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The Constellations of Economic Power: The Position of Political Actors, Banks and Large Corporations in the Network of Directorate Interlocks in Hungary, 1997

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The aim of this paper is to gain an empirical insight into the structures of economic power in Hungary at the end of the nineties. The paper proceeds by the guidance of the weberian definition of power; as power is existing in relations, the paper is intended to be a relational study of the most important actors in the Hungarian economy, using directorate interlocks to trace these relations. The concepts of centrality and autonomy are used to model the possible constellations of relations that might refer to power. Besides tracing these two constellations, the paper also aims at mapping the qualities that are linked by the analysed relations. The propositions of the privatisation debate, the bank power discourse and the market transition debate are also reinterpreted in a relational context.

INTRODUCTION - A STORY AND A DEFINITION(2)

The aim of this paper is to discover the main dimensions of the interorganisational relations in contemporary Hungary, and to assess a number of hypotheses concerning economic power with the aid of these relations.

A paper based on empirical data is necessarily a compromise between the amount of details lost and the generalisability gained. In this paper many details will be lost concerning the interrelatedness of the actors in the economy. Such details are the courses

of action in time. So before turning to data, let us see some of the key actors in a short story.

> *In 1992 a large, stagnating company in textile industry was reorganised by the State Privatisation Agency to become a joint stock company, what was a usual thing in those times. The Agency invited a tender to sell the Company. The first tenders were unsuccessful, the SPA spotted one of the partners of the Company to become an owner. The Partner planned to buy the shares mostly of credit. Everything went in order, except that the Partner company haven' t received the credit, thus it was unable to pay the sum until the proposed deadline. This was the time for the Bank to come to stage: the Company to be sold became indebted so much by this time, that the Bank should have started the filing process. The Bank instead of doing so, supported the group of top managers at the Company to buy it, while it delegated two members to the board. The Bank realised, that filing has a lesser net present value in this case, so it decided to become an owner. For this operation the Bank has utilised its connections at another bank to prevent the Partner to receive the credit, and made it explicit to the SPA, that in case of any privatisation other than the one planned by the Bank, filing would be immediate. A year later the Bank sold its ownership stake, possibly minimising the loss on the credit.*

The story is a minute interplay of the state, the top managers of a large company and a bank. In the following I try to map some aspects of such an interplay analysing the directorate interlocks of political actors, banks and large companies. There have been several attempts to reveal the power relations in the economy by analysing board interlock relations. I will follow the definition of Weber for power:

> *Power is "the probability that one actor within a social relationship will be in a position to carry out his own will despite resistance, regardless of the basis on which this probability rests".*Weber goes on to state, that this probability can rest on any *constellations* or *qualities*.

In this paper I will map the constellations around the most important actors of the Hungarian economy, and to trace the qualities that are connected in such constellations. A constellation is typical to an actor, but it is not a feature of it, neither of the whole network. I define constellations as the *ego - networks* of a given actor. There are two typical constellations that are associated with power in interorganisational relations: centrality and autonomy. In the first part an introduction is given to these concepts, then I sum up the main arguments concerning economic power in the works on the Hungarian

economy. The derived hypotheses will be tested using a population of 240: 14 political actors, 24 banks and 202 companies.

TWO CONSTELLATIONS & THE MEANING OF CORPORATE BOARD INTERLOCKS

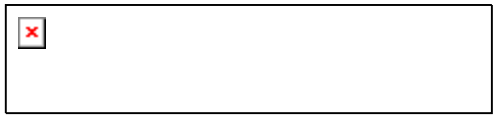
There are several works on operationalising power with network concepts. I cite two major concepts in the literature associated with the relations and power in the economy. The first is centrality, the second is autonomy.

Centrality

The most elaborate work built around the concept of centrality is the financial - hegemony theory of Beth Mintz and Michael Scwartz (Mintz - Schwartz 1985, 1986). The basic assumption of their 1985 book *The Power Structure of American Business* is that the interfirm relations can be conceptualised as hegemonic relations. "A hegemonic relationship exists when one corporation makes decisions that directly and significantly affect the business conditions of another firm. The second firm cannot take actions to nullify the effects or the benefits sought by the first group and therefore cannot achieve mutual deterrence. The second corporation is constrained to adopt strategies" (Mintz - Scwartz 1985 pp 14.). They hypothesised, that banks will be the most central actors in the network because of their control over the sources of credit. They also concluded, that the change in bank centrality in time should reflect the changing importance of these banks in the flow of capital.

