

Towards a set of indices for relational economy on the example of Hungary

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ABSTRACT

While informal relations between economic and political actors are prevalent in post-communist economies, proper tools for their quantitative measurement are lacking. This paper is a starting point for thinking about this issue. Relying on previous research (Magyar – Madlovics 2020), we elaborate the concept of ‘relational economy,’ and discuss the problem of measuring its peculiar phenomena by existing direct and indirect data. Towards a set of indices for relational economy, we consider the use of proxies in three ways: (1) a radar chart composed of specific company data; (2) ‘moments of truth’ when property movements reveal an actor’s *de facto* ownership status; and (3) ‘moments of truth’ when adoption to or exclusion from the informal patronal network is accompanied by a significant change in financial situation. Illustrations to each of the three methods are provided from the case of Hungary after 2010.

KEYWORDS

patronalism, paternalism, informality, measurement, indicator, proxy, Hungary

JEL CLASSIFICATION INDICES

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1. INTRODUCTION

In the post-communist countries, the prevalence of informal relations between economic and political actors has been noted by scholars since the 1990s. Numerous case-studies described the

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role of oligarchs, particularly the Russian oligarchs who first emerged as beneficiaries of the monopoly privileges during the transition (Kryshnanovskaya – White 1996; Szelényi – Szelényi 1995), became highly influential patrons of domestic politics (Hoffman 2011; Åslund 2005), and later became clients in the informal network of Russian president Vladimir Putin (Markus 2017; Yakovlev 2006). Outside Russia, oligarchs and more generally informal relations that distort political processes as well as market-based, competition-oriented economic functioning have been documented in the Czech Republic (Klíma 2019), Moldova (Konończuk et al. 2017), Ukraine (Havrylyshyn 2016), Hungary (Magyar 2016) and Kazakhstan (Peyrouse 2012).

Oligarchic actors represent a theoretical and empirical challenge to economists as their emergence, functioning, and occasional exit do not follow the behaviour one could expect on the basis of the incentives of either private or public ownership. Rather, their economic attributes seem to conform to their changing informal relations. An example from Hungary might illustrate this. Mr. Lőrinc Mészáros, the Prime Minister Viktor Orbán's childhood friend and the former mayor of his home village, was turned from a gas fitter who had amassed in 20 years a modest wealth of ca. 30 million HUF (ca. €93 thousand, in 2010) into a billionaire with 24.4 billion HUF (ca. €75.7 million) by 2015 from public tenders; Mr. Lajos Simicska, an oligarch who was a close friend of Viktor Orbán during his military service and became a main winner of public tenders during his second term (2010–2014) suddenly became unable to win tenders from 2015, with Simicska selling many of his companies and losing two-thirds of his wealth, shrinking from 112 billion to 39.2 billion HUF (ca. €347 to 121 million, respectively) in 2015–2020; and Mészáros, parallel to the fall of Simicska, began skyrocketing and expanded his wealth almost twenty-fold to 479 billion HUF (ca. €1.5 billion) in 2015–2020, becoming Hungary's richest man from public tenders and state subsidies. The expansion of Mészáros' business empire which now ranges from construction to tourism, heavy industry, energy, banking, media, and agriculture was found incomprehensible by economic analysts in business terms (Laki 2019), and the sudden exit of Simicska after years of being the country's most influential oligarch can also be hardly explained in terms of entrepreneurial strategy.

However, case studies are no substitutes for macroeconomic analysis which would describe, in quantitative terms, the weight of such actors and processes in the national economy. Case studies are important to evince that such phenomena exist, and scholars can obtain impressions from them on the basis of which typologies can be created. This is the work we have done in our previous research (Magyar – Madlovics 2020): to identify, on the basis of a mosaic of case studies and existing literature, the key analytical dimensions that distinguish the post-communist 'relational economies' from the Western-type 'market economies', and relationally embedded actors (i.e., oligarchs) from non-embedded actors (i.e., major entrepreneurs). This theoretical exercise yielded the system of criteria for comparative analysis, and so-called ideal types have been created as points of reference against which actual phenomena can be assessed (Weber 1949). The question that remains is the empirical one of measuring. That is, how one can tell oligarchs from entrepreneurs in the economy; which actors and sectors of the economy conform to relational logic and which ones, to market logic; and what kind of measurement tools are applicable to answer such questions and develop databases for cross-country comparisons.

This paper is a starting point for thinking about these issues. Our aim is to take up the problem of measuring the relational economy, to show why the currently available measurement tools are inadequate and try to give some ideas on the direction to take in measuring relational



phenomena. Our study thus anticipates complex economic analysis and attempts to illustrate the approach needed for such analysis.

In the second Section of the paper, we present the main theoretical elements, ideal types and analytical dimensions based on our previous research. In the third Section, we focus on the problem of measurement, discussing existing methodologies and their difficulties when using them in a relational environment. In the fourth Section, we discuss the method of developing proxies as a way of detecting informal embeddedness, to which the example of Hungary is used as an illustration. Showing some preliminary results on various companies from major economic actors in Hungary, we point to the possibility of creating databases on the basis of company data (which can be collected universally for every company) and so-called ‘moments of truth’ (which are irregular but economically significant events when the regime reveals its actual nature).

2. THE CONCEPTUAL FRAMEWORK OF THE RELATIONAL ECONOMY: THREE BASIC DICHOTOMIES

The recognition of the problem of measuring the relational economy begins at recognizing post-communist regimes not as deviant forms of Western-type systems but as *sui generis* structures. We developed such an interpretation in Magyar – Madlovics (2020), following detailed analyses published in volumes of studies we had compiled for the region in general (Magyar 2019) and for the case of Hungary in particular (Magyar – Vásárhelyi 2017, 2015, 2014, 2013). Below, we present three basic dichotomies, each consisting of a pair of ideal types. Pioneered by Weber (1978), ideal types are theoretical constructs rather than actual descriptions. They are models abstracted from reality, representing each phenomenon in its ideal purity. This is necessary to create typologies and highlight the key aspects which divide the types and can serve as dimensions of actual analysis.

2.1. Patronal vs. non-patronal relations

The first dichotomy is between patronal and non-patronal relations. In general, patron-client relations are defined as vertical relationships which involve dependence and inequality of power as the patron controls key resources to the client (Eisenstadt – Roniger 1980). In post-communist economies, patronal relations are formed between political and economic actors, constituting patronal networks which lack formal structure and legitimacy (Hale 2015). Such networks coexist with formal, e.g., state or party institutions, and their members follow the unwritten norms and interests of the network rather than the expectations of the formal, constitutional order (Baez-Camargo – Ledeneva 2017; Ledeneva 2013). At the top of the network is the chief patron, typically the president or prime minister, and clients are situated below him in a pyramid-like hierarchy of dependencies.

Patronal relations are distinguished by four key analytical features (Table 1). First, post-communist patronal relations are dominantly informal, existing not by virtue of bureaucratic, legally defined dependence but the *de facto* power a patron disposes over and can use to extort their clients. This is closely related to the second point, namely that non-patronal relations involve normative rules and impersonally provided benefits or punishments to certain groups, while patrons in patronal relations select between actors on a personal and discretionary basis.



Table 1. Contrasting non-patronal and patronal relations

	Non-Patronal	Patronal
Institutions	Formal	Informal
Regulations	Normative	Discretional
Authorization	Collective (Authorization)	Personal (Authorization)
Command	Bureaucratic/Institutional chains	Clientelist/Personal chains

Source: Own construction.

