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Corporate Governance and Local Embeddedness of the Hungarian Cooperative Banking Sector[1]

Abstract

Traditional cooperative banks are considered as locally and socially embedded, lending to local clients from locally collected deposits and financing the local economy. To offset their disadvantage due to their insufficient size, they exploit the information advantage deriving from their geographical proximity to their clients and the advantages of their peculiar corporate governance deriving from the member-ownership. This paper examines the relevant theories on cooperative finance, while examining the underlying geographical and corporate governance aspects in a less advanced transition economy environment. Governments' preference towards commercial banking and at the same time their negligence towards the cooperatives in general led to a loose financial regulation of the sector. The limits of cooperatives' corporate governance and demutualization intensify when loosing social/local embeddedness. Cooperative banks, located in the periphery with insufficient socio-economic conditions to develop closer relationships with borrowers accelerate capital flight from their regions. Commercial cooperatives entering new markets show higher lending activity but have more non-performing loans due to the lost information advantage.

Key words: cooperative banks, corporate governance, local embeddedness, cooperative network, Hungary

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1. Introduction

The cooperative movement has always enjoyed greater popularity in times of economic crisis and growing social problems. Whilst they were emerging, around the middle of the 19th century, financial centres had no resources to finance peripheral and local economies. The *classical model of cooperatives* (with community development as the main priority) was established for the purpose of undertaking local investments from local savings. Cooperative banks – organised on a voluntary basis – collected local deposits and provided financial services for the local population and enterprises without intermediary financial centres. Through their activities, these cooperative monetary institutions not only contribute to financial equality and the catching-up of rural areas, but also improve the inclination to save and the financial autonomy of peripheral regions by avoiding the crisis-stricken and especially volatile financial centres [Gál 2010: 695, 722].

The prudential lending on the basis of the locally collected funds plays essential role the cooperative sector in the operating practices of the traditional cooperative banking model and it is derived from the cooperative principles [Kovács 2017]: member and customer-oriented business strategy with long-term views; member-ownership involving members into the decision making [Pálos 2013]; strong, bottom-up control; conservative risk-management; [Kiss, 2008] and local presence and embeddedness [Gál, 2012].

Their *unique corporate governance structure*, where each owner-member has one vote, and all clients are owner-members, ensures that borrowers are personally known individuals or small enterprises who all live and work in the geographical vicinity of the cooperative. Therefore, "local embeddedness" is a key variable in their information processing [Delfiner et al. 2006]. Further, by virtue of their social relations and their pursuit of limited profitability, their overall objective is to ensure the development of the local community [Banerjee et al. 1994; Besley and Coate, 1995].

Cooperative lending institutions, in addition to providing a stable, predictable and sustainable system of conducting banking business through their unique proprietary and corporate governance structure, have always built on their legacy and on the practice of commercial banks. Cooperation among local cooperative banks and integration at national level were both required to ensure their entry into competitive markets, to improve the supply of services and to create their own risk-management (institution protection) system.

In 2014, there are – worldwide – 210,000 cooperative banks and credit unions operating in 100 countries, with 703 million members and managing assets of US$ 11,263 billion [UN 2014]. In the European Union alone there are 3,135 cooperative banks which comprise 58,000 branches, 80.5 million members and 750,000 employees who service a total of 209 million private and corporate clients. The two (the global and EU entities) enjoy 20% and 40% shares respectively of the market for deposits [Wyman 2008; EACB 2017].

In respect of their market weight, Hungarian Savings Cooperatives have little significance, and, with few exceptions, have been unjustly neglected by economic research [Kiss 1999, 2009; Gál 2000, 2003, 2012; Gál and Burger, 2013, Burger 2013]. The historical traditions of the sector, its potential in terms of growth and the recent government's desire to increase the share of domestically owned banks as a reaction against the over-dependence on foreign owned commercial banks in transition countries, all offer the sector's stakeholders a strategic role in financing future development. Nevertheless, analogous to foreign examples, the question to be answered is how strongly embedded locally are these institutions and how active they are in retail market financing the local economy. Is it possible to verify the argument that the Hungarian cooperative banking sector plays a dominant role in financing local small-and medium sized enterprises, local public investments and the local households.

Investigation of the geographical characteristics of lending activity of the cooperative banking is strongly related to its peculiar corporate governance structure. The locally embedded nature of member-ownership not only requires a close proximity to clients but strongly determines the geographical distribution of the cooperative banking network.

This study, in fact, attempts to answer – or at least shed light on – three questions:

- What were the major changes in the corporate governance structure in Hungary during the transition and what are the main reasons of demutualizations?
- What is the geographical distribution of cooperative bank network in terms of the settlement hierarchy and their regional preferences?
- What is the relationship between lending activity and the geographical location of cooperative bank branches?

Information availability on borrowers has gradually become the cornerstone of research on banking and cooperative banking in particular [Alessandrini et al. 2009a, 2009b]. Mutuals and cooperative banks, where clients are usually owners too, are considered as efficient organization forms in reducing the organizational and functional distance between lender and borrower, thus mitigating the lending risk and providing a competitive advantage over commercial banks [Pittaluga et al. 2005]. As a consequence of that, the value of local funding and local investment structures has been appreciated across Europe, underscored by the global financial crisis starting in 2008 [Gál 2010].

The literature distinguishes between cooperative banks according to their business objective. Marshall et al. [2003] write about passive (traditional) mutuals, as described above, and commercial mutuals, which aim for growth similar to commercial banks. Düfler [1995] describes traditional (similar to Marshall's passive mutual), market-oriented (as Marshall's commercial mutuals) and integrated cooperatives (which refer to the national network of cooperative banks, which act together as a single national bank).

