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THE MANAGEMENT OF LENDING RISK IN IRISH COMMUNITY CREDIT UNIONS

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ABSTRACT

TRADITIONAL LOAN ASSESSMENT CARRIED OUT BY CREDIT UNIONS HAS BEEN CENTRED ON THE MEMBERS' HISTORY OF SAVINGS AND LOAN REPAYMENT RECORD WITH THEIR CREDIT UNION. THIS HAS BEEN IN KEEPING WITH THE MEMBER-OWNED, VOLUNTARY, SELF-HELP CO-OPERATIVE PRINCIPLES OF CREDIT UNIONS IN PROVIDING FINANCIAL SERVICES TO THEIR MEMBERS. IN MORE RECENT TIMES, IRISH CREDIT UNIONS HAVE BEEN CHALLENGED TO ADOPT A MORE FORMAL APPROACH TO MANAGING LENDING RISK MANAGEMENT IN THE CONTEXT OF A CHANGED ECONOMIC AND REGULATORY ENVIRONMENT. THIS PAPER EXAMINES LENDING RISK MANAGEMENT AND ITS ASSOCIATED GOVERNANCE IN FOUR COMMUNITY CREDIT UNIONS IN IRELAND DURING TWO POINTS IN TIME. THE FIRST IS BETWEEN 2008 AND 2012, A PERIOD MARKED BY ECONOMIC RECESSION AND TRADITIONAL LOAN ASSESSMENT. IT THEN EXAMINES THE REVISED APPROACH TO LENDING RISK MANAGEMENT ADOPTED BY CREDIT UNIONS POST 2012 FOLLOWING A SERIES OF LEGISLATIVE AND REGULATORY CHANGE FOR CREDIT UNIONS WHERE MORE FORMAL RISK MANAGEMENT PROCESSES AND ENHANCED GOVERNANCE WERE INTRODUCED. IT WAS FOUND THAT LENDING BY CREDIT UNIONS WHICH MAINTAINED PRUDENT MANAGEMENT OF LOAN RISK OUTPERFORMED LENDING BY CREDIT UNIONS WHICH TOOK A LESS PRUDENT APPROACH. IN ADDITION, THE STUDY DEMONSTRATES HOW THE APPLICATION OF RISK MANAGEMENT PRINCIPLES TO THE LENDING PROCESS CAN BRING A LEVEL OF CLARITY AND A STRUCTURE TO LOAN UNDERWRITING, THEREBY ENHANCING THE QUALITY OF THE PROCESS. GOOD GOVERNANCE PRINCIPLES CAN POSITIVELY INFLUENCE THE LENDING PROCESS AND SHOULD PROVIDE THE BASIS FOR A SOUND LENDING ENVIRONMENT.

Keywords: credit union; lending risk; governance

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THE MANAGEMENT OF LENDING RISK IN IRISH COMMUNITY CREDIT UNIONS

Introduction

This paper examines the evolution of the approach to lending risk management by community credit unions in Ireland at two points in time over a ten year period, dating from 2008 to mid-2012 and mid-2012 to mid-2017. It presents findings from a temporal study of four community credit unions and analyses their lending risk strategies and perceptions of lending risk, set against a changing economic environment and a new regulatory framework for credit unions which includes enhanced governance and formal risk management processes.

Credit unions in Ireland emerged in the late 1950s and early 1960s. The development of the credit union movement in the early years stemmed partly from a culture of self-help in the period of economic stagnation in the 1940s and 1950s and out of the need for accessible and affordable credit. The credit union was seen as a force for social and economic integration by promoting a spirit of thrift and placing a financial premium on good character (O'Connor et al, 2002: 26-30). The movement experienced rapid expansion in the early years from 1960 onwards and today there are 311 registered credit unions in the Republic of Ireland, with €16.2 billion in assets, €13.5 billion in savings and loans of €4.2 billion (Central Bank of Ireland, 2017). Lending performance vis-à-vis total assets is particularly low at 26.1%. The recession in the Irish economy following the banking crises and economic downturn of 2008 contributed significantly to the regression in the lending performance of Irish credit unions. The granting of loan credit to members is a key component of the business model of the credit union movement. Prior to 2012, loan assessment was quite informal and was typified by loan security tied to the character of the borrower. This approach to lending has changed dramatically, particularly since 2012, when the Central Bank of Ireland imposed far more stringent lending risk management requirements on Irish credit unions.

Research context

The concepts of risk and corporate governance are "*intertwined and inextricably interdependent*" (Bhimani, 2009:4; Adamson, 2012). The basis of corporate governance is accountability and the provision of a framework to counter the consequences of risk (Biggs, 2003). This can be seen clearly in Dahms' (2008:1) definition of corporate governance as being "*the way in which an organisation is controlled and governed to achieve objectives*". Risk management is less well defined in the literature with no clear consensus on a definition (Renn, 1998). The lack of a consensus on the definition of risk management in the literature has not, however, hindered the development of "*procedural tools and approaches for analysing and managing organisational risk*" (Bhimani, 2009:3). It is generally accepted that risk can be assessed in respect of the combination of the likelihood of something happening and the impact which arises if it does actually happen. According to HM Treasury (2004:9), risk management includes identifying and assessing risks and then responding to them. Some events may have a high probability of occurrence but may have a low impact or consequence. In contrast, an event may have a low probability of occurrence but may have greater consequences. In this paper, we are concerned

with the management of 'lending' or 'credit' risk – a key risk for financial institutions. This concept can be applied to the lending process in so far as the financial circumstances of a loan applicant can determine the likelihood of the risk of default being realised. The size of the loan and the total loan exposure can determine the impact on financial institutions if default occurs in terms of loan provisioning or loan write off, and the adverse consequences for the balance sheet. Adamson (2012:555) states that "*good corporate governance will focus on the institutionalisation of corporate governance and risk management*". Joseph (2013:27) asserts that, "*an organisation that manages credit risk well will succeed and attain its business objectives*". This also raises the question about the relationship between risk aversion and entrepreneurial behaviour. Acs and Audretsch (2003:39) state that, while the argument that '*entrepreneurs are more willing to take risks than others are is intuitively appealing',* the empirical evidence is mixed. In this paper, we begin to explore this relationship between awareness of risk and entrepreneurship (in terms of lending performance). Openness to risk is also influenced by the 'status quo' (Kahneman and Tversky, 1991). This is particularly relevant for our study, where the 'status quo' was different pre-2008 (economic boom of the so-called 'celtic tiger' in Ireland), 2008 to mid-2012 (economic recession) and mid-2012 to 2017 (economic recovery and greater regulation). The resulting narrative was very different in each of these periods.

