An assessment of the credit management process of credit unions:
An examination of three Chapters

This dissertation is submitted in partial fulfilment of the requirements for the Degree of Masters in Business Studies, Waterford Institute of Technology, Waterford.

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Abstract

Irish credit unions are facing their most taxing period to date owing to the profusion of loan defaults on their loan portfolios which inevitably has curbed their business performance. Recently the Financial Regulator and other government bodies realise that credit unions must update and implement more stringent processes; thus they have proposed new regulatory policies to facilitate same. With analysts suggesting that 20 out of 414 credit unions are "*facing serious solvency issues*" (McManus, 2010), a call for an enquiry into credit unions' credit management processes are essential. Accordingly this research investigates the credit management processes that are employed by Irish credit unions to sustain their business performance.

The purpose of this study is to examine what tools, interventions and standards are exercised in Irish credit unions. Moreover the skill set and level of credit management personnel is assessed as well as the gaps in the current processes. The overall principle of this research is to observe if these processes are sufficient enough to sustain their business performance or do they need to be updated.

A triangulation approach was utilised in achieving the research objectives. Firstly a survey was disseminated to three credit union Chapters in Ireland in order to obtain an insight into their daily credit management process. To complement this survey, interviews were conducted on four credit union administrators. This research specifically focuses on these three Chapters alone where all the findings originate from these sources.

Numerous findings emerge from this research. The key results underline that credit unions appear to be deficient in the credit control department; namely in the areas of experience, personnel levels and the consistency of interventions used. Moreover, the lack of technology operated in the loan decision process is apparent. Therefore more complex and sophisticated models is a prerequisite if credit unions are to maintain financially stable. In spite of this a number of arduous challenges will face credit unions to implement these changes as their ethos and social duty must be considered.

Irish credit unions play a significant role in the Irish financial sector and society however there is limited research pertaining to their credit management processes.

This study therefore hopes to provide an insight into this topic and help promote further research into same. In general, this research has a practical value to it as it will disseminate the findings to the survey participants. Subsequently, these credit unions can incorporate the recommendations from this study into their credit management processes in order to sustain their business performance.

Acknowledgments

"If you want something very badly, you can achieve it. It may take patience, very hard work, a real struggle, and a long time but it can be done. That much faith is a prerequisite of any undertaking, artistic or otherwise." *Margo Jones (1913-1955)*

First and foremost, I would sincerely like to thank my supervisor Mr. John Maher whose commitment, relentless support and guidance helped me to sew together the threads of my research. Your constant encouragement showed me that "*by believing passionately in something that does not yet exist, we create it.*" (Nikos Kazantzakis). So, to you I am forever grateful.

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Finally I would like to say a special thanks to each of my classmates for all the great times we had together and for providing me with much needed laughter. Always remember that *"it is not the mountain we conquer but ourselves*."(Edmund Hillary). So to you I say never give up on your dreams.

Ethical Declaration

I declare that this dissertation is wholly my own work except where I have made explicit references to the work of others. I have read the Structured Masters Programs Research Policy, Procedures and Guidelines (October, 2009) and hereby declare that this dissertation is in line with these requirements. I have discussed, agreed and complied with whatever confidentiality or anonymity terms of reference were deemed appropriate by those participating in the research.

I have uploaded the entire dissertation to Turnitin, examined my ‘Originality Report’ by viewing the detail behind the overall ‘Similarity Index’, and have addressed any matches that exceed 3% when quotations and bibliography are excluded. Any unaddressed matches in excess of 3% are explained by way of additional note submitted separately with the dissertation. I have made every effort to minimise my overall ‘Similarity Index’ score and the number of matches occurring.

Laura Walsh

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Glossary of terms

ACCUP:	Advanced Certificate in Credit Union Practice.
CPD:	Continuing Professional Development.
CUA:	Credit Union Advisor.
CUS:	Credit Union Studies
ECDL:	European Computer Driving License
EMV	Expected money value
FETAC:	Further Education and Training Awards Council
Grandfather Rule:	The term given to credit personnel with eight or more year's experience.
ICB:	Irish Credit Bureau
ILCU:	Irish League of Credit Unions
MAPDEG:	Mortgage Arrears and Personal Debt Expert Group
NTMA:	National Treasury Management Agency
QFA:	Qualified Financial Advisor.
RMS:	Resource Management System
RPI:	Repayment Protection Insurance
XRS:	Expert Revenue Systems

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Chapter One
Introduction

1.1 Introduction

The purpose of this chapter is to present an overview of the research to the reader. It commences by delineating the justification behind this study and then illustrates a mind map of the literature review. Subsequently the research objectives are asserted and a concise description of the methodology employed in achieving these research objectives is provided. Thirdly, this chapter exhibits the structure of the research and concludes with the advantages of undertaking it.

1.2 Rationale

The motive for this study was derived from a speech made by James O'Brien, Deputy Registrar of credit unions (2010). Currently credit unions face customers who are under financial distress who wish to receive financial assistance. Consequently unprecedented pressure confronts credit unions as members seek new loans or re-scheduled existing loans. However lending decisions made on vacuous information based on goodwill and trust cannot be exercised anymore as this defies logic and sound business practice. Therefore O'Brien (2010) argues that all credit unions should be exploiting facilities supplied by external credit reference agencies to enable better lending decisions.

This argument seems feasible as the arrears on the loan book of credit unions have increased considerably over the past five years. According to the ILCU Annual Report (2009), there was an increase of 3.65 percent since 2005 to a staggering 9.75 percent in 2009. At present approximately 12.5% of loans are in arrears, overall leaving 20 out of 414 credit unions *"facing serious solvency issues"* (McManus, 2010). Thus O'Brien (2010) contends that *"it is vital that there is strong oversight of the credit function at this time.*"

In light of O'Brien (2010)'s proposition, the researcher chose to conduct research on the credit management process of credit unions. Lang and Jagtiani (2010) aver that credit management is a system that is devised to prevent unwarranted damage to a firm or institution from unforeseen but probable events. In this fashion the aim of this research is to identify key areas of the credit management process of credit unions which may need revision given the current economic climate. The researcher wishes to investigate this process for any gaps and establish key ingredients that could be added so credit unions can sustain their business performance.

1.3 Research question and objectives

Accordingly the research question for this study is defined as follows:

Using three chapters as an exemplar of Irish credit unions, what credit management processes are used by credit unions to sustain their business performance?

The research objectives that stemmed from this research question are:

Objective one: To assess the skill set and size of credit management administrators in Irish credit unions

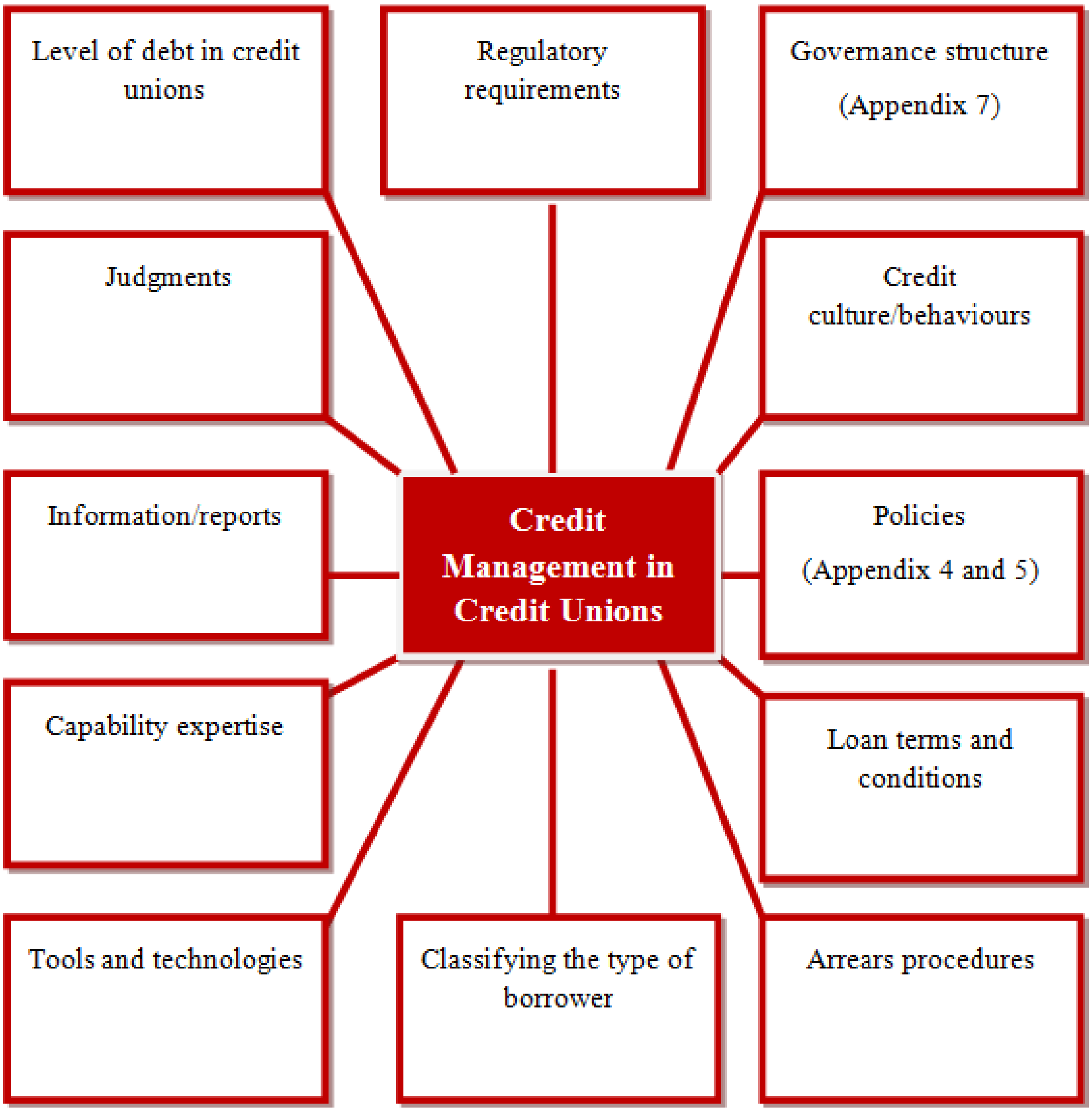
Objective two: To critically evaluate the enactment of the credit management process by observing how it is conducted, monitored and updated.

Objective three: To examine if there is a gap in the current process regarding the range of tools and methods employed.

1.4 Literature mind map

Figure 1.1 below illustrates the numerous domains which will be discussed in the literature review chapters.

Figure 1.1 Mind map of the literature review



1.5 Methodology

The researcher elected both quantitative and qualitative methods to be utilised in order to facilitate this research. While numerous techniques were considered, postal surveys and semi-structured interviews were decided to be the most appropriate. Details of the method used included forty-two postal surveys being disseminated to three credit union Chapters in Ireland. Additionally four semi-structured interviews were conducted with various credit unions officials. This triangulation method allowed the researcher to probe during the interviews whilst gaining accurate and true responses through the means of the survey.

1.6 Dissertation Structure

This research comprises of seven chapters. Listed below is a concise account of each of the chapters to follow:

Chapter Two: This chapter is part of the literature review chapters (as is Chapter Three). It seeks to establish the current problems encountered by credit unions in the credit management area. In essence it provides the foundation for investigating whether the management of credit in credit unions needs to be revised.

Chapter Three: This chapter defines credit management and discusses several credit management processes which could be incorporated by credit unions to sustain their business performance. This chapter categorises credit management under three headings: Lending, credit control and provisions/write-offs. It further includes the barriers to a sound credit management system.

Chapter Four: A description of the methodology used in this research is provided in this chapter. Included in this is the identification of the research problem, the research objectives and the hypotheses along with an illustration of the research design. Moreover a detailed account of the triangulation method employed is given and the limitations of same.

Chapter Five: This chapter portrays the main findings of the primary research.

Chapter Six: The researcher's interpretation, discussion and analysis of the data that were collected in the findings chapter are examined in the context of the literature review in this chapter.

Chapter Seven: The conclusion of this study is outlined in this chapter along with the recommendations provided by the author. Moreover, the limitations of this study are incorporated. Here the author presents areas where further research could be conducted on in the future.

1.7 Benefit of the study

At present *"the Irish banking system is on a life-support system"* (Honahan, 2010). As a result credit unions are experiencing their most taxing period to date regarding their management of credit. A representative of CUMA stressed this point during this research by stating that "*the credit management process in credit unions is definitely becoming a hot topic"*. Therefore this research has never been more imperative than what it is now.

Accordingly this study provides a practical value to credit unions in Ireland as each credit union that participates in the survey has an opportunity to receive the findings. These findings may highlight certain gaps in the current credit management process of credit unions from which they can revaluate these areas in order to sustain a growing business performance.

Academically, this subject area has limited research conducted on it. Consequently the author aims to add insight into this area and provide the foundation for further research to be performed around this research topic.

1.8 Chapter summary

This chapter has provided a background to the research domain and provides an indication of what is to follow. It also sets out the methodology used and exemplifies a mind map of the literature review. Overall this chapter underpins the structure of this study.

Chapter Two

An analysis of the current economic environment for credit management processes

2.1 Introduction

The theme of this chapter is the economic crisis at present and its weight in affecting the financial sector globally. The rationale for analysing this topic arrived from a quote by the Minister for Finance, where he articulated that it was deemed essential to thoroughly analyse how events in the banking sector contributed to the economic crisis. This would then provide a *"fuller understanding of the root causes of the systemic failures"* (Lenihan, 2010). As a result the author will be able to explore if the effects of the Irish crisis had a contagion effect on credit unions in Ireland.

This will be assessed by conducting a concise analysis of the current credit crunch in Ireland and its effect on Irish credit unions. Additionally, the author will analyse the trend of Irelands' debt levels and then narrow this analysis towards the debt levels of credit unions over the past two decades.

2.2 The credit crunch in Ireland

Although it is conspicuous that international pressures influenced the timing, concentration and profundity of the Irish crisis, the primary causes of the problem were indubitably 'home made' (Regling and Watson, 2010). It was a case of the classic domestic problem of excessive mortgage lending into an untenable construction growth and housing boom (Honohan, 2009).

While many analysts suspected this bubble to burst, very little thought that the issue of bank solvency problems would arise. Besides, the concept that banks were *'too big to fail'* gave good reason to think this, even if they were distributing unsound loans to fund property purchases based on improbable predictions (Honohan, 2009). The question thus arises how could traditionally conservative banks have been so imprudent as to allow themselves susceptible in such an apparent property bubble?

There are copious constituents which emerge from the literature that contributed to the creation of the crisis in Ireland, for example interest rates, fiscal policy and concentration of assets (Appendix 3). However, this research will focus on the impact risk management in financial institutions had on the Irish economy.

2.2.1 Risk management in financial institutions

It is clear that the most notorious reason behind the creation of the Irish credit crunch was the critical weaknesses of Irish financial institutions risk management. According to Regling and Watson (2010) there were flaws in several financial institutions' internal risk management in areas such as assessing credit risk and stress-testing. On a similar vein Lang and Jagtiani (2010) ascertain that there was an overreliance on statistical risk models. This led financial institutions to ignore more qualitative verdicts on the disposition of the housing boom along with problems related to adverse selection and moral hazard (Lang and Jagtiani). However, even if these statistical models did envisage the extent to which the financial institutions were exposed, it is probable that nothing still would have been done about it. This is supported by the fact that outside analysts already foresaw this bubble to burst (Central Bank, 2005).

2.2.2 Debt levels in Ireland

Over the last 20 years, Irish financial institutions provided astronomical levels of credit to households and the construction industry (NTMA, 2010). In 1995 the household debt to disposable income ratio in Ireland was robust at 48 percent. Conversely by 2008, this figure had risen to a colossal 178 percent; thus for every 100 euro earned, on average, every household owed 178 euro to the financial sector (Oireachtas, 2010). This increasing trend in debt levels is seen in Figure 2.1 where on average each loan type increased by a substantial 276% since 2000. Accordingly, Ireland was placed as one of the highly indebted countries in Europe (Hurley, 2005).

A rationalisation for this increase is elucidated by Regling and Watson (2010) where the authors state that it is Ireland's integration with other European markets that influenced its bank behaviour. First and foremost the initiation of the euro evidently assisted the lending boom in Ireland due to the accessibility of funding from cross border banks without foreign exchange exposure. Secondly competition surged as foreign banks entered the mortgage sector (Regling and Watson, 2010). Therefore they suggest that there was pressure on the Irish financial sector to cut interest rates and lend more to maintain its market share. Although this is argued, Honohan (2009) contends that global influences were just a slice of the problems behind the Irish crisis.

Figure 2.1 Personal debt levels in Ireland 1999-2010

(Euro millions (€))

	Overdrafts	Loans up to and including one year	Term/ revolving loans	Residential mortgages	Other mortgages	Other loans and securities issued to other residents	Outstanding debt on credit cards
2000	7,798	23,651	38,009	31,816	5,535	3,901	1,079
2002	7,632	21,933	60,440	40,647	7,520	3,027	1,461
2004	6.966	19,834	67,510	61,460	9,875	3,723	1,898
2006	7,389	32,381	95,382	92,765	11,974	3,861	2,407
2008	8,104	58,679	137,345	118,984	17,862	10,440	2,820
2010	8,770	55,789	130,434	109,770	14,996	40,478	3,034
% change From 2000-2010	**12%**	**136%**	**243%**	**245%**	**170%**	**945%**	**181%**

Adapted from: (Oireachtas, 2010)

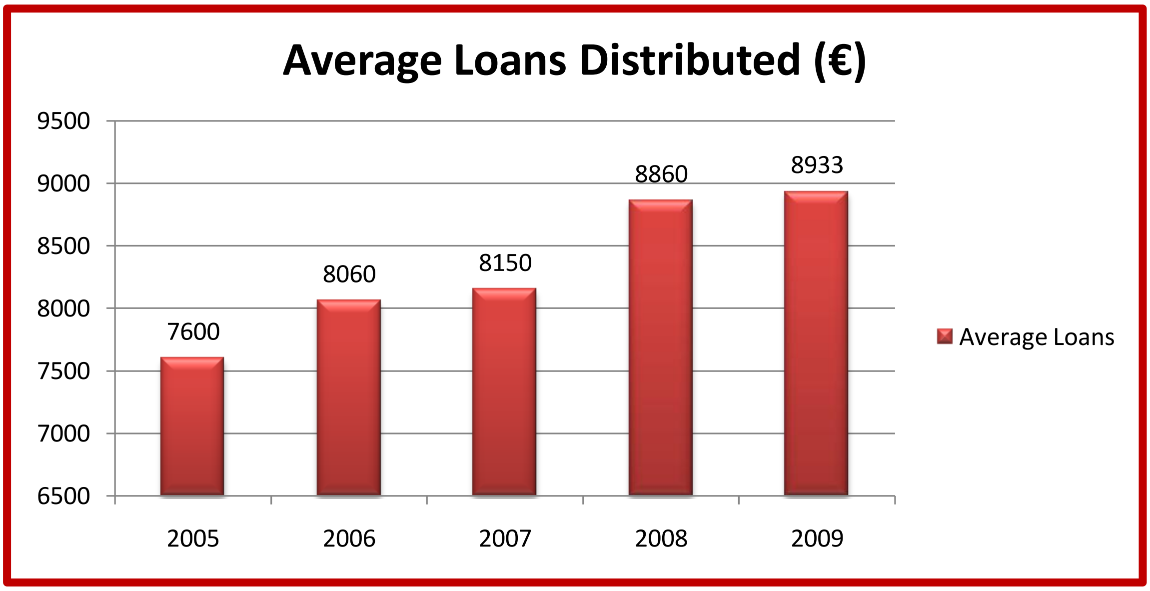
2.2.3 Credit exposure in credit unions

Hobbs (2010b) highlights the reality that the "*credit union system is a part of the banking crisis*". Although the extent of problems may differ the outcome is the same whereby credit unions have supported the consumer credit bubble and now numerous of them face unsustainable loan losses (Hobbs, 2010b).

Contrary to this, Bailey (2009) president of the ILCU states that the majority of credit unions were scrupulous in their approach to managing and distributing their credit. Thus it was estimated that 90 percent of ILCU affiliated credit unions would present a surplus in year end 2009. The reason behind this was that credit unions were actively managing their financial affairs in a *"conservative and prudent manner to minimise exposure…in these difficult times"* (Bailey, 2009).