While these categories with no doubt help to understand different cooperative strategies, the literature rarely questions the importance of local embeddedness in deposit taking and lending activities of cooperatives. For instance, Coccorese [2009] reports on Italian cooperatives, which, despite their local monopolistic situation, do not exploit their power, presumably thanks to their cooperative nature. At the same time, there are hints to that structural and organizational issues do influence cooperative banking behavior. Glass et al. [2010] explain loan quality with organizational and structural issues at Irish credit unions. Burger [2013] also directs attention to internal and governance-related issues when explaining dividend payouts at Hungarian cooperative banks. Therefore, the relationship between the lending activity, structural variables and local embeddedness at cooperative banks is less obvious.

Hungarian cooperative banks are particularly well suited to answer the research question. First, up until 2013, the sector was relatively neglected by policymakers in Hungary. This laissez faire attitude resulted in heterogeneous cooperative models, where both passive, commercial/growth-oriented and demutualized cooperatives appeared [Kiss 1999, 2009; Gál 2003, 2012; Burger 2013]. Second, they mostly stayed out of larger towns up until the 1980s–1990s, meaning that any geographical expansion must have taken place in the last ten-twenty years Kiss [2009]. In this environment this study can both identify different cooperative types and their expansionary strategy. Considering these changes, the aim of this study is the examination of the operational environment and practices of the Hungarian cooperative banks.

The paper is structured as follows. The next chapter will offer a comparison of those financial and regional economic theories which highlight the lending advantages of the cooperative banking system and describe the role of its peculiar corporate governance with implications on its lending strategy. The third section sets the context for the argument by providing a brief outline of evolution of the Hungarian cooperative finance and its corporate governance during the transition. This is followed by an empirical investigation of the geographical characteristics and the lending activity of the cooperative banking sector supported by financial statistics. The final part summarises the main findings.

2. The corporate governance and spatial characteristics of cooperative banks – a literature review

The paper briefly reviews three groups of literature on cooperative banks. The first and the second group explain their success in local lending in relation with their unique corporate governance also discussed in the literature. The article contrasts these arguments with the second group, which describes the obstacles to lending in the periphery. This latter one accepts *a priori* the existing differences and inequalities between centre and periphery in terms of the availability of financial services, and they examine operation of the cooperative sector and its competitive advantage in regions which have a less developed financial infrastructure.

The first group of studies based on micro-financial approaches analyse the relationship between credit institutions and enterprises and the lending activity of different credit institutions (commercialbanks, cooperative banks) of different sizes and representing diverse corporate governance models.

The first cooperative bank (Volksbank) was established in 1852 as a reaction to the social and spatial inequality of financial services. Its functioning was based on the fundamental values of self-help, community solidarity and autonomy, and also on the trust between community members resulting from geographical proximity and the *tacit* knowledge of members. In this system, community members are automatically owners who operate their monetary institution not on the basis of profit constraint but of a profit expectation which guarantees organic growth. The objective of their foundation was to finance the local economy, small and medium-sized enterprises and local communities – which implies local prudent lending (through the formation of capital reserves) on the basis of locally collected funds. Increasing growth, operating efficiency and the strengthening of well-being of members and the local community are important objectives [Fonteyne 2007]. Later, this model spread in different countries (Italy, Finland, Hungary, etc.) with some county specific differences [Kovács 2015].

The literature highlights the specific features of the operation of local banks embedded in local communities. The local banks directed by member-owners recruited from among the community have a competitive advantage in lending over commercial banks due to the 'supplementary information' which they possess [Banerjee et al. 1994]. Since local credit institutions were established by local society for their own members, these institutions have an informational advantage over commercial banks regarding the creditworthiness of their clients, and their credit relationships have a longer history. This reduces their cost of lending in provincial areas.

These findings are in line with the literature on *relationship banking.* According to that, the distance between the bank and its clients move together with credit availability. Moreover, a stronger lender-borrower relationship results in less credit rationing for borrowers even during crisis periods [Ferri and Messori 2000; Cotugno et al. 2013] and these methods create the opportunities for "home banking" functions [Burger 2013]. The time horizon of the development of these functions was examined by Berger and Udell [1998] and Cole, Goldenberg and White [2004]. Relying on their empirical results they proved Boot's [1999] argument, namely, that the bank-customer relations can be realized for both sides in the medium term (7 to 8 years).

The competitive advantage of cooperative banks on the periphery stems from geographical proximity, the member-owner system and the local decision-making process. This is the informational advantage which members who are familiar with each other and bank officers utilise alike in the selection of clients, screening, credit scoring and the control of credit contracts. In their study, Angelini et al. [1998] argued that Italian cooperative banks were able to offer loans to their member-clients with as low interest margins such as commercial banks provide, only in the cases of longer customer relationship due to the better access to information as a consequence of

their stronger local embeddedness. This study considers ownership by members to be the main distinguishing feature of the cooperative banking model and not its local embeddedness. Several further studies confirm that cooperative, fixed and relationship banking is efficient in reducing information asymmetry [CEPS 2010; Ferri and Messori 2000; Sharpe 1990; Guiso et. al. 2004]. The benefits of local embeddedness do not automatically appear – even in the case of cooperative banking. According to the analysis by Ferri and Messori [2000], although cooperative banks operate all over Italy, their efficiency in lending exceeds that of commercial banks only in the Northern and Central regions. This is due to the fact that social and economic conditions in Southern Italy are not good enough to enable cooperatives to reduce the information asymmetry and develop closer socio-economic relationship with the borrowers.

This last argument leads us to *the second group of literature*, describing obstacles to lending on the periphery, which builds on theories of the *post-Keynesian* school *and on regional economics*. The main emphasis is laid on the investor, or, in this case, the lending institution. According to the liquidity preference theory [Chick and Dow 1988] investors prefer higher liquidity at the same levels of yield and risk. Therefore, since the liquidity related to investment is higher in financial centres, the savings (deposits) of peripheral regions flow towards core regions [Dow 1990]. "Backward allocation" – from the centre – is only possible if the investment opportunities of the centre have been fully exploited, if the risk of investment in peripheral regions is lower or if their yields are higher. Consequently, the availability of credit in peripheral areas is lower to that of the centre.