Risk awareness has also been highlighted as an integral part of resilient business models (Hopkin, 2014). To develop enhanced resilience, risk awareness must be combined with the actions *'required to be risk compliant with the ability to be risk responsive'* (pg. 252). Hopkin (2014) suggests that an embedded risk aware culture that is well beyond compliance based on risk registers is required. A performing loan book with low arrears is central to a resilient credit union business model. In this paper, we begin to examine how risk awareness has impacted on that resilience.

Environmental and Regulatory Context

In the banking sector, there has been significant development of formal procedural tools and approaches for managing lending risk, while the credit union sector in Ireland has traditionally tended to rely on more informal methods of evaluating lending risk.

Prior to 2012, Irish credit unions were governed by the Credit Union Act, 1997. This Act set out the statutory framework within which credit unions operated and were regulated. The Act required that the board of directors appoint a credit committee whose responsibility it was to decide on credit applications. The board could also approve the appointment of credit officers, working under the supervision of the credit committee, to approve loan applications. These credit officers were typically the credit union manager and senior staff who operate within certain lending restrictions. In addition, a credit control committee seeks to ensure that the repayment of loans by members of the credit union is in accordance with their loan agreements.

In 2012, the Report of the Commission on Credit Unions[1] suggested that the adverse financial and economic conditions in Ireland following the banking and financial crises and together with

[1] The Irish government established the Commission on Credit Unions in May 2011 to review the future of the credit union sector and to make recommendations on the most effective regulatory structure for credit unions.

"*internal governance weaknesses in some credit unions*" and the "*absence of an appropriate statutory regulatory framework",* contributed to the significant issues facing the sector. It suggested that there was a need to strengthen and re-vitalise the sector so that it could be in a position to play an increasing role in the Irish retail financial landscape into the future. The Report of the Commission on Credit Unions (2012:32-33) indicated that the financial difficulties facing credit unions could be overcome and recommended the reform of credit unions in terms of enhanced regulation and improved structure and governance. The Report made a number of recommendations for the sector. These included voluntary restructuring, the introduction of an enhanced legislative and regulatory framework phased in over time, development of enhanced skills for officers and the introduction of systems and controls designed to improve the management of credit unions.

In 2012, the Credit Union Act, 1997 was amended to reflect most of the recommendations of the Report of the Commission on Credit Unions which included the provision of a statutory basis for the restructuring of credit unions and for the establishment of a Restructuring Board. The Act set out the basis for stabilisation support to be made available with Central Bank of Ireland approval. It provided for enhanced governance arrangements and refers to the roles and responsibilities of the chair, the board of directors the manager and the responsibilities of a newly required board oversight committee. The Act distinguished between the executive role of the manager and the non-executive role of the board. The board is the key decision-making unit of the credit union, setting the objectives and overall strategy and policy, with the manager responsible for both the formulation and execution of the strategy and for the day-to-day management of the credit union.

A key component of the Act relates to risk management, compliance and internal audit. Section 55 of the Act outlines the functions of the board of directors in relation to the appointment of a manager, risk management officer and compliance officer and the approval of the appointment of any other member of the management team. Section 55 of the Act sets out the functions of the board of directors in relation to the implementation of a risk management process that ensures that all significant risks are identified and mitigated to a level consistent with the risk tolerance of the credit union. As with the 1997 Act, the board of directors is required to appoint a credit committee to decide on applications for credit, and a credit control committee which shall seek to ensure repayment of loans by members in accordance with their loan agreements. The board of directors may continue to approve the appointment of a person by the manager as a credit officer to work under the supervision of the credit committee and may continue to approve the appointment of a credit control officer to work under the supervision of the credit control committee.

Section 76(b)(2) sets out that a credit union shall introduce systems and controls to allow it to "*identify, assess, measure, monitor, report and manage the risks which it is, or might reasonably be, exposed to"*. Section 76b also sets out a compliance programme in relation to "*policies, procedures, systems and plans the credit union puts in place to monitor compliance, on an ongoing basis, with its obligations including requirements under all legal and regulatory requirements"*. In addition, Section 76K sets out that a credit union shall appoint a person to provide for "*independent internal oversight*" and to "*evaluate and improve the effectiveness, of the credit union's risk management, internal controls and governance processes"*.

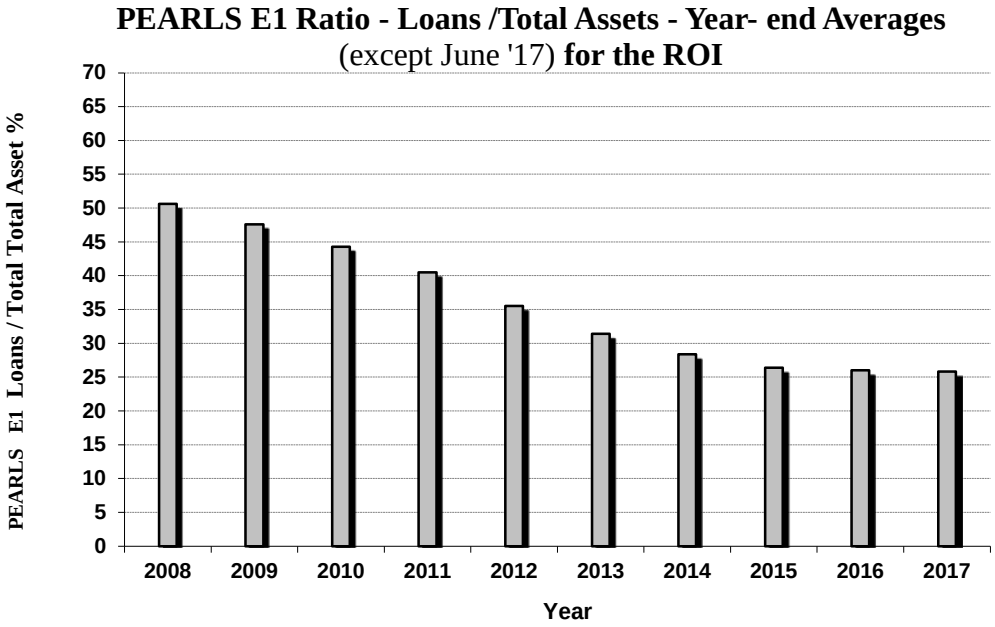
In response to the need for greater risk management by credit unions, the amended Credit Union Act introduced a new subsection (35(3)) on the effective management of credit risk*: "A credit union shall manage and control lending to ensure the making of loans does not involve undue risk to members' savings…"*. Section 35(8) gives the Central Bank of Ireland, through the Credit Union Regulator, the power to prescribe measures relating to the lending practices of credit unions, where deemed necessary. It also prescribes that *'ability to repay'* must now be a key factor in the assessment of credit risk (Section (65(3) (a)).

