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SAFE BANK is a journal published by the Bank Guarantee Fund since 1997. It is devoted to issues of financial stability, with a particular emphasis on the banking system.

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A Word from the Editor

Probably the proverbial 5-minutes for banks in economic systems already belong to history. Financial markets are transforming and the experiences of the global financial crisis (GFC) have contributed to the deterioration of the image of banks, although at a non-uniform level. There were countries where budget funds were a rescue measure in a crisis situation and the countries where, despite concerns and preparation of the regulatory buffers to help banks, the taxpayer resources were not used. The latter includes the Polish banking system.

Using the experience of the past and the projections of the future, the academy and practitioners are looking for an adequate, for the present day, paradigm of financial markets. These efforts are subject to high risk, amongst others, due to the variability of the environmental conditions (for instance: successive depreciation of the globalization concept, difficulties in the international trade, erosion of the international solidarity and integration concepts, social unrest related to the gap between aspirations and the possibilities to satisfy them, new technologies and costly regulations).

Will the international turbulence experienced, the intensification of the conflict of interests of the great powers and reviving nostalgia for locality have consequences for changing the position of banks and the structure of the financial market? This is both an important and difficult question for all stakeholders of financial institutions. Moreover, organic associations and dependencies of financial market entities with the environment of a very complex character cannot be neglected. The latter aspect requires the scope of analyzes, diagnoses, projections or forecasts extension beyond the narrowly understood financial market and financial categories. One should also take into account the highly heterogeneous character of national financial systems, despite various and long-term undertakings aimed at their unification, especially in the regulatory terms. It also raises the need for advanced studies, enabling the answer to the question whether the universalization of regulations towards different levels and structure of national financial systems development is the right direction of the development.

Not pretending to explicitly answer the problems outlined above in 71st number of Safe Bank periodical we present to the readers eight studies on diverse topics.

The first three studies, in the chapter *Problems and Opinions*, tackle on the specific problems of cooperative banks in Spain, Hungary and Russia, in little known approaches and not only in reference to these three countries. Considerations of pairs of authors coming from various countries provide an interesting view and interpretation of the studied phenomena or processes, the volume and organization of crediting of financial needs on a regional or local scale; they also refer to the issue of the regulations and rules universalization for cooperative banks management.

The pair of Polish authors K. Jarno and H. Kołodziejczyk characterizes the consequences of a banking tax introduction for banking operations in Poland based on one-year experience with the use of difference-in-difference method. The signal nature of the results may constitute the premise for the analyzes continuation along with the extension of the empirical data horizon.

M. Idzik presents in the paper the results of research on client of financial services segmentation according to their competences and relationships with banks. The use of the latent class analysis (LCA) has made it possible to distinguish four homogenous groups of clients.

The last paper in this section is about founding of social enterprises in Poland and some other countries in comparative perspective. One can perceive it as a contribution to the debate on socially responsible banking.

In the chapter *Miscellanea* there are two studies. In the first one A. Dżuryk characterizes the position of the European Financial Congress (EFC) on FSB consultative document *Funding Strategy Elements of an Implementable Resolution Plan*. EFC – established in 2011, is a platform for debating the issues of security, financial stability and economic growth in Europe and discussing measures to ensure a successful future for Poland and the European Union. The position is based on opinions of stakeholders of Polish financial market including experts representing banks, regulatory bodies, law firms and academia. The second study concerns the credibility of opinions of auditors on the financial statements of entities applying for a loan, from the bank point of view, in assessing the borrower's risk.

I wish you interesting reading and I invite you to participate in the discussion on the problems of stability and security of the financial system.

Jan Szambelańczyk
Editor-in-Chief

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Problems and Opinions

Stefan Gärtner*
Jorge Fernandez-Mototo**

Governance, Cohesion and Banking in Spain from a Spatial Perspective[1]

Abstract

During the global financial crisis, regional banks – dependent on local savings and only able to lend these savings to customers within their respective regions – helped avoid a credit crunch in some countries; while in others, they did not fulfil this function. This paper elaborates governance structures that influenced the success of regional banking systems in Spain, with regard to regulation principles, the overall economic and political structures, and self-organisation of regional banks. With respect to the high importance of the decentralised banking sector in Germany, the paper compares the state of decentralised banking between Spain and Germany, concluding that the regional principle in Germany, a decentralized state structure with mechanisms of regional balance, and the self-governance of regional banks are important factors.

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1 We are not only very grateful to the Hans-Böckler Foundation, who funded the project, but also to all the experts (to name one example here, Carlos Javier Rodriguez-Fuentes from the University La Laguna, Tenerife) who enabled us to gain important insights and discuss our ideas. Many thanks to Franz Flögel for his fruitful comments on an earlier version of this paper.

Key words: oligopoly and other forms of market imperfection; consumption, saving and wealth; financial crises; banks, depository institutions, micro finance institutions, mortgages; government policy and regulation; size and spatial distributions of regional economic activity

1. Introduction

The decentralised German banking system, with its more than 1,400 regional savings and cooperative banks, counts as one success factor of the German economic model and explains Germany's rapid return to economic prosperity and growth after the global economic crisis of 2007–2008 [Gärtner 2011; Hardie and Howarth 2013b; Audretsch and Lehmann 2016]. In fact, German regional banks prevented a credit crunch in 2008/2009 by continuing to provide access to credit or even enhancing loan offers, especially for small- and medium-sized enterprises (SMEs) [Gärtner and Flögel 2016]. However, the significance of regional banks differs greatly between the banking systems of European countries. Despite the implementation of initiatives to both create a common European market and integrate diverse national banking systems, the European financial system remains spatially complex and uneven, especially in terms of the degree of geographical concentration of its banking and financial institutions [Manna 2004]. By revealing their underlying mechanisms, many differences between the countries' financial banking systems, apart from the traditional dichotomy of bank-based and market-based systems, become visible [Hall and Soskice 2001; Allen and Gale 2001]. Alternative taxonomies and concepts are therefore required. Attention has been drawn, for instance, to differences between public utility versus capitalist credit and banking systems [Gowan 2009], or to the differentiation between Islamic and non-Islamic financial systems [Pollard and Samers 2007].

Our approach is based on the presumption that banking systems can be distinguished as either decentralised or centralised banking and financial systems [Klagge 1995; Verdier 2002; Gärtner 2013; Gärtner and Flögel 2014], as well as the hypothesis that this differentiation helps to explain the varieties of financial systems, especially with respect to SME finance [Gärtner and Flögel 2014]. On the one hand, we raise the question of what role decentralised and centralised banks play in business lending, as well as how, i.e., at which distance to clients, regional and large banks organise their lending decisions. On the other hand, against the backdrop of corporate and state governance [Shleifer and Vishny 1997; Verdier 2002; Levine 1998], factors which explain the persistence of decentralised banking will be identified.

The results of this paper were generated from a broader research project, sponsored by the Hans-Böckler Foundation, that compared the financial and banking systems of Germany, the UK and Spain. The three country cases were selected because they putatively demonstrate substantial variety in terms of centralised banking. Germany supports a comparably strongly decentralised banking system as a result of the specific regional structure of the Federal Republic of Germany [Hakenes and Schnabel 2006]. The UK, on the other hand, exemplifies a centralised system, as

London represents one of the most important financial centres of the world. The degree of Spain's banking system centrality could be considered to lie between the German and UK cases. In addition, Spain constitutes an outstanding research example, as the country's formerly regional savings banks were liberated from their geographical constraints in 1988, leading to a decline in decentralised banking. Furthermore, Spain is a country in which savings banks played a significant role until the financial crisis, while its savings banks association, compared to its German counterpart, does not even remotely play an equally important role.

Accordingly, this paper revisits the state of decentralised banking in Spain through a German lens. Our aim was to understand the significance of decentralised banks in Spain and to assess success factors for decentralised banking systems. The identified success factors are not limited to banking business strategies, as we also focused on general banking group policy, state system and regulation principles. All in all, we explored banking group philosophy and its structure, as well as country-specific governance structures, to understand regional banking.

The empirical results were based on data analyses and studies of reports of banking groups or individual banks. However, the results were also strongly based on qualitative research. For Spain, we conducted 32 interviews with bankers, regulators, representatives from banking associations, policymakers, researchers and SMEs. Furthermore, a short research stay at the University La Laguna in Tenerife was carried out (by Carlos Javier Rodriguez-Fuentes) to discuss our results and ideas.

In the following section, we will outline key theories, while the subsequent section will present relevant facts about the structure of the Spanish banking system. Then, in the fourth section, success factors will be explained, after which some conclusions will be drawn.

2. Decentralised and centralised banking

As early as 1995, Klagge argued in favour of a classification of banking systems into decentralised and centralised systems [Klagge 1995]. Essentially, decentralised banking systems are associated with small local and regional banks, which are considered to be superior in the field of SME lending and are often publicly or cooperatively controlled [e.g., Berger et al. 2005]. Centralised banking systems comprise large national and international banks, which have the capacity to realise economies of scale and scope in lending.

In his historical cross-country comparison, Verdier [2002] analysed the influence of politics on financial systems. Examining the conflict between large and small banks, as well as between financial centres and peripheries from 1850 onward, Verdier showed that centralised countries tend to support centralised banking, whereas the power of municipal and regional governments aspire to protect local and regional banks from their centralised competitors. Liberalisation, privatisation, the abolishment of regional restrictions and financial market-friendly regulations were and are more pronounced in centralised countries (e.g., France, the UK), whereas regional savings and cooperative banks were and are protected in countries with a federal structure, such as Germany and Switzerland (for the Cantonal Banks) [Verdier 2002]. Although Verdier [2002] mentioned the advantages of centralised banks in overcoming information asymmetries and promoting access to finance within peripheral regions, his empirical study suggested that decentralised banking needs to be protected from overwhelming competition from nationwide, large commercial banks. Therefore, Verdier [2002] argued that regional governments must possess appropriate power to protect their regional banks.

As our approach was shaped by observations of the German banking market, in which state aid for decentralised banks does not play a role and regional banks are not protected from competition by nationwide banks, we proposed two related characteristics of the banks themselves to determine whether banking systems are centralised or decentralised [Gärtner and Flögel 2014]:

The first characteristic is the geographical market orientation of a bank's business activities: Do banks operate at the regional level, e.g., by collecting money from regional savers and loaning it to regional borrowers, or do they instead rely on business at the supraregional scale, by either borrowing from and investing in national/global capital markets or operating within supraregional branch systems (regional vs. supraregional banks)? Our consideration was based on the theoretical foundations of polarisation theory and post-Keynesianism with respect to regional banking markets and interregional flows of capital [Chick and Dow 1988; Dow and Rodríguez-Fuentes 1997; Klagge and Martin 2005; Gärtner 2008]. In particular, the oft-debated ability of regional banks to slow capital drains from peripheral to core regions suggests that regional banking may make a difference when it comes to access to finance in peripheral regions and may thus stimulate more balanced regional development [Gärtner 2008].

The second characteristic is the place of decision-making: Do banks make decisions (e.g., whether to grant a loan) in close proximity to their clients, or are decisions made from afar; for example, from remote headquarters? Decentralised banking capitalises on the close proximity between creditors and borrowers to conduct lending decisions. From a theoretical point of view, localized lending is associated with reduced information asymmetries and a reduction in credit rationing, especially in the case of lending to SMEs [Stein 2002; Pollard 2003; Berger et al. 2005; Gärtner 2009; Alessandrini et al. 2009; Flögel 2017]. The relevance of difficult-to-transmit, so-called soft information in lending to informationally opaque SMEs restrains remote decision-making processes and favours a decentralised banking system in which banks' head offices and decision makers are located in proximity to their clients. In contrast, centralised systems capitalise on their proximity to other financial institutions in order to facilitate financial innovation and indirectly organise and control investment decisions. Centralised banking is associated with transaction-oriented lending, in which hard (easy to transmit) information as well as information and communication technology (ICT)-based evaluation methods are used to make credit decisions [Udell 2008; Gärtner and Flögel 2017]. As a consequence, centralised financial institutions require geographical proximity to other banks, rating agencies, lawyers, regulatory bodies, tech firms, etc., which explains the rise of financial centres [Friedmann 1986; Sassen 2001; Taylor et al. 2003; Lo 2003; Grote 2004; König et al. 2007; Hall and Appleyard 2009; Schamp 2009; Therborn 2011; Gärtner 2013; Dörry 2015].

In bank-based SME lending, the distance between two actor pairs matters [Alessandrini et al. 2009]: First, the relationship between SME customers and their advisors (called operational distance); and second, the relationship between customer advisors and supervisors, i.e., head offices (called functional distance). As Flögel [2017] argued, the incorporation of aspects of distance in Stein's [2002] model on decentralisation, hierarchy and soft information implies the following relations: Whereas short operational distance improves the ability of customer advisors to gain access to soft information, short functional distance is associated with enhanced bank-internal use of soft information, which in turn encourages local staff to actively collect soft information [Flögel 2017]. In this context, a purely metric understanding of distance would insufficiently explain information transmission, as short geographical distance is neither necessary nor sufficient to facilitate knowledge exchange between actors [Boschma 2005; Torre and Rallet 2005; Torre 2008; Bathelt and Henn 2014]. More likely, other forms of closeness, such as social and organisational embeddedness and cognitive affinity, need to be considered to fully understand the effect of distance in banking [Uzzi and Lancaster 2003; Klagge and Martin 2005; Alessandrini et al. 2009]. Yet, short geographical distance eases the transmission of soft information because it facilitates face-to-face interaction and supports other forms of closeness.

The two characteristics of the classification do not render one another redundant, because bank regulation and the standardisation of decision-making processes (especially rating and scoring systems) tend to have an effect on the tendency to centralise lending decisions for regional banks as well [Degryse et al. 2009; Dixon 2014; Gärtner and Flögel 2014]. For example, if a regional bank were to lend only on the basis of credit agencies' rating scores, then this bank would not conduct credit decisions within close proximity to their customers. On the other hand, supraregional banks can and will delegate decision-making powers to the regional level [Flögel 2017]. This happens, for example, when a national bank with an extensive branch network delegates substantial lending authority to its branch employees. In addition, advances in ICT may reduce the stickiness of soft information in lending [Papi et al. 2017], as well as potentially eliminating the need for short distance to reduce information asymmetries.

3. The structure of the spanish banking system

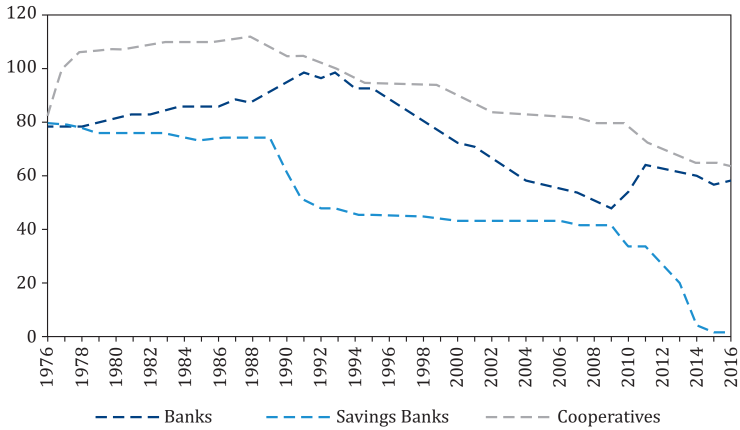
The fact that savings banks have not been as important in Spain as they are in countries with elaborated savings banks systems is clearly evident when considering the number of Spanish savings banks. Figure 1 shows that there were just 74 savings banks in Spain in 1988, compared to 585 in Germany in the same year [Deutsche Bundesbank 1990]. Four years later, in 1992, the number of Spanish savings banks had been reduced by 35%, to 48. Due to the financial crisis, only two 'real' savings banks remain in Spain as of 2017. This trend must be viewed against the backdrop that, in 1988, the regional principle, which limited the reach of savings banks to their home region, was abolished, Spanish savings banks had open branches all over Spain [Illueca et al. 2005]. To gain market shares, savings banks lent to customers who had not received loans from local banks. Other causes of the crisis included savings banks` late development towards becoming universal banks, the lack of funding bases on the local level, the partial lack of professional competence in management, governance problems in supervisory boards, and of course the Spanish property boom.

Also in 1988, a seven-year process of concentration in the cooperative bank sector began. Until 1988, there were 112 cooperative banks in Spain; by 1995, however, that number had been reduced to 96, as most had been acquired by savings banks [Romero 1997]. The main factors relevant to their numerical decline since the beginning of the 1990s revolved around viability problems [Romero 1997]. Even though a similar concentration of cooperative banks had also taken place in Germany, from 3,385 banks in 1988 [Deutsche Bundesbank 1990] to just 975 in 2016 [Deutsche Bundesbank 2017], the number of currently active cooperative banks in Germany is clearly much higher than that in Spain during the peak period. The concentration process of Spanish cooperative banks has continued, with varying intensity, until today.

Germany had, and still has, substantially more regional banks: Indeed, in 2015, savings banks and cooperative banks together accounted for 1,463 individual banks. The number of large commercial banks, on the other hand, is relatively small: only four as of 2015.

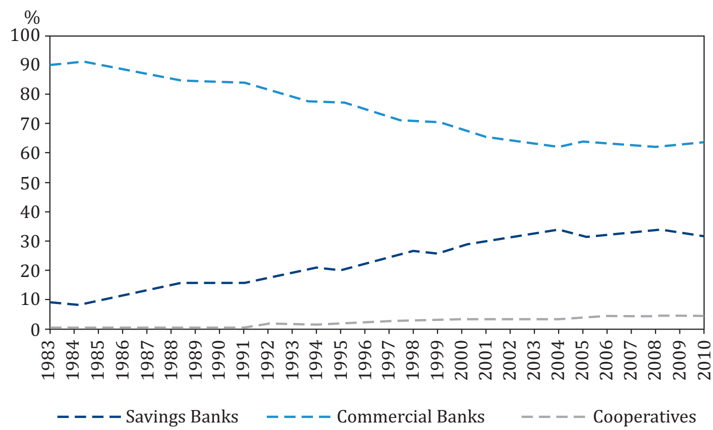
As we can see in the following figures, in Spain, commercial banks control the main shares of the loans to the industrial and service sectors (construction and real estate activities are excluded). Over the course of the last 25 years, savings banks have caught up to commercial banks, with a shift from 10% of market shares in 1983 to 34% in 2004. Afterwards, their position remained stable until 2010. Due to the financial crisis and substantial reduction of savings banks, data distinguishing between different banking groups no longer exist for Spain. The reduction of the gap between savings banks and commercial banks is related to the geographical expansion of the former. However, the whole share of the increase in market shares was not obtained exclusively from commercial banks. Rather, it was more likely gained in line with the formation of new kinds of enterprises in the course of the economic development of Spain.

Figure 1. Number of institutions within the Spanish banking sector



Source: Banco de España, own calculation.

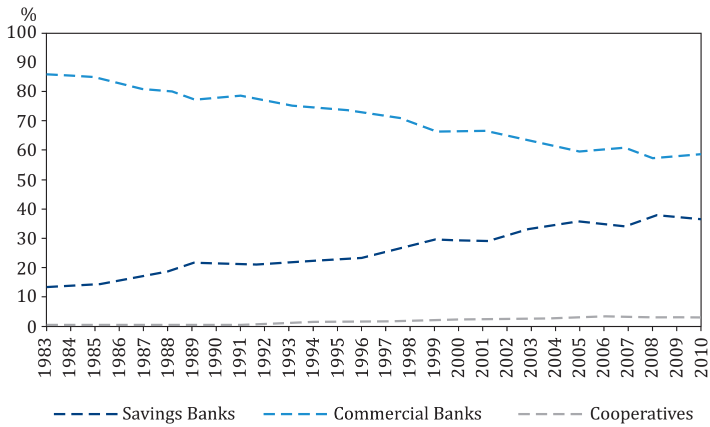
Figure 2. Market shares of loans to industrial enterprises (construction excluded)



Source: Banco de España, own calculation.

To this day, cooperative banks in both markets represent the smallest of the three banking groups: At the end of our investigation period, cooperative banks only represented 5% of the market for credit to the industrial sector, and only 4% of the market for credit to the service industry. In Germany, decentralised banks hold much more market power in the loan business market. In 2015, savings banks and cooperative banks together were responsible for more than 46% of loans to the German economy (self-employed and companies). The four big commercial banks, as well as the state banks (Landesbanken) – which we call centralised banks to distinguish them from decentralised or regional banks – claimed 35.4% (see section 2). In 1999, the numbers differed noticeably from today, as centralised banks claimed a market share of 44.2% of the loans, while regional banks accounted for only 35.5%. Thus, a strong increase in the market share of decentralised banks occurred in Germany [German Central Bank, own calculations].

Figure 3. Market shares of loans to service enterprises (real estate excluded)



Source: Banco de España, own calculation.

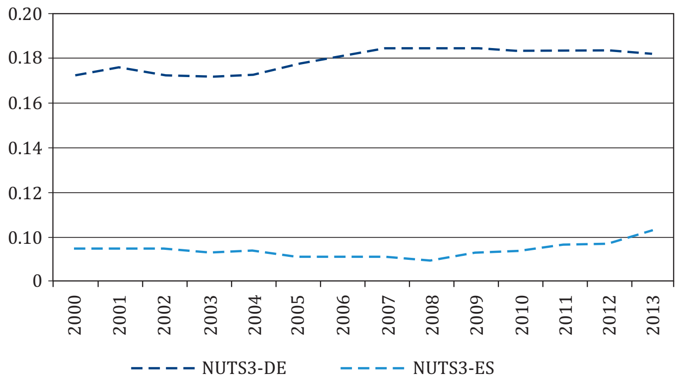
When contrasting decentralised and centralised banking and their potential for differential effects on the decision-making process, both operational and functional distance must be considered (see section 2). To approximate distance, adequate quantitative data are needed to ensure comparability between different countries, which has thus far not been demonstrated.

Therefore, for operational distances, we looked at the geographical distribution of the banks' employees. Using employment data for spatial comparisons of financial systems is still a new approach [for its first applications, see Gärtner 2013; Wójcik and MacDonald-Korth 2015]. Unlike other indicators, employee data are often available at the micro level; for example, at the level of districts and towns (Nuts-3), which are 402 for Germany 'Kreise and kreisfreie Städte' and 52 for Spain 'provincias'. This makes it possible to analyse the spatial concentration of the financial system in each city/county. All employees who pay social insurance were included, while self-employed individuals were excluded. To analyse the spatial concentration of bank employees, we compared the shares of the employees in finance to the rest of the economy in one region with those to the rest of the economy in the whole country. See the following formula:

$$RKI_j = \sum_j \left| \frac{b_{ij}}{B_{i.}} - \frac{b_{.j}}{B_{..}} \right| * 0.5$$

b_{ij} = Number of employees, sector i, region j
$B_{i.}$ = employees, sector i
$b_{.j}$ = all employees, region j
$B_{..}$ = all employees
The range of the indicator is from 0 < 1. An index value of 1 would indicate that all employees were located in one region (see the next figure).

Figure 4. Spatial concentration of the employees in finance for Spain and Germany (Nuts-3)

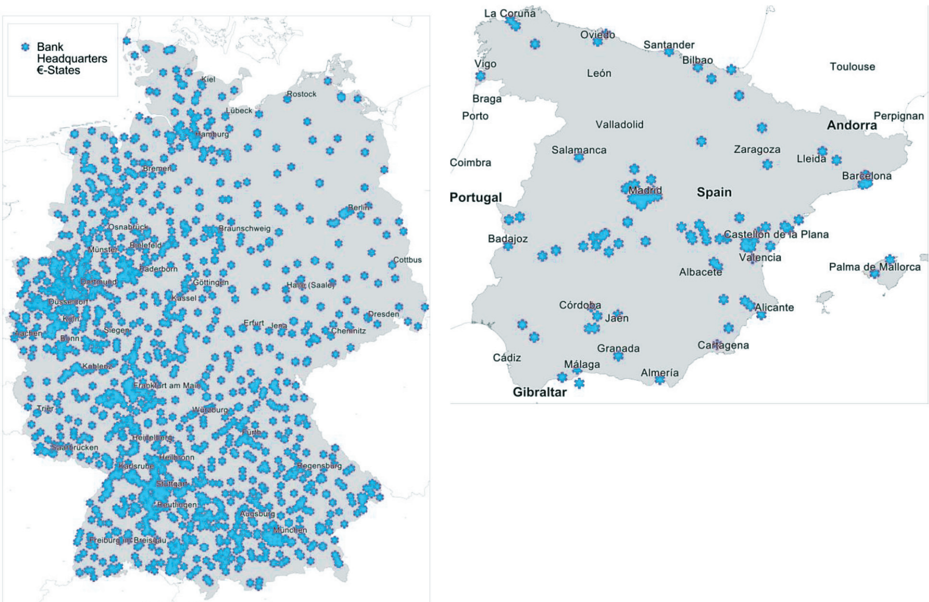


Own figure; source: Bundesagentur für Arbeit (Register data/social insurance) and Ministerio de Empleo y Seguridad Social (Register data/contracts).

The low index value for Spain demonstrates that Spanish employees in finance are less spatially concentrated than those in Germany, which is above other factors caused by the expansion of the banking branch network. The increase in spatial concentration since the 2008 crisis in Spain can likely be traced to the reduction in savings bank branches and to increased concentration in specific regions. The fact that the Nut-3 level varies between Spain and Germany and the Spanish regions are bigger than the Germans has to be taken in consideration: The difference in spatial concentration between Germany and Spain is therefore smaller in reality but still exists.

However, credit decisions are made at the branch level only occasionally; therefore, both functional distance and operational distance are relevant. To proxy operational distance within a cross-country comparison, we used the spatial distribution of the headquarters (see figure 5). The data come from European Central Bank (ECB) and are unfortunately only available for the €-Countries and for actual year 2014.

Figure 5. Bank headquarters locations in Spain and Germany, 2014

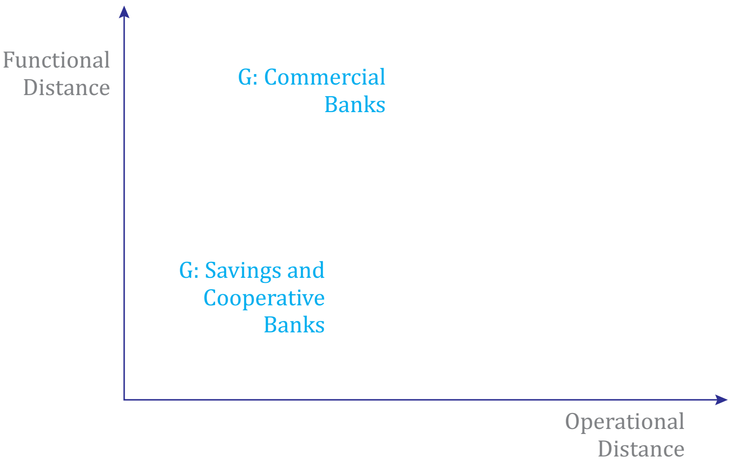


Own figure; source: ECB.

The comparison between Spain and Germany is definite: Western Germany especially contains many banking headquarters, which are broadly distributed regionally. In Spain in 2014 – six years after the crisis – few banks existed. Thus far, the quantitative data analyses have indicated a shorter operational distance in the Spanish banking market, which is in particular explained in the substantial branch expansion before the financial crisis and shorter functional distance for Germany, as there are less banks in Spain and their headquarters appear to be more concentrated in space. Unfortunately, a separate data analysis, including functional and operational distance for the different types of banking, is not possible.

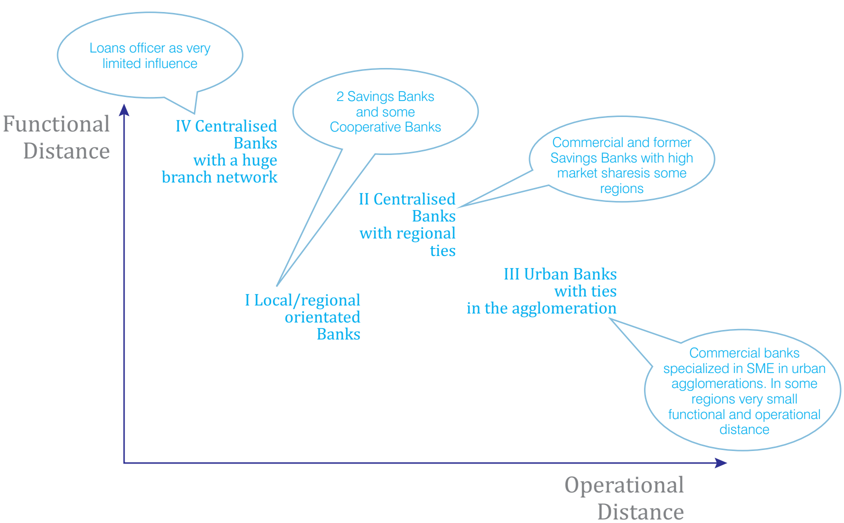
Taking together the results of the data analyses and the empirical findings from the interviews allow for the development of a heuristic classification of categories of banks with respect to operational and functional distance (see the two figures in the following). The position on the x- and y-axis was estimated and not calculated. For Germany, the situation is quite clear (see figure 6). Here, we can put the savings banks and the cooperative banks together in one group, which show low operational (many branches) and functional (each bank decides locally) distance. The second group could comprise the commercial banks (above all, Deutsche Bank AG and Commerzbank AG). These banks still have a broad branch network, but are more focused on urban areas, which lead to their operational distance being lower than that for savings and cooperative banks. However, the main difference between these two groups for Germany lies in functional distance. For Spain (see figure 7), we do not have the clear a group distinction, and one could at least define four groups in regard to operational and functional distance.