The following measure of centrality was used by Mintz and Schwartz in their cited book:

where R is the a sociomatrix, e is the centrality of the given vertex. Putting it another way e is an eigenvector of R with l eigenvalue (Bonacich 1987). There is an advanced version of this measure that weights indirect ties (the connections of the neighbours to their neighbours), also by Philip Bonacich. There is a b parameter, that is an adjustable weight to indirect ties. The measure is calculated the following way:



where c is the centrality of the given vertex, and a is a parameter which allows, that if the centrality of a vertex is one, that means an average centrality independent of the number

of vertices. *b* parameter is the mentioned weight. This measure takes indirect ties into account, but we can also utilise a measure that makes it possible to assess, to what extent are actors *in the middle* of the network in the sense that they are between many others. The so-called betweenness centraliy is calculated the following way:

where centrality for a given actor *i* is calculated to sum up the number of geodesic paths between two distinct actors, *j* and *k* that passes through *i.* (if there are more geodesics, these are weighted equally to give a sum of one).

Autonomy

The concept and measure of structural autonomy was developed by Ronald Burt (1992). He has utilised the concept in analysing the cooptational relations of firms proportional to their structural constraint in buyer - supplier relations (Burt 1978, 1983). The idea was summarised in his 1992 book *Structural Holes.* The reasoning departs from the idea, that social capital is not directly proportional to the number of relations one has. The key is the concept of *redundancy*. Two contacts are redundant to the extent that they lead to the same alters. In an efficient network there are no redundancies, that is all connections are separated by a structural hole. The lack of structural holes mean structural constraint on ego.

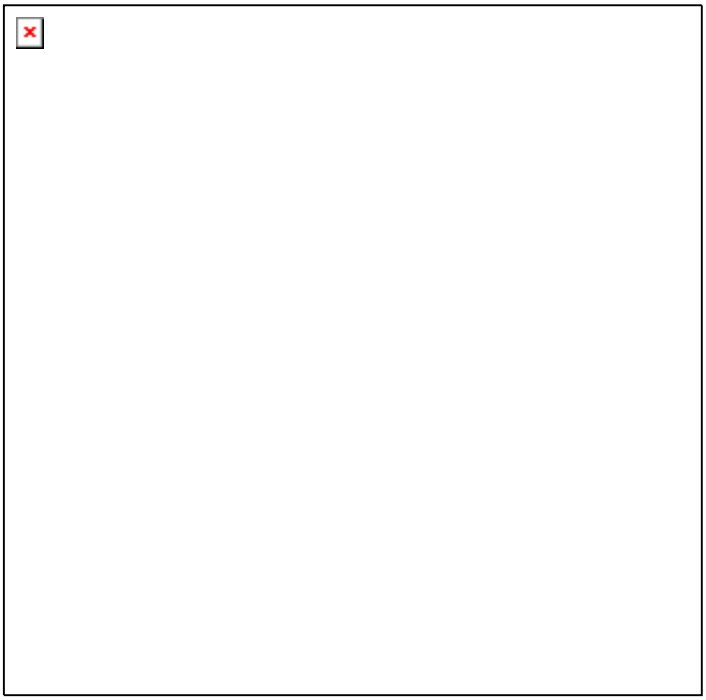


Figure 1. Structural Constraint

There are two components in measuring structural constraint: the costs or energy invested in reaching an alter, and the lack of structural holes around the alter. Burt uses the same measure for the two concepts:

where p_{ij} is the direct investment of ego (i) in reaching alter (j) the summed expression is the indirect investment of i (through ties with any q) to reach j (where q is tied to i and j). This value is high, if i invested a lot of energy proportionally in reaching j, and there are few structural holes around j. The measure of structural constraint is the above expression squared:

Centrality itself is not a cause for power, only an indication. Autonomy can be a source of power itself: there is a causal mechanism, that connect a constellation characterised by autonomy and power. A firm in an autonomous position has more chance to follow "tertius gaudens" strategies, has more opportunities to form coalitions, or discriminate prices. Centrality is an indication of an underlying asymmetry. In the case of banks this asymmetry is the disposition over capital. In the case of the state it can be political power.

HYPOTHESES ON INTERORGANISATIONAL CONSTELLATIONS IN THE HUNGARIAN CONTEXT

The question of economic power has also been put in the Hungarian context of the market transformation. There were three main paths in the social science discourse where this question appears: the first is the discourse of *privatisation*, mostly participated by economists. The second one is a recently started debate over the *position and role of banks in the economy*, we find sociologists and economists here, the approaches has a wide range from information economics through macroeconomics and case studies to the study of ownership relations and interlocking directorates. The third is the debate in economic sociology known as the *market transition* debate, mostly with economic sociologists. Let us take a bit closer look on the hypotheses that can be drawn from these debates.

The debate of privatisation concerns the process of dismantling the high ownership centrality of the state. The recent articles on privatisation and ownership relations suggest, that the privatisation is practically over. Imre Kovách and András Csite propose in their recent article, that the period of post - communism is over, a stable, market-like system has emerged. It would be beyond the scope of this paper to even sketch the

sizeable discourse of privatisation, I will only derive some hypotheses concerning the end of this process.