The two main indicators used to measure the lending performance of credit unions are the "PEARLS E1"[2] ratio (loans as a percentage of total assets) and the "PEARLS A1" ratio (loan arrears as a percentage of total lending) with recommended levels of "70% or more" and "less than 5%" respectively. Figure 1 sets out the E1 ratio for Irish credit unions between 2008 and 2017.

In 2008, loans to total assets stood at 50.6%. By 2012, this had reduced to 35.5% and by mid 2017 stood at 26.1%. Considering that the recommended PEARLS goal is greater than or equal to 70%, it can be observed that the low loan to asset ratio in Irish credit unions has a negative impact on the effective financial structure, as it effects growth and profitability.

[2] PEARLS: World Council of Credit Unions (WOCCU) International Credit Union Prudential Standards. A system of financial ratios to monitor the performance of credit unions and to generate comparative credit union rankings. PEARLS: **P**rotection, **E**ffective Financial Structure, **A**sset Quality, **R**ates of Return, **L**iquidity, **S**igns of Growth. .

Figure 1



Source: ILCU Monitoring Department, August 2017

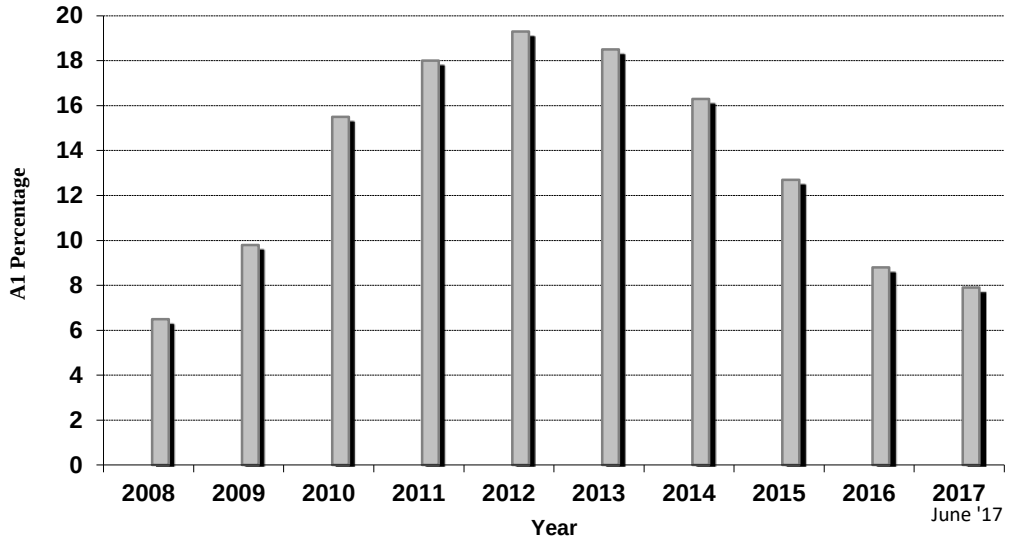
Kaupelyte and McCarthy (2005:8) suggest that intense competition in the market for personal loans all year round may explain low loan to asset ratios in comparison to the PEARLS recommendation. It is suggested that the reducing loan book and reducing interest rates then led to a reduction in loan quality, as some credit unions were tempted into unduly relaxing their credit standards and into making poor lending decisions to compensate for the reduction in loan quantity and loan income (CUDA, 2006:6). This view is shared by McKillop et al (2006:113) who suggest that falling loan to asset ratios could encourage some credit unions to engage "*in less than prudent lending*". In fact, this is not atypical of lending by financial institutions in general during the boom, where Saunders & Allen (2010:25) observed an increase in the quantity of debt with a simultaneous decline in the quality of debt. This would likely include the provision of loans to high-risk borrowers.

While the loan to asset ratio was diminishing, the loan arrears levels for credit unions steadily increased between 2008 and 2012 after which it began to reduce. This is reflected in the PEARLS A1[3] ratio plot for the period 2008 to 2017 illustrated in Figure 2 below with a peak of 19.3% in 2012 after which it had dropped to 7.9% by June 2017. This suggests significant improvement in the loan quality of Irish credit unions.

[3] PEARLS A1 Ratio. Measures the Gross Loans in Arrears, 10 weeks or more, as a proportion of Total Loans Outstanding.

Figure 2

PEARLS A1 Ratio - Loan Arrears/Total Loans
Year- end Averages (except June 2017) **for the ROI**



Source: ILCU Monitoring Department August 2017

Research methodology

This research sought to explore the strategies and perceptions of credit unions in relation to the concepts of risk and governance in the management of lending, between 2008 and mid-2012 and again between mid-2012 to mid-2017. Four community credit unions were the subject of the primary research. These credit unions were chosen on the basis that two had relatively high loan arrears levels and two had relatively low loan arrears levels when the study commenced in mid-2012. The arrears levels chosen were relative to the overall average A1 PEARLS financial ratio for the Irish credit union movement which stood at 19.3% on 31st March 2012. It was considered that the selection of this combination of credit union loan arrears' profiles would provide a contrast in relation to concepts of risk and its associated governance in the management of lending in the four credit unions. Three of the credit unions studied are located in a single urban conurbation setting with the fourth credit union located in a satellite town close to this conurbation, thus providing a degree of homogeneity in the lending profile by virtue of the urban demographic. Senior personnel were identified from each credit union for a series of semi-structured interviews in relation to the concepts of risk and its associated governance.

The research was carried out in two parts. Part 1 of the research was carried out in June/July 2012. A credit union manager, a senior loans officer and the chairman of the credit committee were identified from each credit union for a series of semi-structured interviews. The interviewees were chosen firstly, for their expertise and detailed knowledge of lending and

secondly, so that each could bring a different perspective in relation to the issues of governance and lending risk. Community credit unions were chosen for this study because the member profile, in terms of lending risk, was considered typical of the average borrowing consumer profile. Each credit union was assigned a code to protect its identity. A profile of the selected credit unions is set out in Table 1, showing their relative arrears levels compared to the average for credit unions nationally and their loan to asset ratio.

Two key financial indicators were explored in the context of lending: loans as a percentage of total assets (E1) and loan arrears as a percentage of total loans (A1), for each credit union. Emphasis was placed particularly on an analysis of loan arrears as a percentage of total loans for the four credit unions for the period, as this ratio was used to provide comparative data on the level of loan arrears in each credit union.

