Béla Tomka

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BÉLA TOMKA
University of Szeged

The extent and impact of the interlocking of the boards of banks and industrial companies in central Europe has been a subject of debate and controversy for generations. The first comprehensive research on interlocking directorates was carried out at the turn of the century by Otto Jeidels[1] and Paul Wallich,[2] who analysed exhaustively the particular forms of relations between German banks and industrial companies. Their seminal study was followed by Jacob Riesser's[3] work, and then the inter-war studies of Wilhelm Hagemann.[4] These writers considered interlocking as a major means of establishing long-term relationships between industrial companies and universal banks, which allowed the German great banks to play a significant entrepreneurial role in industrialisation and exert control over industry. Standing on completely different ideological ground, Rudolf Hilferding, in his studies of the development of pre-World War One German and Austrian economy, held that through interlocking and shareholding banks were able to institutionalise their power, which was increasingly predominant over the entire economy.[5] Several surveys have discussed interlocking between German banks and industry subsequently. Alexander Gerschenkron, whose description of German bank–industry relationships was influential, interpreted the role of interlocking directorship quite similarly to the abovementioned theories.[6] In recent years, economists have also revisited the issue of universal banking, and as a result the traditional concepts of motivating factors and the role of interlocks have been questioned.[7]

Interlocking has also received special attention in those central European countries where there was a preponderance of universal banks. In the case of Austria, for example, besides Hilferding and Gerschenkron, David F. Good has considered the 'personal union' of banks and industrial companies to be 'perhaps the most important aspect of bank–industrial relations'.[8] Richard Rudolph, Eduard März and Peter Eigner have also emphasised the importance of this phenomenon.[9]

At the turn of the century, the banking system of Hungary not only had strong connections with those of other central European countries (and

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especially with Austrian financial institutions), but was also similar to them in several ways.[10] The presence of interlocking directorates was one of these similarities. The phenomenon attracted attention in contemporary Hungary, but this did not go beyond the scope of journalism.[11] The subject has remained under-represented in debates on modern Hungarian economic history.

This article seeks to contribute to a better understanding of key aspects of Hungarian bank–industry interlocking before World War One by employing a case-study approach. The next section surveys historical research on interlocking, and recent interpretations in economics and then offers a working hypothesis. This is followed by a discussion of the state of Hungarian banking before World War One. Section IV presents an analysis of interlocking in Hungary. The last section offers an overall conclusion.

II

In recent decades, there has been surprisingly little published on interlocking between banks and industrial firms in pre-World War One Hungary, and the few studies have followed Hilferding's financial capital concept. The problem has never been analysed empirically: only attempts at estimating the number of interlocks between banks and industrial firms have been made. All and any kinds of personal relations have been identified as an ability of the banks to assert their influence, that is, as signs of bank hegemony. In most studies it was interlocking itself that defined the so-called 'sphere of influence' (a key concept in Hungarian research) on banks.

Among others, Iván T. Berend and György Ránki in their widely cited work have claimed that none of the most significant industrial enterprises were able to protect their independence from the banks, and in this way vast 'spheres of influence' emerged. They referred to the rise of a financial oligarchy, which was brought about as a result of interlocking, and whose 'narrow circle became an omnipotent power' in Hungarian economy.[12] Thus interlocking has gained an enormous significance in the general Hungarian literature, which fact makes its neglect even more surprising.[13] According to Berend and Ránki, in 1913 among the biggest Hungarian banks the Pesti Magyar Kereskedelmi Bank (Hungarian Commercial Bank of Pest) had 55, the Magyar Általános Hitelbank (Hungarian General Credit Bank) 63, the Hazai Bank (Domestic Bank) 29, the Magyar Bank (Hungarian Bank) 50, and the Leszámítoló Bank (Discount Bank) 24 industrial firms in their respective 'spheres of influence'. They argued that the major Hungarian banks had control over '225 industrial joint stock companies altogether, with a 711 million Crowns worth of capital',[14] and as a result of this, in 1913 'the financial capital was involved in two thirds ... of the industrial production. 91 per cent of the incorporated industry (state-owned companies included) belonged to the sphere of influence of the financial capital'.[15]

During the 1970s, even as the ideological influence on Hungarian historiography waned, the discourse on bank-industrial relations remained unchanged. Interlocking still continued to be a significant element in the financial capital concept.[16] It was only from the mid-1980s that new research began to discuss bank–industrial relations from a different perspective. A landmark study by György Kövér pointed out the vagueness of the concepts of 'interest' and 'sphere of influence' and the problems of their application without being properly defined.[17] Yet interlocking in the pre-1914 period has still not been examined with empirical research, leaving the Hilferdingian interpretation of interlocking unchallenged. Even Hungarian scholars who escaped political constraints by publishing abroad and using non-Marxist concepts, such as the Gerschenkronian framework, supported the view that Hungarian banks had their large spheres of influence in industry.[18] The concepts conceived on the basis of the theories of Hilferding and Gerschenkron – despite highlighting different aspects – have proved to be reconcilable in that they both attribute a strong control function to interlocking in early twentieth-century Hungary.