If privatisation is nearing its end, we can expect, that the State Privatisation Agency will have a control mostly over the "remaining" companies, that have the state as the most important owner, and has a poorer market performance. This "portfolio" should be worse, than the portfolio connected to other key political actors, who in turn, should have firms with a more diverse ownership palette around.

The bank power - debate has a double face: economists argue in line with the principles of information economics, that banks are victims of an information asymmetry. On the other hand sociologists argue, that banks are in power positions. According to the reasoning of economists banks use corporate governance tools to overcome this asymmetry, caused by debtors, who know more about the risks of the debt in question. Júlia Király has hypothesised four idealtypical groups of firms according to their bank relation. The first is a group of *companies remained indebted*, mostly those large state owned companies that provided most of the production in 1987. At the times of the return to the two tier banking system the credits of these companies were inherited by the new banks. Needless to say, these credits were not based on prudential bank practices. The second group consist of companies *became indebted quickly* in the beginning of the nineties, mostly smaller companies formed of state owned firms. These middle sized enterprises had no debt in 1987, actually they were mostly formed in the nineties, and they were growing rapidly of foreign capital. They were much affected by the shockwave of loosing eastern markets. In the third group we find firms that *quitted banks*. These companies managed to repay debt, and became independent of banks. These companies were mostly privatised by capital injection. The fourth group consists of the best corporations that never had significant debt, and are financed from internal sources, or bounds. These companies are mostly the most important exporters.

To sum up this line of arguments, we can hypothesise, that banks will be mostly related to two groups: large and small companies, both performing poorer, than the others. We can also expect that if banks use interlocks as a governance tool in case of poorly performing firms, than this also reflects in the data. One remark need to be made here: throughout the paper I will separate the groups of home founded banks and banks founded by foreigners. These two groups has different histories (inherited clients from socialism, state bailouts etc.), and also embedded in a very different way in the network.

In the debate of market transition the question of economic power appeared only occasionally, and mostly tied to the question of elite mobility. This discourse is dominated by the school(s) of social mobility, what implies that the question of power is not a central one. In the beginning of the discourse the notion of elite continuity and political capitalism were the heading concepts, later on the theory of managerialism appeared, as an alternative. The hypotheses included in the theory of post-socialist managerialism formulated by Iván Szelényi focuses on the constellations of the largest enterprises (Szelényi *et al.* 1996). In the special "post-communist" conceptualisation of managerial-ism a crucial assumption is the corporate independence of "real" owners,

similarly to the classic theories of managerialism (although Szelényi' s approach and interest is different to these theories, rather oriented towards the new class theories). This independence flows from the recombinant property structure of the transformation (Stark 1996). Managers exercise control over the large corporations not because of their ownership stakes, but because of their skills and education. The key figures are the "financial managers" in this system.

Szelényi and his colleagues' theory implies (in an implicit way) the following hypotheses on corporate interlocks: first we can assume, that the net effect of the absence of "real" owners -- mostly foreign owners -- allows a space for managerial interorganisational control. Second, we can also assume, that the largest enterprises will not be isolated of each other, but will rather form a cohesive group. Third, we can expect, that banks will be interlocked with large companies, and companies without "real" owners.

TRACING CONSTELLATIONS: CENTRALITY AND/OR AUTONOMY?

Data

For assembling the relational database we have collected data on the board and top management compositions of the top 350 companies in Hungary according to their gross revenue in 1995, and for the full population of banks. We have also collected the lists of top and middle rank leaders of the departments of the Hungarian Government, and the lists of names for the parliament fractions of political parties.

We distinguished two types of ties: directed and nondirected. A directed tie means that a manager of a bank or company or a political leader sits on a board of another bank or company. A nondirected tie means that there is a person on two boards without any identifiable "sending" organisation. Besides relational data we also had some variables from company CD ROMs.

Basic structural features

Before taking a closer look at the structure of relations, one feature is apparent. Ninety percent of the actors (that are not isolates) in the network are organised in a single bi - component of directorate ties (in other words this group needs at least two ties to be cut to fall to two groups). This means that there is practically one single net of companies. Something similar is reflected in the following fragment from an interview, that I conducted with the CFO of one of the top 50 companies in the spring of 1997:

"This country is not quite big. That means it is quite difficult to find someone who is not known, especially among those, who are important in business. Business is not made because of these relations, but there are no others to make business with. For me,

personally it is difficult to go to a bank or investment fund, and not to find many people there whom I have known before."

This suggests that this network serves as a background for business. The ten percent that is not part of the network are mostly foreign owned companies, or affiliations to multinationals. In the one third of isolates, that are not part of the population such companies are also over-represented. This suggest, that a company is either a part of the network or it is an isolate -- there are no totally separate components.

