Features, facts and figures of European cooperative banking groups over recent business cycles

J.M. Groeneveld[1]

Draft, April 2013

JEL Classification Codes: G2, G21, G3, G32, G34, L21, P13.
Keywords: European banking; shareholder banks; cooperative banks; performance; corporate governance.

1. Introduction

Since the start of the financial and economic crises in 2007, all European banks have been affected by various shocks. As a result, European banking systems will remain fragile and have to increase their resistance to new shocks by raising liquidity and solvency ratios in the near future. In addition, many banks are forced to adjust their governance structure, business model and remuneration schemes. These changes are important to restore and maintain financial stability as well as confidence among the general public. Moreover, fundamental reforms in the execution of European banking supervision are underway. Policy makers are working towards the creation of an European Banking Union, where the European Central Bank will become responsible for the supervision of systemically important financial institutions.

In this profound transformation process in banking, it is important to acknowledge that the European banking sector is not homogeneous. Basically, one can distinguish between public banks, investor-owned banks and stakeholder-owned banks. The latter category comprises savings banks, credit unions, mutuals and cooperative banks. There are indications that these stakeholder-owned banks weathered the subsequent storms relatively well so far, without large scale state support (EACB, 2010; Birchall, 2013). At the same time, these types of banks did not receive much attention before the financial crisis hit and hence the question arose why these banks seem to have performed comparatively well.

This article tackles this question for the largest category within the family of stakeholder value banks: European cooperative banking groups (henceforth ECBGs). Acknowledging the heterogeneity of ECBGs (Ayadi *et al.*, 2010), this paper explores the possible connection between the common features and the relative performance of fifteen ECBGs over the latest

---

[1] The author works at the Directorate Cooperative & Sustainable Business of Rabobank Nederland. The views in this article are personal and do not necessarily reflect those of Rabobank Nederland (j.m.groeneveld@rn.rabobank.nl, telephone number 0031 30 2131400).

business cycles. Where appropriate, the text will be larded with concrete examples of individual ECBGs. More specifically, the article explores whether long-standing assertions about the corporate governance and organizational features are reflected in differences between performance indicators of ECBGs and all other banks in the time span 1997/2002-2011.

In this respect, this paper complements existing scarce academic studies and (policy) reports on financial cooperatives in various ways. Contrary to other studies, this paper analyzes the central issue in a concise historical perspective and in the context of organizational characteristics of ECBGs. Secondly, we examine fifteen ECBGs simultaneously over a similar and relatively long time span, which enables us to draw robust conclusions about the entire cooperative banking sector. Most recent articles are case studies of – specific aspects of – individual ECBGs in different times of crisis and/or over relatively short time spans (e.g. Stefancic and Kathiziotis, 2011; Mooij and Boonstra, 2012; Bley, 2012), which results in a diffuse picture and does not allow for general conclusions. Thirdly, we shall empirically validate qualitative postulations about ECBGs from previous publications (e.g. EACB, 2007). Fourthly, we do not only investigate the relative performance of ECBGs in (recent) times of crisis, but our sample period also incorporates times of economic prosperity. With this elaborate approach, this publication attempts to promote wider understanding and a nuanced view of the cooperative banking model. The objective point of departure is that the cooperative banking model is a complementary alternative to publicly and privately owned banks.

The paper is structured as follows. Section 2 sketches the roots, organizational structure and evolution of ECBGs. We briefly describe how they eventually emerged from small local credit cooperatives more than a century ago. This clarification provides useful starting points for understanding their recent performance. The reasons for the past disregard and recent revaluation of the – proclaimed social-economic and governance characteristics of the – cooperative banking model are discussed in section 3 and 4, respectively. Section 5 formulates testable hypotheses, which are derived from the preceding sections. In section 6, we highlight our newly constructed and more comprehensive database. The database covers a broad range of indicators for fifteen ECBGs in ten European countries and similar measures for entire banking systems of the countries in question. The sample period runs from 1997/2002 up to 2011. This sample period encompasses more than one business cycle. Section 7 contains the empirical results which are explained in the context of considerations from previous sections. An

important research question is whether the comparative performance of ECBGs differs between economically good and bad times and whether the results are line in with the proclaimed specific features and original cooperative characteristics.

Our empirical findings suggest that many previous assertions and qualitative statements about ECBGs really hold in practice. Furthermore, ECBGs do exhibit a different performance compared to all other banks throughout different stages in recent business cycles, i.e. not just in times of crisis. Their corporate governance with member influence and specific decision making mechanisms seems to lead to a relatively low risk appetite and high capitalization, a high degree of stability and a predominant focus on retail banking. Data and information to test the often voiced claim about ECBGs that they – have – always put customer interests' first are not available. It must be emphasized that these conclusions cannot be extrapolated into the future. Indeed, an abundance of historical examples of successes and failures among all types of banks exists.

2. The transformation of local credit cooperatives into ECBGs

The history and evolution of many ECBGs is extensively documented.[2] In short, most cooperative banks were established more than a century ago in response to the problems that small urban and rural businesses had in accessing financial services. These groups could only obtain loans at exorbitant interest rates from money lenders.[3] From the very first credit cooperatives promoted by Schulze-Delitzsch (1808-83) and Raiffeisen (1818-88), they adopted an organizational model based on democratic governance and mutualism. Beginning in Germany, the cooperative banking concept gradually dispersed to the rest of the continent and to the Nordic countries. It was about offering opportunities for banking inclusion to large groups in society. In economic terms, credit cooperatives were established to correct market failures and to overcome the associated problems of asymmetric information in favour of borrowers. They could do so because member/consumers financed the institutions and were involved in the decision-making process.

[2] See for instance Bosseno (1994), Brazda (2001), Werner (2005), Albert (2008) and Mooij (2009).
[3] The practice of charging excessive interest rates was an ordinary characteristic of the era. According to some early reports, annual rates in excess of 30% were not uncommon in Germany (Guinnane, 2001, p. 368).

Within small communities, relatively intimate knowledge of each other's credit and trustworthiness guaranteed that loans were only provided to borrowers who could be expected to repay them. Financial incentives for members to monitor each other and social networks among members (i.e. 'social capital'[4]) contributed significantly to the flourishing of co-operative banks (Ghatak, 2000). Local credit cooperatives became wide spread and were physically close to their members via dense local branch networks. In line with their objectives, credit cooperatives did not aim at maximizing short term profits, but profits were necessary for further growth and were for the larger part retained and added to the capital base. This feature made them financially solid and well capitalized with a low risk profile. Credit cooperatives also inherently strived for long term relationships with their members, who were clients, owners and depositors at the same time.

Not all cooperative banks managed to survive the ravages of time. Quite a few cooperatively organised banks were unable to adapt to technological, social or competitive changes and consequently disappeared or now just live a marginal existence.[5] Many countries never had a cooperative banking sector of any significance, because the cooperative ideas did not find fertile soil as a result of cultural factors. In other countries, cooperative banks chose to be acquired by other banks or have converted into investor-owned banks.[6]

Over time, the cooperative banking model of the 'survivors' evolved and differentiated into a multiplicity of European institutions with characteristics reflecting the needs of cooperative members on the one hand and the specificities of national legislative frameworks on the other (Alexopoulos and Goglio, 2009). The majority of local credit cooperatives developed via national (network) organizations into internationally active banking groups. These developments were partly prompted by regulatory requirements or the necessary realisation of economies of scale and higher efficiency levels from a competitive point of view. Some ECBGs have sold a part of their business activities to investors or became partly listed, thus gradually transforming

---

[4] Putnam (2000, p. 19) defines social capital as consisting of '*social networks (among individuals) and the norms of reciprocity and trustworthiness that arises from them*'.

[5] In Sweden, the Föreningsbanken Sverige was more or less forced by the government to convert in 1993 from a cooperative ownership structure to a stock corporation. The transformation in the legal form of Föreningsbanken and its subsequent share listing meant the end of the bank's long legacy and identity as a cooperative institution (Körnert, 2012).

[6] A striking example is the wave of demutualization of mutual building societies in the United Kingdom in the 1990s (Llewellyn, 2012).

into a hybrid type of financial cooperative.[7] Hence, the organizational structures are definitely not static, but are constantly evolving.[8]

In their domestic home markets, ECBGs were, to varying degrees, engaged in consolidation, diversification, domestic acquisitions (of non-cooperative financial institutions), and launching new distribution concepts. Like many other banks, ECBGs are nowadays heavily involved in the virtualisation of the distribution of products and services in response to changing customer demands and to increase efficiency. For most ECBGs, the process of internationalisation gained momentum in the 1980s. The main driver of international expansion was the limited (organic) growth potential in the domestic markets and the higher growth potential abroad. Other ECBGs have argued that the internationalisation strategies of their customers/members prompted their cross-border expansion. The diversification of risks and business lines as well as the somewhat circular argument that their private peers follow international expansion are also put forward as motives.

In practice, the form, size, appearance, organization and operation of ECBGs differ across countries and over time. Chart 1 presents the distribution of ECBGs included in this study according to asset size from the smallest to the largest. The ratio of the largest (French Crédit Agricole Group) to the smallest (Portuguese Credito Agricola Group) is 144, which shows the great disparity in sizes. ECBGs also vary in terms of their attitudes to membership and their interpretation of cooperative values. Some banks strive to make every customer a member, while others are not actively recruiting members (Oliver Wyman, 2008). Other striking differences include the extent of centralization and integration within the networks (Desrochers and Fischer, 2005)[9], the size and focus of international activities, and the design of the cooperative governance with member authority (see Ayadi *et al.*, Chapter 3, 2010). In most cases, industrial reorganisation, governance reform and pressures of competition have fostered an accentuated centralisation of strategic and operating functions and processes. This has led to the establishment of so-called higher-tier networks, which still vary from loose associations to

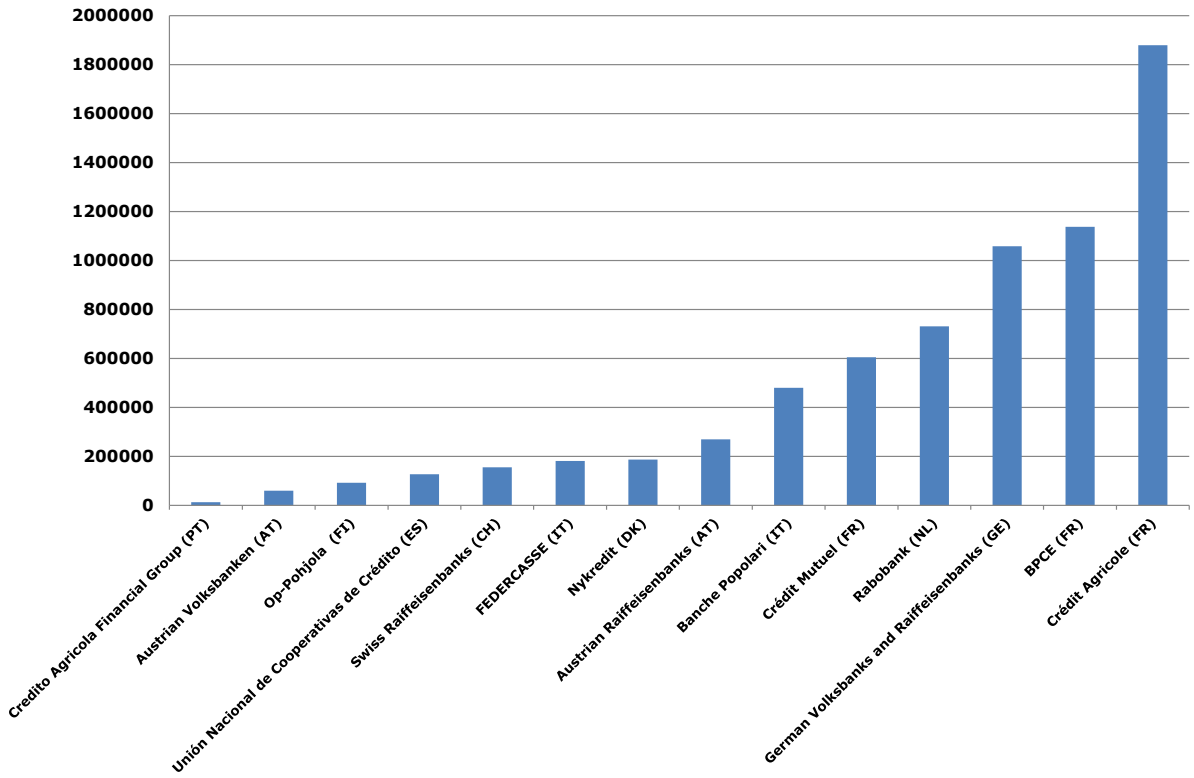
[7] As an example, the French Crédit Agricole S.A, listed since 2006 on the Euronext Paris, was created to represent all of the Group's business lines and components. As of December 2011, 56.2% of Crédit Agricole S.A was owned by the regional banks that make up the Federation of Crédit Agricole, and 38.7% was owned by institutional and individual investors.