Control function has been a major element in explanations on interlocking in the international literature of economics, too.[19] According to control theory, problems of verifiability, enforceability and observability of contracts may hinder the creation of complete contracts, that is, 'writing complete contracts may simply be too expensive'[20] Lacking complete contracts, creditors are defenceless against debtors, which forces them to endeavour to control debtors in order to prevent losses. Interlocking can be considered as a major means of that control.[21]

Besides control theory, information theory has recently gained popularity in economics and then in economic history as another interpretation of interlocking.[22] Information theories hold that there are information asymmetries between creditors and debtors, since creditors, that is banks, know less about the quality of debtors and of those who need credit.[23] If this situation persists, reliable debtors receive credit on the same terms as less reliable ones. There are certain institutions, however, that can help surmount information asymmetry. Interlocking is one of these institutions. Its function is to monitor debtors by offering access to internal information. Cable has argued that, through membership in directorates and boards, banks were able to keep the company management under their influence, which can be proven by the fact that, companies under bank supervision performed better.[24] Others have pointed out that, in their own interests, industrial firms seeking credit gave board memberships to bank representatives, thus giving up part of their independence. By doing so, banks became better informed, which increased their trust in certain industrial companies. Successful companies could seek credit on better conditions, which made the allocation of funds more effective on a national level as well.[25]

To sum up, until now, as far as bank–industry relations in Hungary at the turn of the century are concerned, it has been a standard view in research that by interlocking as the major means banks were able to assert their influence on industry. This control function of interlocking – though in various forms and with varying emphases – also appears in the research of economics complemented with information theory.

In practice, there is a strong case for a more complex interpretation of interlocking. Our hypothesis is that none of these arguments – particularly not when applied exclusively – can provide us with sufficient explanation as to why relations between banks and industrial companies had become what they were at the turn of the century in Hungary. It is far from evident that interlocking really gave banks the hegemony assumed by Hilferding and his followers, or that its main function for banks was the exertion of control over industrial firms. Nor is it evident that monitoring was the main goal of interlocking.

In our opinion, the function of both controlling and monitoring presupposes that banks provided resources to industrial firms interlocked with them, and this is exactly what makes control and monitoring possible, and necessary at the same time. On the basis of this, in the following section we are going to deal primarily with the relations between ownership (bank's shares in firms) and interlocking, and between crediting and interlocking. The study is based on both new original research and on previous studies.[26]

At the turn of the century, the Hungarian banking system bore a close resemblance to the Austrian and German banking systems. Firstly, it was dominated by joint stock banks. Most of these were universal banks, that is, they combined short-term businesses with long-term investments, although these did not reach the scale of those of Austrian and German banks.[27] They also operated a two-board system, with a directorate and a supervisory board.[28] Interlocking between banks and other companies was also a common phenomenon in Hungary. The managers and senior clerks of great banks had several directorate and supervisory board memberships. To name but a few: in 1913 Arnold Barta (Magyar Agrár- és Járadékbank – Hungarian Agricultural and Debenture Bank) had 38, Ferenc Székely (Magyar Bank és Kereskedelmi Rt. – Hungarian Bank and Commercial Co.) 34, and Móric Herzog (Magyar Agrár- és Járadékbank) 26 memberships.[29]

The following study considers the interlocking between the Pesti Magyar Kereskedelmi Bank (Hungarian Commercial Bank of Pest, commonly called the Kereskedelmi Bank, and henceforth referred to as PMKB) and joint stock industrial companies in the decade immediately preceding the First World War. The study of this particular bank can be justified by the fact that this institution was a 'typical' representative of Hungarian great banks of the period.