Mapping constellations: positions in the field

For mapping the distribution of constellations in the field let us take a look on the overall map of positions. For constructing the map I have organised the two different relations (directed management-board ties and nondirected board-board ties) into a 240*720 matrix. The rows contained data of firms on the sent directed ties, on the received directed ties (through including the transpose of the previous matrix) and on nondirected ties. At the next step I have calculated the correlations of rows in the mentioned 240*720 matrix, thus receiving a 240*240 matrix with Pearson product moment correlation coefficients in the cells, where x_{ij} shows the similarity of node i and j with respect to sent, received and nondirected ties. To represent the structure of the field where the divisions are defined by similarity and dissimilarity I have used non-metric multidimensional scaling (the MINISSA algorithm) available in UCINET V (Borgatti et al 1999) social network analysis software. Figure 2 is a representation of the field in two dimensions.

The first feature that is apparent is the core - periphery structure of the diagram. This can be a misleading observation, in fact it is a *reversed core - periphery field*. Nodes in the middle are at the intersection points of the derived axes. Let us leave the "core" for a minute and take a look at the "peripheries". On the right hand side (or on the eastern side) of the map we find the subfield of political actors. The two most central actors in the network are the APV Rt (State Privatisation Agency) and the Department of Finance. These two actors are at one pole of the map with the other central political actors around. North from the central zone there is a subfield of large corporations. The banks in this area are large, originally state founded banks, the corporations are also among the top 50, usually with a longer past. These two poles are not only easy to differentiate, but, according to my interpretation they constitute two major *styles* in the field of economic relations, that is: these poles represent different constellations. The "core", the area at the intersection of the axes represent firms that are not participating intensively and interestingly in the network of interlocking directorates and they are mostly organised into separated dyads, or they are hangers-on for large banks and big companies.

These two styles are not deterministic. The interesting cases are the banks that are connected to others not in the style of banks. We can see two banks near to the political pole. These two banks are mostly connected to the firms that are bound to the state. Both are state founded investment banks. We also find banks in the middle area and two banks around. These are the affiliations of large multinational banks. The most puzzling cases

are the banks on the northern side, together with the previously mentioned one from the south-western side: these banks are connected just the opposite way as banks usually do.

The horizontal axis is associated with political actors and foreign actors, as the MDS diagram of the correlations of axes and the most important attributes reveals (figure 3). The vertical axis has the larger companies (both in terms of revenue or employees or capital) near to its positive pole, usually with a longer history (greater number of years of existence), and state ownership. We also find the home founded banks here. (The striking difference between home and foreign founded banks in their network positions is obvious.)

