three theories explain different elements of the professional community's complex institutionalization. The intellectual orders of professional debates and the transaction-based institutional logics of associations co-evolve, with the shifting regulatory context driving most institutional dynamics.

Keywords: professional community, business associations, professional associations, associational system, logistics

rendszere. Vezetéstudomány - Budapest Management Review, 51.

²⁸ This chapter is the translated adaptation of the article: Molnár, G. T. (2021 [forthcoming]). Változatok a szakmaiság intézményesítésére – a magyar logisztika szakma szerveződéseinek

5.1 Introduction

It is a worldwide social phenomenon that professionals acting in similar areas organize not only firms, but also wider professional communities. These communities can stay at the level of informal relations, but are often formally institutionalized. This institutionalized cooperation has many forms, including associations, chambers, clubs and not-for-profit firms. Compared to firms and governments we have relatively limited scientific knowledge of professional associations, most of it related to the institutional form and functionality of individual associations, or to the higher levels of neocorporatist structures. Previous studies are mostly based on case studies or statistical samples of individual associations, while our theories posit that professional communities are institutionalized as systems of associations at the community level. By considering this broader context, we can arrive at a more complete understanding of the workings of associations and their development paths. The institutions of professional communities are the typical channels for the perspectives and interests of professionals to be included in the policy process. They also provide a host of mechanisms for the maintenance of the professional knowledge base and self-regulation, contributing to the proper functioning and development of economies. The main question of my research is therefore how professional communities are institutionalized. The goal of this study is to improve our understanding of how associations within a professional community form systems of associations.

This study focuses on the formal institutionalization of professional communities. I first define professional associations as the basic building blocks of this process. Institutional economics is able to explain the existence of professional associations as institutions: they are hybrid institutions of coordination situated between markets and hierarchies, relied upon where the transaction costs of those alternatives would be higher (Ménard, 2004). This, however, does not provide a satisfactory account of the many parallel associations within communities and their differentiation. Political science studies on associations as vehicles interest representation are able to integrate the approaches of economics, organizational ecology and network analysis to provide more complete explanations of the diversity of associations (Berkhout et al., 2017; Lang et al., 2008). On the other hand, little theoretical progress exists on systems of associations since the seminal work of Schmitter & Streeck (1981/1999), with mostly sporadic developments. I intend to contribute to this by introducing a new theoretical frame to the field, and by specifying the relations between the theoretical perspectives. My selected approach is congruence analysis based on complementary theories.

Section two defines the key concepts of professional communities and systems of associations, then provides an overview of scientific theories explaining the patterns of professional associations. Section three introduces the research questions and ambitions. Section four provides the case selection rationale and the empirical methods. The following two sections summarize and discuss the results of the empirical analysis on the differentiation and integration of the system of associations respectively. Section seven contains conclusions on the explanatory strength and relations between the theories in the study, then suggests possible future research avenues.

5.2 Theory and literature review

5.2.1 Professional communities

I define professional communities as groups of professionals and businesses linked by some common activities with their corresponding knowledge base. There are three linked elements at the core of this concept: the knowledge base of the profession, the common professional activities and the common interests and goals arising from the first two. The knowledge base is essential not just for carrying out the professional activities, but also bears normative content, as it is linked to the values and goals inherent to the community.

5.2.2 Institutionalization

We can approach the institutionalization of professional communities from the institution concept of new institutional economics, where institutions are the rules of the game, structuring social interactions by defining incentives, thus reducing uncertainty (North, 1990). Institutionalization in this theoretical framework means that a community is able to define norms to structure members' interaction within and outside of the community. These norms can be informal (habits and implicit expectations associated with a profession) or formal (organizational rules). Following the footsteps of most studies on professional communities, this study approaches them from the perspective of their formal institutions (although intends to stay open to the inclusion of informal elements in explanations).

5.2.3 Professional and business associations

The basic unit of the institutionalization of professional communities is the professional association, which we define following Prüfer's (2016) synthesis as private (not completely governmental, containing voluntary elements), formalized, not-for-profit organizations, intended to further the goals of a given underlying community (generally

their members). This definition covers a broad range of professional, business, industry, trade and entrepreneurial associations, local entrepreneur's clubs and other associations, which might have different geographical, occupational and value-based identities. In the following I use the term *professional associations* or simply *associations* as a general umbrella term for all of these.

5.2.4 Systems of associations

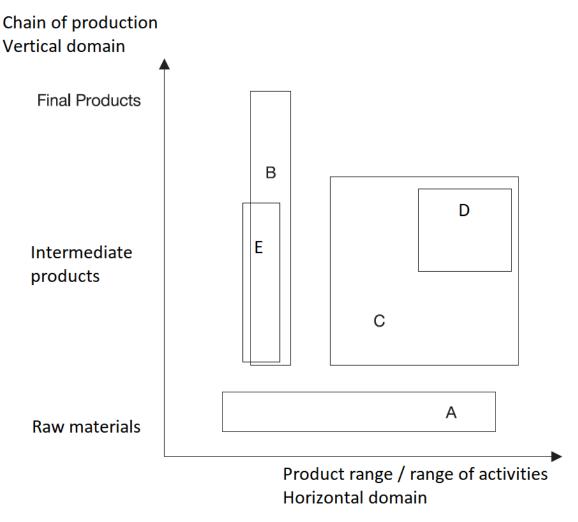
Systems of associations are a collection of the associations within a professional community along with their structured interactions (Schmitter & Streeck, 1981/1999). The two main structural elements of a system of associations are its differentiation and its integration. Differentiation results from the individual features of all the associations within a system, while integration is the result of their structured interactions. A complex system needs both elements to function, as the various perspectives and interests of community members can only be covered by differentiated institutionalization within or among associations, while they need to be integrated at the community level if they are to be successfully included in governance.

5.2.4.1 Differentiation

Differentiation relates to the number of associations serving the membership and functional needs of community members, i.e. how fragmented the associational population of the community is. The associations of a typical professional community are typically divided along two main dimensions: the positions of their members along the chain of transactions define their vertical domain, while the scope of their members' activities define their horizontal domain (see

Figure 8).

Figure 8: The domain of associations [source: adopted from (Schmitter & Streeck, 1981/1999, p. 61) with additions]



Associations B and C have a more extensive vertical membership domain, and are internalizing a higher degree of heterogeneity regarding transactional conditions. Associations A and C have larger horizontal membership domains, meaning that they deal with higher heterogeneity among their members interests through their internal coordination.

5.2.4.2 Integration

The cooperation of associations can lead to institutionalized integration in two ways. Associations involved in vertical integration create a meta-association that is formally superior to them. The more meta-associations are able to coordinate the whole professional community, the more integrated the system of associations is said to be. It is worth noting that integration can be both internal and external to associations: there is little difference between a meta-association and a strongly internally differentiated regular association with autonomous units capable of leaving it. According to Schmitter and Streeck's (1981/1999) hypothesis, the more differentiated a systems of associations

is, the more likely it is to require a complex, multi-tiered hierarchy of meta-associations to be integrated.

Organizations engaged in horizontal integration do not create a formal meta-association above them. Following Schmitter and Streeck (1981/1999) we can distinguish five forms of such institutional arrangements, from looser cooperation toward formal mergers:

- 1. Ad-hoc alliances: without formalized rules
- 2. Joint task forces: have their own rules, but exist for a specific goal
- 3. Joint ventures: task forces whose task is permanently institutionalized
- 4. Alliances: formalized cooperation in multiple functional areas
- 5. Staff sharing, partial mergers

5.2.5 Explanations of institutionalization

5.2.5.1 Institutional logics

Professional associations can be understood as coordination organized at an intermediate layer between private hierarchies and governments. Studies in political and organizational science often employ two main theories following Schmitter and Streeck (1981/1999) to explain their patterns of institutionalization. These are the so-called institutional logics of membership and influence. Both logics can be regarded as jointly specified applications of the theoretical frameworks of transaction costs and collective action. The difference between them comes from which potential goals of collective action they give primary importance to. These considerations of collective action are further clarified by the theory of transactions costs (Williamson, 1979), by adding that the higher internal heterogeneity inherent in larger organizational domains leads to higher costs of coordination.

The logic of membership explains associational features through the exchange relations between associations and their memberships. This logic defines a difficult balance between the benefits from club goods provided to members on the one hand, and the costs of institutionalization on the other. Its starting point is the theory of collective action (Olson, 1971), which posits that smaller, more homogeneous groups organize themselves easier. This limits the growth of associations to smaller, relative homogeneous segments of communities. On the other hand, the goods provided by associations to incentivize collective action might enjoy economies of scale, therefore membership benefits might increase up to a point with association growth.

The logic of influence is based on the exchange relationship between associations and governments. It describes a delicate balance between the resources and monopoly goods provided by the government in exchange for coordination, and the costs of

institutionalizing the required level of coordination. The basic message of the logic is that the more extensive an association is, the larger its possible governmental influence. This assumes, of course, that the policy process favours actors which represent broader coalitions of interests. Based on the logic of influence we can expect continuously growing associations, constrained only by the transaction costs of internal coordination.

The Logic of Effective Implementation Firm Government "Sell Compliance" "Provide Services" through by means of Selective Goods Monopoly Goods Services Control to over Members Members Characteristics Characteristics The Logic of Organizational Properties^a The Logic of of Members Membership Influence of State Agencies Representation Participation for Members Members 'Create Consensus' "Exert Pressure" around for Solidaristic Goals Public Goods Club Movement The Logic of Goal Formation

Figure 9: Schmitter and Streeck's competing "logics" of associative action [source: (Schmitter & Streeck, 1981/1999, p. 21)]

a Choice of present organizational properties restricted by past organizational properties.

The extent of an association is defined by the interaction of the two institutional logics. Institutionalizing a higher level of internal complexity is able to partially resolve the tensions between the two, however, it also leads to higher costs for the internal mechanisms of goal formation and effective implementation. Associations in general are expected to strive to increase their institutional autonomy, which requires them to strike a balance where they do not overly depend on either exchange relationship (Schmitter & Streeck, 1981/1999).

These explanations have mostly been applied to the study of national associational populations in the scientific literature. Bennett (1995, 1996) explained the institutional

forms of local associations with the transaction costs of coordination and the mix of selective incentives and collective goods provided by them. His main result is that with the growth of associations the logic of influence takes precedence over the logic of membership. Perry (2012) compares the associational populations of Ireland and New Zealand, finding that meso-level features of communities, primarily the heterogeneity of businesses in a community explain the differences in institutionalization. Bennett (1999a, 1999b, 2000) uncovers differences between the institutional logics of associations with various membership profiles. He finds that associations of narrower professional communities (trade associations) are better explained by the logic of influence, while associations of broader communities (industry, professional and meta-associations) are better explained by the logic of membership.

5.2.5.2 Relations between the two logics

Schmitter and Streeck's (1981/1999) theory on the balance between the logics of membership and influence explaining the differentiation of professional communities has been further clarified since. Grant (2002) defines this balancing act as one of avoiding the emptying out of any of the exchange relationships. This means that an association only balances relations to the extent that is does not allow its membership or governmental ties to dominate its operations. Lehmkuhl (2005) adds that the two institutional logics are not deterministic in how they explain institutionalization patterns, rather they define two basic elements of associations' survival. Associations can pick various balancing positions between the two exchange relations to maximize their level of autonomy, and the outcome can be volatile. One way to resolve that is to assume that the logics of membership and association co-influence the domain of associations, as associations look to maximally extend (thus increasing their influence), unless the costs of internal coordination exceed the benefits of further expansion (V. Schneider & Grote, 2006).

More sophisticated theories assume a dynamic relationship between the two logics, positing that more complex associations are better explained by the logic of influence in two ways. First, associations with broader membership and especially meta-associations are expected to be closer to the logic of influence (Schmitter & Streeck, 1981/1999). Second, the logic of membership applies more during the early stages of institutionalization, and gradually takes a secondary position to the logic of influence as associations develop over time (Grant, 2002). The extent and speed of this reorganization depends on the governmental relations of each association, as in pluralist systems of interest representation they are generally explained by the logic of membership, while in neocorporatist systems the logic of influence becomes more important (Lang et al., 2008).

We have rather scarce empirical results on the explanatory powers of these institutional logics. Bennett (1999a) studied British business associations, finding that as they strive to increase their resources over time, the logic of membership became more and more important to them. This led to the dominance of a service provider approach to institutionalization, essentially emptying out the interest representation functions. Berkhout et al. (2015) find that systems of associations in the EU are primarily influenced by considerations of the logic of membership (segmentation and interest heterogeneity within communities), and not governmental relations. Lowery and Gray (1996) found similar results for the associations of the USA, while also finding support for Schmitter and Streeck's (1981/1999) hypothesis that the logic of membership is stronger at lower layers of professional institutionalization, and the logic of influence is stronger at the higher layers, closer to governmental organizations. Aldrich et al. (1994), Ibsen and Navrbjerg (2019), and van Waarden (1992) studied the effects of changes in social contexts on the associations in the USA, Denmark and the Netherlands respectively. Their main result is the same: as associations respond to challenges from the outside by expanding their membership domains, the logic of membership becomes increasingly important for them. They therefore provide more and more selective incentives (mostly services) to their members instead of trying to represent narrower, more specific interests.

5.2.5.3 Competition or cooperation

A rarely applied element of Schmitter and Streeck's (1981/1999) theoretical framework relates to the study of interassociational relations and the systems that they give rise to. Explaining interassociational cooperation is similar to explaining the extent of associations, as the integration of associations also means a higher degree of internal coordination, instead of relying on private hierarchies or governments for coordination. The cooperation of various associations at the level of professional communities is therefore analogous to how individual associations strive to cover larger membership domains through internal differentiation and integration. The patterns of interassociational integration can thus be explained by the logics of membership and influence similarly the features of individual associations. Again, we can turn to the benefits from more extended coordination.

On the other side of this equation, we need to consider the costs of interassociational coordination. That can be explained through the logic of membership, looking at the relations between different associations. What influences which associations are willing to cooperate with others? The larger the overlap between the potential membership of two associations, the more likely they are to compete with each other, making their

cooperation costlier. Associations B and E in Figure 9 above are more likely to compete than B and E. Associations E and A do not compete for potential members, so they may only be opposed due to their members' different interests.

A third dimension of relevant differences between associations concerns their functionality, which acts similarly overlaps in membership. Functional specialization and the division of labour within a community leads to easier cooperation, while more significant functional overlaps lead to more intensive competition. There are potential links between membership and functional domains, as broader, more general and narrower associations often provide different goods to their members (Battisti & Perry, 2015). This makes the two kinds of associations – for instance associations C and D in Figure 9 – even less likely to compete than associations within the same categories.

5.2.5.4 Institutionalizing professional debate

Institutionalizing professional communities and their associations relies on their ongoing internal intellectual debates, which give meaning to their exchange relationships (Mike, 2017). The economic study of associations traditionally focuses on their roles in self-regulation, while political science studies their interest representative functions. Both roles require the underlying professional communities to construct their identities – define themselves through common values and goals – and to articulate their shared interests (R. Greenwood et al., 2002). Professional communities institutionalize their intellectual debates on their interests and the accepted ways of furthering those interests. This professional debate is more than simply aggregating given preferences or interests, as it aims to find some common truths about which goals and tools are acceptable for the community. Mike (2017) adopts Polanyi's (1951/2010) concept of intellectual orders to describe the institutions of these professional debates. He theorizes that a functioning professional intellectual order need to institutionalize three sets of rules:

• The rules of competition define who can participate in the debate.