Firstly, besides the Magyar Általános Hitelbank (Hungarian General Credit Bank), the Pesti Magyar Kereskedelmi Bank was the most significant Hungarian bank in the late dualistic period. In 1913, according to several index numbers – share capital, assets – this bank was the largest one. Moreover, before the war, in the whole Monarchy it was only the Creditanstalt and the Wiener Bankverein which preceded it by share capital, and the PMKB was sixth by liabilities.[30]

Secondly, the PMKB had an outstandingly large number of interlocks. Their number is particularly impressive if we take into account the memberships in all – and not only in the industrial – companies; in this case, the bank had as many as 304 memberships in Hungarian, and 34 in foreign, companies. The 47 domestic memberships of Móric Mezei and the 37 of Jenö Szabó are the largest figures in Hungary (see Table 1). Both of them were particularly active in transportation (railway) companies. His past predestined Jenö Szabó to specialise in transportation, since until his retirement in 1893, he had been an officer of the Railway Department in the Ministry of Transportation, and then he worked as a ministerial counsellor. As far as industrial memberships are concerned, in 1913 Leó Lánczy had six, Fülöp Weiss 15, Henrik Fellner 13, Ödön Hollós 15 memberships in Hungarian directorates and supervisory boards.[31] Lánczy had been the director of the Kereskedelmi Bank since 1881. His name became associated with the most progressive decades in the development of the bank; he also worked as an MP and held the title of Privy Councillor.[32] Fülöp Weiss was the executive director of the bank. His connections with bank leaders in the Balkans are often highlighted in studies of the pre-war period. He followed Leó Lánczy as bank president after World War One. Henrik Fellner was Executive Director between 1892 and 1911, when he was managing the Leipziger Vilmos Distillery and Sugar Works, which he also owned, and he was also a manager of GYOSZ (the National Association of Manufacturers). The members of the bank directorate and supervisory board, the directors and the deputy directors,[33] held altogether 115 positions in the directorates and supervisory boards of 74 Hungarian industrial joint stock companies (see Table 1).[34]

The data on bank interlocks comes from the Compass Leonhardt.[35] To measure the volume of capital relations (share capital, credit) between banks and industrial firms, we used the internal balance sheets of PMKB.[36] The database set up from those is described elsewhere.[37] These data refer to

TABLE 1
INTERLOCKING DIRECTORATES OF THE PESTI MAGYAR KERESKEDELMI BANK AT THE END OF 1913

	Industry	Banking	Insur.	Transp.	Commerce	Others	Total
Directorate:							
Leó Lánczy	6	2	1	7	–	–	16
Dreher Eugen	1	–	–	–	–	–	1
Henrik Fellner	13	–	1	3	–	–	17
Ödön Kajári	5	–	–	8	–	2	15
Vilmos Gutmann	4	2	1	2	–	2	11
Róbert Haggenmacher	3	1	–	–	–	1	5
Loránt Hegedüs	5	2	2	1	–	–	10
Ferenc Heinrich	1	1	–	1	–	1	4
Franz Hawerda-Wehrland	–	–	–	–	–	–	–
Móric Mezei	2	1	–	42	–	2	47
Jenő Szabó	3	–	–	33	–	1	37
Béla Széchenyi	–	–	–	–	–	–	–
Manfréd Weiss	6	–	–	–	1	1	8
Fülöp Weiss	15	4	2	3	–	–	24
Directors, sub-directors:							
Adolf Zala	6	1	–	3	–	–	10
Miksa Fehér	5	10	–	8	–	–	23
Péter Maishiern	7	–	–	7	1	–	15
Róbert Sztehló	2	–	–	2	–	1	5
Lajos Csuka	–	–	–	–	–	–	–
Lajos Büchler	1	1	–	–	–	–	2
Emil Gergely	2	2	–	–	–	–	4
Ödön Hollós	15	–	–	8	–	2	25
Ödön Schweiger	2	2	–	–	–	1	5
Adolf Wertheimer	–	–	–	–	–	–	–
Supervisory board:							
Adolf Blau	–	–	–	–	–	–	–
Zsigmond Gold	–	–	–	–	–	–	–
Ferenc Hertelendy	1	2	1	2	–	1	7
Sándor Kovácsy	5	1	–	1	–	–	7
Lázár Reimann	5	1	–	–	–	–	6
Oszkár Rust	–	–	–	–	–	–	–
Total	115	33	8	131	2	15	304

Notes: Memberships in directorates and supervisory boards of Hungarian companies held by the Pesti Magyar Kereskedelmi Bank's members of directorate, directors, sub-directors and members of supervisory board at the end of 1913.
Source: Compass Leonhardt, 1914. Bd. I–II. (Wien, 1915) (Compiled by the author).