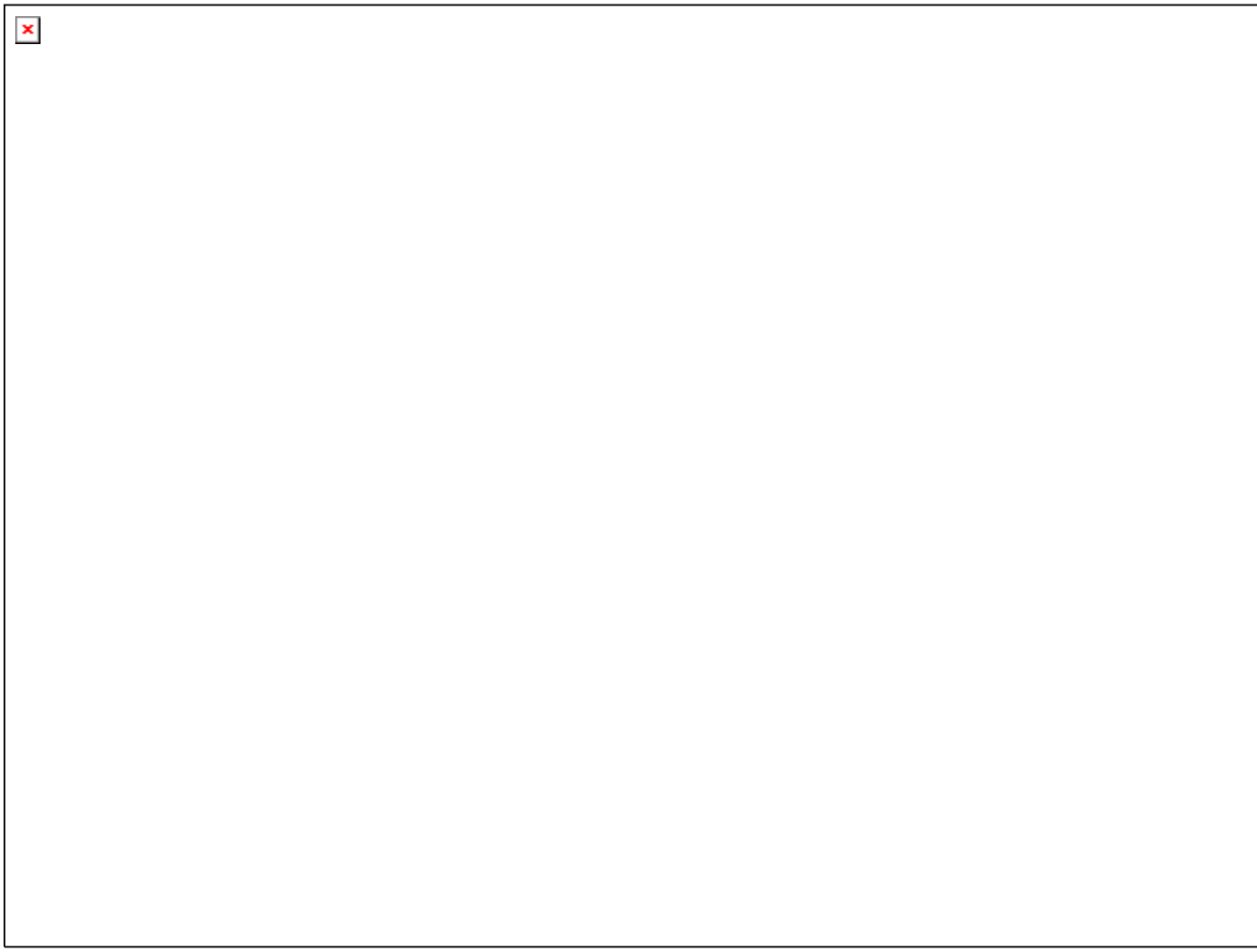


Figure 2: The field of economic relations. MDS, stress = 0.331, MINISSA algorithm based on correlations, N = 240.

Modelling constellations: centrality and/or autonomy?

We can conclude, that the field of positions revealed two major types of constellations. The task now is to discover, whether these two poles are associated to the mentioned types: centrality and autonomy. For coming to a decision on this question, I have used regression models.

There are two groups of models: one for centrality, and one for autonomy. Let us see the models of centrality first.

In the first groups of models (see table 1) there are three dependent variables employed. The first is outdegree, that is a raw measure for the embeddedness of each actor. The second is the Bonacich Power measure, that is a centrality measure taking indirect ties also into account. The third dependent variable is betweenness centrality, that takes the "inevitability" of each actor into account, measuring how much each actor is in the middle of the network. In the case of the latter two, outdegree is also employed as a control variable. The independent variables are the dummies of the groups: departments of the Government (including the State Privatisation Agency), the parliament fractions of political parties, home funded banks, other banks, the top 50 and the "smallest" 50 in the sample. So the group of reference is the group of the "middle" 100 firms.

In the first model we can see, that the embeddedness of the government actors, the home founded banks and the top 50 companies is stronger according to their outdegree, than that of the other groups. In the second model, the model of Bonacich power measure, we find similar results, so, the constellation of centrality measured this way is a feature of the government, home founded banks and the top 50. If we control for outdegree, we can see that only the effect of outdegree is signifi cant. In fact, in this case, the Bonacich power measure is strongly correlated to outdegree (the actors with higher outdegrees connect to others with higher outdegrees), that is reflected in the high R square. The models of betweenness reveals a split among the most embedded actors. In the fourth model we can see, that the there are two groups with a high betweenness: government departments and home founded banks. The group of top 50 is not significantly more in the middle of the networks, than others. If the control for outdegree is included, the only significant variable is the one of the top 50: they have significantly less betweenness compared to their embeddedness, than others. Government actors and home founded banks are "in the middle" of the network because of their higher embeddedness.

Table 1: Models of centrality and autonomy. Group: all actors, N=240. Number of random permutations: 5000.

	MODEL					
	CENTRALITY					
	1	**2**	**3**	**4**	**5**	

dependent variable	OUTDEGREE	BONACICH POWER	BONACICH POWER	BETWEENNESS	BETWEENNESS	STR CON
adjusted R square	0.273	0.2	0.736	0.086	0.289	
F value	16.216***	11.130***	96.890***	4.945***	15.039***	9
independent variable						
Intercept	2.1737	10.45	3.8347	196.6291	67.5892	
OUTDEGREE	-	-	3.0433***	-	59.3635***	
GOVERNMENT	11.0485***	26.8061***	-6.8178	671.2678***	15.3892	-0
PARTY	0.6262	-3.9372	-5.8432	-50.9791	-88.1572	
HOME FOUNDED BANK	6.1861***	23.0452***	4.219	493.0495***	125.8193	-0
OTHER BANK	-0.2401	-4.0896	-3.3589	-64.56	-50.3064	
TOP 50	1.2425*	6.3008**	2.5193	-450734	-118.8360*	-0
SMALL 50	-0.4689	-1.548	-0.121	-2.5631	25.2736	

*: p<.10 **: p<.05 ***: p<.01 †: Smaller values mean lesser constraint, thus higher autonomy.

Figure 3: Interpreting the axes. MDS diagram of the correlations of the most important variables
and the co-ordinates of the previous map.