Figure 6. Operational and functional distance in Germany



Source: author's own work.

Figure 7. Operational and functional distance in Spain



Source: author's own work.

Bank type I: Local- and regional-orientated banks

The first group consists of local- and regional-orientated banks. Particularly, it includes the two remaining savings banks and some of the cooperative banks. The group of cooperative banks in Spain is again heterogeneous. Some act on a national level; others specialise in farming only; still others are local-orientated universal banks similar to the German cooperative banks. These we would put in the group of local- and regional-oriented banks. This group is similar to the German group consisting of savings and cooperative banks, but is much smaller in regard to market shares. Institutions in this group are characterised by a dense branch network in its region and local decision authority.

Bank type II: Centralised banks with regional ties

The second group demonstrates a slightly higher distance in comparison to group I, in terms of both the operational and functional levels. This group consists of centralised banks which are building strong regional ties in some regions. Large banks have bought smaller regional banks, or the regional banks have merged. These banks have retained the decision-making authority in some regions. This can occasionally be traced back to direct economic factors; while at other times, more political reasons are at work. This group consists of former savings banks and commercial banks with high market shares in some regions.

Bank type III: Urban banks with ties in the agglomerations

These institutions have the smallest branch network, presenting a medium–high functional distance. The strategy of these institutions is to focus on the medium-size enterprises located in highly populated urban areas. For this reason, they have a high number of employees per branch and have been operating in the territory for many years. Depending on the density of the branch network developed in the region, a risk department may be present or credit operations may be studied at the headquarters.

Bank type IV: Centralised banks with a huge branch network but less decision power

This type of banking institution presents low operational distance but high functional distance. Such institutions have developed a dense branch network but demonstrate substantial functional distance. This implies that the location of the risk analysts is distanced. There is nearly no option for employees in 'ordinary' branches to talk to the analysts personally. These branches have some power in decision-making processes depending on the strategy of the institution, but this situation can easily change. An example of this kind of institution would be Banco Santander.

What this means is that access to finance for SMEs in Spain is dependent on the region where they are located. In a significant number of Spanish regions, savings banks (and cooperative banks) only play a limited role in SME finance. The number of savings and cooperative banks and their shares of loans to SMEs have never been similar to the number and shares in Germany. Some of the nationwide commercial banks, e.g., Banco Sabadell (based in Sabadell, northwest of Barcelona), have specialised in SME financing. In Spain, the banking groups are much more similar to each other, yet possess more within-group differences, than in Germany.

4. Governance, cohesion and banks

As outlined in the introduction, the structure of financial systems has traditionally been approached by distinguishing between bank-based versus market-based systems. In the former, external corporate finance is mainly facilitated by bank loans, in the latter, shares, bonds and venture capital have become more important [Beck et al. 2001; Levine 2005; Beck 2012]. While research in the field of the varieties of capitalism has explained similarities in performance with institutional complementarities [Hall and Soskice 2001], we sought to understand the degree of success of regional banking by focusing on governance. Corporate governance and finance have been researched in general, and attention has been paid to their embedding in national legal systems and forms of capitalism [for an early overview, see Shleifer and Vishny 1997; for regulation and finance, see Levine 1998]. In a historical analysis, Verdier [2002] showed how regional banking is connected to other national structural factors. Below, we identify these regional banking success factors.

4.1. Distance and banking group associations

As described, one advantage of decentralised banking is the shorter distance between creditors and debtors. However, lending within close proximity to clients comes at the price of a longer distance to financial centres. Banks at decentralised locations, far from financial centres, have the disadvantage of also being far from other banks, rating agencies, specialised lawyers, etc. This poses the risk of a lack of specific (financial) knowledge, skills and access to services. A well-organised association of regional banks would be able to create closer proximity to their member banks, as well as facilitate knowledge spillovers and learning – i.e., access to the knowledge base of the financial centres – for geographically remote regional banks [Bülbül et al. 2013; Gärtner and Flögel 2017; Greenham and Prieg 2015]. Therefore, in addition to short functional and operational distances, embeddedness within supportive associations of regional banks tends to be one success factor of decentralised banking,

The comparison of banking associations makes clear that Germany strongly differs from Spain in this regard. The banking associations in Germany are aligned with the pillars of the banks, as banks are exclusively embedded in their associations. Savings banks belong to their corresponding regional savings banks associations and the Deutscher Sparkassen- und Giroverband (DSGV), forming the savings bank financial group. Cooperative banks are embedded in the cooperative banks' financial group and its association. The Bundesverband Deutscher Banken (BDB) and its regional subsidiaries represent the private banks. Such a pillared system of associations does not work in the same way for Spain any longer, as many former savings banks are still members of the Spanish savings banks association (SECA) but are no longer publicly owned savings banks. In Germany, the associations for savings banks and cooperative banks are both very powerful. They help small and regional banks to realise economies of scale and scope. This relationship can be illustrated by the fact that in Germany, the DSGV had 3,217 employees in 12 regional savings banks associations in 2015; whereas CECA, the Spanish equivalent, had only four employees in 2015 [CECA annual report, 2015].

Associations have tended to become even more important as the new, complex regulatory environment (Basel III) penalises small banks more than large banks, since the implementation of new regulations involves substantial fix costs [Alessandrini et al. 2016]. Supportive associations could help to apply the regulation requirement to small regional banks, which cannot afford to employ many experts, in a more cost-efficient manner.

4.2. Regional principle in the combination of regional balance

From a historic and geographic perspective, regulations have restricted the business activities of savings banks in many countries to their regions. In Germany, this restriction continues to exist with the so-called regional principle (enacted in the savings banks acts of the federal states [Bundesländer]). The regional principle obligates savings banks to lend to institutions, companies and private individuals in the region of their responsible municipality first, which, in particular, implies only running branches within the region. Unlike in Germany and a few other countries, many banking systems have seen large-scale legal reforms, reorganisations and (partial) privatisations [Engerer and Schrooten 2004; Hakenes and Schnabel 2006]. Since the late 1970s, international institutions (e.g., the International Monetary Fund, the World Trade Organization) and the European Union have advocated for deregulation, privatisation and open financial markets as a way to – as they believe – increase efficiency and thereby increase general wealth [Gärtner 2013]. Especially, the goals of financial integration, the creation of large banks (to have large transnational players) and increasing competition are supported by the European Commission [Commission of the European Communities, 2009] and the European Central Bank [Cabral et al. 2002].

Spain deregulated the banking market and abolished the regional principle with the Royal Decrete 1582 in 1988, just 11 years after the savings banks were allowed to act as universal banks. The 1988 liberalisation caused a geographical expansion of savings banks to new and distant markets, as well as a reduction in the number of savings banks due to M&A and defaults.

If banks are not restricted by region, there is a danger that the centres will absorb capital at the expense of either the periphery or old industrial areas. Positive effects cumulatively reinforce successful (centre) regions and begin to diffuse into the surrounding areas once a certain level of concentration has been reached [Dow and Rodríguez-Fuentes 1997; Gärtner 2009]. As early as the 1950s, Myrdal recognised that 'different studies in many different countries have shown how the tendency of the banking system to remove savings from poorer regions and invest them in richer and more advanced areas offering high and guaranteed profits unless intervention forces it to act otherwise' [Myrdal 1959: 26]. Banks that are restricted to a regional market can slow cumulative causation and support regional savings–investment cycles, which helps peripheral regions to invest their capital regionally.

However, regional savings–investment cycles can only work if peripheral regions have sufficient savings. People too poor to save money cannot save at their regional bank. It is generally assumed that the profits of regional banks directly depend on the strength of the regional economy [Alessandrini and Zazzaro 1999]. A regionally segregated, decentralised banking system 'may not be an unmixed blessing to the periphery: while such a system may guard against a monetary outflow to the center, periphery banks are exposed to extra risk where peripheral regions have, as they tend to do, quite specialized and strongly cyclical economies' [Chick and Dow 1988: 240]. This relationship does not prove empirically true for Germany, however. Here, the regional banks are at least as successful in poor peripheral regions as they are in economically strong regions [Gärtner 2008; Conrad 2010; Christians 2010; Christians and Gärtner 2014]. Several interrelated reasons can be used to explain the counterintuitive empirical observations.

First, the regional principle not only slows centripetal backwash effects, it also keeps functional distance short and allows regional banks to develop strong relationships with their regional customer base. This is possible especially in weak regions where less competition from national commercial banks exists. Less competition is, on the one hand, associated with poor market outcome for customers, in line with the structure-conduct-performance paradigm [Fischer and Pfeil 2004]. On the other hand, less competition enhances banks' access to information and reduces information asymmetries for borrowers, according to the relationship banking theory [Peterson and Rajan 1995]. Both lines of reasoning potentially explain the success of regional banks in weak/peripheral German regions. Having market power makes business easier and allows the realisation of obligatory rents. Informational advantages of regional banks in their respective peripheral regions allow superior screening and monitoring and potentially reduce credit default. In addition to these effects, the substantial regional redistribution mechanisms of the decentralised Federal Republic of Germany tend to guarantee a certain level of economic activity in all regions of Germany. An OECD comparison which calculated the regional range in household primary income as a % of income in the country's median region (for 2009) reveals some differences between Spain and Germany: In Spain, the range between the regions is 55.5 percentage points higher than in Germany (48.7%) [OECD, 2013]. This indicates that the spatial dispersion of income is higher in

Germany than in Spain. Against the background of the substandard development of the former GDR regions in Germany, it is astonishing that primary income is more equally distributed between the regions in Germany than it is in Spain.

The majority of primary income consists of wages and property, as well as entrepreneurial income. The disposable income adds all social benefits to the primary income, and transfers and subtracts taxes on income, wealth and social contributions (and transfers). If we consider the Gini index (which assumes values between 0 and 1), which measures inequality among the regions in each country, we see that in Spain (0.093), disposable income is also more unequally distributed between regions than in Germany (0.0792) [OECD, 2013]. Differences between primary income and disposable income reflect state redistribution mechanisms. Therefore, we also calculated the variation coefficient[2] [Leßmann, 2005] for regional disposable income of private households as a % of primary income. The statistical relation was positive, which means the higher the indicator, the higher the redistribution between the regions. The variation coefficient for Spain was 0.043495, lower than it was for Germany (0.079739), indicating that redistribution in Germany is higher than it is in Spain.

In sum, the gap between rich and poor regions in Spain is greater than the gap between rich and poor regions in Germany. This could influence the possibility in weaker regions to save money and deposit it in local banks. Additionally, the high increase of loans, especially in the building sector and in real estate, has led to high capital demand in all Spanish regions, which cannot be satisfied by regional savings alone. The need for exogenous capital in Spain has led to a securitising process intended to gain liquidity [Caterineu 2008; Carbó-Valverde et al. 2011; Otero-Iglesias 2013; Dymski 2013]. Otero-Iglesias [2013] considered that securitisation activity in Spain has fostered riskier lending behaviour.

4.3. Regulation (and real decentralised banks)

In many countries, savings banks were established in the 19th century to enable the poor to be more financially independent by encouraging savings 'for bad times' [Brämer et al. 2010; WSBI, 2017], and have traditionally been restricted to riskless investments of clients' deposits, especially in government bonds [Batiz-Lazo and Maixe-Altes 2006]. In Spain, giving loans to businesses only became possible in 1976: With the Decreto Fuentes Quintana, savings banks were given permission to offer the same services as commercial banks, including lending. In contrast, savings banks in Germany were founded as publicly supported self-help organisations, not only to help the poor to save but also to support small local firms with loans [Völter 2000]. In Germany, large commercial banks were latecomers in SME lending, as

[2] $$VC = \frac{\textit{standard deviation}}{\textit{mean}}$$

they targeted small private and business clients only after World War II [Gall et al. 1995; Historische Gesellschaft der Deutschen Bank e.V. 2009].

The moment in time when savings banks became universal banks was crucial. As outlined above, when lending at a short distance, banks realise advantages in soft information processing, especially when lending to SMEs, which tend to be profitable for regional banks. Regional savings banks that have not been permitted to lend have been denied the opportunity to utilise these soft information advantages and, consequently, have missed the source of income from SME lending. The time of lending permission is significant, because short distance lending implies relationship lending, whereby close business relationships develop over time and, only after some time, do information advantages materialise, i.e., information asymmetries between borrowers and banks are overcome [Peterson and Rajan 1995; Boot 2000; Handke 2011]. Time dependency suggests that newcomers in SME lending face information asymmetries at the beginning, regardless of short distance in lending. The same relation tends to be the case for regional banks which extend lending to new regions, as was observed for the Spanish savings banks after the liberalisation of territorial restrictions. The permission to lend and publicly guarantee protection for deposits made by clients has been one important historical reason why savings banks were able to develop as strong universal banks in Germany.

5. Conclusion

Each of the three abovementioned success factors do not describe single conditions, but rather complex mechanism of action. In Spain, it was not just that the former regional savings banks were liberated from their geographical restrictions in 1988 and were transformed into national players; they were also latecomers in business loans and had just 11 years' time to develop as regional (restricted) universal banks. Additionally, the Spanish savings banks association was never comprehensive enough and, due to a lack of support, savings banks could not develop equally quickly.

Whereas Verdier [2002] explained that regional independent banks cannot survive without state subsidies or lobbying for regulations, which 'defend local banks against competition from the center' [Verdier 2002: 20], our comparison shows the opposite: Governance matters less for regulating and limiting the ability of centralised banks to defeat decentralised banks with overwhelming competitiveness. Rather, governance is needed to protect decentralised banks from damaging their own success factors by restricting them to their regional markets. In Spain, the abolishment of the regional principle initiated the end of savings banks.

However, this is not to say that the solution is just to adopt the German banking system and the system of regional cohesion and state structure. Different financial systems are developed in different contexts (markets, cultures, laws and regulations), strongly influencing which systems in which countries hold advantages or disadvantages. This means that different countries require different solutions, and that a system with regionally independent banks requires certain circumstances. The question is to what extent a regional banking system of similar significance to that in place in Germany would be of unmixed benefit in other countries. It thus seems probable that other countries require different solutions.

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Interviews

We have conducted 32 interviews. Due to data protection, we just listed in the following the interviews with researchers and representatives of the associations

- Camino García Domínguez, Confederación Española de Cajas de Ahorros (CECA), Madrid, Institutional Relations Madrid (08/05/2015)
- de la Herrán, Joaquín; The Spanish Banking Association (AEB), Madrid (24/04/2015)
- Manuel, Illueca, University of Valencia (22/04/2015)
- Martínez, Ana, Instituto de Crédito Oficial (ICO), Madrid (24/04/2015)
- Maudos, Joaquín, University of Valencia (21/04/2015)
- Ródriguez Fuentes, Carlos, University of La Laguna, Tenerife (29/04/2015-06.05: research stay; several talks)
- Tulla-Pujol, A., University of Barcelona (17/06/2016)

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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

		Location of savings cooperatives	
		In medium-size or large towns or cities	In small towns or villages (peripheral)
Allocations of collected deposits	Loans to clients	**Competitive market/ lending strategy pursuing cooperative model** (intense competition with commercial banks, embeddedness hard to achieve)	**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)
	In other ways – (interbank loans, government debt securities)	**Competitive market / passive strategy pursuing cooperative model** (risk avoidance, embeddedness irrelevant)	**Local monopoly situation / passive strategy-based cooperative model** (no risk moderation based on limited local embeddedness)

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].

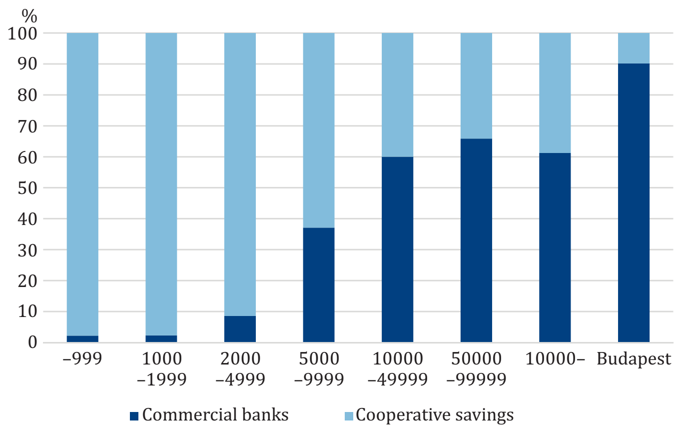
The information technologies and other aspects of innovations of electronical services changed rapidly in the last decades, and these processes integrated step by step to the practices of the financial institutions. They developed their online platforms and allowed the possibilities of e-banking (Bruno 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 cooperative 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.).

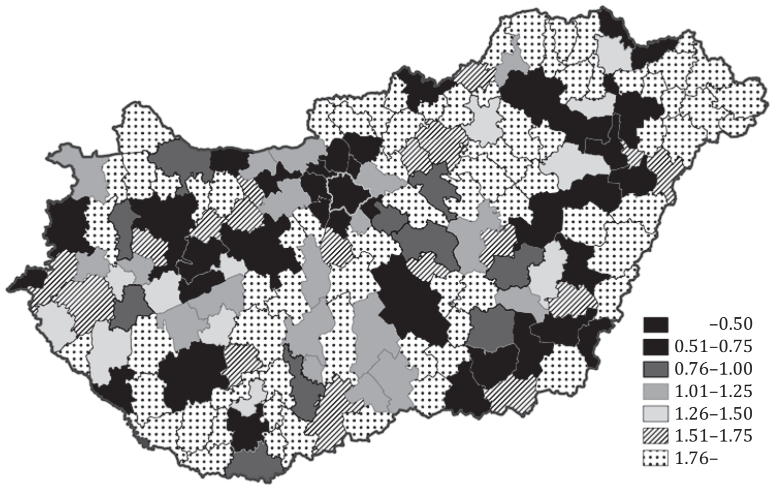
Figure 1. Presence of commercial and savings banks in the different size of settlements, 2017 (%)



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 coopratíve 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.

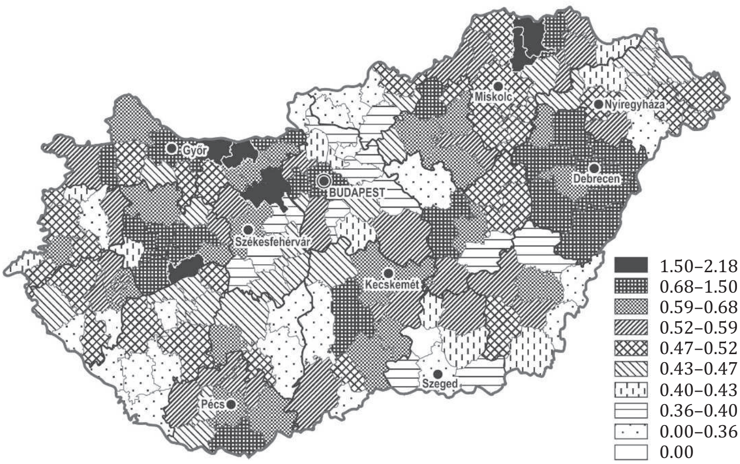
Figure 3 illustrates that micro-regions with higher LTD values can be found closer to larger towns and agglomerations. Consequently, the value of the LTD ratio is high in Budapest, the capital city, around some urban areas and in micro-regions with higher economic wealth.. However the relationship between 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.

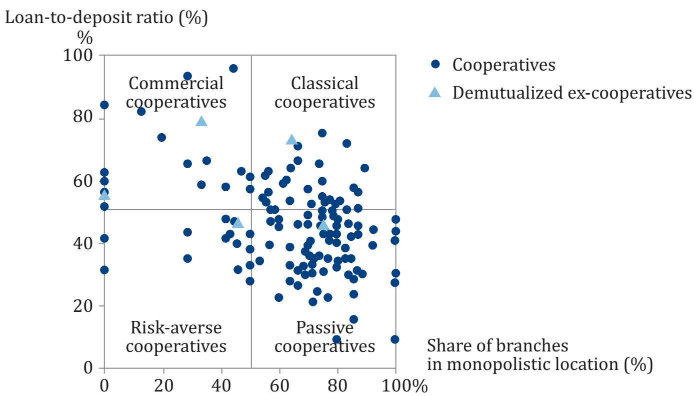
Figure 3. Estimated loan-to-deposit values of the cooperative sector (2010)



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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Fostering Regional Economic Development by Promoting Cooperative Banking Structures in Rural Areas – Lessons Learned in the Russian Federation after 1990

Abstract

Cooperative banks have to consider their institutional and commercial development in order to be a full-fledged and relevant part of the banking system. This implies to offer carefully-designed financial products according to the level of development of their members/customers, of the regions and of the financial system in which they are embedded. The paper analyses the emergence of rural cooperative banking structures in Russia that developed after 1990 by referring to Chick/Dow's »stages-of-banking-model« and issues of corporate governance. The analysis suggests that the institutions need to achieve further elements of modern banking for becoming significant market players in the country. In addition, the regulation and supervision by the Russian government has to be balanced vis-à-vis the size and importance of single rural credit cooperatives in comparison to other – by far larger – elements of the financial system.

Key words: Russia, cooperative banking, credit cooperatives, financial development, regional development, regulation

1. Introduction

Credit Cooperatives have proven to be reliable providers of financial services to small and medium-sized companies in the past. Originating in the early second half of the 19th century until now they have managed to survive and adapt in many Western economies. As so-called stakeholder banks they gained – together with

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savings banks – renewed interest in the course of the so-called great financial crisis (GFC) of 2008–2009 since they were able to withstand the latter nearly without any public bail-out or assistance (see e.g. Birchall (2013)). This performance makes the concept of cooperative banking also appealing as instrument in the »toolbox« of modern development policy.[1] There is the option to proactively foster cooperative banking in transition economies, emerging and developing economies to underpin the financing of small local businesses, supporting their expansion and therefore contribute to regional economic growth. Russia may be regarded as an example for this option. In this country starting in the mid of the 1990s credit cooperation was supported by foreign organizations which were usually active in the area of development assistance and the US farming sector. Later in the middle of the last decade also the Russian government promoted the establishment of rural credit cooperatives as part of a special presidential program for the development of the agricultural sector.

The analysis presented here is derived from studies and scientific field work of the authors that especially considered the development of the system of rural credit cooperatives in the Russian Federation in the time after the year 2000. Due to significantly different economic (high oil prices) as well as political conditions and developments (start of the presidency of Vladimir Putin), this phase can be named the »second phase of transition« in Russia – following a first period of social and economic change in the 1990s. The present contribution aims to assess the system's impact on local development and to give recommendations in which way its performance can be increased and can be put on a sustainable basis under the contemporary conditions of the Russian economy. The theoretical background of the analysis is mainly formed by the Finance & Development approach and New Institutional Economics. The basic assumptions of the Finance & Development approach were already set in the 1950s – a time in which development theory and policy were born as a new field in the branch of economics.[2] It started with the explanation of underdevelopment because of a lack of effective systems of financial intermediation by authors like e.g. Abramovitz (1952). Later – also based on historical studies – the discussion was spinning around the question whether the financial sector is leading or following the course of economic development. Pagano (1993) was the first to integrate the system of financial intermediation in a model of endogenous growth. Empirical studies increasingly appearing in the early 1990s revealed approaches such as a »finance matters« and a »symbiotic

1 See Beck (2014) for the notion of »toolbox or financial development as »tool«, respectively.

2 In this theoretical line – with reference to Tschach (2002) and Stiglitz/Weiss (1981) – a model is built that explains the function of credit cooperatives as institutions that are able to fill gaps in the provision of loans left by the official banking system. By filling those gaps, they contribute to the realization of productive investment projects in rural areas. At this point the author describes an »informational proximity« that enables credit cooperatives as member-based institutions to deal with information asymmetries especially in remote areas in a different manner than »distant« banks are able to. The analysis of the system of rural credit cooperatives in Russia itself is focused on the group of »agricultural rural credit cooperatives« (ARCC) which is the dominating group among two other legal forms of credit cooperatives mainly operating in urban areas.

relationship« between the financial and the real sector. In addition, linkages were shown to other fields of development such e.g. the legal system, the education system and the industrial structure of a country. A so-called functional view was derived that points especially to the single services financial systems provide to the real sector (mobilization of savings, monitoring of borrowers, provision of liquidity etc. In this regard, special emphasis is given to the question which financial institutions are best at providing »access« to loans and financial services among circumstances of asymmetric information and high transaction costs (especially from the point of view of development economists). The aspect of »access« is also the one where the Finance & Development approach was strongly connected with the theoretical concept of New Institutional Economics that helps to explain how financial institutions can evolve from managing informational problems causing market failure. In addition, also Keynesian and Neo-Keynesian elements of thought (especially liquidity preference) enriched the basis of the Finance & Development approach. Although the latter may not have received the necessary attention, it formed the basis for the well-known stages-of-banking-model of Chick/Dow being strongly applied here in this article. It should be added, that the latest empirical post GFC studies on the relationship between financial and economic development like e.g. from Gambacorta et al. (2014) point at specific thresholds for a positive economic effect of financial sector development. The thresholds arise from non-linearities in the relationship between financial and economic development (e.g. qualitative differences in the provision of intermediation services).[3] There is a new consensus rising that politicians and practitioners in the area of development policy have to be aware of these thresholds to fine-tune the quality and quantity of their activities to support domestic banking structures and the establishment of equity markets.

The article is organized as follows: it delivers a theoretical consideration of cooperative banking and its possibility to foster regional growth especially from the point of view of the stages-of-banking-model of Chick/Dow which is further elaborated by new elements. Then the case of Russia and its system of rural credit cooperatives is analyzed using this framework. Following the results of these elaborations implications are drawn for the further promotion of the cooperative banking structure as a »tool« for promoting especially regional growth in Russia.

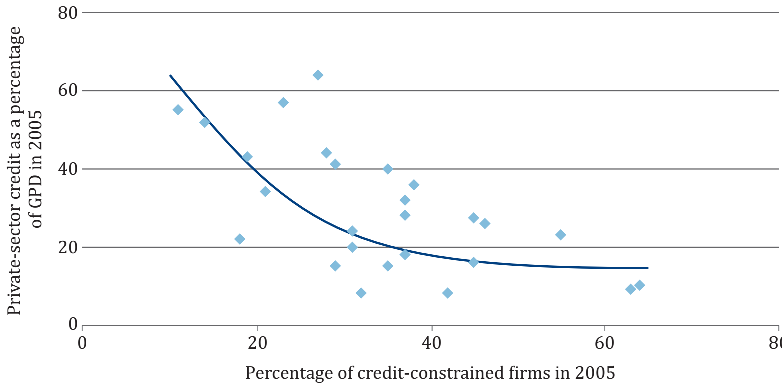
2. Regional development and its nexus with financial development

Financial development is generally important to assure the provision of adequate financial services and hereby especially loans for commercial investments. Empirically, the percentage of credit-constrained firms diminishes in the course of financial development measured by the amount of private-sector credit as

[3] See also Beck (2014) for a list of possible phenomena behind the non-linear character.

a percentage of GDP (see Figure 1). On a national aggregated level – obviously – the capability of the institutions to cope with credit constraints grows in the course of financial development.

Figure 1. Size of banking sector and percentage of credit-constrained firms for a sample of transition countries



Source: EBRD (2015), p. 34.

One has to recognize that newer empirical studies have confirmed the threshold character of financial development.[4] This means that the positive effect on growth generated by a growing financial sector is diminishing in the course of economic growth or even vanishing – eventually turning negative – beyond a certain level of development.[5] Gambacorta et al. (2016) identify two thresholds: for the banking market and for the equity market. E.g. Griffith-Jones (2015) takes this result to draw conclusions for Africa given this fact. Due to the still low level of financial development there is still a good potential to use financial development to spur economic development on this continent and to learn from the latest regulatory lessons to sketch institutions and bureaucratic procedures to accompany the path of financial expansion. Also regarding former communist transition countries like Russia the threshold character is an important message for fine-tuning the further development of financial services and especially loans to the private sector. While having seen a considerable increase the overall level of financial development remains still below the level of countries with comparable levels of economic development. There is room for further expansion to make maximal use of the growth-promoting effect of the financial sector.

4 See Graff (2000) and Graff/Karmann (2006) for a comprehensive analysis. For the general notion see: Berthelemy/Varoudakis (1996).

5 See Beck (2014).

Especially while looking at interregional development differences the threshold approach points to two possible directions: (A) In cases of much less developed regions there might be room for a further expansion while (B) in others – comparably more developed ones like the Moscow region – it would be rather recommended to shrink the volume of financial services provided. This may also apply to considerable differences between the amount of financial services provided to single branches of an economy.

Regional differences are often associated with differences between centers and peripheries. Peripheral regions' growth prospects are often lower due to a lack of market access or lack of agglomeration economies. Here, in addition the regional-credit-availability literature (RCA) shows up to add the lack of finance as a further stumbling block for growth in the periphery. By causes of liquidity preference and information asymmetry the supply of funds to the periphery is lower or at least more volatile. At least here, structural-organizational issues of the banking system come into play. The better e.g. regional banks are able to pre-finance local investments and are not channeling funds away to the »center« the higher also the growth prospects of the periphery. This capability to pre-finance is explicitly in the focus of Victoria Chicks stages-of-banking-model. Therefore, it is also useful to analyze the financial capabilities of local banking structures like e.g. those of credit cooperatives.