the year of 1913. This is partly due to practical reasons: there are no other years before World War One when data for the factors in question (credits, interlocks) are available. However, this year seems to be an appropriate choice in other respects as well, as on the one hand the level of economic activity followed a fairly regular pattern in Hungary then, and on the other hand it is suitable for comparative purposes, because other researchers also seem to prefer its study. The minutes of bank's executive management and directorate meetings of industrial firms offered additional qualitative information for the research.[38]

IV

Based on the data, it can be said that wherever the Kereskedelmi Bank had a significant number of shares, there was interlocking in almost every case.[39] At the end of 1913 the bank possessed more than 25 per cent of the shares in 17 cases and among these there were only two companies where it was not represented either in the directorate or in the supervisory board. Typically, there were one or two representatives in the companies, and in a few cases there were even three or four delegates. At Schlick & Nicholson for example, where the bank owned 30.5 per cent of the shares, Loránt Hegedüs, who was the Executive Director of the bank and became Minister of Finance later, Ferenc Heinrich, Minister of Commerce-to-be and hardware retailer, and the above mentioned Fülöp Weiss; at the Danubius Textilmüvek (Danubius Textile Factory) (40 per cent), industrialist Manfréd Weiss, directorate member Fülöp Weiss and director Róbert Sztehlo; at the Egyesült Tégla és Cementgyár (United Brick and Cement Factory) directorate members Móric Mezei and Jenö Szabó, Fülöp Weiss and Deputy Director Ödön Hollós were all members.

However, the number of interlocks had not always been proportionate to the share of ownership at all. When the Fiumei Magyar Olajipar (Hungarian Oil Company of Fiume) was founded in 1906, out of the two million Crowns share capital the Kereskedelmi Bank took over only 175,000 Crowns but it nominated two people to the directorate and three to the supervisory board.[40]

More importantly, there were a lot more cases of interlocking than proprietary status; in 1913 out of 74 industrial joint stock companies the bank was interlocked with, in 51 cases the bank had none or only a minor number of shares (less than three per cent of all).[41] In this way, bank shares (ownership) seem to play a minor part only in the existence and the number of interlocks. This result is supported by the regression of interlocks on bank ownership. Undoubtedly, ownership has an effect on board membership, however, this effect is weak: the value of R^2 being only 0.171 (see Table 2). If dummy variables are introduced for interlocks, the coefficient on ownership does not prove to be significant.

For the bank, interlocking was a means of keeping an eye on the course of business when the bank gave loans to a company. Those companies

TABLE 2
RELATIONSHIPS OF INTERLOCKING DIRECTORATES AND THREE VARIABLES OF BANK–INDUSTRY RELATIONS, 1913

Independent variables	Dependent variable=board membership Coefficient *(t-statistics)*
Ownership	0.286* *(2.790)*
Credit	0.196 *(1.923)*
Size of company	0.135 *(1.410)*
R^2	0.171
F	6.275
p	0.001
N (companies)	95

Notes: * Significant at the five per cent level.Board membership: membership(s) of the Pesti Magyar Kereskedelmi Bank in boards and supervisory boards of industrial companies. Size of company: equity capital. Ownership: the PMKB's shares of industrial companies at the end of 1913. Credit: volume of credits given by the PMKB to industrial companies at the end of 1913. Dummy variables for the memberships were included (D=1 if the company has bank representative, D=0 if there is no bank representative), but not reported. None of these results were significant.

Sources: Compass Leonhardt, 1913–14. Bd. I–II. (Wien, 1915); National Archives, Budapest Z 49, Pesti Magyar Kereskedelmi Bank, Könyvelöség, 18, 43–44, 79–80, 115–117, 156–160, 191–192. cs.

which owed a significant sum of money to the bank did have interlock(s) with it in several cases – with the notable exceptions of the Budapesti Ásványolajgyár (Budapest Mineral Oil Works), the Biharszilágyi Olajipar (Biharszilágyi Oilworks) and the Palatinus Építö (Palatinus Constructions). The extent of interlocking did not necessarily reflect the size of the credits, and interlocking was not restricted to the companies with whom credit relations existed. While the bank had personal relations with 74 industrial companies in 1913, it had no credit relations whatsoever with 40 of these. The largest Hungarian industrial joint stock companies, like the Weiss Manfréd Müvek (Manfréd Weiss Works), the Rimamurány-Salgótarjáni Vasmü (Rimamurány-Salgótarjáni Iron Works) or the Salgótarjáni Köszénbánya (Salgótarján Mines) were among these; they used the bank's services for their fundraising only. A regression of interlocks on bank credits gives a positive but statistically insignificant coefficient, that is, it shows that interlocking hardly depended on bank credits. If dummy variables are included for interlocks, the coefficient on credits does not prove to be significant either. A regression of interlocks on the size of company (equity capital) also gives an insignificant result (Table 2).