To sum up the experiences on the constellation of centrality, we can state, that the most embedded actors are government departments, home founded banks and the top 50. Embeddedness usually comes with betweenness, expect in the case of the top 50.

In the second group of models the question is autonomy. These models are constructed the same way, with structural constraint as a dependent variable.

Without a control for outdegree, we find that the most embedded three groups of actors are also less constrained. In the case of constraint, a control for outdegree is theoretically advisable. The measure of constraint decreases with an increase in outdegree. If we introduce this control we find that only home founded banks and the top 50 are significantly less constrained (more autonomous), than others, the government departments has a constraint proportional to their high outdegrees. The group of the smallest 50 companies in the sample has a significantly higher structural constraint (that is lesser autonomy), that is not only a function of their small outdegrees.

Introducing the control for outdegree has increased the fit of the model considerably. I have computed the models with omitting the three most embedded, and the least embedded actors (with an outdegree of one) also, but these models yielded the same results.

For summing up the models of constellations (see figure 4), we can state that the constellation of centrality is a feature of the government actors and home founded banks, and to some extent of the top 50. The constellation of autonomy is more probable around home founded banks and the top 50. So the government is central, but not autonomous beyond its centrality, the home founded banks are central and autonomous, the top 50 companies are central to some extent, but they are more autonomous than others, beyond the effect of embeddedness.

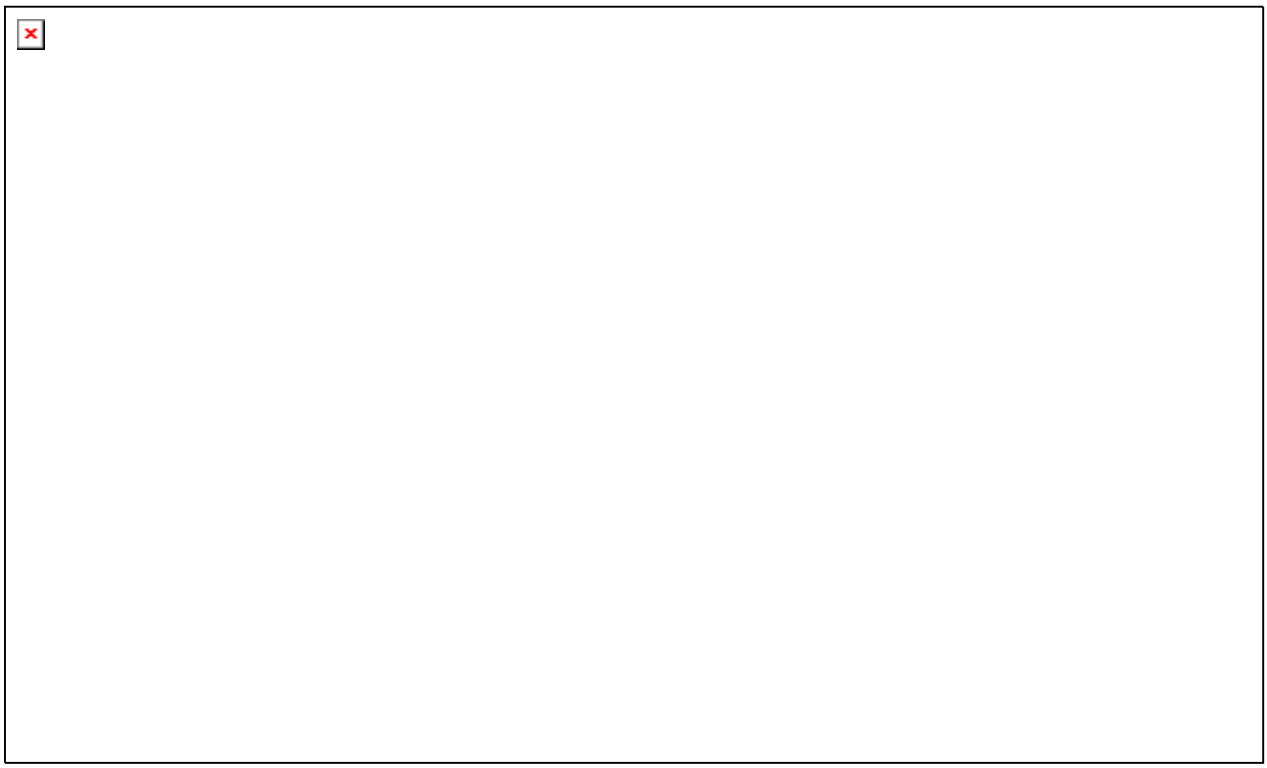


Figure 4: The profiles of constellations: group averages.
The variables are normalised to have equal maximums.

Now let us return to the map of positions. We found two poles, two different constellations, the question to answer is how these poles correlate to the divisions in centrality and autonomy.