Although this outturn seemed acceptable, an upward trend in credit unions' average loan distribution amount is apparent since 2005 (Graph 2.1) with a substantial increase of 17.54 percent by 2009 (ILCU Annual Report, 2009). As a result it is perceptible that the quantity of lending distributed in credit unions followed the same ascending trends as other Irish financial institutions.

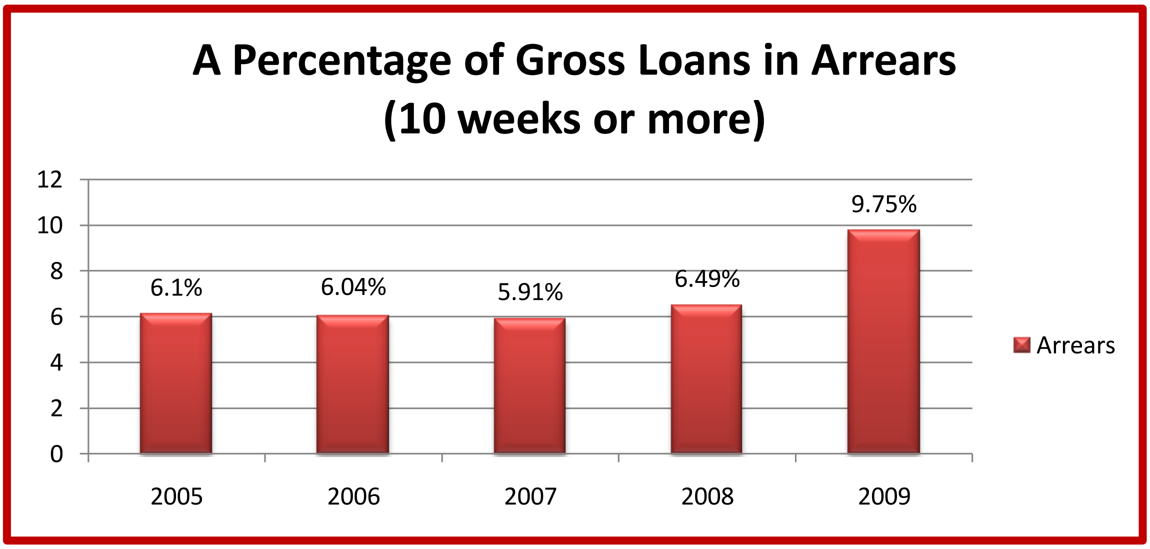
Graph 2.1



Adapted from: (Irish League of Credit Unions, 2009)

According to the ILCU Annual Report (2009), the defaults that occurred from these loans also trended upwards. From 2005 to 2009 there was a 3.65 percent increase of gross loans in arrears meaning that by 2009 9.75 percent of credit unions loans were after defaulting (Graph 2.2). At present 12.5% of loans are approximately in arrears, overall leaving 20 out of 414 credit unions *"facing serious solvency issues"* (McManus, 2010).

Graph 2.2



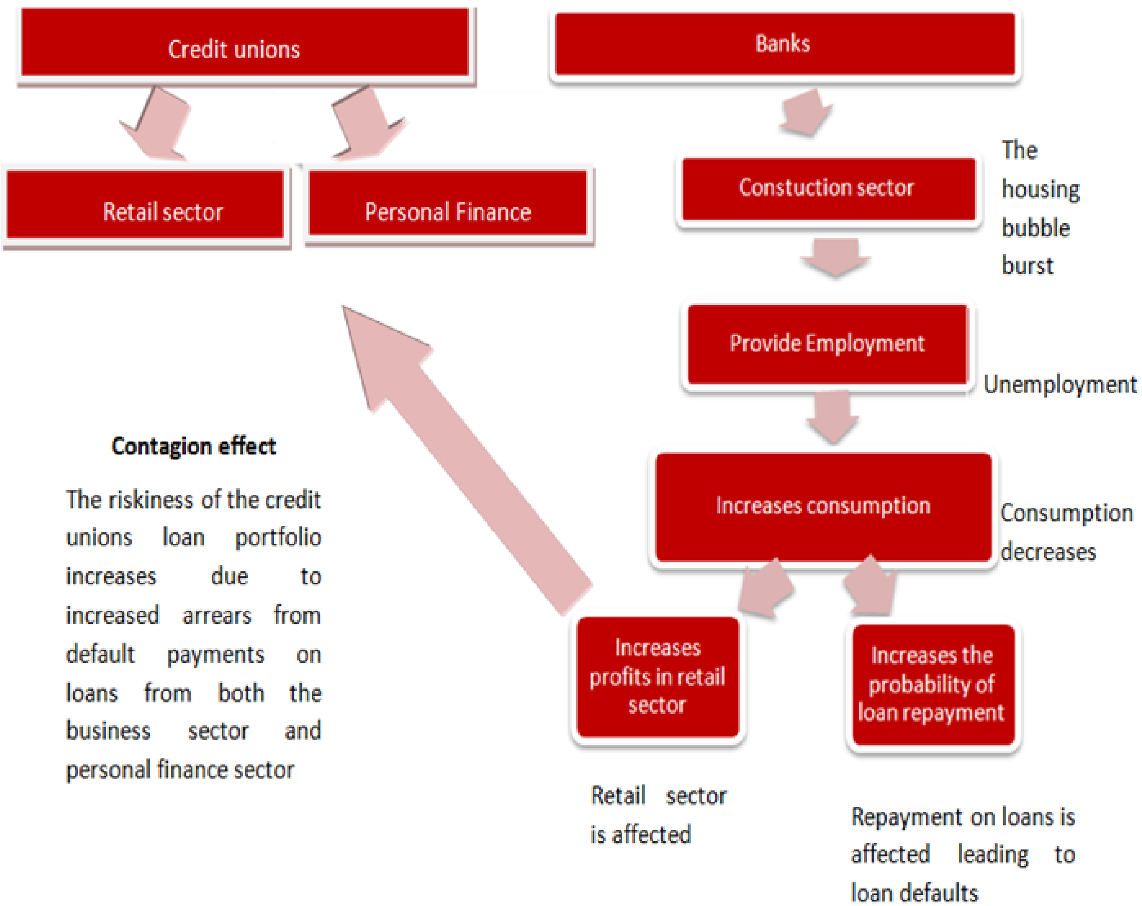
Adapted from: (Irish League of Credit Unions, 2009)

In spite of this, the ILCU Annual Report (2009) stress that credit unions are now implementing more regular reviewing of their loan books and adjusting regular provisions for same. Although Hobbs (2010a) agrees that it is the credit unions that must save themselves, he fears that "*time has run out*". Effectively there appears to be an appetite in credit unions to strengthen their current management process in order to assuage this concentration of debt and arrears.

2.3 The contagion effect

James O' Brien, Deputy Registrar of credit unions deliberates that although credit unions managed better than banks, the economic environment with the growing unemployment rate ultimately had a contagion effect on their performance (Irish Times, 2010). Thus he urges that credit unions must better protect themselves against the extra losses. Construed from the literature, it appears that it was the mixture of house price depreciation, job losses, decrease in consumption and loan defaults in other financial institutions that added to the likelihood of credit union borrowers to default on their payments (see Figure 2.2). As a result Irish credit unions today are left with the largest level of loan defaults on their books in the history of their existence (Hobbs, 2010). Indeed, this brings a call for investigation to see if credit unions credit management processes are sufficient enough to sustain their business performance.

Figure 2.2 The contagion effect



2.4 Chapter summary

To conclude, it is overt that there is a prerequisite for an exploration of the credit management processes of Irish financial institutions. The profusion of debt that has been distributed in Ireland over the last decade has certainly instigated a ripple effect of bad debts and loan defaults across all financial bodies. To narrow this research, the main focus will be placed on credit unions' credit management processes and its effect on their business performance.

Chapter Three

Credit Management: Theory and Processes

3.1 Introduction

Chapter three will reform the direction and content of this research by focusing on the credit management processes of credit unions. This chapter firstly provides a comprehension of the concept of 'credit risk management' and presents a brief explanation for the prerequisite to control for this risk. Following this, a detailed account of the numerous credit management processes is provided. Lastly, a pattern of the barriers to a thriving credit management system will be reviewed. The structure of this chapter allows the reader to understand the significance of controlling risk and the consistency of this process within the business model and ethos of credit unions.

3.2 What is credit risk management?

Fatemi and Fooladi (2006) characterise credit risk as risk that occurs from the ambiguity in a borrowers' capacity to meet his/her debt. At a different slant, King (2008) defines credit management as the "*policies and practices businesses follow in collecting payments from their customers*". Regarding levels of priority in financial institutions, it is unsurprising that their main focus is to warrant that this type of risk management is effective above all others (Fatemi and Fooladi, 2006).

At a different method of thinking, Saunders (2007) contends that credit risk management can be explained quantitatively where the expected return (E (r)) per euro loaned is correlated to the agreed return by:

$$E(r) = p(1+k)$$

where p is the probability of the loan being repaid and k is the agreed return. If the p value is less than 1 then default risk is present. Consequently, to compensate for this risk, the risk premium (m) has to be sufficiently high but not too high as to reduce the probability of repayment (Saunders, 2007).

3.3 Controlling for credit risk

According to Bernanke (2009b), *"one of the lessons learned from the current financial crisis has been the need for timely and effective internal communication about risks"*. This is observed in a study conducted by the Comptroller of the Currency where the findings show that the main component to the failure of financial institutions was the inadequate control over loan quality (Apadoford, 1988). He lists the following as the components to this poor loan quality:

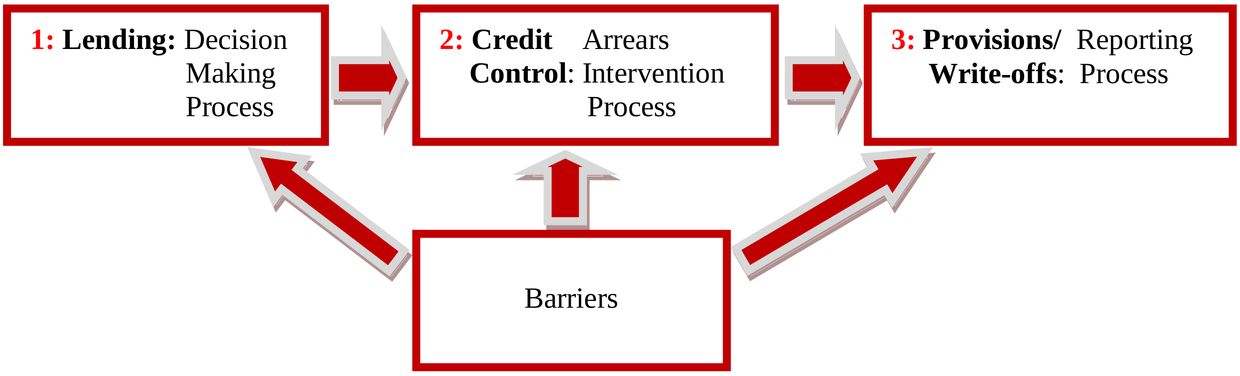
- Inattention to loan policies.
- Over indulgent loan terms and nebulous standards.
- Perilous concentration of credit.
- Weak control over loan administrators.
- Inadequate systems to identify loan problems.
- Excessive growth of loan portfolio which facilitates poor control over quality.

Consequently these examples are worthy of further investigation in credit unions in terms of their presence and the measures taken to combat them.

3.4 The processes for effective credit management

Basu and Rolfes (1995) state that top-quality credit management processes are key components in the foundation upon which every successful financial establishment is built. Corroborating this, Oesterreichche Nationalbank (2005) emphasise the importance of the individual stages in the process of credit management. Moreover this process takes many forms and exploits several structures (Basu and Rolfes, 1995). From extant studies emerge three key areas in which credit management is performed in (Figure 3.1). Therefore the author will discuss the various processes that could be implemented in each of these areas, with an aim to assess the current management process of credit unions.

Figure 3.1 Credit management areas



3.5 Lending process

Ralston and Wright (2003) develop two elements to high quality lending practices from their study on credit unions. The first step is obtaining systematic identification of risk of each loan applicant. Saunders (1997) further agrees that it is necessary for financial institutions to measure the probability of borrower default. However, Thomas (2009) stresses that measuring the riskiness of a borrower can be difficult as the problem of moral hazard could arise. Secondly Ralston and Wright (2003) highlight the necessity for credit unions to adjust the lending conditions of a loan in order to incorporate the high risk of a borrower. In general the presence or absence of these elements may be significant for credit unions regarding their credit management processes.

3.5.1 Credit limits

One of the main functions of a financial institution is to realise proper control over credit. Bessis (2002) underlines the importance of executing a limit procedure so as to avoid any single loss that could endanger the financial institution. Dekker (2004) argues that it is the lending officers' role to place an instalment period and principle amount that would complement the affordability of the borrower. However, Bessis (2002) also deliberates that this limit on lending will conflict with the development of the financial institutions business volume as it will curb the level of borrowing from customers. Moreover, he considers that shorter duration loan periods restrict the interest revenue generated. It further increases the probability of customers not meeting their monthly obligations, as the pay instalments are too high. Therefore borrowers are unnecessarily categorised in a delinquency state (Dekker, 2004). Contrary to this, Dekker (2004) asserts that the longer the duration period of a loan the greater the risk that borrower is due to the changing environment and perhaps changing circumstance of the borrower. Accordingly, the question arises are credit unions implementing a stringent lending limit process?

This topic has recently been brought to light as there has been an amendment to Section 35 of the Credit Union Act 1997 which increases the limit on lending from 20 percent to 30 percent. This modification increases the level of lending in credit unions so as to complement their ethos of helping people during difficult times (Credit Union, 2010). However, this will encounter more risk on credit unions' loan portfolios as *"the management of credit limits is largely the only instrument to control and bound credit losses"* (Bessis, 2002). Conversely, CEO of the ILCU, Kieron Brennan notes that this risk will be counteracted by the increased provision of bad debts and changed policies regarding loan rescheduling (Credit Union, 2010a). Nevertheless Hobbs (2010a) postulates that at present credit unions are facing difficulties. Accordingly this research aims to analyse if this altered regulatory policy is the best way forward for credit unions given their current circumstances and the economic climate.

3.5.2 Proposed tools for lending

The current credit crunch gives rise to new innovative credit management applications in order to further alleviate lending risks (Fatemi and Fooladi, 2006). Accordingly, several tools and models will be discussed that have materialised from the literature, which could be incorporated in the credit unions credit management processes.

3.5.2.1 Affordability

Burton (2008) contemplates why lenders in the past had authorised the distribution of more credit to borrowers who had existing commitments that they were already finding difficult to pay back. He believes that this gives rise to the role of affordability in the decision making process of lending and the approval of credit. At a different perspective, Thomas (2009) states that when measuring the affordability of a borrower it is their lack of cash flow and not assets that causes them to default. Accordingly, he derives a borrower structural model based on affordability as follows:

$$\textbf{(Realisable assets)}_{\mathbf{t+1}} \mathbf{=} \text{(Realisable assets)}_{t} + \text{(Income level)}_{t} - \text{(Expenditure)}_{t} - \text{(Loan repayment)}_{t}$$

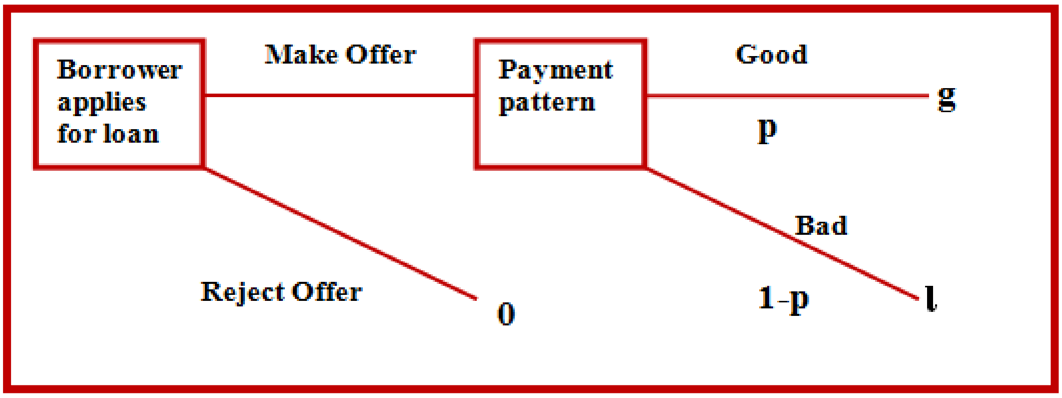
where this model computes the variable at time t+1 by summating and subtracting various variables at time t. Hence the affordability of a borrower is negative if $\text{(Realisable assets)}_{t+1} < 0$.

In spite of the viability of this method, Wilkinson and Tingay (2004) as discussed by Burton (2008) conducted a study on the effectiveness of affordability tests. The results show that this method is weak when assessing the default risk of a borrower as there is a high correlation between it and the more conventional information derived from the loan application and credit bureau check. In spite of this, Burton (2008) states that recently the Financial Regulator and lending institutions have given additional precedence to measuring affordability when assessing borrower risks. However, given the voluntary nature of credit unions do they have the means to incorporate this method of assessment? Middlemiss (2004) considers that the main barrier in updating technology is getting financial institutions to invest in it. Overall it appears the use of affordability tools in the context of borrower assessment is a contentious one.

3.5.2.2 Decision trees

Another instrument that could be employed in the credit management process of credit unions is decision trees. Bailey (2004) defines decision trees as the *"organisation of information* [by] *creating a connected graph with nodes branching into other nodes".* Moreover, Thomas (2009) describes how the repayment probability of a borrower can be assessed using the simple decision tree shown in Figure 3.2.

Figure 3.2 Decision tree



Adapted from: (Thomas, 2009)

If g is the profit made by the financial institution from repaying borrowers, ι the loss the financial institution suffers from the borrower defaulting, p the probability of the borrower being good and 1-p the probability of the borrower defaulting then we get the decision tree above. Thus under the EMV criterion the bank accepts the applicant providing the output of the equation is as follows:

$$pg - (1-p)\,\iota > 0$$

(Thomas, 2009)

Regarding the use of decision trees, Jepson (2009) conducted a study on North Vancouver B.C. Credit Union. They found that B.C. Credit Union didn't need to exercise their loan loss reserve due to the employment of advanced credit risk assessments like decision trees. Similarly, could this method be beneficial to Irish credit unions also?

3.5.2.3 Risk models

Fatemi and Fooladi (2006) stipulate that a new method of managing and measuring credit risk is necessary in all financial institutions. However, given that there are vast amounts of new accessible product innovations (Fatemi and Fooladi, 2006); can this technology knit in with the ethos and lending culture of credit unions? They further stress that credit scoring models can easily be incorporated into the everyday credit assessment activities of financial institutions; thus the underlying logic of this framework could be adapted in credit unions. Disputing the effectiveness of credit models however, Kindred (2004) asserts that they are "*based on the assumption that the future will be like the past*"; i.e. economic circumstances cannot be predicted.

One instrument that is utilised by 70 Irish credit unions, where a further 33 Irish credit unions are in the process of including it in the credit area of their business, is the Irish Credit Bureau model. Betts (2004) defines credit bureaux as organisations that "*collect and maintain credit data on behalf of the credit industry*". The ICB (2010) is a model which facilitates the assessment of credit risk in Ireland by providing information on a borrower's payment history, their level of outstanding debt and the amount of cleared loans. The overall purpose of this check is outlined in Table 3.1.

Table 3.1 The purpose of the ICB

To assuage the cost of seeking information about a borrowers credit stance.
To promote more rapid decision making due to this augmentation in information.
To assist the prevention of arrears due to sound lending decision making.
To support fraud deterrence.

Source: (ICB, 2010)

In general Hobbs (2010e) acknowledges that the use of these models lead to better lending decisions and cheaper, more proficient, credit management. However, MAPDEG (2010) have put forward a recommendation to the government that the ICB must further develop its database so as to incorporate all loans as well as personal guarantees. Today, credit unions arrears levels are continuing to trend upwards;

giving reason to assess the efficiency of their current credit management technology or lack of.

3.5.2.4 Stress testing

Honohan (2009) defines stress testing as a system that purports to predict the condition of a financial institution in extreme scenarios. Alexander and Baptista (2006) aver that financial intermediaries frequently employ stress testing to place limits on their risk exposure. Moreover stress tests compliment conventional models (Hilbers and Jones, 2004). Accordingly the use of stress tests in credit unions may highlight underlying problems in their loan books.