- The rules of consultation define the acceptable ways of putting forward arguments.
- The rules of persuasion define the shared forums of debate.

Studies on the interest representation functions of associations have also included some elements of intellectual orders in their theories, in addition to the usual factors of exchange relationships. Berkhout et al. (2017) distinguished two main forms in which associations contribute to policy making, providing information on members' interests and information on the professional quality of policy proposals. Vining and Boardman (2007) analyse the relationship between these two types of policy contributions, claiming that associations are more successful in articulating arguments based on scientific professional knowledge. Professional debates are thus not just the starting points of interest representation, but also provide useful tools for engaging in it.

The institutional features of these professional intellectual debates influence systems of associations in two ways. At the layer of individual associations, their membership and functional domains are influenced by their internal intellectual orders. At the layer of professional communities, the shared or distinct intellectual orders within a community influence the possibilities and costs of integration: the more significant the intellectual differences, the costlier it is to bridge them institutionally.

5.3 Research questions and ambitions

This study adopts a complementary theories congruence analysis approach (Blatter & Haverland, 2012). My main goal is to find out which elements of association systems are better explained by which of the proposed theories. We only have partial expectations about the relations between the alternative theoretical explanations. My secondary goal is to clarify these relationships in order to progress towards a theoretical synthesis.

My first research question relates to the differences between associations as the basic units of professional community institutionalization, that is the differentiation of the system of associations:

(1) What factors explain the different patterns of institutionalization of professional associations within a professional community?

Regarding this differentiation we can rely on a few theories drawing on the frameworks of collective action and transaction costs, and the alternative theoretical framework of intellectual orders. The research ambition here is twofold: first, to test the explanatory power of the theories, and second, to formulate propositions on how they could be refined. The second research question relates to the institutional solutions of bridging these associational differences, that is, the integration of the system of associations:

(2) What factors explain the patterns of cooperation between professional associations within a professional community?

The choice between different forms of institutionalized cooperation can depend on both the external context and nature of existing relationships between individual associations. We do not have explicitly formulated theories to rely on for this question, only a theoretical framework, which defines a broad range of possible factors. The study gets closer to an exploratory ambition here, as the goal is to identify the specific factors and relationships for the formulation of a theory of associational integration.

5.4 Case selection and methods

The units of analysis are associations and systems of associations. I selected a case from among national professional communities, as that is the main level at which these communities institutionalize (Lehmkuhl, 2002). While subnational and international (or supranational) levels of governance are also relevant for professional communities, they generally engage with those levels through national level associations (V. Schneider & Grote, 2006).

The research adopts an outcome variable-centred (Y-centred) approach by assessing the fit of several possible theories in explaining the observed patterns of the system of associations as the outcome. Case selection was therefore guided by prior knowledge of the system of associations: I was looking for a professional community with a rich formal institutionalisation to explain through the analysis.

The selected case is the Hungarian logistics profession. The case study draws on the experiences of companies and professionals involved in logistical activities in Hungary, including foreign companies active in the country and the activities of Hungarian companies abroad. However, the impact of the global and supranational professional governance context is only discussed where it directly affects actors in our case. The temporal delimitation of the case follows the institutionalisation of the logistics sector in Hungary, so the period covered is from the period of economic transition and the founding of the first specifically logistics-related associations (1989-90) to the year of fieldwork (2019). The unit of observation are firms, professionals and organisations involved in the governance of the professional community.

5.4.1 Features of the case

Logistics as a profession has been around for about three decades and is still in the process of defining itself and seeking formalized approval. The logistics profession has no official

definition and does not exist in the Statistical Classification of Economic Activities in the European Community. Logistical activities are included under transportation and a few other headings in the classification of sectors. Logistics professionals do most of their work employed by firms in other sectors. Logistics in this common approach is a horizontal field that cuts across vertical sectors, providing an essential complementary service to their operations. Logistics can thus be defined in terms of its general objectives, but in practice it mostly needs to fit in with the needs and logic of other professions. This horizontal approach was reflected by the most recent public governance of the profession in Hungary, where logistical aspects are integrated into the governance of other, higher priority sectors, rather than being institutionalized as a separate department of logistics. The institutionalisation of logistics as a profession also meant the definition of logistics services as an independent (vertical) economic sector. Those who define logistics as a separate industry mainly include companies that provide warehousing, freight forwarding, transport and logistical consultancy services in it. Some interest representative organisations and government documents identify the logistics industry mostly with the activities of freight forwarding, transport and warehousing, but this is considered a very narrow definition by stakeholders.

In the course of this study, I operationalized logistics as a broadly defined professional community, including logistics professionals in non-logistical firms, integrated logistics service providers, as well as professionals and their companies in specific market segments (e.g. freight forwarding, warehousing).

5.4.1.1 Market context

The last three decades of European logistics have seen both specialisation and segmentation, and the rise of logistics companies with integrated and diversified portfolios. Thus, while smaller firms have been forced into highly competitive segments, larger firms have been better able to avoid this through providing higher value-added, integrated service packages. Medium-sized companies and their employees were the main membership base of professional associations. While the simultaneous emergence of the two market trends posed serious professional and regulatory challenges to them, they also had more resources to attempt to cope with compared to smaller firms (Lehmkuhl, 2005).

5.4.1.2 Government context

The public sector has been involved in logistics activities for the longest time, since the first logistics systems were developed within the army and postal services. Logistics as a separate governance area has emerged periodically within Hungarian government, generally when it fitted in with current policy initiatives. In the previous government

structure, logistics was under the Ministry of National Economy's Deputy State Secretariat for the Domestic Economy. In the most recent structure since 2014, the Ministry of National Development and then the Ministry of Innovation and Technology's State Secretariat for Transport Policy were responsible for logistics, without a separate Deputy State Secretariat or department dedicated to logistics. Logistical aspects were thus assigned to other sectoral areas within the government.

As the main actor responsible for building and maintaining basic infrastructure, the Hungarian government is an important element in the transportation segment of logistics. The government is also an important actor in maintaining the professional community's knowledge base as the main provider and regulator of vocational training and higher education systems. A significant governmental support institution is the IFKA Public Non-profit Foundation for Industrial Development (until 2013 IFKA Public Foundation), which was involved in the coordination of development policy since its establishment in 1990.

In the context of transport and freight forwarding, national public licensing systems provided professional community institutions with their most important tasks. These have lost importance with European integration and liberalisation processes, leading to a shift in associations' focus towards regulatory issues of international competition and externalities, complemented by involvement in European and national development policy (Lehmkuhl, 2005). The transformation of the regulatory environment has undermined the traditional functions of associations, to which they responded by institutionalising new functions.

5.4.1.3 Challenges

The Hungarian logistics profession has recently faced several clear identifiable collective challenges. The creation of the institutional framework for the profession coincided with the period of transition to a market economy, within which the role of the profession had to be defined. The economic transition has been accompanied by a radical transformation of market structures, integration into international supply chains and the pressure to adapt to the global competition that this entails. The latest set of challenges is linked to technological change: the digital revolution and the era of automation are expected to fundamentally reshape the way logistical activities are organised, requiring new collective responses. For this professional community case, we can expect that the benefits to be gained from organising have been significant. The rich formal institutionalization, combined with the presence of major collective challenges have made logistics a likely case of community-level integration. The frequency of regulatory and

developmental challenges and the need for coordination between heterogeneous market actor have also been important push factors towards overarching institutionalization. Preliminary research has identified a number of associational structures, providing a suitable context for the study of institutionalisation at the community level.

5.4.2 Operationalization

In order to explain the system of associations of the professional community, we need to understand the processes that shaped it. Three main elements can be distinguished, which give the three sets of phenomena for the empirical analysis to focus on, somewhat extending the approach of previous case studies (Aldrich et al., 1994; J. Greenwood, 2003):

- (1) The formation, initial functionality and membership profiles of associations, and the internal institutionalisation of the professional debate.
- (2) The development of associations: changes in functional and membership profile and the underlying professional debate; dissolutions of associations.
- (3) The evolution of relations between associations: patterns of competition, horizontal and vertical cooperation.

5.4.3 Empirical methods

The case study began with document analysis, where I examined government documents related to the profession, the association's statutes, code of ethics, other publicly available documents, long with their board and membership composition. During the preliminary analysis I identified the main actors, market and public policy challenges facing the community, and the emerging solutions. This formed the basis for the interview schedule and sample. I contacted fifty of the one hundred organisational, government and corporate officials identified and conducted semi-structured interviews with fifteen of them. Since the research is not hypothesis testing but theory building in nature, the sampling of interviewees was not statistically, but theoretically driven (Eisenhardt & Graebner, 2007). The three main considerations for selection were to interview actors with sufficient knowledge of the governance of the professional community, to include knowledge and perspectives specific to different professional segments, and to explore regional differences. A list of interviews is provided in the Annex.

The semi-structured interviews started by identifying the most important challenges and solutions for the respondents segment, followed by questions on specific elements of professional institutionalisation. With the consent of the subjects, audio recordings and

transcripts were made. The documentary analysis and the interviews complemented each other to provide a triangulated picture of professional institutionalisation.

5.5 Differentiation of the community

In this section, after clarifying the governmental and market context, I review the pattern of associations of the Hungarian logistics profession, revealing the differentiation of the system based on differences in functionality, membership and the rules of intellectual debate.

5.5.1 Segmentation

The professional community is segmented along two dimensions. Firstly, vertically, along a chain of interdependent logistical activities.

Table 33 gives an overview of the main economic activities in logistics, along with the actors who typically perform them.

Table 33: Actors and activities in the logistics profession (author's edit based on the case study)

	Logistic al systems of firms	Custom s service provide rs	Freight forwarde rs	Shippin g firms	Integrate d logistics provider s	Logistics consultan ts	Logistics technology suppliers
Customs administratio n		frequent	frequent	rare	rare		
Transportatio n	rare		rare	frequent			
Freight forwarding			frequent	rare	frequent		
Warehousing		rare	rare				
Intralogistics					rare		rare
Administratio n, inventory, tracking	frequent	rare			frequent		
Setting up logistics systems					rare	frequent	frequent
Supply chain organization						frequent	rare

A key contractual issue for each activity is whether a company without a core business profile in logistics organises it in-house or contracts a specialised logistics service provider. The outsourcing of logistics activities to specialised firms is a dynamically developing element of the industry. The emergence of a comprehensive logistics concept among European associations was in parallel with the spread of vertical integration. This resulted in the expanding membership of associations of freight forwarder and shipping professionals, with increasing overlaps in membership since the 1990s. In Western

Europe, these processes were followed by mergers between organisations in the shipping and freight forwarding segments (Lehmkuhl, 2005). Similar integration pressures can be expected in Hungarian logistics following the similar market trends.

The other main dimension of community segmentation is horizontal, defined by the different modes of transportation. Direct competition between road, rail, water and air transportation is rare. They are rather complementary, as their speeds and costs differ significantly. Within modes of transport, common technological and regulatory challenges can define closer communities.

5.5.2 Professional associations

5.5.2.1 Comprehensive associations

Comprehensive associations perform a wide range of information sharing, professional self-regulatory and interest representative functions. These associations are generally involved in all horizontal segments and are therefore distinguished primarily by their vertical membership domain.

Table 34 describes the features of comprehensive associations from those with the widest membership profiles (HALPIM, HLA) to those linked to specific vertical segments (customs services, freight forwarding, logistics service providers).

Table 34: Features of comprehensive associations [author's edit]

	Hungarian Association of Logistics, Purchasing and Inventory Manageme nt - HALPIM	Hungar ian Logistic s Associa tion - HLA	Hungarian Chamber of Commerce and Industry	Associatio n of Hungaria n Logistics Service Centres	Association of Hungarian Forwarders	Hungari an Associati on of Customs Affairs - HACA
Initial members hip	Logistics pro from all segme		Shipping, freight forwarding, logistics service provider firms and professionals	firms	Logistics service provider, freight forwarding firms and professionals	Logistics service provider, shipping and freight forwardin g firms and professio nals
Change in members hip ²⁹	+ firms	+ firms	-	+ shipping and freight forwarding firms	-	-

²⁹ + denotes new elements, - denotes lack of change.

	Hungarian Association of Logistics, Purchasing and Inventory Manageme nt - HALPIM	Hungar ian Logistic s Associa tion - HLA	Hungarian Chamber of Commerce and Industry	Associatio n of Hungaria n Logistics Service Centres	Association of Hungarian Forwarders	Hungari an Associati on of Customs Affairs - HACA
Initial functiona lity	Forum, events	Forum, events	Forum, Interest representa- tion	Develop- ment policy	Interest representation	Interest represent- tation
Change in functiona lity ³⁹	+ Interest representatio n, training, services	+ training, services	-	+ Interest representat ion, services	+ Regulation, events	training, regulations, events
LCF member (2006- 2016)	Yes					
NLA member (2017- 2019)	No	Yes	No	Yes		No
Approach to professio nalism	Business, profession (horizontal)	Technic al, professi on (horizon tal)	Business, indus	stry (vertical)		rechnical, profession (horizont al)
Founding	1991	1990	2009	2002	1989	1993
Website	https://logis ztika.hu/	http://m le.hu/	https://mkik. hu/mkik- kollegiumok	http://mlsz ksz.hu/	https://www.szallitm anyozok.hu/	https://m vsz.eu/

The institutional entrepreneurs leading the associations' initial institutionalisation were either academic professionals (Attila Chikán - HALPIM, Imre Knoll - HLA) or prominent entrepreneurs committed to the emerging approach of logistics. Apart from the two academically oriented organisations, the early impetus for the establishment of each of these institutions came from the government, resulting in initial functions of interest representation and involvement in development policy and regulatory policy. Functional profiles became more extensive and also more similar over time as the 'academic' associations expanded into advocacy and the others into membership services. The expansion of membership domains was also common. The more vertically focused associations have opened up to a lesser (AHF) or greater (AHLSC) extent towards a more comprehensive membership, while purely individual or corporate membership profiles have generally been replaced by mixed membership profiles, including both kinds.

5.5.2.2 Segment-specific associations

The largest group of associations is linked to a single horizontal segment related to a specific mode of transportation. Table 35 describes associations which are specific to the road, railway or waterway segments.

Table 35: Features of segment-specific associations [author's edit]

	Association of Road Transport Firms - ARTF	National Road Transpo rt Associati on - NRTA	Hungarian Road Transport Association - HRTA	Federation of National Private Transporters - NiT Hungary	Hungarian Rail Association - HUNGRAIL	Hungarian Shipping Federation - HSF	Hungarian Federation of Danube Ports - HFDP	Hungarian Ferry Association	Hungarian Federation of Inland Waterway Freight Forwarders - HFIWFF
Initial membershi p profile	Road shipping and freight forwarding firms	and freight Road shipping firms		Railway shipping firms	Firms in the waterway transport segment	Firms in the water logistics services segment Waterway shippi			
Membership	profile changes: no	ne			T				
Initial functional profile	Interest representation	Regulation representat		Regulation	Interest represer	ntation		Forum	Interest representation
Functional profile change ³⁰	-	+ services	+ training, services	+ interest representation , services	+ forum, events	+ regulation, events	+ training, Development policy, events	-	
LCF member (2006- 2016)	No				Yes		No	HCF	
NLA member (2017- 2019)	Yes				No	Yes		HSF member	
	professionalism:		technical, industry	· /		1 2004		1006	1002
Founding	1990	1992	1965	1989	2006	2004	2012	1996	1993
Website	http://www.kkvs z.hu/	http://ww w.fuvosz .com/tart alom/be mutatkoz as	https://www.mk fe.hu/hu/	http://www.nit.hu/	http://hungrail .hu/kik- vagyunk/	https://www. mahosz.hu/? content=info	https://www.hfi p.hu/	https://komp ok-revek.hu/	http://www.mbfsz.hu/

³⁰ + denotes new elements, - denotes lack of change.