This approach accepts the existence of financial systems with a distinct and over-centralised spatial structure, according to which the centres of economic core regions are characterised by a high concentration of capital at the top levels of the urban hierarchy [Porteous 1995; Gál 2012]. In the meantime, SMEs and regions located far from financial centres are under-funded. We can find several examples of this in the UK – and also in Germany, which has a more decentralised spatial structure and more multi-polar structure of financial centres [Klagge and Martin 2005; Gál 2010: 344–46].

In addition to the low liquidity of investment on the periphery, a further obstacle is that a cooperative bank engaged in local lending alone is unable to diversify its credit risks sufficiently – either geographically or sectorally in many cases [Alexopulos and Goglio 2010: 9]. Even though this can be improved by cooperative integration through the credit products of a central institution (apex bank), this fundamentally transforms the role/position of the local bank and increases information asymmetry and the *functional distance*[2] between client and apex bank. It has a negative impact on the credit available to SMEs [Pittaluga et al. 2005; Alessandrini et al. 2009a].

[2] Functional distance investigates the so-called economic distance/proximity between the bank and the local economy which refers mostly to the embedded nature of the organisational and decision-making mechanisms of banks in the given settlement within the region [Pittaluga et al. 2005; Alessandrini et al. 2009].

Similarly, the weakness of the local economy (lack of enterprises, unemployment etc.) creates an obstacle to local funding – which would discourage anything other than high-risk lending. Since, by definition, the periphery is less developed than the centre, lending in the centre involves fewer and lower risks (even if we disregard the competitive milieu factor).

Literature deals with *corporate governance and banking strategy issues of cooperative banks* and considers the profit target of a cooperative with such factors as the social embeddedness of the cooperative, its ownership structure and the strategy of its management. This also determines the location of branches and their risk-taking propensity. Hence Düfler [1995] identifies three types of cooperative banking model in respect of Germany and Marshall et al. [2003] likewise in relation to the UK[3]. These are the traditional model serving the local community, the profit-oriented commercial model and an intermediate integrated model. Bank expansion might be a consequence of profit orientation, and so an urban presence might be the result of a decision in favour of this. Swift regional expansion and entrance to urban markets are consequences of higher profit aspirations which are typical for profit-oriented commercial cooperatives. Since lending is likely to produce higher profitability at the cost of higher risks, more intensive lending activity may also be linked to the profit- and expansion-oriented cooperative model.

On the basis of the professional literature and experience from our own research, we summarise the operational model of cooperative credit institutions in Table 1.

Given the structural characteristics of cooperatives' lending activities discussed in the previous section and their strategic considerations on geographical expansion cited above, the paper constructs a two-by-two stylized matrix to classify cooperative banks.

We analysed the operation of cooperatives in two dimensions: the first dimension of the matrix is the cooperative's geographical location (whether there are branches in less developed areas, predominantly in smaller settlements, or, rather, in more developed areas, in significant medium-sized and large towns or cities). The second dimension is the cooperative's lending intensity, which may be described by using a loan to deposit ratio for instance. These dimensions define four cooperative types:

a) The *classical/traditional cooperative* is an active lender and located outside core areas, is embedded in local society and so is able to decrease informational asymmetry sufficiently. It is, therefore, an active lender.
b) Passive cooperatives (in local, non-competitive market with low lending intensity) are also located on the less developed periphery. Therefore they invest the deposits collected in an alternative way, e.g. on the interbank market or in government securities.

[3] Marshall et al. [2003] write of "*mutuals*", since no cooperative banks exist in the UK in their pure form (The Cooperative Bank is a normal commercial bank whose owner is a cooperative – the Cooperative Wholesale Society or CWS).

c) Actively lending commercial cooperatives (similarly to Düfler's [1995] market-oriented cooperative) located in larger towns and larger cities are similar to commercial banks in terms of their strategy. They preserve cooperative legal status and governance structure.
d) Finally, a group of risk-averse cooperatives operating in urban areas with limited lending activity remains. Their challenge is offering competitive rates on deposits while avoiding lending.

Table 1. Illustration of geographical position and lending activity of cooperative credit institutions

<table>
<tr><td colspan="2" rowspan="2"></td><td colspan="2">Location of savings cooperatives</td></tr>
<tr><td>In medium-size or large towns or cities</td><td>In small towns or villages (peripheral)</td></tr>
<tr><td rowspan="2">Allocations of collected deposits</td><td>Loans to clients</td><td>Competitive market/ lending strategy pursuing cooperative model (intense competition with commercial banks, embeddedness hard to achieve)</td><td>Local monopoly situation /lending strategy in non-competitive market (Classic cooperative model: autonomous financing of the local area with lower risk factor from informational advantage)</td></tr>
<tr><td>In other ways – (interbank loans, government debt securities)</td><td>Competitive market / passive strategy pursuing cooperative model (risk avoidance, embeddedness irrelevant)</td><td>Local monopoly situation / passive strategy-based cooperative model (no risk moderation based on limited local embeddedness)</td></tr>
</table>

Source: edited by the authors based on Gál and Burger [2013].

Marshall et al. [2003] direct attention towards commercial mutuals, which, according to their view, had been on the way to demutualization. They originate these processes mainly from a bunch of sources: from the "money culture", developments of the retail market and managerial choice. They state, ownership control of several mutuals, particularly the ones with dispersed ownership, were under control by their senior management, which chose to loose ties with the local community and turned their institution into commercial banks. This led to to the new strategy of these institutions and they have effectively lost their local embeddedness.

At the same time, Iannotta et al. [2007] show that cooperatives serving their own community usually have better quality loan portfolio (though they do not explicitly

compare them to commercial cooperatives). At this point, using the literature, the paper formulates hypotheses as follows. While traditional, locally embedded cooperatives, using their local information advantage, may compete successfully with lending, cooperatives with rapid geographical expansion, losing their ties with their community that leads to the deterioration of their main competitive advantage in lending.