Recently the Financial Regulator has regulated all credit unions to stress test their loans in order to highlight the extent of their credit problems and to assess their current stance (Tribune, 2010). On the other hand, Honohan (2009) cautions that while stress testing is useful, they seldom are very informative about systemic risks. Therefore it is questioned whether stress testing will be enough to build a collective picture of the health of credit unions?

3.5.2.5 Neural networks

Lastly the utilisation of a neural network system appears to be the newest technological advancement in the area of easing credit risk in financial institutions. Rouse (2002) avers that this system is essentially a computer program that is self training and learns from experience. Altman and Saunders (2007) further testify that this approach explores *"potentially 'hidden' correlations among the predictive variables which are then entered as additional explanatory variables in the non-linear bankruptcy prediction function"*. Moreover Rouse (2002) elaborates that this method differs from credit scoring models as it sets procedural principles in place in order to manage information by a process rather than by hard inflexible rules; thus it is comparable to analogical thinking. Conversely, Finlay (2008) brings to light two non-trivial problems in network development. Firstly the structure of the network is not a precise science; hence an element of trial and error must be encountered. Secondly, he claims that it is difficult to establish the values of the network weights.

So given this complex nature of neural networks, do Irish credit unions have the skill set to introduce and employ such technology? Desai et al (1997) conducted a study on this technology in American credit unions where they concluded that neural networks outperformed the rest of the methods for identifying poor borrowers. Accordingly this suggests that there is a need for further research pertaining to the capacity of Irish credit unions to implement neural networks to their credit management process.

3.6 Credit control process

Finlay (2009) underlines that the loss generated from loans that are written-off is one of the biggest costs of a financial institution. In view of this Ralston and Wright (2003) accentuate the importance of the execution of timely arrears procedures. Corroborating this attitude, Weaver (1994) state that timely review of the performance of loans is as crucial as thorough appraisal of the original loan application. However, Ralston and Wright (2003) observe that this review is not being administered in credit unions as often as what is required. In light of this, the level of consistency of a credit unions' credit control process may impact the sustainability of the credit unions business performance.

3.6.1Types of borrowers

Ayub (2004) considers that the prioritisation of accounts is important during the collection process, where they should be organised according to the actions that have to be applied. Hinder (2004) further states that the type of default borrower must be identified first in order to decide what action is to be taken. These borrower types are outlined in Table 3.2.

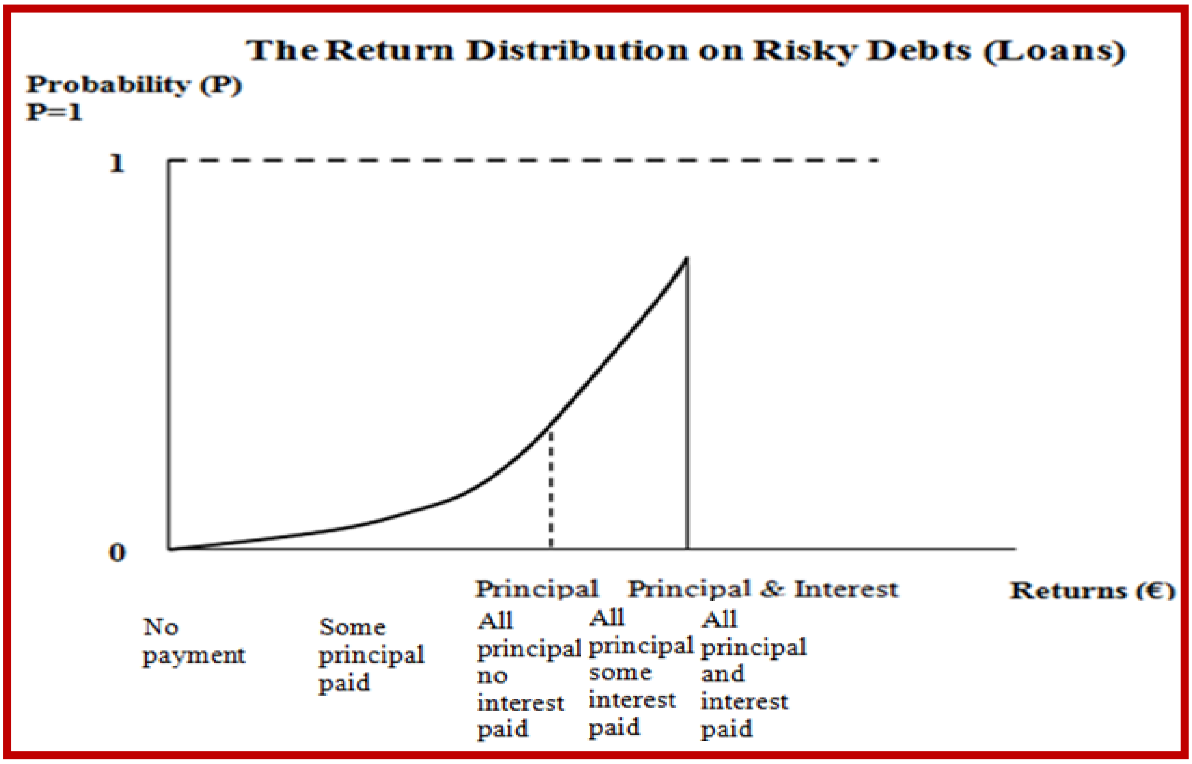
Table 3.2 Type of default borrower

Loss of income through job loss
Customer service issues such as direct debit set up
A mistake/forgotten
Change in circumstances e.g. marital breakdown
Dispute with lender/retailer
Over commitment
No intent to pay (fraudulent)

Source: (Hinder, 2004)

At a different perspective, Saunders (1997) produces a graph illustrating the different types of risky loans. Here the peak shows the high probability of the loan principal and interest been paid from the borrower (Graph 3.1). This is never equal to one; hence it is the financial institutions purpose to get it as close to one as possible. From this, he derives that borrowers can be categorised into five types. These are exemplified in the graph below.

Graph 3.1



Adapted from: (Saunders, 1997)

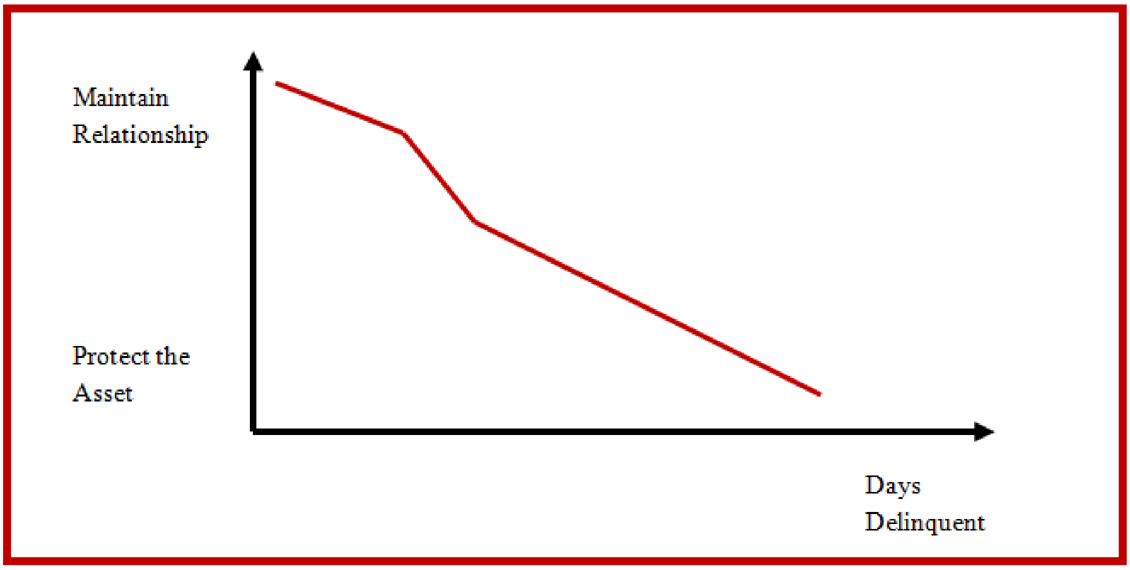
In this manner, given the various types of default borrowers, Finlay (2008) urges that "*decisions need to be taken about how to manage…delinquencies so that the likelihood of the account recovering is maximised and potential future losses due to bad debt are minimised*". Hinder (2004) concurs with this view by recognising that if financial institutions lack action regarding their arrears interventions then the result leads to a larger proportion of borrowers who do not pay. Accordingly this poses the question whether credit unions implement an organised process when recovering arrears?

3.6.2 Arrears interventions

Finlay (2008) states that during the early delinquency stage, adequate pressure should be placed to encourage the payment of arrears. On a parallel vein, MAPDEG (2010) urge financial institutions to incorporate a sufficient communication process when trying to recuperate arrears. With respect to this Finlay (2008) illustrates the stages that could be used in credit unions to achieve the higher probability of collecting the arrears (Appendix 6). Here he ascertains that the use of timely arrears procedures is crucial to the success of recovering arrears. This strategy includes the regular issuance of clear but firm letters and phone calls. However, even with a strategy in place Finlay (2008) argues that it is often difficult to categorise a customer into a specific group before deciding what form of communication to take. Stemming from this impediment, XRS (2010) apply meticulous technology to assist financial institutions in retrieving their debts. This system places a great degree of organisation and control on the credit management process as it shows credit control officers what accounts to look at on a daily basis. According to XRS (2010) this technology could help financial institutions realise a 60% decrease in debtor days. Concerning the benefits of this system, M.C.C.C credit union states that it has helped them to reduce their arrears substantially (XRS, 2010). Given that several credit unions in Ireland employ this technology, should this system be implemented in all credit unions?

In spite of the practicality of these processes, Hinder (2004) brings to light the difficulty of maintaining a customer friendly attitude during the arrears process. This especially is of concern to credit unions as their ethos of helping the community is weighed up against the interventions used to ensure their financial stability (Financial Regulator, 2010). Hinder (2004) further states that financial institutions should act responsibly by listening to their borrowers, by not harassing them and by trying to recover the arrears in a professional manner. Therefore collections are about "*customer service, protecting the asset and speed recovery*" (Hinder, 2004). At a different stance Hinder (2004) contends that when the delinquency duration gets longer, the emphasis the financial institution places on maintaining their relationship with the borrower decreases and their priority of protecting their asset increases (see Graph 3.2).

Graph 3.2 Goal of the collection process



Source: (Hinder, 2004)

Regarding credit unions, Hobbs (2010d) emphasises that they must integrate tough conditions when trying to manage the significant challenges that face them. At a different slant the topic of rescheduling loans as a method in recovering arrears is being highly debated in recent times. Hobbs (2010a) believes it is a method that worsens the risk profile of credit unions. Conversely, credit unions consider that once a non-performing loan is rescheduled then the risk fades away (Hobbs, 2010a). In light of this, credit unions last year "*lobbied for extended loan limits to reschedule short term non-performing loans into performing longer term ones*". Overall there is ambiguity in the literature about the importance of loan rescheduling in credit unions' credit management process. Thus this research aims to investigate this matter.

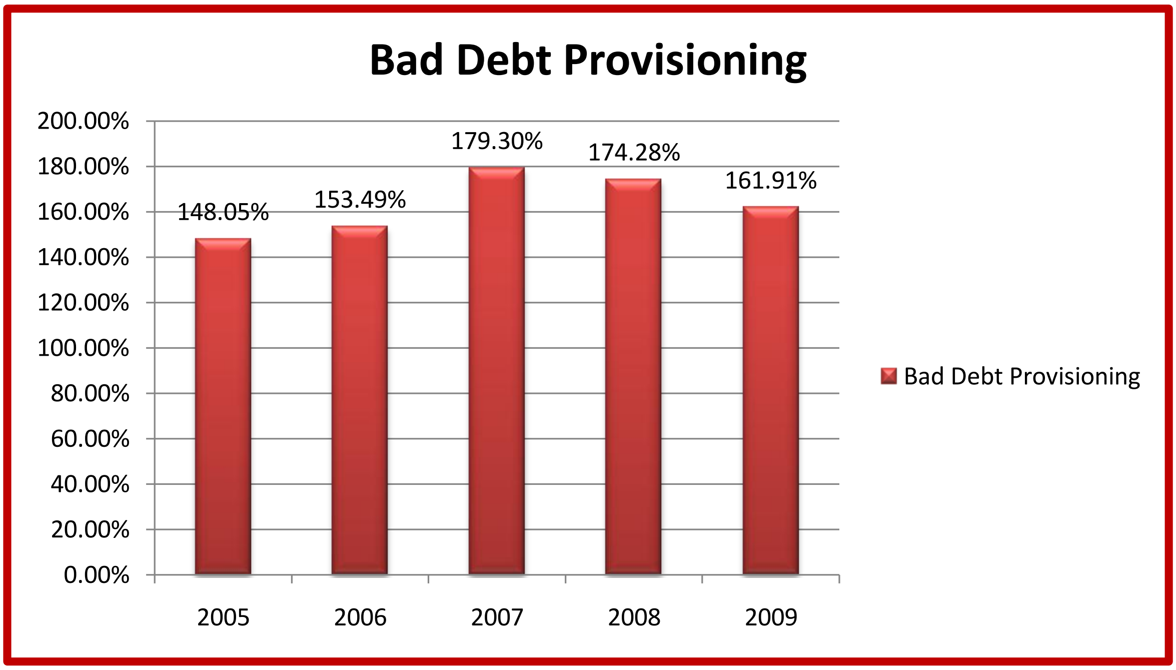
In general with 12.5% of credit union loans in arrears (McManus, 2010) there is a strong presence in the literature regarding the requirement for credit unions to review their credit management process and the effects of certain interventions.

3.7 Bad debt provisioning and write-offs

Finlay (2008) states that between thirty and ninety days of delinquency, the debt collection process has failed and the account is transferred to debt recovery. Consequently this debt is written-off and is recorded as a loss in that financial institutions profit and loss sheet (Finlay, 2008). MAPDEG (2010) therefore stress that this is an occurrence that all financial institutions wish to avoid; thus stringent arrears interventions are indispensable. At a different perspective, Posner (1990) considers the cause behind these write-offs is the lack of experience, time and technical knowledge of staff. Accordingly Byrne et al (2002) argues that this is the situation in credit unions because of their volunteer nature.

In order for credit unions to endure the impact any write-offs have on their balance sheets there must be stringent regulatory policies set in place. One policy set in place recently is that credit unions must withhold provisions for bad debts of at least 100% under Resolution 49 (ILCU Report 2009). However Weston (2010b) states that this policy is being challenged by credit unions as they consider it too stringent to fit in with its operating principles. Nevertheless, given the profusion of arrears in credit unions recently, it is pleasing that the level of bad debt provision is ample enough and somewhat consistent throughout the past 5 years (Graph 3.3). In 2009 alone, on average credit unions are placing 61.91% more than what is required in their bad debt reserve which suggests that they are able to withstand their losses.

Graph 3.3



Source: (Irish League of Credit Unions, 2009)

Although it appears that credit unions maintain sufficient provisions to support their losses, will these provisions remain adequate if their losses continue to trend upwards?

3.7.1 Reporting standards

Recently Regulators have placed a strong emphasis on consistent and updated reporting in all financial institutions. However, the Law Reform Commission (2010) considers that a more methodical system of credit reporting in Ireland should be introduced. At a uniform perspective, Hazera (2002) stresses the necessity of financial institutions to disclose all credit management activities in their reports. It is also vital that the board and senior management receive a detailed report at least quarterly on the quantity and trend of the liquidity risk of the financial institution (State Bank of Pakistan, 2010).

From the literature, the overall consensus is that rigorous reporting standards are essential in all financial institutions. However should there be an exception for Irish credit unions? McCaughren (2010) highlights the ongoing debate of whether credit unions are superior enough to be able to maintain the reporting standards of banks. Regarding this the ILCU (2010) as cited in McCaughren (2010) believes that credit unions are "*by their very nature different from other financial institutions*", for example their size. Coherent with this the Central Bank further delineates that the cost of implementing strict reporting criterions in credit unions will not lead to any benefits for their members. Hence, this issue of methodical reporting standards has to be weighed up against the culture of credit unions. Accordingly, this discussion is ongoing.

3.8 Barriers to effective credit management

Lang and Jagtiani (2010) conclude in their research on the failures of credit management that there is a prerequisite for an overhaul on competent internal control systems and a robust autonomous credit risk management function. Regarding credit unions two major barriers emerge from extant literature. These are credit culture and education.

3.8.1 Credit culture

Basu and Rolfes (1995) define credit culture as a structure of shared principles, viewpoints and credit related activities. They further inform that credit culture affects the practices of the financial institution concerning credit management; for example the ethos of a financial institution advocates the type of lending conducted. Therefore Middlemiss (2004) states that financial institutions should have a more *"morally acceptable approach"* to assessing credit and should enact a certain level of social responsibility.

This is pivotal to credit union operations in Ireland where their principles are "*founded in the philosophy of co-operation and its central values of equality, equity and mutual self-help"* (Clonakilty Credit Union, 2010). Therefore it is imperative that credit culture fits the overall business of the credit union (Rouse (a), 2002); where it complements the importance of its social duty (Ralston and Wright, 2003). However, Lenihan (2009) highlights that given the present economic climate, credit unions social role duty is being put under pressure. He develops this statement by stressing that credit unions must ensure that their financial position is not undermined, their members' savings secure and their reports accurate and consistent. On the other hand he states that they must also maintain their duty of providing finance to the community. Therefore the literature suggests that a good balance must be administered between these two issues.

3.8.2 Education and training

Another barrier according to Hobbs (2010b) is that credit unions "*lack the business acumen to fully appreciate the risks to the business they are responsible for governing*". Additionally MAPDEG (2010) states that lenders must provide comprehensive training for frontline staff in order for them to assess and monitor a loan efficiently. In light of this, regulatory requirements have now been put in place which obliges all credit union staff that offer financial products to their customers to become an accredited individual (ILCU, 2010). This applies to all individuals that offer insurance products to their members. Overall the personnel can be sufficiently qualified by either obtaining a grandfather rule, QFA, ACCUP or CUS (ILCU, 2010). However, is experience under the 'grandfather rule' enough? Should all credit personnel acquire some qualification regardless of what products they sell? This will be further analysed in the findings chapter.

3.9 Chapter summary

This chapter provides a conceptual framework of extant literature on the practices and processes that could be implemented to ensure that a credit unions' credit management process is more financially sound. In addition to this, the theory suggests that credit unions must obtain comprehensive technology and skills in order to appreciate the risks that they are managing. However it further emphasises that several barriers may impact the capacity of credit unions to do so. Overall, the literature provides the foundation on what credit management processes are used by credit unions in order for them to sustain their business performance. This will now be investigated with empirical research.

Chapter Four
Research Methodology

4.1 Introduction

The main purpose of this chapter is to depict and justify the methods by which data and information were assembled for this research. From the theories of relevant literature the research problem is identified and the research question and objectives are formulated. Subsequently, a description of the research design is presented which includes the methodology chosen and the rationale for selecting this specific method of data collection and analysis. Lastly detailed accounts of the survey questionnaire and semi-structured interviews are provided.

4.2 Research problem

Sekaran (1992) expresses a research problem as one that represents a question or issue that is to be explored with the goal of discovering an answer or solution. The research problem for this study was derived from several literatures.

Firstly O'Brien (2010) describes that Irish credit unions are encountering a particularly challenging financial and economic period. As a result *"credit unions must be pro-active in adapting their business to the changing environment"* (O'Brien, 2010). He further maintains that the criteria for lending must be more restrictive and the credit control area more supervised. Therefore "*sufficient resources should be made available in the credit control area of the business"* where it is "*vital that there is a strong oversight of the credit function at this time"* (O'Brian, 2010).

On a parallel vein, Ralston and Wright (2003) conclude that credit union managers should enforce more rigorous lending criteria when granting loans to high risk borrowers. Additionally, they stress that the credit management function of credit unions is fragmented. Concurrent with this view, Lang and Jagtiani (2010) urge that there is a requirement for further research into the practice of credit management as few studies have been conducted on it to date. In view of this, the researcher wishes to investigate this area more by conducting an in-depth analysis of the credit management process in credit unions with a particular focus on certain chapter segments.

4.3 Research question

The research question of this study must be a clear concise statement of the issues to be examined (Brannick and Roche, 1997). The research question for this study is:

Using three chapters as an exemplar of Irish credit unions, what credit management processes are used by credit unions to sustain their business performance?