Apart from the consultative organisation of ferry operators, the founding of associations was always motivated by some specific regulatory or development policy challenge. Several organisations retained a monopoly role linked to some government function, but their functionality generally expanded over time to include a wide range of services to members: providing market information, club goods, even private goods with economies of scale. Accordingly, their potential membership initially consisted of those affected by the government's activity, then gradually expanded to include the entire professional community of the segments. As their associational identity was defined by horizontal segments (modes of transportation) their membership scope often extended beyond logistics professionals to other areas of transportation, such as passenger transport.

Different associational subsystems were institutionalized in each of the segments, corresponding to their market and transactional structures. Due to the mainly international nature of the air transport segment, it is not organised at the Hungarian national level, institutionalized only as working groups within comprehensive associations. Market actors rather relied on private platform providers and international professional associations for their coordination. In the relatively lately liberalised rail segment, actors have established a single professional organisation. HUNGRAIL thus represented the entire segment, pursuing a wide range of activities. The waterway segment, marginal in terms of market size, was able to rely on a relatively small and familiar group of professional, as was the case with the railway segment. The segment's institutionalisation was based on the organisations of the narrower occupational groups and a metaassociation (HSF) linking them together. The extensive firm population in the road segment led to the created of four associations at an early stage. Competition for potential members was strongest in this segment, leading to steadily increasing overlaps in membership and functionality of associations. The segment did not have a metaassociation, relying on the HCCI and bilateral partnerships for coordination.

5.5.2.3 *Clusters*

Clusters are usually geographically well-defined associations of firms linked by a shared field of activities. They institutionalize formal horizontal, vertical or cross-sectoral cooperation to facilitate the market activities of their members, establishing a form of coopetition (Pitelis et al., 2006). Their primary objective in this case was to coordinate development policy efforts.

Table 36: Features of cluster associations [author's edit]

	Central European Logistics Cluster	Pannon Logistics Cluster	Southern Zala Logistics Cluster	Sopron Region Logistics Cluster	North Hungarian Logistics Service Cluster
Initial membership	Logistics service	provider, shipp	ping and freigh	t forwarding firn	ns
Change in membership ³¹	-				
Initial functionality	development policy	developmen t policy, representati on of interests	developmen t policy, services	development policy, services	development policy, services
Change in functionality ⁴¹	-	emptying out	+ training	emptying out	+ training
LCF member (2006-2016)	Yes	No			
NLA member (2017-2019)	No				
Approach to professionalism	Business, indust	ry (vertical)			
Founding	2007	2005	2011	2006	2008
Website	not available, not accredited	http://www. panlogklasz ter.hu/	http://www. dzlk.hu/	not available	http://misdolin. hu/nordlog

Clusters were not considered by the professionals interviewed as significant professional institutions. They were mainly established for specific development policy purposes, in line with the public funding obtained by influential local actors. Their activities were concentrated on the funding periods, with only a limited presence in later years.

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 $^{^{31}}$ + denotes new elements, - denotes lack of change.

5.5.2.4 Clubs

Clubs formally institutionalise only the information-sharing function of associations. The HEALS approaches the logistics profession from a more scientific point of view, the CLD from a more practical one. No information is available on the activities of the HEALS after 2011. Presumably, it has been dismantled.

Table 37: Features of clubs [author's edit]

	Hungarian Economic Association, Logistics Section - HEALS	Club of Logistics Directors - CLD
Initial membership	Logistics professionals	Logistics directors
Change in membership ³²	-	
Initial functionality	Forum, professional events	
Change in functionality ⁴²	Lack of activity	-
LCF member (2006-2016)	Yes	No
NLA member (2017-2019)	No	Yes
Approach to professionalism	Business, profession (horizontal)	
Founding	1997	2008
Website	https://www.mkt.hu/tarsasag/szakosztalyaink/, http://www.mktlsz.hu/	https://nlvklub.hu/hu/

5.5.3 Explaining differentiation

Describing associations along their horizontal and vertical domains, there is a clear distinction between associations with a comprehensive orientation and those representing a narrower professional segment. Although it is primarily the membership domain that distinguishes comprehensive and narrower professional associations, there is also a significant functional division of labour between them. Within the specialized group, associations are further differentiated on the basis of horizontal segments (modes of transportation), and interassociational competition is found within each segment.

Of the three main dimensions of differentiation of the professional community, the logics of membership and influence explain two: the institutional solutions to collective action problems and the dynamics of competition for potential members and influence.

5.5.3.1 Collective action

The logistics sector did not exist as a comprehensive community at the beginning of our study period, as it was trying to define itself in the changing Hungarian economic and scientific context. The economic transition and privatisation left a coordination gap in various professional segments of logistics, which was filled by competing private actors at different speeds. One of the reasons for this is the different internal heterogeneity of

³² + denotes new elements, - denotes lack of change.

the segments, as business networks are important substitutes for associations in coordination and knowledge sharing, especially in the case of international relationships. Logistics enterprises with an international orientation are therefore usually less integrated into the Hungarian professional community, as shown by the example of the air transport segment.

The logic of influence played a greater role in the development of associations than previous results would suggest. For professional associations with a narrower domain, the presence of governmental development policies seems to be a very important impetus in the process of institutionalisation. This suggests that government support and regulatory challenges may override classically analysed determinants of collective action, such as group size.

The most differentiated institutionalisation is found within the heterogeneous road segment. This may be explained by the logic of influence: road transport companies are more exposed to regulatory variability, while at the same time the government is more open to the perspective of traditionally large employer road transportation firms than that of other segments. The potential benefits of organisation were therefore highest in this segment. In the case of port operators, although they form a smaller, more homogeneous group with personal contacts, there was a clear delay in institutionalization until public benefits prompted it.

Comprehensive associations (HALPIM, HLA) initially exhibited the dominance of the logic of membership. Their expansion was explained not by the logic of influence but by the economies of scale of their services acting as selective incentives. The emergence of comprehensive associations was also driven by institutional entrepreneurs from the academic sphere, who lastingly defined the profile of associations.

5.5.3.2 Institutional dynamics

The institutional development that occurred as a result of interassociational competition reflects the dynamic balance between the logics of membership and influence. All competing associations have sought to expand as much as possible, reducing differences in membership and functionality. As expected, all organisations strived to increase their influence over public policies, but due to the competition for potential members, this has not overshadowed the logic of membership. Competitive overlaps were primarily present between associations with comprehensive membership and functional profiles, and between associations specific to road transportation.

In both cases, the coexistence of associations of similar size and profile can be explained by the institutional dynamics. Associations were more different in the early stages of their development than at the end of the studied period, because their early institutionalisation was based on some specific resource or function acquired by the institutional entrepreneur. The competition for members and government influence led to an expansion of functional and membership profiles and thus to increasing similarity. The managers of associations explicitly sought to maintain some degree of parallelism, because they wanted to preserve their autonomy, which required a more diverse membership and functional profile.

Mergers and dissolutions seem both very rare events. None eventually occurred in this case, and the possibility was raised in only two cases. In what aspects were the several overlapping associations different enough not to merge or displace each other? On the one hand, the founder institutional entrepreneurs – either still personally or through establishing an ethos – determined the approach and functionality of their associations throughout the period. At the level of specific resources and services there are still significant differences, even if the institutionalization paths are similar and guide competing associations in similar directions. The influence of the logic of influence can also be observed: while Schmitter and Streeck (1981/1999) assumed a stable public context around the increasingly concentrated professional communities, the governmental context has changed frequently over the course of our case, providing associations with changing opportunities and resources. The Hungarian case therefore does not show the same organisational concentration as the Western European examples (Lehmkuhl, 2005).

5.5.3.3 Institutionalizing professionalism

For another explanation of parallel institutionalization, we need to go beyond the theories of exchange relations between the organisation and its environment. There are two differences related to elements of intellectual orders: how the professional community is defined (which corresponds to the rules of competition) and the rules of consultation. The institutions of intellectual orders stem from the initial functionality of associations and the professional ethos created by the institutional entrepreneurs, and then showed strong stability even while the functions changed. The institutional logics of exchanges and of intellectual debates interacted to determine the institutional forms that emerged, including the patterns of sectoral differentiation.

The majority of stakeholders referred to a distinction between "scientific" and "interest representative" associations, where the former included HLA and HALPIM, while the latter included AHLSC and most segment-specific professional associations. How can we explain this distinction?

The legitimacy of associations as institutions stems from their credibility in being able to coordinate different views and interests. This is where they are expected to have an advantage over alternatives as professional institutions. This credibility is established through the institutionalisation of professionalism as an ongoing intellectual debate. From the point of view of the logic of membership, this means that the association must represent the interests of its members in a credible way, and from the point of view of the logic of influence, it means that the association must communicate with the government in a credible way, selecting from among the points of view that arise and formulating acceptable common positions.

The main differences can be defined in terms of the rules of competition and consultation. The rules of competition defines the set of actors whom members of an association consider as parts of their professional community, therefore are allowed to enter the professional debate. An important lesson of the case study is that professional communities are not pre-defined by some objective set of similarity criteria. According to the unanimous opinion of the actors interviewed, the definition of logistics as a field of professional activity is rather contested. The concept of logistics as a separate industry or sector is rejected by those who espouse the concept of a horizontal logistical professionalism. In the horizontal approach to the profession, the community of logistics professionals is defined by common values and knowledge, wherever they are located in the division of labour. The emergence of a unified logistics identity faced further difficulties due to the different conceptions of those who approach logistics as a technical field and those who approach logistics as a management area. While these different perspectives have converged over time, differences are still evident in the problem definitions and proposed solutions.

The main difference between "scientific" and "interest representative" associations lies in the rules of consultation. The intellectual debate within "scientific" associations is closer to scientific debates in search of the truth, or in this case the professionally correct goals and solutions. For "interest representative" associations, although they do consider professional arguments, their internal debates are closer to pure interest reconciliation, approximating some form of majority voting. In practice, the rules of intellectual debates cannot reach these theoretical extremes in either case. "Scientific" associations are not scientific societies when they enter the field of governance, therefore they are forced to engage in some form of interest representation. "Interest representative" associations usually cannot aggregate the heterogeneous interests of their members with some given formula, but must seek better solutions through intellectual debate. They also need

professionally grounded arguments to articulate their needs in legitimate ways to the broader public.

Differences in the rules of consultation go hand in hand with differences in the rules of competition: 'interest representative' associations were less keen on inclusive membership, while more academic associations sought to include all stakeholders who might have arguments to contribute.

5.6 Integration of the community

After the patterns of differentiation, I turn to the forms of cooperation between associations that make up the integration of the system of association. The logistics community is poorly integrated, which is reflected in the low degree of vertical integration and the lack of stable forms of horizontal cooperation.

5.6.1 Vertical integration

The only case of vertical integration in the professional community was the creation of HSF in the waterway transportation segment in 2004. The primary objective of this meta-association of interest groups was to represent the perspective of the waterway shipping community in governmental operations and social conflicts. It also has coordinative, educational and international representative functions, and it also organises professional events. HSF did not exercise strong hierarchical control over its member associations, but it was generally through HSF that they were involved in any other form of interassociational cooperation.

5.6.2 Horizontal integration

5.6.2.1 Joint consultation

The associations studied often entered into strategic partnerships with each other, mainly to facilitate the flow of information on public policy issues. These partnerships remained at the level of ad-hoc alliances, as they were based on informal arrangements and did not involve the creation of separate associations or formal institutions such as working groups.

5.6.2.2 2 Logistics Consultative Forum

The first attempt at forming a comprehensive association for Hungarian logistics was the Logistics Consultative Forum [LCF]. Like HALPIM, its foundation was linked to Attila Chikán. LCF was a comprehensive association with member associations from all segments, although it never achieved the status of a real meta-association. Its functionality reflected the equality of members, with an annually rotating the presidency. These

rotating presidents had a significant role in determining how actively in what directions the joint work would progress in a given period. As a form of horizontal cooperation LCF can be categorised somewhere between the forms of joint venture and joint task force, because it had its own formal institutional framework, but was fully dependent on the workforce delegated by its member associations.

LCF originally had three objectives: to provide a professionally correct and appropriate conceptual framework for public policy decisions; to improve the quality of logistics-related regulations; and to operate a system of qualifications for logistics service centres. The latter functions have lost its relevance with a restructuring of development policy instruments. LCF functioned as a mostly informal, consultative group and virtual, joint working groups working on documents. LCF was highly consensus-oriented: it only issued statements on issues where its members could reach full agreement. Critics argued that the diversity of members combined with the consensual logic led to its slow decision-making, making it difficult for members to take effective action.

5.6.2.3 National Logistics Alliance

The joint declaration titled National Logistics Alliance in 2017 and the underlying National Logistics Competitiveness Programme aimed at jointly formulating problems and solutions affecting the professional community. Ten associations originally participated, with the AHLSC taking on a leading coordinating role. Their goal was to engage more successfully in the public policy process by bypassing the slow, consensual activity of the LCF. The 'interest representative' associations that participated in the NLA thus engaged in joint policy formulation with government actors by leaving out some 'scientific' associations.

A more recent joint declaration in 2018 strengthened the institutionalisation of the NLA by formalizing its internal division of labour. There was also a slight increase in the number of participants. The NLA had no permanent associational framework and carried out its work through seventeen project-based working groups, organised jointly with the government, which institutionalised a division of labour by industry segments. The participants did not seek to develop a comprehensive approach beyond collecting individual solutions. As a form of horizontal cooperation, the NLA corresponded to the institutional form of a joint working group: it operated without a separate legal form, through the delegates of participating associations, to solve specific problems.

5.6.3 Explaining integration

As expected, institutions for comprehensive coordination at the community level were established later in the institutionalization process. They were created on the initiatives of already successful associations. Associational integration was highly unstable, remaining at a low degree overall. The main reasons for this are the volatile nature of government relations (as explained by the logic of influence) and the difficulty of bridging the significant differences of intellectual debates between associations.

5.6.3.1 Membership domain

The NLA and the LCF involve a broad, differentiated group of associations, so the logic of membership would have made strong coordination very costly for them. To overcome this, cooperation could have been first achieved in each segment, resulting in multi-tiered vertical integration.

5.6.3.2 Institutionalizing professionalism

The LCF and the NLA can be understood as a step towards the establishment of a comprehensive intellectual order for the professional community. The main difference between the two initiatives was the nature of this intellectual order, mainly the different rules of consultation. At the layer of associational integration, the difference in the rules of competition was also notable, as several 'scientific' associations were left out of the NLA. The difference is also reflected in the rules of persuasion: while the LCF is a single informal 'round table', the parallel working groups in the NLA, which function as separate forums, raise questions as to whether the debate has been extended to the community level or if segmentation was further institutionally solidified.