Table 1
Profile of Selected Credit Unions

Credit Union Code	**Relative Loan Arrears Levels** *(Relative to the overall average national PEARLS A1 ratio of 19.3% on 31st March 2012).*	**Actual Loan Arrears** *(A1 Ratio, March 2012) (PEARLS Goal is 5% or Less)*	**Loans to Assets Ratio** *(Source: Annual Reports for Selected Credit Unions)*
CU A	Relatively High	34.23 %	56.7%
CU B[4]	Relatively High	23.81 %	38.8%
CU C	Relatively Low	11.30 %	47.8%
CU D	Relatively Low	12.77 %	59.7%

Part 2 of the research involved an assessment of the lending practices, outcomes and overall management of lending risk in the same four credit unions following the legislative, regulatory and economic changes evident since mid-2012 and as at mid-2017. This involved additional research 5 years later in July/August 2017 to determine how the management of lending risk had changed in the context of the Credit Union Act 1997 (as amended) and to ascertain how the impact of these changes influenced the lending risk. Each of the four credit union managers was re-interviewed with the purpose of exploring how lending risk management strategies and perceptions in their credit unions had changed.

[4] This credit union merged with three other smaller credit unions in the period 2016 and 2017.

Findings

The findings of the empirical research for the period 2008 to mid- 2012 need to be set against the background of a number of factors which may influence the opinions of key personnel in the area of loan credit including the significant decrease in new lending and an increase in loan arrears that were seen to be the result of the economic recession that began in 2008. The background of high unemployment levels and high household debt levels, as well as uncertainty regarding the future configuration of the credit union movement, also need to be taken into account. The findings from the follow up research carried out in mid-2017 need to be set against a background of a recovered Irish economy and an enhanced legislative and regulatory framework for the credit union movement.

The findings of the study are presented for the two time periods between 2008 and mid-2012 and between mid-2012 and mid-2017 as follows: the approach to lending risk in the economic environment, the methods of loan assessment, lending performance and governance of lending.

Approach to Lending Risk in the Economic Environment 2008 to mid-2012
The concepts of risk and lending risk in the context of the economic and regulatory environment were explored during the interviews in 2012**.** The chair of CU A (relatively high arrears in 2012) suggested that, prior to 2008, the credit union had taken more risks and had a greater tolerance for lending risk. Between 2008 and 2012, fewer lending risks were being taken. The chair of CU A suggested that lending risk had reduced, as the attitude of the credit union to the granting of loans had changed. There was a greater emphasis placed on a member's ability to pay, with the aim of reducing the risk of loan arrears. The manager of CU C (relatively low arrears in 2012) suggested that members request higher loan amounts in times of economic prosperity. This can lead to 'riskier' loans because of the potentially higher impact on the credit union if the loan defaults. For example, the manager in CU C suggested that, in the years prior to 2008, it was not uncommon for members to request loans of €25,000 for the purchase of a car. In the economic climate of 2012, the members were requesting loans of between €5,000 and €7,000 for car purchase. Lending risk had reduced and the credit union had become more risk averse in relation to the granting of loans.

The concepts of risk appetite and risk tolerance were recognised by some of the interviewees in the context of loan credit in 2012. The interviews revealed that the two credit unions with relatively low arrears levels (CU C and CU D) had introduced maximum loan amounts of €50,000 and €40,000, in the previous ten years and seven years, respectively, and this practice continued. Both credit union managers suggested that a capping of this nature reduces the risk exposure and the financial impact on the credit union in the event of loan default. A similar type of loan restriction did not apply in CU A or CU B. However, by 2012, three of the credit unions did not have a formal risk committee in place to manage overall risk to the credit union and the fourth was in the process of establishing one. The manager of CU C suggested that, even though there was no risk committee in place, "in everything we do, we are looking at risk". When questioned about how the credit union assessed the 'riskiness' of a loan, the senior loans officer in CU C suggested that one way to assess loan risk is to ask the question – "if this was my money, would I grant this loan?". The findings suggest that the approach to lending differed in each credit union and a non-uniform approach to the management of loan risk appetite was

evident across the credit unions. To summarise, CU C and CU D (both with lower arrears in 2012) were more risk aware in the period pre 2008 and between 2008 and mid-2012 than CU A and CU B (both with relatively high loan arrears in mid-2012). They had introduced their own controls, in particular a self-imposed loan restriction, and there were indications that they had an integrated culture of risk awareness.

Approach to Lending Risk in the Economic Environment mid-2012 to mid-2017

By mid-2017, significant changes had occurred, not only in terms of the economic environment, but in terms of the risk management framework introduced by new legislation and regulation. It was found that in CU A (relatively high arrears in 2012), a lending restriction of €10,000 per loan had been imposed by the Credit Union Regulator in 2013. This was relaxed to €25,000 in 2016. However, the manager was of the opinion that this lending restriction had hindered loan growth and business development and, importantly, was continuing to hinder member confidence in the credit union as a lending institution. In CU B (relatively high arrears in 2012), a restriction of €35,000 was imposed initially by the Central Bank of Ireland but was subsequently relaxed to €45,000. However, the manager was of the opinion that this capping of €45,000 was sufficiently high enough to fall within the lending tolerances of the credit union's business objectives and, as such, did not have a significant negative effect on business development. By contrast, CU D (relatively low arrears in 2012) did not have a loan restriction imposed at any stage. Notwithstanding this, and in the improved economic environment, the credit union has maintained the self-imposed maximum loan amount at €40,000 and describes its lending risk appetite as moderate. It has maintained its member confidence and this is reflected in a comparatively very healthy loan to asset ratio of 49% and reserves of 17.5%. The situation is similar in CU C (relatively low arrears in 2012) in so far as it did not have a loan restriction imposed at any stage but has continued to maintain a maximum loan amount of €50,000. To summarise, CU A and CU B (both with relatively high arrears in 2012) had to adjust to a heavier regulatory intervention than CU C and CU D (relatively low arrears in 2012). It could be said that the increased burden of regulation posed a greater shock to the business model of CU A and CU B. CU C and CU D were better able to cope due to their enhanced resilience.

Methods of Loan Assessment 2008 to mid-2012

Loan assessment amongst the credit unions studied incorporated traditional character-based assessment of the applicant, in the form of history of repayment of previous loans, with an assessment of the member's ability to repay the loan. The degree of emphasis on each of these two elements varied between the four credit unions, particularly prior to 2008. In both CU C and CU D (relatively low arrears in 2012), there was a stronger emphasis on ability to repay. This approach required proof of income in the form of pay slips and bank statements as well as proof of other debts. The purpose of the loan, the duration and the amount, as well as the savings, were all taken into account in the assessment process. However, between 2008 and 2012, all of the selected credit unions placed a greater emphasis on the member's ability to repay the loan, with more supporting documentation being requested. All interviewees stated that, apart from the lending policy documents, there were no other written procedures in existence for loan officers to follow in order to assist in the processing of a loan. They suggested that the policy document was sufficient to cover the relevant aspects of the lending procedure. The approach to assessing a member's ability to repay varied in each credit union, with a stronger emphasis on the assessment of ability to repay in CU C and CU D. To summarise, CU C and CU D (both with

relatively low arrears in 2012 compared with CU A and CU B) had a combination of formal and informal (character) loan assessment methods developed pre-2012.