Rewards and punishments, such as the provision or withdrawal of state subsidies or public projects from the network’s embedded actors, are meted out with the exclusive, personal authorization of the patron and by targeting the client, a person or a company directly.

Third, patronal systems place decision-making power into the hands of a single actor, the patron, and therefore authorization held or given in these systems is personal. This is in contrast to Western-type non-patronal systems, which are characterized by collective authorization and decision-making (i.e., bodies decide instead of particular people) precisely to uphold impersonality and avoid arbitrary decision-making. Finally, in non-patronal settings private or public organizations develop through bureaucratic, institutional chains with several levels of formally defined actors and corresponding procedures. In contrast, the organizations characterized by informal patronal relations depend on clientelist, personal chains. Individual companies might still have a formal bureaucratic management, but company networks of legally owned as well as offshore companies and ones owned via intermediary front men are linked together by the person who receives favours as a member of the informal network. The key actor is always the person (e.g., an oligarch), and it is them to whom a variety of companies, conglomerates, networks, or a web of personal clients is attached.

2.2. Relational vs. market economy

We define economies dominated by informal patronal networks as ‘relational economies’, in contrast to market economies dominated by non-patronal relations. Among several peculiar features discussed in our earlier works (Madlovics – Magyar 2021; Magyar – Madlovics 2020: 361–536), the most important effect informal patronalism exerts relates to the nature of relations between the state and the economy.

While such relations have been noted to have market-distorting effects in Western settings as well in the literature of *rent-seeking* (Holcombe 2018; Buchanan 1980; Krueger 1974), rents in a market economy are created by state intervention that is (1) normative, targeting social groups on the basis of objective, impersonal criteria; (2) legal, manifesting in formal laws, regulations, and taxes; (3) lobbied for by interest groups which engage in a competitive process (Congleton – Hillman 2015). In contrast, rents in a relational economy are created by state intervention that is (1) discretionaral, targeting certain people or companies the patron chooses to affect; (2) combines legal and illegal elements; (3) received by the clients and sub-patrons as rent-seeking loses its competitive character and rents are being distributed from above.



What ratio of markets in an actual economy (like the Hungarian one) follow the logic of informal patronal networks, and which ones are not relational but still market-oriented, is an empirical question, one that is to be answered precisely by the measurement tools discussed below. On the theoretical level, two points need to be seen. On the one hand, a relational economy may feature various types of economic actors: from market-oriented to relational, from private to publicly owned, from small to big firms, from domestic to international players. Several post-communist economies feature such dualities, many of them influencing the behaviour of economic actors significantly (Bohle – Greskovits 2012). On the other hand, the relational economy means that relational phenomena are *dominant*. Dominance can be in terms of market share as well, but most importantly it means that relational actors can subordinate any other type of economic functioning, actor or property to their own goals. Patronal elements are given power over others by the (political-economic) means of the informal patronal network, to the operational logic of which the relational economy is adjusted.

Beyond the changing nature of rent creation, the other key feature informal patronalism brings to the relational economy is the conditional character of property rights. In a market economy, (1) property rights are upheld impersonally, meaning economic actors ‘do not need to participate in politics to maintain their rights, to enforce contracts, or to ensure their survival from expropriation’ (North et al. 2009: 112); (2) *de jure* and *de facto* rights of ownership coincide, meaning an entrepreneur can exercise all use and control rights legally associated with their property (autonomy and freedom from coercion). In contrast, in a relational economy (1) property rights are conditional as any actor’s property may be taken over on a discretionary basis in the case they challenge the interests of the chief patron; (2) *de jure* and *de facto* rights of ownership diverge in the informal patronal network (no or restricted autonomy in face of coercion should they fail to comply the chief patron’s informal orders).

Oligarchs and front men in a relational economy are *de jure* owners of their property, but *de facto* key elements from the bundle of property rights are exercised by their patron in the informal patronal network (Table 2). In the case of low- and mid-profile front men, *de jure* and *de facto* property rights are completely detached: formal ownership remains little more than dead letter as the front man has no autonomy vis-à-vis their patron who actually exercises these rights. The main function of low- and mid-profile front men is the legal personalization of the patron’s accumulated wealth, keeping the wealth of a patron who could not legally own it. The situation is only slightly different in the case of a high-profile front man, who takes on the role of operating the embedded companies as well. By allowing to exercise certain *de jure* rights, the patron actually delegates his right to access and manage his *de facto* property. But the rights to withdrawal, exclusion and alienation remain in the hands of the patron, who exercises them through the front man via informal ties.

Recent literature on post-communist regimes attempted to capture phenomena associated with the relational economy within the paradigm of ‘varieties of capitalism’ (Széleányi – Mihályi 2019). While the relational economy is capitalist in the sense that it features – *de jure*, on the formal level – a dominance of private ownership, the system has – *de facto*, on the informal level – markedly different characteristics which are also system-constituting features that overrule the system’s formal identity. While the relational economy can be seen as a variant of capitalism, making ‘capitalism’ the primary criterion of categorization carries the risk of conflating relational economies, and their *sui generis* features, with Western-type economies, hindering the understanding



Table 2. Property rights of economic and political actors in a liberal democracy and patrimonial autocracy

Property rights		Liberal democracy		Patrimonial autocracy			
		<i>de jure</i> ownership = <i>de facto</i> ownership		<i>de jure</i> ownership = / = <i>de facto</i> ownership			
		Entrepreneur	Politician	Front man (low/mid-profile)	Front man (high-profile)	Oligarch	Poligarch (Chief patron)
Use rights	Access	+	–	–	+	+	+
	Withdrawal	+	–	–	–	+ –	+
Control rights	Management	+	–	–	+	+	+
	Exclusion	+	–	–	–	+ –	+
	Alienation	+	–	–	–	+ –	+

Source: Modified from Magyar – Madlovics (2020: 477).

of their actual nature.¹ Placing the relational economy among the varieties of capitalism may be done by the Weberian concept of “political capitalism,” which can be used for a separate group of types of capitalism including, beyond the relational economy, other concepts like crony, patrimonial, or clan capitalism as well (Holcombe 2018; Robinson 2013; Kosals 2007).

2.3. Oligarchs vs. major entrepreneurs

Oligarchs are key economic players in relational economies, embedded in the informal patrimonial network. Yet politically well-connected major entrepreneurs in Western settings are often referred to as ‘oligarchs’ as well, and parallels are sometimes drawn between Russian and Ukrainian oligarchs and American ‘robber barons’ as well (Åslund 2005). Others point out that Russian oligarchs did not create new, value-productive enterprises or innovative products, and they did not invest in the Russian economy either but engage in capital flight and money laundering via foreign markets (Cooley et al. 2018; Granville 2003).