The two integration initiatives can be interpreted as competing initiatives by the two leading overarching associations, where they attempted to organise coordination according to their own intellectual orders. Thus, successful associations and their leaders were acting as institutional entrepreneurs at the meta-association level. However, there was a significant overlap between the participants, suggesting that the main difference was not caused by conflicts of interest. Not all of the more narrowly defined professional associations were content with the concept of NLA, indicating that the dividing line was not primarily between actors representing more specific or more comprehensive member interests, but rather arose from different conceptions of professionalism. The differences discussed at the level of individual associations (differentiation) were reproduced at the level of cooperative initiatives (integration).

5.6.3.3 Influence of government relations

Government connections had a dominant influence on the institutionalisation of community level coordination, just as expected. The volatile nature of the public policy environment and the lack of unified institutionalisation of logistics within the government were significant explanatory factors of low integration. The nature of professional input required by government influenced which integration efforts based on which kinds of intellectual debates were more successful. The main reason behind the unstable and low degree of integration was the lack of governmental demand for a comprehensive association at the professional community layer of institutionalization. Logistics professionals within the government were part of the professional community, and were able to provide some stability to the coordination informally. However, regular government reorganizations have also made this difficult.

Different operating principles have emerged throughout these public reorganizations over time. During some periods the government favoured consensus at community level, while at other times it bestowed a prominent, even official position onto certain actors due to their ability to react more quickly (NLA) or because of their greater political weight (the large employer road transportation segment). This variability discouraged formalised institutionalisation at the community level even for potential beneficiaries of comprehensive coordination, leading to more flexible institutional forms.

5.7 Conclusion

The aim of the study was to determine how and to what extent elements of each major theoretical perspective are able to explain patterns of a system of associations. Section 5.7.1 reviews our results on which features of the system of associations are better explained by which theoretical considerations. Section 5.7.2 deals with the next level of analysis, looking at the relationship between the theories, sketching the basis for a possible theoretical synthesis. The paper concludes with an overview of the limitations of this research and suggestions for further research directions in Section 5.7.3.

5.7.1 Explanatory strength of theories

Table 38: Elements of the case explained by each theory [author's edit]

Feature of the system of associations	The logic of membership	The logic of influence	The institutionalization of professional debate
Differentiation: initial institutionalization	The formation of associations closely follows segment borders.	Development policy incentives dominant for segment-specific associations (incl. AHLSC).	Comprehensive associations (HALPIM, HLA) created specifically to institutionalize an approach to the profession.
Differentiation: development, mergers, dissolution	Strong service orientation, competition for members. Segment-specific associations (except AHLSC) stayed within their original segments.	Membership domains frequently extended. Consultative associations developed public policy roles.	Functional and membership overlaps explained by different professional identities and rules of consultation.
Integration: horizontal cooperation	Less overlapping (functionality and membership-wise) associations more likely to cooperate (informally or through NLA).	Unstable forms of integration explained by the instability of governmental institutions.	Competing professional identities and rules of consultation reproduced at the community level to produce competing cooperation initiatives.
Integration: vertical (meta- associations)	Lack of demand for vertical integration due to strong segmentation (except for the most concentrated, waterway segment).	Lack of meta- associations explained by the lack of unified, stable public governance institutions.	Differences in rules of consultation made vertical integration too costly.

The collective action factors described by the logic of membership explained the basic pattern of associational differentiation, insofar as their extent generally matched the boundaries of market segments. However, the logic of influence explained the creation of associations and lower layers of institutionalization better than expected, as very few associations could form without a regulatory or development policy function. The exceptions to this can be explained by differences in the institutionalisation of the professional debates, as some associations were founded specifically to promote a particular approach to the profession.

In the later development of associations competition for members along the logic of membership and the logic of influence have pushed them in the same direction: towards expanding their functional and membership domains. Contrary to our theoretical expectations, differentiation did not increase as the community evolved, as associations became more similar instead. The remaining patterns of differentiation were largely explained by differences in the institutionalization of intellectual debate, which proved to be more persistent than functional and membership profiles.

At the layer of associational integration, the logic of influence dominated as expected, but did not result in ever more extensive coordination. The uncertain and unstable institutionalization of the profession within the government was reflected by the institutionalization within the community. These dynamics were complemented by the influence of institutional differences in professional debate, where competing professional identities and their associated rules of consultation led to competing initiatives of horizontal integration. Although all segments would benefit greatly from successful comprehensive coordination, governmental uncertainty and differences in professionalism have impeded any vertical integration, except within the narrow segment of water transportation. This points toward the relevance of the logic of membership for integration: a smaller, more homogeneous professional (sub)community is more likely to have a more integrated system of associations.

5.7.2 Synthesis of theories

5.7.2.1 Institutional logics and professional debates

The exchange-based and intellectual debate based theories grasp different elements of the institutionalisation of professional communities, offering complementary explanations. The characteristics of intellectual orders do not fit into the exchange-based theoretical framework traditionally used to analyse associations, but the two sides of institutionalization influence each other. The institutions of professional debate influence the costs of coordination, depending on how well they fit the functions of associations and the expectations of participants. The search for professional truths does not necessarily coincide with the search for solutions acceptable from the perspective of interest representation. A community which institutionalized common rules of professional intellectual debate will face lower costs of coordination than one comprised of various, competing intellectual orders. This parallels, but goes beyond, the logic of goal formulation as formulated by Schmitter and Streeck (1981/1999). Finding the right goals and arguments legitimises coordination inwards, reducing its transaction costs, as

explained by the logic of goal formulation. But a well-functioning intellectual debate also legitimises the professional community outwards, increasing its public policy influence. In the case of Hungarian logistics, differences in intellectual debate had a significant and lasting impact on the institutionalisation of the professional community. This may be a consequence of the specific precarious situation of the logistics profession. Identity building and conceptualization, along with the intellectual search for acceptable solutions and legitimising arguments are valued higher in communities at an early stage of their institutionalisation or in those undergoing transformation (R. Greenwood et al., 2002). This means that the specifics of the logistics case could exacerbate the differences in intellectual debate. In communities with more stable identities and environments, an interest-based, transactional approach may have a higher explanatory power.

The construction of a professional community's identity and its institutionalisation are parallel, linked processes. At the associational layer, the institutionalized forms of professional debate and the exchange-based characteristics of associations are interrelated. Associations geared towards 'scientific' debate are characterised by more inclusive and more individual (as opposed to organizational) membership profiles. Associations which are primarily for interest aggregation are characterised by a more exclusive, narrower membership of mainly businesses. In the search for the right solutions, the voice of all professionals is equally important, while the voice of the larger actors (firms) is more important in interest reconciliation. Scientific debate is fuelled by the involvement of all competent stakeholders, while effective aggregation of interests would be hampered by the inclusion of an overly broad range of actors.

In line with the expectations of our theories, the heterogeneity of the professional community strongly influences its institutionalisation, but differences along different dimensions are important to various degrees. While the features highlighted by the exchange-based theories of associations, such as the membership and functional domain, have undergone significant changes in our case, the institutional characteristics of intellectual orders, such as conceptualization of the community and the rules of consultation, are much more stable. To summarise the lessons from the two theoretical approaches, institutional entrepreneurs initially attempt to adapt the exchange-based and intellectual institutional features of associations to the conditions defined by the logics of membership and influence. The changing factors of the logics of membership and influence then force associations to evolve their profiles, while their more stable intellectual orders constrain the possible development trajectories.

Professionalism as an intellectual debate also extends to the definition of the professional community itself, for which several concepts emerged from the different approaches of the actors. Research on professional communities must confront the fact that the boundaries of the community as a case under study are not given. Different associations propose a community with different identities linked by different shared activities and knowledge bases. Although this problem may be particularly strong in the case of Hungarian logistics as a relatively newly defined professional community, the possibility of redefining a community's identity may also be relevant for more stable communities, and institutional analysis should therefore take it into account.

5.7.2.2 Logics of membership and influence

The theory linking the logic of membership to lower layers and the logic of influence to higher layers of institutionalization has found partial support. In line with our theoretical expectations, features of the government context are the primary determinants of sectoral integration. Both governmental and private actors are part of the broad professional community and therefore the institutions of both spheres co-evolve. The changing institutions and needs of the government side are thus reflected in the changing integration patterns of the professional community. The sectoral level collaborations that emerge despite this variability reflect aspects of competing associations with overarching needs. However, the logic of influence is more significant than theoretically expected in lower institutional layers and early on in the institutionalisation process. Associations and institutions of public governance seem to complement each other (V. Schneider & Grote, 2006), influencing each other's development paths.

5.7.3 Limitations, future directions

Our understanding of the interactions between the characteristics of the public policy process and professional communities is still rudimentary. The study has focused on the main arena of these interactions in a national level professional community, but the relationship between subnational and supranational levels of government and associations may also be important.

In addition to the institutional layer of formalised associations, it may also be worthwhile to include in the analysis the interactions between individual professionals and businesses. This would also allow exploring how non-formalized elements of intellectual orders and other informal professional institutions fit into this picture. The perspective of network analysis would provide an appropriate framework for this.

The synthesis of intellectual and transactional institutional theories also needs further elaboration. Two main questions emerge for further research: *How does a professional community define and institutionalise its identity*? and *How do intellectual and transactional institutional elements interact*?.

6 IDENTITY FORMATION OF THE PROFESSION IN A LATECOMER POLITICAL SCIENCE COMMUNITY³³

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Abstract

Latecomer political science communities have faced multiple challenges in the past decades, including the very establishment of their professional identities. Based on the case study of Hungary, this article argues that publication performance is a substantial component of the identity of the political science profession. Hungary is a notable example among Central and East European (CEE) political science academia in the sense that both the initial take-off of the profession and then its increasing challenges are typical to the CEE region. In an inclusive approach, which encompasses all authors published in the field between 1990 and 2018, as well as their publication record, the analysis demonstrates that political science has undergone major expansion, quality growth and internationalisation but these performance qualities are unevenly spread. These reflect important aspects of the profession's identity. This agency and performance-based approach to identity formation might well be used to build up identity features elsewhere and also in a comparative manner.

Keywords political science - professional identity - publication performance - internationalisation - skewness

6.1 Introduction: studying the identity formation of new professions

The political science profession is changing fast: internally, new fields, subfields, and new methods emerge, while externally new expectations structure it, restructuring our understanding of the role and thus the identity of the profession (Boncourt et al. 2020; Klingemann 2008; Krauz-Mozer et al. 2015; Mény 2010). In reflecting on these points, it remains an important question as to how political science becomes or remains distinct

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from other professions, how it is recognised and how it creates its visibility. These are all key aspects of its identity. Moreover, it is also apparent that a profession cannot stabilise and adapt if its identity foundations are not clearly settled. In this sense, a clear identity of the profession provides a status in academia and helps to establish an acknowledged institutional position. This is because such a status will serve the profession and will provide a standing for those who cultivate it. While the identity of professions is based on the recognition of the group (Mény 2010), this group recognition is embedded in its composite membership. This is the focus and the question of this research article, namely how do the actors involved add to the identity formation of the discipline? Yet, this answer is particularly hard in case of new political science communities given the absence of firm legacies and the lack of actors that have sound background in the field.

In looking at these issues in more detail, a review of the scientific literature on latecomer political science communities highlights that this is mainly in the form of qualitative case studies, which focus on theoretical, methodological, and institutional developments either at a regional (Eisfeld & Pal, 2010; Ghica, 2020; Klingemann, 2008; Krauz-Mozer et al., 2015) or at a country level (Chiva 2007; Gel'man 2015; Kasapović 2008; Szabó 2002). These are important starting points for understanding the professionalization processes, but they do not offer results on an important aspect that – as this article argues - structures the identity of a professional community, namely its performance. On the other hand, a few bibliometric studies focus on latecomer political science communities (Jokić et al. 2019; Schneider et al. 2013) that highlight some performance trends. However, due to their focus on smaller cross-sections of political science publication activities, they do not study the identity-building of the discipline in that frame. This study proposes a multifaceted approach to study professional identities based on the main professional activity of the community that is scientific publication, supplemented by data on the personal identities of the authors. We apply this inclusive, data-driven approach to the latecomer Hungarian professional community over a three-decade long period (1990-2018). The single-country case study design is justified by the unusual depth and breadth of the data collection process, providing a comprehensive overview that can serve as a starting point for future comparative studies. After introducing the proposed theoretical frame and the research questions, the article will place the selected case in a Central and East European comparative frame and will formulate expectations on that basis. After explaining the methodology, the main body of the article examines the development of Hungarian political science's professional identity. The conclusion discusses the results in light of recent developments and identifies prospective research directions.

6.2 Approaches to professional identity

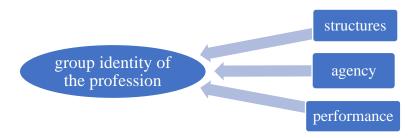
There are two main trends in the literature to explain the foundations of professions' group identity. The first emphasises the organisational aspect. The second focuses on the identity of those who apparently constitute the profession. In the former, the focus is on the institutional level, namely organisational aspects that establish the foundations of the group: who they are, where they belong to, and what structural-organisational attributes they have. In this context, such factors as standardised training, a certificate of competence (e.g. a PhD in political science), institutional membership and employment in the practice of the profession tend to appear as the foundations of the group (Rose, 1990, p. 581).

In the second aspect, group identity appears as an agency issue. In other words, how do those who are part of the group identify themselves? In this regard, a "professional identity (...is) a unique construction of who one is" (Caza and Creary 2016, 79). This literature also posits that people in the professions have multiple identities. It seems that there is no "cognitive exclusiveness" that used to make the professions of old times develop and be safe within their own realm with an identity only of their own (Larson 1977). These two aspects only partially apply to newly developing professional communities, where both the structural foundations and personal professional belonging can be widely shifting and make identity formation uncertain. Although the organisational attributes become invigorated with time in newly established professions, the formation of group identity cannot be safely built on these types of institutional-organisational components. For example, in Hungary in 1989 nobody had political science training, not the least a PhD in the field, and although a political science association was in existence since the early 1980s, its profile was not clear, and even employment in the field of political science was for a long time uncertain (Szabó 2002). Hungary was not alone in this regard as this state of affairs was basically the same in all post-communist countries³⁷. Building the concept of a professional community on the self-identification of agents is similarly problematic in these countries: several professionals widely recognised as key contributors to Hungarian political science did not identify themselves as political scientists while many self-identified political scientists did not contribute scientifically to the field. This article proposes an additional aspect to unfold the identity of the political science profession – namely performance. We argue that the identity of the community is mainly an internal construct: it is formed through the actions of those who contribute

³⁷For a recent overview on the identity background of the "founding fathers" of political science based on a survey of political scientists, see (Ilonszki and Roux 2019).

to the key practices of the group, fundamentally to academic performance. Figure 10 below shows how we position this analytical framework in the literature about identity.

Figure 10: Framework for a profession's identity formation



The proposed approach allows for multiple identities similarly to the agency-based approach, as professionals can be active contributors to multiple professional communities irrespectively of their organisational belonging. The article will posit that whoever contributes to the political science profession will add to its identity - will add to its status and make it recognisable for others on this basis. This leads to a more inclusive concept of the professional community: the individuals involved connect through their activities in the field. While designed in response to some challenging aspects of latecomer communities, this approach might be fruitful in studying other political science communities as well. As disciplinary and institutional affiliations as well as personal academic identities become generally more complex and fluid, a flexible and inclusive framework could yield a more accurate picture of the profession.

6.3 Research questions

The above framework allows us to construct the identity formation of the discipline by presenting and connecting the personal composition and the performance composition of the Hungarian political science community. This leads to two broad research questions.