Bryman and Bell (2003) emphasise the fundamental nature of research questions. They further underline that poorly devised research questions produces poor research. Consequently they suggest having a four step process in place in order to originate a clear concise research question (see Figure 4.1 below).

Figure 4.1 The process of selecting the research question

Research area

- Credit management

Select Aspect of research area

- Credit management in credit unions

Research questions

- Do credit unions need to update their credit management process?
- Do credit unions operate sound lending practices?
- Do credit unions have a set process in place to control for credit risk?
- What is the trend of the level of debt distributed by credit unions in the last decade?
- Did the economic crisis have an impact on credit unions' loan portfolio? Have they adapted their policies to control for same if so?
- What difficulties do the credit unions culture and ethos impose on their management of credit risk?
- How are credit unions managing the increased arrears on their loan books?
- How do credit unions in different sectors differ regarding their management of credit?

Select Research Question

Using three chapters as an exemplar of Irish credit unions, what credit management processes are used by credit unions to sustain their business performance?

4.4 Research objectives

Saunders et al (2009) aver that research objectives provide confirmation that the researcher has a clear sense of purpose and direction. They further contend that these objectives will instigate superior specificity than the research question.

The overall research objective is:

To assess the current credit management process of credit unions using three Chapters as an exemplar of Irish credit unions.

Stemming from this the following are the key objectives of this research:

Objective one: To assess the skill set and size of credit management administrators in Irish credit unions.

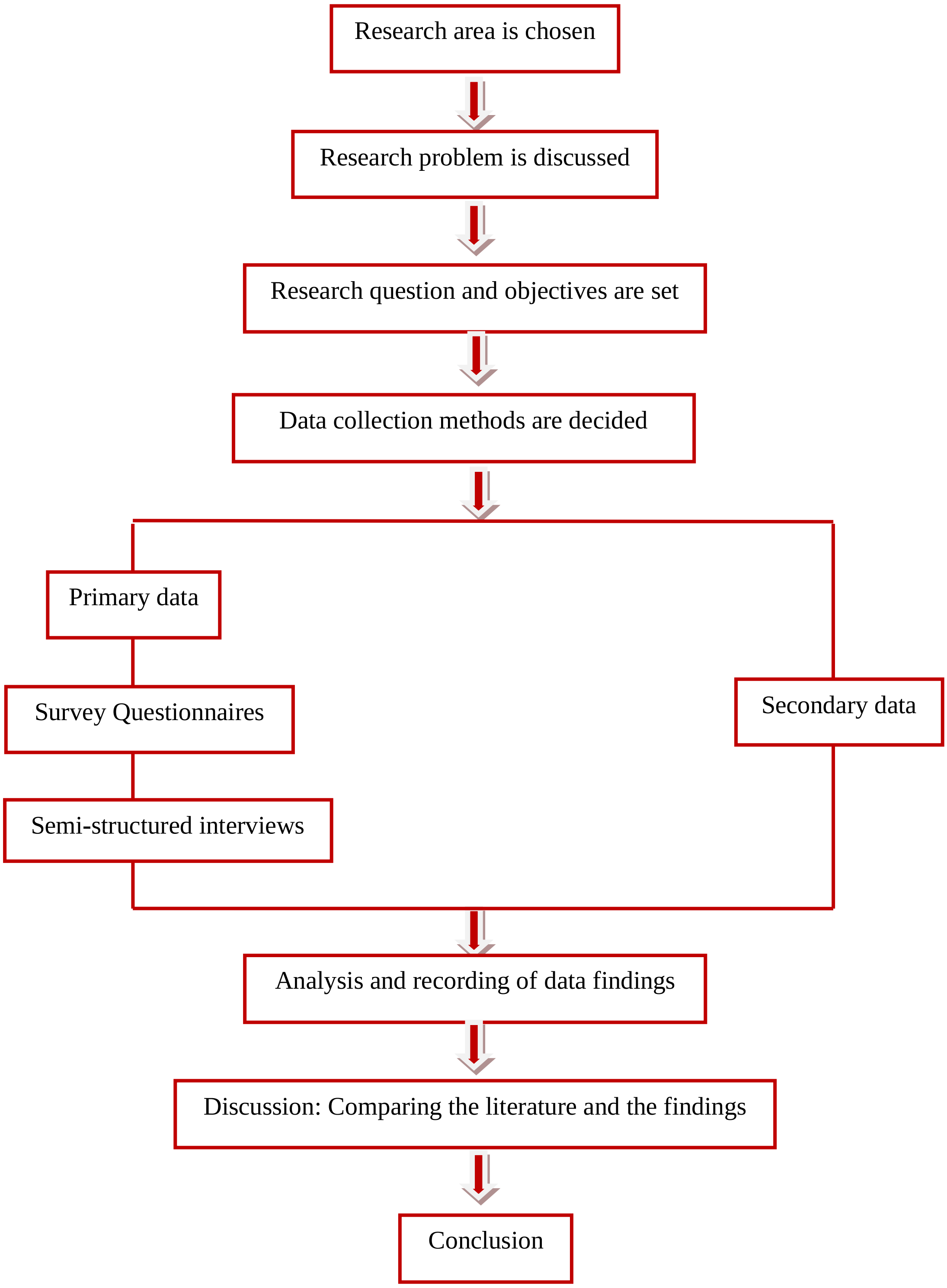
Objective two: To critically evaluate the enactment of the credit management process by observing how it is conducted, monitored and updated.

Objective three: To examine if there is a gap in the current process regarding the range of tools and methods employed.

4.5 Research design

Bryman and Bell (2003) argue that research design offers a framework for the collection and analysis of data. However, Wailes (1999) warns that selecting the appropriate methodology can be relatively challenging. The research design process used for this research is illustrated in Figure 4.2 below.

Figure 4.2 Research design process



4.6 Qualitative versus quantitative research

The biggest obstacle in research is deciding which method of analysis will be used. McDaniel and Gates (1998) discuss that quantitative analysis utilises mathematical skills to analyse data of which it may reveal statistically significant differences between variables. It focuses attention on the measurements of characteristics presented by events and people in a research study and analyses the topic in depth (Thomas, 2003). On the other hand, qualitative research is not subject to quantification analysis but instead examines attitudes and motivations (McDaniel and Gates, 1998). It allows the researcher to interpret phenomena with regard to the significance people bring to them (Thomas, 2003) and captures a more broad view of the topic (see Table 4.1).

Table 4.1

Qualitative versus Quantitative		
Comparison Dimension	**Qualitative Research**	**Quantitative Research**
Types of questions	Probing	Limited probing
Sample size	Small	Large
Information per respondent	Much	Varies
Administration	Requires interviewer with special skills	Fewer special skills required
Type of analysis	Subjective, interpretive	Statistical, summarisation
Hardware	Tape recorders, projection devices, video, pictures, discussion guides	Questionnaires, computers, printouts
Ability to replicate	Low	High
Training of the researcher	Psychology, sociology, social psychology, consumer behaviour, marketing, marketing research	Statistics, decision models, decision support systems, computer programming, marketing, marketing research
Types of research	Exploratory	Descriptive or causal

Adapted from: (McDaniel and Gates, 1998),

4.7 Triangulation

Stewert and Shields (2001) as cited in Thomas (2003) state that there are continued debates about which form of methodology is best. Contrary to this numerous authors today perceive qualitative and quantitative research as complementary rather than conflicting (Thomas, 2003). Accordingly this method is categorised under *technical version* which emphasises that both quantitative and qualitative data are capable of being fused (Bryman and Bell, 2003).

Morgan (1998) as discussed in Bryman and Bell (2003) proposes when the researcher is conducting both quantitative and qualitative analysis they base it under two criteria: *Priority* and *Sequence*. Table 4.2 exemplifies the order of which the researcher will prioritise and sequence this research.

Table 4.2 Classification of methods to triangulation research

		Priority	
		Quantitative	**Qualitative**
Sequence	**Preliminary**	**1**	
	Follow-up		**2**

Adapted from: (Morgan, 1998)

Bryman and Bell (2003) further state that qualitative research can be used to complement quantitative research by providing a more crystallised insight into the research area. The researcher thus uses a triangulation method to acquire a deeper in-sight into the credit management process of credit unions.

4.8 Data collection

For this research data was assembled from both primary and secondary sources.

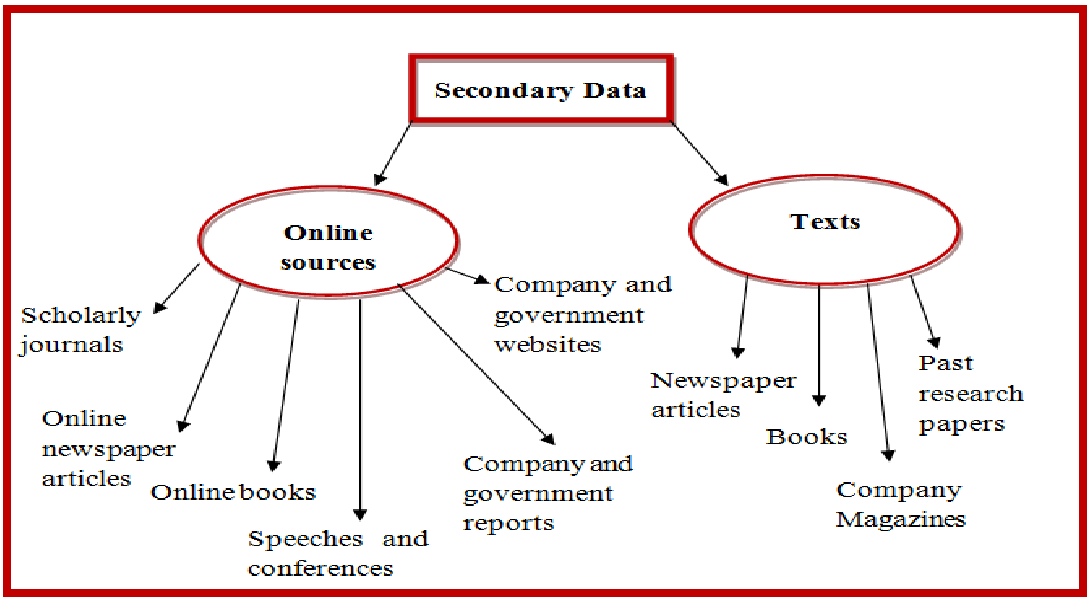
4.8.1 Primary data

The credit management process of Irish credit unions is a complex phenomenon of which the researcher wishes to acquire better knowledge of. According to Brannick and Roche (1997) the researcher formulates and controls the primary data of a study. Accordingly, the researcher chose both postal surveys and semi-structured interviews as the methods to conduct this research.

4.8.2 Secondary data

Secondary data is data that is derived for a different purpose other than the research problem at hand and should be pertinent, accessible, and precise (Brannick and Roche, 1997). The purpose of this data is to aid the researcher to develop the research problem by identifying the gaps in the literature. The following are the means by which secondary data was obtained for this research:

Figure 4.3 Secondary data sources



4.9 Survey Questionnaire

A survey is a "*systematic method for gathering information from entities for the purposes of constructing quantitative descriptors of the attributes of the larger population of which the entities are members*" (Groves et al, 2004). The main type of survey questionnaire employed is a self completion questionnaire which can be conducted either via telephone, email or postal service (Bryman and Bell, 2003).

Fink (2006) views surveys as a method by which peoples' outlooks and knowledge can be altered. In this fashion the researcher decided to administer postal surveys for this study as it is most suitable to elicit the information required to meet the objectives of this research. Surveys also are an inexpensive method to obtain information from businesses or people who are located at a far distance. It further avoids interviewer bias which can impact the reliability and validity of the data collection. Another element which promotes the utilisation of surveys is that it ensures anonymity, which increases the probability of the company or person completing the questionnaire more truthfully. For this research postal questionnaires were chosen because data and sources of information were mandatory to answer several questions; as a result survey completion required time.

4.9.1 Sample selection

Before the sample can be selected there must be a comprehensive inventory of the population. This is fundamental to the process (Brannick and Roche, 1997). For this research the population of interest was all credit unions operating in Ireland that are affiliated to the Irish League of Credit Unions. Thus the population consisted of a total 508 credit unions which are regionally grouped into 25 Chapters (ILCU, 2010).

However, given time constraints and costs, it was not feasible to distribute surveys to this magnitude. In order to collect the data the researcher needed to conduct convenience sampling. Saunders et al (1997) states that *"convenience sampling involves selecting those cases which are easiest to obtain for your sample'*. Therefore the sample frame selected was three credit union Chapters in the South-East region of Ireland which consists of 42 credit unions in total. It was anticipated that this sample frame would represent the entire population.

4.9.2 Questionnaire layout and content

Smith (1995) states that negligence in questionnaire construction and not realising promises made to respondents are both major factors in causing the questionnaire's poor reputation. Consequently the researcher ensured great attention was provided in the formation of this survey.

The survey questions were composed as follows:

- First of all, Brannick and Roche (1997) states that questionnaires should not be too long in order to ensure a high response rate. However given the breadth of this topic it is required to cover numerous areas. Consequently 28 questions were asked in order to capture the essence of credit management in credit unions.

- To make the answering of questions easier, the questionnaire was divided into four sections: *Lending*, *credit control*, *credit committee* and *current stance*. These sections made it easier for the respondents to collect data for the survey as they could identify which area they were dealing with. The layout further entailed a statement of each section, giving the respondents an overview of the area in which they are responding to.

- Numerous types of questions were used in the survey which included: *Descriptive questions*, *open-ended questions*, *scalar*, *nominal* and *ordinal*. This will provide a greater analysis of the data.

- Furthermore confidentiality and anonymity were warranted to enhance response rates

A summary of the content of the questionnaire is exemplified in Appendix 8. In general the focus of this survey is broken down into six elements which collaborate to give an overall picture of the credit management process of credit unions (Figure 4.4).

Figure 4.4 Credit management process components

4.9.3 Administration and analysis of the questionnaire

Firstly, letters and emails were sent out to Chapter presidents and other administrators to promote the research to all credit unions in the three Chapters. The questionnaire was then administered by post due to cost efficiency since the respondents were not placed nearby.

One of the primary purposes of the survey was to obtain a high response rate in order to ensure that the analysis and findings were statistically significant. This was accomplished as the response rate was an impressive 50% where 21 out of 42 questionnaires were returned. This response rate would have increased to 57.14% allowing for the fact that 3 credit unions either could not participate due to the voluntary nature of their credit union or the board decided that they were not in a position to comment on this aspect of their business. Thus this response rate compares favourably to the standard 30% response rate from surveys (Brannick and Roche, 1997). Therefore a good insight into the general credit management process of credit unions can be provided.

Brannick and Roche (1997) emphasise the significance of reminder letters when trying to increase the response rate. Therefore a reminder letter was administered to all those who did not respond after the time frame given in the initial mailing. An email was also sent to a representative of CUMA to further promote the research so as to increase the response rate (Appendix 8).

Other elements which contributed to the achievement of a high response rate were the inclusion of a self addressed pre-paid envelope with the surveys, an opportunity for respondents to receive the findings once completed and guaranteeing strict confidentiality (Table 4.3). Once all the answered surveys were received, the researcher coded and inputted the data into the statistical program SPSS.

Table 4.3 Factors affecting survey response rate

Factor	Effect
Respondents interest in topic	Strong
Questionnaire length	Limited
Identity of survey sponsor	Moderate
Preliminary notification	Moderate
Pre paid postage	Moderate
Non monetary incentives	Variable
Confidentiality	Variable
Return deadlines	None
Follow-up contacts	Strong

Adapted from: (Brannick, and Roche 1997)

4.9.4 Limitations of questionnaires

The following are the limitations of this type of research:

- Postal surveys have a poor response rate compared to personal and telephone interviews (Brannick and Roche, 1997). However this research exceeds the expected 30% response rate by an extra 20%.

- There is weak flexibility with this type of data collection and no opportunity to probe.

- There is a probability that the survey does not reach the respondent or back to the researcher due to postal errors.

- The time duration of retrieving the answered surveys can be long.

4.10 Semi-structured interviews

Interviews can be classified as either being *structured* (quantitative research), *semi-structured* or *unstructured* (both qualitative research). For this research the researcher decided to conduct semi-structured interviews. Since this method is flexible (Bryman and Bell, 2003) a more explicit picture of the credit management process of credit unions is painted.

In this study four interviews were conducted with the aim to supplement the findings of the questionnaire. Because of confidentiality reasons, the respondents will be referred to as Respondent A, Respondent B, Respondent C and Respondent D throughout the findings chapter. Table 4.4 below shows the position of each respondent so the reader can see what mindset and background the interviewee comes from.

Table 4.4 Interviewees

Interviewee	Position	Financial Institution	Interview Duration
Respondent A	General manager	Large credit union	20 mins (approx.)
Respondent B	Lending officer	Large credit union	20 mins (approx.)
Respondent C	Credit control officer	Large credit union	20 mins (approx.)
Respondent D	Credit committee official	Large credit union	15 mins (approx.)

The motive behind choosing these interviewees is because each individual carries out a function that affects the credit management process of credit unions. Furthermore each position complements each section of the questionnaire: *Lending, credit control, credit committee* and *current stance;* where the latter would be influenced by the general manager.

The type of sample selection for this method was again convenience sampling. Bryman and Bell (2003) state that this type of sampling is most used when conducting interviews as the issues of representativeness are less significant in qualitative research.

4.10.1 The advantages and disadvantages of semi-structured interviews

Semi-structured interviews help to elucidate research problems and create a mind-map of the possible solutions to these problems. Moreover they "*facilitate the elimination of superfluous questions and the reformulation of ambiguous ones*" (Bless and Higgon-Smith, 2005). It further covers a topic in greater breadth (Brymann and Bell, 2003) and complements the findings of the questionnaire. The interviewer can also confirm and clarify the answers with the interviewee which produces clear and precise data.

Conversely, Bless and Higgon-Smith (2005) state that untrained interviewers could introduce an element of bias when conducting semi-structured interviews. Additionally Brymann and Bell (2003) stress the importance of accurately recording the interview so the data can be woven into an analysis seamlessly. This is vital to guarantee that the data is both reliable and valid.

4.10.2 Recording and transcription of interviews

For this research, the interviews were recorded using a Dictaphone. Moreover the researcher signed with all interviewees a confidentiality and anonymity agreement so as to relax the respondent and promote truer and more in-depth responses (Appendix 9). However the researcher did consider that the recording may disconcert respondents due to their words being preserved (Brymann and Bell, 2003). After the interviews, transcriptions were conducted verbatim to enable better analysis.

4.11 Reliability

Groves et al (2004) define reliability as the *"measurement of variability of answers over repeated conceptual trials"*. It determines if the answers of respondents are consistent. The researcher tested the reliability of the quantitative research by conducting an external reliability test where two subjects were administered pilot surveys on two occasions. This "test-retest reliability", as discussed by Bryman and Cramer (2005), showed that the respondents positions remained comparatively constant; thus emphasising the reliability of this research.

To minimise variability in the data collected, the researcher allowed respondents to take as much time in the interviews to answer the questions accurately. The interviews also allowed clarification of questions when respondents were slightly confused.

4.12 Validity

Emory and Cooper (1991) identify validity as the degree to which a test measures what essentially is wanted to be measured. Bryman and Bell (2003) further describe validity as a measure of the integrity of the conclusions that are produced from the research. Its form can be either *internal* or *external*. For this research external validity was considered because this type of validity generalises across people and surroundings. Accordingly, emphasis was placed on Irish credit unions in the southern region of Ireland.

4.13 Chapter summary

In this chapter an explanation of the research methodology was provided and justified. Firstly the research problem and objectives were identified along with an illustration of the research design. A triangulation approach was deemed suitable for this research where detailed accounts of the two methods were given along with the limitations of each. Thus a conceptual framework of the methodology for this research was presented.