The weak relationship between interlocks and capital relations – both the possession of shares and credit transfer – indicates that the board presence had not only control or monitoring function and that the bank domination or even a significant bank influence were not concomitant with it. A qualitative look at the characteristics of supervisory board and directorate memberships also supports this statement.

The characteristics of supervisory board and directorate memberships were influenced by several factors. From the bank's perspective, it must have been an interlocking different in quality when the first man of an industrial company made his way to the supervisory board of the bank – like Lázár Reimann, Executive Director of the Magyar Általános Köszénbánya (Hungarian General Mines) – or when a bank leader was delegated to an industrial company. The very same difference obviously affected the nature of relations established between the bank and a third company. At those companies where the link was an outsider not employed by the bank, there was a different kind of influence than at those where the employee of the bank was present.[42] Besides, as far as the possibilities of influence were concerned, there were considerable differences between the 'positions' – chair or ordinary member – of the supervisory board and the directorate.

There is other evidence to support the fact that memberships were of different qualities. Although Móric Mezei or Jenö Szabó had considerably more memberships than Henrik Fellner, they were mostly delegated to local railway companies, while Fellner, Vice-President of the Kereskedelmi Bank, was delegated to big enterprises. That is why research made attempts to separate 'weak' – or 'secondary' – personal relations. In the absence of clear criteria and research methodology, however, this differentiation has not been commonly used in quantitative research.[43]

When trying to evaluate the directorate positions bank leaders held, we also need to consider that the accumulation of positions sometimes made it impossible for a banker to exercise any influence on the company. It seems obvious that Fülöp Weiss' 36 (24 domestic and 12 foreign) board memberships made up such a vast number that some of these positions could have little importance, since he must have hardly been able to get a comprehensive view on the course of his own and 36 other companies' business, and it is not likely that he was well informed of the course of business on an everyday basis.

The maintenance of contacts with companies outside Budapest and the regular control/monitoring of their business was not an easy task to accomplish for the bank – or the representatives of the bank – given transportation and communication conditions at that time. For those who were delegated to companies in the countryside, often it was impossible to be present at directorate and supervisory board meetings. In such cases there were corrections (or attempts to make corrections) afterwards: as in September 1907, when the Kereskedelmi Bank had to appeal to the Kassai Takarékpénztár (Savings Bank of Kassa) because important decisions on credit matters had been made 'in the absence of Mr. Fehér'.[44]

Besides, the delegates of the bank often found it impossible to be competent in the various issues that came up during the course of business in the industrial companies. Therefore, lack of competence brought about the failure of attempts to exercise influence or control. Moreover, many operational matters were of no concern to the bank delegates. Though there must have been clashing views on the best way of profit maximisation, this aim was common for both parties, which prevented the emergence of significant conflicts of interest between the bank and the company.

In the following, on the basis of archival sources of industrial companies, we shall present two cases which illustrate the limits of bank control despite existing interlocks: whenever there was a conflict between the bank and the industrial firm it did not necessarily mean that the bank was able to exercise its influence. The main reason for this was that the bank delegates – with only a few exceptions – were in a minority on the boards. In addition to this, there were cases where several banks were represented in the managing bodies of the companies at the same time, for instance at the Rimamurány-Salgótarjáni Vasmü (Rimamurány-Salgótarján Iron Works) in the first decade of the 1900s or at the Egyesült Tégla és Cementgyár (United Brick and Cement Factory). The simultaneous presence of delegates from different banks in competition with each other worked against attempts to exercise influence.[45]

Besides, the peculiarities of the decision-making mechanisms of the industrial companies often left little space for bank influence (even if the delegate was a directorate member), which can be illustrated by the following case. From the minutes of the directors' meetings of the largest Hungarian joint stock company, the Rimamurány-Salgótarjáni Vasmü, it can be established that in the first decade of the twentieth century – although Leó Lánczy and Bernard Popper were members as the delegates of the Kereskedelmi Bank and the Wiener Bankverein – decisions were in the main made by Lajos Borbély, Director of Technology, and, to a lesser extent, by Ármin Bíró, Director of Commerce. They were the ones who presented their plans, which were given consent in each and every case.