Methods of Loan Assessment mid-2012 to mid-2017

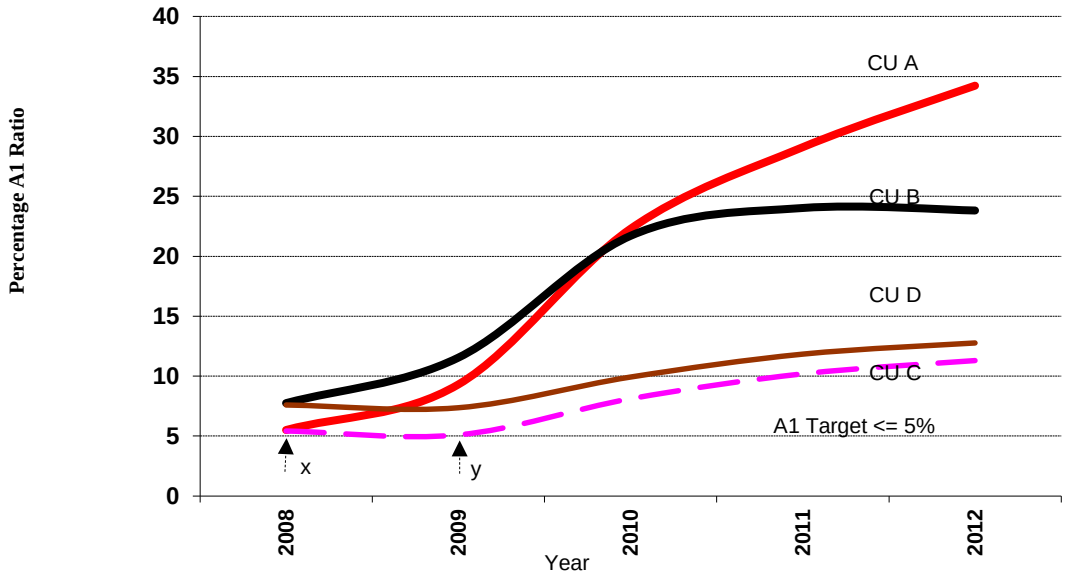
By mid-2017, CU A (relatively high arrears in 2012) had made significant changes to its loan assessment methods. These included the introduction of debt to income ratio assessment, credit checking, and early stage loan arrears assessments. These assessment checks are now the norm, taking precedence over character-based assessment methods. In CU B (relatively high arrears in 2012), there were also significant changes to loan assessment methods. A dedicated lending team has been set up to provide speciality and uniformity in the lending process. This team reports to the credit committee. Additional assessment procedures include procedural documentation, credit checking and debt to income assessment. In CU D (relatively low arrears in 2012), additional enhancements were made to methods of loan assessment in the latter half of 2012 and this was supported by the introduction of a new IT platform which prompted formal debt to income analysis for loan applicants. However, the manager was of the opinion that some of the older members, with good lending repayment records and with only pension income to support them, are intimidated by the new loan assessment processes. This situation has to be managed with sensitivity and a balance struck between the implementation of formal loan risk assessment processes and the need to accommodate an older, more traditional group of members. To summarise, CU C and CU D had already started to incorporate more formal loan assessment methods in combination with character-based assessment. Hence, such requirements post-2012 proved less of an adjustment or shock to their systems and business model.

Lending Performance 2008 to mid-2012

A key financial ratio, for the purposes of this study, is loan arrears as a percentage of total loans (PEARLS A1). The national trend for this ratio has been upwards for the period 2008 to 2012 as was illustrated earlier in Figure 2. The four selected credit unions showed a similar pattern of growing A1 ratios, albeit at different rates of growth. A graphical representation of the PEARLS A1 ratios for the period 2008 to 2012 for the four credit unions studied is presented in Figure 3.

Figure 3

Profile of the Loan Arrears Levels for the Four Credit Unions



The results of the findings for the two credit unions with high A1 ratios show that CU A had a sharp increase in the ratio between the period 2008 to mid-2012, from 5.5% to a level of 34.23%. The A1 profile for CU B shows a similar pattern with a sharp rise in the A1 ratio during the period 2008 to 2012 to the level of 23.81%. The national average level for the credit unions in 2012 was 19.3%. In relation to the two credit unions with relatively low A1 ratios, CU C shows a relatively slow rate of increase from 2009, to a level of 11.3%. CU D shows a similar increase in the A1 ratio from 2009 to a level of 12.77% in 2012. One feature of these profiles is the fact that, in 2008, the A1 ratios for the four credit unions were relatively similar, i.e., within 2.34 percentage points between the lowest and highest (5.42% for CU C to 7.76% for CU B) and averaged 6.57% (Table 2). This figure is remarkably close to the A1 ratio for the credit union movement in 2008 which was 6.5%.

Table 2

Comparative A1 ratios for 2008

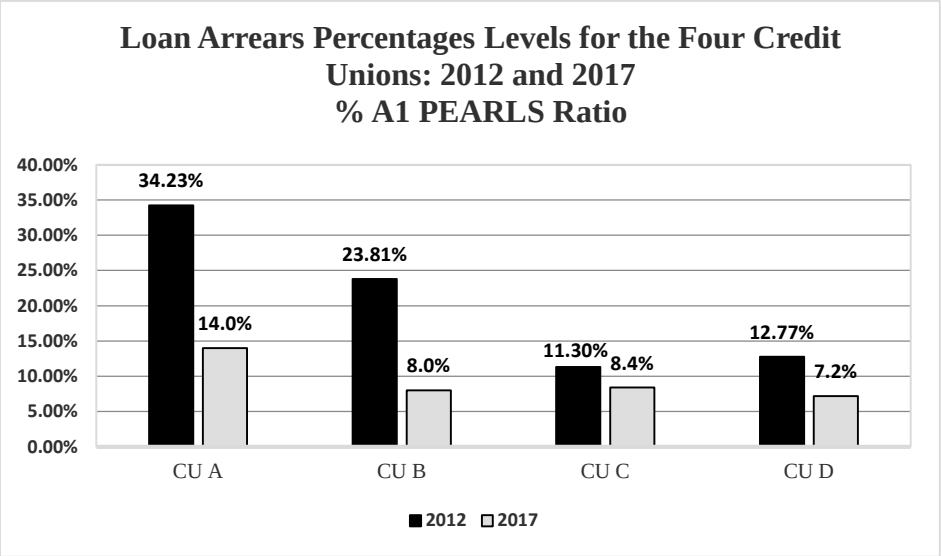
Credit Union	CU A	CU B	CU C	CU D	Average A1 for the Four Credit Unions in 2008
A1 in 2008	5.5 %	7.76%	5.42%	7.6%	6.57%