The Stages-of-Banking-Model – and its nexus to the level of financial development

According to Dow et al. (2008) – who applied the model to analyze former Soviet Union countries in their early years of transition – the stages-of-banking-model was conceptually outlined in Chick (1986) and Chick (1993). It was applied in Chick (1988) and later refined by Dow (1999). Crucial for the mechanics of the model (see Figure 2) is the habitus of economic agents – producers, vendors, consumers – of increasingly using banking accounts for their transactions i.e. keeping money and paying bills.[6] The more it happens the more banking-system-intern money creation takes place providing means of payment – demand funds – to pre-finance investment. Of course, this also entails a systematic basis for inflation. Although the core of this process is that banks monetize claims – promises to pay – of the mentioned economic agents against each other. Thus, they transform promises-to-pay into a medium – money – to (easily) pay for other claims. The more this is taking place the more one could speak of an »investment first« instead of a »savings first«. This points to a partially substitutive character of money creation vis-à-vis the collection of savings from the public (but especially from foreign sources – e.g. via cross border banking – what is supposed to be a more unstable form of supply) to underpin (local) economic development processes. Due to this, it delivers strong arguments for the creation of a strong and stable domestic monetary and banking system.

6 See Kumhof / Jakab (2016).

Central building blocks – liquidity preference and information asymmetries

Liquidity preference is one of John Maynard Keynes' basic tenets to make forecasts about the behavior of economic agents regarding the holding of assets during changes of perceived risk and uncertainty. By looking at financial services – namely possibilities to deposit money and to issue credit – it is important to have a look at both sides of the market in parallel – the supply side (banks/lenders) *and* the demand side (companies and households/borrowers). If the future outlook is negatively affected so is the will of suppliers to lend or invest funds for a longer term. Both sides – the supply and the demand side are more prone to keep their assets liquid and to remain flexible. There is also a center-periphery aspect in the sense that financial markets in the center tend to be more liquid so that a diminishing outlook favors the flow of funds to (economic) centers leaving the periphery aside as object for investment. Here, the structure of the banking markets appears as a possible counterforce to withstand an overreaching drainage of funds to centers that diminishes the growth perspective of the periphery. Especially savings banks and cooperative banks have a reputation for being banks operating locally – collecting deposits and issuing loans. Their charter and business policy is from scratch (by charter or regulation) devoted to their host region (stakeholder banking approach/regional principle).

Figure 2. The Stages-of-Banking-Model and the demand and supply of funds

Stage-1	Stage-2	Stage-3	Stage-4	Stage-5	Stage-6	Stage-7
Savings First	Investment First	Inter-banking Market develops	Lender of Last Resort exists	Liability Management	Sales Maximization and Financial Innovation	Shadow Banking & Disintermediation
Supply of funds						
Liquidity preference		Information asymmetries	Corporate governance	Cross border banking	Shadow banks	Financial innovation
Demand for funds						
Liquidity preference		Structural change	Technological change	Investment	Consumption	Business cycles
Beck (2014): *"What is the role of finance in a modern society?"*				Development of money – crypto money like e.g. BITCOIN – and Fintechs		

Source: According to Chick/Dow (1993) and amended with own conceptual ideas.

The second building block – although not directly obvious in the formulation of the stages-model – is the assumption of information asymmetries between the lender and the borrower of funds. The borrower is typically alleged of having more and better information about the prospects of his project seeking finance. The less he is able to convince the lender of its quality the higher is the risk of denial of funding or of being rationed in the sense of Stiglitz/Weiss (1981). It is important to add that this rationing may also appear in the relationship between a bank seeking deposits to issue loans from savers/depositors. E.g. bank runs can occur if the latter's confidence has fallen beyond a certain threshold. The phenomenon of rationing is also not only confined to bank loans but also encompasses the possibility to receive equity to fund investment projects. Here also rationing – namely equity rationing – may occur. Regarding credit rationing, again, the structure of the banking system and the goals it pursues come into play. The above mentioned stakeholder banks are in this sense seen as being better able to cope with information asymmetries due to their local position – in close proximity to the borrower of funds. As a result the chance to receive funding for the latter is greater and due to this a contribution to local economic development can be asserted. Empirical studies underpin this notion and experiences made in countries like Germany – being a prominent international showcase for a decentralized banking landscape (financing of the German »Mittelstand«) – pointing to its importance for the design of financial structures supporting local business activities elsewhere in the world.

The interrelationship with aspects of Corporate Governance

According to Shleifer/Vishny (1997) aspects of »good« corporate governance are central for receiving significant financial contributions from external partners. In its core this concept deals with mechanisms to assure a certain return for investors. Thus, it is relevant in regard to the relationship between the financial institutions and their borrowers (internal) and the financial institutions and their depositors and investors/lenders (external). Better corporate governance on the side of the borrowers increases the chance to adhere to the terms of the debt contract. Assuring a good governance within the conduct of business of the financial institution contributes to its reputation by its depositors and investors/lenders. Due to this, a better corporate governance also diminishes information asymmetries and enhances the functionality of the financial institutions. Thus, it promotes a »stepping-up-the-stages« in the sense of Chick & Dow as laid down in the next section.

Based on these basic theoretical considerations a short look at the single different stages of banking development according to Chick and Dow is given with a supplement to the last few years.

Stage-1 – Savings First

At a low level of usage of the banking system for payments the power to pre-finance investments of banks remains low. Therefore, it is overwhelmingly dependent on savings held by the public or owned by the banks itself. One should note that early banking was to a certain extent only investment banking. Bankers were entrepreneurs identifying prospective investment projects, organizing depositors for it, and leading the process of investment.

Stage-2 – Investment First

For this to exist there has to be a typical behavior of using bank accounts for transactions. Due to this banks can to a great extent generate or create money by monetizing claims of their customers vis-à-vis each other. Due to this the power to pre-finance investments is maximized. To start an investment the banking systems provides funds finally based on promises to »pay the bill later« – with the revenue from the investment and the value added created by it.

The »Investment-First«-power of the banking system is good news for transition and developing countries. It means that there is – besides using foreign savings – a second powerful channel to use »financial development« as »tool« for economic development. This means a stable banking system resting on a stable monetary regime is an important ingredient to »internally« foster investment (or at least to create the basis for it).

Stage-3 – Interbanking market develops

As banks lend money to their customers-depositors they also lend money to other banks. Due to this, they can underpin their liquidity management and can earn money with interest payments. This affects the capability of transforming risks and durations while issuing loans based on their deposits that can be withdrawn on a daily basis. Thus, the interbanking market supports their ability to transform deposits into long-term loans for investments.

Again, this is good news for transition and developing countries that have the chance to interconnect their banking systems internally but also with foreign institutions and finally financial markets. Although there needs to be an increasing awareness of the »cursory« character of these transactions. In times of crises, liquidity preference rises what may at first affect money lend to borrowers in developing countries. A special consideration must here be given to cross border banking that offers – in addition – bank organization-intern channels to move money / means of payment from one country to another.

Stage-4 – Lender of Last Resort exists

Looking back at the history of banking there is a modus of transforming a fully-privately run banking business into a system where private commercial banks operate side-by-side with a distinguished monetary authority – namely a Central Bank. Although not compulsory necessary, this is typically a public bank – a bank owned by the state. Due to the importance of the functioning of the monetary system and the acting of commercial banks pursing their role as deposit collectors and issuer of loans for our today's economies (with an extremely high division of labor) it is in the public interest to have this system run smoothly. Thus, there are good reasons to have one powerful agent being able to act as »fire brigade« and with the necessary far-sightedness to use created money to secure the functioning of the system in the light of the huge negative external effects of their break down for other parts of economy.

Stage-5 – Liability Management

Having established an integrated banking system banks cannot be alleged of being profit maximizers. Thus, they look at their costs of refinancing while issuing loans against interest rates paid by their customers. Thus, they will consider other means of refinancing next to deposits given to them by their customers-depositors. An important alternative here is the financial market in its broadest sense that develops over time in the course of (global) financial integration.

Stage-6 – Sales Maximization and Financial Innovation

Going further with the notion of profit maximization it is obvious that commercial banks will try to generate as much revenue from lending operations as possible. If they have stepped over the necessity to solely use deposits for this they again make use of the »deep« international financial market to increase their liability side-by-side with an increase of their assets – that means an increasing amount of loans lend out to customers. Here also examples of »financial innovation« come into play – especially modern forms of securitization – that can be used to increase the amount of loans issued.

Stage-7 – Shadow Banking and Disintermediation

The fact that banking could be a profitable business of course also attracts competitors or new business actors to the financial market trying as well to earn money with offering possibilities to deposit money and to lend-invest into profitable investments projects or to offer consumer credits. This trend can be summarized under the term shadow banking.[7] This may of course partially lead to a process of disintermediation in which's course officially registered commercials banks lose their »monopoly« or generally their importance as – traditional main – provider of financial services. At best, they can use these new technologies or evolving innovative institutions complementary for expanding their own lending business. Here, especially securitization and the necessary organizations/institutions to operate it (e.g. special purpose vehicles) are in the focus but also fee-based services and remunerations from the off-balance sheet activities as a whole. In most of the cases – due to its competitive character – financial innovation and especially shadow banking will be rather a substitute for the services of commercial banks. This of course poses a threat to their own genuine existence. Although from a dynamic point of view, this should not be a negative development. As long as the new financial organizations/institutions that evolve are not a threat to financial stability and therefore for the function to finance investment and consumption it is a positive process of institutional evolution. More choice – more instruments for investment and lending – is provided to investors and consumers. Of course, this also calls for new practices to monitor and regulate these activities by the monetary/

[7] See e.g. Deutsche Bundesbank (2014) for an overview.

public authorities. This process of adjusting the regulation is already ongoing and was spurred by the triggers-and-effects of the so-called Great Financial Crisis(GFC) of 2007-9.[8]

Post Stage-7 – or »What is the role of finance in a modern post-GFC society« – according to Beck (2014)

The aftermath of the GFC provoked a public debate about the way commercial banking is behaving and what – especially risks – is associated with the ongoing process of financial globalization. Thorsten Beck (2014) considered this discussion under the headline or question about the »role of finance in a modern society«. The notion that the financial sector has an important function to play in a globalized world remains. Although there have also been certain »own development« of the financial sector that showed signs of an »expanding-too-much» – leading to much financing and an unhealthy or unproductive swallowing up of resources – namely human capital – to »run« it. Last-but-not least the expected leave of the United Kingdom of the European Union – the »Brexit« – revealed the importance of the financial sector for some certain localities in the world – here the London City. This capital region became one of the most important financial centers worldwide after the so-called »Big bang« deregulation in 1986 – being one of the mayor steps of financial liberalization of the Thatcher government. Due to the Brexit a discussion was started to move important financial institutions and with it the necessary personnel to the city of Frankfurt and other EU capitals. It is obvious that such concentration of the financial sector – as a »real« sector – deploying human resources, generating services and paying profit taxes also has implications on the behavior of (local) politics and economic policy as a whole. All-in-all the financial sector should not be expanded in a way that »Dutch-disease-like« dependencies on it develop to the damage of other sectors or the diversification of the whole economy, respectively.

Beyond the evolvement of shadow banking and financial innovations there is a further line of innovations that are connected to the increasing digitalization of the economy/society. This also produces innovation (starting) at the level of the baseline of the monetary system: the kind of money/specie used to conduct transactions. There is an increasing »toying-around« with so-called crypto currencies – with the BITCOIN being the most prominent. Their usage in certain areas still shows the typical signs of an uncontrolled currency in its infancy. But there are also more serious attempts to adopt this »technology« for standard transactions.

To sum up – and also by coming back to Thorsten Beck's question on the future of finance – it is intriguing that financial services will go on playing a very important role for the economic development of countries, regions and localities. Hereby, it is important to acknowledge their own dynamic development partially being driven

8 The International Monetary Fund is intensively looking at this regulatory aspect of financial innovation and publishes a lot of information about this for practitioners in its journal Finance & Development.

by the search-for-profit but also by innovations resulting from market gaps and the application of modern digital technologies. Like every innovation there are opportunities and risks that need to be managed to assure a fruitful use.

Interestingly financial innovations – excluding (badly structured) securitization and financial derivatives – have according to Thorsten Beck – especially taken place in developing countries and can – together with the »power« of digitalization and IT as the infrastructure of the knowledge society – have an important impact on the growth prospects of single localities, regions and countries. Here, especially the African continent is in the focus where e.g. new payment and loan technologies were born to tackle the problem of not existing »traditional« banking structures and of lacking technical infrastructure as a whole. This is a typical latecomer advantage that can be used.[9]

Before we apply our theoretical analysis to the Russian economy we regard the interplay of the stages of banking to be reached or that can be reached and the *regional* availability of loans and financial services as a whole.

3. Analysis of local / sub-systems within the model – the particular role of stakeholder-oriented banks – especially of cooperative banks

a) A last-but-not-least static view

Local banking structures can be mirrored in the stages-model to assess their »individual« capability to finance or pre-finance local investments – or to speak more broadly – offer adequate financial services to their – local customers – including consumer loans as well.

As whole banking systems climb up the ladder single or sub-parts like nascent cooperative banking structures in transition countries can do the same.

Taking a look at cooperative banking systems operating »worldwide« there is a tendency to run in a certain way separate internal structures for refinancing and monitoring-supervision. This leads to a high degree of internal financial integration and typically encompasses the operation of so called apex structures providing »financial-services-for-financial-intermediaries« like e.g. insurance products, investments products-vehicles, leasing etc.

[9] This bodes well in a time where the young population on this continent needs much more »prospect« than ever – since ironically due to information technology – and at the same time – the quality and chances of life »elsewhere« have become more visible and transparent and are thereby increasing the time preference or to say in other words the »impatience« to wait too long for economic development to take place.

b) A dynamic view

By looking at the evolvement of cooperative banking structures in the »West« and their still partially considerable high market shares it is obvious that they have managed to adapt their service-offers according to the needs of economies graduating from agrarian to industrial and further on to service or even to knowledge economies.

This structural change is closely associated with a technological change. The latter typically demands another quality and quantity of financial services.[10]

Thus, also local cooperative banking systems should be continuously adapting their service portfolio (scale and scope) to the changing needs of their local customers – commercial but of course also private ones – like e.g. consumers – not only demanding new household equipment but also loans to invest in education to increase their human capital. When do so they contribute to local economic development and welfare. Although, especially in transition economies, the structural break caused by the time of communism and the associated central planning – partially of up to 70 years – diminishes the market share that can be reached during the time of economic transition to full-fledged market economies.

From the outlined perspective the following hypotheses shall be examined:

(1) The power / capability to pre-finance investment increases in the course of financial development – going along with an increased use of banking accounts.
(2) Due to liquidity preference, funds tend to flow to highly liquid financial centers.
(3) Due to information asymmetries, local banks remain important to finance local investment projects.
(4) An interconnected local banking system is optimal. Cooperative banks operating with a sophisticated apex system are an example for this.
(5) Regional credit availability is affected in the course of »stepping up« the stages of banking development.
(6) Credit cooperatives have to align permanently their service portfolio to meet the changing needs of their local customers in the course of economic transition.

After having outlined this analytical framework we are now assessing the system of rural credit cooperatives that was re-established after the break-up of the Soviet Union and the central command economy in Russia in the 1990s.

4. The system of rural credit cooperatives in Russia

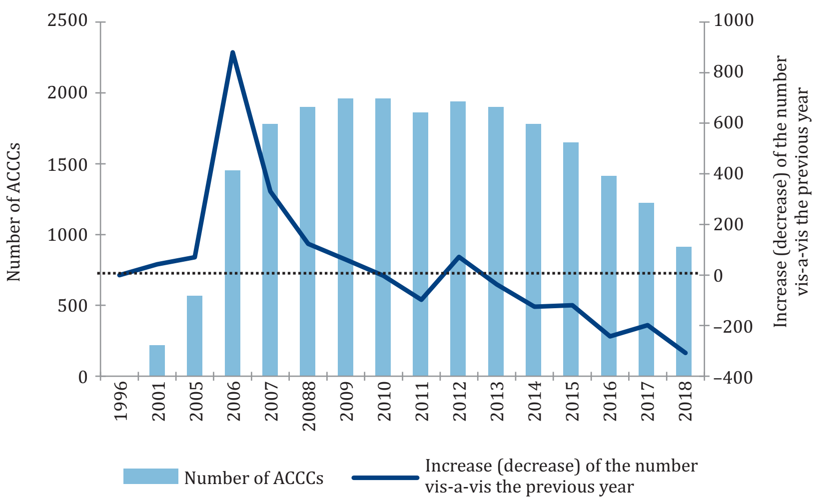
Although the system of credit cooperatives in Russia was one of the most sophisticated at the beginning of the 20th century a completely new movement emerged after 1990. The more than 70 years of communism led to a loss of collective memory in regard to the function of cooperatives within a market economy. The November

10 See Lin (2012), p. 33.

revolution and the subsequent collectivization did not leave room for western-style cooperatives based on the idea of economic freedom and democratic organization. The new movement arising from the spirit of perestroika and the necessity to fill gaps in rural areas was pushed forward by a couple of charismatic persons. They had close ties to the idea of a regional development supported and stimulated by rural credit cooperatives capable of providing loans and services needed by farmers and rural entrepreneurs. After more than 20 years after their revival it is possible to evaluate the evolution of this specific system and to draw lessons from it.

In Figure 3 the development of the number of 1st tier agricultural rural credit cooperatives is outlined between the years of 1996 and 2018. After a strong growth of their number in the first half of the years 2000 the number peaked in 2009. A main driver of the peaking was a specific federal presidential program for the development of agricultural business (lasting from 2006–2007) that delivered strong incentives to found credit cooperatives to work as channels for low-interest federal funds. In the course of the GFC the small credit cooperatives and especially those founded on the basis of these government incentives were affected significantly. Since then their number shrank by roughly 1.000 to about 900 left over being registered in 2018. The reasons for this are manifold and can be found in the prematurity of the system not having established a cushion against a crisis situation as such in 2009–2010. Although, especially the still low professional level reached at this time is the most important reason. In addition, many of the institutions were not really operating. During this period only about 500 were considered to be working seriously as providers of loans – not primarily because of government incentives in connection to the mentioned federal presidential program.

Figure 3. Development of the number of rural credit cooperatives in Russia from 1996 to 2018



Source: Register of the Bank of Russia from the 16th of March 2018.

A specific reduction took place with regard to the number of 2nd tier – regional – rural credit cooperatives. The number decreased from 33 to 6 over the course of the last years since 2009. This is a particular problem because they fulfill a function of regional competence centers for the 1st tier cooperatives operating directly on the village level. This is a clear sign of a worsening of the institutional composition of the whole system of rural credit cooperatives in Russia. This issue will be addressed at the end of this article with regard to a modified and targeted strategy to publicly support the system.

4.1. Specific Russian characteristics

The basic motivation to deal with local development in the Russian Federation are its natural- and transition-related differences between urban centers and rural peripheries. The country operates under a partially completely different framework for its growth process in comparison to other smaller Central European transition countries that received a lot of guidance due to their perspective of becoming members of the European Union. A balanced development of urban and rural regions is especially challenging in a country like Russia endowed with a unique geography. Successful development approaches need to refer to existing economic structures and endowments. In this regard financial intermediaries can mobilize resources for the local development. Therefore, the building up of locally operating financial institutions is – nowadays – a core instrument of a holistic development policy. In this regard – however – as stated by Cuevas and Fischer (2006) – *"Co-operative financial institutions (CFIs) are among the poorly understood entities in financial markets."* Although, the observable success of many systems of cooperatives worldwide led to a new interest in cooperative structures and the recognition that – in the light of the failed laissez-faire neoliberalism that dominated the development scenery since the early 1980s – there must be other ways and frameworks to »organize« sustainable development. Even the World Bank – historically a typical advocate of market liberalism – has modified its development strategy by arguing for a so-called New Structural Economics-approach – a term introduced by its former chief economist Justin Yifu Lin (2008–2012). This approach calls for a combination of market incentives, a substantial provision of public goods and a pro-active government in the course of development. The approach also asserts that *"For low-income countries, small, local financial institutions should be the core of financial structure as the industrial structure is dominated by small firms/operators in agriculture, manufacturing and services."*[11] This is – albeit late – a further and general argument to consider the role small locally operating credit cooperatives can play to contribute to sustainable development in Russia.

11 See Lin (2012), p. 33.

4.2. Database and analysis

To gather the data necessary to back the analysis a lot of field work was done by the authors using results of three surveys among roughly 300 member-clients of agricultural rural credit cooperatives (ARCC) in 15 different regions of the country. They were conducted in 2004, 2005 and 2010 (see Table 1). The assessment of the data was backed up by several interviews conducted with local leaders of the system and international experts.

Table 1. Overview on the studies conducted by ACDI/VOCA on the operation and impact of agricultural rural credit cooperatives

	Region	Year		
		2004	2005	2010
1	Wolgograd	x Podershka: 45 respondents		
2	Orenburg	x Agrosojus: 14 respondents	x 48 respondents	
3	Perm	x Doverie: 43 respondents	x 55 respondents	
4	Rostow	x Doverie: 40 respondents, Orlovsky: 40 respondents		
5	Saratow	x Krestjanin: 43 respondents, Nadezhda: 46 respondents		x (16 ARCC, 40 respondents)
6	Udmurtia	x Zardon: 40 respondents		
7	Chuvashia	x Soglasiya: 37 respondents		
8	Jaroslawl	x Sodruzhestvo: 46 respondents		x (3 ARCC, 56 respondents)
9	Mari-El		x 51 respondents	x (3 ARCC, 40 respondents)

	Region	Year		
		2004	2005	2010
10	Adygeya		x 40 respondents	x (3 ARCC with 24 respondents, 2 other organisations with 20 respondents)
11	Kalmykia		x 63 respondents	x (1 ARCC, 15 respondents)
12	Stawropol		x 50 respondents	
13	Wologda			x (10 ARCC, 40 respondents)
14	Kemerow			x (1 LVKG, 20 respondents)
15	Pensa			x (11 LVKG, 44 respondents)
	Number of regions	8	6	8
	Number of ARCC	10*	not indicated	48
	Number of respondents	394*	307[a]	299

* 45 members per ARCC were interviewed. *450 members interviewed totally.
[a] Regarding the number of respondents in the different regions see ACDI/VOCA (2005), p. 13.
Source: own composition based on ACDI/VOCA data.

One of the first questions of the survey was dedicated to the purpose of the loans received by the ARCC. Table 2 lines out the results. It is indicated that investment-oriented purposes such as especially »expansion of enterprise« and »start/opening up of a business« were making up more than 50% of the named purposes.

Table 2. Purpose of the first loan received by ARCC (in % of the respondents of each single your group) – results of the surveys in 2004, 2005 and 2010

Purpose	Year of entry into the ARCC (become a member/survey in 2004)						Survey in 2005	Survey in 2010
	1997–1999 52= 100%	2000 37= 100%	2001 73= 100%	2002 69= 100%	2003 77= 100%	2004 86= 100%	307= 100%	299= 100%
Maintain standard of living	23	8	21	35	22	16	19,7	21,7
Expansion of enterprise	54	70	56	46	56	51	52,8	49,5
Start/opening up of a business	8	8	3	4	10	6	10,0	4,7
Change of special-ization	2	0	1	1	3	2	2,6	1,3
Survive under changed condi-tions	4	5	8	12	5	6	13,5	4,7
Other	8	5	11	12	4	19	–	8,0
No answer	2	3	–	–	–	–	–	0,1

Source: ACDI/VOCA (2004), p. 7, ACDI/VOCA (2005), p. 4 and ACDI/VOCA (2010), p. 35.

To see whether the loans given to the members were contributing to an increased economic activity the single borrowers were asked how the amount of cultivated land increased during the time of membership and how the number of employees had grown over the respective time. Table 3 lines out the results for the increased use of land – in total, regarding the amount owned and the amount leased.

Table 3. Comparison of the amount of cultivated land between the year of entry into the ARCC and the year 2004 (early phase)

Basis indicator at time of entry into the ARCC	Year of entry into the ARCC					
	1997–1999 52=100%	2000 37=100%	2001 73=100%	2002 69=100%	2003 77=100%	2004 86=100%
Share of borrowers cultivating land	94	95	84	86	83	65
...in the year 2004	92	95	84	86	83	65
a) Average amount of cultivated land in ha in the starting year	251	211	264	171	369	82
...in the year 2004	394	279	342	194	402	82
b) Average amount of cultivated land owned by the borrower in the starting year	122	59	96	69	250	46
...in the year 2004	145	85	100	75	247	46
c) Average amount of cultivated land leased by the borrower in the starting year	228	229	258	207	237	76
...in the year 2004	378	300	343	221	287	76

Source: ACDI/VOCA (2004), p. 6.

Table 4 reveals an increased number of employees hired full-time, part-time and as seasonal workers.

The results of the three surveys indicate an increasing role of rural credit cooperatives. The third survey of 2010 – see Annex No. 1– revealed that the amount of land privately used for agricultural production increased in the course of the membership in the following way:

– total amount of cultivated land: 70,9%.

Among this:
- amount of cultivated land owned by the borrower: 132,2%,
- amount of cultivated land leased by the borrower: 61,0%.

In the survey during the period of 1998 to 2010 it is visible that the years between 2003 and 2006 can be described as the »boom« years of the early period of the second period of transition.

Table 4. Comparison of number of employees and regarding type of employment

Basis indicator at time of entry into the ARCC	Year of entry into the ARCC (membership)				
	1997–1999 52=100%	2000 37=100%	2001 73=100%	2002 69=100%	2003 77=100%
a) Share of borrowers hiring full-time employees	50	57	47	36	45
...in the year 2003	62	68	49	35	45
b) Average number of full-time employees per borrower	5,2	9,4	7,8	6,6	11,4
...in the year 2003	9,6	9,7	9,3	6,3	11,4
c) Share of borrowers hiring part-time employees	6	11	11	3	4
...in the year 2003	6	14	12	4	4
d) Average number of part-time employees per borrower	1,3	2,0	1,8	2,5	2,0
...in the year 2003	1,3	5,0	1,9	2,0	2,0
e) Share of borrowers hiring seasonal workers	33	38	28	30	31
...in the year 2003	33	38	34	33	31
f) Average number of seasonal workers per borrower	9,2	11,6	8,4	15,2	11,4
...in the year 2003	10,7	15,6	11,6	15,0	11,4

Source: ACDI/VOCA (2004), p. 6.

In addition, the 2010 survey lines out – by posing sociological questions – that in the perception of the local population there is a general positive influence of the credit cooperatives' activities on the specific locality in which they operate.

The main problem or »gap« with the design of the three surveys is their sole orientation on the input side. The increasing use of land or hiring of employers may not directly lead to an increase in the value added. Albeit this was due to the design of the surveys. ACDI/VOCA was aware that asking questions regarding revenues or economic success following from taking loans would have meant to lose a considerable number of respondents since they were afraid of disclosing personal financial figures (informal economy problem). Nevertheless, the role of agricultural rural credit cooperatives seems to be supportive for local growth processes. Albeit the quantity and quality of their operations and financial services – especially the total amount of loans – is very small.

Because of this we are now assessing the system of rural credit cooperatives that was re-established after the break-up of the Soviet Union and the central command economy in Russia in the 1990s in the framework of Victoria Chick's stages-of-banking-model. We assess it – according to the upper-mentioned sub-system character of cooperative banking structures in the »West« also as a separate system (see Table 5).

Table 5. Analysis of Russia's commercial banking system and the system of rural credit cooperatives

Stage	Commercial banking system	System of rural credit cooperatives
1 – Savings First	Functional	functional
2 – Investment First	Yes, but remains under its possibilities. Many people still do not have a bank account. The more the shadow economy is present the more cash paying is used – diminishing the basis for money creation.	Less – since they are not allowed to offer accounts for transactions. But as organizations themselves they are typically customers of commercial banks.
3 – Inter banking Market develops	Yes	There was a third level – a federal – credit cooperative (called Narodny Kredit). It went bankrupt and was abandoned after the financial crisis.
4 – Lender of Last Resort exists	Yes	No, although there are ambitions to establish an own cooperative banking institute with a full-fledged banking license. Only the Rural Credit Cooperatives Development Fund (RCCDF) provides some assistance.

Stage	Commercial banking system	System of rural credit cooperatives
5 – Liability Management	No extremes	no
6 – Sales Maximization	No extremes	no
7 – Shadow Banking & Disintermediation	Partially	No, but it could be affected. Although, one should note the niche character of the system.

Source: author's own work.

Considering the result – at first for Russia's system of commercial banks – one could note its typical transitional character. Although, some peculiarities or country specifics do exist vis-à-vis the commercial banking system of other transition countries – namely those closer to the European Union. There are considerable differences namely due to:

1. Strong role of the state
   The Russian government controls about 60% of the commercial banking market and is at the same time in charge for the supervision of the banking system via its so-called »megaregulator« (an agency run by the Russian Central Bank). This must naturally lead to conflicts of interests, although during the time of financial crisis it proved to be a cushion against uncontrolled bankruptcies of larger commercial banks.
2. Low share of foreign banks
   Only about 20% of the assets of the banking sector are controlled by foreign banks. This is in strong contrast to the situation in other transition countries in Central Europe. There, the banking sector is dominated by foreign banks. The latter strongly used the chance to internationalize their businesses by acquisition of incumbent banks or the establishment of new banking institutions. This contributed to a fast professionalization of the host countries' banking sectors but also proved to be a risk of capital flight in the course of the financial crisis.
3. Concentration on growth poles
   The World Bank staff describes the Russian banking sector as *„…relatively shallow, fragmented, and concentrated in Moscow"*.[12] Commercial banking concentrates its activities on Moscow and St. Petersburg region due to its high density of population and economic activity. Only the state owned Sberbank operates in the periphery because of its public task. For other commercial banks, the periphery is too expensive for business development vis-à-vis the growth poles of Moscow and St. Petersburg. The latter had already been alleged of being »overbanked«. Thus, there is a need for alternative financial institutions like e.g. rural credit cooperatives to fill the gaps left by the commercial banking sector.