From a formal point of view, the bank's influence came to its peak when in July 1910 there was a change in the top management of the Rimamurány-Salgótarjáni Vasmü. Lajos Borbély, Executive Director, being elected as an MP and 'well on in his years', resigned and an executive committee of four members was elected with him, Ármin Bíró, Bernard Popper (Wiener Bankverein) and Leó Lánczy as members.[46] The order of decision making was, nevertheless, regulated in a way that all the major technical decisions were under Borbély's control, marketing issues were discussed by Bíró and Borbély, and only when 'the two gentlemen agreed on an answer, was it presented to the committee'.[47]

It is true that the value of the minutes of meetings as sources should not be overestimated, for decisions could have been made informally as well. It is a fact, however, that in these sources we can find no trace that Leó Lánczy wanted to put any kind of pressure on the company to assert his own or the bank's will, and – in case of an open conflict of interest – because of the above-mentioned rules of procedure he would have had almost no chance to do that. Moreover, the presence of bank delegates can hardly be grasped by these sources, except in the formalities, such as when in October 1905 'Mr. Bernard Popper said words of thanks for the hearty welcome and assured the company of the Wiener Bankverein's goodwill and on his part promised to do his best to support the directorate in the work of management',[48] or when in 1907 'Ede Loisch Vice-President greeted one of the members of the directorate, Mr Leó Lánczy, and expressed to him his best wishes for the anniversary'.[49] And this was also true vice versa: the industrialist Manfréd Weiss, as a member of the directorate of the Kereskedelmi Bank, did not have any detectable influence on the decisions of the bank.[50]

A plan of the Rimamurány-Salgótarjáni Vasmü for raising share capital says even more about the relations of the bank and the company. During this action the Kereskedelmi Bank was trying to seize a disproportionately large part of Rimamurány shares by issuing preference shares. In 1909, 'considering the money market's favourable conditions', the bank was going to propose 'a motion that the share capital of the company, which amounted to 32 million Crowns at the time, should be raised with 15 million Crowns to 47 million by issuing 75 000 preference shares, each being worth 200 Crowns'. The directors of the Wiener Bankverein and the Kereskedelmi Bank, who were present, were ready to take over 50 or 40 per cent of the preference shares at par rate and agreed to keeping them blocked for ten years. From the minutes, we know that 'an extensive discussion began over the motion, during which doubts were settled or taken into account, counter motions rejected' and the proposal was eventually adopted.

The phrasing, nevertheless, indicates that the decision must have been interfering with certain interests. Indeed, in a few days, on 30 July,

> members of the directorate announced that a group of shareholders, worried about the issue of preference shares, consulted with them so that the directorate should give up raising the share capital. Since this motion of the directorate to issue preference shares was not favoured by the shareholders and since it is desirable that the harmony, which

> the company was pleased to preserve between them and the shareholders and to which the current prosperity of the company is due, should be maintained by all means.

The directorate withdrew the proposal.[51]

The objection of minor shareholders was accompanied by a major stock exchange action initiated by Simon Krausz, a well-known speculator of the period, whose aim was to shatter the issue of the Wiener Bankverein and Kereskedelmi Bank shares.[52] Krausz and those he represented possessed a large amount of Rimamurány-Salgótarjáni Vasmü shares, thus the issue of preference shares interfered with their interests. Krausz mobilised his numerous personal connections in and out of the country to protest against the plans. He organised a press campaign which emphasised how 'immoral' the banks' intentions towards minor shareholders had been and set up an office to inform and organise the shareholders of the industrial company. The most effective part of his actions was when he put cheap Rimamurány-Salgótarjáni Vasmü shares on the stock market. The plunging prices alarmed those who were still inactive. Due to the protest of the shareholders and in spite of the bank interests, the issue of preference shares was suspended. This case demonstrates that minor shareholders, when being properly organised, were able to protect their own interests against the management, even if leading banks were represented in them.

There are several other examples to illustrate how difficult it was for the bank to exert its influence on industrial companies even in the case of significant interlocks or proprietary shares. One of these cases is the purchase of the Danica Vegyimüvek (Danica Chemicals) by the Kereskedelmi Bank. At one of the directorate meetings of the Kereskedelmi Bank in 1909, Leó Lánczy reported that the bank purchased 12,000 shares of the Danica, which amounted to 80 per cent of the company's shares.