In the cases of CU A and CU B, the A1 ratio began to increase in 2008 (indicated by the arrow marked 'x' in Figure 3). This is in contrast to CU C and CU D where the increase in the A1 ratio did not begin to rise until 2009, as indicated by the arrow marked 'Y' in Figure 3. This suggests that, in CU A and CU B, more loans became delinquent[5] earlier and loan arrears climbed at a much faster rate in the period following the financial crisis. Most interviewees agreed that more needed to be done to improve the appreciation of the PEARLS A1 ratio. However, the manager of CU B stated that the A1 ratio is "*not a fair ratio*". He argued that it should not be regarded as a critical indicator in determining levels of loan arrears and in influencing the lending risk appetite of a credit union and suggested that the economic environment is probably the main driver of why loans go into arrears.

Lending Performance mid-2012 to mid-2017

By mid-2017, the loan arrears levels have fallen significantly in all four credit unions. As illustrated in Figure 4, the loan arrears to total assets ratio had decreased significantly in the five year period since mid-2012 as would be expected from an observation of the national figures. Three of the four credit unions have levels very close to the national average figure of 7.9%.

Figure 4

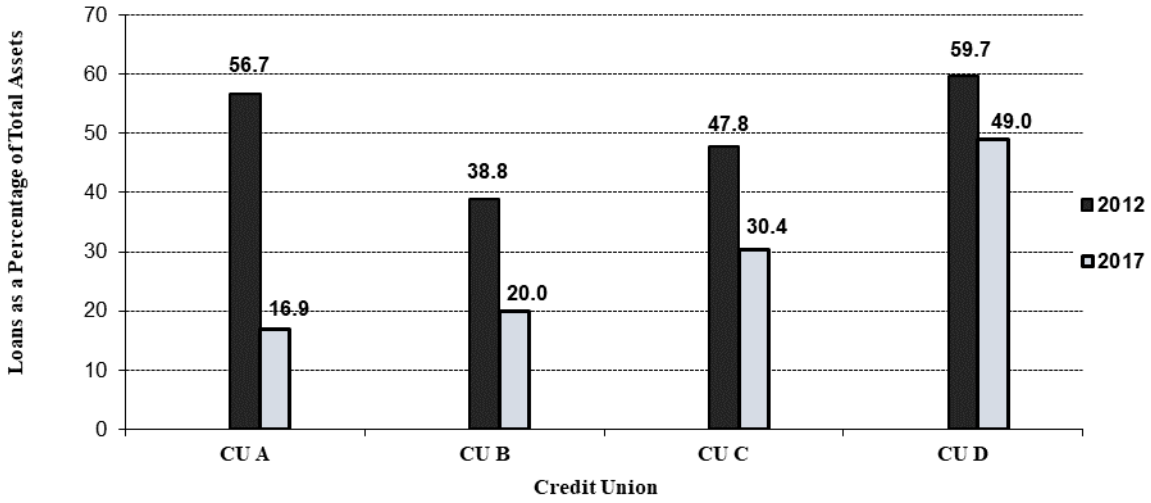


The combined average loans/assets ratio for the four credit unions had reduced from an average figure of 50.75% in 2012, to an average figure of 29.08% in 2017. However, in CU C and CU D (relatively low arrears in 2012), the figures for the loan/asset ratios are significantly higher than for CU A and CU B (relatively high arrears in 2012) and above the national average (Figure 5).

[5] Loan delinquency can occur when a loan repayment is overdue or late. For the purposes of this paper, loan delinquency is described as the gross loans in arrears 10 weeks or more, as a proportion of total loans outstanding (the PEARLS A1 ratio). At an arrears level greater than 9 weeks (10 -18 weeks), a provision of 10% of the net loan balance is also required. A zero provision is required for loan arrears of less than 9 weeks.

Figure 5

Comparison of Loans as a Percentage of Total Assets for Years 2012 and 2017 for the four Selected Credit Unions



To summarise, CU C and CU D could be described as having developed a culture of risk awareness over a long period of time (dating back to pre 2008). It should be remembered that an orientation of risk awareness during the economic boom would have required perseverance, as the general narrative of the 'celtic tiger' was to embrace risk. This indicates a spirit of independence and strong character in these credit unions. It is also interesting to note that this culture of risk awareness did not impact on their levels of entrepreneurship, as can be seen from Figure 5, where CU C and CU D have consistently had better loans/assets performance than CU A and CU B, both of which could be described as less risk aware.

Governance of Lending 2008 to mid-2012

The literature reviewed as part of this study suggested a strong role for corporate governance in the management of lending. In 2012, interviewees were asked for their views on the ways that governance may influence the lending process. The chair of CU A considered good governance as playing an important role in the process. This credit union had continued to improve its governance from 2008 and one example of this is how the credit control committee and the credit committee were working together to improve the management of loan credit. In relation to training and education, the empirical evidence suggests that mentoring has been the main means of educating credit union staff and volunteers in the past, but more formal methods of educational training are now on the increase. This manager suggested that the credit union was now more conscious of formal training than in the past and one result of this is an increasing emphasis on the quality of loan underwriting. He also suggested that more specialisation for loan officers would be beneficial.

The manager of CU B was of the opinion that, if governance were too prescriptive, it would impact negatively on the lending process. In his opinion, the lending process should not be a "box ticking exercise" and needs to have a degree of subjectivity to it. He suggested that credit

unions should not be too risk averse; it was important to discuss the loan with the member and relationship building should be an important factor in the lending process. In CU C and CU D, there was a strong emphasis on both formal training and mentoring, both before and since 2008. There appeared to be greater managerial influence in CU B and CU D in relation to the decision making authority for the granting of loans. The managers in these credit unions tended to interface with loan applicants, develop relationships of trust and have greater discretion and authority in relation to loan decision making. Credit committees would appear to have had greater influence in the decision making process in CU A and CU C. All records of applications for loans were furnished by the lending officers to credit committees of their respective credit unions. The findings also suggested that liaison between the credit control and credit committees in the management of loan credit was not significant (with the exception of CU A). To summarise, CU C and CU D (both with relatively low arrears in 2012) have placed a stronger emphasis on training and mentoring dating from pre-2008 than was the case with CU A and CU B (both with relatively high arrears in 2012). Thus the requirement for greater training and qualification for both staff and volunteers would have proved less of an adjustment for both CU C and CU D.