At the same time, Iannotta et al. [2007] argue that high ownership concentration typically implies better loan quality. From the literature cited earlier someone may assume that the quality of expanding cooperatives' loan portfolio drops as they abandon their embeddedness. Regarding to the existence of different types of cooperatives, Burger and Gál [2013] argue that demutualized banks, previously commercial cooperatives, which are owned by a few individuals, adopt more efficient lending processes similarly to commercial banks, exhibiting therefore a better efficiency.

In his paper Burger [2013] examines dividend payout policies at the Hungarian cooperative banks in connection with their ownership and corporate governance structures. Burger's [2013] study builds on Shleifer and Vishny's [1997] study on corporate governance, and on the above cited literature by Düfler [1995] and Marshall et al. [2003]. Summarising their key findings, the paper states that it is not the concentration of ownership that matters in corporate governance, per se, rather the perspectives of the owners that determines corporate governance. Individual shareholders with blockholdings at limited companies may think long term as they are not threatened as owners. In contrast, at cooperative banks the quasi concentrated owners and, at the same time, managers exert control over the cooperative not as a result of their legal ownership but due to the support received from their selected members. Because of the deliberate reduction of membership in Hungary the small number of selected members, increasingly served managers' as well as their own growing ownership interests [Kiss, 2009]. These members support the management because they are rewarded with favours such as good positions at the co-operative. Therefore, cooperatives ceteris paribus are managed according to short term objectives rather than their demutualised ex-cooperative counterparts. This finding is seemingly in contrast with Shleifer and Vishny's [1997] and Hansmann's [1988] arguments, inasmuch as they assert that the dispersed ownership is the only optimal form in the case of cooperatives, particularly if agency problem emerges. However, the lessons learned from the corporate governance structure of the Hungarian cooperative banks is that the sector has gone through a 'latent demutualisation' in the past decades, resulting in a sharp decline in membership as well as in their local embeddedness, which had also a negative impact on their lending activity.

3. Regulatory and corporate governance challenges of the cooperative banking during the transition period

3.1. Regulatory environment and institutional framework

The history of Hungarian cooperative savings banks divided into more phases. The first credit cooperative was founded in the 1850's. The next period is characterised by the way towards the network integration (1898) while in the third period, in the early 20th century, the sector expanded dynamically. Historical and economical events (world wars, economic crisis) repeatedly interrupted these processes. During communist era cooperative banks were oppressed and controled by the political decision makers [Moizs and Szabó 2012; Kulcsár 2007].

To understand the evolution of the Hungarian cooperative banking sector in the last two and a half decades, it is essential to introduce the framework conditions for financial market transformation from the command to market economy. The creation of the Hungarian two-tier banking system, introduced in 1987, was a top-down driven process supervised by a central authority and assisted by the 'neoliberal financialization project' [Raviv 2008]. Therefore, the banking system operated in a highly centralised fashion with a considerable degree of territorial concentration. From spatial perspectives it virtually reproduced the earlier Budapest-centred, over-centralised state-socialist single-bank structure, even if on market oriented basis. Foreign banks also followed the over-centralized location strategy in making their strategic decisions on their networks and headquarters. Banking reform was also accompanied by the emergence of a *dual banking system*[4], which is characterized by the dominance of foreign-owned commercial banks and, at the same time, the much smaller market weight of domestically-owned banks [Gál 2005]. Crowding out effect of the 'dual banking system' on domestic banking has further increased the difficulties within the cooperative banking sector.

Experience from the transition suggests that the role of the state was especially significant in the case of reforming the post-socialist banking systems, while the concept of financial deregulation proposes the withdrawal of the state from financial markets. However, the post-socialist state had not only committed itself to the neoliberal restructuring, reforms required by EU accession but unilateraly biased towards large foreign investors who played a key role in bank privatization (by 1997 all large banks privatized by western financial institutions) [Raviv 2008; Gál and Schmidt 2017]. The Hungarian government policy was characterised by the'big is beautiful' approach, which was accentuating big companies, particularly foreign owned commercial banks, at expenses of domestic banks (cooperatives) and local entrepreneurship[5]. At the same

[4] The term 'dual economy', as it is commonly applied to post-socialist countries, not only highlights organisational and structural differences among economic actors (large and small firms) but it is embodied in differences between foreign-owned companies (commercial banks), on the one hand, and small domestic firms (cooperative banks), on the other.

[5] Literature suggests that only large enterprises capture economic of scale and scope, and larger banks enjoy significantly greater market power than their smaller peers [Rugman and D'Cruz 2000]. Others,

time, the funding needs of the domestic SME sector, which was facing credit rationing by larger banks during the 1990s, were largely neglected by governments[6]. This policy also failed to recognize the potential advantages of the domestic cooperative banking sector in financing small businesses and mitigating financial exclusion.

The evolution of the Hungarian cooperative banking is determined by the legacy of the centrally planned command economy. However, the command economy heritage alone may not be sufficient to adequately explain why the Hungarian cooperatives were struggling after the regime change. Rather the newly created competitive conditions in the banking market and the shortcomings of new regulations have undermined the very essence of cooperative banking paving legal loopholes towards demutualisation. Evolution of the Hungarian cooperative banks in turn not only followed international trends towards demutualisation but regulatory shortcomings and the dual banking system significantly affected their transformation.

Until 1987, the one-tier bank system accommodated with a mode of economic control in which credit demands of economic actors were determined by central planning[7]. However, despite the framework conditions cooperatives were exempted from direct party control. Their operation relied more on their semi-autonomous professional associations by county level and paradoxically their legal statute was much closer to the membership-oriented classical cooperative law, than the legislation adopted after the change of regime.

The cooperative banking sector has been the "orphan child" of government economic policy of the past twenty years [Kiss 2011]. The state intervention and recapitalization in the cooperative banking sector became necessary and inevitable shortly after the consolidation had been implemented in the commercial banking sector. The transformation crisis imposed a huge burden on the banking system and cooperative banks became particularly vulnerable. The undercapitalized institutions with their unexperienced management and SME clients were not prepared for the new credit market environment characterized by both the increasing competition and tightening economic condition. The sector was backed by state capital injection in 1993, consolidating one third of cooperative banks and the government simultaneously established their institutional protection scheme. Cooperative banks

like, Sachs and Warner [1995] argue that openness, measured partially by the investments of foreign owned companies, contributes to growth and economomic covergence. In contrast to this, Fogel et al. [2008] find that countries with higher big business stability show slower growth. Similarly, large banking system is associated with stable and big business sector might induce stability rather than growth and dynamism.