RQ1: How did the political science community expand during the last three decades?

RQ2: How did the publication performance of the professional community evolve over the last three decades?

While our approach presupposes a largely internal drive in the profession's identity formation (the actors involved identify with the field and tend to perform accordingly) different policy actors have a role in this process. Nevertheless, despite the increasing push to publish (or perish) academic research and publication are fundamental for the healthy state of the discipline (Drennan et al. 2013) as they promote the profession's adaptive potentials and thus irrespectively of the external push they add to the profession's identity.

6.4 Expectations: Political Science in CEE and Hungary

The large majority of post-communist countries could not build on substantial precommunist local legacy relating to political science and although their communist era was far from identical most of them could not establish political science during the communist decades either. The only exceptions in this regard were Poland and Yugoslavia, but their relative advantage remains controversial, as scholars have pointed out that the two countries could not significantly capitalise on it (Boban and Stanojević 2021; Gebethner and Markowski 2002; Mény 2010). Thus, the analysis offered in this article focuses on the professional identity formation in the 'new' era covering the post-communist period only. Hungary is no exception to this, with political science only becoming established with the fall of communism.

Hungary follows the trajectory of most countries in other aspects as well. Although initially Hungarian political science seemed to be a forerunner, more recent developments show that it is facing problems very similar to most countries in the region from precarious funding through decreasing student numbers to disputed relevance (Világi et al. 2021). Hungarian higher education, together with that of the Czech Republic, Slovakia, Latvia, Lithuania and Poland also suffers from diminishing student and staff numbers (Pruvot et al. 2018, 19). Political science is not immune from the effects of that general trend. For example, in 2018 Hungary was among the larger political science communities of the region, being second only to Poland and comparable to Lithuania, Romania and Slovakia. However, at the same time in 2017 it had the lowest number of PhD candidates in political science among the larger countries, with this being a sign that political science as a professional career seemed to have lost its attractiveness.

The identity frame of this article encompassing the performance aspect of identity formation is all the more interesting as the scientific "output originating from the region is also still below its potential in both quantity and quality" (Ghica 2020, 169). In this regard, Hungary seems to have some comparative advantage as it enjoys a central position as the most regionally connected national community in terms of co-authorship in CEE (Jokić et al. 2019). Not unrelated to that it was an early "internationaliser" as exemplified among others in terms of ECPR membership (Berndtson 2021) that might well increase the sources for publication, such as connectedness, networks or funding. As for the overall regional publication pattern, although the research findings are limited, they nevertheless establish some baseline points regarding the Hungarian case. In the first place, the publication output of political science in CEE has been growing along with its bibliometric quality (Jokić et al. 2019). On the basis of preliminary research, this article

seeks to confirm this trend in the Hungarian case. In addition, in face of the development of the profession particularly in training and quality assurance mechanisms, we also anticipate increasing quality of the publications. We can rightly expect more publications from authors who are increasingly qualified to pursue the profession, who work in a (relatively) safe and stable environment, and who face normative expectations. The numerical aspect is thus complemented with fundamental changes in some quality aspects of publications. Furthermore, an increased international component may also add to the publication features. At the same time, however, there are well founded doubts whether these positive patterns prevail all over the entire profession in Hungary. The professional communities in Central and Eastern Europe are often fragmented, which might manifest itself in uneven research performance among members as the cohesion of the discipline is largely lacking (Eisfeld and Pal 2010, 234).

6.5 Methods

6.5.1 Operationalisation

In an iterative approach opting for maximum inclusion, data collection began by creating a list of political scientists based on their institutional affiliations, self-identification, and contribution to the flagship Hungarian political science journal, Politikatudományi Szemle (Hungarian Political Science Review). After compiling their complete list of scientific publications, we repeated the classification process for all of the co-authors until we found no new contribution or person linked to Hungarian political science. This added up to the complete scientific publication data for all professionals who contributed to Hungarian PS and/or had institutional connections with it. The resulting primary database has individual authorships (author-publication combinations) as observations.

6.5.2 Data

The main data source was the Hungarian Scientific Bibliography (MTMT) official database (Holl et al., 2014). This is an unusually complete and detailed dataset as scholars are expected to maintain up to date their MTMT profiles as part of the performance evaluation systems. Records in the database are validated by official institutional and central administrators. MTMT has already been used to study patterns of publication performance in Hungarian academia (Sasvári and Nemeslaki 2019), but this article goes beyond this earlier article both in depth and spread. First, for the authors without complete

MTMT profiles we compiled bibliographies through numerous other sources.³⁸ As a result, this database is more encompassing as it includes all authorships for all journal articles of political scientists and contributors – irrespective of language, length, or format from commentaries through research notes to "proper" research articles. We also complemented biographic data from the same sources for incomplete or missing MTMT profiles. In addition, we also constructed a secondary panel database on publication performance including books and book chapters, with author-year combinations as observations, to allow for analysis based on the whole active population for a given period. For the general population, the most reliable and comprehensive comparative performance measure in the database is scientific journal articles, therefore most of the analysis relies on those.

6.6 The Analysis

6.6.1 The professional community

On the above grounds all potential performers with their performance appear in the database and it is possible to create four groups with particular connections to the Hungarian political science community. The political scientist group contains those whose involvement in political science is clear through their institutional affiliation or their self-identification in their professional profiles and through their publication activity as political scientists. The second i.e. the *contributor* group's members are not affiliated to a political science institution and do not identify themselves as political scientists but have contributed with at least two publications to the field of political science. They comprise two typical subgroups: those who are not in academia, but publish in political science (advisors, politicians, diplomats), and those academics who are clearly not political scientists yet still publish in political science. The third group is the so-called outsider group, whose members have less than two publications in political science. In our database, they mainly appear as co-authors with political scientists or contributors, but this group also includes those who publish only once in political science. This latter sub-group consists of students of political science who publish once before leaving the profession and academia or real outsiders who, once in a lifetime, publish in a political

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³⁸ These include their personal or institutional pages, Google Scholar, ResearchGate, Academia.edu, LinkedIn, and by querying academic meta search engines (EPA-HUMANUS-MATARKA, National Széchényi Library catalogue. The supplementary publication data was found to be comparatively reliable only for journal articles, so we focus on journal articles for most analyses, with checking robustness on a restricted (MTMT) sample including books and book chapters.

science related topic, but represent another profession. It is an important aspect of the profession's identity development how the share of contributors and outsiders changes as compared to political scientists per se: their shrinking share as compared to the group of "true" political scientists might indicate a more compact political science community, while their stable presence will hint at a multifaceted profession.

The final group, *foreign contributors* appear in the database as co-authors but have no Hungarian institutional affiliation. To qualify for any of the non-foreign groups, we required an author to have Hungarian affiliation for a given year, and only considered positions at international institutions based in Hungary (such as Andrássy Universität Budapest and CEU) as Hungarian affiliations if the professional was involved in publishing, teaching, supervisory or associational activities within the Hungarian political science community.

Table 39 provides an overview of some important features of the four above mentioned groups. We cannot neglect the outsiders or the foreigners: their mere numerical presence and their rightly expected performance certainly form the features of the profession. The groups of the political scientists and the contributors are less numerous (325 and 202 respectively³⁹) while they certainly show more internal stability and higher performance levels than outsiders or foreigners (see Figure 11). Women comprise less than one-fourth in the political scientist and contributor group, while more than one-third among the outsiders and foreigners. The average length of careers (given the twenty-eight year-long observation period) gives the impression of an established and person-wise internally stable discipline. The average age at first publication is surprisingly low which strengthens the former observation on career length. Close to ninety percent of political scientists have the MTMT publication portfolio. Since MTMT was launched in 2009 and has become the official basis of performance management in Hungarian academia, those colleagues who did not maintain MTMT profiles were either affiliated exclusively to international institutions or retired or deceased by the time MTMT got into use.

Table 39: Demographic composition of the profession [author's edit]

author group	political scientist	contributor	outsider	foreigner
frequency	325	202	1070	555
share of MTMT profiles	88.3%	83.2%	67.9%	0.2%
share of females	23.7%	23.3%	37.8%	35.7%
average length of academic career in	17.8	21.3	n.a.	n.a.
Hungary				
average age at first publication	28.1	26	n.a.	n.a.

Figure 11 might look complex at first sight as it shows the features of the community through both measurement foci. The four grouped bar charts represent the size of the four groups of performers and their numerical change over time while the two line diagrams show the rate of publication activity of the most decisive groups that is political scientists and contributors.

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³⁹ It is important to note that a mere structural-organisational approach would imply a smaller number of political scientists.

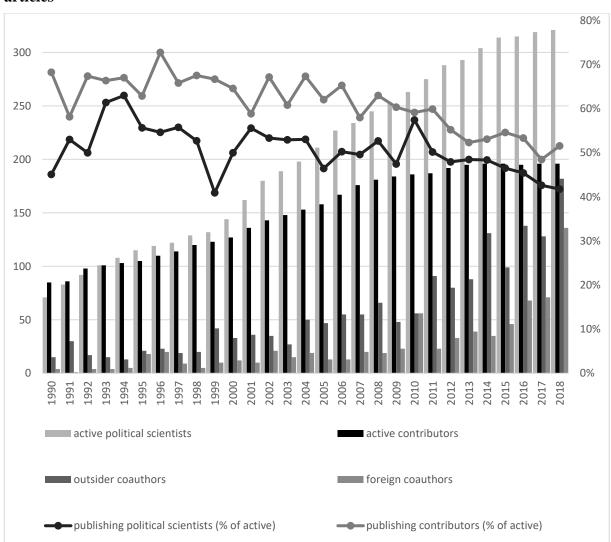


Figure 11: Size and publication activity of author groups with regard to journal articles

In Figure 11 the sample of journal articles comprises all scientific articles irrespective of language and quality impact. As for the number of persons that appear as political scientists or contributors the picture is straightforward: the number of active political scientists increased more than fourfold (more precisely from 71 in 1990 to 321 in 2018); the increase of contributors was less dynamic but still more than twofold (from 85 to 196), and except for the first post-transition years that is from 1994 onwards the number of political scientists was persistently higher than those of contributors. Political scientists per se have unquestionably become the dominant group among the performers.

Although the growth rate has slowed down for both the political scientist and contributor groups in the last decade, the stagnation was more noticeable in the number of contributors. We can rightly claim that numerically the size of the political science community possibly has reached its peak. New institutions – either within universities or

outside as research organisations - have not been formed in recent years. At the same time, we can observe a clear increase both in the outsider, and particularly in the foreign co-author group. This hints at more intense cooperation between foreign co-authors and the political scientist and contributor groups. Somewhat in contrast to this increase and stabilisation of the political scientist and contributor groups at a potential peak, the line diagrams show decline in their per capita publication performance. The number of political scientists who publish each year stagnates (around fifty per cent) while in case of contributors there is a clear decline in the past decade.

6.6.2 Publication activity

While the preceding analysis was based on all journal articles,

Figure 12 below allows a more in-depth look as it features various types of publication performance per capita. The most striking results is that the increase in scientific publication activity of Hungarian political scientists mostly occurred because more authors entered the field and not because of increasing per capita performance. This led to a steady increase in overall output, but no major improvements comparable to the rise in publication output of European political science from 2006 to 2013 (G. Schneider, 2014).

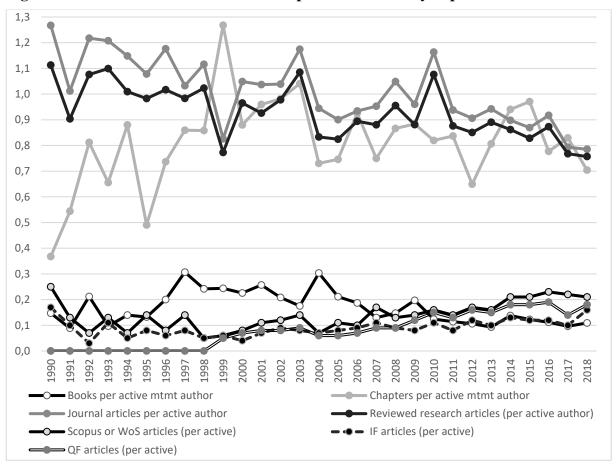


Figure 12: The extent and structure of the publication activity of political scientists

The data also highlight that there is an element of fluctuation in the yearly output per capita, which initially increased then slightly decreased for books, chapters and journal articles. Although this is less surprising for books and chapters as they tend to have lower weight in performance assessment, it is somewhat troubling in the case of journal articles given their significance for professional standing. We can observe the only substantial "improvement" per capita in the rise of articles published in journals with Quality or Impact Factor, while the per capita number of articles indexed in Scopus or WoS only slowly increased to reach its 1990 level. There could be survivorship bias behind the early

drop in average performance, as for those years we are more likely to have data on indexed articles and their authors, but the stagnation (in research articles) and slow growth (in high quality articles) still persists if we compare those numbers to the late 1990s. One explanation could be the transformation of personnel structure: during the early years of the profession, the few authors who published research articles had the international connections and capacity to appear in internationally indexed journals. With the expansion of the field and the many new entrants, less prestigious, domestic research journals became more frequent publication forums. The growth in Scopus-indexed articles and the upward turn in performance after 2010 aligns with earlier results for the whole region (Jokić et al. 2019).

This initial focus on the rapid expansion of publication output lasted until the end of the 1990s, when the gap between books, chapters, and general research articles on the one hand and internationally indexed articles on the other was the largest. After 1999, the shift from quantity towards scientometric quality became ever clearer, as the increasing share of journal articles in total output and the shift within journal articles demonstrate. The gap between the number of all journal articles (including those not reviewed or not present in Scopus and WoS) and higher quality articles clearly declined, as the discipline adapted to changing performance expectations over time and almost completely abandoned scientometrically disregarded categories. ⁴⁰ An alternative explanation could be that we slightly overestimate the expansion of the profession by not excluding non-publishing colleagues from the active category, thus underestimating the per capita output of active colleagues.

The role of local (CEE) journals becoming internationally recognised in increasing publication quality noted by Jokić et al. (2019) is corroborated by our data. While articles in foreign journals went from being indexed in Scopus thirty per cent of the time throughout the 1990s to being indexed sixty to seventy per cent of the time in 2018, for Hungarian journals this ratio increased from almost no Scopus indexed journal articles in 1990-2004 to around ten per cent in 2016-2018. By 2010 as many as thirty to forty per cent of Scopus indexed articles by members of and contributors to Hungarian political science appeared in Hungarian journals, and twenty to thirty per cent of them still do for our latest available years.

The growth in QF and IF articles from the middle of the 2000s coincides with an increasing focus on high quality research output at leading institutions, as well as more

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⁴⁰ Note that Hungarian political scientists still engage in plenty of non-peer-reviewed publication activities, but non-scientific publications were excluded from the analysis.

steadily available funding for such endeavours. Although local and national resources remain limited, some increase in international cooperation also supports this type of quality performance. As for the range of internal resources two or three research projects tend to win financial support from the national science foundation (OTKA and later NKFH) in the field of political science on a yearly basis. Some additional competitive funding is available for young colleagues, limited to three or four grants per year. Exceptionally, leading institutions provide funding for open access appearance to encourage quality as well as visibility of publications. Altogether however quality publications are frequently connected to involvement in international projects (see Table 40).