Governance and Lending mid-2012 to mid-2017

The enhanced governance framework sets the context for 2017. The interviewees were asked for their views on the ways that the enhanced governance regime has influenced the lending process. All agreed that the enhanced governance has been positive in terms of assessment of lending risk. Understanding the concepts of lending risk, compliance with legislation, regulation, policies and procedures by both management staff and volunteers are seen as key to enhancements in credit union governance. One issue agreed upon by all was the emphasis now placed on formal training and education for both staff and volunteers. Training for front line staff, such as credit officers, was seen as particularly important. In CU A, for example, all staff are actively encouraged to gain APA status (accredited product advisor). Similarly, in CU D, there has been an emphasis on upskilling and staff have gained considerably from the accredited learning pathways for credit unions, amongst other training and educational avenues. In CU B, the manager stated that all staff involved in lending have qualifications in either QFA (qualified financial advisor) or APA (accredited product advisor).

Discussion

The findings of this study have highlighted how the management of loan risk and the economic environment influenced the risk of exposure to loan default. Loan risk exposure began to decrease in the period 2008 to mid-2012. There were a number of possible reasons for this. One reason was that the loan amounts sought were considerably reduced as a result of the economic recession, thus reducing the financial impact on the credit unions should loans become delinquent. To some extent, loan risk was driven by members who requested higher amounts when money was plentiful. A second reason is that the studied credit unions were less open to lending risk following the economic downturn in 2008, with increasing emphasis on assessing the members' capacity to borrow. In the enhanced legislative and regulatory period post 2012, awareness of lending risk has become more formalised with a more quantitative approach applied to its management.

Loan Assessment

The interviews in 2012 revealed that the loan assessment process carried out at operational level or the "loan interface level" i.e., at the point where the member applies for a loan, was found to be a combination of character-based and capacity-based assessment in the selected credit unions. The degree of emphasis on each of these two elements of the process had varied between the four credit unions prior to 2008. However, it was found that a greater emphasis was placed on the capacity of a member to repay a loan from 2008. Post 2012, the legislation makes it clear that the ability of the loan applicant to repay a loan is the primary consideration in the loan underwriting process. The process now involves a number of additional components to establish the financial capacity of a member to repay a loan, which are standard for all credit unions. These include establishing the debt to income percentage, which is measured against a recommended level, and credit rating checks to establish if the member has difficulties in repaying other loans.

Lending Performance Indicators

The average figure for loans as a percentage of total assets for the four studied credit unions in 2012 was found to be 50.75%. Even though this was lower than the recommended PEARLS level of 70% plus, it was higher than the average ratio for Irish credit unions nationally which stood at 35.5 % in 2012 (ILCU, 2017).

Loan arrears levels are measured by the A1 PEARLS ratio which Byrne (2006:34) describes as "*one of the most important measurements of institutional weakness*". The A1 loan arrears ratios in 2012 for CU C and CU D (relatively low arrears in 2012) were above the PEARLS recommended goals but were well below the average for the movement. It is suggested that a more risk averse approach to lending by CU C and CU D contributed to the "delay" in the increase in the "rate of climb" of the A1 curve following the economic downturn in 2008, as observed in Figure 3. Also, the "rate of climb" over the period 2008 to 2012 was significantly slower than the rate for CU A and CU B (relatively high arrears in 2012). The A1 arrears levels at the end of 2012 were less than half of those in CU A and CU B. The opinion of the manager in CU B in relation to the A1 ratio generates an interesting debate on the "fairness" or otherwise of this ratio. It is suggested that the reason the A1 ratio was described as "unfair" is because of a belief held by some that high A1 loan arrears levels are singularly associated with poor loan underwriting practices in credit unions. Other factors, such as the weak economic environment, have also, undoubtedly, influenced loan arrears levels in more recent years, as described above. The "fairness" debate also gains some credence, in so far as when a loan book reduces, the A1 ratio may automatically increase because of the method of computation. However, the quality of loan underwriting must be regarded as a key determining factor in influencing the levels of the PEARLS A1 ratio, as evidenced from this study. Most of the credit union personnel interviewed in 2012 agreed that more needed to be done to improve the appreciation of this ratio and other ratios in their credit unions. Investigations by McKillop et al (2006:176) carried out in 2005 suggest that, generally, there is not enough expertise to facilitate the effective use of PEARLS and, in most credit unions, PEARLS remains primarily a supervisory and monitoring mechanism rather than a useful management tool. The interviewees suggested that a strong commitment to director education and training was considered to be a key element in developing competencies for the effective use of financial performance indicators by boards.

As indicated above, loans as a percentage of total assets, on average, for the four studied credit unions had further reduced to 29.08% by mid-2017, from an average of 50.75% in 2012. This ratio is higher than the national average for credit unions in the Republic of Ireland which stood at 26.1 % in mid-2017. In CU D, for example, the mid-2017 level was 49% which is very significant, highlighting the success of this credit union in beating the national trends and continuing to create and maintain the conditions whereby the members continue to take out loans. It is suggested that prudent management of loan risk prior to 2008 and the continuation of this prudent risk management post 2008, has enabled this credit union to remain financially resilient. It has demonstrated to the community it serves that it can meet their financial needs and remain strong.

Reducing Loan Arrears

The loan arrears levels for the four credit unions studied, as measured by the A1 PEARLS ratio, have shown a significant reduction since 2012. For example, in CU A and CU B (relatively high arrears in 2012) arrears have reduced from 34.23% in 2012 to 14% for CU A and from 23.81% to 8% for CU B. It is suggested that this is a result of a combination of the writing-off of non-performing loans, improved loan underwriting policies and procedures and enhanced management of lending risk.