[8] For instance, the Austrian Volksbanken Group had to change its structure fundamentally in 2011 when it received state aid to compensate for considerable capital losses incurred in Central and Eastern Europe.

[9] The Dutch Rabobank Group is one of the most centralised systems, whereas the Italian cooperative banking sector is the most decentralised system.

cohesive groups (Di Salvo, 2003).[10] In a few cases, the central institution has an important supervisory role over its local bank members. This is the case for the Austrian Volksbanken, the Finnish OP-Pohjola Group and the Dutch Rabobank Group. In these countries, the supervisors have delegated to the respective APEX organizations formal supervisory powers over its member banks. These central institutions themselves are supervised by the national supervisors.

Chart 1 Asset size of ECBGs (in EUR billions)



Source: data are provided by ECBGs and refer to 2011.

A general feature of ECBGs is the existence of some form of internal solvency and liquidity structures, except for the Italian Banche Popolari. These structures form the core of internal mutual support schemes in ECBGs. In essence, these schemes offer network resources to ensure the solvency and liquidity of the participating local or regional cooperative banks in a network organization. As such, these support schemes come on top of the coverage provided by the compulsory and supplementary deposit insurance schemes that are in place in individual countries. Most ECBGs have cross-guarantees which are commitments or obligations by

[10] For instance, the French Crédit Agricole Group has a three-tier network, comprising local, regional and central organizations. The Dutch Rabobank has a two-tier network, consisting of local member banks and the central organization. The Italian Banchi Popolare has no national structure at all, with all member banks acting completely independently of each other.

participating entities to provide liquidity to a troubled local cooperative bank.[11] This makes them financially solid and contributes to relatively high ratings for ECBGs (Ferri *et al.*, 2013). Due to all these factors, many outside observers find that cooperatives have relatively complex governance structures given their fragmentation of ownership ('one member one vote' principle), decision rights, mutual guarantees and multi-level boards (Oliver Wyman, 2012).

3. The era of underexposed and fading cooperative banking features

For a long time, the features and values of the cooperative banking model did not attract a lot of attention in articles, the press, reports and scholarly research for various reasons (Kalmi, 2007). Firstly, the original 'mission' of cooperative banks seem to have been largely completed and the original 'raisons d'être' of cooperative banks have become less valid; almost everyone in Western Europe has access to financial services today and the need to promote financial inclusion is hardly present anymore. Moreover, the comparative disadvantages that non-cooperative banks faced in the past for servicing small farmers and small businesses have also largely disappeared. Legal frameworks now offer much stronger contract enforceability and verifiable information about potential borrowers is generally available. In other words, the traditional differentiators of the former credit cooperatives have become less pronounced and less understood over time.

Another reason is that the transformation of local credit cooperatives into (inter)national network organizations (ECBGs) has resulted in varying degrees of hybridisation with the 'capitalist' corporate model. Besides, the proclaimed multiple goals of ECBGs are generally more difficult to understand (for 'outsiders') than theoretically more easily interpretable and single goal of profit maximizing of most listed banks. As pointed out by Ayadi *et al.* (2010), cooperative banks can be categorized as 'dual-bottom line' institutions. They claim to fulfill other equally important objectives than mere shareholder value creation. This suggests that financial performance and economic efficiency are neither the only nor the ultimate standard of assessment for ECBGs. These aspects are indisputably important but they are not sufficient to assess the contributions of cooperative banks to society and the economy.

---

[11] The Finnish OP-Pohjola Group and the Dutch Rabobank Group have internal support schemes for local cooperative banks with the most far reaching 'joint-liability'. Associations with joint-liability allow creditors to make direct claims against the group if the amount owed by the troubled entity is not forthcoming. In effect, joint-liability automatically implies a significant degree of pooling among the participating entities.

As elaborated earlier, the rich diversity in existing governance and organizational structures, business models, changing and varying degrees of member influence at the local and central level, divergent functions of the central institutions and different focal points in foreign activities also hinder straightforward evaluations of ECBGs. The European cooperative banking sector can be characterized as *Commonality with Diversity.* Apart from this diversity, the limited attention for ECBGs was also due to perceived decreasing differences in employee behaviour, financial products, services, prices, operations and business lines compared to competitors (Gijselinckx and Develtere, 2008). ECBGs became visibly active in non-retail activities and expanded across domestic frontiers and evolved into large and complex business structures.

Moreover, the dominance of the free market thinking and the associated Anglo-Saxon model aimed at profit and shareholder value maximization did not encourage great interest in ECBGs. In this shareholder value era, some – subsidiaries of – ECBGs actually got partly listed[12] or adopted practices from banks with other organizational forms. Other ECBGs extensively debated whether or not to exchange the cooperative model for the shareholder value model[13], because this was considered to be an appropriate way to attract external capital for faster growth (Deloitte, 2012). Hence, ECBGs themselves were also partly responsible for confusion and contempt of their cooperative business model. Besides, some ECBGs do not independently report reliable empirical data or longer and consistent time series for key cooperative and financial indicators, partly because they do not have the same extensive reporting requirements as listed banks. This aspect obviously hampers an objective evaluation of their business model and impedes empirical and scholarly research.

All these developments were not favorable for retaining a clearly visible cooperative identity and the collaboration with or adoption of elements of non-cooperative enterprises have been sometimes viewed as a capitulation to capitalism. In fact, ECBGs were sometimes forced into a

---

[12] A subsidiary of the Austrian Raiffeisenbanken, Raiffeisen Zentral Bank, is listed. BGZ, a 100 per cent subsidiary of Rabobank in Poland, is also partly listed. See also footnote 5 about Crédit Agricole S.A.

[13] The Dutch Rabobank pursued the Great Cooperative Debate in the years 1995 through 1997. After intense discussions, it was decided to retain the cooperative identity. It was believed that a different legal format with fairly uncertain effects would diminish the countervailing power of members' influence on the day-to-day business decisions of professionals managing the cooperative banking group. The conviction was that there were great opportunities for a viable and strong cooperative bank with a critical mass amidst private banks. This bank would enrich the banking landscape with a distinctive business model and philosophy, thereby contributing to diversity in banking.

defensive position prior to the crisis as their cooperative business model was considered to be rather misty, outdated or even detrimental for the entire banking sector (Kodres and Narain, 2010). Cooperative institutions were not considered the most efficient, vibrant, or innovative institutions for a long time. PA Consulting Group (2003) even accused cooperative banks for 'spoiling' the market conditions for other banks. Others (e.g. Oliver Wyman, 2008) underscored the sluggishness and intransparency of decision making processes or exaggerated the principal-agent problem inside ECBGs on merely theoretical considerations (Groeneveld and Llewellyn, 2011).[14]

Box 1 The cooperative degeneration of ECBGs?

The literature shows that quite some agricultural cooperative firms have undergone similar evolutionary processes as the former credit cooperatives. For various reasons, they have gradually moved away from their original purposes and were put in a defensive position for similar reasons. In the business administration literature, such a development has been qualified as the degeneration of the agricultural cooperative enterprise caused by a decline in social capital, i.e. the disappearance of tight (member) networks as a result of the evolution into large and complex organizations and/or the achievement of its original goals (Nilsson *et al.*, 2012).

It is undeniable that some degree of degeneration has also occurred in the evolution process of local credit cooperatives into the present ECBGs, though this is hardly empirically investigated up to now. For instance, the traditional dependence on member networks for funding has eroded, since most ECBGs now access debt capital markets and therefore must satisfy rating agency requirements to secure funding on favourable terms. At the same time, members' potential losses are now limited due to internal deposit insurance schemes, thus weakening their original incentives to monitor the entire cooperative organisation. Furthermore, autonomy and discretion of local member banks in managing their affairs have diminished due to the increased requirement for centralised business functions (APEX) to deliver efficiency gains through economies of scale and scope. The increasing complexity of financial services provision and the establishment of subsidiaries for international activities like corporate and investment banking required professionalization of management and the associated establishment of central institutions where decisions are increasingly taken. All these developments have created a noticeable distance between the centralised management of ECBGs and their members. Consequently, member influence, involvement and solidarity have waned throughout the organization (Cornforth, 2004).

[14] This refers to potential conflicts of interest between managers and owners of a bank. Agency issues arise in any organization in which there is a separation of decision and risk-taking functions. In the case of Cooperative banks, these issues emerge between the management and the members. In the case of shareholder value companies, these issues occur between the management and shareholders.

Moreover, large cooperative organization faces challenges in terms of accountability to the members, and the separation between representative and executive bodies.

We do not take such a negative view on financial cooperatives. It should be realized that much of the structural changes that the ECBGs underwent over the past decades were mostly inspired by the desire to remain economically and financially viable. They tried to avert a demise by undergoing a constant process of renewal and transformation in response to or in anticipation of profound shifts in the market (Gijselinckx and Develtere, 2008). These transformations will not automatically lead financial cooperatives to relinquish their identity and degenerate into typical capitalist institutions (e.g. Coté, 2001). To ward of this fate, it is necessary for them to continue to exist as a cooperative by staying in line with the fundamental principles of cooperation, as expressed by the Cooperative Identity Statement (ICA, 2006). It goes beyond the scope of this article to discuss the corporate governance of financial cooperatives in detail. But suffice to say that an adequate election process of member representatives, clear internal mechanisms of accountability, a high degree of member participation and influence in general decision-making and deliberations are needed to maintain a critical level of 'social capital' in complex and large ECBGs (see Fonteyne, 2007). It basically comes down to sound internal governance and capable leadership to maintain social capital above an indefinable threshold (UN, 2011). Otherwise, the entire organization will indeed gradually wander away from the original cooperative principles and the pursuance of multiple goals.[15]

4. The revelation of cooperative banking features

The European Association of Cooperative Banks (EACB) and the International Cooperative Banking Association (ICBA) made efforts to emphasize the special nature of cooperative banks in various reports well before and during the crisis. One of the messages is that the customer has always been and is still at the core of their operations and, at a local level, members still have a say in the local member bank's policy (EACB, 2005). It is also suggested that cooperative banks have an 'impact presence' on the entire banking market. To define and quantify this presence value, however, proves to be a difficult exercise. This statement namely hints at a noticeable causal relationship between cooperative banks and society and the structural characteristics of banking markets. Such a causality is hard to demonstrate empirically, as it really only manifests itself on the entry or exit of a large cooperative bank (Groeneveld and De Vries, 2009) or

[15] Cornforth (2004) contains a comprehensive overview of the cooperative corporate governance from a theoretical point of view.

perhaps in times of crisis as will be investigated in this paper. But it also works the other way round: society and the market environment influence cooperative banks.

Another claim is that the orientation of the domestic cooperative banking part inside ECBGs has remained relatively unaltered (EACB, 2005). The first-level cooperative banks are still predominantly targeted towards retail banking and servicing the real economy, i.e. private individuals and SME's, because effective member influence would force them into this direction. This would also translate into a lasting engagement with local regions and the real economy, which would be visible in relatively dense branch networks, i.e. physical proximity to customers and members. It is also stated that proximity is further reinforced through the participation in numerous social networks and by actively supporting the local communities. Consequently, the well-known academic issue of asymmetrical information between the bank and the customer when providing loans could be less pronounced in the cooperative banking part. With their assumed strong local ties and networks, local banks are in theory better equipped to assess the creditworthiness and risks of customers at a local level. The danger of moral hazard and adverse selection would consequently be more limited. If that is true, it can be assumed that – alongside the asserted focus on customer value – this differentiator will be reflected, particularly in unfavourable times, in relatively higher lending to households and corporate customers.

Retail banking is mainly about relationship banking which goes hand in hand with a long term orientation.[16] This would imply that especially local cooperative banks within ECBGs do not aim at – short term – benefits of their operations, services and products for members and customers and themselves, but champion a 'dual bottom line' approach. They do seek profit, but also strive for economic and social welfare in local communities.[17] Consequently, their returns on equity or assets are expected to be more stable and lower. Their risk profile should be also comparatively moderate.

Despite all the changes in the financial structures and composition of the balance sheets, it is also stated that ECBGs still add a considerable part of their net profits to their capital and

[16] Note that this alleged longer term perspective and priority to collective and sustainable interests are precisely the behavioural changes which the public, politicians and regulators are demanding from financial institutions following the credit crisis.
[17] De Noose (2011) stresses that German savings banks also have this dual bottom line approach.

reserves, which would lead to a solid capitalization and relatively high ratings. These comparatively high ratings would also stem from existing legally-binding cross guarantees to connect different entities of the group as a risk management tool. Rating agencies tend to view this type of arrangement as less risky since the entire organization is viewed as a single consolidated risk unit.

Until the breakout of the credit crisis, the position papers and background documents were sometimes put aside by 'outsiders' due to their predominantly qualitative character and lack of 'empirical' proof for the claims. It is undeniable, however, that cooperative banks stand out regarding their history, structure, organizational form and original business objectives from other banks. But these aspects were often ill understood and misinterpreted as elaborated in previous paragraphs. The main observable differentiator of ECBGs is their specific corporate governance with some degree of member control. Member influence surely cannot rule out policy mistakes, but can basically bridge the distance between executives and policy makers and the most important stakeholder, the customer. Theoretically, this intrinsic feature is *only* a precondition for ECBGs to be able to operate or position themselves differently in the market.