In our theoretical framework, the oligarch and the major entrepreneur are distinguished as ideal types along four major dimensions (Magyar – Madlovics 2020: 164–168):

- *The nature of political connections*, where a major entrepreneur has formal relations dominantly influencing his economic activity (lobbying) and the relationship is a voluntary deal (both parties retain their autonomy), whereas an oligarch has informal relations dominantly

¹The discussion of the relational economy in this paper is limited to the theoretical points that are strictly necessary to understand what patrimonialism is and those that will be measured in Section 4. The discussion of other issues – such as the relational economy’s sustainability, whether it can survive without the continuous redistribution of income and wealth in the economy, or its links to the world economy – are omitted accordingly. A comprehensive theoretical presentation of the relational economy can be found in Magyar – Madlovics (2020, particularly in Chapters 5 and 7).



influencing his economic activity (embedded in the ruling elite) and patron-client relations with a patronal network;

- *The nature of political favours*, where the major entrepreneur enjoys normative regulations and non-excludable favours (applicable to everyone in the industry), whereas an oligarch enjoys discretionary regulations and excludable favours (targeted to certain people or companies);
- *The nature of success*, where the major entrepreneur (1) becomes ‘major’ through technical/organizational innovation, and (2) remaining ‘major’ does not depend on their personal allegiance to a *de jure* political actor (can remain profitable without political favours), whereas the oligarch (1) becomes oligarch irrespective of market innovation (securing monopoly grants with patronal support), and (2) remaining oligarch depends on their patronal allegiance (depends on political actors maintaining discretionary privileges);
- *The nature of roles and property*, where lobbying relations in a market economy do not change the sociological character of political and economic actors (the *de jure* ownership of the economic actor’s property is *de facto* exercised by him, and the political actor remains *de facto* propertyless and confined to the political sphere – hence, the dichotomous category to ‘entrepreneur’ is ‘politician’), whereas patronal relations in a relational economy change the sociological character of political and economic actors (the *de jure* ownership of the economic actor’s property is *de facto* exercised, at least partially, by his political patron, who therefore enters the economic sphere and becomes a property owner – hence, the dichotomous category to ‘oligarch’ is ‘poligarch’).

The presence of oligarchic entities embedded in the relational economy poses a challenge to data collection. For oligarchic companies have two identities: a formal identity, defined by their legal attributes such as belonging to the private or the public sphere, or the person of the legal owner; and an informal identity which is the owner’s informal position in the patronal hierarchy. Thus, specific indices are needed to identify the informal side of patronal companies, and to be able to measure the determining factor of informal patronalism in post-communist relational economies.

3. THE PROBLEMS OF MEASUREMENT: CURRENT METHODOLOGIES AND OFFICIAL DATA COLLECTION

While the difficulty of capturing informal or hidden economic activity in quantitative terms is well-known to scholars (Charmes 2020; Feige 2016; Shumska – Nezhyvenko 2013), case studies and databases have been produced for the post-communist region since the 1990s. By method, existing case studies related to patronal economies can be grouped roughly as follows: (1) qualitative analyses; (2) quantitative analyses based on direct data; and (3) quantitative analyses based on indirect data.

We mentioned qualitative analyses in the Introduction, carried out by (political) economists focusing on oligarchic tendencies in Russia, Ukraine, and other post-Soviet countries (Åslund 2019, 2015, 2005; Sakwa 2012, 2008). Qualitative assessments can provide authentic descriptions and valuable insights into the functioning of informal patronal regimes



(Hale 2015; Lanskoj – Myles-Primakoff 2018; Dawisha 2014; Judah 2014). However, their results are often non-comparative as they are not ordered by statistically interpretable data.

Quantitative analyses utilize statistical data which may either be direct or indirect (Franklin 2008). Direct data are collected for observable phenomena where the measured variables are treated as ones that are directly relevant to, evidence the presence of, and immediately describe the object of the research. Such data may be collected by national statistical offices, international organizations like the World Bank, or they can be original databases built by the researchers. Direct data are routinely used in mainstream macroeconomic analyses focusing on economic development in terms of GDP growth, unemployment, and inflation, and they are also utilized by those interested in the process of privatization and (re)nationalization in the post-communist region (Csillag 2020; Mihályi 2014; Lane 2007). But macroeconomic data measure economic performance, which is on a different analytical level from informal patronalism. We have reasons to believe that relational economies perform worse than non-patronal ones, particularly because informal patronalism belongs to the category of ‘extractive institutions’ (Acemoğlu – Robinson 2012), and they reduce the competitive part of the economy which restricts innovation (Kornai 2010). But poor economic performance may be explained by many factors beyond patronalism, and patronal countries can perform well under favourable circumstances (like Russia which produced, according to the World Bank, 7.2% GDP growth on average in 2000–2007). In short, performance indicators cannot capture the relational character of an economy. Moreover, the inherently unobservable nature of informality (Klima 2019; Ledeneva 2018) limit the validity of the conclusions that can be drawn from direct data. For example, measuring the extent of ‘private’ and ‘public’ ownership focuses on *de jure* property titles while not considering that these may not coincide with *de facto* ownership relations.

Original quantitative datasets may be compiled for phenomena official statistics do not measure. Importantly, the utilization of big data has recently gained ground in post-communist corruption research through the analysis of public procurements in Hungary (Corruption Research Center Budapest (CRCB) 2022, 2016a, 2016b) and other European countries (Fazekas – Cingolani 2017). These data are extremely valuable and offer a unique opportunity to detect signs of top-down corruption patterns. Using them as direct data, however, can be misleading. For example, they are used to measure ‘corruption risk,’ defined as high if the public procurement occurred without a notice and without competition. This variable is treated as directly relevant for policy design, indicating a wrong or deficient legal framework that dishonest administrators and private actors may exploit (I. J. Tóth – Hajdu 2017). The very word ‘risk’ assumes that corruption may only appear as a deviance in the system, and the leaders of the state would like to eliminate it. In relational economies, however, corruption is a top-down process as its (relational) phenomena are generated by patrons in the political as well as the economic sphere. Thus, there is more ‘corruption certainty’ than corruption risk in patronal economies, and serving the public good becomes the deviance (Magyar – Madlovics 2020: 394–401).

Beyond direct data, indirect data are often used in the form of survey-based scores. In this case, the phenomenon to be assessed – such as business climate or corruption – is treated as directly unobservable, and the opinion of experts is recorded as the indicator of the respective state of affairs. Such data are used for institutional reports as in the case of the World Economic Forum’s Competitiveness Reports (WEF 2016, 2010). Survey data are also a popular method of measuring corruption (Ledeneva et al. 2017). The most notable example is Corruption Perceptions Index (CPI) which is a composite index published annually for most of the world’s



countries, based on surveys with country experts and local businessmen by Transparency International (TI 2018a).

Indirect data solve the problem of the inherent unobservable nature of informality by not trying to measure the phenomenon as such but relying on expert opinions. Yet the general problem with these databases is that their survey questionnaires are tuned to the phenomena of market economy and not to the relational economy. Institutional reports measure the political sphere and the business climate in general, but not the specific phenomena of the relational economy like discretionary state intervention. As for CPI, we have assessed it as a measure of corruption in the post-communist region in an earlier paper (Magyar – Madlovics 2019), the results of which may be summed up as follows. CPI, and the numerous indices it is based on, focus on: (a) corruption in general, which blurs everything from occasional bribes to systemic top-down cases; (b) corruption in the form of private bribes, which appear only in everyday corruption as a means of deviating state action from the intentions of its rulers; (c) institutional guarantees such as ‘ability of governments to contain corruption’ (TI 2018a) which also reflects the assumption that state leaders actually want to persecute corruption instead of facilitating it.

These datasets still offer partial insight into the extent of corrupt transactions that are initiated by private actors, possibly under coercion, and whether these grow into the bottom-up state capture stage on a systemic basis. But they do not provide a picture of the situation when the initiator of a corrupt transaction is neither the company nor public administrators with the potential to extort, but the patronal rulers of the state itself. To put it in terms of an example: global corruption indicators survey private actors about whether they have to bribe officials to ‘get things done,’ for example to win a public procurement tender. But this way the survey disregards the situation when the entrepreneur does not even have the chance to bribe anyone, for public procurements are already distributed from the top and public officials must simply ratify the chief patron’s chosen client as winner. This pattern of criminal state may persist for countries such as Hungary, which are placed in the mid-range in terms of TI’s country rankings, as well as for countries such as Russia or the post-communist nations of Central Asia, who are placed at the bottom of the rankings (TI 2018b).