Chapter Five
Primary Research Findings

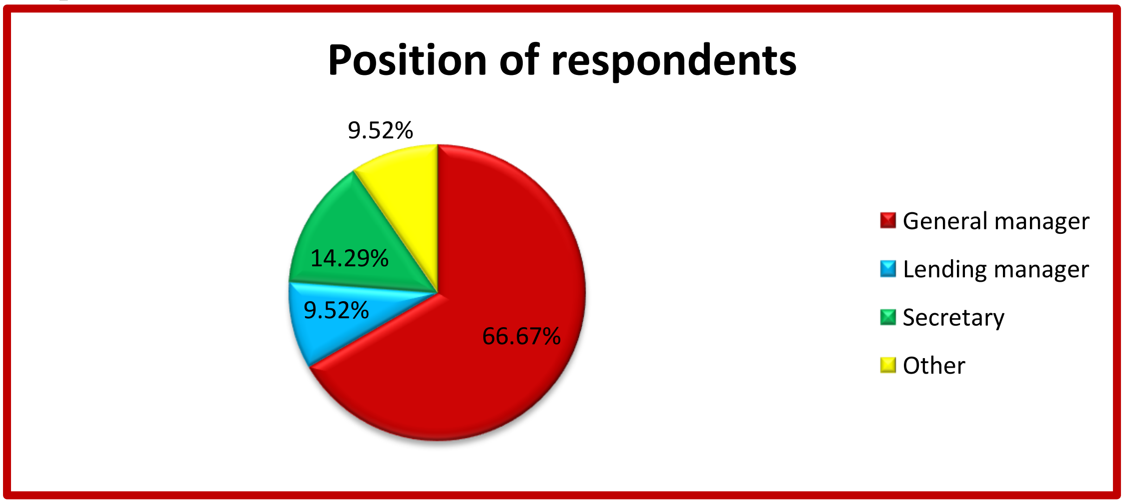
5.1 Introduction

The purpose of this chapter is to present the findings from both the postal questionnaire and semi-structured interviews conducted so as to address the research objectives posed. The main findings from the primary research are formatted under three sections which are based upon the research objectives. The chapter concludes with a brief synopsis of the findings and will lead the research onto the discussion chapter.

5.2 The role of the survey respondent

Firstly 66.67% of the survey respondents are general managers in their credit union. Subsequently, 14.29% of the respondents are secretaries in their credit union (see Graph 5.1). Accordingly this leads to more reliable data as the general manager has the most rounded knowledge in each area of credit management in their credit union.

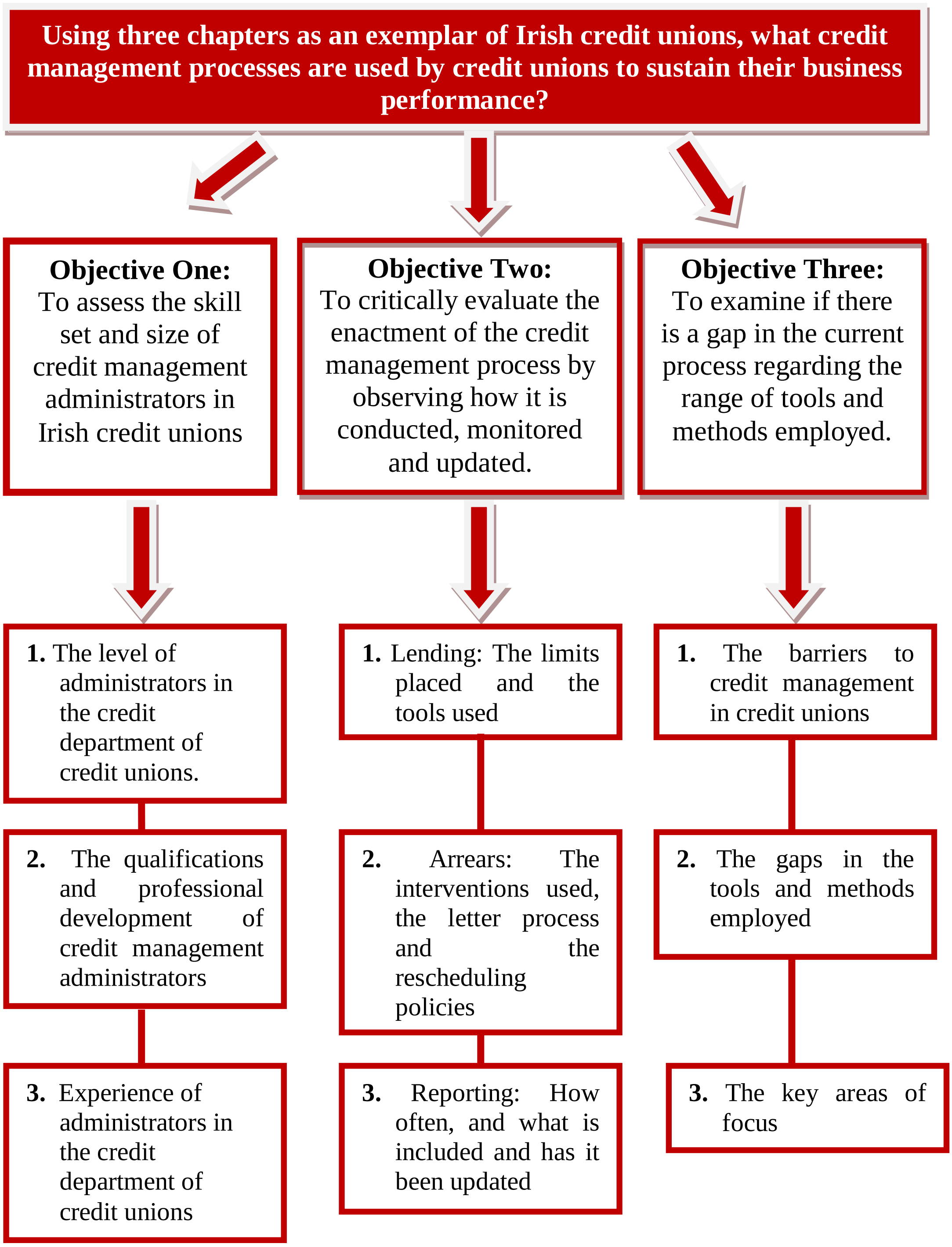
Graph 5.1



5.3 Framework of findings

The following is an illustration of how the findings will be approached (Figure 5.1). The findings are divided up into three sections with the aim to answer or contribute to the research objectives and research question; overall providing an empirical insight into the credit management process of credit unions.

Figure 5.1 Framework of findings

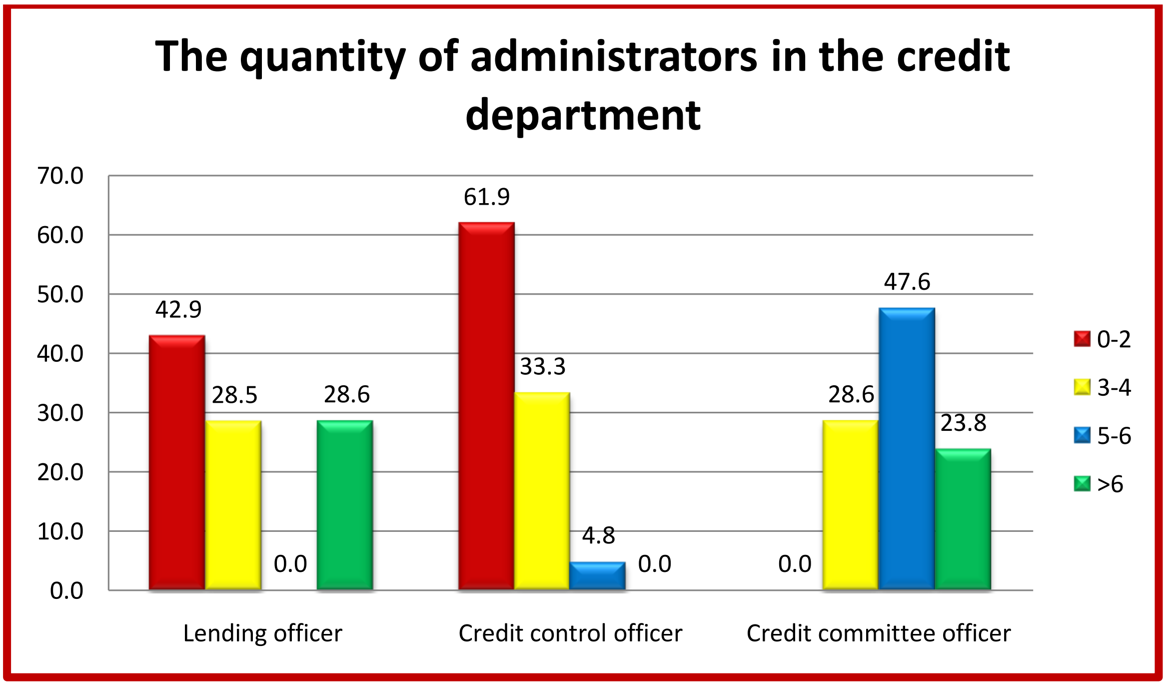


5.4 Objective One

5.4.1 The level of administrators

The quantity of credit administrators can suggest what size credit union the respondents are from. Size plays an important role in impacting the capacity of a credit union to facilitate more complex technology and levels of reporting. Moreover the general conception is that the smaller the credit union is the more volunteer based it becomes (Respondent B). Thus this may affect the stringency of that credit unions' credit management process as both time and skill set is minimised.

Graph 5.2



As exemplified in Graph 5.2, 42.9% of the sample frame only has a maximum of two lenders. On the contrary 28.6% of the respondents have greater than six lenders. This can present an idea of the different sizes of credit unions that responded. Corresponding to this, it is interesting to observe that the amount of credit unions with five or six credit control officers is a mere 4.8%. Consequently a vast 61.9% of credit unions have only one or two credit control officers. Regarding size it appears credit unions place a stronger emphasis on lending than the credit control area.

Assessing the credit committee of credit unions, 71.4% of credit unions have five or above members. Respondent B contends that credit committees are mainly volunteer based, thus credit unions usually have big credit committees because they can utilise the skill and expertise of the credit committee at little or no cost.

5.4.2 Qualifications

On average only 19% of credit unions' lending officers have an undergraduate degree where the majority of them at 76.2% have a leaving cert qualification as their highest qualification. Credit control officers appear to be more qualified as 23.9% possess an undergraduate degree and 9.5% a masters degree. It is noteworthy to examine the 'other qualifications' variable in the survey, which when specified by the respondents most of them hold only a primary school qualification as their highest academic achievement. However their lack of academic proficiency is mostly counteracted by having longer experience in the credit union.

Table 5.1 Qualification levels

Qualification	Lending officer	Credit control officer	Credit committee officer
Leaving Cert	76.2%	57.1%	66.7%
Undergraduate	19.0%	23.9%	19.0%
Masters	— — — — —	9.5%	4.8%
PHD	— — — — —	9.5%	4.8%
Other	4.8%	— — — — —	4.8%

At a similar trend, 84.13% of all credit departments on average have no QFA qualifications. Therefore only 15.87% obtain a QFA. However Respondent B emphasises that if an officer is working in their area for over eight years they are covered by the 'grandfathering rule'. In essence this means that they won't have to get a QFA qualification or the equivalent as experience covers them. This is further examined in this research by assessing administrators who do not have a QFA qualification with their experience in the credit union. The results show that 73.33% of lenders, 35.29% of credit control and 42.86% of the credit committee are 'Grandfathered' out of the sample that do not possess a QFA qualification.

Table 5.2 No QFA Vs Experience

	Lending Officer	Credit control officer	Credit committee officer
No QFA	71.4%	81%	100%
Grandfathered (out of the 'No QFA' sample)	73.33%	35.29%	42.86%
Grandfathered (out of the total sample)	52.38%	28.57%	42.86%
No QFA, Not Grandfathered, (out of the 'No QFA' sample)	26.67%	64.71%	57.14%
No QFA, Not Grandfathered, (out of the total sample)	47.62%	71.43%	57.14%

In a similar fashion, only 9.52% on average of credit union credit personnel acquire an ACCUP or CUS qualification. Additionally 3.17% of credit union credit administrators have an ECDL or FETEC qualification.

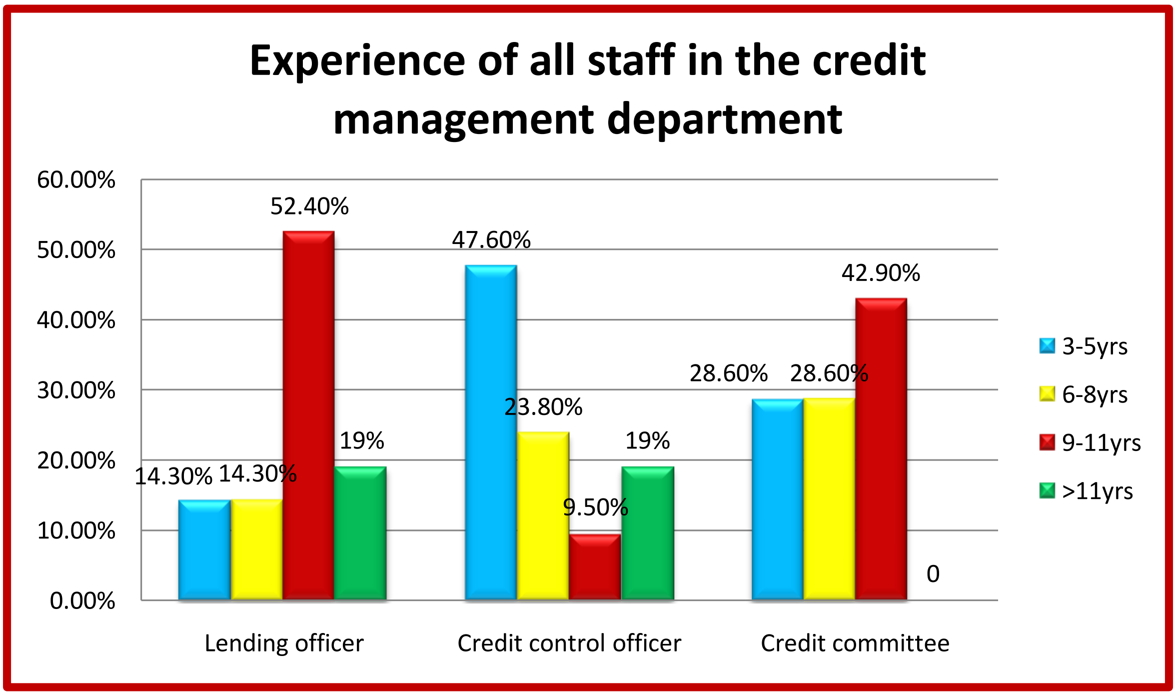
With respect to theses results, Respondent C states that with a changing world and a changing credit union some level of skill and learning is required. Additionally she claims that the QFA qualification is essential to obtain if the staff is in a full time position. Complementing this view, Respondent A declares that acquiring a qualification *"is a necessity, not an option*". She further remarks that traditionally credit unions did not see the value of continuous professional development but now it is becoming more important and experience is becoming less. The explanation she gives behind this is that it is no longer based on knowing your member but more on their affordability.

Contrary to this however, Respondent D maintains that the emphasis on qualifications has not been embodied in the credit committee section over the past decade. Instead, he describes that the process of making sound loan decisions is using a blend of initiative, experience and team work along with the knowledge of the family background of that member. Nevertheless, from the findings it appears that qualifications in general facilitate a more competent workforce which creates a more efficient credit management process.

5.4.3 Experience

The next question in the survey concentrates on the level of experience in each department of the credit management area. On average the general experience across all three departments that was greater or equal to nine years is 47.62%. This underlines that experience is a major factor in the process of credit management. The itemisation of this experience is illustrated in Graph 5.3. From this it is conspicuous that the least amount of experience overall is in the credit control area, where 47.6% of officers have experience of just 3-5 years.

Graph 5.3



Commenting on the importance of experience, Respondent B acknowledges the fact that although literature provides the knowledge of credit management, *"experience will teach you much more"*. Concurrent with this Respondent C declares that "*experience is necessary*".

Rejecting these views, Respondent A stresses that "*experience is not sufficient enough nowadays"*. She argues that in order for credit unions to survive the changes in the economy, academic development is indispensable.

5.5 Objective Two

5.5.1 Lending

5.5.1.1 Lending Limits

To gain insight into the lending process of credit unions, one of the questions in the survey is designed to realise what the longest duration of a basic loan given to a borrower is? The results are shown in Table 5.3, where it is apparent that 57.1% of the respondents' credit unions have maximum loan durations of 5 years or longer.

Table 5.3 Longest loan duration

Loan duration	**Percentage of credit unions**
3-5-4.5 yrs	42.9%
5.0-6.0 yrs	47.6%
>6 yrs	9.5%

With respect to this issue, Respondent B contends if a loan is given out over a long period of time, a persons' circumstance might change which may lead to their loan defaulting. However Respondent C disputes that the "*longer a loan is out the more interest is charged and the more revenue generated for the credit union*". Additionally she contests that if a loan was shortened then this would require borrowers to increase their payment instalments. This is not feasible in today's climate as it could also increase the probability of the loan defaulting.

5.5.1.2 Tools

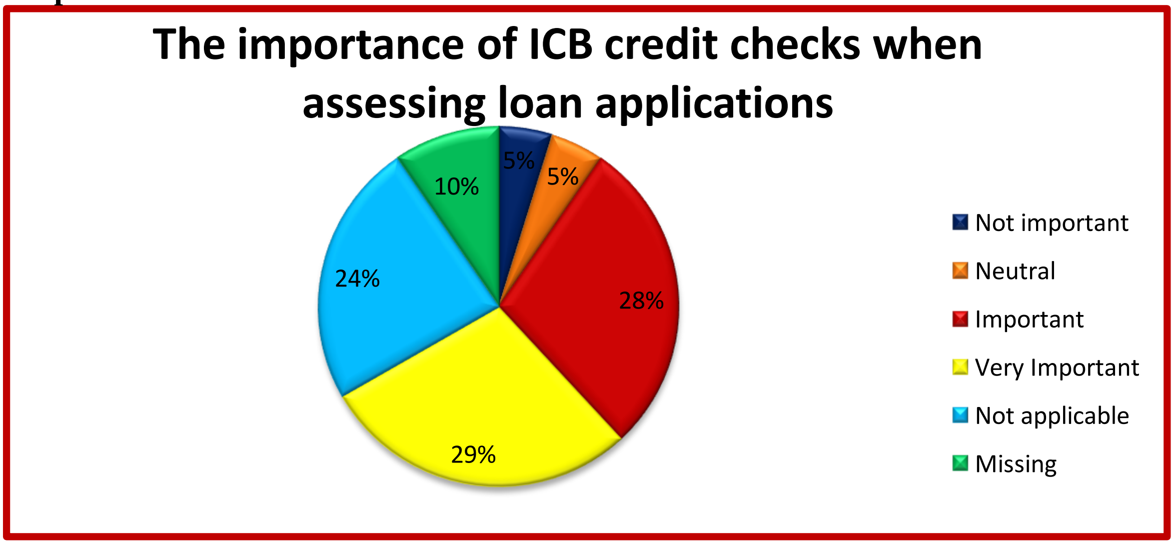
The survey contains fourteen tools and factors where the respondent was asked to rank each of them according to their level of importance. The respondents deem the usage of all these tools as being at least important in the loan decision making process. Moreover, an independent T test with a 95% confidence interval was conducted to see if there was a significant difference in the mean of tool interventions and the level of lending officers. With a P value of 0.133, regarding the importance of tools, the findings confirm that there are little variances in the answers of respondents who have large amount of lending officers to those who do not.

The results of the tools are grouped into three categories. These are ICB credit checks, affordability calculators and history tools and monetary tools (see Appendix 10 for the latter). Respectively these categories' findings are presented as follows:

5.5.1.2.1 ICB

According to 57.2% of credit union respondents the ICB credit check is regarded as being an important or very important tool in the loan decision making process. Only 9.6% of these believe ICB credit checks are not important or they are neutral to this tool. However it is interesting to note the non response rate for this question. With 23.8% of the respondents stating that they do not have this tool and another 9.5% of respondents that did not answer this question, suggests that overall 33.3% of credit union respondents do not have or use this tool when assessing loans[1].