[12] See World Bank (2013).

4. Specific geography
   Russia's unique geography is much more similar to the one of Canada or of the United States than to the geography of other Central European transition countries. As argued above this also – naturally – affects the concentration of economic activity and therefore also that of commercial banks and leaves whole territories unbanked.
5. Extraordinary influences caused by political sanctions
   Due to the political tensions surrounding the crisis in Eastern Ukraine and especially because of the Crimea conflict – followed by financial sanctions – Russian banks faced difficulties to refinance themselves on the international capital market. The Russian State had to become active and partially secured refinancing with public money.

All-in-all – and apart from the problems caused by political sanctions – the Russian commercial banking sector has seen a significant improvement of its professionalism. So-called pockets-banks had been closed by an engaged and reform-oriented government that heavily transformed the banking sector and its regulation since the early 2000 years. In 2016 about 100 small banks were closed.[13] Although, the functionality of the banking system as a whole remains below its possibilities with many people in Russia still not having a bank account. To sum up – all of the mentioned factors diminish the capability of the Russian banking sector to pre-finance investments and leave room for improvements or alternative institutions.[14]

By now looking especially at the system of rural credit cooperatives – being in the focus of this paper – one has to confess that it is still a system in its infancy. This regards to its size as well as to its level of institutional-commercial development. Being – still – not allowed to provide banking accounts to the population obviously prevents the system from moving beyond stage-1. In addition, many other aspects that typically make up apex organizations providing internal financial services for the members of the system are not yet developed. The GFC that also hit the Russian banking system – although by far not so intensively like Western banking systems – also had effects for the system of rural credit cooperatives. The main problems that arose were increasing amounts of non-performing loans caused by a – partially – low level of professionalism and associated problems of corporate governance. They led to the bankruptcy of the (only) third level cooperative Narodny Kredit. This federal credit cooperative was originally assigned to become an umbrella organization for refinancing and financial management of the whole system. Apart from this there were ambitions to at least form a so-called non-bank-credit-organization connecting the system with the financial market or even the forming of an own cooperative bank with a full-fledged banking license. All these initiatives had been stopped in the aftermath of the financial crises and a withdrawal of international assistance. The German Ministry of Finance was via the German Bank for Reconstruction and Development (KfW) engaged in building up structures for

13 See Russian Central Bank (2016).

14 See World Bank (2017).

re-financing. In 2005, a fund called GERFO was created. Yet, this fund had been closed and the financial resources were transferred to another fund that is not focusing on the re-financing of credit cooperatives.

Still operating is the Russian Credit Cooperative Development Fund – RCCDF – that was set up by a grant from the US American farm system in 1997. It is a foundation operating in close proximity to the Union of Rural Credit Cooperatives (URCC) – a branch association. The fund's mission is to channel loans to 2nd and 1st tier credit cooperatives. Thus, it is part of the small apex devoted to provide financial services to the credit cooperatives operating locally across Russia. The leadership of the RCCDF and of the URCC is typically also the head of the whole system operating Russian-wide. During this period, there existed also a cooperation between the fund, the union and other – partially occasionally – operating organizations. Among them were foreign public, semi-public, private and domestic federal institutions. Unfortunately, triggered by the financial crisis and the changed government policy the momentum of the development of the system got lost after 2012. Now, the sector's remaining apex organizations are in due need for sophistication and support. Especially problematic is the strongly diminished number of 2nd tier cooperatives (down from 33 to 6 institutions) that were used to be the backbone of the qualitative development of the 1st cooperatives in the respective regions.

To sum up, the level of internal financial integration of the system of rural credit cooperatives is very low. Due to this, its capacity to pre-finance investments is very low as well.

4.3. Paths to promote the impact of the system

Despite the low level of banking development in the sense of Victoria Chick's stages-model, a positive impact of the system of rural credit cooperatives on local economic development was found. Due to the provision of loans to farmers and rural entrepreneurs the currently more than 900 single institutions improve the performance of local economic circuits and increase the ability to export processed goods to urban regions. It is shown that the loans were used to increase the amount of agricultural production by deploying more land and hiring more employees. The strength of the systems rests on a) its regional presence, b) the high »informational proximity« vis-à-vis its members, c) the low cost of its personnel and d) the flexibility in the issuing of loans. On the other side, the system shows several weaknesses that need to be overcome: a) low financial capacity that enables only to issue small loans with short maturity, b) non-transparent bookkeeping, c) low level of organization on the federal level and d) only weak access to the (international) financial market.

Therefore, to become a sustainable system a lot of institutional and commercial development is needed. Especially the financial and economic crisis that also hit Russia in 2009–2010 revealed the mentioned weaknesses in the still nascent system of rural credit cooperatives. This refers especially to the lack of a powerful apex structure capable of providing monitoring and liquidity. Further, the applied credit technology needs to be improved and has to be supported by state-of-the-art management information systems (MIS). Altogether the core task is the provision of «internal public goods« – or to say it technically to provide adequate »financial-services-for-financial-intermediaries«. It is still recommended to found a »bank of credit cooperatives« linked to the financial market acting as a powerful apex institution exercising monitoring and supervision and – due to this – increasing and guaranteeing the reputation of the whole system. In the last months, there was some progress in this regard since the Central Bank of Russia started to explicitly recognize the system as a relevant part of the rural financial architecture to guarantee a certain level of access to financial services. In addition, there are ideas to implement a staged concept of supervision – depending on the size of the single institution – that could finally lead to the integration of the most sophisticated credit cooperatives into a specific sectoral deposit insurance scheme. The latter would increase the reputation of the respective institutions and could open up room for an extension of the spectrum of the financial services that can be offered to their members-customers. As a result, a better development of the whole business model seems possible that would strengthen the effect of the system on local economic development. Even now, the most innovative and active parts of the system are showing a lot of creativity to offer financial services different to classical loans for the investment into machinery etc.

4.4. The role international assistance had played – lessons learned

Regarding the role of the international development assistance provided to the system the results are rather disillusioning. Like in other parts of the world the support was not coordinated and dominated by the agenda and historical background of the international institutions. Currently – and especially due to the public good character of the necessary elements – it seems that only a comprehensive institutional and commercial development package with support by all relevant stakeholders including the Russian government and international institutions like the World Bank or the European Bank for Reconstruction and Development (EBRD) could give enough impetus to put the system on a sustainable development path. The alternative – and this is the situation that can be observed right now – would be an ongoing fragmented development dominated by single successful regional systems in some of the 83 Russian regions (like e.g. Saratov and Astrakhan). Therefore, the still existing chance to build up a Russian-wide system of rural credit cooperatives contributing to sustainable development especially in peripheral regions neglected by the commercial banking system could be used.

Following the results of the analysis recommendations can be given to the practitioners-regulators in the Russian Federation according to best-practice elsewhere and in the light of the post-financial-crisis regulatory regime or trend, respectively. Three main conclusions shall be formulated and explained:

- Foster the business development of the sector and do not hope too much for government assistance.
  There is still some tradition in Russia to look maybe too heavily at the government to solve problems or to give assistance. Of course, the political economy of Russia's agrarian complex is especially prone to think into this direction. But there are strong arguments for pursuing the development by implementing and applying tested business models elsewhere. There is room for a common marketing of the brand »Russian Rural Credit Cooperative« as soon as basic »rules of the game« are settled. They are necessary to guarantee the building up of a common reputation as providers of financial services in the Russian periphery.

- Connect the system of rural credit cooperatives with initiatives for rural development like e.g. the Local Initiatives Support Program (LISP) of the World Bank.[15]
  Economic development can – at the end-of-the-day – not be isolated from the broader social development and quality-of-life issue to be available for economic agents. The Russian branch of the World Bank is following this point by implementing and expanding its so-called Local Initiatives Support Program (LISP). It supports local government agencies to invest in public infrastructure in several Russian regions – at first pilot regions – now in a broader geographic range. Hereby, World Bank funds are merged with local public and private funds to invest in local infrastructure projects of a broad range. Rural credit cooperatives may become part of this cooperation due to their character as financier of smaller local investment projects and their participative decision making. Especially the latter is a core element of LISP to engage the local public in setting the goals and co-financing of the single projects. There is a chance for complementary funding of projects by the credit cooperatives and LISP to overcome bottlenecks for business to be started due to the lack of the respective infrastructure.

- Find new national and international partners to promote the building up of a powerful apex structure.
  After having completed the first phase of building up structures that started in the early 1990s with the assistance of international organizations now the new realities have to be taken into account. The first reality is the loss of some kind of »federal spirit« in the Russian system of rural credit cooperatives due to the loss of the initial protagonists. The second reality is that most of the international organizations – NGOs and public development institutions – have left the country by reason of »mission accomplished« or »changed attitude«. The recent Russian official policy vis-à-vis (not only foreign) NGOs is also an argument, but maybe not the decisive one regarding the system of rural credit cooperatives. While the hitherto given assistance was basic work with of course also idealistic goals now a next round of »tougher« much more business-oriented assistance is in need. This refers to a solid marketing package aligned with capital to pay for the necessary investments to introduce it locally at the point-of-sale. This would obviously mean a selective approach with the most sophisticated and strong regional systems rece-

[15] See World Bank (2014) and World Bank (2016).

iving assistance. With smaller and not so sophisticated parts of the systems other ways of dealing have to be found. This may go from »closing-them« – something that happens automatically due to the intensive new way of regulating the sector – up to keep on assisting them within federal programs to support the poorest Russian regions – e.g. in the tested ways of organizing on-lending-programs or by intensifying the role of the state-owned Russian Agricultural Bank as shareholder in single credit cooperatives. Time will show whether these regions can climb up the economic ladder and whether credit cooperatives can remain in a niche with a very simple organization necessary to provide financial services.

5. Summing up and looking ahead

Altogether there seems to be a necessity for more selectivity regarding the strategy and actions to be chosen to use credit cooperatives in Russia as a tool for promoting regional growth. Here it also has to be noted that the probability of credit cooperatives attaining market shares as in western countries with a strong and continuing cooperative tradition and business practice is rather low. The period of communism that swept away all forms of privately-oriented cooperative banking is also a structural break during which no adaptation to the changing circumstances of the overall transition from agrarian, to industrial and to service economies took place. The new forms of credit cooperation created after 1990 were born into a much different and fast changing environment in which the historical basis – agriculture and handicraft – only possesses a smaller importance.

On the other side, Goglio/Alexopoulos (2013) state that the importance of stakeholder-oriented banking structures has risen as a result of the GFC. They see growing market shares in developed countries what also bodes well for their operation and economic chances in transition and development countries. Here, an important prerequisite is obviously an informed government with a regulatory body that acknowledges the peculiarities of the cooperative banking business model vis-à-vis purely shareholder-oriented banks. The latter have a lower risk profile and a different (typically regional-confined) modus of operation that diminishes the probability of becoming a threat to the overall banking system in case of their bankruptcy. E.g. in the post GFC regulation in the Eurozone this is not appropriately acknowledged and leads to asymmetric high regulation costs for those typically smaller financial institutions (due to high fixed costs of fulfilling the regulations). Thus, shareholder-oriented banks benefit from this regulation. However, they are not primarily interested in serving market niches or peripheral regions. This is exactly the room for cooperative banks providing financial services that are urgently needed for the catching-up process of regions lacking behind.

Annex-01. Change of the amount of cultivated land on average per company

Indicator	**Year of entry into the ARCC**													
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	**No answer**	Total
Number of respondents	1	9	4	16	8	12	16	30	59	39	56	36	7	6	299
Indicator at the time of receiving the loan															
In % of respondents															
cultivating land	100	100	75	94	63	58	56	57	78	79	70	67	43	67	71
Among who leased	0	22	25	44	25	42	44	33	49	23	32	42	14	33	36
Total amount, ha	5	118	1120	273	81	2193	663	208	581	273	243	385	24	27	413
owned	5	108	637	148	27	59	9	48	21	19	43	146	4	8	63
leased		43	1449	283	135	2908	840	266	880	868	433	386	60	39	684
Indicator in 2009															
In % of respondents															
cultivating land	100	100	75	94	63	58	56	67	78	82	70	67	43	67	73
Among who leased	0	44.	50	75	25	33	44	47	51	21	30	42	14	33	39

Annex-01 – continued

Indicator	**Year of entry into the ARCC**														
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	**No answer**	Total
Number of respondents	1	9	4	16	8	12	16	30	59	39	56	36	7	6	299
Total amount, ha	120	600	2400	451	149	8535	726	329	584	288	296	385	24	27	692
owned	120	518	854	185	59	1086	20	116	42	33	73	146	4	8	137
leased		185	2320	278	225	13006	908	303	828	994	503	386	60	39	1009
Change of the indicator till 2009 vis-a-vis the time of receiving the first loan															
Total amount, ha	115	482.7	1280,0	178,2	68,6	6342,1	63,4	121,3	2,9	14,9	53,0	0	0	0	62278
owned	115	409.9	216,3	36,2	32,6	1008,7	11,1	68,7	20,9	14,6	29,6	0	0	0	16437
leased	0.0	142,5	871,0	-4,3	90,0	10097,9	67,3	37,3	52,7	125,6	70,0	0	0	0	45122
Change in percentrage															
Total amount, ha	2300,0	410,2	114,3	65,4	84,9	289,2	9,6	58,3	0,5	5,5	21,8	0	0	0	70,9
owned	2300,0	378,7	33,9	24,4	121,6	1702,3	119,0	143,9	99,7	78,6	68,1	0	0	0	132,2
leased		335,3	60,1	-1,5	66,7	347,3	8,0	14,0	-6,0	14,5	16,2	0	0	0	61,0

Source: ACDI/VOCA (2010), p. 29.

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Two Years of the Bank Tax in Poland – an Analysis of Effects

Abstract

The main purpose of the paper is an attempt to assess the effects of introducing a bank levy in Poland on selected indicators of the banking sector using the difference-in-differences method. The employment of the difference-in-differences method does not result is strict findings regarding the incidence of the newly introduced bank levy. Although we observe negative effects on ROA, the value of assets, and the value of loans, and positive effects on the number of employees, our results are not statistically significant.

Key words: bank tax, banking sector, difference-in-differences

1. Introduction

On 1 February 2016 a bill imposing a tax on assets of selected financial institutions entered into force in Poland.

The new tax receipts are central budgetary revenues. The tax is expected to fund social policy projects and to increase the extent to which financial sector contributes to the state's budget.

The tax is payable by domestic banks, branches of foreign banks, branches of credit institutions, cooperative savings-and-credit funds, domestic insurance companies, domestic reinsurance companies, branches of foreign insurance and reinsurance

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companies, principal branches of foreign insurance and reinsurance companies, and consumer loan lending institutions.

The taxable base is the excess of total assets over 4 billion PLN for banks and other credit institutions, 2 billion PLN for insurers and 200 million PLN for consumer loan lending institutions. When it comes to banks, cooperative savings-and-credit funds as well as credit institutions, the taxable base is subject to reductions of many kinds (in particular the taxable amount may be reduced by the value of Polish Treasury bonds). The tax rate is 0.0366% monthly.

The literature on the effects of introducing a bank levy is limited. Following the approach broadly presented in literature (Buch et al.[1], Capelle-Blancard and Havrylchyk[2], and Celerier et al.[3]) we employ difference-in-differences method to assess the effects of imposition a bank tax in Poland. The main purpose of this paper is **an attempt to assess the effects of introducing a bank levy in Poland on selected indicators of the banking sector using the difference-in-differences method.**

2. Bank levies across Europe

Bank taxes have been introduced in many EU countries since 2010 (mainly in 2011). Financial institutions other than banks are subject to levies in many countries as well. Table 1 summarizes bank levies in place in EU countries.

Usually, the rationale behind levying a tax on banks is that bank crises cause expensive burden for a public finance system (mainly by rescuing systemically important banks) and it is a way of shifting this burden[4]. However, one should have in mind that Poland maintains that the tax is levied on banks to fund social policy programs. Generally, there are two main ways of using additional revenues streams generated by the bank tax. In most EU countries bank tax revenues contribute to the central budgets. Other common practice is that bank levy revenues contribute to a special financial stabilization fund which is expected to mitigate systemic risk.

There is a considerable variation in bank levies across Europe. Firstly, most countries refer to the liability side of banks' balance sheet when determining the

1 C.M. Buch, B. Hilberg, L. Tonzer, *Taxing banks: An evaluation of the German bank levy*, "Journal of Banking and Finance", 2016, no. 72, pp. 52–66.

2 G. Capelle-Blancard, O. Havrylchyk, *Incidence of Bank Levy and Bank Market Power*, "CEPII Working Paper", 2013, no. 2013-21. Available at: http://www.cepii.fr/PDF_PUB/wp/2013/wp2013-21.pdf [Accessed 26 February 2017].

3 C. Celerier, T. Kick, S. Ongena, *Changes in the Cost of Bank Equity and the Supply of Bank Credit*, 2017. Available at: https://www.fdic.gov/bank/analytical/cfr/bank-research-conference/annual-17th/papers/16-celerier.pdf [Accessed 1 May 2018].

4 M. Kogler, M. Kogler, *On the Incidence of Bank Levies: Theory and Evidence*, "University of St. Gallen Discussion Paper", 2016, no. 2016-06, p. 1. Available at: http://ux-tauri.unisg.ch/RePEc/usg/econwp/EWP-1606.pdf [Accessed 26 February 2017].

tax base (equity and insured deposits are exempted) but not all the countries follow this pattern. It is worth noting that French levy is imposed on minimum regulatory capital. On the other hand, Hungary, Slovenia, and Poland impose levies on assets. Secondly, tax rates differ significantly between countries, even if they determined the tax base similarly (see Table 1). What is more, some countries have opted for a flat tax rate (for instance Belgium and France) while some other have chosen a progressive tax rate dependent on the amount taxed (Austria, Germany, Hungary, the Netherlands, and the United Kingdom). The Netherlands and the United Kingdom differ between long-term and short-term funding additionally.

Table 1. Bank levies in EU countries

Country	Year of implementation	Tax base	Tax rate (as of 2012)	Allocation
Austria	2011	Total liabilities net of equity and insured deposits	0.0–0.085%*	Central budgetary revenue
Belgium	2012	Total liabilities net of equity and insured deposits	0.035%	Central budgetary revenue
Cyprus	2011	Total liabilities net of equity	0.09%	Financial stabilization fund revenue
France	2011	Minimal amount of own funds required to comply with coverage ratio	0.25%	Central budgetary revenue
Germany	2011	Total liabilities net of equity and insured deposits	0.0–0.06%*	Financial stabilization fund revenue
Hungary	2010	Total assets net of interbank loans	0.15–0.53%*	Central budgetary revenue
Latvia	2011	Total liabilities net of equity and insured deposits	0.036%	Financial stabilization fund revenue
The Netherlands	2012	Total liabilities net of equity and insured deposits	0.0–0.044%**	Central budgetary revenue
Poland	2016	Total assets	0.0366%	Central budgetary revenue

Country	Year of imple-mentation	Tax base	Tax rate (as of 2012)	Allocation
Portugal	2011	Total liabilities net of equity and insured deposits	0.05%	Central budgetary revenue
Romania	2011	Total liabilities net of equity and insured deposits	0.1%	Financial stabilization fund revenue
Slovakia	2012	Total liabilities net of equity and insured deposits	0.4%	Central budgetary revenue Financial stabilization fund revenue
Slovenia	2011	Total assets	0.1%	Financial stabilization fund revenue
Sweden	2009	Total liabilities net of equity and insured deposits	0.036%	Financial stabilization fund revenue
The United Kingdom	2011	Total liabilities net of equity and insured deposits but netting of gross assets and liabilities against the same counterparty and deduction for liquid assets	0.0–0.088%**	Central budgetary revenue

* Depending on the amount taxed.
** Depending on the amount and whether funding is either long-term (half rate) or short-term.

Source: on the basis of: S.M. Chaudhry, A. Mullineux, N. Agarwal, *Balancing the regulation and taxation of banking*, "International Review of Financial Analysis", 2015, vol. 42, pp. 38–52; M. Devereux, N. Johannesen, J. Vella, *Can Taxes Tame the Banks? Evidence from the European Bank Levies*, "Saïd Business School Research Papers", 2015, no. 2015-05; L. Kovács, *Bank Taxes in the European Union*, "Public Finance Quarterly", 2012, vol. LVII, iss. 3, pp. 332–346.

3. Literature review

As a repercussion of the recent global financial crisis a number of varying taxes on financial institutions have been proposed or enacted, including a financial transaction tax, a bonus tax and levies on financial institutions[5]. A Financial Activities Tax has been proposed by the IMF in a report for the G-20[6].

The literature on the effects of introducing a bank levy on banking sector's indicators focuses, among others, on passing the burden of newly introduced tax onto customers. Kogler found empirical evidence for the presence of this phenomenon in the EU-23[7]. Capelle-Blancard and Havrylchyk found that in the case of Hungary the tax was shifted to customers with the smallest credit demand elasticity, such as households with an outstanding mortgage[8]. It is possible by raising interest and fee margins. The authors employed the difference-in-differences method relying on the fact that the tax rate in Hungary is much higher for big banks than for small ones.

There is also growing literature concerning the influence of tax imposition on banks' balance sheets and performance. Two different strands of research should be distinguished depending whether a tax is imposed either on liabilities (net of equity) or assets.

Perotti and Suarez assessed the effect of a Pigouvian tax on non-deposit liabilities as a tool to internalize systemic risk external costs generated by short-term funding and found that when banks were heterogeneous and obtained different benefits from short-term funding this tool could be not only effective but also preferable to liquidity regulation[9].

Devereux et al. studied the effect of bank levies introduced in European countries on the risk-taking behavior of banks[10]. In their findings they conclude that bank levies had an effect on banks' funding choices and can be successful in reducing banks' funding risk but also had an effect on banks' portfolio choices. In short, the levies induced banks to borrow less but also to hold more risky assets.

Celerier et al. showed that liability tax led banks to shrink their balance sheet as well as to shift the composition of their balance sheet to assets that are more capital

5 D.A. Shackelford, D.N. Shaviro, J. Slemrod, *Taxation and the Financial Sector*, "National Tax Journal", 2010, vol. 63, no. 4, part 1, pp. 781–806.

6 International Monetary Fund, *A Fair and Substantial Contribution by the Financial Sector. Interim Report for the G-20*, Washington, DC, 2010.

7 M. Kogler, *On the Incidence..., op. cit.*

8 G. Capelle-Blancard, O. Havrylchyk, *Incidence...*, op. cit.

9 E. Perotti, J. Suarez, *A Pigouvian Approach to Liquidity Regulations*, "International Journal of Central Banking", 2011, December 2011 issue. Available at: http://www.ijcb.org/journal/ijcb11q4a1.htm [Accessed 1 May 2018].

10 M. Devereux, N. Johannesen, J. Vella, *Can Taxes Tame the Banks? Evidence from the European Bank Levies*, "Saïd Business School Research Papers", 2015, no. 2015-05. Available at: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2563634 [Accessed 15 April 2017].

demanding, i.e. corporate loans[11]. Therefore, by decreasing a relative cost of equity a liability tax has potential for increasing both bank equity ratios and bank lending.

On the contrary, Buch et al. found empirical evidence of a reduction in lending after the bank levy had been introduced in Germany[12]. However, there is no proof of changes in the provision of new loans. The authors also found evidence that banks increased deposit rates as a response to the levy. It is also worth mentioning that the majority of German banks were exempt from paying the tax.

The second strand of research concerns a situation where a tax is imposed on assets.

Dia and Van Hoose showed that imposition of a tax on banking lending could correct the over-lending problem by reducing the returns from lending, although it could also adversely affects the composition of lending[13].

4. Methods

Methods used in the paper include: descriptive analysis, comparative analysis, and econometric modeling.

On the basis of the literature review we identify the main reasons for introducing a bank levy in European countries and discuss the main differences in bank taxes' characteristics.

Research methodology with regard to the quantitative analysis presented in the paper follows the procedure known as difference-in-differences (DID). The DID is a statistical technique that studies the differential effect of a treatment on a 'treatment group' (in our case the treatment group comprises Poland's banking sector) versus a 'control group' (in our case – the Czech Republic's banking sector). We use Czech banks as a control group since there is no tax levy in the Czech Republic. Poland and the Czech Republic are neighbouring countries at the similar development level. What is more, a factor that strongly affected profitability of Polish banks in 2016 (a sale of shares of Visa Europe to Visa International) refers to Czech banks as well.

The DID was employed by many authors that had been investigating effects of bank tax imposition and so far has proved to be an effective research tool.

The aim of this study is an attempt to assess the effects of introducing a bank levy in Poland on selected indicators of the banking sector using the difference-in-differences method.

11 C. Celerier, T. Kick, S. Ongena, *Changes…*, *op. cit.*
12 C.M. Buch, B. Hilberg, L. Tonzer, *Taxing banks…*, *op. cit.*, pp. 52–66.
13 E. Dia, D. Van Hoose, *Bank taxes and loan monitoring: a cautionary tale*, "The Manchester School", 2016, vol. 86, no. 1, pp. 1–20.

Celerier et al. list some characteristics that are typically seen as important bank capital structure determinants, i.e. among others bank size, bank business model (composition of assets), and bank profitability[14]. The characteristics reported above are of particular interest to other researchers too (cf. Devereux et al., Celerier et al.).

We have decided to use respectively changes in total assets, changes in total value of loans, and return on assets as proxies for those characteristics.

The novelty of our study is an inclusion of changes in employment in a banking sector. Employment should be seen here as a cost of operations. Thus, in more adverse environment we expect banks to look for possible cost cuts and to decrease the employment.

We use a difference-in-differences approach with time and country fixed effects (e.g., Angrist and Pischke[15]) using regression to estimate equations such as:

$$Y_{it} = INTERCEPT + \beta_1 * TREATED + \beta_2 * TIME + \beta_3 * DID + \varepsilon$$

with the β_3 as an estimation of the relevant effect of a treatment (introducing a bank tax) on Poland's banking sector. This model also includes three dummy variables, controlling for the time (month) effect, the country effect and an interaction between them.

Four models are constructed and estimated with different dependent variables, which are:

EMPLOYMENT – a variable of simple percentage increases of the number of employees in the banking sector;

ASSETS – a variable of simple percentage increases of the total value of assets of the banking sector (in local currency);

LOANS – a variable of simple percentage increases of the total value of loans granted by the banking sector (in local currency);

ROA – a variable of the return on assets (in percentages) of the entire banking sector.

The analysis covers the period between January 2014 and December 2017 (with a monthly frequency, quarterly for data on employment). Data comes from websites of the Polish Financial Supervisory Authority, the Czech National Bank, and kurzy.cz.

14 C. Celerier, T. Kick, S. Ongena, *Changes…*, *op. cit.*, p. 13.

15 J.D. Angrist, J.-S. Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, 2008, pp. 165–169. Available at: https://www.researchgate.net/profile/Joshua_Angrist/publication/51992844_Mostly_Harmless_Econometrics_An_Empiricist's_Companion/links/00b4953344a9a0cb13000000/Mostly-Harmless-Econometrics-An-Empiricists-Companion.pdf [Accessed 25 February 2017].

5. Findings

Following the approach broadly presented in the literature, we employ DID to test whether introducing a bank tax in Poland has affected the selected banking sector's indicators (i.e. an increase of total assets, loans, profitability and number of employees). With regard to our research procedure, we selected four dependent variables for the DID regression referred to as EMPLOYMENT, ASSETS, LOANS and ROA. After using the techniques mentioned above and testing the statistical significance of the coefficient standing by the DID dummy variable (which is the estimator of the DID) as well as other estimated parameters the conclusion is that none of the presented models can adequately explain the effects of introducing the bank tax in Poland (the results of the estimation are reported in Table 2).

Table 2. DID regression results

	(1)	(2)	(3)	(4)
dependent variable Y	EMPLOYMENT	ASSETS	LOANS	ROA
INTERCEPT	0.7892* (0.2986)	0.4839 (0.3213)	0.4358* (0.1673)	0.09618*** (0.00668)
TREATED	–1.0100* (0.4223)	0.1363 (0.4544)	0.1791 (0.2366)	–0.02218* (0.009447)
TIME	–0.5808 (0.4353)	0.3696 (0.4642)	–0.0134 (0.2417)	0.00007306 (0.009650)
DID	0.3171 (0.6156)	–0.6225 (0.6565)	–0.3075 (0.3418)	–0.006935 (0.01365)

Standard errors in parentheses.
*** $p<0.001$, ** $p<0.01$, * $p<0.05$

Source: authors' own work.

The regression results show that the sign of the estimated DID parameter affecting the EMPLOYMENT variable is positive. In contrast to that, the DID estimates in the models for ASSETS, LOANS and ROA are negative. Those findings, were they statistically significant, would suggest that the introduction of the bank tax impacted ROA, the value of assets and the volume of loans of the Polish banking sector negatively, while the number of employees rose as a consequence of levying the tax.

Although, DID has proved to be an effective tool in assessing the effects of a bank tax on different banking indicators in many studies, and the indicators selected seem to be typically seen as crucial indicators of banking sector, we are not able to observe the effects of tax imposition. One explanation is that the time series used in our analysis are still too short. Another possibility is that the method cannot yield significant results due to the fact that there is not a sufficiently similar control group to base the calculations on. The choice of the Czech Republic was made based on our opinion that it was the best out of possible alternatives taking into account macroeconomic and banking sectors' characteristics. However, banking sectors in Poland and the Czech Republic may not be similar enough to form a proper comparison basis. Finally, the effects of a newly-introduced tax in Poland can be non-linear, hence a need to use more sophisticated econometric methods to assess them.