4. TOWARDS A SET OF INDICES FOR INFORMAL PATRONALISM: THE USE OF PROXIES

The more informality becomes dominant in a political-economy system, the fewer valid insights we can get from data based on opposing presumptions. Beyond normative biases, three factors steer scholars toward using such data. First, the fact that formal features are more readily measurable than informal ones make data collection by formal categories easier and such databases, more common. Second, using existing databases is less costly than collecting original data, which creates an incentive toward secondary analysis in research. Finally, the need for comparative analysis on a large sample of countries drive scholars to use the institutional formal databases which work with the largest country pool. To question whether formal data indeed coincide with the *de facto* status carries the risk of undermining the possibility of comparative research, which is provided only, at the moment, by the above-described databases. The issue of data availability gives rise to a vicious circle: Western categories define data collection; the collected data are used in analyses, implicitly accepting the hidden axioms of data collection;



the analyses perpetuate the Western analytical framework in the discipline, including data collection and the research paradigm in general.

Our aim is to consider the possibility of indices which can empirically measure the phenomena for which, in our previous works, only ideal types and case-by-case illustrations have been provided. When *de facto* relationships exist within the realm of informality and illegality, indirect data offer the only possible solution for measurement. However, the way we propose is not based on surveys but rather the application of proxies. Instead of direct data which directly show the respective phenomena, these ‘indirect indicators’ only suggest their presence based on the observation of other, related phenomena. These may be legally defined and measured, such as the operational attributes of a company that can be collected either in a single research or in the form of a longitudinal database. Indeed, utilizable data is currently collected as direct data, such as the big data and some national and international statistics mentioned above. However, they need to be reinterpreted as proxies to use them to detect informal patronalism. The use of proxies may not provide such a detailed analysis as a qualitative case study can, but they offer comparability between different political-economic systems.

While this paper does not desire to create a complete set of proxies, let alone to build a database, we will start exploring two possible ways of data collection: explorative and recognitive. The explorative way strives to create proxies to find embedded companies among the entirety of local economic actors. In this case, a uniform method of data collection is created, and it is universally applied for every company to see whether they conform to the relational or the market model. In contrast, the proxies of the recognitive way note and collect in a theoretically structured way all the cases when relational actors ‘reveal themselves’. While not universally collectable, recognitive proxies focus on irregular but typical cases such as property movements following a life event (like marriage). As the key actor in relational economies is always the person, not the institution, the monitoring of people who are suspected to be embedded actors can lead to ‘moments of truth’ regarding their *de facto* ownership status, or whether their wealth is indeed a result of adoption into the informal patronal network.

In the following, we are going to offer possible proxies for both types, with illustrative results from the case of Hungary. We selected this country for illustration because of data availability, and the high frequency of occurrence of (seemingly) relational phenomena. In 2010, Viktor Orbán and his party Fidesz won a supermajority at the national elections and instituted a regime he refers to as ‘illiberal democracy’ (Orbán 2018, 2014). Critics have recognized the regime as a prime example of democratic backsliding, involving extreme concentration of political power through the erosion of checks and balances and the colonization of state institutions by Orbán’s clients (Bozóki – Hegedűs 2018; Kornai 2015). However, Orbán became not only a strong *de jure* prime minister but a *de facto* chief patron as well, presiding over an informal patronal network that extends beyond the realm of political institutions and the formal institutional setting in general (Magyar 2016). Instead of state capture, i.e., the bottom-up corruption of the state by oligarchs, Hungary represents a case of oligarch capture, whereby the chief patron disciplines and domesticates the oligarchs and settles them into his own chain of command (Becker 2017). As a result, the last decade has seen the institutionalization of relational economy in Hungary, with the gradual annexation of different markets through the methods of predation and relational market-redistribution (Madlovics – Magyar 2021).



4.1. Is the company oligarchic? A radar chart of embeddedness

An explorative proxy can be developed to distinguish oligarchs from entrepreneurs. The theoretical differences between them can be used to make empirical conjectures on their economic behaviour, which may be ordered into four subsequent groups: creation, accumulation, operation, and consolidation (Table 3). As the political favours received by oligarchic companies are discretionary, their creation will involve state arbitrariness, special laws, monopolistic grants, and/or directed privatization of state assets. As a result, oligarchic companies will have an incredibly fast ramp-up phase, becoming ‘national champions’ in spite of the fact that they were established immediately prior to their first state procurement order being announced (or even after that). The nature of political connections, i.e., embeddedness will also allow oligarchic companies to win huge state contracts without appropriate references or base capital.

This leads to the second phase, accumulation of wealth and capital for the company. Benefitting from its embeddedness, the oligarch’s company will be able to secure loans if necessary – under rather favourable terms – without any capital cover from state banks or banks that went through transit-nationalization: they had been taken into temporary state care, before they were privatized to a loyal member of the informal patronal network (Várhegyi 2017). Measuring loans from the patronal network in a country needs delimitation of the network and its lending institutions. Although many elements of financing are probably hidden

Table 3. Possible empirical differences in the positions of major entrepreneurs and oligarchs

	Major entrepreneur	Oligarch
Creation	Established by private actors (speed of ramp-up phase dependent on market fluctuations)	Established by state arbitrariness (fast ramp-up phase, becoming “national champion” very soon)
Accumulation	Based mainly on market, though also possibly on competitive privatization	Based mainly on directed privatization, state concessions, public procurement with illegally guided bids
	Receiving loans from financial institutions evaluating the company’s financial situation	Receiving dedicated loans from the patronal network and its financial institutions
	Receiving state subsidies on a normative basis	Receiving dedicated state subsidies
Operation	Innovative, market-oriented, optimized for market demand	Non-innovative, patronal-network oriented business, optimized for domestic rent-collection
	Pricing depending primarily on market competition	Overpricing depending primarily on patronal relationships
Consolidation	Profits utilized in transparent fashion, largely reinvested	Profits drawn out of the venture, utilized in other (less transparent) fashion

Source: Modified from Magyar – Madlovics (2020: 167).



(Chayes 2019), banks of the aforementioned kind can be identified on the basis of case studies in the case of Hungary (Várhegyi 2019; Király 2016). Beyond loans, the accumulation phase may also feature state subsidies (legal discretionary support) and overpriced public procurements with guided bids (illegal discretionary support).

The circumstances of creation and accumulation largely define the operation of the oligarchic company. While the profit of a major entrepreneur's venture is oriented toward the market which forces it to be innovative (Kornai 2010), the oligarch is dependent on the patronal network rather than market innovation. Them being winners of state contracts and procurements suggests that they might be only administrative, rent-seeking coordinators, and not technology coordinators. That is, they can function as gateways of accessing to state contracts, and partner with such large subcontractors or associates in a consortium who under proper rules of competition would be able to carry out the tasks specified by the procurement contract on their own. However, as they lack patronal embeddedness, they require the oligarchic company which can profit, not from carrying out the activity or market-oriented innovation, but as rent-seeking coordinator establishing a system of subcontractors. Also belonging to operation, the scale of taxed profits within the total revenue in the case of an oligarchic company should significantly exceed those at businesses in the same industry, but not enjoying patronal support. This disproportion in scale indicates the venture's nature as tapper of public funds and seeker of rents discretionally allocated from above.