Graph 5.4



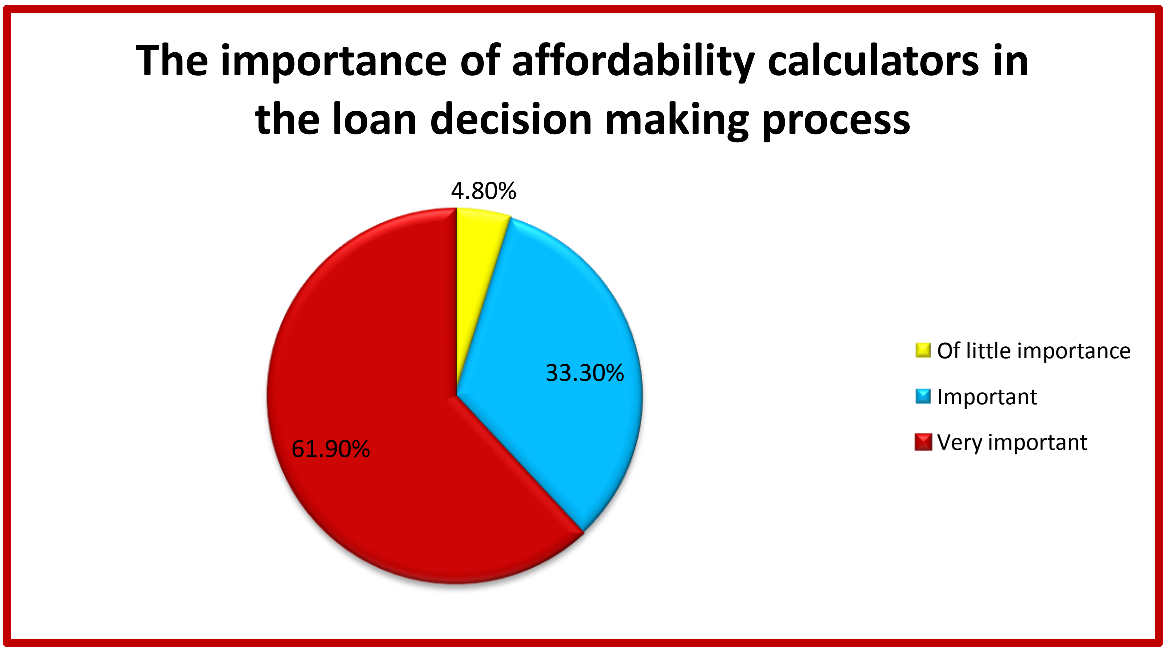
[1] It is known that 23.8% of respondents do not use this tool because they wrote this beside the question in the survey. It appears also that the 9.5% of credit unions that did not answer the question at all may not obtain or use this tool either as they answered all of the other questions prior to and following this question. Thus the conclusion that 33.3% of credit unions do not obtain or use the ICB credit check is partly conjectured and is not 100% fact.

With reference to ICB credit checks, Respondent B praises its use by pronouncing that "*it has been a revelation since it came into the credit union*". He continues by stating that a loan applicant could have a regular savings pattern in a credit union but may have five or six write-off loans in other financial institutions. Accordingly the introduction of the ICB allows a credit union to identify the people that are trying to abuse the system from those who are good borrowers. Corroborating with Respondent B's position, Respondent A acknowledges that it is of huge benefit to credit unions as it provides a full picture of a members' current position in relation to their affordability. She further emphasises that she doesn't know how other credit unions lend without it as they cannot fully calculate the risk of a borrower defaulting. Respondent B additionally states that a credit scoring model could be added in the loan assessment process in order to paint an even fuller picture. The capacity of credit unions to implement same will be debated later in the discussion chapter.

5.5.1.2.2 Affordability

Graph 5.5 manifestly paints an overview of the respondents that think highly of the affordability calculator tool as a measure of a loan applicants' credit risk. In total 95.2% of respondents deem that this tool is either important or very important in the loan decision making process. It appears that credit unions in general believe that this form of tool is a necessity when assessing the loan application of a borrower.

Graph 5.5



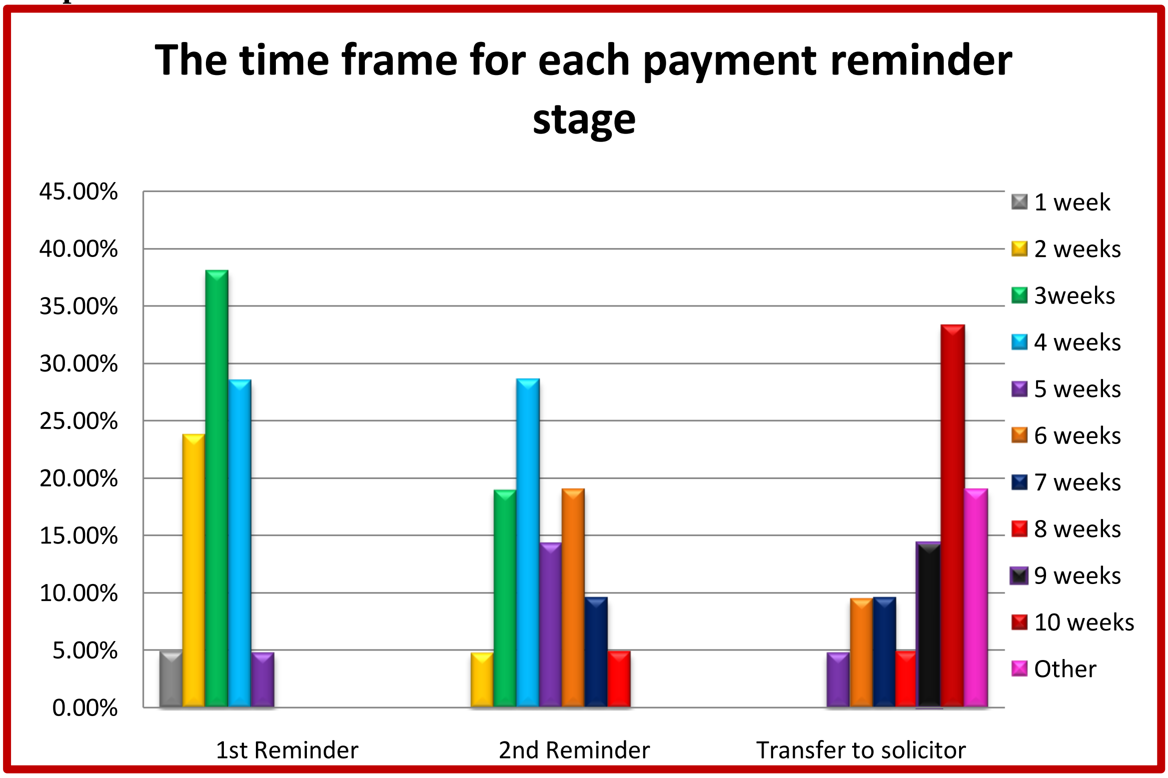
In spite of this Respondent B heightens that one of the main difficulties, is getting credit unions' to invest in more complex technology, especially if they are small. Respondent A further expresses that you can never have enough information and technology where in an ideal world there would be one tool that takes all aspects of a borrowers stance into account.

5.5.2 Credit Control

5.5.2.1 Payment reminder process

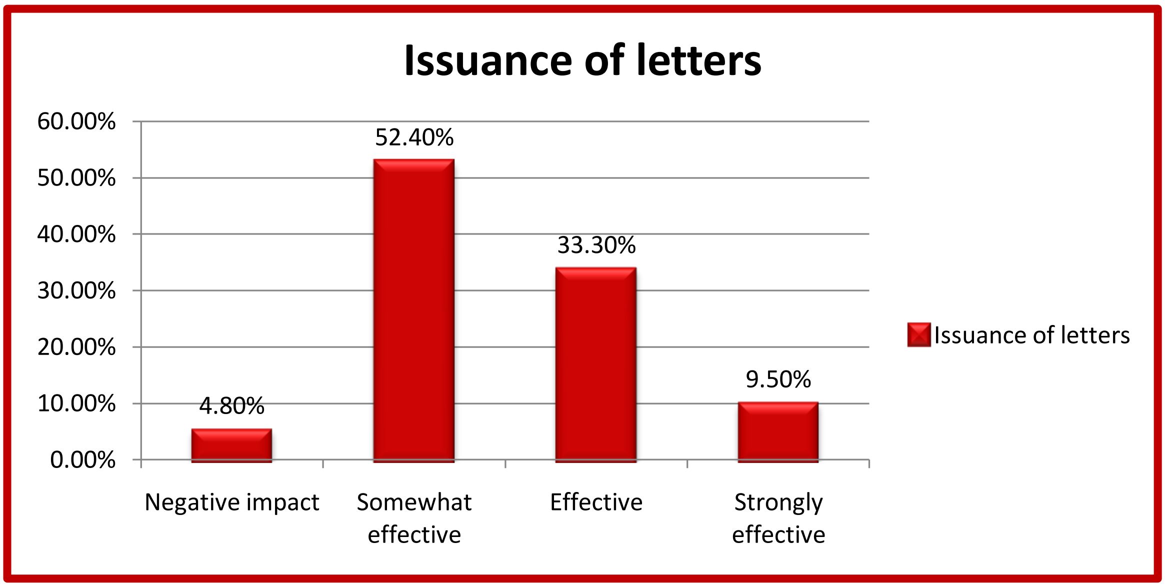
From the literature one of the factors that support arrears recovery is the timely issuance of reminder letters. This factor is measured in the survey by asking what time frame is incorporated in each of the respondents' reminder letter process i.e. first reminder, second reminder and transfer to solicitor. The results show that the minimum period for the first reminder is 1 week, the maximum period is 5 weeks and the mean is 3.05 weeks. Subsequently, the minimum period for the second reminder is 2 weeks, the maximum 8 weeks and the average is 4.71 weeks. Following this, the transfer to solicitor takes place between 5 weeks and 10 weeks where the most common is 9 weeks. However the latter mean score is slightly fallacious as 19% of respondents stated that the transfer to solicitor of a default loan is either longer than 10 weeks or is unknown because each account is treated differently. Moreover 4.8% of respondents did not answer this question; again this is probably due to the same reason. Additionally the standard deviation is somewhat consistent across the three stages as it is between 0.973 and 1.864. This proposes that each of the respondents' reminder process differs by approximately 1 or 2 weeks in each stage.

Graph 5.6



Complementing this question, respondents were asked to rate the effectiveness of the issuance of letters. On average, with a mean score of 3.24, respondents deem this intervention useful in recovering arrears (Graph 5.7). The standard deviation of the respondents' answers is also low at 0.870.

Graph 5.7



However 57.2% of the respondents find that this type of intervention is only somewhat effective or worse has a negative impact. To analyse this further, the researcher decided to investigate how many respondents who think little of the issuance of letters, send out first reminders at 4 weeks or more. The results show that 24.81% of the total respondents send out a first reminder at this late stage and think little of the issuance of letters. Moreover 4.8% of this figure had a large amount of rescheduled loans in 2009 i.e. greater or equal to 501.

In relation to the issuance of letters and reminders, Respondent C claims that issuing a letter 9 days after the payment is missed results in arrears being attended to at an earlier stage. Contrary to this, she believes that this stringent reminder process has caused upset amongst members as it is difficult to implement such policies when the ethos of the credit union has to be taken into account. However, she believes that by proactively contacting borrowers, their motivation to contact the credit union to resolve their accounts increases.

5.5.2.2 Loan rescheduling

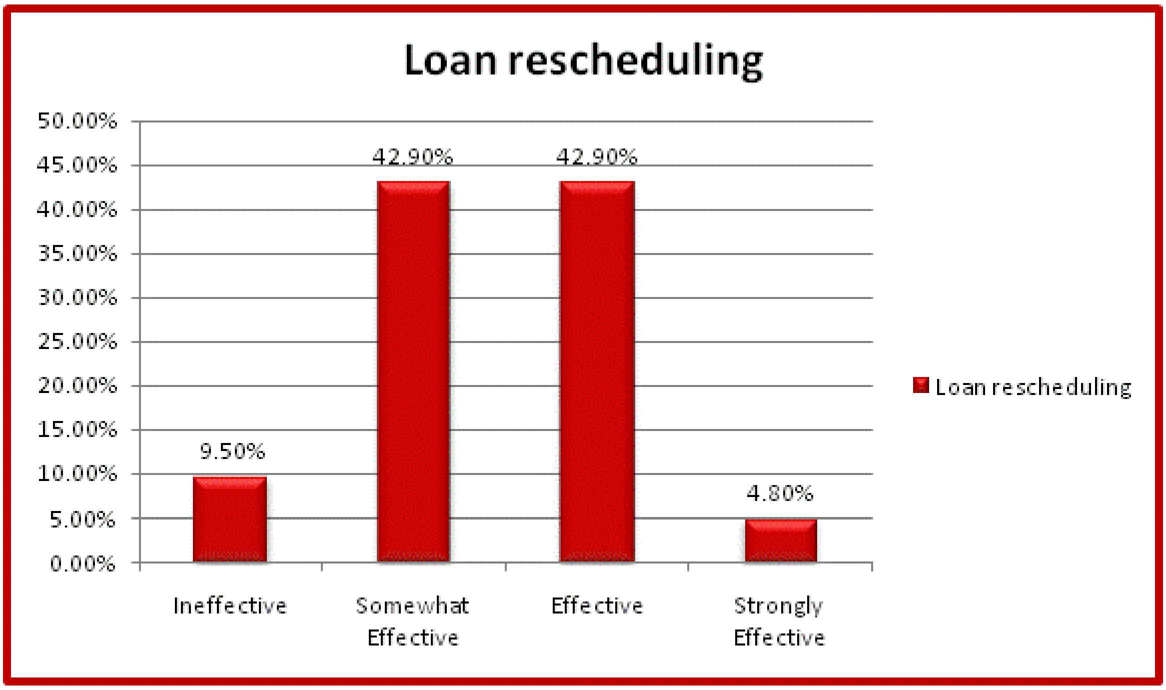
Another factor that is used in many credit unions to recover arrears is loan rescheduling. In the survey the respondents were asked if they had a rescheduling policy, what number of loans were rescheduled in 2009 and to what value. Respectively Table 5.4 displays these results.

Table 5.4 Loan rescheduling

	Frequency	Percentage
Rescheduling policy: Yes	19	90.5%
Rescheduling policy: No	2	9.5%
Number of rescheduled loans in 2009		
<100	11	52.4%
100-300	3	14.3%
301-500	1	4.8%
>700	4	19%
Missing	2	9.5%
Value of rescheduled loans in 2009		
0-2,000,000m	10	47.6%
2,000,001m-4,000,000m	5	23.8%
4,000,001m-6,000,000m	1	4.8%
6,000,001m-8,000,000m	1	4.8%
8,000,001m-10,000,000m	3	14.3%
Missing	1	4.8%

It is clear that most credit unions have a rescheduling policy set in place (90% of respondents). Moreover approximately half of respondents had a low number and value of rescheduled loans in 2009. However 14.3% and 19% of respondents respectively appear to have a lot of rescheduled loans or a high rescheduled loan value in 2009. In general when asked to rate the effectiveness of loan rescheduling, 85.8% of the respondents rated it somewhat effective or effective with an average score of 3.43. Respondent C states that her credit union *"much prefers to look at long term payment arrangements and loan reschedules"* when trying to get members payments back on target. Hence this suggests that credit unions value the use of loan rescheduling in recuperating arrears.

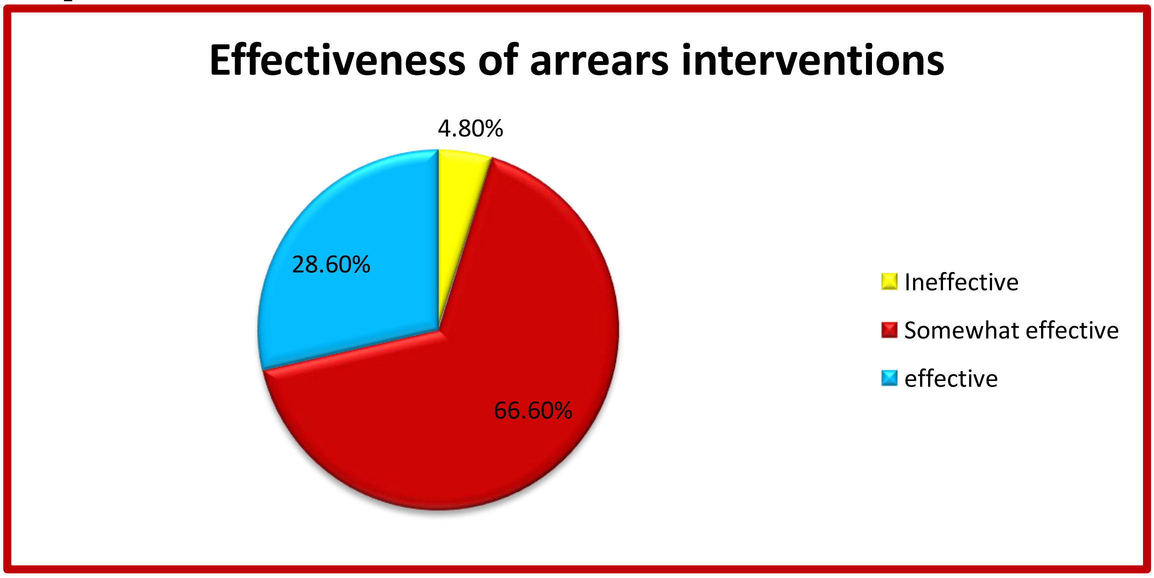
Graph 5.8



5.5.2.3 Arrears interventions

To assess the importance of arrears interventions as a whole, the respondents were asked to rate the level of importance of five different variables: The issuance of letters, loan rescheduling, loan freezing, share to loan transfer and reduction of payments. The results are shown in Graph 5.9.

Graph 5.9



Relating to this, Respondent C states that it is necessary for credit unions to become more progressive in the recovery of arrears. She discloses that recently the credit control department in her credit union have implemented a more rigorous and meticulous approach to recovering arrears, where the following is the process that they employ:

Table 5.5 Letter reminder process

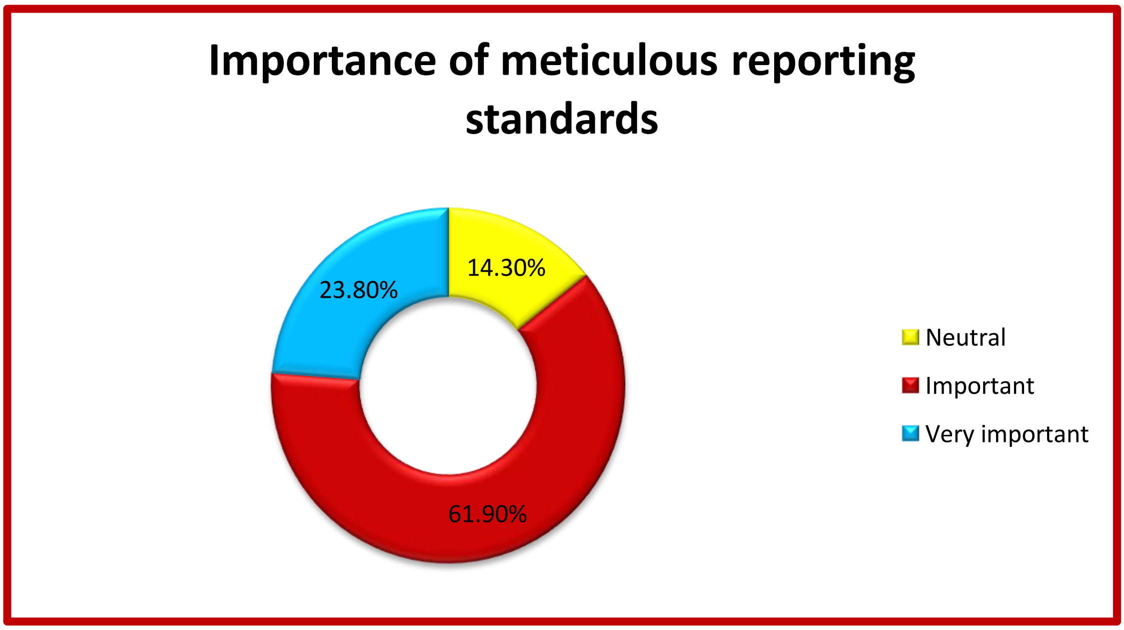
Stage	**Process**
9 days after payment is missed (day 9)	Letter 1
3 days after letter 1 (day 12)	Call 1
7 days after call 1 (day 19)	Letter 2
3 days after letter 2 (day 22)	Call 2
7 days after call 2 (day 29)	Letter 3
3 days after letter 3 (day 32)	Call 3
If no payment after call 3	Transfer to solicitor or Debitask Collection Agency

Additionally, she contends that this process is even more robust with the new XRS system that her credit union has in place. This system allows a superior level of responsibility and ownership of accounts in the credit control area.