The trend in international publications also appears as one explanatory source of the contrast between growth in quality and stagnation in per capita research output. Figure 13 compares authorship patterns for internationally indexed reviewed articles. The lines show the dynamic of the average number of authors, while the stacked areas show the growing share of co-authorship for research articles indexed by Scopus or WoS.

4,50 100% 90% 4.00 80% 3,50 70% 3,00 60% 2.50 50% 2,00 40% 1,50 30% 1,00 20% 0,50 10% 0,00 0% 2018 2012 2013 2015 2017 1992 2014 2011 ■ Single author 2 authors 3 authors ■ 4+ authors Avg. Authors (research articles)Avg. authors (Scopus/WoS)

Figure 13: Co-authorship patterns for internationally indexed research articles with a political scientist author

Looking at the average number of authors, the growth in co-authorship intensified from 2010, and is much higher for internationally indexed articles. The distribution paints a similar picture: the share of single authored articles declined in all samples, while articles with several authors became more prominent, and both these trends were stronger for internationally indexed articles. Hungarian political science had a noticeably higher share of co-authorship than what was observed for the subsample of comparative politics in CEE (Schneider et al. 2013) and for political science in the region (Jokić et al., 2019).

The levels observed in our data would put Hungarian political science among those with the highest rates of co-authorship in the region, and very close to results on global political science (Metz and Jäckle 2017). Compared to data on the WoS-indexed part of political science, this puts the level of co-authorship in internationally-indexed Hungarian political science scholarship as slightly below average until the mid-2000s, and clearly above average after that (Henriksen 2016).

Co-authorship thus seems to be one of the driving forces behind the increase in high quality publications, but with what groups did political scientists cooperate? Table 40 demonstrates that some of the growth in co-authorship occurred through denser cooperation within the profession, as the average number of political scientist authors per article increased slightly.

Table 40: Authorships by author groups over time for (Scopus / WoS indexed) research articles with a PS author

Average	Research articles			Scopus/WoS articles		QF/IF articles			
share of:	1990- 1999	2000- 2009	2010- 2018	1990- 1999	2000- 2009	2010- 2018	1990- 1999	2000- 2009	2010- 2018
Political scientists	96.1%	94.0%	89.5%	96.9%	92.7%	88.8%	96.1%	85.4%	74.0%
Contributors	1.4%	1.4%	1.8%	0.5%	1.3%	1.6%	0.0%	1.6%	2.6%
Outsiders	1.7%	2.6%	5.4%	0.5%	0.8%	4.0%	0.7%	2.5%	10.7%
Foreigners	0.8%	2.0%	3.3%	2.1%	5.2%	5.6%	3.3%	10.4%	12.7%
Authors (political scientists)	2.29 (2.07)	2.45 (2.09)	3.03 (2.14)	2.31 (2.15)	3 (2.21)	4.96 (2.27)	2.34 (2.2)	3.08 (2.2)	5.14 (2.24)

Despite their significant share of PS article authorships, the share of contributors as co-authors to political scientists is quite low, with negligible growth. This suggests that while contributors engage in political science scholarship, they do not cooperate intensively with core political scientists. The increase in the share of outsiders as authors along with their rapidly growing number shown in Figure 11 hint at the opening of Hungarian political science towards other professions within Hungary (they are the outsiders) and foreign colleagues especially in the last decade. Just to provide the most extreme (or the best) example: in the last year in our database in the group of IF/QF articles authors from outside of core political science represented one fourth of all authorships, and outsiders and foreign co-authors were dominant within that group. As we proceed in time, the share of contributors and foreign contributors has been rising.

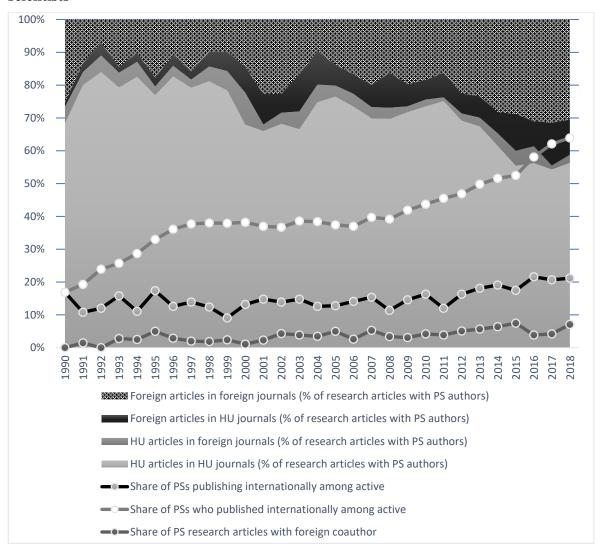
Besides other professions, Figure 11 and Table 40 draw our attention to an increasingly relevant group: international co-authors. This academic connectedness also contributes to

the identity of the profession: In parallel with the increase in quality articles, we can expect a general growth in foreign (especially English) language publication activity, as those articles are more likely to be ranked in international databases. These developments already hint at the increasing international component in publication, but to what degree is Hungarian political science part of European political science, or more broadly, how internationalised is the profession?

6.6.3 Internationalisation

Figure 14 presents two parallel trends in Hungarian political science. The stacked areas represent the share of publications in foreign languages and foreign journals among all research articles, while the lines represent trends in the personal publication dimension of internationalisation.

Figure 14: Internationalisation of the publication activity of Hungarian political scientists



The initial years of the profession show that the early expansion in publication output was mostly concentrated on Hungarian articles. Afterwards, the share of Hungarian language articles in both Hungarian and international journals declined from around eighty-five per cent in the 1990s to less than sixty per cent of overall output in recent years. The share of foreign language articles in foreign journals increased from less than ten per cent to more than thirty per cent, while the share of foreign language articles in domestic journals is steady around ten per cent.

Here we can observe the expected, growing dominance of English, as its ratio among foreign language articles increased from around three-fourths to over ninety per cent. The shrinking, yet continuing relevance of German due to historical and geographical reasons is also worth mentioning, as it decreased from between sixteen and seventeen per cent to around five per cent in the past decade, but had a larger share throughout than all other languages combined in our database.

These general trends show a profession that follows international trends in publication patterns to some degree, but what about the personal side of the equation? How broad and how regular is the internationalisation of the profession? The share of political science articles by Hungarian authors and foreign co-authors increased from virtually none to a still quite low seven per cent. This together with the mass appearance of foreign co-authors is somewhat puzzling (see Figure 11). The explanation could be that the core political science publication activity of professionals in our sample is less internationalised than their other publications, but it could also be that articles with foreign co-authors are linked to large research projects with group authorship. Since political science research articles with foreign co-authors have a much higher average author count of (2.72 as opposed to 1.16) than those without, with a variance of 13.2 (compared to 0.3), the outlier-based explanation seems more likely.

The share of active Hungarian political scientists who published internationally each year varied between ten and fifteen per cent for most of our sample, then increased to just above twenty per cent during the last decade. There seems to be significant variance in the publication activity of different author groups, as the share of active political scientists, who had published internationally at all, steadily increased to above sixty per cent in the meantime. The two major eras of internationalisation seem to be the initial expansion stage and the 2010s, especially its final years. This latter mirrors the expansion in foreign articles as well as the recent increase in regularly internationalised authors. These trends paint a picture of an increasingly internationalised professional community especially compared to earlier results, such as Schneider et al. (2013). However, the still high (almost forty per cent) share of non-internationalised members along with the small (one-fifth) share of those who produce international publications annually suggests a very

uneven development of the profession. Internationally indexed articles tend to have more foreign co-authors (see Table 40), so there is a possibility of the emergence of a small, internationally connected, high-performing subgroup within the profession.

6.6.4 Uneven development

Is there a similarly uneven pattern in the distribution of publication performance in general, or in the case of high-quality publications? Table 41 presents the changing distributions of publication activity among Hungarian political scientists on three tiers of publication quality, from reviewed research articles through internationally indexed articles to those appearing in quality factor or impact factor journals.

Table 41: The distribution of publication performance among political scientists over time

Average yearly reviewed journal articles by political scientists for each decade		1990-1999	2000-2009	2010-2018
Research articles	mean (median)	1.91 (1.2)	1.84 (1.33)	1.84 (1.33)
	st. dev. (skewness)	1.76 (1.64)	1.84 (2.22)	1.87 (2.03)
	non-publishing	6.0%	8.7%	9.0%
	share of top decile	39.1%	27.3%	33.0%
Scopus/WoS	mean (median)	0.49(0)	0.72(0)	0.51 (0)
research articles	st. dev. (skewness)	1.93 (8.16)	2.06 (5.21)	1.45 (4.26)
	non-publishing	79.7%	74.4%	79.0%
	share of top decile	85.7%	84.2%	83.2%
IF/QF research	mean (median)	0.41(0)	0.6(0)	0.43 (0)
articles	st. dev. (skewness)	1.7 (8.64)	1.86 (5.46)	1.34 (4.93)
	non-publishing	81.2%	78.7%	81.5%
	share of top decile	86.3%	85.1%	86.0%

For the broad research article category, there is a slight decline in the mean yearly performance of political scientists from 1.91 to 1.84, while the median is consistently lower than that, increasing from 1.2 to 1.33. This paints a less negative picture of political science than what we expected from Polónyi's (2018) assessment of the decline in publication performance for Hungarian academia as a whole. Standard deviation and skewness metrics suggest a strongly skewed distribution with significant outliers, that is, a large part of our population publishing close to zero research articles per year, with the few high performers increasing the mean. The increasingly uneven distribution was the result of the ratio of non-publishing political scientists increasing slightly, from six to nine per cent, as the share of the top decile of publishing authors in total performance decreased to a level lower than in the 1990s. This divide in the profession between those who actively publish and those who are hardly visible conforms with European standards – good or bad (Kwiek 2015).

The distribution of publications in journals which are internationally indexed, and those which had Impact or Quality Factors show dynamics very similar to all articles. Mean

performance increased for the second decade, then returned close to the 1990s level during the last decade. Although the skewness of the distribution of yearly average performance decreased, it remained high throughout the sample. Both the ratio of political scientists not publishing in those categories (between seventy-four and eighty-one per cent) and the share of the top decile in total performance (between eighty-three and eighty-seven per cent) proved remarkably stable.

These trends suggest that the observed growth in publication output followed by the increasing focus on quality research articles did not really affect the differences between low and high performing groups. The profession continues to have a major division between those who are affiliated with central institutions providing resources and incentives for internationally recognised publication activity, and those who publish infrequently. The 'two separate worlds' of domestic and international political science research observed for Western countries by Camerlo et al. (2018) seem to hold for the case of Hungary, as well. The Matthew effect of science could be at play here, as those who successfully enter central institutions and international networks are likely to be even more productive over time (Merton 1968). We could view this as the natural result of different institutionalisation paths and the division of labour between research-oriented and teaching- or practice-oriented professional subgroups. One of the major structural problems of Hungarian political science diagnosed in the past decade was the lack of structured networks stemming from the low number of co-author connections (Antal 2011). Our results hint at a profession that was able to overcome these problems for a well-connected, internationalised core group of researchers, but is yet to integrate large parts of its membership into these networks.

6.7 Conclusion

As professions are less and less unified communities - due to specialisation and the entry of new subfields - their professional identity remains questionable. This research turned this question around arguing that the diversity of members and changing performance patterns constitute the profession's identity per se. The combined focus on the agency and the performance aspects of Hungarian political science (who are the contributors and what do they perform) provides a vivid picture of the development of the profession and clarified fundamental features of its identity. First, in terms of agents the identity of political science has become more compact. Political scientists - that is those who by institutional position, acclaimed identity and via their performance give face to the group - have achieved a dominant position. At the same time, political science remains

colourful, as the share of the contributor group (that is those who are outside the core of the profession both with regard to institutions and identity claims) is around one third. Overall, it seems that while there is an identifiable and increasingly clear professional community of Hungarian political scientists, the discipline is still open to contributions from outside. The research also shows important changes regarding the performance of political science, especially in the second main dimension: internationalisation. The increased international component of academic output provides international visibility for the profession, and the increasing share of quality publications clearly adds to its status, and possibly its acknowledged institutional position. Political science has become more recognisable for the interested audiences as well.

In looking at these issues in the round, the analysed changes, achievements, and bottlenecks all signify the development of the profession's identity. However, publication performance and international recognition are very unevenly shared among members of the profession, which could also reflect an uneven access to resources as well as a lack of internal connections within the community. While a national political science community and its institutions continue to develop, its integration into European political science is through the connections and activities of a small group of high-performing professionals in central institutions. This means that the professional community might not be robust, especially when facing challenges to these institutions.

More recent institutional transformations such as the privatisation of universities and the corresponding appearance of new stakeholders (a phenomenon that proved to be consequential in all places (Aarrevaara and Dobson 2013)), or the replacement of institutes and research centres from under the Hungarian Academy of Sciences (Paternotte and Verloo 2020) into a new institutional framework under government authority might threaten the research agenda and the "output" agenda of the profession. Having seen the function of performance in identity formation we can rightly formulate concerns: how would the identity of our profession transform as a result? To better understand developments in the CEE region (as in all newcomer professional communities), we need a combination of the performance- and personnel-centred and the institutional perspectives, which would allow the study of the relations between professional institutionalisation and the development of underlying professional networks. This would lead to a better understanding of which contexts are more conducive to high quality research and overcoming the issue of fragmentation through the development of cohesive professional networks, as well as the communities that are more resilient to organisational changes and uncertainty.

7 SUMMARY AND CONCLUDING REMARKS

This chapter lists the dissertation's main findings for each of the chapters, before discussing a few more general conclusions from the perspective of the overarching questions of the research program. The dissertation concludes with a summary of its methodological contributions, limitations and proposed extensions.

7.1 Overview of conclusions

The studies in this dissertation have made various contributions to our knowledge of professional communities and their institutionalization from the perspectives of new institutional economics and exchange theory, even taking small steps towards a more complex theoretical synthesis. Where does the research program stand at this point, and what questions are still to be answered? Table 42 summarizes the key findings from each study included in this dissertation, as well as the future research directions suggested by each.

Table 42: Overview of conclusions and further directions

RQ	Conclusions for each chapter	Further directions
What are the	(2.1) All of the proposed economic	I. How are the many
economic roles of	roles of BAs (property rights	roles of BAs related? Do
business	protection, reduction of transaction	their institutional logics
associations?	costs, joint maintenance of	complement each other,
How are business	knowledge base and infrastructure,	or do they result in
associations	internal and external coordination for	organizational tensions
institutionalized in	development) can involve activities	and trade-offs?
order to fulfil their	linked to the private order and the	
economic roles?	public order.	
	(2.2) All of the economic roles (see	II. What specific
	above) can contribute to both value-	contextual elements
	creating and redistributive rent-	incentivize socially
	seeking.	beneficial or harmful
	(2.3) Beneficial contributions from	activities or professional
	each of the economic roles of BAs	communities?
	(see above) are possible at each of the	
	different levels of institutionalization	
	(intermediary association,	
	associational governance, self-	
	regulation, and co-regulation).	
What drives BAs	(2.4) The institutional incentives	
to engage in	created by the private-order and	
socially beneficial	public-order context explain the	
or harmful	socially beneficial or detrimental	
activities?	orientation of BAs' activities.	