Finally, consolidation refers to the utilization of profits. In the case of companies participating in fair market competition, especially the startups and developing ones, a decisive majority, if not all the profits are reinvested in the company, as would be only natural in the case both of an expanding field of activities needing investment and the likelihood of market fluctuation (Avanzi 2009). In oligarchic companies, the burden of necessary investments in equipment is transferred to the partner in the forced consortium, or the subcontractor, and any risks meant by possible market fluctuations are annulled by stable, politically directed contracts. Therefore, patronal embeddedness implies that the scale of dividends paid out of the taxed profits of an oligarch's venture will far outdo that of dividends taken out of patronally non-supported ones that are exposed to the market.²

In Table 4, key features of the kind of functioning we expect from oligarchic companies are associated with empirically measurable proxies. First, the fast ramp-up phase can be captured by the analysis of growth rate of turnover of the company (exceeding the growth rate of other companies in the industry). Second, the proxy for the detection of public procurements with guided bids is the calculation of odds of winning. This method has been pioneered by I. J. Tóth – Hajdu (2017), who offer it as a more telling indicator than the usual metrics of corruption risk and the number of single-offer bids. Simply put, if we know how many times a company wins and losses when it comes to public procurement, we can determine its winning chance by a simple formula: $\text{odds} = \text{number of tenders won} / \text{number of tenders lost}$. This metric may be

²What the oligarchs do with the paid-out dividends could be the subject of another study. In short, different money laundering schemes are possible, the most well-known of them being offshore finance and the global 'real estate sinkhole' (Cooley et al. 2018). In the case of Hungary, a number of private equity funds have been founded by the higher elite of the informal patronal network to hide and use their monies in non-transparent transactions (Bódis 2021). The mushrooming of these funds, and the fact that their ownership and operational data are concealed by law, is yet another proxy for state-aided oligarchic functioning.



Table 4. Proxies of oligarch embeddedness

	Oligarchic feature	Proxy
Creation	Fast ramp-up phase, becoming “national champion” very soon	Growth rate of net income
Accumulation	Concessions, public procurement with manipulated bids	Odds of winning public procurements (number of tenders won/number of tenders lost)
		State contracts/net income
	Receiving dedicated loans from the patronal network	Share of loans from state, state-reorganized, and/or transit-nationalized banks or company bonds (issued by the company, bought by the national bank)
	Receiving dedicated state subsidies	State subsidies/total assets
Operation	Non-innovative, patronal-network oriented business, optimized for domestic rent-collection	Sales for export (of non-innovative products)/net income
	Overpricing depending primarily on patronal relationships	Rate of taxed profits/net income
Consolidation	Profits drawn out of the venture, utilized in other (less transparent) fashion	Rate of dividends/taxed profits

Source: Own compilation.

scaled on the average for industry as well (I. J. Tóth – Hajdu 2021). However, this metric should be applied only to those companies which receive a substantial share of their income from public procurements, or otherwise bid on a substantial number of tenders. Therefore, a filter criterion should be introduced that sets the odds-proxy of the companies with marginal involvement in the public procurement market to zero.³

Beyond the odds, in the accumulation phase the dedicated loans and state subsidies may be directly assessed from company reports and reinterpreted as proxies of patronal embeddedness. In the operation phase, the proxy for non-innovative functioning can be the share of sales for export in two senses: (1) sales for export may be low if the company deals with consumer products and services, as the companies concerned are often optimized for domestic rent collection; (2) production for export may be high if the company deals with non-innovative products such as natural resources, which has been a typical field of oligarchic involvement in Russia as well as other countries in the post-Soviet region (Gaddy – Ickes 2013; Granville 2003). Finally, the above-average scale of taxed profits can be a mark of overpricing dependent on patronal relationships, just like the share of profits taken out of the company as dividends instead of being reinvested.

³In the calculations below, the criterion is set to be a minimum of 5 tenders (total number of wins and losses).



Individually, neither piece of data proves the oligarchic or embedded nature of a company. A successful major entrepreneur may also have high profits; fast growth in the initial phase may depend on other circumstances than support of patronal network; and market actors can also be regular winners of public procurements if they routinely apply with the best offers. The combination of the data, however, strongly suggests patronal ties and hence it is a proxy of patronal embeddedness. Normalizing the data into a standard scale, we can create a radar chart for patronal embeddedness for any company in an economy, and it serves as an indirect indicator for a company's oligarchic nature, or the lack thereof. In other words, we expect to see different patterns in the radar chart, allowing us (1) to tell oligarchic companies from those of major entrepreneurs, (2) to be able to compare each company by quantitative methods.

As the key actor in patronal settings is the person, not the organization, we will start illustration by selecting people (economic actors) whose major companies will be analyzed. In Hungary, the list of the 100 wealthiest Hungarians has been compiled since 2002 by the journal *Napi Gazdaság*, while *Forbes* also lists the 50 wealthiest Hungarians since 2014. As an illustration to the proxies of embeddedness, we have selected two actors from these lists, one presumably embedded and one presumably not embedded based on media reports.⁴ The two actors are Lőrinc Mészáros, who is currently one of the wealthiest Hungarian and reached this position under the premiership of Viktor Orbán, and László Bige, who was already ranked in the first issue of the 100 wealthiest in 2002, eight years before Orbán won supermajority in 2010.

A fertilizer tycoon with a near-monopoly in Hungary, Bige gradually became the second richest Hungarian in 2013, a position he maintained for the next five years as well. In contrast, the economic successes of Mészáros began only after 2010; until that, he had had only a single company and accumulated a modest wealth of ca. 30 million HUF (ca. €93 thousand) as a gas fitter (*Origo.hu* 2014).⁵ However, the estimated value of his assets grew 100 times in the years under the Orbán regime, making him the 88th richest Hungarian with 6.9 billion HUF (ca. €21.5 million) in 2013 and the wealthiest Hungarian with 381 billion HUF (ca. €1.2 billion) in 2018. By 2019, Mészáros and his family have become unavoidable actors in construction, tourism, heavy industry, energy and agriculture (*Forbes Magyarország* 2019). According to Mészáros, what contributed to his success are 'God's will, good luck, and the person of Orbán' (K. Erdélyi 2014). An elementary school classmate and close friend of Orbán and the mayor of his home village Felcsút in 2011–2018, Mészáros is believed to be the front man of Orbán by more than two-thirds of Hungarians (Medián 2018).

Difference of embeddedness is clearly visible if we compare the major firms of the two actors, each depicted in a separate radar chart (Figure 1). As the radar chart is presented here only for the sake of illustration, we have made two simplifications: (1) not every proxy from Table 4 is included, only the ones that were the most readily available in annual company reports and existing databases (but each of the four phase – creation, accumulation, operation and consolidation – is covered); and (2) the data have been rescaled into a range of (1,10), with each datum replaced by the number of the decile it falls into. As the averages were percentage data, the

⁴One pair of actors is sufficient for the purpose of illustration, although actual analyses of the Hungarian economy (and other ones) should bring more businesspeople under consideration. For example, Scheiring (2020) found that 32–43% of the 100 wealthiest Hungarians had clear political allegiance in 2002–2018.

⁵Calculating with 321.51 HUF = 1 EUR exchange rate (middle exchange rate of the Hungarian National Bank at the end of 2018). For the sake of simplicity, we will use the same conversion rate throughout the entire article.