6. Conclusion

Although the findings regarding ROA, the volume of loans, and the value of assets are in line with our predictions, the results with respect to the number of employees contradict our predictions. Nevertheless, our results are not statistically significant so the employment of the DID method has not provided an adequate answer to question on the effects of introducing a bank levy in Poland on selected indicators of the banking sector.

To sum up, we have observed a great variation in bank tax characteristics across EU countries. Still, we haven't found any empirical evidence of the effect of the newly-introduced bank levy on employment, assets, loans, and ROA of the banking sector in Poland using DID as methodology.

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Social Determinants of Opinions about Banks

Abstract

The objective of the research was to identify and select homogeneous segments of consumers in terms of their competence on the market of the financial services, as well as to evaluate the influence of the consumers' economic competence on the relations with banks. The sociodemographic features as well as the place that the consumer occupies within the social structures provide a poor explanation of the evaluation of the banks. Opinions about banks are poorly correlated with the socio-economic status of the consumer. There is a weak relationship between the economic status of the consumer and his/her economic competence. There is a strong correlation between the economic competence of a consumer and the overall evaluation of the banks. Four homogeneous groups of consumers were selected in terms of economic competence: Self-excluded (17%), Uninterested (48%), Second-raters (30%), and Leaders (6%). The segmentation was conducted using latent class analysis (LCA). The latent class analysis enabled one to identify the subtypes of the interconnected features which are unobserved in the traditional model. The source of the empirical data is comprised of the field research results conducted by the CAPI method on a nationwide representative sample of the residents of Poland, N=3000.

Key words: economic competence, bank assessment, typological classification, latent class model

1. Introduction

In March 2017, the Polish Bank Association informed that the reputation index, TRiM, of the Polish banking sector amounted to 38 points—a y/y growth of 7 points [Wizerunek… 2017]. At the same time, from this research we have also learned that there is a high diversification of the social evaluation of the banks' reputation. 38% of the society evaluate the banks' reputation well or very well, whereas 34% think of it as average and the rest as poor or very poor [Poprawa… 2017]. From the Kantar TNS research we have learned that 31% of the customers evaluated well the quality of cooperation

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with the bank: 34% evaluated it very well, 24%—excellently, and a mediocre or poor score was given by 9% of the bank customers [Zoom Finanse 2017]. Publications of this kind usually evoke multiple comments, mostly about the business sector which earned such rating, regardless of whether the rating is good or bad. However, the questions concerning the social determinants of this, and not the other evaluation of the reputation of the banking sector, remain unanswered. According to Lazar, the evaluation formulated by the public opinion is a process of complex communication which includes personal experiences, popular opinions, competence as well as suitable mechanisms of the media [Lazar 1995]. Almeida is of the opinion that there is a complex mechanism of formulating opinions and views [Almeida 2007], where the following elements play the key role, namely: social determinants, world outlook, stereotypes and prejudices, popular views, personal experiences, opinion-forming activities, competence in a given matter, education and knowledge.

The justification for a broader approach in the social evaluation of the banks can be found in the growing trend which takes interest in the influence of the human factor on the social and economic processes. This is expressed in a fact that more and more people tend to accept that the theory of human assets plays an important role in explaining and planning activities of different organizations. This trend also justifies the programs of economic education of the society [Collins 2013, Miller, Reichelstein, Salasand BilalZia 2015]. According to Fernandes, et al, the lack of competence and the gap between the desired competence and its status quo create a foundation for managing the owned assets which is far from optimal and preserving the stereotypes [Fernandes, Lynch, Netemeyer 2014].

An additional inspiration to take up this subject is the conclusion, presented by the Polish Bank Association during a press conference on April 25, 2017, explaining the high diversification of the evaluation of the reputation of the banking sector on the grounds of the social determinants: *"High indications as regards the level of knowledge, experience in using the banking services and the financial competence of the customers have a very strong relation with the evaluations of the banks' reputation, (…). The low indications as regards the reputation are accompanied by relatively low indications in terms of being interested in the information about banks, low level of financial knowledge and no motivation to expand it as well as using financial products only to a small extent"* [Poprawa … 2017].

The objective of this paper is to identify and selects the homogeneous consumer segments in terms of their competence on the market of financial services as well as to evaluate the influence of the competitors' customers on the perception of the banks in Poland. Moreover, this paper sought answers to the following questions: To what extent does the socio-economic status diversify the opinions about the banks? How does the economic competence of a consumer influence the evaluation of the banks? Are there any relationships between the economic status of a consumer and his/her economic competence? The conclusions in this regard may serve to better learn the complex social phenomena on the financial market, to support the communication process and planning the educational programs.

2. Research methodology

The meaning of the term competence is not defined precisely, and it is frequently understood differently [Białecki 2006, Dubois, Rothwell 2008]. The most frequent understanding of the notion "competence" is a set of certain skills, knowledge and attitudes which make a competent person be able to cope with diverse, important and typical life tasks. One of the European Council's documents proposes to understand the notion "competence" as "*broad skills based on knowledge, experience, values and inclinations gained as a result of educational influences*" [Kompetencje… 2002]. In the recommendation of the European Parliament and the Council of the European Union, dated December 18, 2006, the notion "competence" is defined as a combination of knowledge, skills and attitudes suitable for a situation [Key Competences… 2007]. According to the definition of the International Network on Financial Education (INFE) acting within OECD, the economic competence means "*a combination of awareness, knowledge, skills, attitudes and behavior necessary to make financial decisions and leading to reaching individual financial well-being*" [Measuring… 2011]. This paper takes into account the above-mentioned areas, and following Friensen and Anderson and INFE, this paper adopted that "*Competence is defined as integrated usage of knowledge, skills, values, experiences, contacts, external sources of knowledge and tools for solving problems, carrying out different types of activities or coping in a given situation"* [Friensen, Anderson 2004].

The TRiM Index was used to evaluate the opinion about banks. This is an aggregated measure of opinions about banks which includes five detailed indexes that evaluate: liking of the banks, overall opinions, evaluation of the financial results, trust in the long run as well as the evaluation of the quality of the services. This is a weighted rating. The TRiM Index falls within the range from minus 66 to 126 points. Scores below 18 points mean a poor result and scores over 47 points mean a good result. Scores between 19 and 46 points are on an average level.

The source of the empirical data is comprised of the field research results conducted by the CAPI method on a nationwide representative sample of the residents of Poland, N=3000. This sample was of a nationwide and representative character by voivodship, size of place of residence, sex and age of the respondent. The data was analyzed using the syntax version of the LatentGOLD 4.5 program [Vermunt, Magidson 2008].

2.1. Methodological assumptions of the latent class analysis

Smith has already written in 1956 that "market segmentation is a homogeneous view of the market as a specific number of smaller homogeneous markets according to their responses to product preferences" [Smith 1956]. In order to describe the essence of the studied processes, a latent class analysis was proposed. The conducted typological classification was of a descriptive function. Segments were identified post hoc after selecting the segmentation criteria. After selecting the segments, a profiling procedure was carried out. It was necessary to adopt a post hoc approach because it was not possible to define the values or levels of the segmentation variables.

This paper carried out the segmentation analysis using a latent class analysis (LCA). In our case, the segments were identified post hoc, and the measurement of the criteria included both the observed features as well as the directly measurable ones (behavioral). The classification was performed based on the subjective and objective segmentation. The subjective criteria include: the knowledge about finances, one's interest in the banks' offer, the current experience with the banks, and the scope of using the banks' offers. The objective criteria are the market reactions of the consumers, namely: the reactions to the need to increase one's economic knowledge, self-evaluation of one's knowledge, inclination to search for information about the banks and sharing this information, etc.). In the latent class analysis the respondent is not permanently assigned to a segment, but a probability of being assigned to each of the selected segments is calculated.

The latent class analysis serves to identify the interconnected subtypes within the multivariate categorical data. The latent classes are the segments which are directly unobserved (latent) segments—what is actually observed are their symptoms. A latent class describes a certain abstract feature or characteristics which cannot be directly observed; which, however, is a factor that diversifies the individual objects that are studied [Bollen 1989; Lubke 2005; Keel et al. 2004]. The examples of the latent variables are, among others: preferences or behavioral intentions [Formann 2003]. Such characteristics can be measured only indirectly in such a way as to obtain answers linked to the attitudes or preferences.

The latent class analysis is made up of a structural part of the model and the measurement part. The structural part estimates the probability of classifying the given case. As a result, we arrive at a percentage of the population in the given latent class. The measurement part determines the probability of *k*th answer to *i*th question under the condition of being attributed to the *n*th latent class. The measurement part of the model describes the relationship between the *i*th indicator variable, and the attribution to the *c*th latent class; moreover, it constitutes the basis for the description of the *c*th class [Vermunt, Magidson 2005].

The procedure of the latent class analysis selects segments and estimates the parameters of the density function which is characteristic of each of them. The general model follows the form (formula 1) [Vermunt, Magidson 2003; Yang 2006]:

$$f(y_i \mid z_i) = \textstyle\sum_{x=1}^{K} P(x \mid z_i) f(y_i \mid z_i) = \displaystyle\sum_{x=1}^{K} P(x \mid z_i) \prod_{h=1}^{H} f(y_{ih} \mid x, z_i) \quad (1)$$

where:
y_i – dependent variables (latent class indicator),
z_i – independent variable (predictors),
x – latent classes (from 1 to K).

The density function for latent classes serves as a basis for determining conditional probability of occurrence of the observed values assigned to the given class [Kaplan 2003, Langeheine 2002]. The latent class regression model is depicted by a formula:

$$f(y_i \mid z_i^{cov}, z_i^{pred}) = \sum_{x=1}^{K} P(x \mid z_i^{cov}) \prod_{t=1}^{T} f(y_{it} \mid x, z_{it}^{pred}) \tag{2}$$

where:
y_i – dependent variables (latent class indicator),
z_i^{cov} – independent variable (covariances),
z_i^{pred} – independent variable (predictors),
x – latent classes (from 1 to K).

In order to arrive at the value of the parameters maximizing the likelihood function, the expectation-maximization algorithms and a Newton–Rapson method (NR) are used most frequently. After estimating the distribution parameters, a probability is calculated that a given case comes from a given homogeneous group. The probability of being assigned to the clusters is estimated based on the model (formula 2).

The fact that this model is estimated with the maximum likelihood method allows one to determine in a non-arbitrary way an optimal number of segments based on a set of measurements of fitting the model [Magdison, Vermunt 2007, Tofighi, Enders 2007]. In the end, we strive to such estimates of the model parameters, so that the cases included in the same class are homogeneous in terms of the specific and selected criteria; whereas, the cases belonging to the other latent classes would differ from each other as much as possible [Bartholomew, Knott 2002]. A set of indexes useful in evaluating and comparing the obtained solutions are the indexes based on the value of the likelihood function which depict part of the variabilityVarianceDiversity which has not been explained by the model yet. These are the logarithms of the likelihood function and information criteria (based both on the logarithm of the likelihood function as well as on its squared value) [Akaike 1987]: Akaike (AIC) (formula 3), Bayesian (BIC) (formula 4) as well as the consistent Akaike criterion (CAIC) (formula 5). The lower their value, the better the model is. In practical applications, the lowest model for which BIC reaches its minimum point is chosen. All these tests come down to comparing the theoretical represented by the estimated parameters of the model and observed in empirical data [Akaike 1987].

Akaike information criterion (*AIC*):

$$AIC = -2ln(L) + 2p \tag{3}$$

Bayesian Information Criterion (BIC):

$$BCI = -2ln(L) + p * ln(N) \tag{4}$$

Consistent Akaike information criterion (*CAIC*):

$$CAIC = -2ln(L) + p * (1 + ln(N)) \quad (5)$$

where:
$ln(L)$ – natural logarithm of likelihood function,
p – number of estimated parameters,
N – number of observations.

3. Social determinants of the evaluation of the banks

The researchers of the determinants of the formation of public opinion eagerly refer to the financial and economic issues. In general, there is a belief that on an individual level specific behavior or opinion is a function of the level of education, age and socio-economic position [Domański, Sawiński, Słomczyński 2007].

A dictionary of sociology and social sciences defines socio-economic status as an index which aims at classifying individuals, families or households by profession, income or education [Słownik… 2005]. As it can be seen in the current research, some of the variables that describe the social and economic determinants have a significant influence on the consumers' decisions and opinions. The basic assumption of the socio-structural model of behavior is that a specific opinion is determined by where a given individual is placed within the social structures [Cwalina 2000]. It is frequently considered that such determinants as place of residence, professional status, and income are the most effective predictors of consumer behavior in the financial market. We can find confirmation of this trend in the criteria applied by the banks when classifying customers into specific segments [Zarządzanie… 2000]. Most frequently these criteria include the variables which determine a customer's socio-economic status, such as: education, professional position, income, and sometimes also life satisfaction and evaluation of the customer's economic situation [Marshall 2005].

However based on empirical research, it turns out that the socio-demographic features can only partly explain the customers' behavior on the banking market and the opinions formulated about banks. It can be seen in the surveys conducted in 2015 on a nationwide representative sample of holders of household credits in PLN and CHF N=900 that the socio-demographic features have little influence on diversifying the opinions formulated about the banks [Idzik, Gierogica 2016], despite the fact that the group of borrowers is highly diversified in terms of the above-mentioned features.

We can draw a similar conclusion when analyzing the distribution of the evaluations of the banks' reputation [Reputacja… 2016]. In terms of age, the highest rating of the banks (37 points) can be recorded in the group aged 20–29. In the other age groups defined in 10-year intervals, the reputation index fluctuates between 29–31 points (there are not statistically significant differences). From the same study we can surmise that among the people with higher education, the TRiM Index of the banking sector in 2016 was 37 points. It was 32 points among the people with secondary education, 29 points among the people with post-secondary education, BBA—27 points, and vocational—31 points. The statistically significant difference can be seen only between the people with higher education and the other groups. Similarly when analyzing the distribution of opinions about banks by profession, the lowest evaluation of the reputation of banks is recorded in the group of unemployed people (TRiM Index—20 points), retired—28 points, farmers—29 points, entrepreneurs—32 points, skilled workers—33 points, white collars and clerks—34 points, and students—35 points (Diagram 1). In terms of the rating, the unemployed differ significantly from the other groups. When making the above-mentioned comparisons, it would be worthwhile to mention that the scope of the minimal and maximal ratings of the TRiM Index is from minus 66 to plus 126 points. In the case of a respondent's income, if the said income exceeds PLN 4000 a month, then it changes the evaluation of the banks' reputation. In the case of people with incomes under PLN 4000 a month, there are no statistically significant differences in the evaluation of the banks' reputation. When taking into consideration the place of residence, a statistically significant difference reveals itself only when comparing the ratings by the residents of cities with a population of 200k and more in comparison with the residents of smaller cities and rural areas. In this respect, we can think of the residents of the rural areas, cities with a population under 20k and 20k-50k as a homogeneous group.

The socio-economic status of the consumer is the outcome of the education, professional position and the income. Taking into consideration the above-mentioned criteria applied by Marshall [2005] to classify the socio-economic status, 23% of the Polish society can be regarded as a group of high socio-economic status, 39% as a middle-class status, and 38% as a low socio-economic status. In this view, the TRiM Index in the group of people with a high socio-economic status is 47 points. In the group with a middle-class status it is 41 points, and in the case of people with a low socio-economic status, the value of the TRiM Index is 29 points (Diagram 2).

A statistically significant difference in the evaluation of the banks' reputation is between the groups of people with the high and low socio-economic status. Taking into account all the above-mentioned results, the socio-demographic features in this case do not provide satisfactory results as the factors that diversify the evaluation of the banks' reputation. Howard and Brown [2016] also arrived at similar conclusions in their studies on trust. They claim that the socio-demographic variables are not sufficiently useful in explaining the social determinants in the changes of trust to various institutions that are studied as part of the Edelman Trust Barometer project.

The overall increase in the society's education level raises the professional competence; however in the opinion of Orczyk, "it is difficult to say whether this is linked to the need and speed of the correction of the competence" in the other areas of the consumer's life [Orczyk 2006]. The increase in the level of education or the socio-economic changes is not closely related with the changes of attitudes and opinions about banks [Zoom Finance 2017, Kantar TNS, Warszawa]. From the above-mentioned information we can conclude that a high socio-economic status as well as a high level of education in a given field only partly compensate for the shortages in the competence in the other areas of the consumer's life. In the opinion of Almeida [2007] it has become more difficult to estimate the changes in the attitudes and behavior of the consumers on the basis of the general changes in the level of education and socio-economic status. The following are of key importance in formulating opinions and views, namely: cultural and environmental determinants, one's world outlook, stereotypes, popular views, personal experiences, opinion-forming actions and competence in a given matter, as well as education and knowledge. This opinion concerns the consumer's competence. In the view of Boyatzis [2008], competence refers to the cognitive skills, following the acceptable conduct patterns, self-awareness, self-control, and social awareness of mutual relations. The level of education and/or the socio-economic status change the attitudes through an indirect influence of the competence [Almeida 2007]. Szarfenberg [2015] restricted this notion to economic competence and indicated the economic knowledge, the skills to proceed and use information when making decisions on the financial market. This approach acknowledges the theory of human capital in explaining various social and economic phenomena. It involves leaving the commonly used criteria in favor of the real-life criteria which diversify the perception of a given fragment of reality by a consumer. Adopting such a concept requires significant changes in having and using the knowledge on determinants of the evaluation of the banking sector.

Diagram 1. TRiM Index value of the banks by profession

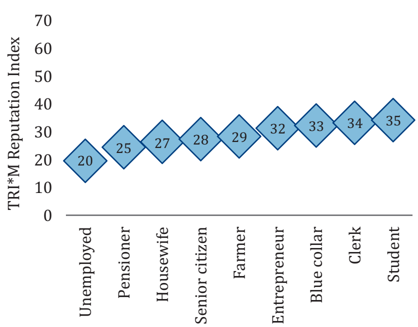
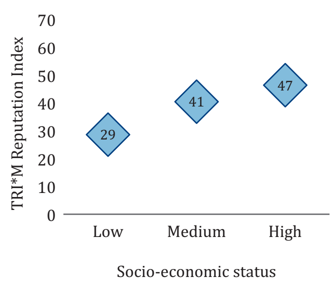


Diagram 2. TRiM Index value of the banks by groups of socio-economic status of the consumer



Source: Reputacja Polskiego Sektora Bankowego 2016 (Reputation of the Polish Banking Sector), ZBP, Warszawa.

When analyzing the results of the empirical studies of the evaluation of the banks' reputation from the perspective of the competence defined by Szarfenberg using economic knowledge, skills of proceeding on the financial market and experience as well as using information in the process of making decisions on the financial market, a clear diversification in the TRiM Reputation Index is revealed. Consumers with a very low level of economic knowledge usually evaluate low the banks' reputation. The TRiM Reputation Index in their case is 27 points. It goes up to 34 points in the group of consumers with low economic level through 47 points in the group of people with average level of economic knowledge, to reach 58 points among the people with high level of economic knowledge (Diagram 3).

Taking into consideration the scope of using the financial services, there is a relationship where the higher the scope of using the financial services, the higher the TRiM Index is (Diagram 4). In the segment of consumers with the minimal or low scope of using the financial services, the TRiM Index is 31 points and 35 points respectively, and in the segment with a high level of using the financial services it rises to 61 points.

Diagram 3. TRiM Index value by consumer's economic knowledge

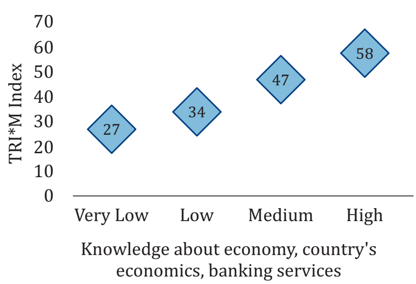
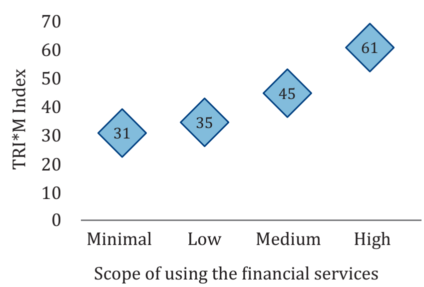


Diagram 4. TRiM Index value of the banks by the scope of using the financial services

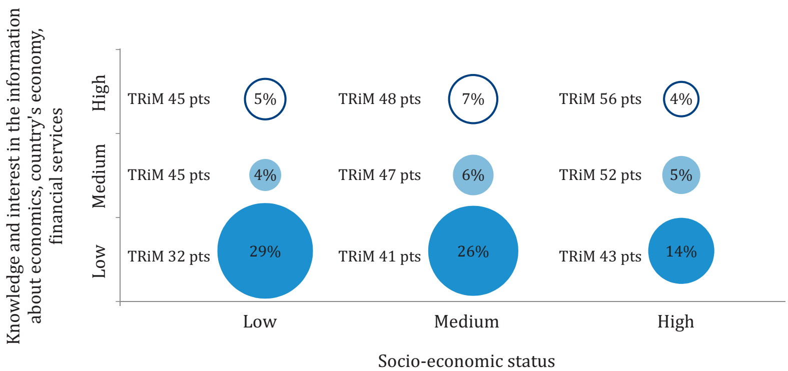


Source: Reputacja Polskiego Sektora Bankowego 2016 (Reputation of the Polish Banking Sector), ZBP, Warszawa.

Based on the criteria mentioned by Szarfenberg (the total rating of the factors: economic knowledge, the ability to act on the financial market and experience, as well as using the information in the process of making a decision on a financial market) the TRiM Index is 25 points in the segment with low competence, and 57 points in the segment with high competence.

Economic knowledge, experience in using the financial services, and being interested in information about economy have a good impact on the evaluation of the banks' reputation [Reputation of the Polish Banking Sector 2016, ZBP, Warszawa]. At the same time, the change in the socio-economic status only partially improves the economic competence of the consumer. The increase in economic and the higher education available for masses do not have a direct impact on the improvement of the society's economic competence. Almost one-fifth (23%) of the Polish society is regarded as having a high socio-economic status. 17% in this group have high economic competence, (which is 4% of the society). At the same time, in the group of people with a high socio-economic status, 61% have low economic competence which constitutes 14% of the Polish society. In the case of the people with a low socio-economic status, 75% have low economic competence which is 29% of the Polish society, and 13% have high economic competence which is 5% of the Polish society. When analyzing the distribution of the economic competence of the consumer versus his/her socio-economic status, no relationships were recorded between these variables. This means that a consumer has formal education, holds specific professional competence, performs autonomous work, has incomes that classify him/her as an affluent person; and, at the same time is economically competent. Such a situation concerns approximately 4.5m of the residents of Poland who have a high socio-economic status; and, at the same time, have low economic competence. It also concerns 9.3m people with a middle socio-economic status and low economic competence, as well as 8.3m residents of Poland with a low socio-economic status and low economic competence [Machała, Idzik 2017].

Diagram 5. TRiM Index of the banks, consumer's economic competence by groups of socio-economic status



Source: Machała, Idzik [2017] based on: Reputacja Polskiego Sektora Bankowego 2016 (Reputation of the Polish Banking Sector), ZBP, Warszawa.

In the opinion of the authors of the report Improving… [2005], more favorable opinions about banks are among the consumers with higher economic competence because they understand the financial products, notions and risks which enable them to make more conscious choices, as well as the knowledge where assistance can be found and what effective actions can be undertaken to optimally use the financial services. The conclusions from the report President's... [2010] indicate that the consumers with higher economic competence have the ability to apply their knowledge and skills in order to efficiently manage their financial assets. On the other hand, the authors of the report National… [2011] evaluate that the economic competence provides the ability to pass judgments and undertake effective decisions concerning the usage of the money assets and how to manage them.

4. Application of the latent class analysis in typological classification of the Polish society by financial competence

The competence is a set of cognitive and non-cognitive features which create certain potential, or rather the ability to perform life tasks which appear in a certain context. It is not possible to describe the evaluation of the financial competence of the consumers with only one variable. The economic competence includes knowledge, skills, attitudes, experience, usage of knowledge and tools in solving problems, as well as performing different types of activities aimed at economic problems [Friensen, Anderson 2004, Measuring… 2011].

From the point of view of the measurements, the indexes of different states were represented by 12 variables which described the main areas of economic competence of the consumer: 1. Evaluation of the overall economic knowledge, 2. Looking for information about banks and their services, 3. Being interested in economic issues, 4. Evaluation of the need to raise knowledge about the financial services, 5. The scope of using the financial services, 6. Sharing information about banks, 7. Experience in using the banking services, 8. Dislike towards raising knowledge about the financial services and economy, 9. The intensity of using the Internet in order to gain information, 10. The number of known financial products, the number of known bank brands, 11. The ability to manage the household budget, 12. Education. A similar concept of segmentation by selecting three segments of consumers was used in the study: Wizerunek Polskiego Sektora Bankowego 2017 (Image of the Polish Banking Sector).

Table 1. Selected criteria of fitting the latent class model

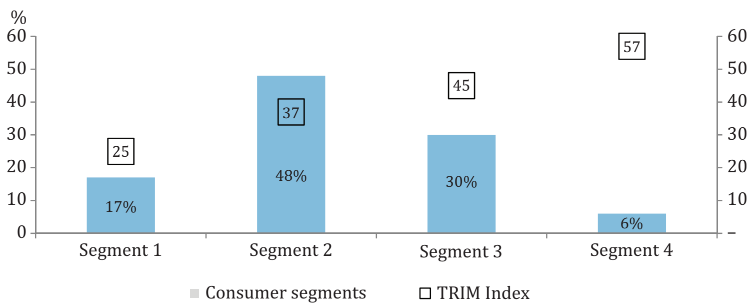
Number of lattent classes	BIC (Bayesian Information Criterion)	AIC (Akaike Information Criterion)	CAIC (Consistent Akaike Information Criterion)	Classification error
2	19318.66	19195.27	19348.66	0.1954
3	18918.64	18791.13	18949.64	0.1238
4	18847.95	18716.33	18879.95	0.1044
5	18861.36	18725.63	18894.36	0.2304

Source: Results of own research on the basis of Zoom Finance 2017, Kantar TNS, Warszawa 2017.

However, it was necessary to determine the number of clusters (latent classes) in the first step. Four alternative models containing from two to five latent classes (Table 1) were estimated. The choice of the latent classes was made by comparing the BIC and CAIC ratings as well as the rating of the classification error. The lowest value of the BIC and CAIC information criteria as well as the classification error were reached for the model with four latent classes (Table 1). The classification error in the case of this solution was 0.1044, and in the case of reducing or increasing the number of latent classes, it increased. The level of p also did not exceed 0.05 in the case of the model with four latent classes.

The parameters of the latent class model were calculated for a 4-class model. All the variables had a significant impact on the discrimination of the latent segments. On the basis of the evaluation of the conditional likelihood of attributing the 12 individual indexes to each latent class, the proper names of individual latent classes (segments) were defined, and profiles of each segment were drawn up. As a result of applying a four-class model, the dimensions of each segment were determined (Diagram 6). When analyzing the banks' ratings from the perspective of four selected segments, the TRiM Index reaches the value of 25 in the first segment, 37 in the second segment, 45 in the third segment and 57 in the fourth segment.

Diagram 6. Typological classification of the Polish society by financial competence



Source: Results of own research on the basis of Zoom Finance 2017, Kantar TNS, Warszawa 2017.

Segment 1—"Self-excluded" constitutes 18% of the Polish society. It is represented by people with the lowest economic competence. Eight out of ten (81%) people in this segment have low (34%) or very low (47%) knowledge about economy, and 89% are not interested in raising one's knowledge in this respect. It can be assumed that almost all people in this segment (98%) do not look for information about economy or banks, and 99% do not talk about banks or economic issues. Eight out of ten (72%) do not use any financial services. Statistically speaking, a person from this segment is familiar with 0.4 banking product (knows what it is for and how to use it). More than half of the people (58%) in this segment evaluate that there is a high risk that in the future they might make bad decisions when using the banking services. Moreover, 44% say that the decisions on the market of the financial services are easy and fast, and 61% trust their skills as regards using the financial services. In the socio-demographic perspective these are the people aged under 22 (25%) and over 60 (45%); with elementary education (23%), junior high school education (23%), and vocational education (29%). 44% of them live in the rural areas or towns with a population of under 20k (14%). Fewer than half of this segment (45%) use the Internet every day; and, at the same time, 34% do not use the Internet at all.

Segment 2—"Uninterested" constitutes 48% of the Polish society. It is represented by the people with low economic competence. Half (51%) of this segment has low (32%) or very low (19%) knowledge about economy and financial services; 79% are not interested in raising their knowledge about economy. 5% of this segment look for information about economy or banks at least from time to time, and 97% of them do not talk about economic issues on their own accord. Statistically speaking, a person from this segment is familiar with 2.3 banking products (knows what it is for and how to use it). Six out of ten people (62%) in this segment think that there is a high risk that in the future they might make bad decisions when using the banking services. For 43% the decisions on the market of the financial services are easy and fast, and 66% trust their skills as regards using the financial services. In the socio-demographic perspective these are the people aged under 22 (22%), 23–35 (22%) and 36–47 (21%), with elementary education (32%), and with finished secondary technical or high-school education (41%). 36% of them live in the rural areas or towns with a population of under 20k. (14%). Fewer than half of this segment (48%) use the Internet every day; and, at the same time, 21% do not use the Internet at all.