RQ	Conclusions for each chapter	Further directions
Do members of	(3.1) Several functions of BAs	V. How do BAs achieve
BAs perceive	contribute to perceived internal and	these positive effects on
them as effective	external trust in business partners.	credibility? What are its
in increasing the	_	institutional
credibility of their		prerequisites? \rightarrow (5.1-
members?		5.4)
Do members of	(3.2) BAs in general do not increase	
BAs trust in the	credible commitment among business	
contractual	partners, but BAs with functions	
commitments of	relevant for contract enforcement do.	
their business		
partners more		
compared to non-		
members?		
Are members of	(3.3) BA membership does not	VI. What mechanisms
BAs better able to	facilitate the creation of new	substitute for BAs in
engage with	partnerships with previously	these cases? Do BAs
business partners	unknown or geographically distant	contribute indirectly to
from outside their	partners, but might facilitate building	solving these problems
personal and local	trust in them once the relationship is	by complementing those
networks?	established.	alternatives? \rightarrow (5.1-
		5.4)
What transaction-	(4.1) There is a trade-off between	VII. How do
enabling roles do	relying on professional community	professional
professional	institutions and relying on long-term	communities fit into
associations fulfil	relational contracting (or integration)	typical governance
within a	for the governance of contractual	structures of
professional	relations.	transactions?
community?	(4.2) There is a trade-off between	
What factors	relying on professional community	
influence whether	institutions and relying on market	
a professional	reputational mechanisms for the	
association has a	governance of contractual relations.	
role in the	(4.3) Reliance on market	
transactional	intermediaries can both complement	
relationship	and substitute for reliance on	
between two	professional community institutions	
businesses?	for the governance of contractual	
	relations.	
	(4.4) The scope and type of	VIII. How do features of
	government involvement in the	the policy process and
	governance of contractual relations	professional
	determine the role of professional	communities influence
	community institutions, as it both	each other? How do
	enables them and relies on them	professional
	throughout the policy process.	communities feature in
		policy networks?

RQ	Conclusions for each chapter	Further directions
What factors	(5.1) The transactional and	IX. How do the
explain the	intellectual elements of professional	transactional and
different patterns	communities complement each other	intellectual sides of a
of	in explaining their	professional community
institutionalizatio	institutionalization, co-evolving	influence each other?
n of professional	during the process.	
associations	(5.2) Constructing the identity	X. How do professional
within a	(borders) of a professional	communities define and
professional	community is done through	institutionalize their
community?	competing claims throughout the	identities? \rightarrow (7.1-7.2)
What factors	institutionalization process, affecting	, ,
explain the	the resulting institutional forms.	
patterns of	(5.3) The scope and type of	VIII. How do features of
cooperation	government involvement in the	the policy process and
between	governance of a professional	professional
professional	community is the strongest	communities influence
associations	explanatory factor of community-	each other? How do
within a	level integration, while it is also	professional
professional	significant at the lower, differentiated	communities contribute
community?	layers of institutionalization.	to policy networks?
How did the	(6.1) While there is an increasingly	XI. How can a
political science	clear professional community of	professional community
community	Hungarian political scientists, it is	define its identity
expand during the	still open to scientific contributions	(borders) while
last three	from outside the community.	remaining open to
decades?	(6.2) The increased international	contributions from
How did the	component of academic output	outside?
publication	provides international visibility for	
performance of	the profession, and the increasing	
the professional	share of quality international	
community evolve	publications clearly adds to its status,	
over the last three	and possibly the acknowledged	
decades?	institutional positions of the	
	community.	
	(6.3) While a national political	XII. How does network
	science community and its	structure influence
	institutions continue to develop, its	institutionalization?
	integration into European political	XIII. How do changes in
	science is mainly through the	institutionalization
	connections and activities of a small	influence network
	group of high-performing	structure?
	professionals in central institutions.	XIV. How is
	This means that the professional	professional
	community might not be robust,	performance influenced
	especially when these central	by network structural
	institutions face challenges to their	elements and by
	autonomy.	institutional context?

The sections below present the main theoretical and empirical contributions of the dissertation for each overarching question.

7.2 What professional community institutions contribute (i.)

The results of Chapters 2&3 suggest caution in pursuing the question of what professional communities contribute to their members and societies. The mostly negative conclusions of these studies did not get us closer to resolving the debate on whether they are socially beneficial or harmful, pointing instead to possible refinements of the theories.

7.2.1 Literature review and approaching the what question

The first theoretical contribution of the dissertation is clarifying the distinctions between the institutional forms, functions, and economic roles of professional community institutions. Distinguishing the three layers allows clearer conclusion on each with the possibility of theoretically linking them.

The critical review of the literature in Chapter 2 found that simple answers to the question of what professional communities provide are likely to be contradictory or wrong. They might be vehicles of socially harmful rent-seeking and providers of socially beneficial coordination or collective good provision at different times or even in parallel. That is why our subsequent empirical analysis focused on one role at a time, assessing the evidence on its existence and mechanisms instead of trying to compare multiple roles at once.

Regarding what determines the roles which a given professional association fulfils, the review in Chapter 2 demonstrated that the institutional form of associations itself does not offer a complete explanation. Evidence points toward the importance of institutional constraints on the different kinds of rent-seeking that communities can engage in. These constraints stem internally from the members of the community and the underlying intellectual order, as well as externally from the broader governance framework in which community institutions are embedded. That is why the case studies attempt to include at least one of those additional layers in the analysis, hopefully leading to more comprehensive theories of institutionalization.

7.2.2 Hungarian professional community institutions

It can be argued that applying various theories of institutionalization to the study of professional communities in Hungary leads to an important empirical contribution itself, as most of the surveyed strands of literature rarely included cases from Central-Eastern European countries. The empirical studies have demonstrated that professional community institutions are important elements of the framework of governance in Hungary, at least for the selected communities. We have also learned that professional

associations exist in a wide variety of forms, institutionalizing a variety of functions. The transaction-enabling roles of professional associations seem to be consistently relevant complements to more widespread private- and public-order institutions. Hungarian professional communities seem to have a much more limited but not completely negligible role in influencing public policy.

Two important limitations to these impressions need to be mentioned: first, while the SME sample was representatively selected, the case studies were of professional communities which showed at least some success in maintaining formal institutions and meeting collective challenges. Less successfully institutionalized Hungarian professional communities might fulfil even more limited governance roles. On the other hand, the generalizability of the results is questionable for other contexts. Without cross-country comparative research it is impossible to tell which of the conclusions reflect specificities of the Hungarian context, and which hold for most professional communities.

7.2.3 The need for a nuanced approach to functionality

Although our sample of Hungarian small and medium enterprises were more likely candidates of relying on professional communities than larger firms, it is notable that neither of the typical associational roles studied found uniform support for our cases. As a way forward, however, the empirical analysis revealed important differences between different kinds of associations regarding their effects on members.

It is not just belonging to a professional community that matters, as the effects are conditional on the features of the community's institutionalization. Although the results are mixed, from Chapter 3 it seems that membership in associations with related functions such as moral and professional selection and control of members, business dispute resolution, and information sharing has positive effects on members' contractual relations. We have found much weaker evidence for the positive effects of association membership in general.

The literature review and the empirical analyses all point toward a more nuanced approach to the institutionalization of professional communities, one that (1) is more sensitive to the differences in institutionalization between seemingly similar cases, and (2) would include its interactions with the private and public-order contexts surrounding it. This is the path that we embarked on in the case studies of Chapters 4-6, which provided the more positive conclusions of the research program.

7.3 How professional community institutions fulfil their roles (ii.)

7.3.1 Not central yet important

A basic empirical conclusion of the studies in this dissertation is that professional community institutions have been important, but often not central elements of governance for SMEs and professionals in the seed production and logistics communities. Many organizations, especially smaller ones relied on professional communities as they adapted to turbulent periods of capitalist transformation and Europeanization. On the other hand, professionals from inside and outside professional associations highlighted their limited roles (especially compared to traditionally more powerful interest groups) in influencing public policy, and the possibility of marketized private solutions to substitute for several of their functions. Professional communities appear as cogs of shifting importance in complex governance structures, not as the main driving forces behind policy and strategic changes.

7.3.2 Including governance and associational features

The survey we utilized in Chapter 3 to study the contract supporting roles of professional associations was empirically novel for two reasons. While the institutional economics literature traditionally focused on transitory (mostly post-soviet) contexts, the Hungarian case is much closer to a developed economy, providing a new angle on the issue. Other studies (Mike & Kiss, 2018) suggest that even in such developed economies, we can expect a complex mix of institutions to appear in the governance structures of contract, with no one royal road emerging. Secondly, our survey included the perceived functions of professional associations beyond the patterns of membership. This proved to be highly relevant, as our results suggest that the roles which professional associations are able to fulfil depend on what functions and mechanisms they are able to institutionalize. These two results suggest that further studies are needed with a similarly rich micro-level data collection design (capturing individual-organizational and associational features), providing a deeper look into how and when members rely on what kinds of professional community institutions.

7.3.3 Private alternatives to community institutionalization

The political science literature on professional communities generally focuses on their activities as representatives of organized interests, adopting a top-down approach. A key result from our empirical studies is that it is worth complementing that with a bottom-up

approach, focusing on the decisions and relationships of individual community members, which usually go beyond or often do not even focus on interest representation.

Whether members of a professional community rely on formal institutions such as associations depends on the costs and effectiveness of their institutional alternatives. Both informal networks (along with their norms) and formalized private-order solutions (organizational hierarchies and relational contracts) matter as institutional alternatives to community-level institutionalization. Developing and maintaining community institutions requires more effort than its private-order alternatives, such as relational contracting and reputational mechanisms, so professionals will only rely on them when they provide additional, more effective mechanisms of coordination and cooperation.

On the other hand, professional community institutions can enable private-order alternatives, contributing indirectly to successful governance. This is what we have found for the seed industry and logistics cases. The case studies supported the proposition that professional associations can be important elements of governance even if they do not have a central, direct role with formal sanctions attached, like some famous historical cases of guilds and extra-legal communities (Bernstein, 1992; Greif, 2006; Greif et al., 1994).

This institutional gap-filling of professional institutions is relevant beyond the study of contractual governance, as the importance of professional associations' contributions to governance structures influences the amount of resources spent on their institutionalization. Both members and policymakers are more likely to involve and support community institutionalization if they consider it a useful element of governance, thus possibly enabling their government-related roles of interest intermediation and policy implementation. This connection leads us to the final question on the processes of institutionalization.

7.4 How professional community institutions develop (iii.)

7.4.1 Literature review and approaching institutionalization

The literature review in Chapter 2 highlighted that professional community institutionalization is not a deterministic process toward a 'full-fledged' institutional form. While selective incentives and formalized self-regulation are needed for some collective action problems to be resolved, the more costly institutional forms are only found if a group of stakeholders with sufficient resources decides to establish and maintain them. This is where the underlying community of professionals and actors of

the broader governance framework appear not only as constraints but as drivers of institutionalization.

The three case studies in this dissertation approached the complexities of institutionalization in different ways. Chapter 4 is mostly a cross-section of governance solutions found in the seed industry, which still offers some grounds for conclusions on institutionalization. Chapter 5 turned to the dynamics of formalized institutions of the logistics community, while also analysing the relationship between underlying professional communities and those institutions. Chapter 6 changed the focus from formal institutions to the underlying professional community of political scientists.

7.4.2 Government connections

Although scholarship on professional and business associations tends to define them as voluntary, private organizations, we cannot explain the institutionalization of professional communities completely without including public sector elements in our analyses. There seems to be a mutual reliance between private and public-order mechanisms, where the two kinds of institutions co-evolve. Public sector organizations often rely on the voluntary collective action of professionals to design and implement more effective policies. In doing so, they provide incentives (through conditional resources and access) and constraints (through regulatory decisions) for the development of professional communities.

This complementarity between governmental and private, professional governance mechanisms often goes beyond formal organizational arrangements. Policymakers and governmental actors can be parts of the professional communities which they govern or regulate and can form networks that survive reorganizations within the public sector. This happened in both the Hungarian seed industry and logistics cases. These intensive two-way relations are key to understanding professional community institutionalization, possibly trumping Olsonian bottom-up considerations of collective action such as group size and heterogeneity: an adverse public-order context can prevent a smaller, more heterogeneous group from institutionalizing itself, while government incentives are almost always behind successful attempts at institutionalization.

7.4.3 Instrumental and intellectual sides of communities

The final theoretical contribution of the dissertation stems from the endeavour to distinguish and connect the instrumental and intellectual sides of professional communities. We argued that to understand the institutionalization and social roles of professional communities, we need to go beyond economic theories based on optimization along given preferences and incorporate insights from the sociology of professions. These communities are as much about making sense of their environment, and constructing shared meanings and identities as they are about maximizing some economic surplus. A successful professional community gives place to an ongoing intellectual debate on the values, goals, and solutions which are acceptable. Who participates and how in those debates is determined by the communities' institutions, which are in turn influenced by intellectual developments and differences within the community. Chapter 5 highlighted how incorporating elements of intellectual orders into the theoretical framework allowed for more complete explanations of the development of a professional community.

Two main dimensions of intellectual differences with major institutional consequences emerged from all case studies. The first concerns the definition of the communities themselves: there can be various conceptualizations of a professional community with their corresponding claims to representation. Which individuals and organizations constitute the seed industry, logistics, or political science community is not objectively defined, and different members have different groups in mind whom they are willing to consider parts of the same community. While these identities tend to strongly overlap, their differences can have major consequences for multiple layers of institutionalization, as constraints and drivers of institutional differentiation and integration. How a professional community constructs its identity during its (early) institutionalization was the main question of Chapter 6 on the Hungarian political science community. It seems that internationalization is one of the key aspects, as professional networks and private organizations increasingly reach beyond national borders.

The second intellectual difference with important institutional connections is the rules of consultation, which define acceptable arguments and how they can be articulated within the community. The main division here seems to be between a more gradual, scientific approach in the quest for professionally optimal solutions, and a more pragmatic, streamlined interest-reconciliation approach. Differences in these institutions and how they align with policymaking processes can be important factors for a professional communities' success in interest representation and governance.

7.5 Methodological contributions

The case studies in this dissertation were the first steps of a research program that intends to develop a more nuanced and comprehensive understanding of professional community institutionalization. While the external validity of our conclusions is accordingly limited, the main intention was to develop and demonstrate the applicability of partially novel approaches.

7.5.1 In-depth case studies of institutionalization

The case studies in this dissertation opted for an in-depth, qualitative research design based on interviews and document analysis. Although the ecology and membership patterns of associations can often be reconstructed from document analysis, the stakeholder interviews allowed for the inclusion of how members perceive the professional community and its institutions. This is important for the study of how professional communities are institutionalized (question iii.) for two reasons.

While including the functions of professional associations is itself an important addition to surveys (as mentioned in 7.3.2), the stakeholder interviews allowed for the inclusion of the perceived impact of these institutions. It turned out that associational features such as ethical codices and committees are much more prevalent on paper than in practice, and members often do not consider them relevant for their activities. Secondly, the case studies highlighted the importance of considering alternative, even competing conceptions of professional communities, as the borders and identities are often not fixed. A more quantitative strategy assuming fixed categories of communities is much less likely to reflect these nuances.

The other gain from adopting a bottom-up perspective of professional communities is that it makes interactions between different institutions more explicit. Stakeholders operating and utilizing the institutionalized mechanisms of these communities can offer information on how they operate, and what institutional features are crucial for that. The individual and organizational strategies of the members reveal how the different institutions on which they rely in their professional activities interact, revealing competing and complementary institutional mechanisms.