6 This is in line with the literature, which finds that the foreign-owned banks lend less to SMEs, particularly if the banks' headquarters are located in a distant country [De Haas et al. 2010]. Similarly, they argue that small banks lend more to SMEs than do large banks in transition countries.

7 In socialist planned economy, there also existed two financial institutions specialised in retail banking, the National Savings Bank with nationwide network and cooperative banks. The anti-market sentiment of the command economy abolished the cooperative banking in 1952. After a few years of break, cooperative banks were allowed to reorganize itself in 1956. Their operation was subordinated to the Ministry of Finance, the scope of their services was limited to household lending only.

which became vulnerable during the first domestic banking crisis after the change of regime during the first stage of economic transition were supported by the state through the newly established National Cooperative Banking Institution Protection Fund (*OTIVA*) and by strentheneing the Takarékbank (functioning as an apex bank). Despite setting up these institutions both the effective lobbying force by cooperative banks and government policy will for further support have disappeared [Gál and Burger 2013; Kalmi 2010]. The sector remained alone in the unequal/uneven market competition with commercial banks, all the while maintaining its 4–6% market share. The banking reforms of the early transition period offered a unique opportunity to strengthen the domestic cooperative banking sector but it was not exploited and its internal and external framework conditions were totally lacking.

Due to the absence of adequate legal regulation the corporate governance structure further weakened paving the way towards demutualization and the *social embeddedness* of the cooperative banking sector started to disappear in Hungary. Moreover, there was no mandatory membership at an institutional protection fund for Hungarian cooperatives, as it is typical in other European countries. The degree of heterogeneity was high and, at the same time, the propensity for stronger network integration[8] remained low. Institutions often look at each other as competitors and not as partners. While some cooperatives chose to operate without any protection fund, and sometimes demutualized ex-cooperatives, operating as commercial banks, were admitted. As a result, up until 2013, three protection funds existed in the country (OTIVA, TAKIVA, REPIVA) with varying degree of control over the cooperatives and financial power[9]. In 2013, the Orban government launched a forced integration of the cooperative banks passing the Act on Cooperative Banks (CXXXV), which interrupted the bottom-up and voluteer integration processes within the sector. Instead of this the government introduced a mandatory, top-down and political-driven integration, which beard the marks of being typical in crony capitalism [Kornai 2015] and in 'mafia states' [Csepeli 2014]. In spite of this 'reform' has some cost-cutting results, it did not solve the main problems of the sector: for example the small market share, the lower efficiency and performance, and it led to the final erosion of territorial priciple of cooperatives [Kovács 2015]. In this Act, the legislature created a new institutional framework of networks, established a new umbrella organisation of the integration, which is responsible for the institutional protection (as successor of three former protection funds), the financial supervision and the crisis mamagement, if it is necessary. In this duplicated structure, the Takarékbank (the former apex bank) became the old and new umbrella bank of the integration with extensive inspection rights, but its main task is the making of common strategy and business policy [Bodnár et al. 2015].

8 The stronger network integration means development of network-wide pruducts, common IT and business stategy under the assistance of the apex bank.

9 TAKIVA used to collect only a HUF 2m (€6,000) contribution from each member as a hedge against any crisis situation. REPIVA managed assets of HUF 200m and OTIVA assets of HUF 14.4bn – in addition to its own equity (valued at HUF 10bn.).

3.2. Corporate governance and ownership structure of the cooperative banks

In 1992, when the Act on Cooperatives passed, there were 260 cooperative banks with 1752 branches and their membership reached 1.8 million. Following the single state intervention the sector was struggling to keep pace with commercial banks: the number of institutions nearly halved due to mergers, the sector lost 90% of its members by 2008, and its market share stagnated at around 5 percent, when the government initiated a major overhaul and reorganization of the cooperative sector.

Membership fell from 2 million (registered) at the time of the regime change (1990) to around one hundred thousand by 2006 [Kiss 2009]. This cannot be compared with the German or Italian experience, where one-third or one-half of clients are members of cooperatives. The management of several cooperatives deliberately tried to reduce their membership by increasing the compulsory membership fee, with the final aim to run the cooperative as their own financial institution that often resulted in management buy-outs. Cooperative corporate governance has a few particularities compared to commercial enterprises due to the unique setup of mutual ownership, but cooperative members and board members have less ability to control the management than it is the case at commercial companies [Fonteyne 2007]. Some of Hungarian cooperative managers exercise effective control over their cooperative with their own shares and with the support of a few selected members. First, managers of certain cooperatives hold a significant number of shares, since the elimination of the limitation of the number of shares owned by a member. Second, selected members support the management for good positions or high dividends. Therefore, the number of members is a critical determinant of corporate governance at a cooperative bank, so if the number of members is around the legal minimum, the corporate governance is strong, the share of distributed surplus as well as the capital per member is high. In contrast, if the cooperative has a large number of members, the trends are reverse. Burger [2013] called the first group as commercial cooperatives, and the second as passive cooperatives. Burger's [2013] empirical analysis confirms the emergence of agency problem: institutions functioning with around the legally required minimum of 200 members[10] tend to vote much higher dividends for themselves than traditional cooperatives with a much larger membership do. Contrary to this practice traditional/classical cooperatives reinvest most of their profits for the benefits of future generations.