An additional option available to credit unions to help to reduce loan delinquency, while at the same time enhancing relationships with the borrowers, is to re-write or reschedule a delinquent loan. The Central Bank of Ireland (2013) describes rescheduled or re-written loans as loans where the conditions of repayment have been changed by the credit union so that the duration of the loan is extended, or, the repayment amounts have been reduced for 4 or more months within the period of the loan. The number of rescheduled loans in Irish credit unions rose sharply during the period of the economic downturn from 2008 onwards as members came under increasing financial strain to repay loans. However, Elderfield (2010) expressed some concern at the increasing level of rescheduled loans and the potential impact on credit unions if these loans defaulted. In 2013, the Central Bank of Ireland (2013) issued regulations regarding the rescheduling of loans. A key point to be observed in relation to the rescheduling of a loan is that a loan should only be rescheduled where the credit union has established the ability of the member to repay the loan in accordance with the revised terms. The regulations require that credit unions may determine if it is prudent to grant additional credit where the rescheduled loan has performed in accordance with the new terms for a period of time - not less than a year in most cases. Additional provisioning may also be required for rescheduled loans and this can only be reduced where the member has complied with the terms of the new loan agreement for a period of at least one year. While the rescheduling of a loan will assist the borrower and help build relationships, credit unions need to be mindful of the importance of proving ability to pay in accordance with the new terms, as well as complying with the additional regulatory burden of setting aside additional funds to cover possible losses. The management of rescheduled loans should be an integral part of the overall approach to loan risk management by credit unions.

Lending Risk Appetite

The empirical findings of the 2012 research revealed a degree of appreciation of the principles of loan risk appetite, as applied to loan credit, by the selected credit unions. However, the absence of formal risk assessment processes in the selected credit unions suggested that risk management processes to identify, treat and control lending risk were not in place at a higher level. By mid-2017, there was an increased awareness of the concept of risk appetite and risk capacity in the four credit unions studied, although it may not yet be fully embedded. It is suggested that it is important for credit unions to identify the overall risk appetite and risk capacity of their credit unions, as understanding these concepts can have a significant impact on lending risk. Risk appetite can be defined as *"the degree of risk on a broad-based level that a credit union is willing to accept or take in pursuit of its objectives"* (DICO, 2011:3). Risk capacity can be defined as the *"maximum amount of risk which the organisation is technically able to assume before breaching one or more of its capital base, liquidity, borrowing capacity, reputational and regulatory constraints* (Central Bank of Ireland, 2014:6). Establishing an appropriate overall risk appetite is a key function of boards and management. When an overall risk appetite is established, lending tolerances can then be adjusted to align with categories of members with different financial circumstances. It is important that risk appetite is set in the context of the credit union's capacity to withstand adverse consequences. This capacity depends on several factors, including its earnings capacity, the level and quality of its capital, its level of loan provisioning and the quality of its loan underwriting procedures (DICO, 2011:3). A higher capacity to absorb adverse consequences provides a greater opportunity to adopt a higher risk appetite and set higher tolerances, where appropriate. A lower capacity to absorb adverse consequences indicates a lower tolerance for risk. The task of boards and management should be to assess this capacity on an ongoing basis and make recommendations on loan risk tolerance levels which are acceptable to the credit union. Boards and management need to provide clear guidance to credit union front-line staff on the limits of the risk which it may take in relation to the granting of loans. This should be expressed in the loan credit policy document, which needs to be a dynamic document, and also in all procedural, control and algorithm documents.

Governance and Lending Risk

A variety of views emerged in 2012 on how governance influenced the lending process and the need for governance to be enhanced. Prior to the introduction of the enhanced legislative and regulatory framework, loan risk assessment was less formalized, with considerable variations in how each credit union viewed and implemented the process of loan risk assessment. Even though there were variations in the views of interviewees from the selected credit unions, there appeared to be an increasing level of awareness of the requirements for good governance. In particular, the apparent consistency in the governance arrangements in CU C and CU D both prior to and post 2008 in terms of the governance and management of loan credit, may be reflected in the relatively low levels of the A1 arrears ratios. In 2017, the research findings demonstrated that the good governance practices of CU C and CU D in the past have continued to yield benefits in terms of their current financial performance and resilience.

An organisation achieves its objectives by the way in which it is controlled and governed and risk is the chance of something happening that will have an impact on those objectives (Dahms, 2008:1). The commonality between governance and risk is the achievement of objectives. The variety of views expressed by the interviewees in the study, in relation to governance and risk,

suggest a need for boards of credit unions and managers to further embrace the interrelationship between the two in order to achieve the objective of good lending practice. Good overall governance is a key element in the management of lending in credit unions. At its most fundamental, credit union governance is about aligning the actions and choices a credit union makes with the interests of the members (Report of the Commission on Credit Unions, 2012:139). A key aspect of good governance, as we have seen, is the management of risk. Kaupelyte and McCarthy (2005:1) suggest that developmental stages of a credit union are often closely related to the management of risk and, as credit unions develop and professionalism develops, higher standards of risk management in credit unions should develop, leading to an increase in regulation. This is particularly true in relation to the lending component of Irish credit union business, where, as the research has found, there is now a greater appreciation of principles of formal risk management and of enhanced governance. It is suggested that one of the key elements in improving the management of lending risk was the formalisation of risk management processes, compliance management and internal audit, combining to develop risk oversight. The embedding of a risk culture into credit unions needs to be part of the overall management of lending risk. Risk culture has been defined as "*the norms of behavior for individuals and groups within an organisation that determine the collective ability to identify and understand, openly discuss and act on the organisation's current and future risk*" (Central Bank of Ireland, 2014:11). Lending risk can be underpinned by embedding a strong overall risk culture, where risk analysis becomes the norm, both at the operational and strategic level of credit unions. It is suggested that the formal training and education of staff and volunteers on the management of loan risk is considered to be a key element in developing norms and assisting in the development of strong organisational values and beliefs in knowing when to accept risk and knowing when to minimize or avoid risk. Boards and managers need to take into account the interactions of the various elements that help to develop, influence and refine good lending strategy. This process must be seen as dynamic and the board must act in a dynamic fashion in the management of loan credit, as these inputs vary or change.

Conclusion

This study found that the prudent management of lending risk can contribute to ensuring the sustainability of credit union performance and to ensuring that the co-operative objectives are fulfilled in terms of serving the financial and social needs of the community. It demonstrated that good governance practices can provide the foundation for a sound lending environment. The challenge for credit unions is to continue to respond to the changing regulatory, legislative, social and economic environments, recognize and embrace the concepts of lending risk and continue to develop good governance practices in order to enhance the loan underwriting process. Loan book growth will be a very significant component of its strategic objectives in the continued development of the business model of Irish credit unions. The application of risk management principles and good governance in the management of loans to members will help to ensure that the quality of loans will be maintained to the highest standards. In other words, there is a strong relationship between awareness of risk and lending performance. As Irish credit unions continue to develop the business model along an evolutionary path towards greater professionalism and maturity, the requirement for applying risk management principles and enhanced governance in the lending process will continue to be important. Further research is recommended in the area of lending risk in Irish credit unions. This paper was confined to four credit unions and, by its nature, could be described as limited both in scope and depth. Further research, for example, might extend the research to a larger sample of credit unions and explore the influence of the external economic environment on credit union lending practices in more depth.

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