Segment 3—"Second-raters" constitutes 30% of the Polish society. It is represented by the people with average economic competence. Two out of ten people (21%) in this segment have low (18%) or very low (3%) knowledge about economy and financial services, 65% are not interested in raising their knowledge about economy. 14% of this segment look for information about economy or banks, or the financial services at least from time to time, and 92% of them do not talk about economic issues on their own accord. Everyone in this segment uses the financial services. Statistically speaking, a person from this segment is familiar with 4.3 banking products (knows what it is for and how to use it). More than half (55%) in this segment think that there is a high risk that in the future they might make bad decisions when using the banking services. Moreover, 48% evaluate that the decisions on the market of the financial services are easy and fast, a 59% trust their skills as regards using the financial services. In the socio-demographic perspective these are the people aged 48–58 (28%), 36–47 (24%) and 23–35 (23%); with finished secondary technical or high-school education (44%), vocational education (18%) or higher education (22%). 33% of them live in the rural areas or towns with a population of under 20k (11%), and 16% live in cities with a population of more than 500k. Fewer than three-fourths in this segment (70%) use the Internet every day.

Segment 4—“Leaders” constitutes 6% of the Polish society. It is represented by the people with high economic competence. Seven out of ten (7%) in this segment have low (6.5%) or very low (0.5%) knowledge about economy and financial services, 48% are not interested in raising their knowledge about economy. 32% of this segment look for information about economy or banks, or the financial services at least from time to time, and 20% of them talk on their own accord about banks or economic issues with other people. Everyone in this segment uses the financial services. Half of the people (50%) in this segment think that there is a high risk that in the future they might make bad decisions when using the banking services. 62% say that the decisions on the market of the financial services are easy and fast. Statistically speaking, a person from this segment is familiar with 6,2 banking products (knows what it is for and how to use it), and 63% trust their skills as regards using the financial services. In the socio-demographic perspective these are the people aged 36–47 (36%), 48–58 (24%) and 23–35 (16%); with finished secondary technical or general education (35%) as well as higher education (29%). 23% of them live in the rural areas or towns with a population of 21k–50k (20%), and 18% live in cities with a population of more than 500k. Three-fourths of this segment (73%) use the Internet every day.

5. Summary

The typological classification revealed four segments of consumers diversified by the economic competence profile. The latent class model enabled identification of subtypes of the interconnected features. This allowed one to learn the social determinants of the banks’ evaluation. The results of the latent class models may serve to better learn the complex social phenomena on the financial market and support the communication process. The obtained results allowed us to refer to the selected generalizations and opinions functioning in the public space. The socio-demographic features as well as the place that a consumer occupies in the social structures are insufficient to explain the evaluations of the banks. Opinions about banks are poorly correlated with the socio-economic status of the consumer. The economic competence is one of the important predictors formulating opinions about banks. There is a strong relationship between the economic competence of the consumer and the overall evaluation of the banks. The condition for long-term improvement of the opinion about banks is the increase in the socio-economic status and a simultaneous increase in the competence of the banks’ customers.

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Sources of Funding and Revenues of Social Enterprises in Poland in Comparison to Selected European Countries and World-Wide

Abstract

The fundamental ideas and values of the social economy find their expression in the goals of social enterprises and in the ways of their activity. However, they are not the only determinants of their social activity. Diversified financial resources are also necessary to stimulate the creation and development of these enterprises. The objective of the paper is to indicate to what extent social enterprises in Poland use various sources of funding their activity, compared to chosen European countries and world-wide. The analyses were carried out on the basis of data from international SEFORIS reports, covering 1000 social enterprises in Hungary, Romania, Spain, Portugal, Germany, Sweden, Great Britain, Russia and China and a sample of 412 Polish social enterprises. The findings of analyses indicate that revenues from business activity are significant financial source of social enterprises in many European countries, including Poland. However, they are not the only way to gain capital. Among other forms of capital contribution, subsidies, donations or membership fees can be singled out. The share of social enterprises using those sources significantly varies in individual countries.

Key words: social enterprises; NGOs; commercial revenue, sources of funding

1. Introduction

Non-profit organizations traditionally operate in the social sector. They affect economic, social and cultural areas threatened by broadly understood marginalization which generate social pathologies. Their negative consequences affect the whole community. To solve or facilitate problems such as homelessness, famine, domestic violence or environmental pollution, NGOs enable the involvement of human

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resources in a complementary way to public and private sectors. Thus, they improve government activities by implementing their own visions of society and innovative undertakings, regardless of government policy. NGOs include groups and institutions that are entirely or largely independent from government and have primarily humanitarian or cooperative rather than commercial objectives.

Necessary funds for the NGOs in order to implement their long-term activities are obtained from public as well as from private donors. In that respect, NGOs must usually rely on various sources of financing. However, increasing number of non-profit organizations are looking for additional revenue, imitating commercial enterprises. They try to attract a bigger number of customers interested in their services that enables them to obtain additional capital.

Therefore, some non-profit organisations, to secure the realisation of their goals, introduce an entrepreneurial activity – a commercial sale of goods and services. Such activities create the possibility to become independent from the public sources or charity. Taking on the activity basing on the commercial sale of goods and services is described as commercialization of social organisations and is the main reason of creation and development of social enterprises. The commercialization of social activity is also a response to some of the crucial issues like an increasing number of people who need support or growing amount of organizations competing for funds to conduct their activity. Business activity aside, the vital distinguishing factors of social enterprises are the issues referring to the profit and the objectives. As Defourn and Nyssens state [2007] the financial surplus is not the absolute rule for the described entities and is used to fulfil social goals. It does not mean that profit is an insignificant economic category. Earnings generate the opportunity to fulfil the essential task of social mission.

Summing up all the above mentioned issues, the aim of the paper is to indicate to what extent do social enterprises in Poland use various sources of funding their activity, compared to chosen European countries and world-wide. The research conducted has revealed the percentage of social enterprise using particular source of financing. Results of the research provide significant input into an international discussion on financing social enterprises and diversifing their support resources.

2. The concept of social economy – from non-profit to not-for-profit activity

The organisational foundation of the third sector (NGO) is a long-term social mission, this is a specified idea aiming at helping the society. NGOs are entities having more complex, flexible and different values and motivation for action than for-profit units. They actively participate in identifying problems of a local environment, on a national level and very often also of an international character. Therefore, the character of activity of those entities is especially significant, most of all in the context of taking independent actions, for which the organisations were created [Froelich 1999, pp. 246–268].

Obviously, the realisation of autonomic goals requires specified financial sources. In case of non-governmental organisations, the funds are usually obtained from several sources. Among the reasons of gaining diversified financial sources, one can enumerate broadly understood premises connected with independence and autonomy of non-profit organisation within the realisation of social mission [Carroll and Stater 2009, pp. 947–966]. Other premises concern the creation of economic safety of NGOs, expressed in striving for the limitation of the risk of dependence on financial resources suppliers [Frumkin and Keating 2011, pp. 151–164].

Diversification of funding streams introduces opportunities of avoiding the risk of being controlled by public, as well as private, donors, especially when one of them has a dominant share in the funding. Diversification strategy of revenue sources in non-profit organisations increases the autonomy of NGOs in their fulfilment of social mission and diminishes the risk of pressure put on the management, for instance within the change or resignation of formerly approved priorities [Keating et al. 2005].

Another reason among NGOs of revenues diversification are the financial premises connected with the threat of default or insolvency and the decrease of revenues. Numerous research on the economic condition of non-profit organisations shows that the diversified sources of revenues are characteristic of the entities of a better financial situation [Chang and Tuckman 1994, pp. 273–290].

Hager [2001, pp. 376–392] stresses that diversification of revenues increases the probability of organisation's survival. Along with that statement, the researcher also argues that a higher level of concentrated revenues has contributed to the collapse of many organisations. Especially in times of economic deterioration, the decrease in revenues from one source can be compensated by the revenues from another. Carrol and Stater [2009, pp. 947–966] argue that one of the conditions of operational stability of NGOs is the access to diversified streams of funding. Greenlee [2002, pp. 1999–210] also points out the relationship between the stability and predictability of revenues and their differentiation. A similar opinion is expressed by Carmin [2010, pp. 183–202] who stresses that financial stability is vital for NGOs because it not only provides financial support but also enables the fulfilment of organisation's goals and also secures the sources for workers' salaries, purchase of necessary equipment and maintaining posts. In that context Froelich [1999, pp. 246–268] proves that financial stability of the organisation makes it more predictable and the regularity of the access of financial resources makes the action of NGO more dynamic and unswerving.

Among the opportunities to seek additional revenues by NGOs we can also distinguish a commercial sale of goods and services. Taking up a business activity by non-profit organizations is defined as their commercialization or marketisation [Simpson and Cheney 2007, pp. 191–222; Dart 2004a, pp. 290–310 and 2004b, pp. 411–424] or economization [Dees 1998, pp. 54–69; Eikenberry and Kluever 2004, pp. 132–140; Wygnański 2008]. Realization of commercial sale of goods and services give NGOs the status of social enterprises [Mikołajczak 2017a, pp. 135–144]. It does not mean that sale prices are always created by the market. They very often are defined on a lower level or on the level lower than the manufacturing costs depending on the recipients [Mikołajczak and Czternasty 2015, pp. 420–433]. The idea of marketisation, on the one hand is based on economic stability of NGOs, on the other, however, on becoming independent from financing based on subsidies and philanthropy [Juraszek-Kopacz et al. 2008].

Non-profit organisations, by imitating commercial entities, seek the opportunity to attract a wider range of customers and recipients of their services and this way to gain additional capital. As Foster and Bradach [2005, pp. 92–100] point out the process of economisation requires number of changes appearing in the field of management, stressing organisation's entrepreneurship and self-sufficiency.

The phenomenon of marketisation of non-profit organisations is visible around the world. Its direct consequence, as it was signalled before, is the creation and development of social enterprises. Kerlin and Pollak [2006] highlight that a growing importance of social enterprises is defined by the issues referring to social policy of the state and limited possibilities to finance the activity of enterprises being subjected to such policy. Adaptation of entrepreneurial behaviours to obtain capital for running NGOs and entrepreneurial orientation when generating the revenues is connected to the duality of NGOs' activities which is expressed in the transformation of functioning formula from non-profit to not-for-profit [Grohs et al. 2015, pp. 163–186]. It manifests itself in an immediate entry of the organisation into the market and initiative of the business or a relative form of running another paid business. Thus, the described entities are often perceived as a sub-group of hybrid entities of social economy oriented towards the market and an institutional response of the third sector organisations to their problems with financing their activity [Billis 2010; Evers 2005; Grassl 2012; Mikołajczak 2017b, pp. 56–57].

A lack of legal definition of a social enterprise in many European countries, as well as world-wide results in the description of their peculiarity only through the features which distinguish them from other businesses and functions which they fulfil. As Defourn and Nyssens state [2007] the financial surplus is not the absolute rule for the described entities and is used to fulfil social goals. It does not mean that profit is an insignificant economic category. Earnings generate the opportunity to fulfil the priority task of social mission.

NGOs acting as social enterprises, apart from the revenues from commercial sale to fulfil their social mission, also try to attract the attention of private and institutional donators as their financial and non-financial involvement supports the business activity [Maier et al. 2016, pp. 64–86]. Numerous researchers stress that running a business by social enterprises, on the one hand enables them to become more independent from public administration and philanthropy [Dees 1998, pp. 54–69; Enjolras 2002; King 2006], however, on the other hand it gives them the opportunity to gain resources from social investors [Geobey and Weber 2013, pp. 124–137], for instance in the form of Social Impact Investing. They represent new kind of activities which are characterised by a special relation of the rate of return and the risk, typical for so-called “patient capital” [O’Donohoe et al. 2010]. These assets are at the same time characterised by features similar to investments of “social impact investments” [Brandstetter and Lehner 2014]. Moreover, social enterprises can use national and foreign funds, including the sources of the EU and other ways of funding offered by, e.g. the European Commission.

3. Data

The data for the analysis of revenues and funding sources has come from international SEFORÏS reports, created within a multi-disciplinary research programme, financed by the European Commission, which analyses the potential of a social enterprise in the EU and outside it to increase social integration via growing involvement of parties, promoting civil society and changes in providing social services. SEFORÏS combines the observations of decision-makers and social entrepreneurs with the latest research to build solid and new facts about social entrepreneurship. SEFORÏS formulates theoretical frames for integration and innovation processes in the context of using new experiments involving social enterprises. Moreover, it creates a unique international database of in-depth case studies, and at the same time, it tests and concludes basing on solid and cross-sectional research. In the period of April 2015 and December 2015 SEFORÏS consortium ran a research covering 1000 social enterprises in Hungary, Romania, Spain, Portugal, Germany, Sweden, Great Britain, Russia and China. As a result of careful cooperation of social enterprises and the EU financing the biggest and most rigorous panel database of social enterprises world-wide was activated [www.Seforis.eu].

Data for the analyses are collected from the Klon/Jawor Association, which conducted a survey on a representative sample of 3,800 Polish foundations and associations run in the third and fourth quarter of 2015. The survey, commissioned by the Klon/Jawor Association, was conducted by the Millward Brown company. The research was carried out on a random group of associations and foundations drawn from the REGON GUS register (Main Statistical Office) (using December 2014 data), verified on the basis of information obtained from KRS (National Court Register) and data collected in the bazy.ngo.pl network. The data concerning associations and foundations were collected by means of the interview method, which used two research techniques: 1) 2,975 interviews were carried out employing the CAPI technique (direct interviews supported by a computer, conducted by interviewers in an area), 2) 825 interviews were done applying the CAWI technique (an online survey). In both cases, respondents were people performing key functions in their organizations. The data were collected in compliance with the secrecy principle. As part of the report, in the third quarter of 2014, 24 individual in-depth interviews with non-governmental organization employees and leaders were conducted.

In Poland there are 17 thousand foundations and 86 thousand associations that are registered (excluding Voluntary Firefighting Forces). Seventy thousand of these are active. Most non-governmental organizations deal with sport, tourism, recreation and hobby – these are essential activity spheres of 34% of the organizations. The organizations whose major activity sphere is education and upbringing account for 15% of the non-governmental sector. Organizations dealing with art and culture are the third most numerous branch of the sector: associations and foundations active in this field account for 13% of the sector [Raport Klon/Jawor, pp. 175].

The group of entities fully meeting the definition of a social enterprise are social cooperatives. Data from the Ministry of Labor and Social Policy show that from 2009 onwards, the number of registered social cooperatives is growing. There is no reliable data on the number of actually operating social cooperatives. According to the opinion of some experts, only ca. 1/3 of them conduct business activity [Schimanek 2015, pp. 7–20].

4. Assumptions and research process

There were several arguments which persuaded the author to use the secondary data made available by Klon/Jawor Association. First and foremost, it enabled to enlarge the research sample, its representativeness and the number of observations which led to broader conclusions in the course of conducted statistical analysis. Moreover, using the existing data, combined with own analyses, made it possible to fulfil also different goals than those initial ones which prompted the collection of data. A significant premise of an economic nature of such approach was the cost of research – much lower compared to original research [Frankfort-Nachmias and Nachmias 2001, pp. 321–323].

On the basis of survey data "*Condition of the third sector in Poland in 2015*", made available by Klon/Jawor Association, among all the organisations that took part in the research (3800) those NGOs were selected which ran a commercial sale of goods and services – those entities which were qualified into the sector of social enterprises. On that basis, the sample of 412 entities was selected. 25 of those entities did not present the revenues in 2014, therefore, for further analysis a sample of 387 NGOs was selected. Next, the number and share (in %) of social enterprises, using particular sources of financial support of their activity, was verified. The detailed specification of financial resources was presented in table 2. The sources were grouped in 7 categories to enable the comparison of share of social enterprises, using each of the sources with their equivalents in chosen European countries and world-wide. Using the information concerning financial performance of social enterprises, the given number of entities was classified into a specific range of revenues. Values of the latter, to facilitate the comparison, were converted into euro (EUR) based on an average exchange rate of Polish National Bank in 2014.

5. Findings and results

Sources of financing

The research carried out by SEFORÏS shows that in 2014 the revenues from commercial sale were the most popular source of revenues among social enterprises in analysed countries. It must be stressed that the percentage of tested entities in Spain indicating the source of gaining capital through commercial sale of goods and services was the highest (74%) followed by Great Britain (64%) and Hungary (62%). In turn, Romania was characterised by the lowest share of social enterprises financing their activity from business revenues.

Subsidies are also significant sources of financing, from the point of view of entities of social economy. That form of gaining capital was declared by a quarter of entities in analysed countries, while the highest percentage was noted in Sweden (36.2%), Portugal (35%) and Great Britain (29.5%) and also in Germany (28.7%). Chinese and Spanish social enterprises declaring that kind of financing constituted the smallest share – (18.9%) and (20.8%) respectively. The countries that were mentioned first, were characterised by the share of 21% compared to other countries when considering financing in a form of investments. In remaining countries, the share of social enterprises gaining capital in such a manner is low and reaches approx. 2%.

In Romania, Russia and Germany, when compared to other countries, the biggest share of discussed entities declared financing in 2014 in a form of subsidies (12.1%, 11.8% and 10.3% respectively), and the lowest in Spain (1.7%), Hungary (1.6%) (see table 1).

Table 1. Sources of financing of social enterprises in chosen countries in 2014 (in %)

Sources of financing	**Hungary**	**Romania**	**Portugal**	**Russia**	**China**	**Germany**	**Sweden**	**Great Britain**	**Spain**
Sale revenues	62	28.5	50.1	60.4	53	43	53	64	74.5
Subsidies	25.3	26.5	35	23.1	18.9	28.7	36.2	29.5	20.8
Investments	2	2	2	3.9	21	6.5	2.1	1.4	0.6
Donations	1.7	12.1	5.6	11.8	4.3	10.3	4.2	2	1.6
Loans	1	–	0.5	–	1	3	4	1	–
Member fees	3	1	1	–	0	1	–	0.5	1.5
Other	5	9	6	–	2	7	1	2.5	0.5

Source: own elaboration on the basis of SEFORÏS report [www. Seforis.eu].

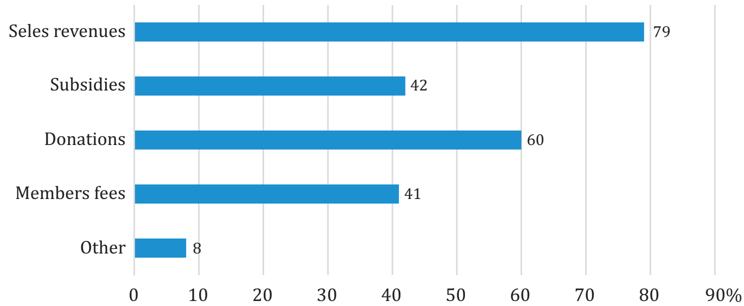
However, in Poland in 2014 79% of social enterprises declared the revenues from sale of goods and services as the source of their activity. For about 40% of discussed entities subsidies and membership fees were a source of capital support of their activity. In turn, 60% of a total number of analysed social enterprises pointed to donations. The sources of financing put in a category "Other" characterised 8% of discussed entities. The figures in diagram 1 do not show categories such as investments and loans because enterprises in Poland did not use these forms of financing their activity.

Table 2. Sources of financing social enterprises in Poland in 2014

Sources of financing	Share % (SE)	number of SE
Subsidies		
Local authority	50	208
The EU funds	37	152
Programmes of the European Commission	11	47
Foreign funding (excluding EU)	11	46
Donation from other divisions	3	12
Sales revenues		
Business activity	79	324
Revenues from other paid activity (non-business)	20	83
Donations/contributions		
Financial and non-financial donations from private individuals	45	184
Financial and non-financial donations from institutions, companies	34	141
Revenues from 1% of the income tax	25	105
Support from other national NGOs	14	59
Public fund-raising incomes	11	44
Support from other foreign NGOs	8	33
Membership fees	41	169
Other		
Interests, profits from endowment capital, deposits, shares and stocks	32	130
Revenue from assets	19	80
Other	6	23
Punitive damages	2	9

Source: own elaboration on the basis of a survey data of Klon/Jawor Association research on "*Condition of the third sector in Poland in 2015*".

Diagram 1. Categories of social enterprises financing in Poland in 2014 (in %)



Source: own elaboration on the basis of a survey data of Klon/Jawor Association research on "*Condition of the third sector in Poland in 2015*".

Comparing the sources of financing social enterprises in Poland with the entities of social economy of chosen European countries and world-wide, we can notice that in 2014 the percentage of Polish social enterprises indicating the revenues from commercial sale of goods and services as a form of financing their activity, was the highest (79%). However, the differences are not so significant as in case of other categories of funding sources. The share of social enterprises in Spain financing their activity from business was close to the share of Polish entities (74.5%). Among the latter, the capital-gaining categories of subsidies, donations and membership fees, are much more popular, nevertheless in Sweden (36.2%) and Portugal (35%) it was similar. The results of analysis show that social enterprises in Poland, as well as in Romania, Russia and Spain, do not have the access to financing in a form of loans, though in other European countries and in China only few entities used that kind of funding (from 0.5% in Portugal to 3%–4% in Germany and Sweden).

In Poland, the lack of financing in a form of investments into social enterprises is also clearly visible compared to other analysed countries. Except China, where 21% of discussed entities gained such funding, in other analysed countries it did not constitute a significant source of funding social enterprises. The share of assessed entities using other forms of capital contribution in Poland, as well as in Romania and Germany, was similar and reached 7–9%.

6. Revenues

Analysing the revenues of social enterprises in discussed countries, in Great Britain, Portugal, Spain and Germany the biggest share of social enterprises in 2014 reached the revenues level of 1 million euros (55%, 44% and 43% respectively), and the smallest share in Russia – just 5%. However, Russian social enterprises formed the biggest share of entities which had the revenues lower than 80 000 euros, similarly as Chinese enterprises – 52%. In turn, in Great Britain merely 5% of entities of social economy reached the lowest level (range) of revenues. The biggest share of Swedish, Chinese, Hungarian and Russian entities was placed in the range of 80–200 thousand euros of revenues (33.5%, 24%, 23% and 22% respectively). Revenues exceeding 500 thousand euros were reached by 23% of social enterprises in Hungary and Romania and a bit less (20%) in Great Britain. A similar share – approx. 12% of analysed entities, compared to most of the analysed countries, had the revenues in the range of 0,5–1 million euros.

Summing up, in 2014 the highest revenues (exceeding 1 million euros) were reached by social enterprises operating in Great Britain and Portugal, the lowest (less than 80 thousand euros) in Russia and China. In the same countries, a dominant share of entities that reached the lowest level of revenues is visible. At the same time the trend in Great Britain is opposite (see table 3).

Table 3. Revenues of social enterprises in chosen European countries and world-wide in 2014 (in %)

Revenues (in 1000 EUR)	Hungary	Romania	Portugal	Russia	China	Germany	Sweden	Great Britain	Spain
up to 80	26	33	21	59	52	27	14	5	20
80–200	23	18	9,5	22	24	8	33.5	8	13
200–500	23	23	10.5	9	7	12	19	20	13
500–1000	13	12	15	5	5	12	12	11.5	11
more than 1000	15	14	44	5	12	41	21.5	55.5	43

Source: own elaboration on the basis of SEFORÏS report [www. Seforis.eu].

However, in Poland in 2014 the biggest share of social enterprises (50.6%) reached an annual revenue less than 80 thousand euros. 15.5% of NGOs running a business had the annual revenue over 200 thousand euros, however lower than 500 thousand euros. A bit smaller share (13.4%) of social enterprises in Poland reported revenues in the range of 80–200 thousand euros. In turn, 8% of the social economy entities were classified in the range of 0.5–1 million euros. The highest revenues (over 1 million euros per annum) appeared in case of 48 social enterprises (12.4%).

Comparing the revenues of social enterprises in Poland to entities of social economy in analysed European countries and world-wide we can notice that the share of Polish social enterprises (50.6%) which reached their revenues on the lowest level (less than 80 thousand euros) is like the share of entities in China and Russia (respectively 52% and 59%). Similarly, a small share – merely 8% – of Polish social enterprises reached revenues in the range of 0.5–1 million euros in analysed period.

Such share is similar to the share of Russia and China (5%). In turn, when we consider ranges of 80–200 thousand and 200–500 thousand euros that the share of social enterprises in Poland is similar to the share which characterises Spain.

Table 4. Revenues of social enterprises in Poland in 2014

Revenues (in 1000 EUR)	number of SE	share of SE (in %)
up to 80	196	50.6
80–200	52	13.4
200–500	60	15.5
500–1000	31	8
more than 1000	48	12.4

* Exchange rate – 1 euro = 4.1845 PLN

Source: own elaboration on the basis of a survey data of Stowarzyszenie Klon/Jawor research on "*Condition of the third sector in Poland in 2015*".

7. Conclusions

The phenomenon of marketization of non-profit organisations is expressed in making efforts by these entities to adopt entrepreneurial behaviours, characteristic for commercial enterprises. The foundation of that process is gaining additional capital through commercial sale of goods and services to fulfil social mission. The access to funding is a vital condition for social enterprises to expand their impact. Results of analysis indicate that the revenues from business activity are significant source of social enterprises' capital in many European countries, including Poland. Obviously, they are not the only way to gain capital. Among other forms of capital contribution, we should single out, among other things, subsidies, donations or membership fees. However, the share of social enterprises using those sources varies in individual countries. In Poland, the share of described entities, which finance their activities from the commercial sale of goods and services, is the biggest compared to other analysed countries, similarly in case of subsidies and donations. Nonetheless, some forms of capital contribution are inaccessible, e.g. investments or loans. Significant differences among the countries are visible also in relation to the level of revenues. Most of Polish social enterprises, as well as Russian, reach revenues which do not exceed the lowest range of revenues (80 thousand euros). Revenues over 1 million euros are characteristic only for few social enterprises in Poland, while in Great Britain, Portugal, Spain, Germany and Sweden the share of such entities is much bigger. Presented results require further research which will explain the reasons of revenue level differentiation reached by social enterprises in the international context.

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Miscellanea

Andrzej Dżuryk

Funding of Banks in Resolution

Abstract

The article presents the outcome of the research executed by the author, which formed the position of the European Financial Congress (EFC) in relation to the Financial Stability Board's consultative document on *Funding Strategy Elements of an Implementable Resolution Plan*. The position, was based on the opinions of stakeholders of Polish financial market, represented by banks, regulatory bodies, law firms and the academia.

The consultative document set out proposed guidance on the development of a plan for funding banks in resolution. The research revealed a wide array of challenges in the development of firm capabilities to facilitate the execution of the funding strategy in resolution. Additional issues were raised regarding relevant aspects for estimating liquidity needs in resolution process. There were indicated numerous obstacles to the mobilisation of assets that could be used as collateral for particularly private sector backstop sources of funding. All those blocking points could be removed by public sector support funding, subject to certain conditions. Moreover, there are a number of actions that could be taken by G-SIBs and authorities to support the development and implementation of resolution funding and there are also some other aspects of funding strategy which shall be also considered.

Key words: financial stability, financial stability board, resolution, BRRD, funding in resolution, G-SIB

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1. Introduction

The author tackled on the position[1] of the European Financial Congress (EFC)[2] in relation to the Financial Stability Board's[3] consultative document on Funding Strategy Elements of an Implementable Resolution Plan[4]. The position was based on opinions of stakeholders of the Polish financial market, collected in a research performed by EFC. A group of experts representing banks, regulatory bodies, law firms and the academia, were invited to participate in a survey. They received selected extracts of the consultation document and the consultation questions. The experts were guaranteed anonymity. There were over 20 replies. The replies were grouped and presented anonymously to experts who took part in the consultations. They were asked to mark opinions that should be included in the final position, as well as opinions they did not agree with. The experts could also adjust their primary positions under the influence of arguments presented by other participants, which they had not known previously. On the basis of the final responses received, the author developed the synthesis of Polish stakeholders' view, which became the position of European Financial Congress. The synthesis was presented by the author at the conference "*Zarządzanie Ryzykiem i Kapitałem w Bankach*" held by the National Bank of Poland[5].

The consultative document set out a proposed guidance on the development of a plan for funding in resolution that builds on the FSB's August 2016 *Guiding Principles on the temporary funding needed to support the orderly resolution of a global systemically important bank (G-SIB)*[6] and the existing supervisory and resolution guidance on liquidity risk management and resolution planning, respectively. It identified a set of key funding strategy elements covering:

- firm capabilities to support monitoring, reporting and estimating funding needs in resolution and to facilitate execution of the funding strategy;

1 *Position of the European Financial Congress in relation to the Financial Stability Board's consultative document on Funding Strategy Elements of an Implementable Resolution Plan*, European Financial Congress, January 2018, http://www.efcongress.com/sites/default/files/analizy/position_of_the_efc_funding_strategy_in_resolution.pdf [Accessed: 11.03.2018].

2 The purpose of regular debates held within the EFC Project is to ensure the financial security of the European Union and Poland (www.efcongress.com) [Accessed: 11.03.2018].

3 Financial Stability Board promotes global financial stability by coordinating the development of regulatory, supervisory and other financial sector policies and conducts outreach to non-member countries. It achieves cooperation and consistency through a three-stage process, including monitoring implementation of agreed policies, http://www.fsb.org/what-we-do/ [Accessed: 11.03.2018].

4 *Funding Strategy Elements of an Implementable Resolution Plan*, Financial Stability Board, 30 November 2017, http://www.fsb.org/wp-content/uploads/301117-2.pdf [Accessed: 11.03.2018].

5 "*Zarządzanie Ryzykiem i Kapitałem w Bankach*" Conference, National Bank of Poland, Warsaw, 23 February 2018, http://zrk.projektekf.pl/ [Accessed: 11.03.2018].