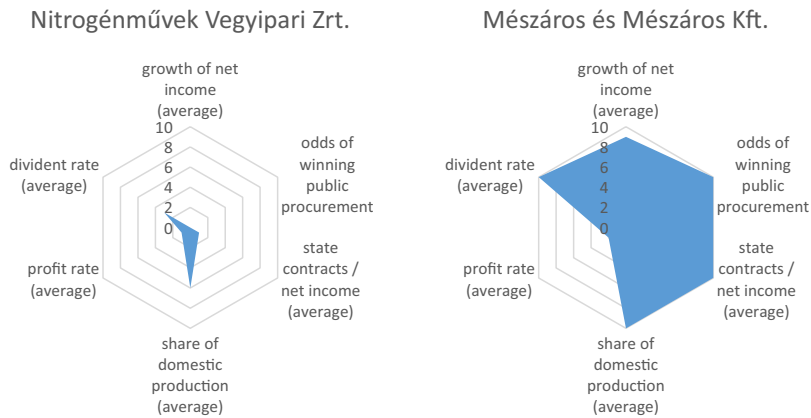


Fig. 1. Radar charts for Mészáros and Mészáros Ltd. (left) and Nitrogénművek Plc (right)

Note: The data are normalized to 1–10 scales, with each datum replaced by the number of the decile it falls into.

Source: CRCB Annual reports.

conversion only involved division by ten and upward rounding to the next integer; the odds of winning public procurement, ranging from 0 to 22.3, were assorted according to the deciles of a 0–30 scale. In addition, the share of export has been changed to the share of domestic production, so that it is consistent with the rest of the proxies where high numbers indicate high and low numbers mean low embeddedness.

Mészáros and Mészáros Ltd. (MM) is a construction company founded on 24 July, 2001 by the closest friend of the Prime Minister (as mentioned earlier). However, its success came after 2010, i.e., the establishment of the Orbán regime. According to the calculations of I. J. Tóth (2020a), the company ‘has increased its total assets 141 times at current prices, its sales revenue, 102 times and its net profit, 58 times since the change of power in 2010.’ The average annual growth of net income of the company in 2014–2018 was 81.4% with an average profit rate of 16.8%, accompanied by an average dividend payout ratio of 97.1%. The latter ratio is much higher than that of other companies in the construction industry, which tends to be around 10% (I. J. Tóth 2020b). In addition, ‘MM does not export at all,’ Tóth writes ‘(in 2007–2019), MM worked only in Hungary. “It would be difficult to export for a construction company,” one could say. But among the Hungarian-owned construction companies, there is one – and not the smallest one – where exports made up 25–35% of its turnover in 2005–2019, in one year reaching even 60%.’

In contrast, László Bige’s Nitrogénművek Plc. has been a nitrogen fertilizer producer for almost 25 years and experienced a number of ups and downs in accordance with market fluctuations (particularly the change of the price of natural gas, the main cost item of fertilizer production). Annual company reports show that the company grew at the average rate of 38.26% between 2009 and 2013, but in the 2014–2018 period it declined at an average growth rate of minus 8.18%. The profit rate of the company shows an average of 1.89% in the same period (individual rates range from 10.43% to minus 16.12%), whereas the dividend payout ratio of the company is at an average of 20.58%. Indeed, Nitrogénművek paid no dividends in



2016–2018 but reinvested its taxed profits. According to a statement given by László Bige to Country Magazine in December 2020, nearly €420 million worth of technological developments were effectuated between 2004 and 2017 to increase the company's production capacity and production reliability (Bige 2020). The need for Nitrogénművek to innovate and adapt to market circumstances is reinforced by the fact that, unlike MM, a significant part of its net income comes from exports: an average of 41.03% in 2014–2018.

The share of state contracts in the activity of Nitrogénművek is very low: it won only one public tender in 2017, the value of which was 0.07% of the company's net income that year. MM is much more heavily involved in public procurements, although the share of state contracts in its total business activity is difficult to ascertain. MM often wins tenders in consortium with other companies, and its share from the revenue is not public. As an approximate indicator, we used the value of state contracts divided by the net income of the company, even though this number sometimes exceeds 100% due to the presence of consortium partners. The likelihood of MM receiving a significant part of the total income, and therefore, the bulk of its own net income from state contracts, is underpinned by a number of factors. First, the company's ramp-up phase coincides with the time it started winning public procurement tenders. MM won no tenders before Orbán's victory in 2010; in fact, it was a small company on the brink of bankruptcy, starting to deplete its own equity of few million HUF (I. J. Tóth 2020b). In 2011, MM became a major player in the public procurement market, and expanded its assets at the above-mentioned dizzying rates. This leads us to the second factor, which is the excessive involvement of MM in the public procurement market. MM won 21 tenders in 2011 and 2015 (13, or 62%, in consortium) and 78 tenders in 2016–2020 (65, or 83%, in consortium). The value of the tenders in the 2014–2018 period was 317 billion HUF (ca. €986 million). Tóth (2019) calculates that 11% of the value of all state tenders between 2011 and 2019 went to MM, through MM as well as other companies in his (*de jure*) possession.

Finally, the odds of winning, depicted in the radar chart as a separate metric, also speaks volumes. Courtesy of I. J. Tóth, the odds for Nitrogénművek, three Mészáros companies (MM, Fejér BAL, R-KORD), and the industrial average of 97 companies have been made available to us for the 2011–2020 period.⁶ In that period, the Mészáros companies entered 188 tenders and won 136 of them. The average odds for the Mészáros companies were 2.93, while the industrial average was 0.61. The difference is even more striking if we consider only the tenders financed by the EU: in that case, Mészáros' odds is 7.79 against an industrial average of 0.63. Moving on to Bige and Nitrogénművek, they represent a separate world, having entered only one public procurement in the entire period. We can practically say "he did not take part in the game:" his primary customer was not the state. This is yet another piece of data indicating that Bige is a non-embedded major entrepreneur, while Mészáros is a relationally embedded actor.

⁶We are indebted to I. J. Tóth for the provision of the data (I. J. Tóth – Hajdu, 2021). The period of 2011–2020 is wider than what we considered for the previous data. The data also involve three Mészáros companies instead of just MM. Nevertheless, we decided to use this data for two reasons. First, the odds data are precise for Bige as they apply only to Nitrogénművek, and its single public procurement happened in 2017. Second, the purpose of this paper is more illustrative than data-reporting. The odds are an important metric that should be included in a radar chart of proxies. We therefore did not want to leave it out, even though our hands are tied by data availability. Naturally, such liberties should not be taken when these proxies are used to develop databases.



Constructed for more companies, the radar chart would yield different patterns which could be categorized, distinguishing different levels of embeddedness and, possibly, different models of relational functioning. MM and other companies that will be discussed below represent the model of a company experiencing rapid growth and extraordinary rate of profit, most of which is paid out in dividends. A recent survey examined dozens of other Hungarian companies owned by clients of Orbán's patronal network and found similar patterns in the case of them (Sztojcssev – Tiszai 2022). Other models are observable in the Hungarian economy, such as having no economic activity but collecting dividends from other companies and paying them out to the embedded owners (as shown by IBC Projekt, the company of István Tiborcz, Orbán's son-in-law) and creating a company for a single corrupt act with a large profit and dividend rate, followed by the liquidation of the company (as shown with the acquisition of ventilators during the pandemic by a company linked to Orbán's chief international adviser). Capturing such models might require additional criteria in the radar chart, indicating that this type of exploratory proxy can be further refined for the purposes of economy-wide database creation.

4.2. Who is the real owner? Moments of truth (1)

The second category of proxies are the recognitive ones, related to 'moments of truth' that suddenly bring informal patronalism to the surface. Naturally, these proxies can be recorded with respect to pre-selected actors under the suspicion of embeddedness, and they are most conspicuous in relation to sufficiently large enterprises. But giving information on a small selection of companies may actually carry national economic significance, which is indicated by the adopted discretionary legislation such as exempting mergers from antitrust law so they are protected despite achieving monopoly position in an industry has been common in Orbán's Hungary (Előd 2018).