In table 2 we can read that the different definitions of centrality almost equally fit to both poles of the map. Bonacich power is closer linked to the pole of large corporations (north according to the vertical dimension). The striking difference is in the autonomy of the two poles: the northern pole with large corporations and banks is more autonomous, than the south, while the eastern pole with political actors and foreign owned companies is more constrained, than the western pole.

Table 2: The location of the constellation variables in the map of positions

	standardised regression coefficients				
	independent variable				
dependent variable	outdegree	Bonacich power	betweenness	constraint	constraint
horizontal dimension (to the east)	0.3071***	0.1078**	0.1476**	0.0141	0.2769***
vertical dimension (to the north)	0.2586***	0.5618***	0.1288**	-0.2774***	-0.1927***

*: p<.10, **: p<.05, ***: p<.01, effect controlled by outdegree

The cells contain univariate standardised regression coefficients (correlations); the last model contains the effect of constraint on location net of outdegree. Cases: all cases, N=240. Number of random permutations: 5000.

Tracing linked qualities: birds of a feather?

After mapping the constellations in the field of the most important actors in the economy, let us turn to mapping the qualities of these actors. The qualities -- if power is in question -- are not isolated, but qualities of

a dyad. In the preceding paragraphs we were asking ***how*** the actors in the field are connected, tracing two constellations. Now the question is ***to whom*** the groups mentioned before are tied to.

Figure 5 shows how the groups are tied to each other. The elevations in the relational map are proportional to the densities in the ten blocks of interlock relations. The ten blocks are formed to contain a comparable number of actors: the first block consists of the fifteen political actors -- government departments and political party fractions. The second is a block of banks: the total number of home founded and other banks sum up to twenty-four. The 203 population of companies are divided into groups of 25 or 26, sorted in descending order according to their gross revenue.

The most explicit feature is the high centrality of the political actors, banks and large corporations. Political actors are most densely tied to large corporations and banks. These two groups seem to be rather cohesive also. Smaller companies are hanging on the most central groups. The "smallest" seem to be connected to banks, while the middle category to all central actors to some extent.

The density table refers to the presence of centrality. Constraint can be mapped in a similar way to elevations of highly constrained blocks. In the next diagram (figure 6), contact specific constraints are mapped the same way, as densities, calculating the average constraint from each group to each other.

The map of constraints reveal that the most central groups place constraint on the less central ones. Banks also constrain other banks that can be said in the case of large corporations also to some extent.

Modelling linked qualities

To assess the hypotheses and to reveal the structure of linked qualities, I have constructed linear regression models for the qualities linked to the most important groups of actors. The dependent variables in these models are the number of incoming ties at each actor from the specified group. There are four such variables: the first is the number of ties from the SPA (State Privatisation Agency), the second is the number of ties from other government departments, the third is the number of ties from home founded banks, and the fourth is the number of ties from the top 50 companies. The independent variables are the following: INDEGREE, for controlling size effects, FOUNDED AFTER 1990: equals one, if the company or bank was founded after 1990, zero otherwise, HUNGARIAN PRIVATE PROPERTY: equals one, if the unit is in a Hungarian non-state majority ownership, STATE PROPERTY: the same for state ownership, HOME FOUNDED BANK: equals one in case a bank were not founded by foreigners, OTHER BANK: equals one, if the bank was founded by multinational, or foreign banks, or others, TOP 50: equals one, if it is a top 50 non-bank company, SMALL 50: the same for the smallest 50, GROWTH: equals one, if the company or bank had a growing market stake in real terms both in 1994 and 1995. These models only contain the non-political actors, since political actors do not have boards, thus they don't have an in-degree.

In the first model in table 3 we can see that companies (or banks) have significantly more ties from the State Privatisation Agency, than the reference group. This is also true for top 50 companies and home founded banks. Companies with a stable growth are not likely to have a director from SPA, an SPA link usually means poorer performance. The second model shows the effects with a control for indegree. In this model, besides indegree, the only significant effect is the one of the top 50 companies. This means that SPA directors are only over-represented on top 50 boards, state owned and not growing companies or banks have SPA directors only proportional to their larger indegrees. For assessing the hypotheses derived from the discourse of privatisation, let us see the models of the other government departments.

In the model of government actors we find a similar setting, than in the SPA models. In the third model, without a control for indegree, we find that the departments are even more tied to state owned companies, they are also tied to the top 50 and to home founded banks, but poor market performance is not a feature of their network surroundings. In the fourth model only state ownership and top 50 firms seem to be tied to departments beyond their embeddedness (indegrees). The hypothesis, that the SPA have companies with poorer performance around (the "rest" that have remained) seems to be reinforceable: the SPA is tied to companies with significantly worse growth than others, while this is not true to other key political actors. The other hypothesis, namely that government departments should have ties to companies not only state ownership is not

true. The affiliation of government departments to companies owned mostly by the state is stronger, compared to the SPA.