6 *Guiding Principles on the temporary funding needed to support the orderly resolution of a global systemically important bank*, Financial Stability Board, 18 August 2016, http://www.fsb.org/wp-content/uploads/Guiding-principles-on-the-temporary-funding-needed-to-support-the-orderly-resolution-of-a-global-systemically-important-bank-%E2%80%9CG-SIB%E2%80%9D.pdf [Accessed: 11.03.2018].

- the development of a resolution funding plan by the authorities;
- the use of firm assets and private sources of funding;
- the access to temporary public sector backstop funding mechanisms and ordinary central bank facilities; and
- the information sharing and coordination between the authorities.

2. Challenges of the funding strategy

The funding strategy is a key element of a resolution plan. It must be formulated ex ante and will determine the plan's effectiveness. Action plans for stressed conditions must be developed and tested, especially for systemically important banks (SIBs). In practice, however, various difficulties may arise.

The major problem will be to determine liquidity needs in a contingency whose background and circumstances are unknown, on the basis of earlier contingencies observed in the market. The availability of the assumed sources of liquidity depends on many factors, and the financial needs may change very quickly and sometimes unexpectedly. Therefore, the funding strategy may not sufficiently account for all potential problems or it may address them in an inadequate manner. Moreover, in the case of markets where there were no bankruptcies of locally significant banks, it is difficult to estimate the feasibility of the recovery option.

The determination of an entity's liquidity needs in the resolution process depends on the adopted scenario, however this is the fundamental difficulty in modelling behavioural and market elements that constitutes the problem. The projected problems and shocks may turn out to be greater than those accounted for when determining the funding strategy, and an occurring extraordinary event ("black swan") would be an extremely negative scenario. As a result, the accumulated liquidity reserves may quickly run out and prove insufficient in relation to needs, as well as the assumed liquidity sources may be unavailable due to broader market problems. The inability to access market sources of funding in a crisis may result in a need to use extraordinary central bank facilities. The problem in this case may be the lack of adequate collateral in the form of high quality liquid assets (HQLA), which were used up in the recovery phase, due to the none-eligibility of certain types of assets as collateral and the aforementioned worse-than-expected market scenario (lower asset value and lower demand resulting in larger haircuts). The prerequisite for using extraordinary central bank facilities is stripping current owners of the entity of their rights in order to avoid moral hazard (what is not in line with current EU regulations). It appears to be an important aspect that the resolution authority and the central bank (as the lender of last resort) develop their own information policies. An appropriate information policy should prevent the occurrence of a panic (contagion effect) and of a run on bank deposits. The scale of this would be difficult to estimate and could result in an SIB with a robust liquidity situation losing liquidity. Such media activity should not be limited exclusively to traditional media, but should also include a broad offensive, including social media. If the negative scenario unfolds the proper liquidity risk management as well as the meticulous monitoring of funding needs and reporting to the entity responsible for the bank resolution process will be the challenge.

Availability of the appropriate data and the coordination of information at the consolidated level are preconditions for reliable forecasting of future liquidity needs and designing adequate actions. In particular it pertains to current and intraday liquidity, as well as the rapid identification of other entities with similar profiles, which operate in the market. It allows to notify them and to impose increased monitoring and supervisory reporting obligations.

The elaboration and selection of indicators, which may trigger the resolution process due to the risk of financial liquidity is while capital adequacy and balance sheet liquidity ratios are acceptable, poses the challenge for the resolution authority .Especially under conditions when recovery options, in recovery plan, may be unavailable due to market situation or other temporary restrictions. The experience of the latest global financial crisis shows that a national legislator may introduce regulations that hinder or even prevent the implementation of measures, previously provided for in the funding strategy, by limiting the ability to use the assets held as collateral in the process of obtaining extraordinary liquidity. Legal risk is also related to the performance of various master agreements, including with respect to derivative transactions, which may cause problems with enforcement in individual jurisdictions and thus may prevent or hinder the effective and smooth implementation of the funding strategy. This risk may also be related to the insufficient development of legal institutions in some jurisdictions, which may lead to difficulties with the effective implementation of the funding strategy. Legal risk also stems from mismatches among agreements that stipulate mutual liabilities of the counterparties.

In the case of cross-border groups, the challenge may be caused by the differences resulting from diverging policies pursued by central banks, e.g. concerning assets purchase programmes. A considerable challenge may be posed by inconsistent expectations on the part of supervisory and resolution authorities with respect to the required liquidity levels and sources of liquidity funding. Potential difficulties may be related to the achievement of cross-border agreements concerning the allocation of costs of the resolution process to entities within a banking group. Both the BRR Directive (BRRD)[7] and the FSB guidance[8] have established a general frame-

7 *Directive 2014/59/EU of the European Parliament and of the Council of 15 May 2014 establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directive 82/891/EEC*, and *Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC, 2011/35/EU, 2012/30/EU and 2013/36/EU*, and *Regulations (EU) No 1093/2010 and (EU) No 648/2012*, of the European Parliament and of the Council, Official Journal of the European Union, L 173/190, 12.6.2014, http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014L0059&from=PL [Accessed: 11.03.2018].

8 *Key Attributes of Effective Resolution Regimes for Financial Institutions, in particular Annex III 'Essential elements of recovery and resolution plans'*, Financial Stability Board, October 2011, http://www.financialstabilityboard.org/publications/r_111104cc.pdf, an update published in October 2014, http://www.financialstabilityboard.org/2014/10/r_141015/; *Recovery and Resolution Plan-*

work for determining the contributions of individual resolution authorities to the funding of the process. However, in practice, difficulties can be expected at the stage of negotiating specific agreements.

Other challenges and difficulties that may arise in the implementation of the funding strategy include:

- inconsistent auditing standards, which are prone to changes over time, especially with regard to estimating risk and provisioning;
- an effective debt collection mechanism in the resolution process and;
- the maintenance of adequate resources (human, IT, etc.) that enable the performance of tasks related to the implementation of the funding strategy.

3. Liquidity needs in resolution

An important element of the strategy for funding in resolution is the ability to use ordinary central bank facilities. A clarification of what is meant by ordinary and extraordinary central bank liquidity support would be useful. Central banks in individual countries use different solutions in this area. The proper differentiation between these facilities is necessary in order to correctly identify potential sources for covering liquidity needs for the purposes of resolution. Potential process participants should have *ex ante* clarity rather than in an emergency situation.

If a systemically important bank needs to be resolved, structural changes will occur in the banking sector in addition to a significant increase in sensitivity to counterparty risk and the interbank loans maturity shortening. These changes mainly consist in the shrinking of the whole interbank network while the role of banks playing key roles in this network is strengthened. It may cause difficulty in access to liquidity, depending on the bank's position in the interbank network. The multi-level structure of interbank markets must be accounted for, since it means that most banks do not lend to one another directly, but rather via intermediary banks.

When drawing up a resolution funding plan, the market liquidity risk should be considered. Under normal circumstances, the liquidation of assets at, or close to, market price does not usually pose large problems. In the event of an external or internal shock, market participants may partially withdraw, which may cause demand to drop and force the liquidation of assets at a price that significantly deviates negatively from the market one, thus increasing losses and causing a considerable gap between the funding plan and the actual possibilities of obtaining funding. In this context, increasing the liquidity cushion for systemically important banks should be considered. Perhaps increasing LCR and NSFR requirements would be a good solution. If problems occur, liquidity is more important than recapitalisation in the

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pre-resolution stage and thus the priority should be to maintain short-term liquidity to "buy time" for introducing other measures.

The estimation of liquidity needs could involve an internal control system that should also address liquidity risk and, above all, ensure the proper and effective functioning of the liquidity risk management process. Combining this aspect with the public disclosure mechanism would enable market participants to reliably evaluate the bank's liquidity risk management system and its liquidity position during resolution. This could be supplemented with tools for the comprehensive measurement of liquidity risk in order to support the liquidity risk management process to enable the identification of heightened risk, emerging liquidity position weaknesses or an increase in liquidity needs. Another important issue with respect to the assessment of liquidity needs in the resolution process is the bank's appropriate organisational structure, i.e. a structure that corresponds to the bank's scale of operations and risk profile and that ensures the separation of functions between the units, which conduct transactions that affect liquidity risk and those responsible for monitoring and controlling liquidity risk.

Given the increasing popularity of factoring services provided by banks and of loans secured by assignment of receivables under contracts, the examination of the quality of assigned receivables, their maturity and the debtors' rights to offset these receivables may be of particular importance. Attention should also be paid to the liquidity needs related to the breach of clauses embedded into the funding obtained, e.g. concerning additional collateral or restrictions on creating security on assets. On the other hand, a positive solution would be for banks to have long-term contingency liquidity supply agreements, e.g. with other banks, although the question remains whether it would be effective in the resolution stage.

4. The collateral

The identification of assets that could be used as collateral in resolution itself does not appear to be a problem. However their use as collateral for private sources of funding may be the problem. Past experience demonstrates that these sources are often funded by banks (e.g. in Italy). Such a solution threatens systemic risk, since the difficulties faced by a large bank could be shifted to a group of banks or even to the entire banking sector, and thus it should be eliminated. During the implementation of a specific resolution strategy, it may turn out that owing to exceptional market difficulties, the private sector funding assumed, in the recovery plan, will not be available since certain types of assets are not eligible. It will be even more probable when concentration occur,s thus reducing the ability to dispose of the assets concerned. The limited availability of private sources means that the potential cost of conducting transactions (even collateralised) with private entities is difficult to estimate and test, which makes it difficult to assess the impact of these transactions on profitability and solvency under resolution conditions. This type of obstacle can be removed by using support from the public sector institutions. In this case a question arises: in what scope and on what scale can this support be lent? Currently, we have no information on the terms and conditions of extraordinary liquidity support by the central bank, and the resolution plan cannot assume the use of its extraordinary facilities. Nevertheless, the entity subject to resolution may apply for such support after it meets certain conditions. This type of obstacle can be removed by informing banks about the types of collateral that are eligible for acceptance by the central bank in connection with extraordinary operations.

Owing to the fact that no assistance by the central bank can be extended on terms significantly deviating from the market ones, banks should have a sufficient amount of unencumbered assets that can serve as collateral, which will enable them to use the infrastructure made available to commercial banks by the lender of last resort.

Therefore, balance sheet items that may be used as collateral in transactions with the central bank need to be monitored on an ongoing basis. At systemically important banks, the leverage ratio should also be further reduced.

The main obstacle to use assets that could be employed as collateral for private sources of funding may be the fact that no current valuation of these assets performed using prudent methods is available. This valuation must then be conducted in a short time in circumstances where the value of assets recorded in the books of the entity subject to resolution may deviate significantly from their real value. Therefore, bank assets should be regularly valued by independent and credible experts, who are recognised on the market, applying a range of prudent valuation methods that are used by providers of private funding in order to convince them to accept the risk of investing their funds.

The need to predict behaviours of individual market participants in an unusual, stress situation may also cause considerable difficulty in using the assets. One cannot assume that the behaviours observed in the past will be repeated in the current contingency. Possible speculation in the market will also have an impact on securing funding sources (e.g. when FX structure is being adjusted). In a contingency, any estimates concerning the feasibility and implementation of corrective measures on a large scale and with significant effects such as the separation and sale of part of a bank may be erroneous to a considerable extent.

The problem of state aid interpretation, under European Commission law, and its costly consequences, may cause specific obstacle in employing public sector backstop funding. The problem related to the lack of definitions and procedures concerning possible temporary public sector backstop funding may be alleviated by making reasonable efforts to ensure that public sector funding is provided on an arm's length basis. The positive result of the private investor test would provide proof that the transaction was executed on an arm's length basis. This test should demonstrate that the bank's assets serving as collateral for public funding are sufficiently credible and reliably estimated so that they could serve as standard collateral for private funding.

A failure to implement a recovery plan for the bank, e.g. in the Polish jurisdiction, prevents the central bank from waiving the reserve requirement, thus without the implementation of the recovery plan, even the bank's highest-rated assets (HQLA) will not enable it to access obligatory reserve funds. Therefore, it is important to approve and implement as soon as possible the bank's recovery plan, which should be based on conservative assumptions and should be developed before resolution is initiated.

In essence, legal obstacles that may hinder or prevent the use of assets held as collateral for funding sources may be effectively removed only within the home jurisdiction, because uncontrolled bankruptcy of SIFI could trigger a systemic crisis in the country in question. However, legal obstacles cannot be effectively removed in relation to host jurisdictions, which in the face of a crisis will in the first place try to protect their own banking sector. In Poland, the regulatory authority has challenged the use of collateralised funding, i.e. mortgage bonds issued by mortgage banks, as a recovery option at the level of the parent undertaking (through a transfer of funds within a group of companies).

5. Support to funding plans

The development and implementation of funding plans must be accompanied by a range of risk mitigation and public relations measures. Risk mitigation activities involve primarily strengthening the debt collection process and the temporary suspension or significant limitation of lending, which should be restricted exclusively to loans secured on assets with a high recovery rate. At the same time, a communication plan and a consistent media message should be developed by preparing model messages and selecting channels for their transmission. These communications should be aimed at stabilising the bank's situation and lending credence both to the taken corrective measures and to the bank itself. This concerns both the bank's external communications and those with its employees in order to retain and convince them that the actions taken will enable it to survive temporary difficulties. Proper communications have a significant impact on the funding plan implemented and on the bank regaining liquidity.

Guidelines covering reporting structure and methods as well as other operational functioning aspects under resolution conditions should be developed. Supervisory reports are largely based on audited data, which are characterised by considerable delays, and thus a different reporting system is needed. It is critical that the information held by the resolution authority is credible and up-to-date. In order to avoid the interpretation uncertainties associated with nonstandard reporting, resolution authorities should make greater use of the standard reports drawn up by banks and submitted to the competent authorities, i.e. to the supervisory authority, resolution authority and central bank. This approach would not only guarantee access to reliable data, which was verified during its generation process in the earlier periods, but would also ensure that these pieces of data are more frequently available from competent institutions that gather data from the banking sector. Moreover, in response to an individual request by the resolution authority the bank would be able to generate a standard statement much faster than in the case of non-standard processing, which is additionally associated with the risk that data will not be fully comparable across the sector. It should be ensured that the resolution authority can gain rapid access to the required pieces of data that are included in the reports and statements regularly being provided by banks to other supervisory institutions, as well as that a framework be established for open dialogue in the case of dedicated reports, which must be prepared on a case-by-case basis by the banks. The banks selected as possible candidates to acquire the institution in question should be informed of this fact as soon as possible, e.g. already at the recovery plan implementation stage, in order to conduct initial valuation and to shorten/facilitate the resolution phase (see Santander's acquisition of Banco Popular[9]).

Resolution authorities should be very sensitive to any measures proposed in resolution funding plans whose effectiveness depends on the legal environment in foreign jurisdictions, since even if such measures were possible earlier, it may turn out that they are no longer lawful in the jurisdiction at the time when they must be taken.

Another important issue, related to the measures that must be taken by banks and resolution authorities, is transparent cooperation in the definition of critical functions with respect to institutions that play important roles in both resolution plans and recovery plans. Where a bank is the member of a cross-border group that applies a consistent methodology for determining critical functions within individual units. Uniform selection criteria and the list of critical functions by banks in cooperation with resolution authorities is of particular importance for ensuring proper approach and management not only with respect to the recovery or resolution process, but also at earlieractivity. Sets of critical functions related to the recovery and resolution processes may or may not overlap. On the other hand, banks should be given greater rights to inspect the resolution plans drawn up by resolution authorities (currently only a summary of key aspects of the plan is to be made available) if they are to adjust their contingency liquidity plans to resolution plans and ensure their feasibility. A more comprehensive dialogue on this subject should be initiated with resolution authorities. More attention must be paid to ensuring appropriate competences and resources (including the continuity of competent expert work) both on the part of the resolution authority and the bank subject to resolution.

Additionally, resolution authorities could consider a moratorium, which would affect the method of funding the process, and above all could temporarily reduce the bank's liquidity needs. The issue, whether it would be possible to suspend payments for a few days, is currently discussed in the EU as part of work on amending

[9] J. Aguado, F. Guarascio, *ECB triggers overnight Santander rescue of Spain's Banco Popular*, Reuters, 7 June 2017, https://www.reuters.com/article/us-popular-m-a-santander/ecb-triggers-overnight-santander-rescue-of-spains-banco-popular-idUSKBN18Y0IU [Accessed: 11.03.2018].

the BRR Directive. The question is whether the moratorium will be effective and how it will affect the credibility of the relevant market and the scale of disruption. Support for the development of the securitisation market would be helpful as well in order to enable broader access to this source of funding, which would also make the cost of obtaining funding from this source in contingency and during resolution more transparent.

Funding plans should involve pessimistic assumptions regarding possible loss of funds within the entity and within the entire group of companies at the consolidated level. The following questions must be answered: What is the tolerance of depositors in respect to bank problems? Does the deposit guarantee scheme provide sufficient security for those with deposits up to EUR 100,000? What will be the scale of the outflow among those depositors, who hold more than EUR 100,000 in the bank? This comment also applies to all other liabilities that are due shortly or are assigned to long-term liabilities under contractual provisions, but may become due shortly as a result of unfavourable conditions. In this context, market risk exposure and derivatives should also be discussed. The derivatives issued, especially American options, may be exercised by the buyer at any time. Buyers of such options may close their positions in a contingency. This may result in a need to conduct settlements on a greater scale than that suggested by internal bank models. Uncovered positions may additionally exacerbate the situation.

6. Other aspects to be considered

In the event of resolution of a cross-border group using the single point of entry formula, it may be necessary to maintain the liquidity of the entity operating in the host country. The question arises whether, if liquidity needs to be assisted by the public entities (central banks), it can be assumed that this task will be performed by the home country central bank. And what if support in the host country currency is necessary?

As concerns obtaining liquidity in the foreign currency, in addition to obtaining the foreign currency funding from the central bank, currency derivative contracts (FX swaps, CIRS) concluded with the central bank could be taken into account. In a contingency, access to these instruments in the market may be limited; if their availability is ensured by the central bank, this will allow liquidity needs in foreign currencies to be met by converting liquidity surpluses in the local currency.

As concerns the identification of obstacles in the transfer of liquid assets between entities covered by single consolidated supervision, liquidity requirements and large exposure limits should not constitute obstacles to the implementation of a resolution plan. Prudential limits should apply to normal circumstances and at the recovery plan stage. In the resolution process, saving the threatened entity should be the overarching goal, even at the expense of temporarily suspending prudential norms.

Communications with the sector should be structured by providing up-to-date information on threats to entities with similar liquidity risk profiles. This would reduce the effect of the affected entities being excluded from access to private sources of funding in the wholesale market and also mitigate the risk of spillover.

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Position of the European Financial Congress in relation to the Financial Stability Board's consultative document on Funding Strategy Elements of an Implementable Resolution Plan, European Financial Congress, January 2018, http://www.efcongress.com/sites/default/files/analizy/position_of_the_efc_funding_strategy_in_resolution.pdf [Accessed: 11.03.2018].

Recovery and Resolution Planning: Making the Key Attributes Requirements Operational, Financial Stability Board, November 2012, http://www.fsb.org/wp-content/uploads/r_121102.pdf?page_moved=1 [Accessed: 11.03.2018].

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Should Creditors Believe in Auditors' Opinions? Auditors' Independence, Going-Concern Warnings and Credit Risk Assessment

Abstract

Credit risk assessment is an inherent component of banking activity and it is crucial to analyse time aspect of credit risk. During that assessment banks ought to use only reliable documents to achieve reasonable results. Financial statements should not be the one and only data source support loan decision but they are indispensable.

This study is a part of research trend assessing auditors' independence. The purpose of it was twofold. Firstly, to determine if there exists significant dependence between business continuity evidenced by bankruptcies and going-concern warnings paragraphs (GCW) in auditors' opinion. Secondly, to examine possible interrelation of existence GCW in auditors' opinion and non-audit fees earned by these auditors. The research question for this paper is whether banks and other creditors may still base on financial statements and auditor's opinions. To the limitation that the aim of this paper was not to give clear answer which measure of going-concern risk is most appropriate, it presents outcomes of an investigation of a sample of companies quoted on Warsaw Stock Exchange (Poland) main market, that submitted request for bankruptcy to the court register between January 1, 2009 and December 31, 2013.

Key words: audit opinion, going-concern, credit risk, financial statement quality, disclosures

1. Introduction

Credit risk assessment is an inherent component of banking activity and it is crucial to analyse time aspect of credit risk. Of course, none delay in repayment of instalments is welcome, but it is great difference whether such delay is a matter of some technical or organisational problems of debtor or maybe it is a matter of

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structural inability to repay a loan[1]. Therefore, it is essential to use only reliable documents during the process of credit risk evaluation to achieve a satisfying answer. One of the most important sources of information useful in this procedure are undoubtedly year-end financial statements. But to achieve a reasonable base for taking loan decision one need to believe in information included in financial statement, because most of ratios and indicators are based on data from these reports. Financial statements present historical figures and should not be the one and only data source that supports making loan decision but they are still indispensable when deciding about granting the loans.

An independent auditor's opinion is perceived as an institutional confirmation that information disclosed in financial statement present **truth**. But, to be precise in practice according to Polish act on Statutory Auditors, Audit Firms and Public Oversight the opinion states whether "the financial statement gives a **true and fair view** of assets and financial position, as well as the financial result of the audited entity, in accordance with applicable accounting and financial reporting regulations, as well as adopted accounting principles (policy)"[2]. Despite the very similar wording of these two terms (truth and true and fair view) their semantic content is different[3]. Moreover, the auditors' independence has been repeatedly questioned as there exists plenty of research showing that the increase in scope of auditors' fees received for delivering non-audit services, such as (aggressive) tax planning, business consulting or other advisory services erode auditors' objectivity[4]. Such cross-selling of services, which in author opinion is even more evident in Big 4 firms case, may reduce auditors' vigilance and willingness to inform about the problems of business continuity (going-concern) of financial statement preparers. The point is that such extended companies like Big 4 are particularly tempted to provide additional services in order to maintain non-audit departments. Thereby, there is

1 R. Kałużny, *Pomiar ryzyka kredytowego banku: aspekty finansowe i rachunkowe*, Wydawnictwo Naukowe PWN, Warszawa 2009, pp. 29–30.

2 Ustawa z dnia 11.05.2017 roku o biegłych rewidentach, firmach audytorskich oraz nadzorze publicznym, Dz. U. z 2017 r. poz. 1089 ze zm.

3 N.E. Kirk, *'True and Fair View' versus 'Present Fairly in Conformity with Generally Accepted Accounting Principles*, Massey University School of Accountancy, Discussion Paper Series 208, 2001; C. Metzker, *The truth, the who truth and nothing but the truth in financial reporting*, AFP Exchange; Bethesda Tom 23, No. 1, 2003, pp. 56–58; M. Bayou, A. Reinstein, P. Williams, *To tell the truth: A discussion of issues concerning truth and ethics in accounting*, Accounting, Organizations and Society 36, 2011, pp. 109–124; R. Kałużny, A. Piechocka-Kałużna, *Censoring as an aspect of truth in financial statements of insurance companies. Case of Poland*, 2018, the paper under publication.

4 G. Wines, *Auditor independence, audit qualifications and the provision of non-audit services: A note*. Accounting and Finance Vol. 34 (1), 1994, pp. 75–86; D. Lowe, K. Pany, *An examination of the effects of type of engagements, materiality, and structure on CPA consulting engagements with audit clients*, Accounting Horizon, Vol. 10(4), 1996, pp 32–52; D. Sharma, J. Sidhu, *Professionalism vs commercialism: The association between non-audit services (NAS) and audit independence*, Journal of Business Finance & Accounting, June/July 2001, pp. 595–629; V. Beattie, S. Fearnley, *Auditor Independence and Non-Audit Services: A Literature Review*, Institute of Chartered Accountants and Wales, 2002; A. Schneider, B. Church, K. Ely, *Non-audit Services and the Auditor Independence: A Review of the Literature*, Journal of Accounting Literature, Vol. 25, 2006, pp. 169–211; E. Austin, S. Herath, *Auditor independence: a review of literature*, International Journal of Economics and Accounting, Vol. 5, No. 1, 2014, pp. 62–74.

a potential risk of kind of soft audit so as to achieve the highest overall revenues from serving a client. The review of researches conducted before and after last financial crisis (2007) and period of large accounting scandals (2000–2001) justify the adoption of such assumptions.

If one can prove such causal relationship between delivering non-audit services and quality deterioration of auditor's opinion (especially in its paragraph relates to going-concern assumption), both financial statement and auditor's opinion are not useful anymore for the credit risk purposes.

Financial statements are closely linked to decision making process since according to accounting theory accounting itself is usually defined as the process of identifying, measuring and communicating economic information to permit informed judgments and decisions by users of the information[5]. The role of financial reporting (which is a part of accounting), is to provide information that is useful in making business and economic decisions[6]. According to International Financial Reporting Standards (IFRS) which are mandatory (with minor limitations) for the companies quoted within European Union "the objective of general purpose financial reporting is to provide financial information about the reporting entity that is useful to existing and potential investors, lenders and other creditors in making decisions about providing resources to the entity"[7].

There is a recommendation that all professionals must convince the public that their work will be efficacious and honourable[8]. The traditional audit has often been described as a public interest service[9]. It may even be called as some kind of social agreement between auditors and the rest of society. The reason of such special status is that external auditor's services are a helpful tool in reducing agency costs[10]. Therefore, the independence of auditors should be the hallmark of profession[11]. Consequently, auditors are obliged to have systems in place that are likely to deliver high-quality engagements and manageable degrees of moral hazard. Different groups of stakeholders' perceptions may be impacted by whether the independent auditors' report accompanying the financial information is unqualified or contains a going-concern modification[12] since clean audit report

5 E. Hendriksen, M. van Breda, *Accounting theory. 5th Edition*, Irwin, 1992.

6 Financial Accounting Standards Board, Statement of Financial Accounting Concepts No. 1, '*Objectives of Financial Reporting by Business Enterprises*', 1978.

7 International Accounting Standards Board, *The Conceptual Framework for Financial Reporting*, 2010.

8 A. Abbott, *The System of Professions*, University of Chicago Press, Chicago IL, 1988.

9 R. Mautz, H. Sharaf, *The Philosophy of Auditing*, American Accounting Association, Sarasota, FL, 1961; T. Lee, *Corporate Audit Theory*, Chapman & Hall, New York, NY, 1993; D. Flint, *Philosophy and Principles of Auditing – An Introduction*, Macmillan, London 1988.

10 M. Jensen, W. Meckling, *Theory of the firm: managerial behavior, agency costs, and ownership structure*, Journal of Financial Economics 3, 1976, pp. 305–360.

11 S. Ference, *Independence is in the eye of the beholder*, Journal of Accountancy, June 2013.

12 B. Foster and T. Shastri, *Determinants of going concern opinions and audit fees for development stage enterprises*, Advances in Accounting, incorporating Advances in International Accounting, Vol. 33, 2016, pp. 69.

increases the likelihood obtaining funding and often reduces the amount of additional information entrepreneurs must provide to obtain financing for example from lenders. But audits are nothing if they do not possess the confidence of those that read the audit opinion[13]. However, public interest dimensions of the modern audit require a consideration of the balance between the audit and other services like for example consulting. And that is an issue stimulating ongoing question about auditor's independence in sense of lack of bias in forming their professional judgments stated subsequently in their opinions. That is because being independent in this context means 'independence in appearance', which may be threatened when auditors are in close relationship to their clients. Contrary, 'independence in fact' which means meeting formal requirements implemented to appropriate legal acts. Independence itself is not defined as just compliance with the independence rules[14]. Such dimension is in line to accepted definition of independence, which concentrates on freedom from those factors that compromise, or can reasonably be expected to compromise, an auditor's ability to make unbiased audit decisions[15].

Whether or not the provision of consulting service to audit clients erodes the independence of the audit has been keenly debated since the 1970s because of its growing importance to the firms as a revenue source[16]. One may even say that service provided by audit firms is no longer auditing, that is just pure consulting (which is not so independent as audit). Therefore, the quality of auditor's opinion is not perceived in the eyes of opinion's user because economic dependence on clients' fees strongly affect auditor's independence. Non-audit services deliver extra revenues to audit firms but they also might engender an unhealthy degree of economic dependence between the auditing and client firms. Specifically, the auditing firm might lose sight of its obligation to cast a critical eye on its clients' accounting practices for fear of losing such a lucrative revenue source. Moreover, there might arise a conflict of interests, as in the consulting role the auditor's client is management and not the shareholders[17]. Summarising, both over-dependence on fees received from one source (one client) and provisioning for non-audit services delivered to audited client are potential threats that may influent on auditor's independence. Such environment frameworks justified existence of public regulator, whose aim should be protecting value of audits and ensuring that auditors meet

[13] T. Fogarty, J. Rigsby, *A reflective analysis of the "new audit" and the public interest: The revolutionary innovation that never came*, Journal of Accounting & Organizational Change, Vol. 6, Iss 3, 2010, pp. 300–329.

[14] S. Mcgrath, A. Siegel, T. Dunfee, A. Glazer, H. Jaenicke, *A Framework for Auditor Independence*, Journal of Accountancy, January 2001.

[15] International Federation of Accountants, *International Standard on Auditing 200, Overall Objectives of the Independent Auditor and the Conduct of an Audit in Accordance with International Standards on Auditing*, 2009.

[16] T. Fogarty, J. Rigsby, *A reflective analysis of the "new audit" and the public interest: The revolutionary innovation that never came*, Journal of Accounting & Organizational Change, Vol. 6, Iss 3, 2010, pp. 300–329.