To begin with, *de facto* ownership situations can be detected when the direction or the circumstances of the property movement deviate from the model behaviour of an actor in a market economy, and they conform more to the logic of a relational economy. From the case of Hungary, three of such 'moments' can be mentioned: (1) donation of property; (2) separation of property in the event of divorce; and (3) inheritance of property in the event of death.

First, a moment of truth involving *donation of property* was the 2018 establishment of the Central European Press and Media Foundation (CEPMF, or KESMA in Hungarian). Earlier, Orbán's patronal network managed to build a country-wide media empire dominating the Hungarian media market (Vásárhelyi 2017). Yet the formal independence of the related outlets was maintained until the appearance of CEPMF, which was created in August 2018 by a stock corporation that is owned exclusively by Gábor Liskay, a famous media figure loyal to Orbán (Codreanu et al. 2021). Three months later, on 28 November the moment of truth happened: the *de jure* autonomous owners of 476 media outlets decided at once that they would 'voluntarily donate' their property to CEPMF, requesting no compensation for the ca. 90 million EUR worth of companies. This fusion was later declared a 'merger of strategic importance at a national level', and therefore exempted from antitrust law by Orbán himself in a government decree. The board of CEPMF was made up of a former Fidesz MP, an active Fidesz MP, and the leader of a government-financed think tank who also actively spreads the current messages of Fidesz propaganda in television programs and the social media.



The chief patron's clear involvement in the merger on the one hand, and the fact that the *de jure* owners of the formerly independent outlets gave up their property for free on the same day on the other hand, do not follow the logic of market economy but that of a relational economy. The transaction represents a moment of truth that clarified the *de facto* ownership status of the former owners of the nearly 500 outlets, while the *de facto* status of the *de jure* owners of CEMPF itself became obvious in 2020, when Gábor Liszkay turned over his rights as the founder of CEPFM to Tamás József Kertész, the attorney of Mészáros. In 2020, CEPFM and the non-CEPFM pro-government (mainly Mészáros-owned) outlets represented a share of 86% of all state advertising spending, with only 14% going to other media (Codreanu et al. 2021: 65).

The second and third types of moment of truth are related to an event in the life of the *de jure* owner that necessarily entails some kind of transfer of their property. Such an event can be a *divorce*. In a Western setting, separation of common property among separating spouses follows legal guidelines: a divorcing major entrepreneur, who was *de facto* as well as *de jure* owner of his property, leaves a part of their property (such as 50%) with their former spouse. Famous examples from recent years include Bill Gates, the founder of Microsoft who divorced Melinda Gates in 2021, and Jeff Bezos, the founder of Amazon who divorced MacKenzie Scott in 2019. In both cases, the settlement left the former wives with billions from their husband's fortune, and they retained various positions in philanthropic organizations as well (Acuna – McDowell 2021). In the case of an oligarch or front man, however, the property is not theirs to begin with. As a result, their former spouse may receive a part of only what actually belongs to the front man, and the other pieces of property on their name – typically most of their *de jure* fortune – cannot be given up freely to the former spouse. This leads to a 'divergence' from the legal guidelines to 'correct' the automatic mechanism of ownership transfer to the former spouse, thereby revealing the *de facto* owner hiding behind the *de jure* one.⁷

Mészáros divorced his wife in 2020. Before their split, the companies V-Híd, Talentis Group, Mészáros Építőipari Holding, and Opus Global were co-owned by Mészáros and his wife, who were estimated to have a ca. 416 million EUR worth of company shares accordingly. Upon their separation, Mrs. Mészáros could keep almost nothing: her name was removed from the list of shareholders in every aforementioned (oligarchic) company. This immediately shows that, from the couple, Mészáros, who kept the oligarchic companies, had deeper relational embeddedness: he remained within the patronal network, while his ex-wife lost her position as a result of the divorce. But that he could not transfer any of his relational property reveals the lack of autonomy he enjoys with his *de jure* property.

Finally, we can observe a similar pattern in the case of *inheritance*. As a front man who passes away has not been the real owner, most of the property that formally belongs to them will not be transferred to those who have formal connections with them (i.e., their relatives or children) but other members like oligarchs and front men of the patronal network. We may say that it is actually revealed after the death of an economic actor how much of an autonomous owner and how much of a front man they were; that is, how much of their capital really

⁷This is to assume the former spouse is not a front man and does not take the front man role from their former spouse either. Otherwise, the ownership transfer may not diverge from legal guidelines, and the divorce may not provide a moment of truth. The same applies to the third type of moment of truth, where only the deceased can be a front man from their family so that his death results in a revelatory pattern of ownership transfer.



belonged to them and how much it belonged to the patron who is now forced, with the loss of the front man who guaranteed legal cover, to reallocate the wealth within his network.

The death of film mogul Mr. Andrew Vajna in 2019 left behind a large network of companies in Hungary and the US, including radio and television channels, production companies, advertising companies, luxury restaurants, casinos, and a video game animation company. Earlier, Vajna's embeddedness in Orbán's single-pyramid patronal network was clearly indicated by three factors: (1) he worked as the Government Commissioner in charge of the Hungarian film industry from 2011; (2) he obtained his casinos as a government concession following the monopolization of the market by discretionary regulations (Magyar 2017); (3) his media outlets – most importantly TV2, one of the largest commercial TV channels in Hungary – belong to the patronal media empire, functioning as a nation-wide distributor of Fidesz propaganda. After his death, Vajna's widow became the legal heir of his wealth, consolidated in various asset management companies. However, TV2 and other media companies soon moved to the ownership orbit of Mészáros, whereas the state-granted casino concessions were reallocated to two prominent clients, Kristóf Szalay-Bobrovniczky and István Garancsi.

The distribution of property after Vajna's death suggests limited but larger autonomy than in the case of Mészáros. The part of Vajna's empire directly related to power monopolization (media) and wealth accumulation (casinos) in Hungary remained in the hands of relationally embedded actors. But his widow could inherit a sizeable fortune, too, mainly from Vajna's US-based company network he had taken out in advance from the jurisdiction of the chief patron (capital flight). Imagining it as a scalable quantity, the degree of coincidence of *de jure* and *de facto* ownership rights was higher in the case of Vajna, an oligarch, than in the case of Mészáros, a front man.

4.3. Is the wealth based on adoption? Moments of truth (2)

While the radar chart of embeddedness serves to distinguish major entrepreneurs from relational actors, it leaves the role of embeddedness in wealth accumulation unassessed. Proxies to show how much an economic actor's wealth is indeed based on adoption may be moments of truth, now related to specific moments of adoption to or exclusion from the patronal network. Correlation between such moments and the change in the financial situation of the given actor reveals how much their wealth is based on their adopted status. Indeed, this method applies two levels of proxies: first, as the patronal network is an informal organization, any change in the relation of an actor to it can be observed only indirectly; second, the correlation between this change and the change in financial situation is interpreted as a moment of truth, and therefore a proxy, of the role of embeddedness.

First, family relationship can be seen as a proxy of informal embeddedness (Magyar – Madlovics 2020: 196–198). This is exemplified by the economic activity of the wives of high-ranking oligarchs in Hungary. Cecília Rogán-Gaál was the wife of Antal Rogán, a oligarch who is formally the Minister of the Prime Minister's Cabinet Office, and informally the beneficiary of a number of corrupt deals (TI 2018c). At the end of 2015, Mrs. Rogán-Gaál founded Nakama & Partners Ltd., a PR- and Media company. The firm's turnover in 2016 hit a modest 51 million HUF (≈. €159 thousand), which however grew ten-fold to 2017 and once again doubled in 2018, reaching a turnover of 1.2 billion HUF (≈€3.7 million). Involved in state projects, the company's profit rate was 42.7% in 2017 and 36.8% in 2018, with most of the taxed profits taken out as dividends in 2019.