However, renewed management successfully operated some of the institutions with little membership participation during the transition and consequently the reintroduction of pure mutual principles and the underlying social embeddedness of these institutions became highly problematic. Cooperative banks became more and more dependent on their management for the maintenance of their mutual principles and practices. Evidence points to the dominance of managerial rather

[10] This minimum number of member requirement increased by law from 15 to 200 in 2002 in order to prevent or slow down the accelerating erosion of membership and subsequent management-buy-out processes. The drop in membership undermined the cooperative banks' ability for re-capitalisation.

than members motives in demutualisation. The limited participation of members and the loose regulation allowed management to initiate demutualisation where they assumed it commercially necessary. ***In these transactions, besides managers often a new group of external investors took over cooperative banks***[11]. To put Burger's [2013] findings differently, cooperatives led by a handful of individuals are willing to put the assets of the cooperative (and their depositors) at risk, while demutualised cooperatives bought out by their management are less willing to do so. These developments provide an excellent avenue for this investigation, since both cooperatives led by a handful of individuals risking the assets of the cooperative (and their depositors), and demutualized cooperatives bought out by their management willing to risk their own wealth exist.

Cooperative branch networks typically spread geographically differently from their commercial banking counterparts. For instance, in France, commercial bank branches are mainly located in cities, while cooperative banks are located in the rural countryside. In Germany, both the rural and urban cooperative banks coexist. *Local embeddedness* of co-operative banks, similarly to social embeddedness, has been facing challenges since their geographic expansion started. Cooperative branches were banned from towns before the mid-1970s and from larger cities until 1986 as their markets were geographically restricted to villages. Geographic restriction on expansion can partially be explained by the heritage of command economy. However in many capitalist economies geographical restrictions both on the location and the catchment area of cooperatives exist. (e.g. in Italy credit unions can expand to the adjacent regions if they have there more than 200 members).

The Hungarian cooperative banks only became fully fledged banking service providers in 1991 after the new Act on Financial Institutions passed. The elimination of legal restrictions transformed the geographic structure of the cooperative banking sector, which previously became synonymous with 'rural' banking. Their branch network expansion in urban settlements accelerated only in the 1990s. This transformed rural cooperatives to urban cooperatives with headquarters located mostly in small and medium-sized towns [Gál, 2012]. Most cooperatives opened branches in the newly acquired urban markets while others relocated their headquarters there as well. (By 2010, only 41 out of 138 cooperative headquarters are located in villages, while the rest were based in towns, and 19 cooperatives HQs are located in the largest cities outside Budapest.[12])

The Act on Cooperative Banks (2013) had an effect on the network of cooperative banks too. The integration process and development of closer cooperation

[11] During transition only a few new cooperative banks were established, most of them in Budapest, and they have been detached from co-operative principles and any forms of embeddedness, and the founders usually had taken the advantage of low registered capital requirement in the cooperative banking sector, and obtained banking license soon after.

[12] It should be noted that due to the frequently provided town satus in most settlements that previously hosted cooperative HQs only has the legal status changed without actual relocation of the original HQ location.

among the cooperative banks has not come to a halt; as a result of the mergers and acquisitions there were approximately 90 institutions in 2016 [Bodnár et al. 2015] and in 2017 the number of actors of the cooperative sector amounted to 21 because 12 financially strong institutions were created out of 52 due to acquisition processes.

4. Regional dimension of lending activity

The geographically concentrated nature of finanancial services supported by Economic History researches which examined the links between the location strategies of banks and hierarchical functions of settlements. These findings show that some service functions – e.g. financial services – concentrated in large and small towns [Horeczki 2013, Gál 2009b]. However, according to the principle of the location of cooperative banking, these institutions are geographically very extensively spread in Hungary, these institutions operate their offices and branches 1790 settlements in 2017 (approx. 60% of total number of settlements). Hence, the cooperatives are the only one financial provider for approximately 2–2.2 million people in Hungary, and this raises the question of financial exclusion. Financial exclusion refers to those processes by which individuals and households (social exclusion) or areas, regions (geographical exclusion) face difficulties in accessing financial services [Leyshon et al. 2008].

The information technologies and other aspects of innovations of electronical services changed rapidly in the last decades, and these processes integrated step by step to the practices of the financial institutions. They developed their online platforms and allowed the possibilities of e-banking (Bruno et al. 2014). Based on Robbins's (2006) reseach, we can see that in the part of household consumers the number of e-banking users has multiplied by eight between 1995 and 2004.

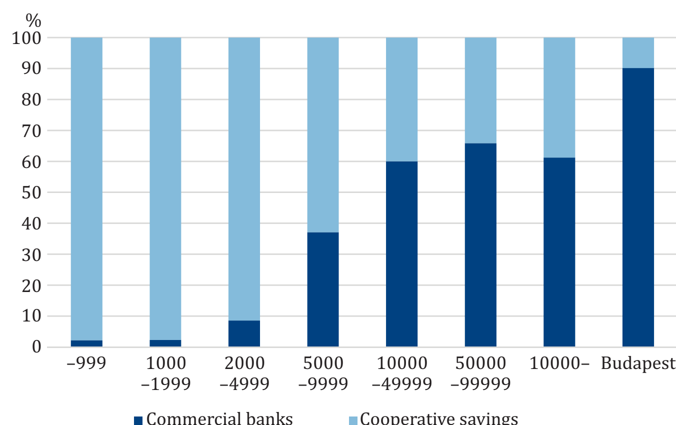
In Hungary, 79% of enterprises use the e-banking services provided that they have internet-connection possibilities, but this rate is lower in the public sphere: 72% of public administrative institutions and 50% of local government use the e-banking (KSH 2014). These tendencies do not mean that the physical presence of banks and cooperative savings do not play an important role, because some services (opening a bank acount, loan application, personal administration) can be done only in a branch with a personal presence. Other demographic (relatively old population in excluded areas), and social (school level of rural population, low incomes and financial knowledge) causes underline the necessity of the geographical accessibility of branches and offices of cooperatives (or commercial) banks in the rural regions.

If we treat separately the two groups of financial institutions (cooperative and commercial banks), we can give some new information. As a result of the development processes of 1990s the number of financial providers and their branches increased significantly, but this trend affected mainly the larger towns and cities (regional or county seats, middle-size cities). As opposed to this, the headquarters of cooper-

ative banks are located mainly in the smaller towns, villages and they have more branches in the less developed smaller settlements too [Rajnai 1999].