In the first model of the number of directors from home founded banks we find that firs of all these banks are tied to other such banks. There are two other significant effects, namely that these banks are tied to the smallest 50 firms in the sample, and they are also tied to firms with domestic owners, rather than with other kind of owners. The companies founded after 1990 also seem to have more bank directors, but this effect is just not significant (p=0.133). Anyway, banks are don' t seem to be tied to older companies. If we control for indegree, we see that banks have directors from other banks only to the extent, that they have many external directors on their boards. Small companies (or we should rather say, not so large companies) have bank directors on their boards in spite of their small indegrees. The companies, that have proportionally more bank directors on their boards, seem to be more profitable also. The map of constraint also suggests, that the these smaller firms are also the sources of autonomy for banks.

Table 3: Models for linked qualities. Group: business organisations, N=225. Number of random permutations: 5000.

		MODEL					
		1	**2**	**3**	**4**	**5**	**6**
		TIES FROM...					
	dependent variable	SPA	SPA	OTHER GOVERNMENT	OTHER GOVERNMENT	HOME FOUNDED BANKS	HOME FOUNDED BANKS
	adjusted R square	0.042	0.138	0.104	0.196	0.036	0.313
	F value	2.364**	5.109***	4.368***	7.193***	2.164*	12.518***
	Intercept	0.1263	-0.0196	0.1746	-0.046	0.2391	-0.2757
	INDEGREE	-	0.0544***	-	0.0823***	-	0.1922***
	FOUNDED AFTER 1990	0.0092	0.0097	-0.04832	-0.0475	0.1519†	0.1536
	HUNGARIAN PRIVATE PROPERTY	0.0605	0.0097	0.0247	-0.0532	0.2409*	0.059
	STATE PROPERTY	0.1402*	0.0949	0.4982***	0.4289***	0.0565	-0.1051
	HOME FOUNDED BANK	0.2357**	0.0367	0.5152***	0.2142	0.7693***	0.0671

	OTHER BANK	-0.0672	-0.0392	0.1037	0.146	-0.1252	-0.0264
	TOP 50	0.1742**	0.1151*	0.2919**	0.2025*	0.1362	-0.0723
	SMALL 50	-0.0857	-0.0559	-0.0158	0.0293	0.3197**	0.4250***
	GROWTH	-0.1132**	-0.0774	-0.0349	0.0191	0.0579	0.1843*

*: p<.10 **: p<.05 ***: p<.01 †: p=.13

The bank clientele hypotheses can not be supported according to these models: banks are not tied to large corporations more, than to others. They are tied to small ones, but the companies closely tied to banks seems to be successful also. It suggests that banks overcame the difficulties of the beginning of the nineties in respect of their clientele. The hypothesis of interlocking of banks and large companies implicitly suggested by Iván Szlényi doesn't seem to be true. Banks do not form a cohesive subgroup (they are densely tied to themselves, but not more densely than to others).

The top 50 companies' first model, without controlling for indegree firs of all indicates a cohesion of this group, the effect of the top 50 variable is significantly positive. These companies are also tied to others with state or domestic majority ownership, and home found ed banks. After introducing the indegree variable, as a control for embeddedness, we can fortify the assumption of cohesion: this is the only variable that remained significant (apart of the indegree).

This provides a support for the (again implicit) hypothesis of post communist managerialism: we find a cohesion in the group of the 50 largest companies. The companies with state and domestic majority ownership -- the most likely to be free from a real owner -- also have significantly more ties from the top 50, though such companies do not have more directors from the top 50, if we compare them to others with a same indegree.

CONCLUSIONS

In the network of the most important actors of the Hungarian economy there are two major positions, that can be characterised by two ideal types of constellations. One of the poles is for political power. The government departments are the most characteristic players here together with the State privatisation Agency. The other pole is for economic dominance with the largest enterprises and the major, home founded banks. The political pole is highly central, but not autonomous proportionally to this high embeddedness. The

economic pole is also central - expect for the lack of betweenness of the top 50 - but it can be characterised by autonomy also. Autonomy seems to be associated with the most important market actors, while the group of the major banks are autonomous and central by all measures.

Centrality is probably associated with underlying asymmetries: the political power of the state, and the source of credit for banks. Autonomy can be a source of power itself. In the case of banks it may take the form of having diversified connections to the moderate size companies (here the smallest 50), in the case of the top 50 companies it might be a well built network of ties to other top 50 and middle size companies. Maybe the finding that the state is central seems trivial. The aim of this paper was not to show that the state has power, but to put it in a context of relations with other actors. Political power might not be a question as much as bank power. The high centrality of banks in all models suggests the importance of banks in capital flows. Beyond this centrality we find that banks are also autonomous. Though not all banks, only the ones founded by Hungarians (mostly the state or other state-founded banks).

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