The subsequent crises have positively changed the opinions and views about cooperative banks over the last five years. Preliminary evidence indicated that the cooperative organizational form in general had performed significantly better than other organizational forms after the global financial crisis of 2007/8 and the following recession (Birchall and Hammond Ketilson, 2009; Groeneveld, 2011; xxx). Policy makers, regulators and academics started to wonder whether these achievements could indeed be related to asserted specifics of the cooperative – banking – model. Furthermore, the interest in the cooperative business model was boosted by the United Nations which declared 2012 as the International Year of Cooperatives (UN, 2011). In addition, international consultancy firms (Deloitte, 2012; McKinsey, 2012; Oliver Wyman, 2012) and The Economist (2010) started to pay attention to the merits and characteristics of the cooperative business model.

The financial crisis disputed the alleged shortcomings of the cooperative – banking – model and the perceived superiority of the shareholder value business model (Davies, 2009). For a long time, comparisons of the pros and cons of corporate governance structures between cooperative banks and investor-owned banks were sometimes misleading as they were based on incorrect

starting points. The issue is that it is not always clear on what basis the comparison was being made: (i) the ideal investor-owned bank, (ii) the ideal cooperative bank, (iii) the actual investor-owned bank, and (iv) the actual cooperative bank model. In other words, it is necessary to distinguish between how institutions behave in some abstract, theoretical or ideal state, and the way they operate in practice. The ideal investor-owned model has clear-cut principles defining objectives, accountability and control. Therefore, the corporate governance of these banks was deemed to be superior to the observed cooperative model where many theoretical flaws of any corporate governance were thought to apply in practice (Kalmi, 2007; Fonteyne, 2007).

However, recent experience unambiguously points to ill-functioning aspects of corporate governance arrangements in investor-owned banks: the actual investor-owned model is not ideal in practice.[18] At the same time, the theoretical shortcomings of corporate governance arrangements in cooperative banks were magnified and exaggerated for a long time (Groeneveld and Llewellyn, 2012). For instance, it has often been – rightly – questioned whether cooperative banks really behave in the interests of their customers and members, particularly in light of their sometimes erratic international strategies. Moreover, 'hard proof' for greater customer satisfaction and stronger customer advocacy at ECBGs compared to other banks is not readily available, though some surveys do hint at less loss of trust of customers in cooperative banks (Ensor, 2012; Oliver Wyman, 2012). Be that as it may, one can equally well assert that the management of quite some investor-owned banks has visibly failed to operate in the interests of their shareholders by following strategies to maximize shareholder value, which caused huge losses and write downs and necessitated large-scale government intervention in the last few years.[19] In conclusion, it is tendentious to compare the actual behavior of a cooperative bank model with some mythical ideal form of investor-owned model. It must be acknowledged that in practice, both forms operate imperfectly and, in the world of the second-best, no safe conclusions can be drawn regarding the superiority of one form over the other.

---

[18] Accountability to shareholders does not operate perfectly or according to the standard text-book regarding the actual drawbacks of the investor-owned model. Many institutional shareholders are arguing that, in practice, their ability to bring inefficient management to task is limited. Besides, institutional investors often do not believe they have significant control, and many believe it is not their function to exercise monitoring and control of the companies in which they hold shares. The discipline of the capital market works very imperfectly for listed banks as well. Companies are not in practice motivated exclusively by the maximization of share-holder value: they may follow a wide variety of objectives and are conscious of a multitude of different stake-holders' interests which at times may conflict with the interests of shareholders.

[19] Northern Rock, Fortis, UBS and Royal Bank of Scotland are clear examples of this.

Another viewpoint regarding cooperative banking has also changed recently. It is increasingly realized that cooperative banking is not synonym to some kind of 'philantrophic' banking which mainly exists to achieve social objectives (Bonin, 2012). Cooperative banks simply need to have adequate and innovative products and services at fair prices and state of the art distribution concepts. These are the basic conditions needed to survive and operate on banking markets and to be chosen by customers as primary bank. Cooperative banks must be entrepreneurial, cost-effective, efficient and business like organizations. Otherwise, they will be unable to deliver customer value, to realize sufficient profits to ensure the continuity of their banking activities and to cope with heavy and intensifying competition. The cooperative business model demands cost and revenue levels for banking activities that do not deviate substantially from the standards of the banking industry. Only if these business conditions are fulfilled, can cooperative banks in principle use their corporate governance to position themselves and operate differently in the market, i.e. with a longer term perspective focused on customer value and pursue non-financial goals (Oliver Wyman, 2008).

5. Hypotheses

The aftertaste of recent articles and reports is that ECBGs still have internal characteristics and a business orientation which can be traced back to the key features of the former credit cooperatives. In short, member ownership is believed to contribute to continuity and a cautious course of ECBGs via specific internal governance mechanisms. If true, these specifics will show up in a divergent performance of ECBGs compared to other banks. We shall test whether the proclaimed differentiators and assertions from previous sections are valid and visible throughout recent business cycles. Concretely, we have inferred four main interrelated hypotheses:

Hypothesis 1: ECBGs have a strong customer focus and client proximity

The alleged engagement with local communities and the real economy as well as member influence should result in relatively dense branch networks. If ECBGs really put the customer interests first, are not risk seekers or profit maximizers (with a view to obtaining excessive bonuses), this should be visible in recent data, especially in times of crises. Indeed, many consumers lost confidence in their financial institutions and financial advisors and were not satisfied with their behavior and performance in recent years. Moreover, the absence of explicit profit targets due to the proclaimed focus on customers' interests, member influence and the

emphasis on retail banking is expected to show up in lower average returns on assets (and equity) than investor-owned banks.

Hypothesis 2: ECBGs aim at austerity and efficiency in operations

Austerity and efficiency in business operations were important characteristics of local credit cooperatives, which were set up with members' money. Since member ownership still exists, frugality and efficiency should ideally be virtues of present ECBGs as well. Among other things, this implies that the absence of a profit objective, or a lower profit requirement, may not lead to inefficient operations. With regards to income, inefficiency would mean that ECBGs set a suboptimal price and that efficiently operating competitors realize a concealed 'excess return', i.e. profit on top of the 'cooperative price'. Regarding costs, the stated focus on customer value cannot be an excuse for more relaxed cost control and inefficient operations. We shall test this hypothesis by comparing cost-income indicators of ECBGs with those of other banks. These ratios are not beatific, but are assumed to be simple and quantifiable proxies for austerity and efficiency.

Hypothesis 3: ECBGs are relatively stable institutions with focus on retail banking

Because of member ownership, ECBGs are believed to be mainly focused on retail, commercial and SME banking. Consequently, they would have a limited appetite for non-core add-ons and a bias towards serving and financing 'real economy' activities. This would be accompanied by a long-term view of relationships with local businesses and municipalities and an innate focus on customers. This area of banking is associated with relatively stable income streams across business cycles and a moderate risk profile. Hence, ECBGs are assumed to be fairly stable organizations with moderate returns on assets/equity and a relatively large retail banking business.

Hypothesis 4: ECBGs have a strong capitalization and low risk profile

A natural conservatism should be created by distributed, independent governance with member influence and ownership and relatively limited access to third party capital. This could mean that ECBGs steered away from riskier activities and practices, for example operating at relatively high levels of tier 1 capital (Laeven and Levine, 2009). The higher capitalization should in turn result in lower returns on equity compared to banks with another business orientation.

6. Sample description

The main objective of this article is to test these hypotheses by investigating the performance of fifteen ECBGs vis-à-vis entire banking sectors in eleven countries over the last turbulent decade. These countries and some key characteristics of the included ECBGs are listed in table 1.[20] Because of their specific nature, different reporting requirements and heterogeneity, it is inappropriate to use databases like Bankscope to collect data on cooperative banks. These databases contain inconsistencies and many caveats regarding cooperative banks. For some cooperative banks, consolidated data for the entire banking group are reported, whereas in other cases unconsolidated data for – small – individual local cooperative banks are given. If these differences are ignored, one easily arrives at misleading conclusions. Actually, data on individual local cooperative banks cannot be compared with those of other types of banks, which often pertain to consolidated group figures. Besides, individual cooperative banks usually obtain all kinds of support from a central institution (APEX), e.g. products, IT systems and HR services, to reach economies of scale inside the entire cooperative banking group.

For our empirical investigation, we combine several data sources. We use consolidated data for ECBGs which are composed by these groups themselves.[21] If possible and appropriate, we have corrected the figures for major breaks in the time series caused by sizeable mergers and/or acquisitions to be able to make sensible comparisons between ECBGs and entire banking sectors. In countries with more than one cooperative banking group, we have constructed aggregated indicators by using total assets of individual cooperative groups as weights.

Data on entire banking sectors in the countries under review are collected from national central banks or supervisory agencies as well as from the IMF and European Central Bank. The period of analysis is determined by the availability of good quality data and spans either 1997-2011 or 2002-11. Both periods encompass years of strong economic growth and financial stability as well as years of economic slack and financial instability. This feature offers the opportunity to

[20] We have restricted our empirical analysis to European cooperative banking groups for two main reasons. The first one is that reliable data on cooperative banks in other parts of the world are hardly available. Secondly, cooperative banks in other parts of the world operate in totally different economic, regulatory and social circumstances and differ regarding their development phase and maturity. So, the overall analysis would be obscured by situations that differ considerably across continents.

[21] In some cases, the consolidated figures were constructed upon request by the author. The data for the Italian Banche Popolari are an example.

test whether the asserted specifics of ECBGs really lead to different performances compared to those of entire banking systems in economically and financially prosperous and difficult times.

7. Empirical analysis of ECBGs

7.1 *Members*

As stated before, ECBGs frequently publicly assert that they do not aim at maximising profits but customer value (EACB, 2005). Ideally, one would like to verify this assertion with direct insights and opinions from customers, i.e. 'hard data' or empirical evidence. Basically, it comes down to the perception of customers whether ECBGs banks 'walk their talk'. Or in other words, keep their promises and treat their customers fairly. Unfortunately, information about the perception and appreciation of customers of this proclaimed customer focus and the maximalization of customer value is not available for many banks, including ECBGs. Indeed, some ECBGs execute customer satisfaction surveys on a regular basis, but they do not convey the results for competitive reasons. Besides, we feel that customer satisfaction measures do not expose the real issue in client relationships, which is about the level of emotional engagement of consumers with their bank and vice versa.

A more accurate indicator would be the level of 'customer advocacy'; the perception by customers that their financial institution does what is right for their clients, not just what is right for the bottom line.[22] Trust and confidence are the key words in this respect. Some recent surveys and reports seem to suggest that cooperative banks have suffered less than other financial institutions from a loss of trust in recent years, but the empirical evidence remains flimsy (Michie, 2010; Ensor, 2012; Oliver Wyman, 2012).

[22] In the midst of the recession and ongoing sovereign debt crisis in the second quarter of 2011, only 29% of Europeans believed their bank acted in their best interest (Ensor, 2012). According to this survey, the top-rated banks regarding customer advocacy appeared to keep things simple, operate transparently, build trust, and treat their customers benevolently.

Table 1 Branches and members in individual countries

Countries	Branches (1997 = 100)				Member to population ratio			# Members (1997 = 100)
	ECBGs		*TBS*[1]					
	2004	*2011*	*2004*	*2011*	*1997*	*2004*	*2011*	*2011*
Austria	73	73	129	135	29.8	28.2	28.7	102
Denmark	98	119	70	56	10.4	7.7	5.3	53
Finland	91	72	120	117	12.6	21.1	24.7	205
France	125	141	84	67	25.2	29.4	34.0	147
Germany	76	70	70	56	17.3	18.8	20.8	120
Italy	139	178	113	111	3.0	3.0	4.0	140
The Netherlands	71	48	50	38	3.4	8.9	11.1	355
Portugal	121	135	112	135	2.6	2.9	3.8	148
Spain	132	141	104	102	2.8	3.9	5.3	220
Switzerland	92	83	78	78	10.0	16.9	22.1	246
Total average	*104*	*112*	*89*	*80*	*12.9*	*14.8*	*16.9*	*140*

Source: ECBGs and ECB.

Note: Data of French and total ECBG branch offices are adjusted for major breaks caused by the acquisition of Crédit Lynnois by Crédit Agricole in 2006 and the merger of Banque Populaire and Caisse d'Eparges in 2009.