This purchase, however – as Lánczy pointed out – was not the bank's own initiative; it acted on behalf of the Hungária Mütrágyagyár (Hungária Fertilizer Works). By then, the Hungária had been planning to lay down the foundations of a new factory for a long time and the company had the Danica's plants in mind for this purpose. The minutes of the banks provide details about the transaction:

> The Hungária, which was well aware of the interlocking between the Kereskedelmi Bank and the major shareholders of the Danica Company, encouraged the bank to get hold of that particular plant for them. During the negotiations it turned out that the Danica was not willing to sell the plant. The main shareholders, on the other hand, seemed to be ready to sell their shares at par rate.

The bank 'found that if the Hungária were able to buy the plant for 2.25 million Crowns, then the purchase of the Danica shares at par rate would be a paying proposition'.[53]

The Hungária accepted the conditions, and the bank bought the shares, charging 100,000 Crowns as commission. Having purchased the shares, however, 'the Hungária directorate turned around and using evasions and formal excuses announced its unwillingness to take over the Danica shares'. And the minutes continue:

> This complete change of front of the Hungária, their actions which contradicted their own words and the cold, unpleasant atmosphere of the consequent negotiations which seemed to betray the long, common past, compelled the Executive Chair and Director Fülöp Weiss, who had been representatives of the Kereskedelmi Bank in the Hungária directorate till that time, to resign as they considered it incompatible with their positions and with the dignity of the bank to continue their activities in the directorate of the company.

They also made it clear though that 'the 40 per cent of the shares of the Hungária, which belongs to the Kereskedelmi Bank and to its business friends will require further participation in the directorate of the Hungária'.[54]

As we can now see, all the conditions of asserting the bank's influence were present in the case of the Hungária Mütrágyagyár. Numerous and unusually high-ranking bank representatives (the two top bank leaders) were delegated to the directorate of the company. The personal relations were strengthened with a large (including 'business friends' possessions) 40 per cent share of ownership, and the company was only a middle-sized one. In this period, the Hungária approached the bank for loans on a regular basis; at the end of 1910, for instance, its debts towards the bank totalled 835,421 Crowns.[55] Despite all this, the bank was unable to exercise real control and there was nothing else left for the two bank representatives to do but leave the board ostentatiously. As a result of the affair, the bank came into the possession of the Danica company, although, as Lánczy put it: 'I wish we had not taken over the supervision of a larger company now'.[56]

The lack of compelling evidence of traditional explanations for interlocking directorates indicates the need for new rationales as to the existence of such connections in pre-World War One Hungary. The data in this study offers only indirect evidence on these rationales, which clearly require further investigation. Information theory can contribute to the understanding of interlocking directorships not in the sense of traditional monitoring – that is, monitoring debts (interim or *ex post* monitoring)[57] – but rather in that the mediation of information could have a role in a wider sense, namely that delegation to a board was often due to the delegate's own or the bank's expertise and information-carrier properties. It seems likely that the value of memberships lay in the fact that they functioned as a means of information mediation for both sides, and not only for the bank, and that an entire network of delegates evolved this way. The banks occupied central roles in these networks, and they could be provided through these persons with business information (*ex ante* monitoring). However, the information flow also served the interest of the recipients, the industrial or other companies. A firm could be informed by the board members about a great deal of economic information, such as up-to-date conditions of bank services, other companies' business plans and so on. It was these features that made the bank representatives really valuable for the recipient company also.

The interlocks connecting the bank with other firms consisted not only of bankers, but also of industrial leaders (such as Manfred Weiss before the war, or previously Robert Haggenmacher), professionals (such as Jenö Szabó) and landowners (Ödön Kajári, Baron Vilmos Gutmann).[58] The mutual information mediator function is especially obvious in the case of the 'big linkers' who were not attached to any of the companies. Ödön Kajári and Baron Vilmos Gutmann were such big linkers in the directorate of the Kereskedelmi Bank before World War One, and also members of 15 and 11 other Hungarian companies, respectively. The presence of banks in company boards could also well be 'information' or rather a signal for the market that the companies in question were reliable ones.[59]

V

This study has tried to test empirically the plausibility of interpretations of interlocking directorates in Hungarian bank–industry relations at the turn of the century made by economic historians during the last decades. It also represents an attempt to look into the validity of two theories of economics regarding interlocking directorates (control theory and information theory) in this period of Hungarian banking history.

As a research design we employed the case-study approach, taking as subject the Pesti Magyar Kereskedelmi Bank and its various connections to industrial firms in the years before World War One. Consequently, this article might not claim general applicability of its arguments, nor even for the entire Hungarian banking system in the period under investigation. However, it constitutes the first empirical study of interlocking directorates of banks and industrial companies in Hungary during the period of Dualism (1867–1918).