5.5.3 Reporting

The survey respondents emphasise the importance of including numerous elements (Appendix 10) into their reports, where 85.7% of them consider meticulous reporting standards as being at least important if not very important. The remaining 14.30% of respondents are impartial to the importance of reporting standards. Overall there is a mean score of 4.10 i.e. respondents believe reporting to be between important and very important. Moreover all credit unions report to the board on a monthly basis; hence there seems to be a methodical reporting system set in place. Moreover with a P value of 0.716, regarding the importance of meticulous reporting standards, the findings confirm that there are little variances in the answers of respondents who have a large credit committee to those who do not.

Graph 5.10



When discussing this issue, Respondent D believes that given the way society and the economy has gone, "*it is more prevalent than ever that you need to be constantly checking, monitoring and reporting*". In conjunction with this, Respondent A underlines that insufficient reporting has an *"impact on the creditability of what we* [they] *supply".*

5.6 Objective three

5.6.1 Barriers

It is conspicuous that most of the respondents (80.9%) are impartial to the main barriers to improving credit management in their credit union. However there are a minority of respondents (4.8%) that disagree on average that the variables asked (Appendix 10) do not hinder improvement in their credit management. It is notable that the two variables which respondents disagree with are associated with a lack of representation at senior management and non-executive level. These results may have an element of bias as largely the respondents are part of the management of their credit union. This is a limitation to the research.

Table 5.6

Respondents level of agreement that there are barriers to improving their credit management process (all variables summated together)	
Strongly disagree	0
Disagree	4.8%
Neutral	80.9%
Agree	14.3%
Strongly agree	0

At a different method of thinking, Respondent C avers that the main challenge for the credit union is managing member satisfaction. She urges that there must be a balance between being loyal and helpful to our customers, and also ensuring that the credit union is financially stable. Respondent D concludes that overall "*the credit union will do its best to support the community but the community must be able to support themselves as well*".

5.6.2 The gaps

It is evident that there are several gaps in the current credit management process of numerous credit unions that emerge from the findings. As discussed several credit unions do not have ICB checks nor do they implement consistent arrears interventions. However, another gap that emerges is the use of stress testing. When the respondents are asked do they have same in their current process, 71.4% said that they do not. Moreover out of this selection of respondents, all of them state that they think that stress testing would help limit loan defaults. On average, 95.2% of all the credit union respondents consider that this form of technology would help minimise the risk of a loan. Concurring with its use, Respondent A states that it is a good tool to obtain.

5.6.3 Areas of focus

Concerning the current stance of the credit management process of credit unions, 57.1% of the respondents state that they have already conducted an overhaul on same and 23.8% made minor changes. In contrast to this 19.1% of the respondents intend to conduct an overhaul of their credit management process or are waiting to see how the market develops. Therefore almost half of the sample credit unions have yet to conduct a complete overhaul on their credit management.

In relation to the key areas of focus, over 90% of respondents emphasise that there is a need for credit unions to improve managers' information on the performance of loans, improve credit control policy and build credit risk expertise at management level. In addition to this over 80% of the respondents stress that there is a need to change the arrears collection process in credit unions, to integrate credit and credit control decisions and experience, and to strengthen technology.

5.7 Summary of the objectives

A summation of the findings pertaining to each objective is exemplified in Table 5.7. These will be the key areas that will be discussed in the discussion chapter to follow.

Table 5.7

Findings of each objective		
Objective One	**Objective Two**	**Objective Three**
-Lending area are the most experienced and have the most personnel. -Credit control area are the least experienced and have the least amount of personnel. -Credit control area has the highest qualifications.	-Lending tools, arrears interventions and meticulous reporting standards are all considered important in obtaining a sound credit management process. -Several credit unions lack the basic tools e.g. ICB. -Consistency of arrears interventions across credit unions is weak.	-Credit unions lack complex and contemporary technology e.g. stress testing. -They consider updated technology as being important in credit management. -The skill set of management and staff are weak according to respondents. -Ethos of the credit union is considered to be one of the major barriers in executing a more rigorous process.
Conclusion: Lack of emphasis in the credit control area. Credit unions need to re-evaluate this issue.	**Conclusion:** More updated technology is a prerequisite. Moreover arrears interventions must be more stringent.	**Conclusion:** Credit unions need to introduce more technology. Perhaps there should be a necessary qualification level for all staff regardless of what they are selling. Additionally the ethos of credit unions needs to be reassessed.

5.8 Chapter summary

This chapter assessed the findings under the three research objectives. These objectives together provide an in-depth analysis of the credit management process used by credit unions in order to sustain their business performance. The findings will now be discussed and contrasted with the literature to further analyse their validity.

Chapter Six
Discussion Chapter

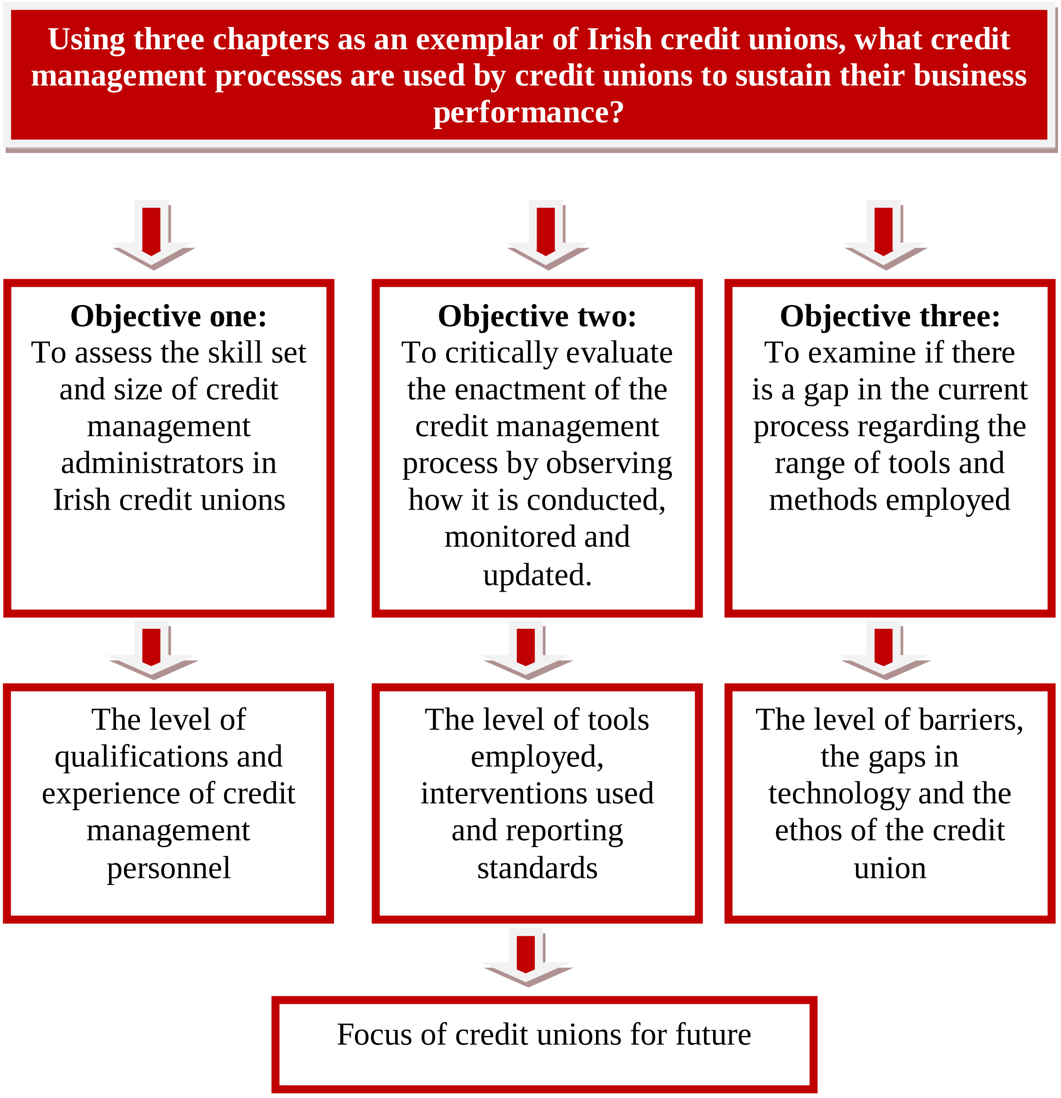
6.1 Introduction

This chapter analyses the findings that are presented in chapter five where the information captured regarding the credit management process of credit unions will be discussed in the context of the literature. The layout of this chapter is similar to the findings chapter where each section is based upon a research objective. This chapter as a whole will present to the reader how the findings and literature interlink with each other and how the development of this research has contributed to the research question posed.

6.2 Framework of the discussion

The following is a diagram of how the discussion will be conducted (Figure 6.1). The discussion is divided into three sections relating to the research objectives. The credit unions focus for the future will be presented also.

Figure 6.1 Framework of the discussion



6.3 Objective one

6.3.1 Qualifications

The findings provide evidence that in order for credit unions' credit management processes to work proficiently then their personnel should have a thorough knowledge and experience in the area of lending and/or credit control. However, Hobbs (2010b) believes credit unions are lacking the necessary skills and intelligence that is required to fully appreciate the risks they are dealing with. Concurrent with this, the findings stress that only 19% of lenders, 23.9% of credit control and 19% of credit committee officers in credit unions possess an undergraduate degree as their highest qualification. Moreover only 15.87% of personnel dealing with credit obtain a QFA qualification. However, this QFA qualification is only required by those staff that sell financial products, for example RPI insurance (ILCU, 2010). With credit unions facing "*serious solvency problems*" (McManus, 2010), perhaps there should be more emphasis on qualifications across all credit departments i.e. lending, credit control and credit committee.

6.3.2 Experience

It is apparent that credit unions place significant weight on experience. The findings show that almost half of the credit management personnel in credit unions have over eight years experience. Supporting this Respondent D states that experience, initiative and team work collaborate to make sound loan decisions. Complementing this view, the ILCU (2010) state that all credit union personnel selling financial products can be 'Grandfathered'. From the research over 73.33% of personnel that were not QFA qualified were covered by experience. However is experience enough? Respondent A deems that it is not. Given the current economic climate, it appears that more stringent policies on the qualifications and skill set of credit management staff should be identified in order for credit unions to realise the risks in which they are managing.

6.3.3 Size

The ILCU (2010) as discussed in McCaughren (2010) considers that credit unions are typically small organisations. The question presented is does size have an impact on the stringency of a credit unions' credit management process? Respondent B highlights that in general size plays an important role in impacting the level of technology used in that credit union. McCaughren (2010) adds to this finding by believing that credit unions are different to banks due to their credit culture and size. This research extends extant literature by assessing the different levels of personnel in each credit department, where credit control was found to contain the least. Thus given that MAPDEG (2010) supports the timely assessment of default borrowers and the ILCU (2010) underlines that 9.75% of credit unions loans were in arrears in 2009; this research reasserts the idea that there should be more emphasis on the credit control area in credit unions.

6.4 Objective Two

6.4.1 Lending

6.4.1.1 Lending limits

One method of controlling credit risk which emerges from the literature is incorporating robust lending limits. Bessis (2002) and Dekker (2004) stress the importance of executing a limit procedure so as to assuage the loss from a borrower. Assessing this issue the research highlights that the majority of credit unions have a lending limit of approximately five to six years. Given that credit unions' lending limits have increased to 30% recently (Credit Union, 2010), the findings of this research align with Dekker (2004)'s viewpoint. He states that higher lending limits means a longer loan duration which indubitably increases the risk of a borrower defaulting. Conversely Respondent C is at variance with Dekker (2004) by supporting Bessis (2002) when he highlights that the shorter the loan period the lower the interest generated. Although debt provisions have increased in credit unions, the researcher suggests that this maximum duration of loans given out in credit unions could be minimised to a four to five year period. The reason behind this is due to the non-profit nature of credit unions and the risky nature of borrowers given the economic climate. However, there is a requirement for further research into this area.

6.4.1.2 Tools

6.4.1.2.1 ICB

One of the credit risk technologies employed in numerous credit unions is the ICB credit check. Corresponding to Hobbs (2010e), this research shows that the majority of credit unions deem this tool important or very important. Moreover, Respondent B and A aver that this technology is a necessity in credit unions given the trend in arrears over the past couple of years. However the findings agree with MADPEG (2010) where they stress that improvements need to be made regarding the ICB. However whilst MADPEG (2010) states that there is a requirement for the ICB to develop its database, this research corroborates with ICB (2010) where it emphasises that few credit unions incorporate this technology into their lending processes. With approximately one third of the respondents that do not utilise this technology, this research suggests that all credit unions regardless of size should implement this tool.

6.4.1.2.2 Affordability calculator

This method of assessing loans is one of the most simplistic models that lenders can utilise. Much attention has been given in the literature concerning the use of affordability calculators in financial institutions. It is apparent from the findings that much precedence is given by credit unions regarding the use of this tool, where 95% of them deem it to be important. While the research is at variance with Tingay (2004)'s perspective, it supports Burton (2008)'s viewpoint where he stresses that this tool helps to moderate the level of borrower defaults. However the research is also parallel to Middlemiss (2004)'s view where he suggests that the main difficulty is getting financial institutions to invest in more complex technology. Thus there is a gap in the literature pertaining to the capacity of credit unions to employ complex technology. This could be further investigated by supplementary research.

6.4.2 Credit control

6.4.2.1 Payment reminder process

Altogether, the findings show that credit unions consider arrears interventions as being somewhat effective or effective in the recovery of arrears. This complements the viewpoints of Finlay (2008), Weaver (1994) and Ralston and Wright (2003) where they emphasise the significance of the execution of timely arrears procedures when trying to recuperate arrears. In line with Finlay (2008), Respondent C avers that it is fundamental for credit unions to impose a more aggressive approach to improving borrowers' accounts. This takes the form of a letter reminder process where the stringency and organisation of same determines how effective it is. When comparing both reminder processes (Table 5.5 and Appendix 6) it is clear that they are similar in their approach. Respondent C illustrates that the first contact commences after 9 days of no payment and last contact at day 32. Corresponding to this Finlay (2008) states that the first contact period, although depends on the type of default, is usually around day one (either by phone or letter). The transfer to solicitor occurs at approximately 37 days which is comparable to the findings. Given the ethos of credit unions and their social duty, Finlay (2008)'s approach appears to be too severe (i.e. contact after one day's missed payment). Therefore this research welcomes the process of Respondent C to be consistent throughout all credit unions.

However, different to the interviews, the survey opposes the reminder concept of Finlay (2008) by illustrating that over half of the respondents find that this intervention is only somewhat effective or even has a negative impact. Approximately a quarter of these respondents send out first reminders later than four weeks, some of which had a large quantity of rescheduled loans. Perhaps the reasoning behind this concurs with Hinder (2004)'s perspective that credit unions should not harass the borrower and should listen to their problems. However given that this intervention decreases the likelihood of a loan defaulting, this research suggests that a more organised, consistent approach in the communication process in recovering arrears is essential. Whether the stringency of this policy can be completely rigid is doubtful however, as each account needs to be assessed and treated differently and the ethos of the credit union also has to be taken into account.

6.4.2.2 Loan Rescheduling

Pertaining to the literature, the findings show that the majority of credit unions consider loan rescheduling as being somewhat effective or effective as an intervention in the arrears recovery process. However Hobbs (2010a) believes that this intervention aggravates the riskiness of credit unions. At a different vein the interviews show that credit unions prefer long term pay arrangements for example loan rescheduling when trying to resolve a borrowers account. Accordingly there appears to be differences of opinion between the literature and the credit unions' opinion. Nevertheless, given that approximately half of the respondents had either less than 100 or €2 millions worth of rescheduled loans in 2009, they do not appear to place too much weight on this intervention. Conversely, 12.5% of credit union loans are in arrears (McManus, 2010), thus emphasis on rescheduling may be greater in the future. Overall, further research into this area is essential as a larger sample frame may produce different and more comprehensive results.

6.4.3 Reporting

The findings from the research and literature complement each other regarding the importance of maintaining scrupulous reporting standards in credit unions. The work of Hazera (2002) resonate with the findings of this study where Respondent D considers that it is "*more prevalent than ever*" to monitor, check and report all credit management activities. Moreover, the Law Reform Commission (2010)'s vision of obtaining a more methodical reporting system in Irish financial institutions is realised in credit unions as all credit unions report to the board on a monthly basis. The work of McCaughren (2010) is contrary to the findings of this study. He considers that credit unions may not be superior enough to maintain the same reporting standards as banks given their size and nature. However this study shows that not only do the credit unions report regularly, they also regard the thoroughness of this reporting to be very important. Moreover, Respondent A stresses that if credit unions do not maintain high quality reporting standards then the creditability of the credit union is affected. In general, both the findings and research suggest that regardless of size, credit unions should apply meticulous reporting standards.

6.5 Objective Three

6.5.1 Barriers

The findings from the survey confirm that in general most credit unions are impartial to what barriers exist to improving their credit management. This opposes Hobbs (2010b) view where he states that a main barrier to credit unions' credit management processes is that personnel lack the expertise to minimise the risks that they are dealing with. However, one of the components to the 'overall barrier' measured is insufficient quality of data (Appendix 10). The findings show that this is the only component that respondents agree is a main barrier to improving their credit management. This complements Fatemi and Fooladi (2006)'s work when they state that the current economy gives rise for new innovative technology.

Consistent with Middlemiss (2004), the findings also show that credit unions acknowledge that they must maintain a social duty when conducting lending. Respondent C urges that credit unions are finding it difficult to find the medium between being there for their members and sympathetic to their problems, and keeping the credit union financially stable. This finding is supported by the views of Lenihan (2009). Accordingly this research suggests that although credit unions have a social responsibility, given the economic climate it is crucial for them to act more stringently so as to maintain its financial soundness. Moreover there appears to be a necessity for credit unions to implement more advanced technology systems so as to achieve more efficient and adequate data.

6.5.2 The gaps

Extending the viewpoint of the Financial Regulator (2006), this study assesses the propensity of Irish credit unions to incorporate more advanced loan assessment technology, for example stress testing. The findings show that most credit unions do not stress test their portfolios but consider that it would be of benefit to them. This is parallel to Hilber and Jones (2004)'s work where they underline that stress testing complements traditional risk models. In line with this, the literature also looks at the value of neural networks and decision trees in the credit management process. Although the work of Desai et al (1997), Financial Regulator (2006), Honohan (2009), and Bailey (2004) suggest the employment of such technology in a financial institution, they are not mentioned in the primary research as most credit unions do not understand the concept of such advanced systems. However, Respondent B stresses that credit scoring models could be added to the assessment process in order to produce a fuller picture of a borrower. Moreover, Respondent A underlines that in order for credit unions to progress, it would be ideal to have one tool that could provide all the required information. Overall, the literature and findings highlight that the more technology credit unions have the more information is provided about the riskiness of a borrower. Additionally, Respondent C's view resonates with M.C.C.C Credit Union where she states that the XRS system is meticulous in its approach in dealing with arrears. Accordingly Table 6.1 illustrates a synopsis of the technology that emerges from the literature and findings. In general, there are gaps in the literature concerning the questions: Do credit unions have the capacity to implement more advanced loan assessment technology and should they incorporate same?