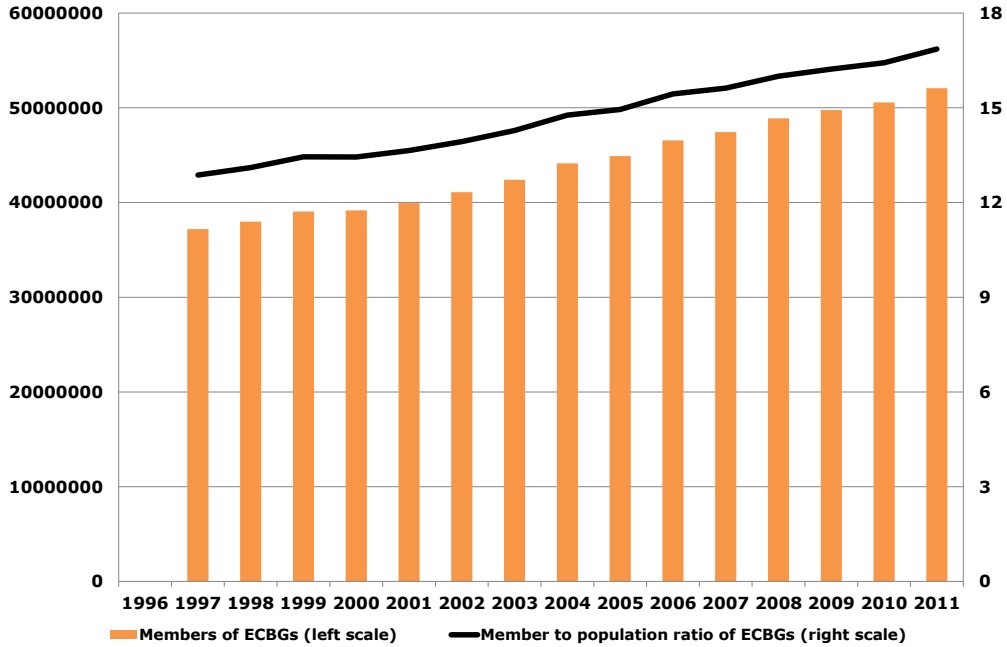
[1] Number of branches of all other banks, i.e. excluding branches of local cooperative banks.

Hence, we – have to – confine ourselves to indirect proxies for customer satisfaction and advocacy. We look at member to population ratios[23] and market shares which contain some implicit information about the attractiveness and popularity of ECBGs. Chart 2 shows the development of the number of members and member-population ratio of the included ECBGs in their domestic markets. Table 1 offers additional country insights. Strikingly, the number of members has increased every individual year, i.e. also in the era of underexposed cooperative banking features (see Section 3). Total number of members rose from around 37 million in 1997 to approximately 52 million in 2011, which equals a growth of about 40 per cent. On average, the member base grew at an annual growth rate of almost 2.5 per cent since 1997. In relative terms, the average member to population ratio showed an upward trend; the ratio rose from 12.9 in 1997 to 16.9 in 2011. As Table 1 demonstrates, every ECBG attracted more members, with the notable exception of the Denmark.[24] The large divergences in the level of this ratio can be explained by differences in the market position of individual ECBGs as well as variations in the attitude towards membership policy.

[23] The membership ratio, defined as the percentage of customers that are members, cannot be calculated with great precision. The reason is that not all ECBGs report separate data of customers of (i) local cooperative banks and (ii) other domestic or foreign group subsidiaries. Besides, the customer figures are clouded by double counting.

[24] The reason for this decline is the reduced business activity of Nykredit in the mortgage market due to tough competition. Until 2012, customers of Nykredit became automatically members when they got a mortgage loan. Therefore, in 2003 Nykredit acquired Totalkredit in order to strengthen its competitive power and win back market shares. In 2012, Nykredit opened up for the opportunity for Totalkredit customers to become member (on a voluntary basis).

Chart 2 Number of members and member to population ratio



Source: National demographic statistics and ECBGs.

Implicitly, the absolute and relative rises in members point to an increasing popularity of the cooperative banking model. The underlying reasons for the absolute and relative surge in members are hard to isolate and will probably be of a financial and immaterial nature.[25] It merely indicates that ECBGs have succeeded in attracting new members with their products, advisory services, client approach, business models or other features. The increase also signals confidence of customers in ECBGs and corroborates tentative results of some fragmented surveys (Ensor, 2012; Oliver Wyman, 2012). Indeed, clients are presumably not very eager to become a member if the level of trust and satisfaction would be low. Here, it should be stressed that membership is voluntary in most countries to date. The rise in the number of members varies widely across ECBGs. This presumably stems from differences in membership policy and differences in the competitive environment. The Dutch Rabobank witnessed by far the largest

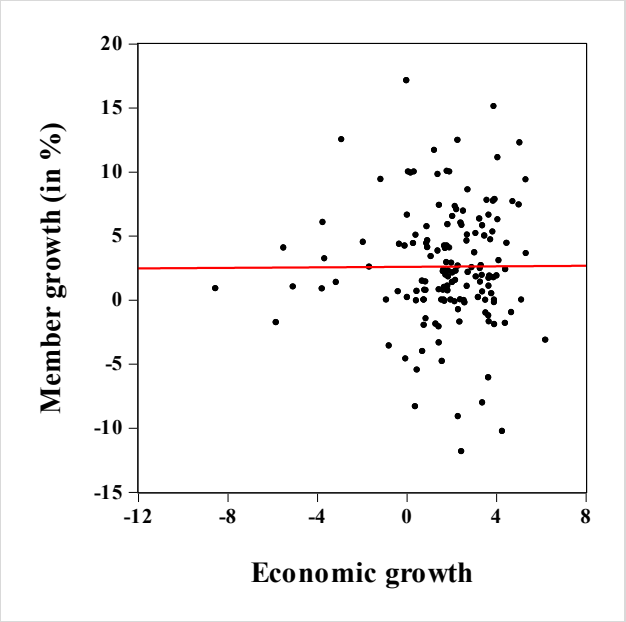
[25] Reasons to become a member are manifold (EACB, 2007). It all starts with trust and confidence in the bank. When these elements are present, marketing and brand research shows that customers attach great importance to both material and immaterial aspects. For instance, the extent to which customers feel that the bank acts in their interests, the identification with the brand, access to the bank's networks and knowledge, the stability/duration of relationships, the way banks deal with environmental and sustainability issues, the degree of product and price transparency, etc.

inflow of members (plus 250 per cent)[26], followed by considerable expansions in Switzerland, Spain and Finland.

Box 2 Correlation between economic growth and member growth

Another implicit assertion is that customers could particularly notice the difference between cooperative banks and investor-owned banks in economically difficult times. One line of reasoning implies that well-capitalized cooperative banks can stand longer behind their customers in bad times than other banks, because they have to deliver shareholder value and/or make profits for external investors. If true, one would expect that retail customers would be more inclined to become a member in periods of weak economic growth. To verify this assumption, we performed correlation tests. Scatter diagram xx plots annual economic growth in all countries against annual member growth of all ECBGs under review for the period 1997-2011. No correlation between economic growth and member growth can be detected. The estimated regression line is virtually flat and the correlation coefficient is almost zero. This result is robust for various sub-periods.

Chart 3 Scatter diagram of economic growth and member growth



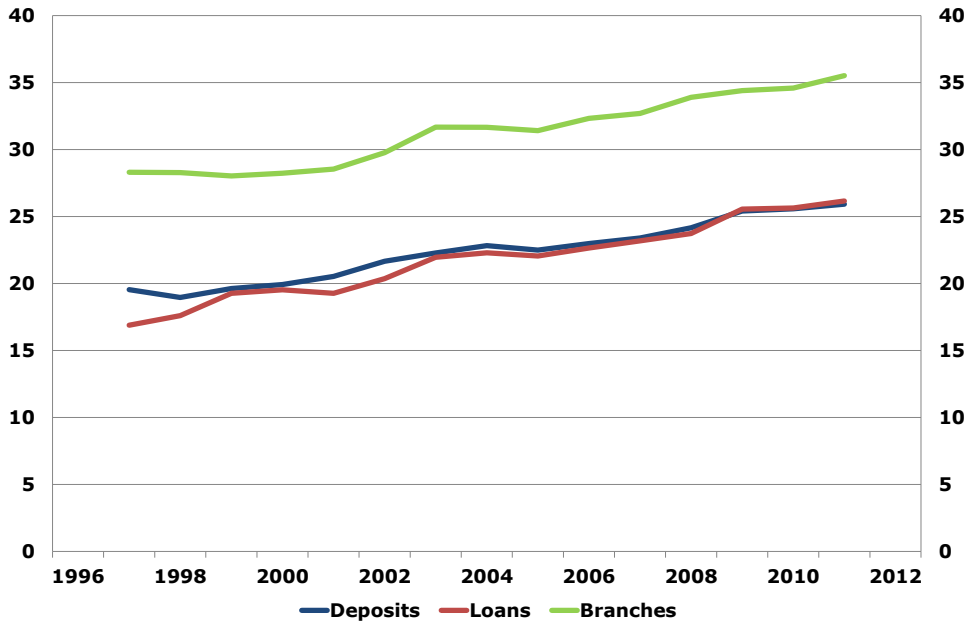
7.2 Domestic loan and deposit market shares

The increase in the number of members has translated into rising market shares in national retail banking markets. Since 1997, ECBGs succeeded to increase their domestic market shares in mortgages and consumer loans as well as in private savings steadily and continuously

[26] This can be attributed to a very active membership policy after the finalization of the Great Cooperative Debate in 1998 (see Mooij, 2009).

throughout economic cycles. On average, both retail market shares rose by about 10 percentage points to 26 per cent in 2011. In the turbulent years 2007-11, ECBGs also strengthened their domestic market positions, but the increase did not differ significantly from that in the other sub-periods. These rises imply shifts of many billions of euros in loans and deposits towards ECBGs. The annual increases were mostly caused by endogenous growth, though in some years acquisitions or mergers were also partly responsible for the rise in overall market shares.[27] The underlying data show that on balance no individual ECBG lost domestic market share over this period. Two thirds of all ECBGs increased their market shares, whereas the market position of other ECBGs remained stable. Like the substantial increase in the number of members, rising market shares are just signs that customers felt relatively more attracted to ECBGs for a myriad of different reasons.

Chart 4 Average market share of deposits, loans and branches of ECBGs (as %)



Source: calculations based on data from individual ECBGs and the ECB.
Note: The unweighted market shares pertain to domestic loans to private households (mortgages and/or consumer loans) and domestic retail deposits of households. The market share of branches is defined as the branches of the local cooperative banks as a percentage of total bank offices.

[27] In France, ECBGs acquired several private banks over the time sample. The acceleration of market shares in 2009 was partly due to the merger between Crédit Mutuel and Caisse d'Epagnes.

7.3 Total loan and deposit growth

Total loan and deposit growth rates shed additional light on the performance and specifics of ECBGs. Chart 5 and table 2 provide visual and statistical information about – the variance of – total (inter)national credit growth to the non-financial private sector since 1997 for ECBGs (CG_{ECBG}) and entire banking sectors (CG_{TBS}). A couple of salient aspects stand out. CG_{ECBG} is fairly stable and equals 8.3 per cent in every sub-period considered. CG_{ECBG} also surpassed CG_{TBS} in every sub-period. Hence, ECBGs are more stable loan providers to the real economy than all other banks. The standard deviation of CG_{TBS} is generally much higher as table 2 demonstrates.

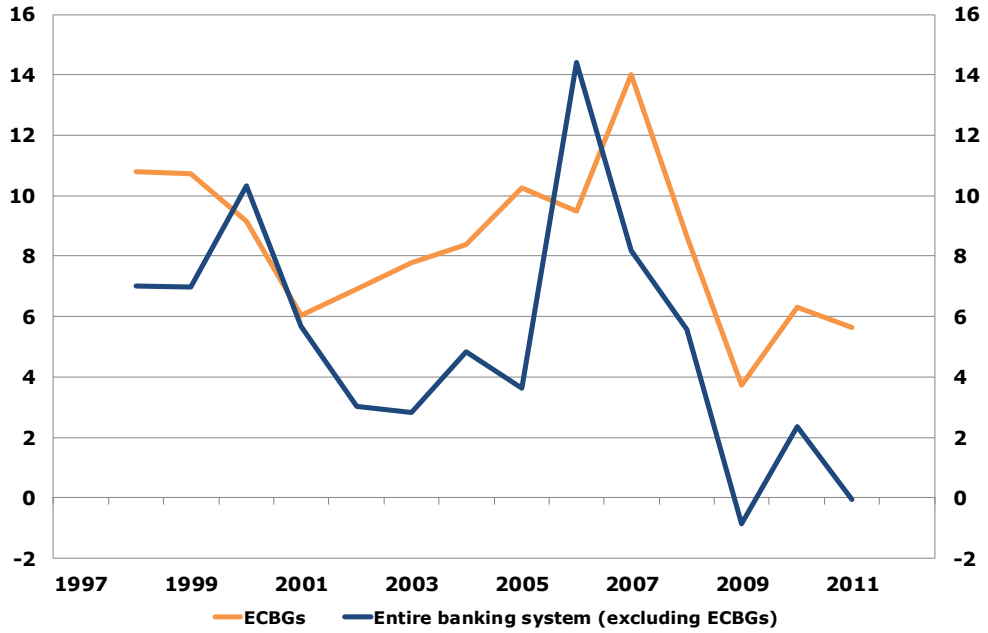
Table 2 Average loan and deposit growth and loan to deposit ratio

Period	Loan growth (standard deviation in parentheses)		Deposit growth (standard deviation in parentheses)		Loan to deposit ratio	
	ECBGs	***TBS***	***ECBGs***	***TBS***	***ECBGs***	***TBS***
1997-2004	8.3* (2.6)	5.8 (2.6)	5.7* (2.4#)	4.0 (2.9)	0.92*	1.31
2005-2011	8.3* (1.8*)	4.7 (5.3)	6.1* (1.4*)	8.1 (6.1)	1.11#	1.18
1997-2011	8.3* (3.4*)	5.3 (4.0)	5.9 (1.9*)	6.1 (5.0)	1.01*	1.25

Source: own calculations based on figures from ECBGs, ECB and national statistics.
Note: time series are adjusted for major breaks caused by mergers and acquisitions. ECBGs stand for European cooperative banking groups and TBS stand for total banking sectors. Fifteen ECBGs from ten countries are included in the sample. An asterisk (*) and hatch (#) denotes that the variable for European cooperative banking groups is statistically different from that for total banking sectors at the 1% and 5% significance level respectively.