Rogán divorced his wife in 2019, and re-married in 2020. Just before the wedding, the 28-year-old bride, together with her parents and two other individuals, purchased more than 1,000 hectares of forest, arable land, meadows, pasture, and buildings in Borsod-Abaúj-Zemplén



County for 1.6 billion HUF (€5 million), around 95% of which came from a loan supplied by the state-owned (patronal) Budapest Bank. The firm of Rogán's new father-in-law also received 2.3 billion HUF from a program financed by the EU. The pattern is the same as above, only this example shows how marriage can be a proxy of adoption into the network. For this life event clearly correlates with the sudden growth (or, rather, emergence) of financial performance of family members. In every case, we can see the companies of spouses skyrocket, receive state contracts and subsidies in spite of having no or little previous (pre-adoption) economic activity. The lack of the owner's entrepreneurial history is made up for by their patronal history; that is, their martial ties to an inner-circle poligarch.

The relationship between adoption and wealth is indicated by the moment of truth of adoption; yet it can also be confirmed by the moment of truth of exclusion. In this case, we can observe the opposite of the case of marriage: instead of the sudden increase of economic activity, a sudden downfall follows the severing of ties to the patronal network in general, and the chief patron in particular. The most spectacular moment of truth was the exclusion of Lajos Simicska from Orbán's network (Magyar 2016: 82–88). A close friend of Orbán from the 1980s, Simicska was the head oligarch who was not simply part of the inner circle but the main overseer of the economic side of Orbán's informal patronal network. With a two-thirds Parliamentary majority won again in 2014 for Orbán-led Fidesz, the chief patron decided to terminate Simicska's monopolistic role in economic affairs within the patronal network. Although the refashioning of the network of oligarchs and political and economic front men connected to the chief patron began in 2014, the conflict broke into public view in February 2015. It caused a dramatic roll-back of companies linked to Simicska, the main winner of public tenders up to that point (CRCB 2019). Their replacements were primarily front men and non-autonomous, patron-bred oligarchs, including the already mentioned Mészáros, Garancsi, and Tiborcz (Figure 2). Simicska's decline on the market of public procurements is one indicator of his fall, which also brought the decline in his wealth mentioned in the beginning of the paper.

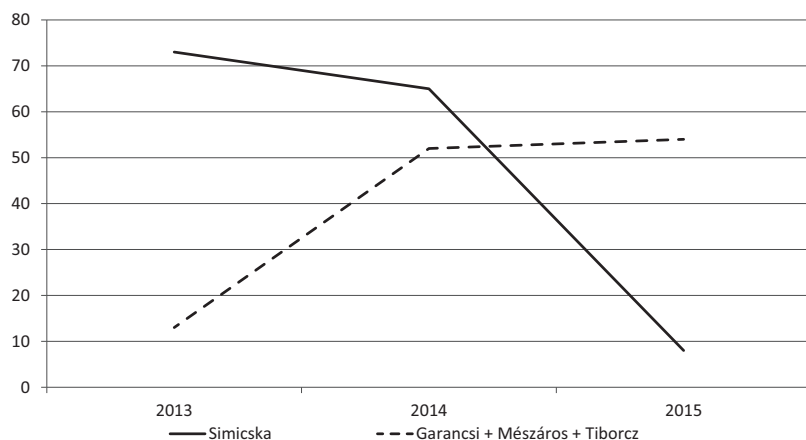


Fig. 2. Number of public tenders awarded to Lajos Simicska and István Garancsi, Lőrinc Mészáros, and István Tiborcz combined, 2013–2015

Source: Erdélyi (2016).



5. CONCLUSION

The problem of measuring informal patronalism poses a challenge for the analysis of post-communist economic systems. While quantitative as well as qualitative data for the region's economies exist, they are mostly based on the inadequate analytical language that steers them toward misinterpreting or outright disregarding the specific phenomena of informal patronalism. Scholars are also incentivized to use existing databases, as they are normally required not just to formulate hypotheses in their papers but immediately validate them with empirical data. If they make a hypothesis that questions the axiom of coincidence of *de jure* and *de facto* positions, for instance, it means they cannot rely on the most readily available comparative databases but need to collect original data. As building a comparative database with a decent country pool from the ground is costly, most scholars who realize the presence of informal patronal phenomena resort to the use of illustrations: illuminating case studies and 'storytelling'.

To conceptualize economic systems that are dominated by informal patronal networks, we invoked the concept of relational economy that was previously introduced in Magyar – Madlovics (2020). Its main characteristic features can be summed up as follows: (1) top-down, monopolized corruption as a system-constituting feature; (2) rent creation through discretionary state intervention; (3) conditional character of property and the divergence of *de jure* and *de facto* rights of ownership; (4) predation and centrally-led corporate raiding; (5) relational-market redistribution and annexing competitive markets via patronalization. These features are dominant in a relational economy, but they are not exclusive, and market-oriented elements continue to exist alongside relational markets. This is most conspicuous when the country has a more open economy (like Hungary), and multinationals remain important economic players. But more refined tools of measurement are needed to detect the relative ratio of relationally embedded and non-embedded actors in quantitative terms.

As a way towards a set of indices for informal patronalism, we offered possible ideas on how proxies can be used in explorative and recognitive ways. Illustrations to these methods have been provided through the case of Viktor Orbán's Hungary, the only relational economy within the EU. But similar patronal regimes and, therefore, relational phenomena can be observed all over the post-communist region, including other patronal autocracies like Azerbaijan, Kazakhstan, Russia (Chayes 2019; Peyrouse 2012), and patronal democracies like Bulgaria, Romania, and Ukraine (Magyari 2019; Markus 2015; Innes 2014). The conceptual framework offered in this paper is valid for these countries and, therefore, the proxies can be used to map their economies as well.

The concept and empirical measurement of relational economy brings both scholarly and policy implications. As for the former, database building with either the offered proxies or other ones invented on the basis of our conceptual framework would render post-communist economies⁸ statistically comparable with respect to the prevalence of informal patronalism. As for the latter, a more refined approach to corruption in post-communist countries can sharpen the analytical and strategic toolkit of foreign investors and international donors. Attempts to

⁸At this point, the analytical framework is refined to the post-communist region. Encompassing other regions may require the revision of the framework, questioning some of its axioms just like we questioned the axioms of the Western framework. The possibility of theoretical expansion of the framework is discussed in Magyar – Madlovics (2020: 733–736).



pressurize recipient countries to enact anti-corruption measures often break down and lead only to cosmetic changes, or the establishment of ‘creative facades that disguise non-acceptable practices behind an acceptable exterior’ (Baez-Camargo – Ledeneva 2017: 68–69). In the case of Hungary, the EU has achieved little to fight off post-accession hooliganism; to mention just one piece of data, 85.6% of the tenders won by Mészáros in 2011–2018 were EU-financed (I. J. Tóth 2019). With the help of the proxies, a signalling system can be created to detect the relational embeddedness of winners of public procurements, and funding can be linked not only to compliance with formal, legal rules (which is monitored by agencies like the European Anti-Fraud Office, OLAF) but also to proxies that indicate the presence of informal patronalism.

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