Cooperative banks play a key role in the less advantageous rural regions. These institutions are the only financial institutions in peripheral areas and usually they are the service providers for local governments there. This unique role justified by our previous empirical results, on the one hand [Gál 2009; Kovács 2012]. On the other hand, according to the examination of the financial institutions' network (2017) we can see that 20% of total population of Hungary (in approx. 70% of all settlements) live without direct commercial bank connections, therefore cooperative banks are the the only service providers for the local household and businesses (Figure 1.).

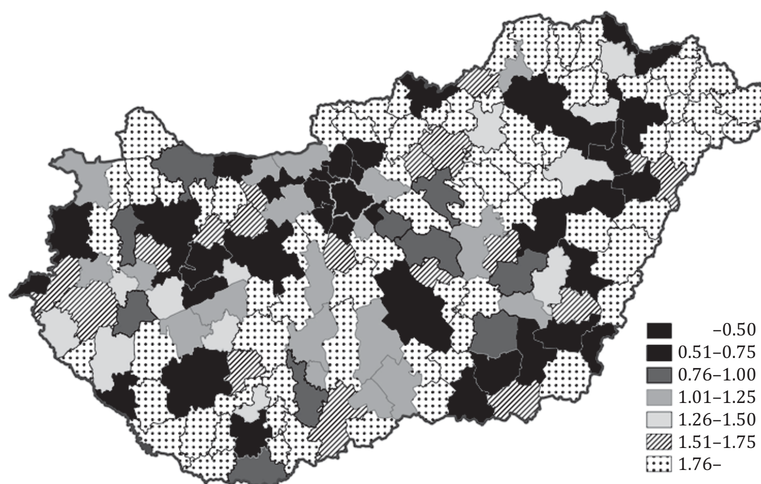
Figure 1. Presence of commercial and savings banks in the different size of settlements, 2017 (%)



Source: Own calculations based on websites of financial institutions.

The branch density indicator measures how many clients are serviced by a branch. The high density at county level suggests the stronger prevailance of neoclassical theories in financial services [Kohn 1998; Merton and Bodie, 2005]. According to these theories the higher density indicators come from the centralized financial networks. Figure 3 shows the territorial or urban-rural differences of the operation of commercial and cooperative banks can be measured with the branch density indicator. This map contains the rate of commercial banks' and cooperative banks' branch density at the microregional level. If the commercial banks' operation is significant in a microregion this rate is lower than 1, and on the opposite side, if this rate is higher than 1, it means the stronger cooperative presence in a microregion. This map shows that if the central settlement of a micro region has more then 10000 inhabitants, then the rate is lower than 1, so the operation of commercial banks is significant. If a micro region coordinated by a smaller settlement, then the stronger cooperative banks' presence is a feature of the microregion.

Figure 2. Rate of commercial banks' and cooprative banks' branch density at the level of administrative districts, 2017



Source: Own calculation based on data of National Bank of Hungary.

In order to examine the geographical differences in their lending activity a hypothetical loan-to-deposit (LTD) ratio was calculated for cooperative banks in the NUTS IV regions from the last available trustworthy data of cooperative sector from 2010. In doing so, first deposit and loan volumes were divided by the number of branches for each cooperative. In a second step, the average of the deposit and loan volumes were aggregated for all the branches in each NUTS-IV region. Finally, the two figures were divided, and a hypothetical average LTD ratio was generated for each region. Plotting these values on a map it reveals tendencies of lending activity.

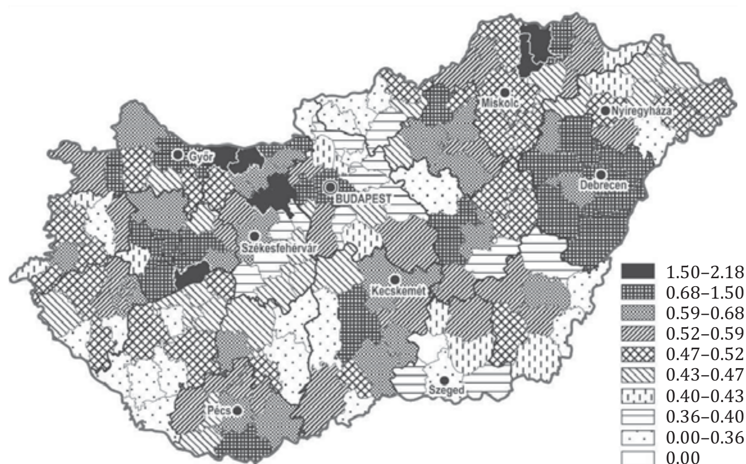
Figure 3 illustrates that micro-regions with higher LTD values can be found closer to larger towns and agglomerations. Consequently, the value of the LTD ratio is high in Budapest, the capital city, around some urban areas and in micro-regions with higher economic wealth.. However the relationship between urban regions and LTD ratios does not appear universal. Loan-to-deposit values are lower around some larger cities (Miskolc, Nyíregyháza and Nagykanizsa). Finally, values for peripheral, less urbanized regions are lower.

The findings demonstrate that the 137 cooperatives under investigation represent a heterogeneous group. There are cooperatives belonging to all four groups described earlier: commercial cooperatives operating in urban regions (competitive markets) with intensive lending activity; classical cooperatives present a partly or fully monopolistic situation[13] also with intensive lending activity; cooperatives

[13] The percentage of branches in a in non-competitive market (local monopoly position) is the key variable constructed on the basis of the lending activity and the geographical (by settlement type) distri-

with urban presence but minimal lending activity are the risk-averse cooperatives; and finally passive cooperatives active in their non-competitive regions. Figure 4 illustrates these categories.