Chart 5 shows a considerable deceleration of CG_{TBS} compared to CG_{ECBG} after 2006 and even dropped below zero in 2009 and 2011. CG_{ECBG} also slowed down remarkably, but ECBGs were still in a position to expand their credit portfolios in sub-period 2005-11 characterized by economically difficult times. This can presumably be largely ascribed to a relatively good capitalization of ECBGs (see section 7.5 below), which allowed them to meet the credit demand of their customers for a longer period of time. Indeed, quite some other banks needed state support to survive and consequently had much less room to grant loans in their deleveraging process. Hence, loan data illustrate the relatively close ties of ECBGs to the real economy as well as their focus on retail lending.

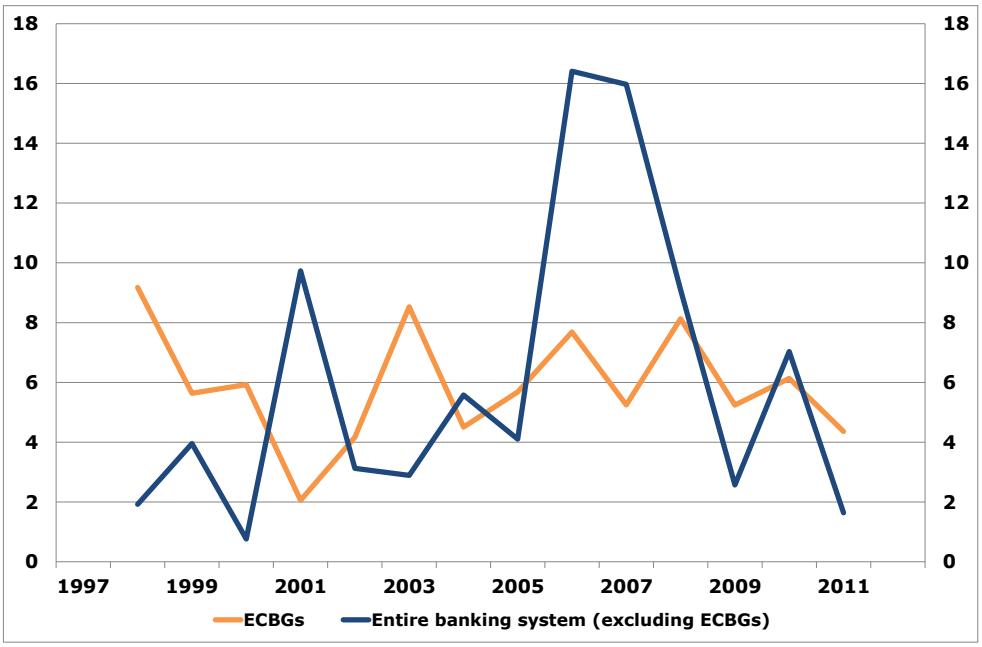
Chart 5 Average credit growth



Source: ECBGs, ECB and national statistics.
Note: ECBGs and TBS stand for European cooperative banking groups and total banking sectors, respectively. The data refer to all (inter)national credits and loans to the non-financial private sector of ECBGs and all other banks.

Regarding deposit growth, one can also observe some striking developments over the last decade. Like credit growth, deposit growth at ECBGs (DG_{ECBG}) shows a smooth development compared to that at all other banks (DG_{TBS}). ECBGs experienced a fairly stable growth of an important funding source (deposits); the variance of DG_{ECBG} was significantly lower than the variance of DG_{TBS}. The large swings in DG_{TBS} are remarkable. First, we can witness a sharp acceleration of DG_{TBS} from around 4 per cent in 2005 to about 10 per cent in 2006-08. During this period, private banks presumably needed funding for the strong expansion of their loan portfolios as well as for other investments with higher returns, which appeared to be relatively risky afterwards. Immediately after the initial credit crisis broke out, DG_{TBS} decelerated sharply, which continued in the subsequent years when a deep economic recession and banking crisis in Europe unfolded.

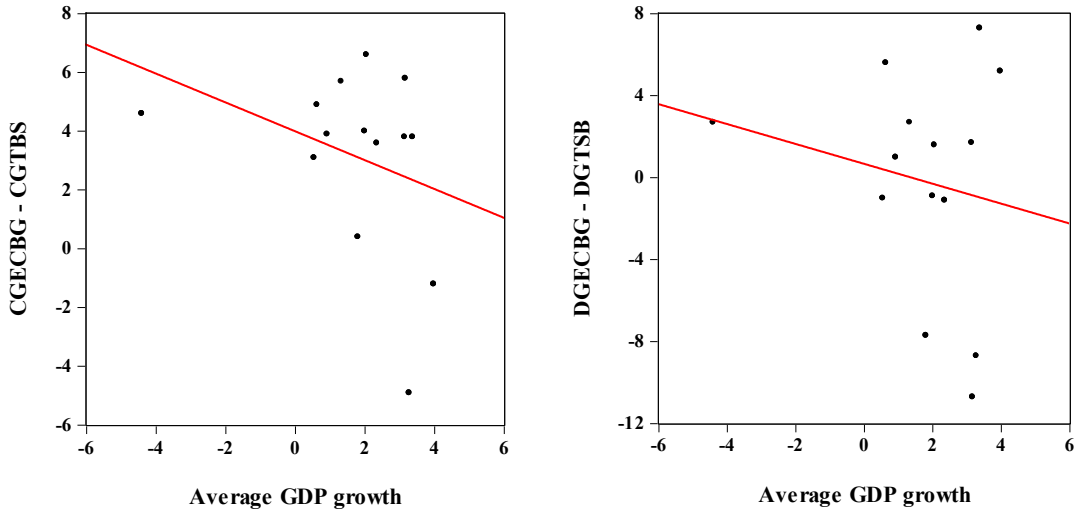
Chart 6 Average deposit growth



Source: ECBGs, ECB and national statistics.
Note: ECBGs and TBS stand for European cooperative banking groups and total banking sectors, respectively. The data refer to all (inter)national savings and deposits of the non-financial private sector at ECBGs and other banks.

These observations hint at diverging loan and deposit growth rates between ECBGs and TBS in different economic environments. To check this empirically, we have performed correlation tests between (CG_{ECBG} - CG_{TBS}) and (DG_{ECBG} - DG_{TBS}) on the one hand and average economic growth on the other over the period 1997-2011. Chart 7 shows the resulting scatter diagram and an estimated regression line. Indeed, both (CG_{ECBG} - CG_{TBS}) and (DG_{ECBG} – DG_{TBS}) are significantly negatively related to economic growth with correlation coefficients of respectively -0.35 and -0.25. In a favourable economic climate, non-cooperative banks grant relatively more loans and obtain comparatively more savings and deposits from households and enterprises. In times of moderate economic growth, ECBGs attract relatively more savings and deposits and provide proportionally more loans than all other banks. This negative correlation could stem from the fact that uncertainty about the health of other banks in troubled times provokes customers to choose the – perceived and acknowledged – more financially solid ECBGs. ECBGs appear to fulfil a more stable role in the financial intermediation process. Put differently, customers tend to select banks with a higher risk profile and a more generous credit policy in a booming economy. These findings point to a safe haven effect and a risk averse attitude of ECBGs.

Chart 7 Correlation between differences in credit and deposit growth rates and average economic growth (1997-2011)



Dividing total loans by total deposits yield so-called loan to deposit ratios (LDRs). These ratios indicate the extent to which banks depend on capital market funding. Over the entire time span and first sub-period, LDR_{ECBG} was significantly lower than LDR_{TBS}. ECBGs are on average less dependent on volatile and uncertain external funding than TBS. However, in the turbulent second sub-period, a remarkable convergence between both LDRs occurred; LDR_{ECBG} increased, whereas LDR_{TBS} came down. However, the difference remained significant at the 5% confidence level in 2005-11. When the crisis hit, the high LDR_{TBS} proved to be unsustainable and necessitated large scale government intervention and a subsequent cut back in credit growth on behalf of private banks in Europe (CEPS, 2010). The LDRs are yet another expression of the different nature of ECBGs with their predominant focus on retail banking.

7.4 Proximity and dense branch networks

Financial cooperatives have historically maintained extensive branch networks to support strong links to their members and communities. Although ECBGs stress the need to aim at increased efficiency in their networks as a result of mobile banking, contactless payments and integrated cash management, they still operate with relatively dense networks. The average market share for branch offices of ECBGs even shows an upward trend since 1997. It is approximately 10 percentage points higher than that for loans and deposits. This fact supports hypothesis 1 that ECBGs usually have relatively dense branch networks in their home markets. On balance, the number of branches of ECBGs increased from around 54,000 in 1997 to more than 60,000 in

2011, whereas total bank branches decreased from 191,000 to 170,000 over this period. As a result, ECBGs have strengthened their local presence.

Client proximity has been considered as a key driver of cooperative bank's success in maintaining customer loyalty and understanding local customer dynamics and risk profiles (EACB, 2005). However, the pace of technological change is accelerating and new models for customer interaction with banks outside the traditional branch model are gaining momentum. Moreover, investor-owned banks have increased focus on their retail clients over the last years as part of their deposit gathering strategy, thus narrowing some of the differentiation versus cooperative banks. Though on average ECBGs remain committed to supporting wide branch networks as a key part of financial services industry infrastructure, they are also heavily investing in new online and e/mobile payment channels.

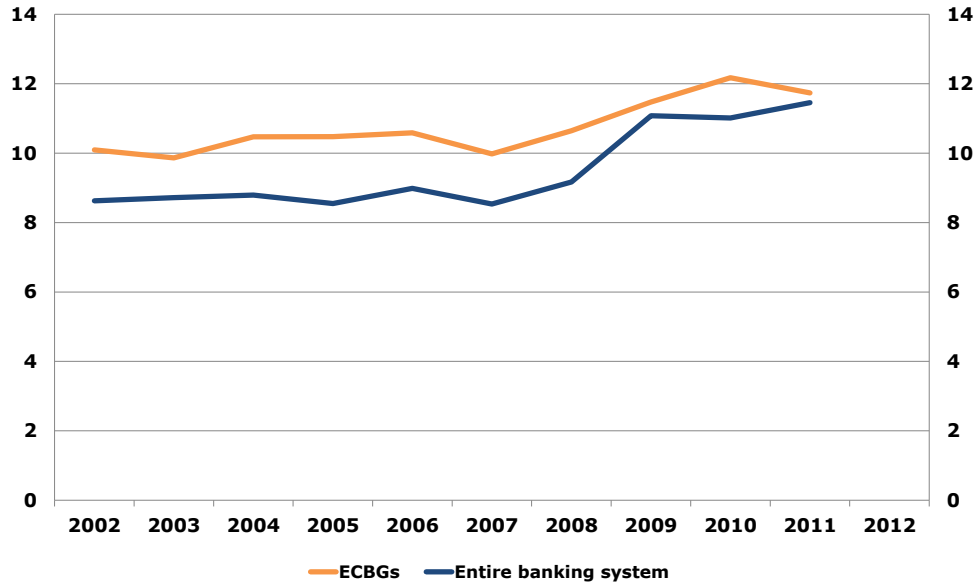
As a further example of the heterogeneity of ECBGs, table 1 contains branch data for both ECBGs and national banking sectors. The table reveals that the market share increase was predominantly due to the expansion of branch office networks of ECBGs in Italy, Spain, France, Portugal and Denmark, respectively. Particularly, Italian ECBGs have considerably expanded their networks. The rise in branch market share is to a lesser extent caused by the fact that ECBGs have slimmed down the number of branch offices to a somewhat lesser extent than their competitors in respectively Switzerland, Germany and the Netherlands. Here, the strong consolidation in both the Netherlands and Germany catches the eye. On the other hand, Austrian and Finnish ECBGs lost branch market share, because they closed down branches whereas all other banks actually opened new bank offices. The divergent distribution network policies of ECBGs and different developments in the density of country's branch networks again mirror diversity in cooperative banking as well as differences in market and competitive conditions in their home markets.