7.5.2 Individuals, networks, and community institutions

Chapter 6 is the first step in a research program that intends to extend the quantitative, data-driven approach of the population ecology strand of literature to the layer of professional community members. The chapter demonstrates that meaningful conclusions can be drawn regarding the identity and dynamics of a community from this approach, which offers multiple potential benefits for future scholarship. Going beyond the formal organizational layer in data collection and analysis allows for the study of changes in the

membership of a professional community. It also enables us to analyse the individual professional activities of members, uncovering structures of cooperation that might not be reflected by formal organizational membership. These linkages may be used to analyse professional networks, which could then be connected to the study of institutions, allowing us to better understand how professional community institutions contribute to the performance of community members (question ii.), and how informal structures and formal institutions co-evolve (question iii.).

7.6 Limitations and possible extensions

7.6.1 Possible research design alternatives

One key limitation of the case studies in Chapters 4-6 is that the single case designs mostly allowed for theory building, but only very limited testing of those theories. Progress on the open questions I, III & VII from Table 42 would require comparative analyses of several professional communities. The first step in that direction is already being made based on a more recent survey of Hungarian SMEs and the construction of a database on professional associations in Hungary.

Questions VIII, IX & XI from Table 42 would lend themselves well to comparative case studies of professional communities, applying a most similar or most different systems design to derive stronger conclusions. One such comparative analysis is already underway based on the most similar cases of the Hungarian and Portuguese political science communities. The cases in Chapters 4 and 4 will also serve as elements of comparative studies.

7.6.2 *Linking networks with institutions*

A second research direction with potentially important implications would be the integration of the perspective of network analysis with theories of professional communities. There are two main institutional layers where the network perspective could be applied fruitfully. The first is following the interest group literature in analysing policy networks and governance networks. These structures include the relations between different associations within a professional community (systems of associations) but also relations with non-associational actors (firms, government agents) who are involved in governance. This would be a major step towards answering question VIII on the relations between policy networks and professional communities. Gathering this kind of data was not part of the case study design for Chapters 4 and 5, but would be feasible to include in future comparative analyses.

A second, deeper layer of community structures where network analysis could be fruitful is the relations between individual members (organizations or professionals) within the professional community. This would allow us to include in our analyses private (informal or bilateral) connections which are relevant for several roles of professional community institutions. Chapter 6 takes the first step in this direction by analysing co-author connections in Hungarian political science, but leaves the analysis of professional networks for future studies.

Although these results could not appear in this dissertation due to space constraints, the data and methods introduced in the chapter allowed for the construction of a complete co-authorship network for the political science community of Hungary. The next step towards answering questions XII-XIV on the relations between network structure and community performance will be to integrate the analysis of professional community institutionalization with community network structure.

7.6.3 International / global institutionalization

A possible extension of the empirical analyses in this dissertation would be to go beyond national professional communities (even though they are home to the main layers of professional institutionalization and governance) and include international institutions. The literature on business interest representation and governance, as well as the case studies of Chapters 4-6 point to the increasing relevance of international actors and institutions in the governance of professional communities. Indeed, internationalization became one of the focal points of the case study on Hungarian political science.

Future analyses within the research program intend to include the international or global layers of governance. Applying the approach of the literature on the Europeanization of professional communities (J. Greenwood, 2001, 2003; Lehmkuhl, 2002, 2005; Streeck et al., 2006) to a non-Western European context could yield novel insights on question XI on how national professional communities can define their identities in an increasingly global world.

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APPENDIX I: LIST OF INTERVIEWS FOR CHAPTER 4 (SEED INDUSTRY)

Stakeholder group	Position	Time of interview
professional	Executive director	2018.02.22 8:00-10:30
association		
professional	Executive director	2018.02.27 12:00-13:00
association		
government	Senior public official	2018.03.29. 9:00-11:10
education &	Senior academic, former public	2018.03.07. 12:00-13:00
research	official	
education &	Senior academic, head of institute	2018.03.06 13:00-14:10
research		
research & plant	Senior academic	2018.03.10 9:00-11:00
breeding		
research & plant	Director	2018.02.28 14:30-16:00
breeding		
integrated producer	Executive director	2018.02.22 9:00-11:00
integrated producer	Executive director	2018.03.01 13:30-15:00
integrated producer	Director	2018.03.21 11:00-12:40
integrated producer	Director	2018.06.13 9:00-10:00
integrated producer	Regional department head	2018.03.05 13:00-14:00
integrated producer	Department head	2018.03.09 10:00-12:30
integrated producer	Executive director	2018.03.02 9:00-10:30
integrated producer	Executive director	2018.03.26 11:00-13:00
distributor	Department head	2018.04.09 14:00-16:20
distributor	Executive director	2018.02.28 8:30-10:00
producer	Executive director	2018.03.23 9:00-10:00
distributor, producer	Department head	2018.03.28 9:00-11:00

APPENDIX II: LIST OF INTERVIEWS FOR CHAPTER 5 (LOGISTICS)

Stakeholder group	Position	Time of interview
Logistics technology symplicus	Executive director	2019.03.26. 11:50-13:00
Logistics technology suppliers	Executive director	2019.03.29. 09:45-11:10
Logistics somvice musvidens	Logistics professional	2019.03.26. 18:00-19:00
Logistics service providers	Head of department	2019.03.29. 14:00-15:00
Logistics professionals	Head of department	2019.03.29. 17:45-21:45
	Director	2019.03.28. 12:15-13:50
	Logistics professional	2019.10.10. 09:45-10:30
Professional association		2019.10.17. 10:30-11:30
	Executive director	2019.10.10. 8:30-11:00
	President	2019.10.09. 11:00-13:00
Professional association, academia	Senior official, senior academic	2019.03.20. 14:00-16:00
	President	2019.03.20. 10:00-11:20
Professional association,	Senior official, executive	2019.03.25. 15:00-17:05
Logistics service providers	Senior official, executive	2019.11.11. 12:00-12:40
	Senior official, executive	2019.11.10. 14:30-15:30
Professional association, Logistics professionals	Head of department	2019.03.22. 10:00-11:20

APPENDIX III: METHODOLOGICAL NOTES FOR

CHAPTER 6 (POLITICAL SCIENCE)

a) Concentric circles of the discipline

Our starting point was the activity of maintaining the professional community, where we focused on institutional positions and publication activity. Recognizing that professionals contribute to a scientific community in varying degrees, we defined four concentric circles of the Hungarian PS community. They are core political scientists, repeated contributors and two outside groups: those who appear as one-off contributors (outsiders) and those who are parts of a foreign professional community without having Hungarian positions (foreign co-authors).

1. Core political scientists

The first group of core *political scientists* are situated at the centre of the professional community. Our inclusive approach meant that there are multiple ways to be classified into this group.

- a) Those who have institutional positions at Hungarian political science institutions OR
- b) Those who have at least 2 publications in political science AND
 - 1. Can be considered scientists through positions, background, and activities.
 - 2. Have political scientist as one of their major professional identities.

We allowed for multiple identities, as they are quite common and accepted in the social sciences. The criterion was for political scientist to be among the two main identities. This leads to an inclusive group of political scientists, which overlaps with several related disciplines.

2. Contributors

The group of repeated *contributors* cannot be considered political scientists by identity but contributed to the development of the community. These individuals...

- 1. have at least 2 political science publications...
- 2. ...but do not fit the criteria for being political scientists.

They comprise two typical groups: those who are not in academia, but publish in political science (advisors, politicians, diplomats), and those academics who are clearly not political scientists, but publish in political science. For example, an economist by training with a handful of political science articles could be classified as PS if they have no other clear identity or an economist if they have an explicit professional identity as one.

3. Outsiders (co-authors)

Outsiders are those who incidentally contribute to political science but have less than 2 publications in political science. In our database, they appear as co-authors to political scientists and contributors, but also theoretically include those who publish only once in political science. They are probably a highly diverse group of students of political science who publish once before leaving the profession, outsiders who once in a lifetime publish in a political science related topic but represent another profession, and co-authors of political scientists who are active in other disciplines as well.

4. Foreign contributors

Foreign contributors are those who publish in Hungarian political science or are coauthors to Hungarian political scientists and contributors but have no Hungarian institutional affiliation at the time, including secondary affiliations such as membership of the Hungarian Academy of Sciences or its Secretariat of Hungarians Living Abroad. Our database only includes the latter group of co-authors.

Positions at international institutions based in Hungary such as Andrassy Universidad Budapest and CEU were considered as Hungarian affiliations if the colleagues had

publishing, teaching, supervisory or associational activities in Hungarian or within the Hungarian PS community.

Those with Hungarian affiliations were included even if they had positions abroad. Scholars leaving Hungary without keeping any Hungarian affiliation were considered foreign the next year. Foreign scholars moving to Hungary were considered part of the community from the year after they fit the criteria. Temporary visiting positions were not considered as either leaving or joining the national PS community.

While foreign contributors could be political scientists, contributors, or outsiders by our definitions in their respective countries, we have not classified them as such, including them in the outsider group for most analyses.

b) Data collection

1. An iterative approach

We had multiple starting points for the list of Hungarian political scientists:

- The list of members of the Hungarian Political Science Association (HPSA) in 2014
- The list of colleagues who received awards from the HPSA in 1990-2018
- Those who published in the Hungarian Political Science Review, flagship journal of the HPSA from 1992(founding) until 2018.
- Those who selected political science or one of its subfields as their official area in their MTMT profiles.

We classified the above candidates, then compiled the complete lists of publications for those classified as political scientists and contributors, classified those publications, and then moved on to their co-authors. We repeated this process until saturation was reached and no new co-authors appeared⁴¹.

2. Operationalizing disciplinary classifications of the authors

Personal professional identities were determined on the basis of (in order of importance):

- 1. Self-identification through personal and institutional profiles, authors' statements and in some cases personal inquiries
- 2. Institutional positions in professional associations, scientific committees, departments, doctoral schools, research institutes
- 3. Publication and teaching portfolios
- 4. Professional background (university and scientific degrees)

In case of disagreements between these criteria, classifications were separately coded by the authors and resolved by consensus.

Classifying the disciplinary areas of publications was based on a combination of thematic features (through keywords, abstracts, and full text) and the classification of the publication venue (through self-definition and database classifications of periodicals and books). We opted for inclusiveness in this as well, so publications in non-PS venues with strong PS elements were classified as PS, even if they were interdisciplinary in nature.

3. Operationalizing publication activity

Our criteria for scientific publications were:

- Peer-review: Here we complemented MTMT classifications by more reliable Scopus, Scimago, Web of Science, CEEOL and DOAJ data. Where these were not available, we consulted the journal's editorial policy. Where the policy had no mention of scientific ambitions or peer-review, or it could not be found, we excluded the publication. Journals classified as peer-reviewed where this might not have been the case earlier were included if we have no record on the time of transition to peer-review.
- Scientific publications (as opposed to popular articles, editorials, teaching material etc.): Here we relied on MTMT classifications complemented by the

⁴¹ The odds of active, but non-publishing political scientists not appearing in our database are higher for earlier years due to fewer early starting points.

above-mentioned sources on publication venues⁴². Articles in journals featuring scientific and popular articles were checked individually against their sections' editorial policy or – where unavailable – our own assessment.

Our main data source was the Hungarian Scientific Biography (MTMT) official database⁴³. This is an unusually complete and detailed dataset as scholars are expected to maintain up to date MTMT profiles as part of performance evaluation systems. Records are validated by official institutional and central administrators.

For authors without complete MTMT profiles we compiled bibliographies through their personal or institutional pages, Google Scholar, ResearchGate, Academia.edu, LinkedIn, and by querying academic meta search engines (EPA-HUMANUS-MATARKA, National Széchényi Library catalogue). This supplementary publication data found to be reliable only for journal articles, so we focus on journal articles for most analyses, with checking robustness on a restricted (MTMT) sample with books and book chapters included. Biographic data was also supplemented from the same sources for incomplete or missing MTMT profiles.

c) Database

Our main database contains the complete scientific publication data of PSs and contributors for the period of 1990-2018, with authorships (author-publication combinations) as observations (rows). This allows us to capture the richness of publication level data combined with biographic information. Journal profiles and quality data were supplemented through matching DOI and journal names to Scopus, Scimago and Web of Science data.

After this build up, we are certain that all the pieces of publication appear in our database that were published in the field of political science understood inclusively during the past three decades by authors who are located in Hungary and/or have connections with Hungarian political science (thus for example, colleagues at CEU were included if and when they had ties with the Hungarian academic community) either due to their position or their publication profile. In the end the database included all types of publications – irrespective of language, length, or format from commentaries – through research notes – to "proper" research articles.

A secondary panel database on publication performance with author-year combinations as observations (rows) was also constructed, to allow for analysis based on the whole active population for a given period. Political scientists and contributors were considered active from their first scientific publication, scientific degree, or academic position until their passing, as we lack reliable data on retirement and career change events.

⁴² A significant part of MTMT records had to be corrected for consistency purposes, mostly reclassifying them as non-scientific publications.

⁴³ The main GUI is at: https://m2.mtmt.hu/gui2/, while the API was used to query author and publication data.

AUTHOR'S RELEVANT PUBLICATIONS

Journal articles

- Molnár, G. T. (2019). A vállalkozói szerveződések szerepe a szerződéses kapcsolatok támogatásában. Egy magyar ágazat tanulságai. Vezetéstudomány Budapest Management Review, 50(9), 66–80. https://doi.org/10.14267/VEZTUD.2019.09.07
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- Molnár, G. T., & Ilonszki, G. (2021). Identity formation of the profession in a latecomer political science community. European Political Science, 20(1), 139–158. https://doi.org/10.1057/s41304-021-00318-w
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Book chapters

- Mike K., Boza I., & Molnár G. T. (2018). A vállalkozói szerveződések mint szerződéstámogató intézmények. Egy magyar vállalati felmérés tanulságai. In Valentiny P., Kiss F. L., Nagy C. I., & Berezvai Z., *Verseny and Szabályozás* 2017 (pp. 62–90). MTA KRTK Közgazdaság-tudományi Intézet.
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- Mike, K., Molnár, G. T., & Boza, I. (2021 [unpublished]). *Do Business Associations Support Rent-Seeking?* Presented at: 2019 Meeting of the European Public Choice Society, Jerusalem, Israel, 2019.04.01-04. & at: Magyar Közgazdaságtudományi Egyesület XIII. Éves Konferencia, Budapest, Hungary, 2019.12.19-20.
- Mike, K., Molnár, G. T., & Boza, I. (2021 [unpublished]). Do business associations support contractual relationships? Evidence from firms in a well-functioning legal order
- Molnár, G. T., Ilonszki, G., Camerlo, M., & Gouvea, G. (2021 [unpublished]). *Towards Normal Science: A Comparative Assessment of the State of Political Science Discipline in Portugal and Hungary* Presented at: IPSA 26th World Congress of Political Science, Lisbon, Portugal, 2021.07.10-15.
- Ilonszki, G. & Molnár, G. T. (2021 [unpublished]). *Identitás, professzionalizáció, intézményi egyenetlenség. A hazai politikatudomány a publikációs teljesítmény változásainak tükrében* Presented at: Magyar Politikatudományi Társaság 2021. évi Vándorgyűlése
- Jungblut, J. et al. (2021 [unpublished]). The Advisory Roles of European Political Scientists: Theoretical Classification Tested by Confirmatory Factor Analysis Presented at: 2021 IPSA World Congress of Political Science