[17] R. Iyengar, E. Zampelli, *Auditor independence, executive pay and firm performance*, Accounting and Finance, 48 (2008), pp. 259–278.

quality and independence criteria[18]. But even knowing that public regulator is vital to financial statement users (including investors), for whom audit process seems to be something oversophisticated similar to black box, there is still actual question of regulator's activity effectiveness. Of course, there are some incentives that motivate auditors to deliver thorough services. The most important are avoiding costs of potential litigation and preserving reputation[19].

Taking into consideration such essential questions about auditor's independence, users of financial statements may come to the conclusion that auditor's quality (which equals to opinion's value) is not at the same level anymore. Therefore, users of financial reports and auditors' opinions, especially professionals (such as banks and other creditors) are entitled to doubt their veracity[20]. Moreover, following this line of thought banks and creditors should be more prudent while taking loan decisions, because of likely going-concern problems of potential debtors.

Using audit opinions and financial statements as the most irrefutable source of information about debtor financial standing seems to be groundless. Although auditors do not opine on a client's creditworthiness, they are required to report if there is doubt as to a client's ability to continue as a going-concern[21]. Going-concern assumption means ability to continuance business for a foreseeable future. Financial statements are prepared on a going concern basis, unless management either intends to liquidate the entity or to cease operations or has no realistic alternative but to do so[22].

According to International Audit Standards[23] that is management role to prove appropriateness of going-concern assumption, but auditor's role is evaluating management assessment. In practice there may occur different scenarios. (1) If going-concern assumption is proper but material uncertainty exists and company disclosed it the auditor should consider additional paragraph (which is not modification of an opinion) named emphasis of matter to highlight such uncertainty. However, (2) if there is no disclosure about material uncertainty, auditor should express a qualified or adverse opinion. (3) If company applied going-concern

[18] D. Aobdia, N. Shroff, *Regulatory Oversight and Auditor Market Share*, Journal of Accounting & Economics (JAE), Vol. 63, No. 2, 2017, pp. 262–287.

[19] For example R. Dye, *Auditing standards, legal liability, and auditor wealth*, Journal of Political Economy 101 (5), 1993, pp. 887–914 or D. Simunic, *The pricing of audit services: Theory and evidence*, Journal of Accounting Research, Vol. 18, No. 1, 1980, pp. 161–190.

[20] T. Tagesson, P. Öhman, *To be or not to be – auditors' ability to signal going concern problems*, Journal of Accounting & Organizational Change, Vol. 11, Iss 2, 2015, pp. 175–192; D. Feldmann, W. Read, *Going--concern audit opinions for bankrupt companies – impact of credit rating*, Managerial Auditing Journal, Vol. 28 Iss 4, 2013, pp. 345–363.

[21] D. Feldmann, W. Read, *Going-concern audit opinions for bankrupt companies – impact of credit rating*, Managerial Auditing Journal, Vol. 28, Iss 4, 2013, pp. 345–363; International Federation of Accountants, *International Standard on Auditing 570, Going Concern*, 2009.

[22] International Federation of Accountants, *International Standard on Auditing 570, Going Concern*, 2009.

[23] International Federation of Accountants, *International Standard on Auditing 570, Going Concern*, 2009.

assumption which in auditor opinion is not proper, he / she ought to express adverse opinion. (4) If there exist several material uncertainties to the financial statement as a whole, or (5) if management is unwilling to extend its going-concern assessment auditor should express disclaimer of opinion[24].

There is an auditor's assessment whether in particular situation an opinion should contain emphasis of matter, or maybe financial statement should receive a qualified opinion, an adverse opinion or even disclaimer of opinion. Otherwise, if in auditor's opinion going concern assumption is evaluated and disclosed properly by the preparer of financial statement, an auditor's opinion does not have to address that issue[25]. Bearing in mind potential decline in opinions' quality there is threat of going-concern warning omission.

As a result, audit opinions' users may lose (so far) useful tool for ascertain imminent bankruptcy of banks' clients. Especially, when there is a discussion whether auditors' going-concern opinions are more effective than other bankruptcy prediction models. Being predictor of possible troubles is not a role of external auditor. However, auditors' opinions users treat his appraisal of audited entity resulting going-concern paragraph in auditors' opinion as an early warning signal. Even if several studies proved that only in half the cases where companies ultimately went bankrupt was a going concern opinion ever issued before their filing for bankruptcy[26].

The problem of auditor's role in not new because existence of 'expectations gap' between assurance provided in audit opinion and expectations of financial statements' users is well documented in prior researches[27]. The reason of occurring the gap is misunderstanding the role of financial audit (and therefore the role of auditor engaged in particular audit) leading to establishing expectations far beyond obligations imposed on auditors.

This paper aims to investigate the relationship between audit opinion and continuity problems of potential debtors. It is reasonable to assume that audit opinions, prepared by professionals having access to all evidence within the company, should contain required disclosures about all potential problems including going-concern problems. Namely, going-concern warning paragraphs in the opinions. There are several harbingers of potential business continuity troubles including negative equity and large net loss for the year. Although not every company recording negative equity disappears from the market, the existence of liabilities bigger than assets is not welcome. Furthermore, according to Polish legal framework, in particular

[24] International Federation of Accountants, *International Standard on Auditing 570, Going Concern*, 2009.

[25] *Ibidem*.

[26] P. Cybinski, C. Windsor, *The Efficacy of Auditors' Going-Concern Opinions Compared with a Temporal and an Atemporal Bankruptcy Risk Model: Analysing U.S Trade and Service Industry Failures 1974–1988*, Pacific Accounting Review – Vol. 17, No. 1, 2004, pp. 3–36.

[27] For example D. Guy, J. Sullivan, *The Expectation Gap Auditing Standards*, Journal of Accountancy, Vol. 165, Issue 4, 1998, pp. 36–46.

Bankruptcy Law[28], such relationship between liabilities and assets imposed an obligation on the management board to submit request for bankruptcy to the court register. Other potential warning signal is a significant loss (which I defined as 50% of company's equity) since it is almost similar to measure applied in Polish Commercial Companies Code[29] as a reason for adoption an owners' resolution on further existence of a company.

To achieve that goal I designed several phases of my research. First, I studied whether an auditor supported its client by providing additional consulting services. Second, I investigated if there was significant deterioration of financial standing of auditor's client in subsequent periods. Third, I ascertained whether an auditor in its opinion discloses appropriate information about potential going concern problems. The next section of this paper develops the hypotheses to be tested. Sections three and four discuss the method and results, respectively. The final section summarizes the work, discusses the implications, and suggests directions for future research.

2. Auditor accuracy, independence and its influence on going-concern warnings

Delivering true and fair view, an entity standing and its possibility for continuing its activity (or risk of near default) is pointed to be one of the reasons of preparing financial statements. Since financial statements' external audit is identified to achieve such true and fair view of an entity, the most important part of an audit work is just stating warnings related to ability for going-concern. In practice, there are two facets of audit work before stating going-concern warnings in auditor's opinion. First step is investigation whether an audited entity did ever implement any procedures to appraise its ability to continue doing business. In second step, auditor ought to check if financial statement reflects effect of these procedures and inform on likelihood of future dire straits. Then auditor warns (via going-concern warnings in opinion) financial statement's users about material derogations in these procedures issuing qualifying or adverse opinion or even disclaimer of opinion. Alternatively, if an entity is in danger of fail and it reports it, the auditor expresses the risk of default that is disclosed in audited financial statement by including emphasis of matter in the opinion. One ought to remember that doubt about the ability to continue as a going-concern arises when entity faces operational and / or financial difficulties. In certain circumstances it may even lead to a legal obligation on management board to submit an application for bankruptcy. However, discontinuance problems do not always mean that an entity will be a subject of liquidation procedure. Such procedures occur only in extreme situations.

[28] Ustawa z dnia 28.02.2003 roku Prawo upadłościowe, Dz. U. z 2017 r. poz. 2344 ze zm.

[29] Ustawa z dnia 15.09.2000 roku Kodeks spółek handlowych, Dz. U. z 2017 r. poz. 1577 ze zm.

Auditors exposure on two possible mistakes linked to going-concern warnings. If there is such a warning and an audited entity subsequently does not fail it is usually called 'type I error'. Contrary when auditor omits going-concern warning paragraph in the opinion and an entity it is called 'type II error'. It is proven that in most cases type II errors generate much more severe repercussions[30].

Due to risk of discontinuity (in the reasonable future period defined as subsequent 12 months after balance sheet day) auditor's independence is a key factor affecting ability for issuing unbiased qualified or adverse opinion or disclaimer of opinion. There is potential relationship between the fees received by auditors and independence. In my opinion there is a risk that fees affect it at least twofold. Future fees relate to the risk of losing them after audit switch, while present fees define the scope of current audit. There is an observable interaction that high level fee allows auditor to employ appropriate resources (even using external professionals). However, that high level of fee may move towards defending them and consequently may lead to ease auditor's appraisal over audited entity. And finally, may erode auditor's inner strength to report significant difficult issues detected during audit.

There are different concepts set to strengthen auditor's independence. Among others, disclosure of auditor's fees is a tool, which may assess independences by the financial statements' users, because in all earnings received by audit firm are divided on audit and non-audit services. According to the extend theory auditor's independence will be higher when audit fees are disclosed compared to the case in which the fees are not disclosed[31]. Such an obligation has been included in legal requirements of many countries for example in Polish Accounting Act[32].

A going-concern audit opinion often results in significant economic consequences to a company, such as negative stock returns and an increased likelihood of bankruptcy[33]. Of course, there might be other than independence factors that influent on audit opinion. Among many of them it is sometimes arisen that auditors make mistakes due to lack of competences and misunderstanding of audited entity[34]. Second, there may be audit technology implemented by audit firm. Next example cause closely relates to audit technology. It is the range of usage professional judgment of an individual during preparing auditor's opinion[35]. Further, it might be auditing firm size that affects form of opinion, because it is generally accepted that having numerous engagements (and therefore being larger entity) makes auditing firm less dependent on individual client; though declines reluctance of issuing

30 K.-W. Lai, *Audit Opinion and Disclosure of Audit Fees*, Journal of Accounting, Auditing & Finance, Vol. 24, Issue 1, 2009, pp. 91–114.

31 *Ibidem*.

32 Ustawa z dnia 29.09.1994 roku o rachunkowości, Dz. U. z 2018 r. poz. 395 ze zm.

33 A. Kausar, R. Taffler, C. Tan, *The going-concern market anomaly*, Journal of Accounting Research, Vol. 47, No. 1, 2009, pp. 213–239.

34 P. Mutchler, *Auditor's Perceptions of the Going-Concern Opinion Decision*, Auditing: A Journal of Practice & Theory, Vol. 3, Issue 2, 1984, pp. 17–30.

35 J. Mutchler, D. Williams, *The Relationship Between Audit Technology, Client Risk Profiles, and the Going-Concern Opinion Decision*, A Journal of Practice & Theory, Vol. 9, No. 3, 1990, pp. 39–54.

opinion containing going-concern warning. Or finally it may be bargaining power of auditor – the ability to withstand pressure placed on him (or her) placed by audited entity. However, such the pressure of audit switch after issuing qualified or adverse opinion is often softened. If audited entity decides to switch auditor after receiving qualified or adverse opinion, it may be perceived as an entity that is not able to stand up high standards of scrutiny of previous auditor no longer[36]. Although it is not applicable to the companies signing audit contracts for several years, it may still relate to these entities that usually sign one-year contracts.

Notwithstanding, there are non-audit services (provided by auditing firm) that lead to rising objections on the going-concern warnings. The most emphasized problem in literature relates to ability of stating appropriate going-concern risk in opinion because of probable lack of independence and objectivism. These independence and objectivism erode (or at least are perceived as been eroded) when the auditing firm serves services especially related to bookkeeping, internal audit, tax planning, restructuring or business consulting. Audit firms usually would like to obtain subsequent (usually lucrative) non-audit services and some prior research prove that they consider sacrificing independence in exchange for additional future earnings while others have found no influence on perception of their independence [37]. Since majority of the literature conclude that providing non-audit services has a negative influence on auditor's independence and one of the contemporary audit role is developing towards early warning model I formulated two hypotheses:

H1: There is a relationship between continuity problems evidenced by bankruptcies and going-concern warnings (GCW) errors (Type II) in most recent audit opinion.

H2: There is a significant relationship between GCW in audit opinion and non-audit fee existence.

3. Method, results

I investigated empirical data, which are based on sample of financial reports of listed companies as well as auditors' opinions on the reports with special regard of going-concern warnings in appropriate sections in these auditors' opinions. My research for companies which management boards' submitted request for bankruptcy to the court register extended from January 1, 2009 through December 31, 2013. The sample consists of publicly held companies quoted on main market or New Connect market of Warsaw Stock Exchange (Poland) and none of these companies was a financial institution. After identifying initial sample classified by year in which bankruptcy occurred, I narrowed my study to entities registered in Polish registry

[36] P. Barnes, *The auditor's going concern decision and Types I and II errors: The Coase Theorem, transaction costs, bargaining power and attempts to mislead*, Journal of Accounting and Public Policy, Vol. 23, Issue 6, 2004, pp. 415–440.

[37] P. Law, *An empirical comparison of non-Big 4 and Big 4 auditors' perceptions of auditor independence*, Managerial Auditing Journal, Vol. 23, Issue 9, 2008, pp. 917–934.

courts and eliminated foreign companies listed on Warsaw Stock Exchange. Final sample encompasses 59 companies that submitted request for bankruptcy between January 1, 2009 and December 31, 2013 (see table 1).

Table 1. Final sample of companies which management boards' submitted request for bankruptcy to the court register extended from January 1, 2009 through December 31, 2013

No.	Name	Date of request for bankruptcy to the court register	Date of most recent financial statement
1	Gant Development SA	2013-10-11	2012-12-31
2	Internetowy Dom Zdrowia SA	2013-10-09	2012-12-31
3	KCSP SA	2013-10-09	2012-12-31
4	Security System Integration SA	2013-10-01	2013-09-30
5	R&C Union SA	2013-09-26	2012-12-31
6	Europejski Fundusz Hipoteczny SA	2013-08-14	2012-12-31
7	MEW SA	2013-08-13	2012-12-31
8	Richter Med SA	2013-07-31	2012-12-31
9	BGE SA	2013-08-01	2012-12-31
10	Budopol-Wrocław SA	2013-07-29	2012-12-31
11	Mediatel SA	2013-07-16	2012-12-31
12	Fota SA	2013-06-28	2012-12-31
13	Zoo Centrum SA	2013-06-25	2012-12-31
14	Ideon SA	2013-04-03	2012-12-31
15	Motor Trade Company SA	2013-01-31	2012-12-31
16	D&D SA	2013-01-30	2012-12-31
17	Sobet SA	2013-01-09	2012-12-31
18	Euromark Polska SA	2012-11-29	2012-08-31
19	Cool Marketing SA	2012-11-29	2011-12-31
20	Synkret SA	2012-11-28	2011-12-31
21	Waspol SA	2012-11-28	2011-12-31
22	Fabryka Maszyn Ożarów SA	2012-11-23	2011-12-31
23	Call2Action SA	2012-11-15	2011-12-31
24	Partex SA	2012-11-14	2011-12-31
25	Direct eServices SA	2012-10-23	2011-12-31
26	Polskie Jadło SA	2012-09-28	2011-12-31

Table 1 – continued

No.	Name	Date of request for bankruptcy to the court register	Date of most recent financial statement
27	Budus SA	2012-09-28	2011-12-31
28	Alterco SA	2012-09-25	2011-12-31
29	A.PL Internet SA	2012-09-21	2011-12-31
30	Religa Development SA	2012-09-18	2011-12-31
31	Energomontaż-Południe SA	2012-08-10	2011-12-31
32	Wilbo SA	2012-07-19	2011-12-31
33	Bomi SA	2012-07-10	2011-12-31
34	ABM Solid SA	2012-06-29	2011-12-31
35	PBG SA	2012-06-04	2011-12-31
36	Hydrobudowa Polska SA	2012-06-04	2011-12-31
37	Dolnośląskie Surowce Skalne SA	2012-04-06	2011-12-31
38	Intakus SA	2012-04-06	2011-12-31
39	Inwazjapc SA	2012-03-30	2011-12-31
40	Budostal-5 SA	2011-12-30	2010-12-31
41	Advadis SA	2011-10-14	2010-12-31
42	Jago SA	2011-11-02	2010-12-31
43	Drewex SA	2011-10-02	2010-12-31
44	Promet SA	2011-06-27	2010-12-31
45	Huta Szkła Gospodarczego Irena SA	2010-09-17	2009-12-31
46	Internet Group SA	2010-08-19	2009-12-31
47	Polrest SA	2010-07-07	2009-12-31
48	Swarzędz Meble SA	2010-05-19	2009-12-31
49	Orzeł SA	2010-05-27	2009-12-31
50	Grupa Kolastyna SA	2010-03-11	2009-12-31
51	Techmex SA	2009-10-15	2008-12-31
52	Zakłady Naprawcze Taboru Kolejowego w Łapach SA	2009-06-19	2008-12-31
53	Pronox Technology SA	2009-05-27	2008-12-31
54	Alumast SA	2009-05-19	2008-12-31
55	Monnari Trade SA	2009-05-08	2008-12-31
56	Polski Koncern Mięsny Duda SA	2009-03-25	2008-12-31

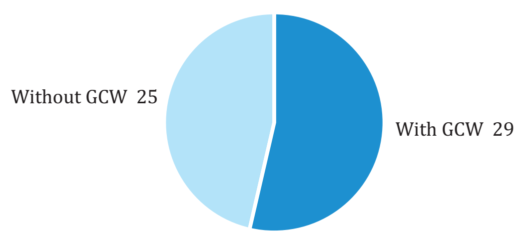
Table 1 – continued

No.	Name	Date of request for bankruptcy to the court register	Date of most recent financial statement
57	Krośnieńskie Huty Szkła Krosno SA	2009-02-01	2008-12-31
58	Sfinks Polska SA	2009-02-17	2008-12-31
59	Odlewnie Polskie SA	2009-01-16	2008-12-31

Source: own work based on Notoria Serwis, EMIS Professional and National Court Register (KRS).

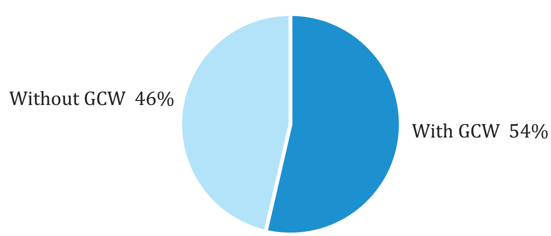
After identifying final sample, I analysed companies' financial statements for the most recent balance sheet day as well as auditors' opinions on these statements. Financial statements and auditors' opinions were downloaded from companies' Internet sites, EBI / ESPI reporting system or EMIS (Emerging Markets Information Services) database. After deleting observations with missing values, the sample consists of 54 auditors' opinions on financial statements of entities requesting for bankruptcy of which 25 did not included going-concern warnings (see graph 1 and graph 2).

Graph 1. Number of auditors' opinions with / without going-concern warnings on companies declared bankruptcy



Source: own work based on Notoria Serwis and EMIS Professional.

Graph 2. Percentage share of auditors' opinions with / without going-concern warnings on companies declared bankruptcy



Source: own work based on Notoria Serwis and EMIS Professional.

To verify justification for committing Type II error by an auditor (forming opinion without going-concern warnings for subsequently bankrupted companies) I assumed that among others there are at least to evident financial signals that may indicate strong financial distress. Irrespective of implemented accounting framework these are:

- negative value of companies' equity capital,
- net loss for the year which absolute value exceeds at least 50% of companies' equity (defined as significant net loss).

Prior research concentrates of different signals that warn about likely future financial difficulties. Among others there may be for example operating loss, negative working capital, negative retained earnings for last three years[38]. Negative value of entity's equity capital seems to be good future financial difficulties indicator because companies with liabilities that exceed total assets may have serious repayment problems since even after monetarization all of the resources some company's debts still remain to be settle. Furthermore, according to Polish Bankruptcy and Reorganisation Law, negative equity capital is a premise for insolvency and require submitting application for bankruptcy (which in fact does not have to lead to liquidation in every single case. Net loss for the year which absolute value exceeds at least 50% of companies' equity (defined as significant net loss), is justified since such a great loss is pretty similar measure to warning signal applied by Polish Commercial Companies Code as a reason for adoption the owners' resolution about further existence of an entity. Lack of detailed information about structure of equity capital (statutory share capital, supplementary capital, revaluation reserves, retained earnings) for sample companies caused the simplification that 50% of companies' equity is more or less cut-off limit for entities' owners that have to make decision about further existence of their companies.

Within 25 companies whose opinions did not contain going-concern warnings there were:

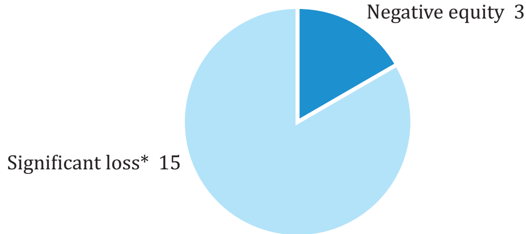
- 3 companies with negative equity in most recent financial statement before requesting for bankruptcy and
- 15 companies reported net loss for the last whole year before requesting for bankruptcy of which:
  - 7 companies reported absolute value of net loss greater than absolute value of equity as at the end of that year.

The structure and numbers of companies with warning signals are presented in graphs 3 and 4.

Within 15 companies with net loss for the year there were also 2 of 3 companies with negative equity. The companies reported negative equity as well as those with significant net loss were audited by non-Big 4 auditing firms (Deloitte, EY, KPMG, PWC).

[38] A. Blay, M. Geiger, D. North, *The Auditor's Going-Concern Opinion as a Communication of Risk*, Auditing: A Journal of Practice & Theory, Vol. 30, No. 2, 2011, pp. 79–81.

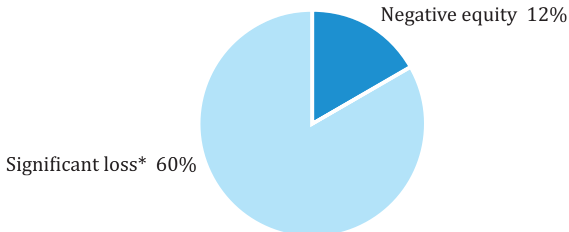
Graph 3. Companies with strong financial distress that should be warning signals for auditors issuing opinions without going-concern warnings



Note*: there are 2 of 3 companies with negative equity that report significant loss at the same time.

Source: own work based on Notoria Serwis and EMIS Professional.

Graph 4. Percentage share of companies with strong financial distress that should be warning signals for auditors forming opinions without going-concern warnings



Note*: there are 2 of 3 companies with negative equity that report significant loss at the same time.

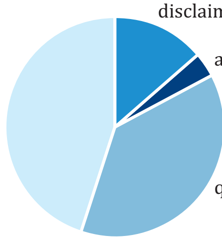
Source: own work based on Notoria Serwis and EMIS Professional.

The second pool of opinions (with going-concern paragraphs) is consisted of:

- 4 disclaimers of opinion,
- 1 adverse opinion,
- 11 qualified opinions and
- 13 unqualified opinions with explanation paragraphs (emphasis of matter) only on continuity problems (see graphs 5 and 6).

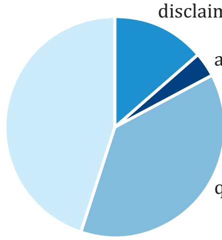
There were only 4 opinions issued by Big 4 auditing firms of which 3 were issued as disclaimer of opinion and 1 unqualified opinion. Regarding to financial signals about company's financial distress it is wondering why such a recognized auditing firm as Big 4 one, released unqualified opinion (however with going-concern warning paragraph) when audited company had negative equity and absolute value of loss for the year reaching 375% of absolute value of equity!

Graph 5. Types of auditors' opinions with going-concern warnings on companies declared bankruptcy



Source: own work based on Notoria Serwis and EMIS Professional.

Graph 6. Percentage share of auditors' opinions with going-concern warnings on companies declared bankruptcy



Source: own work based on Notoria Serwis and EMIS Professional.

Within the group (25 items) without going-concern warnings in most recent auditors' opinions before declaring bankruptcy there were 14 auditing firms that definitely did not provided non-audit services. Only 2 bankrupted companies reported in their financial statement that auditor additionally provided non-audit services and the rest (9 companies) did not disclose such information in their year-end reports which means that financial statement users do not know whether such services were provided and company did not inform about it or maybe services were not provided. In fact, accounting regulations require clear information and it is recommended to disclose appropriate zero-value note rather than omit information entirely. The 2 companies, which were served non-audit services paid for these additional services significant fees. 1st paid over 102% and 2nd paid over 80% of standard audit fee.

4. Conclusions, limitations and future research

The findings may indicate the examined sample proving existence of relationship between continuity problems (defined as requesting for bankruptcy to the registry court) and going-concern warnings errors (Type II) in auditors' opinion. This paper investigated 54 auditor's opinions whose management declared bankruptcy and it occurred that almost 54% of companies received an auditor's opinion without any kind of going-concern warnings. This may lead to conclusions that auditors' expectations on audited business continuity are mostly wrong. Alternatively, their (auditors') procedures implemented within audit engagement are not designed properly or conducted effectively. In effect using auditor's going-concern warnings as a key tool during evaluation of company's creditability is at least disputable. Therefore, empirical evidence may support first hypothesis on relationship between continuity problems evidenced by bankruptcies and GCW errors (Type II) in most recent audit opinion, as far as examined sample is concerned.

The problems with Type II errors relate mostly to effectiveness of auditor's workshop (procedures designed during particular engagement) or auditor's independence. As far as audit procedures are concerned it is highly wondering why 16 of 25 audited and listed companies reporting negative equity or significant net loss for the year (i.e. which absolute value exceeds 50% of absolute value of equity) might have received auditors' opinions without any going-concern paragraph. Having report negative equity capital or relatively huge loss for the year (50% of absolute value of equity), usually indicates material business continuance problems and should attract management concern on further ability for act as a going-concern. It may mean that over 64% opinions should be practically revised due to incorrect audited entity's performance interpretations. Research sample study concludes that most cases relate to non-Big 4 auditing firms.

That is definitely not good news to banks' analysts analysing perspective loan-taker financial standing. Their jobs assume that one of a crucial and helpful tool in assessing clients' opportunity for continuing their businesses is just auditor's opinion. Especially, when such a perspective client is a listed company. Actually, having regard that auditors' opinions are not the only instrument applied during loan procedure, this should lead to significant change in auditors' opinion perception by banks and push them towards implementing new more effective instruments in evaluating clients' situations. That conclusion is addressed especially to smaller banks (including cooperative banks) which credit risk procedures are simpler and depends mainly on auditor opinion and financial statement.

Second potential issue relating to Type II errors relates to relationship between including going-concern warnings and non-audit fees earning by the auditor. The study on research sample may not support that conclusion due to relatively small number of auditing firms delivering non-audit services. Since there were only 2 companies which explicitly disclosed fees for paid non-audit services and 9 with any disclosure on that issue it is not justified to make reasonable outcomes. Especially when empirical data from pool with going-concern warnings show that there were 5 opinions issued by auditors serving the same client non-audit services. Fortunately, according to 537/2014 European Union[39] regulation – legal

[39] Regulation (EU) no 537/2014 of the European Parliament and of the Council of 16 April 2014 *on specific requirements regarding statutory audit of public-interest entities and repealing commission decision* 2005/909/EC, Official Journal of the European Union L 158/77.

framework for EU companies – most of non-audit services (including tax services, bookkeeping, payroll and valuation services) are not permitted any more.

While the findings indicate observable (but not significant) relationships between audit services range and going-concern warnings in auditors' opinions we cannot determine causality. Though, we are not allowed to ascertain existence causal relationship between delivering non-audit services by auditors and quality of going-concern statement in appropriate sections of auditors' opinions. Notwithstanding I found a field in audit legal framework that may require further discussion and maybe (in the future) additional regulation. Therefore, it suggests a need for further investigations in this area.

Some limitations of this paper should be noted. Although serving non-audit services to audit clients is perceived to be important issue in the auditing literature empirical studies, including this one, give no one and only right answer on influence of such services on auditor's independence and audit quality. Another limitation is that my research related to public companies, which requested for bankruptcy. Further and broader research should cover larger sample of companies that received Type II errors in auditors' opinions on their financial statements. An interesting avenue for future research would to examine both publicly listed and private companies' auditor opinions. Next limitation refers to definition of bankruptcy. It is company's management's request submitted to the registry court that was defined as bankruptcy. Notwithstanding it does not exist one and only appropriate definition of company's bankruptcy. There are some studies relate to company's default defined in a completely different way.

Taken together, these studies on examined sample suggest that there may be association between Type II error and company's ability for business continuity, which is not good news. These findings should be useful to users of auditors' opinions, especially to banks, since they treat auditors' assessment of prospective (or existing) debtors' likelihood to act as going-concern as important tool loan-taker evaluation. There are capital market authorities and audit standards setters that should be familiar to the issue while releasing their expectations on auditors' procedures and outcomes included in auditors' opinions (like Polish Audit Authority or Financial Market Authority) and support stronger auditors' opinions users' expectations. And finally, an important implication of the study is that it emphasises the continuing problematic nature of serving audit and non-audit services, even in situations where the non-audit services comprise only traditional taxation services. Of course, there exists new requirement related to quoted companies in EU that prohibit serving non-audit services to public companies, but problem with private (not publicly hold) companies still remains.

Finally, it is worth emphasizing that future survey research can also be conducted on independent auditors and their relationship with audit clients. It is recommended sample size to be extended to all companies – including private (not quoted) entities.

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