7.5 Capitalization

Chart 8 shows the average tier-1 ratio for ECBGs (tier-1_{ECBG}) and national banking sectors. This ratio reflects the amount of equity relative to the risk-weighted assets of ECBGs and national banking sectors. It can be concluded that ECBGs maintain a comparatively high level of capital, e.g. the risk profile of ECBGs is more conservative than that of all other banks. There are a number of explanations for this (Oliver Wyman, 2008). Firstly, high capitalisation is connected with the strong focus of ECBGs on retail operations, for which relatively high capital requirements prevail. Secondly, ECBGs add a major portion of their profit to the capital reserves

each year.[28] In effect, they build the core of their equity base the hard way: through increasing retained earnings. Thirdly, solid capitalisation is simply necessary for ECBGs with a view to continuity. ECBGs have less additional options to raise capital – after sizeable losses – than investor-owned banks, as most of them cannot issue shares.[29] Besides, this fact could mitigate the risk appetite of executives, because they know that capital cannot be easily replenished after incurring considerable losses.

Chart 8 Tier 1 ratio



Source: ECBGs, ECB, IMF and national supervisory agencies.

Chart 8 shows that ECBGs entered the crisis period starting in 2007 with a relatively strong capitalization and even strengthened their capital position up to 2010 independently. In 2008 and 2009, quite some private banks improved their battered capital positions with government aid or acquired fresh capital. In 2011, tier-1_{ECBG} declined somewhat, whereas tier-1_{TBS} continued to improve slightly. This development is again a reflection of the strong focus of ECBGs on serving the real economy. At that time, many European countries just had gone through a major recession or even re-entered into a new one following the credit crisis. Given the emphasis on

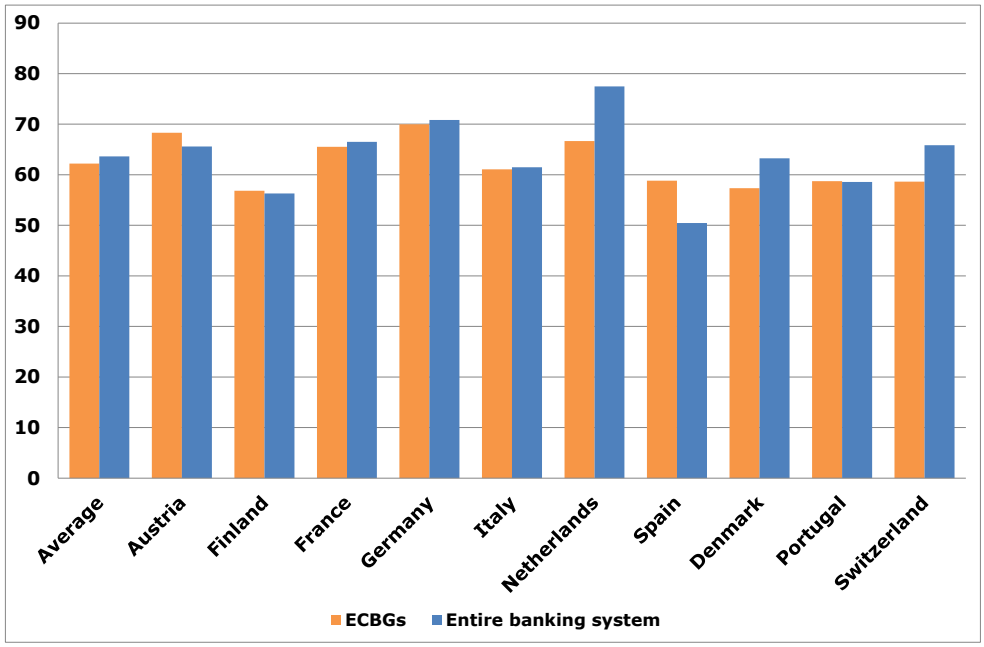
[28] However, some ECBGs do pay limited dividends to members.
[29] This impossibility to issue shares on the stock exchange is not a feature exclusive to most non-listed ECBGs, though. The recent financial crisis has demonstrated that quite some listed banks were unable to issue shares, when their capital vanished into thin air as a result of substantial losses and write-downs. Instead, quite a few listed banks had to be rescued by some form of state support. Moreover, without a certain profit level, investors will not be inclined to buy additional shares. Consequently, the bank in question will be unable to expand its capital buffer by issuing new shares.

retail banking, the rising number of failures in the SME sector hit cooperative banks relatively hard.

7.5 Efficiency

If the claims regarding the business orientation and principles of ECBGs are true, benchmarking of expenses and revenues of ECBGs against banking sector standards is somewhat misleading. Be that as it may, it is a fact that ECBGs face competition from other banks with increasingly sophisticated social agendas and less emphasis on profit maximalization. Hence, ECBGs must build scale and operate efficiently to withstand competition. Chart 9 displays cost-to-income ratios for ECBGs (CI_{ECBG}) and entire banking sectors (CI_{TBS}) in individual countries. Over different sub-periods, CI ratios of individual ECBGs do not deviate significantly from CI ratios of entire banking sectors. This is in line with other preliminary and less comprehensive studies (Moody's, 2003; Čihák and Hesse, 2007; Oliver Wyman, 2008). Moreover, the higher costs of relatively extensive branch networks of ECBGs were more than offset by higher revenues. This outcome suggests that they use their assets and capital base in a highly efficient way.

Chart 9 Average cost-income ratios (2002-2011)



Source: ECBGs, ECB and national supervisory authorities.

7.6 Stability

We measure the stability of ECBGs and entire banking systems by using the Z-score. The Z-score is a widely used measure of bank's distance to default (Boyd and Runkle, 1993; Maechler *et al.,* 2005; Laeven and Levine, 2006; Mercieca *et al.*, 2007) that is monotonically associated with the bank's probability of failure (thus bank risk is defined as the inverse of the Z-score). This variable is defined as:

$$Z\text{-}score_i = (ROA_i + E_i/A_i) / \sigma(ROA_i),$$

Where:
ROA is the Return on Assets
E/A stands for equity capital over total assets
σ (ROA) is the standard deviation (volatility) of ROA calculated as a four-year rolling time window[30]
i denotes European cooperative banking groups (ECBGs) or total banking systems (TBS)

Table 3 Components of Z-scores in three sub-periods, unweighted averages

	Z-score		Equity to Assets ratio (in percentage points)		Return on Assets (in percentage points)		Standard deviation of ROA	
	ECBGs	*TBS*	*ECBGs*	*TBS*	*ECBGs*	*TBS*	*ECBGs*	*TBS*
2002-06	91.7*	64.6	6.33*	5.88	0.54	0.58	0.10*	0.14
2007-11	62.8*	28.2	6.44*	5.18	0.35*	0.25	0.20*	0.29
2002-11	77.2*	46.4	6.39*	5.53	0.44	0.42	0.15*	0.22

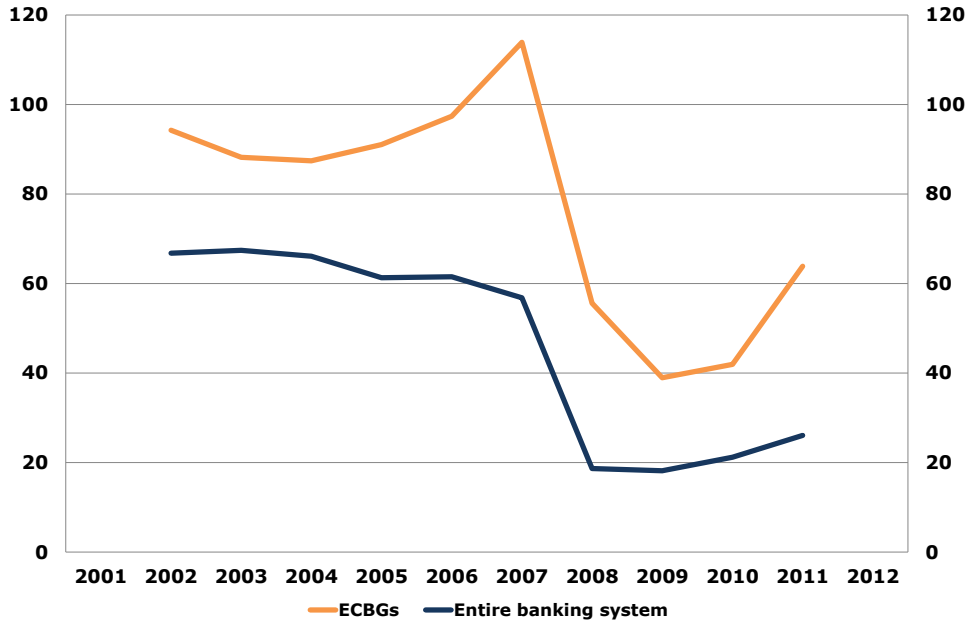
Note: ECBGs stand for European cooperative banking groups and TBS stand for total banking sectors. An asterisk (*) denotes that the variable for European cooperative banking groups is statistically different from that for total banking sectors at the 1% significance level.

A higher Z-score implies a lower probability of insolvency. Chart 10 shows that the average Z-score for ECBGs (Z_{ECBG}) has always been much higher than that of total banking sectors (Z_{TBS}). This finding is in line with scarce earlier studies (Čihák and Hesse, 2007). Formal tests confirm that Z_{ECBG} is significantly higher than Z_{TBS} at the 1% confidence level over the entire time period as well in two sub-periods (Table 3). One can also observe that the stability of ECBGs was negatively impacted by the financial turbulences after 2007. Z_{ECBG} dropped from almost 120 in 2007 to less than 60 in 2008, but remained well above Z_{TBS}. Entire banking systems were fairly unstable with a Z_{TBS} of less than 20 in 2008/9. During these years, quite some investor-owned banks had to be supported with state aid or were nationalized to maintain financial stability and confidence among the public (CEPS, 2010). In 2010 and 2011, national banking systems

[30] While in large parts of the literature the volatility of ROA is computed over the full sample period, we use the average $\sigma(ROA_i)$ for the period 2002-05 and a four-year rolling time window for $\sigma(ROA_i)$ to allow for time variation in the denominator of the Z-score starting in 2006. This approach avoids that the variation in Z-scores over time is exclusively driven by variation in the levels of capital and profitability.

showed a fragile recovery with a slight improvement in Z_{TBS}. This picture does not hold for ECBGs. After reaching its low in 2009, Z_{ECBG} exhibited a strong recovery in the last two years, which points to a strong resilience of ECBGs.

Chart 10 Average Z-scores



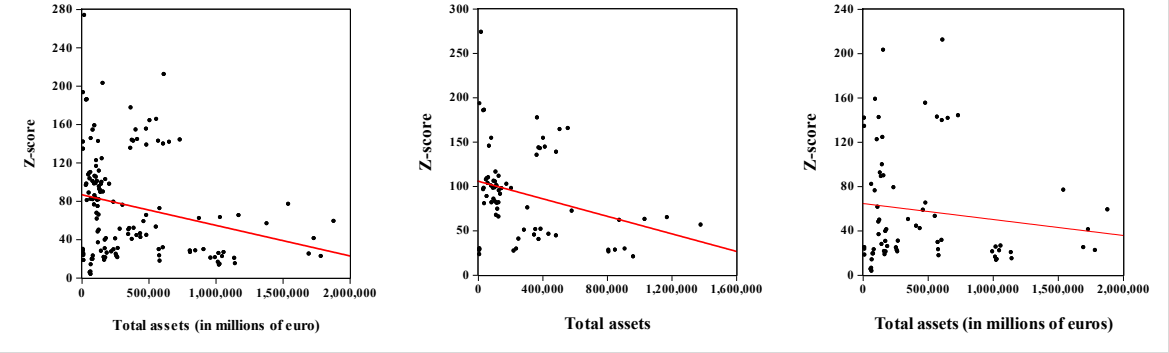
Source: calculations based on data from ECBGs, European Central Bank, International Monetary Fund and national supervisory authorities.
Note: the chart displays the average Z-score of fifteen ECBGs in ten countries and the Z-score of the entire banking sector in these countries.

Box 3 Correlation between the size and stability of ECBGs

To check whether stability is positively or negatively related to the size of the ECBGs in different sub-periods, we have performed a simple correlation analysis. Chart xx consists of three scatter diagrams where total assets of individual ECBGs (in millions of euro) are plotted against the associated Z-score. The first scatter shows the correlation over the entire sample, i.e. data of all ECBGs over the period 2002-11, and an estimated regression line. This line has a downward slope and the correlation coefficient is significantly negative at the five per cent confidence level (-0.24). During the entire sample, stability is negatively correlated with the size of the ECBGs. The second scatter covers the period 2002-07. The slope of the regression line and correlation coefficient are even more negative (-0.31). In the turbulent period 2007-11, no significant correlation is found between the size and the Z-score of ECGBs (-0.14). These findings suggest that smaller ECBGs tend to be somewhat more stable than large ECBGs. A plausible explanation is that larger ECBGs generally have larger international and wholesale operations, which are usually more volatile and generate less stable income streams than retail banking activities of

local cooperative banks. Groeneveld (2011) confirms that large ECBGs suffered the largest losses and write-downs on wholesale banking operations and structured financial products in the period 2007-09.