The analysis of the bank's capital relations (ownership, credit) and interlocking has shown that there was a weak relationship between these variables, which indicates that board representation had not only control or monitoring function. In many cases, the presence of bank directors or other delegates in industrial boards was not accompanied by any capital relations which made the emergence of bank hegemony or even a significant bank influence not concomitant with interlocking. Moreover, the bank had not always been able to represent its own interests effectively even in those cases when besides the interlocks the bank was a significant owner or creditor of industrial companies.

On the basis of the results presented here, interlocking cannot be regarded as a factor which would have made the emergence of hierarchical relations necessary in Hungarian bank–industry relations at the turn of the century. Therefore, the function of interlocking might have been different from what historians, following Hilferding, have assumed. In addition, it seems that neither control theory nor the now widely accepted explanations of bank–firm relationships based on information theory focusing on interim or *ex post* monitoring is able to provide us with a sufficient explanation as to what generated the interlocks.

The pattern of interlocking uncovered in this study therefore call for a more complex interpretation of interlocking directorships in pre-1914 Hungary and make us shift the focus of attention to other possible functions of board representation. There are several possible paths here. The study of *ex ante* monitoring, that is, monitoring without debts or other capital relations, and the structure and functions of personal networks, may prove to be promising in the future. A better understanding of interlocking obviously requires other (for example, sociological) approaches as well. Although the so-called 'control perspective' is present in contemporary literature of sociology, too, other approaches have also been emerging. The 'managerial perspective' says interlocking is a matter of prestige, since the decisions are made by the managers. The 'class cohesion perspective' regards memberships as forms of social interaction between persons from the same social class. The presence of a bank leader in a board might also be the result of not only the bank's interests, but of the individual's own interests also – such as remuneration which came with the membership. These complexities provide a challenging research agenda for understanding interlocking directorates in Hungary at the beginning of the twentieth century.[60]

NOTES

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15. Ibid., p.158.
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33. Though it is not very common, our chart includes the memberships of both bank directors and deputy directors, as their functions in certain cases could be just as important as the functions of directorate and supervisory board members.
34. These data can be compared with the Austrian ones: in 1917 the directorate and supervisory board members of the largest Austrian bank, the Creditanstalt, had 194 memberships in different companies. See J. Križek, *Die wirtschaftliche Grundzüge des österreichisch-ungarischen Imperialismus in der Vorkriegszeit, 1900–1914* (Praha, 1963), p.101. For a German example, the Deutsche Bank had four positions in the metallurgical industry, 14 in the electrical industry and two in the chemical industry in 1903. See M. Pohl, 'Festigung und Ausdehnung des deutschen Bankwesens zwischen 1870 und 1914', in *Deutsche Bankengeschichte*, Bd. 2 (Frankfurt am Main, 1982), p.282.
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36. National Archives, Budapest (thereafter NA) Z 49, Pesti Magyar Kereskedelmi Bank,

Könyvelöség, 18, 43–4, 79–80, 115–17, 156–60, 191–92. cs.

37. Tomka, 'Bank Hegemony', pp.203–6.
38. NA, Z 34, Pesti Magyar Kereskedelmi Bank, Ügyvezetöigazgatósági jegyzökönyvek.
39. In addition to ownership of shares, proxy voting could have represented another way of bank access to directorate and supervisory board memberships. However, the lack of appropriate, systematic data does not makes it possible to test this hypothesis directly in the pre-war period.
40. NA, Z 34, Pesti Magyar Kereskedelmi Bank, Ügyvezetöigazgatósági jegyzökönyvek, 13 Dec. 1906.
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43. This differentiation is not the same as the 'loose' relation which develops when there is the same outsider in the directorate or the supervisory board of two companies. Cf. John Scott, 'Intercorporate Structures in Western Europe: A Comparative Historical Analysis', in M.S. Mizruchi and M. Schwartz (eds.), *Intercorporate Relations: The Structural Analysis of Business* (Cambridge, 1987), p.211.
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54. Ibid.
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56. NA, Z 33, Pesti Magyar Kereskedelmi Bank, Igazgatósági ülési jegyzökönyvek, 3.k, 6 Nov. 1909.
57. Fohlin, 'The Rise of Interlocking Directorates', p.5.
58. For a classification of board members in the inter-war period, see Pogány, 'Bankers and Clients', pp.61–3.
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