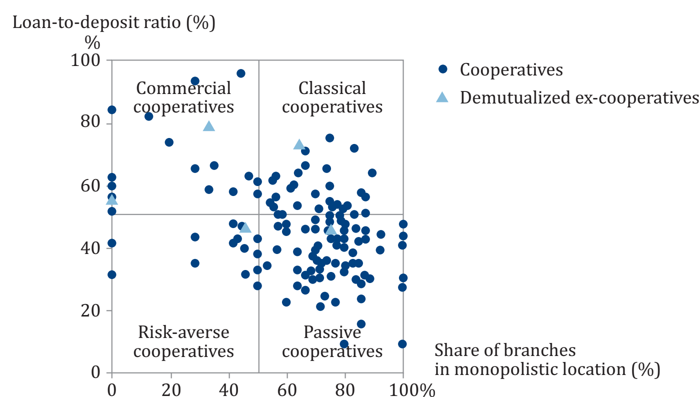
Figure 3. Estimated loan-to-deposit values of the cooperative sector (2010)



Note: The map contains data on the savings cooperative sector, i.e. cooperatives and the banks formerly functioning as cooperatives, but does not contain the credit and deposit volumes of commercial banks.

Sources: Own calculation based on Golden Book of PSZÁF (2010) and cooperatives' websites, Gál and Burger, 2013.

Figure 4. Loan to deposit values and branches in local monopolistic situation of cooperatives



Sources: Gál and Burger [2013].

bution of cooperative banks. Number of branches per institution in a local monopolistic competitive situation means that there are no further cooperative or bank branches in the given areas.

Gál and Burger [2013] concluded, that the commercial cooperatives are characterized by the highest increase of total assets (9.1%) between 2006 and 2011, but their competitive practice coupled with relatively high deposit rates (avg. 5.3%), low ROE (2.3%) indicator and these cooperatives were the most active lenders in cities. In contrast, the passive cooperatives were local monopolies in the rural areas with higher ROA (5.6%), and at the same time, their growth rate was less than 1%. Commercial cooperatives entering new markets show higher lending activity but have more non-performing loans due to the lost information advantage, while cooperative banks, located in the periphery with insufficient socio-economic conditions to develop closer relationships with borrowers accelerating capital flight from their regions [Gál and Burger 2013].

These cooperative banks present in less developed areas were rather small institutions preferring to invest their liabilities in the interbank or government bond markets instead of lending to the local community. This means that the so called *passive cooperatives* channel their resources directly to the financial core and therefore contributing to the further strengthening of the financial centre as well as the persistence of the credit gap between the core and the periphery. A possible explanation is that local lending is too risky or passive cooperatives simply suffer from the lack of equity to maintain their capital adequacy (stability) in case of active lending. Nevertheless, the results obtained, in line with 'regional drainage' theories [Dow 1990], also suggest that the once locally embedded cooperative banks with weakening community ties are not only responsible for capital outflows from their respective regions but they rather contribute to financial centralisation – in a similar way to their commercial banking peers [Gál and Burger 2016].

5. Conclusions

One of the crucial questions of cooperative banking is whether cooperatives can be seen as the local banks, meaning that whether they play an active role in financing peripheral rural areas. This paper discussed the literature on the classical cooperative banking model. The successful lending activity of cooperatives is explained with the help of their information advantage and social control associated with locally rooted social embeddedness, as opposed to commercial banks without such social ties. At the same time, there are hints in the literature that both the social embeddedness and the loose corporate governance structure have their limits: excessive growth in previously unpenetrated regions and the lack of and non-involvement of members in the cooperative's life all work against the information advantage and relationship lending practices of the cooperative banking model. In such cases strong management control or management buy outs may lead to demutualization. However, Gál and Burger's (2013) previous findings show that demutualization and strict ownership control may result in more efficient lending.

The Hungarian cooperative banking segment provided an excellent case to test these hypotheses. Up to 2013, loose cooperative legislation and the lack of political will neglected this sector. As a result, cooperatives were not even close to the uniformity

of their German or Finnish peers, which, particularly this latter, are under strict control and supervision. In Hungary, the apex bank of cooperatives did not even serve all of the institutions. As a result, its risk management/sharing (and in some cases institutional protection) functions were not used by many cooperatives. Moreover, a variety of cooperative strategies could be observed, in some cases, cooperative managers treated their institutions as their own bank where they engaged with high risk-taking activities hazarding their clients' money. The few demutualizations which took place were in fact good for such institutions, since they mostly happened as buyouts and required personal risk taking from the new owners.

The paper found that cooperatives mostly present in rural areas were rather small institutions, which preferred investing collected deposits in the interbank or government bond market instead of lending to the local public. This means that credit institutions channel their resources directly towards financial centres. A possible explanation may be that local lending is simply too risky or passive cooperatives simply lack equity to maintain their capital adequacy. Nevertheless, the sector represents a channel that directs financial resources from regions to the financial centre.

At the same time, larger, growth-oriented cooperatives present in larger towns increased their lending activities. In fact, there was hardly any cooperative with urban presence and with low lending activity. However, these institutions could not use their information advantage and therefore accumulated over-average amount of non-performing loans. In contrast, cooperatives deciding on active lending often end up having higher proportions of nonperforming loans than demutualized ex-cooperatives do. This implies that aggressive profit-pursuing strategy and the cooperative form are not compatible: as cooperatives do not seem to have strong risk management methods.

The good news is that Hungarian policymakers have recognized these developments and a profound transformation has been taking place since 2013. We have seen that the Hungarian cooperatives operate mostly in the smaller settlements because of the principle of cooperative movement, but another economic reason is known: the size (assets) of individual cooperatives is under the economy of scale, so their lending activity is limited. The new regulation (Act CXXXV. of 2013) created more integration processes and common policies for the individual cooperative banks, but the lending activity changes weren't significant according to the available data.

At the same time, banks and cooperatives still have to determine the kind of expansion and lending strategy they want to pursue. Buzzwords such as embeddedness, social ties or local and relationship banking cannot be created from one day to another. Their origins stem from the past: they are connected, developed via path-dependence, and their branch network has grown together with the owner-members and clients. These concepts are deeply rooted in the history and geography of each region. This must be respected and should be preserved in the future.

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