Chart 11 Scatter diagrams of total assets and Z-scores of ECBGs over three sub-periods

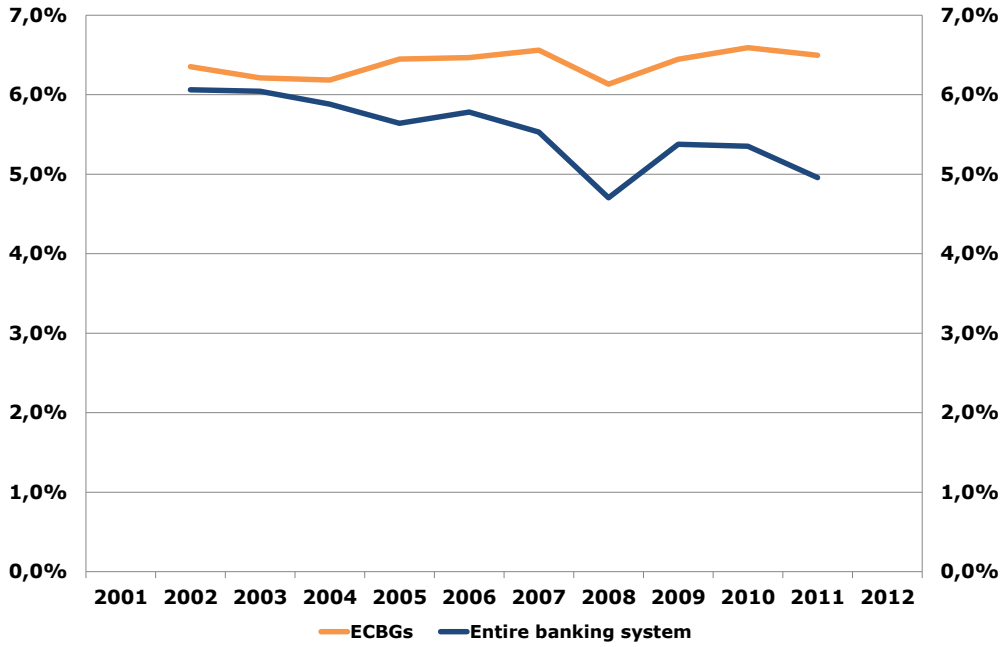


Looking at the three components of the Z-score, we find that the first component, *the ratio of equity/total assets* (E/A), is systematically higher at ECBGs (E/A_{ECBG}, see Chart xx and Table 12). This supports hypothesis 4 that ECBGs maintain larger capital buffers, on average. E/A_{ECBG} remained fairly stable up to 2007, but dropped in 2008. This decline stayed well behind the decrease of E/A_{TBS}, which already began in 2005. Anyway, ECBGs banks entered the crisis with larger buffers, which calls for the qualification that in good times, high buffers are viewed as 'non-productive' as voiced by some earlier critical analyses of ECBGs (PA Consulting, 2003). On the contrary, the clockwork has swung to the other side. Improving the resilience of financial institutions by raising capital (and liquidity) requirements is one of the key reforms that followed the financial crisis. Some improvement in E/A_{TBS} occurred in 2009, partly due to capital injections by national governments and deleveraging by many banks. This rise did not inaugurate a clear trend reversal, as E/A_{TBS} dropped again below 5% in 2011.

The second component of Z_{ECBG}, the return on assets (ROA_{ECBG}), is a widely used proxy for profitability. Earlier assertions fuel the expectation that ECBGs have below average profitability, as they target customer value maximisation instead of profit maximisation and operate with higher levels of equity. Our calculations show that ROA_{ECBG} is not statistically different from the return on assets of total banking systems (ROA_{TBS}) over the whole period and in 2002-06. This picture changes in the time span 2007-11, when the average ROA_{ECBG} was

significantly higher than ROA_{TBS}. ECBGs were obviously affected by the subsequent crises, but ROA_{ECBG} fell less sharply than ROA_{TBS}.[31]

Chart 12 Average Equity to Assets ratio



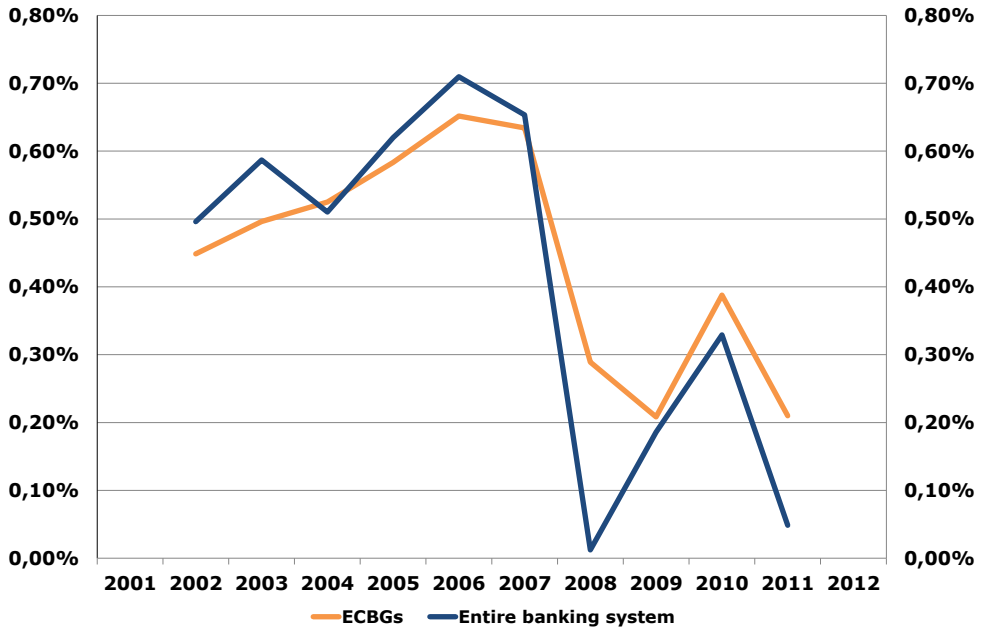
Source: calculations based on data from ECBGs, European Central Bank, International Monetary Fund and national supervisory authorities.
Note: the chart displays the average E/A ratio of fifteen ECBGs in ten countries and the average E/A ratio of the entire banking sector in these countries.

On the face of it, this finding does not seem to be in line with hypothesis 1 that ECGBs would have a lower ROA due to their lower profit requirements stemming from their member influence and focus on retail banking. However, this finding can be plausibly explained by the fact that ECBGs were to a lesser extent involved in riskier wholesale operations and expanded their credit portfolios rather moderately in the years before the crisis. Hence, ECBGs experienced fairly limited losses and write downs. Groeneveld (2011) estimates that the share of ECBGs in total losses and write-downs of all European banks during the first years of the crises was around 8 per cent, which is much smaller than their overall market share.[32] In other words, the

[31] A similar pattern emerges for the return on equity (ROE), with one notable exception. In the sub-period 2002-06, ROE_{ECBG} was significantly lower than ROE_{TBS}. The opposite is true for the time span 2007-11. Over the entire period, ROE_{ECBG} and ROE_{TBS} were exactly the same (7.8 per cent). The volatility of ROE_{ECBG} is consistently lower in every sub-period.
[32] Compared to the balance sheet totals and equity, the initial write-downs/losses at ECBGs were substantial in a number of cases, but they could absorb these capital losses without substantial state aid. In France, all cooperative banks received support as part of a support package for the entire banking system. It is unknown whether they really needed this support or not. In Austria, the international subsidiary of Volkbanken (Volksbanken

divergent development of ROA_{ECBG} and ROA_{TBS} confirms hypothesis 3. It should be stressed that the general situation in banking remains rather troublesome as illustrated by the sharp drop in ROA in 2011. It is generally expected that profitability in banking will definitely not return to the levels prevailing before 2007. There is general agreement that the situation in banking was not sustainable at that time.

Chart 13 Average Return On Assets



Source: calculations based on data from ECBGs, European Central Bank, International Monetary Fund and national supervisory authorities.
Note: the chart displays the average ROA of fifteen ECBGs in ten countries and the ROA of the entire banking sector in these countries.

The third component of the Z-score, the volatility of returns, is significantly lower at ECBGs in all sub-periods, again in line with hypothesis 3. This can be largely explained by the relatively extensive retail operations of co-operative banks, which on the whole generate more stable profits. However, we have to stress that the standard deviation almost doubled in the second time span at ECBGs as well as in total banking systems.

International) needed state support in 2010 following severe losses in Central and Eastern Europe. One of the attached conditions was that Volksbanken had to adjust its organizational structure and expropriate the major part of its international activities. In 2012, some cooperative banks operating in Greece, Spain, Portugal and Cyprus were hit hard by the problems in the respective banking sectors and economic recession.

8. Conclusions

The history of cooperative banks learns that it is impossible to draw conclusions regarding their future (performance) and viability. It basically comes down to the degree of intrinsic responsiveness to change. This article has aimed at contributing to a balanced view of ECBGs by describing their historical characteristics and to investigate empirically to what extent their recent performance is connected with their proclaimed specific and historical features. In this respect, this paper is among the first statistically-based evidence on the relationship between their – original – specifics and the performance in economically good and bad times over the past fifteen years. This article stresses that cooperative banking is not better or worse than other banking models and not a panacea for post-crisis banking in general. It can only be considered as a viable and parallel alternative to particularly investor-owned banks which have been in the spotlight for most of the time in recent decades. There is no presumption that the cooperative banking model is to be regarded as the norm, as investor-owned and cooperative banks have equal status as contributors to the services provided by the financial sector of the economy.

The main message is that the overall performance is still largely explicable by the original features and roots of ECBGs. These characteristics still knock about in ECBGs that eventually emerged from local credit cooperatives established more than a century ago. Using a new comprehensive data base, we find that this conclusion holds in recent times of economic crisis as well as prosperity. This also implies that we cannot reject many unfounded assertions from earlier studies and reports about the impact of the characteristics and business orientation on the financial performance of ECBGs in economic recessions and financial crises. The specific ownership structure at the local level still appears to result in a focus on retail banking, a moderate risk appetite, stable operations and solid capitalization for ECBGs. Indisputably, the economic and financial performance of ECBGs has deviated from that of all other banks in different phases of the latest business cycles.

The empirics support the claim that ECBGs are mainly focused on retail banking in their traditional home countries. This is also in line with the finding of Oliver Wyman (Exhibit 11, p. 21, 2012) that average retail revenues as a percentage of total revenues of some ECBGs are higher than those of all other banks. The increase in branch market share of ECBGs hints at a specific business orientation and divergent servicing philosophies compared to other banks. They are literally and relatively closer to their members/customers than other banks. Over the entire time span, the number of members as well as in the member to population ratios have

increased continuously, which can only be interpreted as an implicit indicator for customers' appreciation of ECBGs.

From different angles, we also find statistical support for other formulated hypotheses which were derived from unverified or poorly substantiated statements and rather partial analyses with deficient data material in previous policy documents and research papers. Table 4 summarizes the various hypotheses and records whether they can be accepted or must be rejected on the basis of our empirical analysis. It should be noted that the postulations are stated in relative terms, i.e. ECBGs are compared to all other banks in the countries under review.

The analysis of – components of the – Z-scores leads to the conclusion that ECBGs are generally a more stable and safer part of the entire banking industry. They operate with higher capital levels and their returns on assets and equity are less volatile, but the levels are not significantly different from those of all other banks. Moreover, loan and deposit growth at ECBGs is significantly more stable than that of all other banks. In good times, ECBGs' credit growth is more moderate, whereas their credit expansion is higher in recessionary times. We also find indications that ECBGs have functioned as safe havens for (inter)national depositors in recent years. Finally, the hypothesis that ECBGs operate efficiently cannot be rejected as well. ECBGs are on balance equally (in)efficient as all other banks.

From a policy point of view, our findings suggest that it is important to acknowledge the relationship between the specific governance and ownership structure of ECBGs and their relative stability and performance (López-Puertas Lamy, 2012). This result has important implications for academics and policy makers alike, since it indicates that ignoring this ownership structure can lead to erroneous banking regulations which may eventually undermine the positive impact of the specific governance on ECBG's stability and hence the stability of entire national financial systems.

Table 4 Acceptance or rejection of formulated hypotheses about ECBGs (1997-2011)

Hypotheses	*Accepted / rejected*	*Explanation*	*Empirical evidence*
Customer focus and/or customer interests' first	Undecided	Absolute and relative increases in members and rising domestic loan and deposit market shares are no 'hard' empirical proof that ECBGs have a strong customer orientation. However, loan growth of ECBGs is less cyclical than that of all other banks. Besides, deposit growth is higher in economically difficult times, pointing to some safe haven effects. It is unknown whether the level of customer satisfaction and/or advocacy at ECBGs differs significantly from that of other banks.	None or implicit at best (rising domestic market shares and numbers of members)
Physical proximity	Accepted	ECBGs have relatively dense branch networks in the domestic cooperative banking part.	Market share for branches
Austerity and efficiency in operations	Accepted	Over the entire period, ECBGs have operated with similar efficiency ratios as other banks (despite relatively expensive distribution methods in accordance with their historical roots). ECBGs were even significantly more efficient in the period 2008-11, where many other banks witnessed a larger drop in (volatile) revenues and a greater surge in (funding) costs following the initial credit crisis.	Cost to income ratios
Focus on retail banking	Accepted	ECBGs are more stable loan providers to the real economy. They had a better loan to deposit ratio before the crisis hit.	Loan and deposit growth and loan to deposit ratio
Moderate/lower returns on assets and equity	Rejected	Despite the absence of profit targets, ROA/ROE_{ECBG} is similar to ROA/ROE_{TBS} in 2002-11, and even significantly higher in 2005-11. This is partly due to relatively large losses and write downs at other banks.	ROA and ROE
Stable organizations	Accepted	Z_{ECBG} is significantly higher than Z_{TBS}, the volatility of ROA_{ECBG} and ROE_{ECBG} is consistently lower. ECBGs have a lower risk appetite in booming times and less risk aversion in bad times. Deposit growth (DG_{ECBG}) follows a more stable pattern.	Z-scores, ROA and ROE, loan and deposit growth
High capitalization	Accepted	Most capital has been build up via retained earnings. Tier 1_{ECBG} and E/A_{ECBG} consistently surpass Tier 1_{TBS} and E/A_{TBS}.	Tier 1 and E/A ratios
Moderate risk profile	Accepted	Focus is on retail banking which is a less risky activity. Besides, ECBGs did not need large scale state support in recent years.	Loan to deposit ratio
Low cost of capital	Not investigated	The high capitalization and the high deposit base could make it cheaper for ECBGs to obtain external funding.	Information about cost of funding is not readily available for ECBGs.
High ratings	Not investigated	Some ECBGs are not supervised on a consolidated basis. Hence, no overall ratings exist for these ECBGs	No overall ratings exist for many ECBGs.

As final remarks, we have to make some qualifications. Firstly, the performance and stability of ECBGs have been assessed in relative terms, i.e. vis-1a-vis other banks. In absolute terms, the performance and stability of all ECBGs have deteriorated significantly in recent years. The subsequent crises had a profound impact on ECBGs, proving that they are not immune to economic and financial shocks. Nowadays, ECBGs are confronted with increased volatility in results, a surging number of bankruptcies of SME firms, a damaged reputation of the entire banking industry and an explosion of regulatory and compliance measures and costs. At the same time, access to external funding and accumulation of capital via retained profits have become more difficult. They cannot hide from cost reductions and efficiency improvements to remain competitive, financially solid and hence viable. In addition, they face an important internal challenge. ECBGs have to safeguard or improve internal governance structures to enable members to preserve the cooperative nature of their local banks and to determine the strategic course of the entire organization. Otherwise, member involvement and engagement may erode, which could eventually endanger the cooperative orientation and viability. In short, we cannot predict whether ECBGs have the ability to manage other future economic and financial crises equally well or will succeed in keeping their overall course and operations closely aligned with member interests in the future.

We also acknowledge that this article has touched upon many issues that deserve further research and elaboration. By refining the data set, cross section analyses – over different sub-periods – can be conducted to examine whether the performance and stability differ between small and large ECBGs. It would also be illuminating to study developments in their international activities, which generally appear to be more risky than their traditional cooperative banking part (Groeneveld and De Vries, 2009). Another important issue concerns the funding of ECBGs (Deloitte, 2012). While these organizations have traditionally relied on retained earnings and member financing, they are now operating in a very different environment, like all other banks. For ECBGs, accessing new sources of funding is paramount. Differences in membership policies, the – effectiveness and functioning of the – governance, the role and functions of central institutions are also topics for further exploration. In this respect, it would be helpful to set-up a consistent international database with qualitative and quantitative information on ECBGs to stimulate academic research and to raise the understanding among policy makers, regulators and the general public about financial cooperatives (Roy and Redjah, 2012). Last but not least, a European wide survey among many bank customers to measure the

level of customer satisfaction, value and advocacy is needed to test one of the most important, yet unverifiable claims by ECBGs that they – have – always put customer interests' first.

References

Albert, E. (2008), *Les Banques populaires en France, 1878-2009; 130 ans de coopération*, Paris, Eyrolles, 2008.

Alexopoulos, Y., and S. Goglio (2009), 'Financial Deregulation and Economic Distress: Is There a Future for Financial Co-operatives?', *Euricse Working Papers*, No. 001.

Ayadi, R., D. Llewellyn, R. H. Schmidt, E. Arbak, W.P. de Groen (2010), *Investigating Diversity in the Banking Sector in Europe: Key Developments, Performance and Role of Cooperative Banks,* Centre for European Policy Studies, Brussels.

Bley, A. (2012), '*Lending stabilizer – German cooperative banks during the financial crisis*', paper presented at the conference 'Cooperative responses to global challenges', March 21-23 in Berlin, Germany.

Birchall, J. (2013), *Resilience in a downturn: The power of financial cooperatives*, International Labour Office, International Labour Organization, Geneva.

Birchall, J., and L. Hammond Ketilson (2009), *Resilience of the Co-operative Business Model in Times of Crisis*, International Labour Office*,* Sustainable Enterprise Programme, International Labour Organization, Geneva.

Bosseno, C. (1994), *Crédit agricole, un siècle au présent, 1894-1994,* Tome 1: *des origines aux années 1950*, Paris, Hervas.

Brazda, J. (Ed.) (2001), '150 Jahre Volksbanken in Österreich', *Schulze-Delitzsch Schriftenreihe*, Vol. 23, Vienna.

CEPS (2010), *Bank state aid in the financial crisis: Fragmentation or level playing field?*, CEPS Task Force Report, Brussels.

Čihák, M., and H. Hesse (2007), 'Cooperative Banks and Financial Stability*'*, *IMF Working Papers*, No. WP/07/02, SSRN, International Monetary Fund, Washington. D.C..

Cornforth, C. (2004), 'The governance of cooperatives and mutual associations: a paradox perspective', *Annals of Public and Cooperative Economics*, Vol. 75, No. 1, pp. 11-32.

Coté, D. (2001), 'Les holdings coopératives: évolution ou transformation définitive?', *Working Paper*, De Boeck Université, Brussels.

Davies, W. (2009), *Reinventing the firm*, Demos, London, United Kingdom.

Deloitte (2012), *Funding the future: Emerging strategies in cooperative financing and capitalization*, report commissioned for the 2012 International Summit of Cooperatives, held in Quebec City from October 8-11 in 2012.

Desrochers, M., and K.P. Fischer (2005), 'The Power of Networks: Integration and Financial Cooperative Performance', *CIRPÉE, Working Paper 05-14*, Quebec, Canada.

EACB (2005), *Cooperative banks in Europe: values and practices to promote development*, Brussels.

EACB (2007), *60 million members in co-operative banks: What does it mean?*, Brussels.

EACB (2010), *European Cooperative Banks in the Financial and Economic Turmoil: First Assessments*, Research Paper, European Association of Cooperative Banks, Brussels.

Economist, the (2010), *Europe's cooperative banks: mutual respect*, 21st of January, 2010.

Ensor, B. (2012), *Customer Advocacy 2011: How Customers Rate European Banks*, Forrester report for eBusiness & Channel Strategy Professionals.

Ferri, G., P. Kalmi and E. Kerola (2013), 'Organizational Structure and Exposure to Crisis among European Banks: Evidence from Rating Changes', *Working Paper*.

Fonteyne, W. (2007). 'Cooperative Banks in Europe – Policy issues', *IMF Working Papers*, WP 07/159, International Monetary Fund, Washington. D.C..

Ghatak, M. (2000), 'Screening by the Company You Keep: Joint Liability Lending and the Peer Selection Effect', *Economic Journal*, Vol. 110, No. 465, pp. 601-631.

Gijselinckx, C., and P. Develtere (2008), 'The Cooperative Trilemma: Cooperatives between market, state and civil society', *Working Papers on Social and Co-operative Entrepreneurship*, WP-SCE 08-01, Leuven, Belgium.

Groeneveld, J.M. (2011), 'Morality and Integrity in Cooperative Banking', *Ethical Perspectives*, Vol. 18, No. 4, pp. 515-540.

Groeneveld, J.M., and D. T. Llewellyn (2012), 'Corporate Governance in Cooperative Banks', in '*Raiffeisen's Footprint: The Cooperative Way of Banking'*, J. Mooij and W.W. Boonstra (Eds.), VU University Press, Amsterdam, The Netherlands, pp. 19-36.

Groeneveld, J.M., and B. de Vries (2009), 'European Cooperative banks: First lessons of the subprime crisis', *The International Journal of Cooperative Management*, Vol. 4, No. 2, September 2009, pp. 8-21.

Guinnane, T.W. (2001), 'Co-operatives as Information Machines: German Rural Credit Co-operatives, 1883-1914*',* *The Journal of Economic History*, Vol. 61, No. 2, pp. 366-389.

International Co-operative Alliance (2006), *Statement on the Co-operative Identity*, Geneva, p.1-2.

Kalmi, P. (2007), 'The disappearance of co-operatives from economics textbooks', *Cambridge Journal of Economics* 2007, 31, pp. 625–47.

Kodres, L., and A. Narain (2010), 'Redesigning the Contours of the Future Financial System', *IMF Staff Position Note*, August 16, 2010, SPN/10/10.

Körnert, J. (2012), 'Swedish cooperative banking in the 1990s: a decade of crisis and transition', in '*Raiffeisen's Footprint: The Cooperative Way of Banking'*, J. Mooij and W.W. Boonstra (Eds.), VU University Press, Amsterdam, The Netherlands, pp. 217-230.

Laeven, L., and R. Levine (2009), 'Bank governance, regulation and risk taking', *Journal of Financial Economics*, 93, pp. 259-275.

Llewellyn, D.T. (2012), '*UK building societies: the strengths of mutuality'*, in 'Raiffeisen's Footprint', J. Mooij and W.W. Boonstra (Eds.), pp. 231-246, VU University Press, Amsterdam. The Netherlands.

López-Puertas Lamy, M. (2012), 'Commercial banks versus Stakeholder banks: Same business, same risks, same rules?', *Working paper prepared for EACB award for young researchers*, December 2012.

McKinsey (2012), *McKinsey on Cooperatives*, Autumn 2012, McKinsey & Company.

Mercieca, S., K. Schaeck, and S. Wolfe (2007), 'Small European Banks: Benefits from Diversification?'*, Journal of Banking and Finance*, 31, pp. 1975-98.

Michie, J. (2010), '*Promoting corporate diversity in the financial services sector*', Paper Kellogg College, University of Oxford.

Moody's (2003), '*European Cooperative Banks: Moving Beyond Issues of Costs and Efficiency*', Moody's Investors service, Special Comment by A. Cunningham, London.

Mooij, J. (Ed) (2009), *Rabobank matters*, Rabobank, Utrecht, The Netherlands

Mooij, J. and W.W. Boonstra (2012, Eds.), *Raiffeisen's Footprint: The Cooperative Way of Banking*, VU University Press, Amsterdam. The Netherlands.

Nilsson, J., G.L.H. Svendsen, and G.T. Svendsen (2012), 'Are Large and Complex Agricultural Cooperatives Losing Their Social Capital?', *Agribusiness*, Vol. 28 (2), 187–204, Published online in Wiley Online Library (wileyonlinelibrary.com/journal/agr).

Oliver Wyman (2008), *Co-operative bank, Customer Champion*, Financial Services, United Kingdom.

Oliver Wyman (2012), *The outlook for Co-operative banking in Europe 2012*: *Banking on values, building on agility*, Financial Services, United Kingdom.

PA Consulting Group (2003), '*Mutually assured destruction?'*, PA Consulting, London.

Putnam, R.D. (2000), *Bowling alone: The collapse and revival of American community*, New York, Simon & Schuster.

Roy, J., and Y. Redjah (2012), 'A new database on financial services cooperatives: description and first results', *Working paper HEC Montreal,* Canada.

Salvo, R. Di (2003), 'The Governance of Mutual and Cooperative Bank Systems in Europe', *Cooperative Studies*, Edizioni del Credito Cooperativo.

Stefancic, M., and N. Kathiziotis (2011), 'An Evaluation of Italian Banks In The Period Of Financial Distress', *International Business & Economics Research Journal*, Vol. 10, No. 10, pp. 103-113.

United Nations (2011), '*Cooperatives in social development and implementation of the International Year of Cooperatives*', agenda item A/66/136, New York.

Werner, W. (2005), 'Auf der Straße des Erfolges – Zur Geschichte der österreichischen Raiffeisenbewegung von kleinen Ortsgenossenschaften zu international tätigen Netzwerken', *Kooperation und Wettbewerb*, Vol. 4. München, Mering.