Table 6.1 Credit assessment technology for the future

	Literature (For)	Literature (Against)	Findings	Conclusion
ICB	ICB (2010) MAPDEG (2010) Betts (2004)	Kindred (2010) MAPDEG (2010) Hobbs (2010e)	57.2% Important 33.3% Don't have Interviewees believe it to be essential	All credit unions regardless of size should use the ICB in their credit management process
Affordability Calculator	Middlemiss (2004) Burton (2008) Thomas (2009)	Wilkinson and Tingay (2004) Middlemiss (2004)	95.2% Important Interviewees state that you can never have enough technology	All credit unions regardless of size should conduct affordability tests on their borrowers as credit unions '*knowing your customer*' motto has changed with the economic climate
Stress Testing	Honohan (2009) Alexander and Baptista (2006) Hilbers and Jones (2004) Hobbs (2010b)	Honohan (2009)	95.2% say it helps minimise credit risk 71.4% say they do not have it Interviewees state that it is a useful tool to obtain however caution must be made that credit unions are not stressing their portfolio too strongly or weakly	Stress testing is useful. There are regulations for credit unions to stress test their portfolios at present. In the near future this should be something that credit unions should consider to implement into their daily lending processes. Credit union size may have an impact on whether they require such advanced technology
Neural Networks	Rouse (2002) Altman and Saunders (2007) Desai et al (1997)	Finlay (2008)	Not tested but interviewees state that other technology would be beneficial to credit unions **Other research**: American credit unions found that this technology was the best out of all loan assessment models	This should definitely be considered by credit unions to implement into their daily lending process as it learns by experience. However further research needs to be conducted pertaining to the capacity of small and large credit unions to incorporate same. Credit union size may have an impact on whether they require such advanced technology
Decision Trees and other Credit Scoring Models	Bailey (2004) Thomas (2009) Fatemi and Fooladi (2006) Jepson (09)	Hobbs (2010e)	Interviewees state that there is a requirement for additional credit scoring models XRS system can be used to manage credit control **Other research**: One of the most successful credit unions to overcome the crisis in America used decision trees in their loan assessment process	Further research should be conducted on decision trees where a specific model can be derived that will complement the credit culture of Irish credit unions. XRS system should be implemented in all credit unions so that arrear accounts can be organised and dealt with in a proficient manner. More research required for credit scoring models in credit unions

6.5.3 Areas of focus

The research provides insight into the main focus of credit unions regarding their credit management processes. In agreement with Bernanke (2009b), credit unions emphasise that communication between managers and lending personnel is essential. Moreover the findings narrow the theories of Adafoford (1988), Comptroller of the Currency (1988), Thomas (2009) and Fatemi and Fooladi (2006). While these theories concentrate on financial institutions, this research discovers that updated technology is also fundamental for credit unions to invest in for the future in order for them to maintain their business success. The study further highlights that credit unions believe that they need to modernise their arrears collection process and build expertise at both management and frontline staff level. Again these findings are parallel to the work and viewpoints of Weaver (1994), Ralston and Wright (2003), Hinder (2004), Finlay (2008), MAPDEG (2010), Byrne et al (2002) and ILCU (2010). Overall, credit unions envisage the gaps in their credit management processes; however they now need to act upon these changes.

6.6 Chapter summary

There appears to be a profusion of literature which complements the findings from this research. However the majority of the literature focuses on credit management in financial institutions and not in credit unions. Although this research provides insight into the current credit management process of credit unions, there is indubitably a requirement for further research on same. Moreover, this additional research could focus solely on the various variables that effect credit management in credit unions i.e. technology, arrears interventions, expertise of credit union personnel and the capacity of credit unions to update systems because of size or nature. From both the literature and findings it is apparent that credit unions need to reassess key areas; namely credit control administration, arrears intervention process, loan assessment technology and expertise of personnel. These will now be discussed in the conclusion chapter.

Chapter Seven
Conclusion

7.1 Introduction

Perceived as a fundamental element in sustaining credit unions business performance, the soundness of credit unions' credit management processes have become recently susceptible to a plethora of criticism. This criticism discloses that the interventions used, the technology employed and the expertise of credit unions' personnel are not consistent with the economic climate and the rapid changes that have been occurring in the financial sector. Therefore this research conveys an analysis on credit unions' current credit management processes and concludes with the key areas that credit unions' need to focus on to sustain their business performance. Moreover it highlights the diminutive amount of literature that concentrates on how credit unions can improve their credit management processes. Accordingly this chapter will underline the areas that further research needs to be conducted on. Within this chapter, emphasis firstly is placed on the conclusions and limitations of this study followed by the recommendations for future research.

7.2 Conclusions

This research focuses on the credit management process of credit unions using three chapters as an exemplar of Irish credit unions. It is conducted from the perspective and opinions of credit union administrators.

Its first aim is to investigate the skill set and size of credit management administrators in order to observe if there is an even distribution between all credit departments regarding same. From the empirical findings, the researcher concludes that the credit control department has the least personnel and experience across all departments. Given that this area is an essential component to maintain the performance and stability of a financial institution (Finlay, 2006); it appears inefficient of credit unions to not place more emphasis in this area. Even though credit control personnel in the sample credit unions are the most qualified, the findings (Respondent C) and the literature (Posner, 1990) state that experience and training are essential for this area to work effectively and seamlessly. Therefore this research deduces that there are deficiencies in the credit control area of credit unions regarding the level of personnel and their experience.

Another purpose for this study is to examine the tools, interventions and reporting employed by credit unions so as to explore whether there are any weaknesses in these areas. In relation to tools, the results from this research show that they are considered important by the sample credit unions when making loan decisions. However what materialised from the findings is that some credit unions do not use ICB checks. This is remarkable to note as both extant literature (Hobbs, 2010e) and this study (Respondent A and B) consider this tool to be a necessity. This study consequently concludes that credit unions lack the technology that both literature and findings believe is vital to assuage the riskiness of a borrower.

A further deduction that emerges from this research is that credit unions do not have consistent arrears intervention processes. Moreover, technology can be realised in this area such as the XRS system employed in Respondent C's credit union so as to help maintain this consistency. This along with the lack of personnel and experience in the credit control area highlights that this sector of the credit union is not as resourceful and disciplined as the lending or credit committee departments.

Reporting is another element which contributes to the meticulousness of credit unions credit management process. This research finds that credit unions consider rigorous reporting standards important to maintain. From the sample credit unions it appears that reporting is comprehensive, consistent and regularly updated and reported to the board. However this is interpretive as it is from the credit unions perspective. This limitation will be further discussed in Section 7.3.

Lastly the gaps to the credit management process of credit unions surface from this research. Including the tools, interventions and credit control area, a lack of technology is apparent in all sample credit unions. This research concludes that credit unions should incorporate stress testing into their credit management process. Moreover, given extant studies other technologies like neural networks, decision trees and credit scoring models should be considered. However, further research is required pertaining to the capacity of credit unions to implement more complex technologies.

7.3 Limitations and recommendations for future research

The following are the limitations and recommendations of this study:

- Most of the survey respondents are general managers (66.67%) which may cause an element of bias towards particular questions. This is because the answers are in the view of the manager. Differently, longitudinal research could be conducted to assess the credit management processes in credit unions.

- Another limitation that emerges is that the interviewees are affiliated to a large credit union. Therefore further research could be made on large and small credit union administrators in order to investigate whether different sized credit unions will produce different results.

- This research was conducted using a triangulation method. It consisted of surveying and interviewing the opinions of credit unions. However, another researcher could conduct the same study by analysing only credit union accounts, i.e. purely quantitative research.

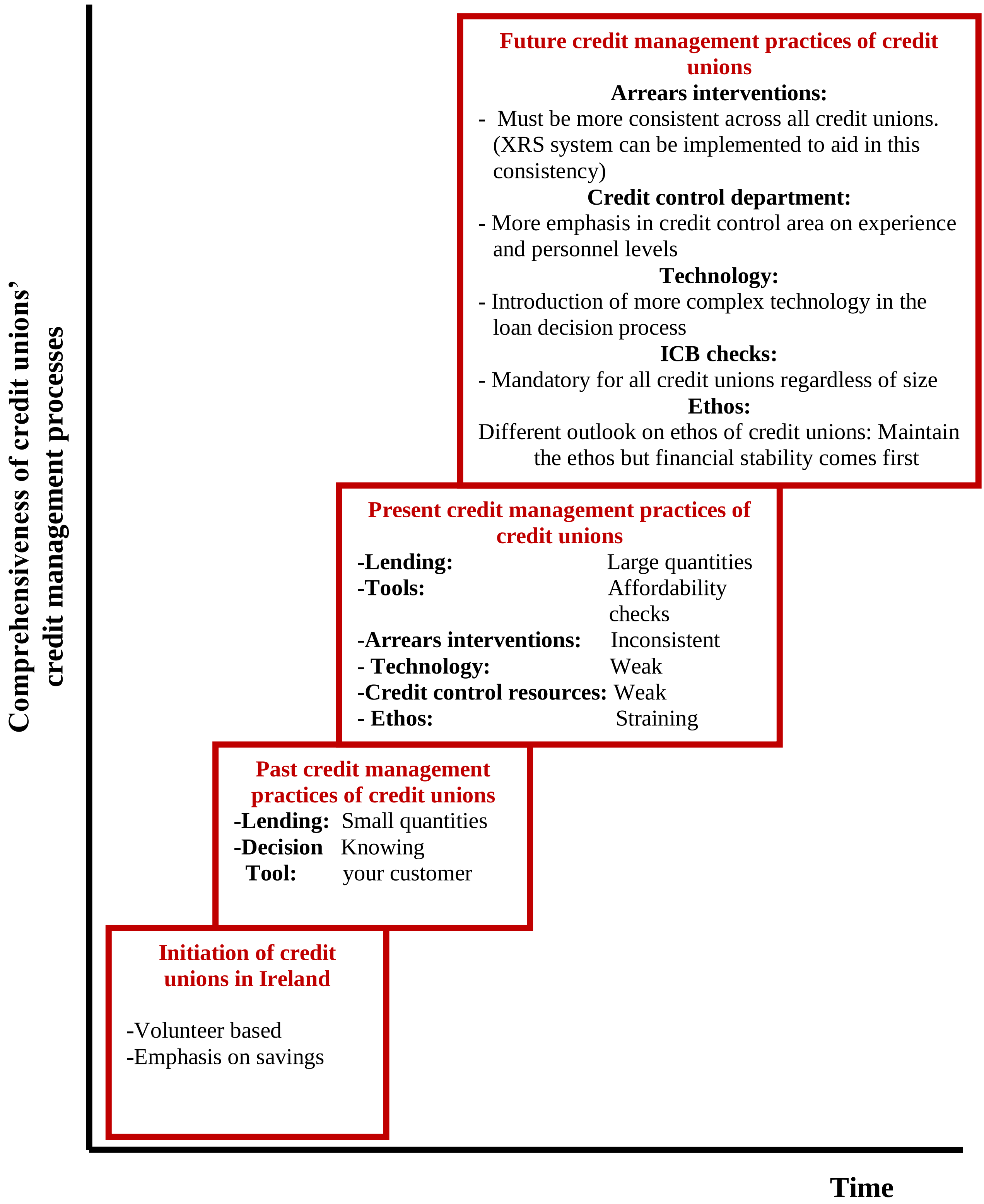
- Another curb to this study, is that all the interviewees were credit union based. It would be valuable if another body was interviewed from the outset i.e. the financial regulator, a CUMA representative, a financial journalist, a member of the ILCU etc. This would give a different viewpoint on the credit management process of credit unions and may bring forth new ideas regarding what could be employed by credit unions to better sustain their business performance.

- Lastly, the survey of this research, given time constraints and costs, was only sent out to 42 credit unions. Accordingly a larger research could be conducted on all credit unions in Ireland. From this it would be interesting to see if the variances between the two researches are small or large, i.e. if the generalisation of the entire population from this research is accurate.

7.3.1 Sequential model

Overall a sequential model transpires from this research which illustrates the past, present and future of credit unions' credit management processes (see Graph 7.1). The future constituents involve the recommendations from this research for credit unions to realise in order for them to sustain their business performance.

Graph 7.1 Sequential model



7.4 Chapter Summary

This chapter provided a synopsis of the findings and conclusions of this research. It further accentuated the limitations of this study and put forward recommendations for further research to be conducted on. Finally, a sequential model was constructed which illustrates the areas where credit unions need to focus on in order to facilitate a sustained business performance.

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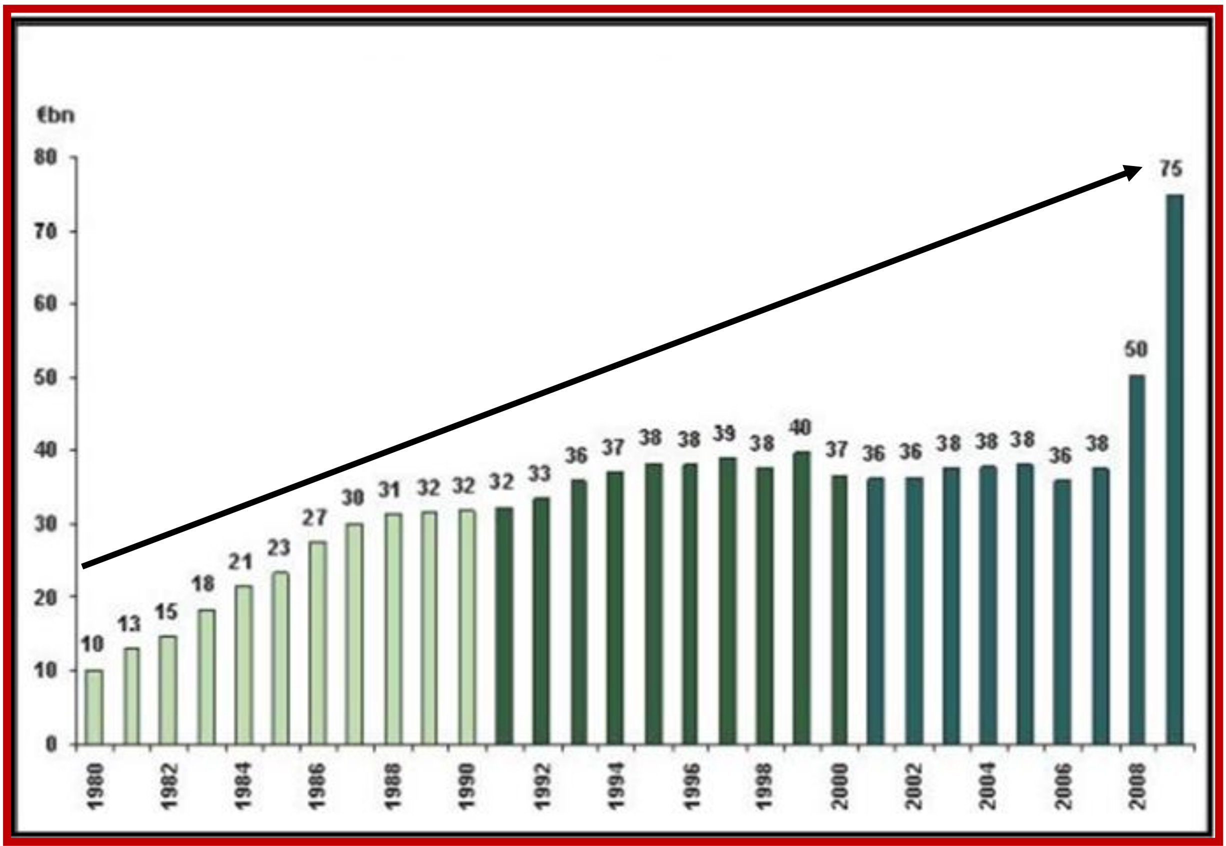
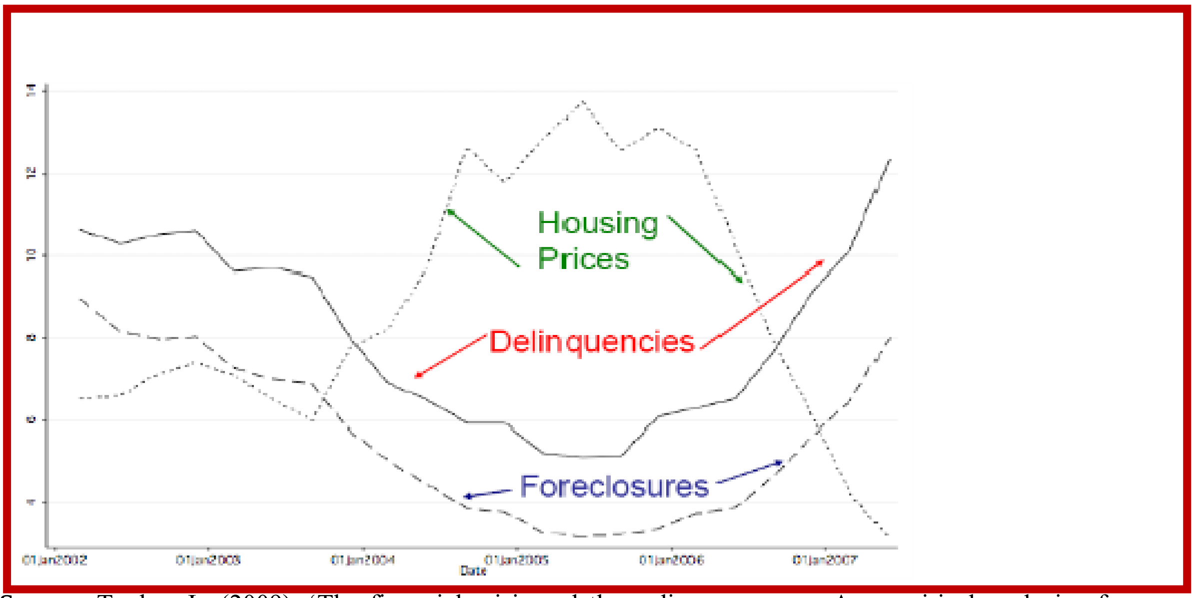
National debt trend levels in Ireland since 1980



Source: National Treasury Management Agency [online] Available from URL:http//www.ntma.ie

A trend in house prices, delinquencies and foreclosure rates from 2002-2007



Source: Taylor, J., (2009), 'The financial crisis and the policy responses: An empirical analysis of what went wrong', NBER Working

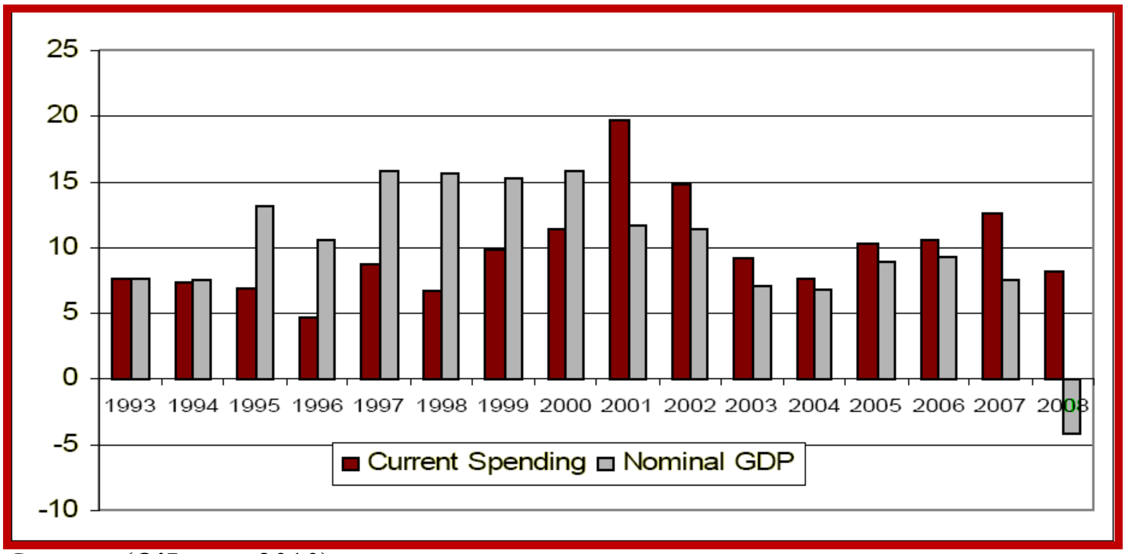
Other causes to the Irish crisis:
Fiscal policy, concentration of assets and interest rates

Fiscal policy

Another candidate for the cause behind the Irish crisis was the pro-cyclical nature of Irelands' fiscal policy for the majority of the decade prior to the crisis (Regling and Watson, 2010). Honohan (2009) stresses that the level of tax cuts left revenues tenuous as they were mainly reliant on taxes derived from the property sector. On a similar vein Regling and Watson (2010) deliberated that this fiscal policy provided fuel to the fire in the Irish economy. If the budgets were counter-cyclical, a moderation of the boom would have transpired. However, budgetary policy swerved towards spending funds when revenues came in (Regling and Watson, 2010). This is exemplified in Graph 2.3 where the increasing trend of reckless government spending is evident, even though nominal GDP was below this spending level from 2001 onwards.

Challenging these opinions, the Minister for Transport Noel Dempsey stated that at the time the Opposition was urging for more Government spending and no political person was demanding this to halt (RTE News, 2010). He further supported the Governments budgetary policy by emphasising the importance of its spending use across the country. However, it is remarkable to observe that even the Taoiseach himself agreed that a more restrictive budgetary policy should have been implemented (RTE News, 2010). So were the banks and financial institutions predominately to blame?

Graph: Government Current Expenditure and Nominal GDP: Annual Changes (%)

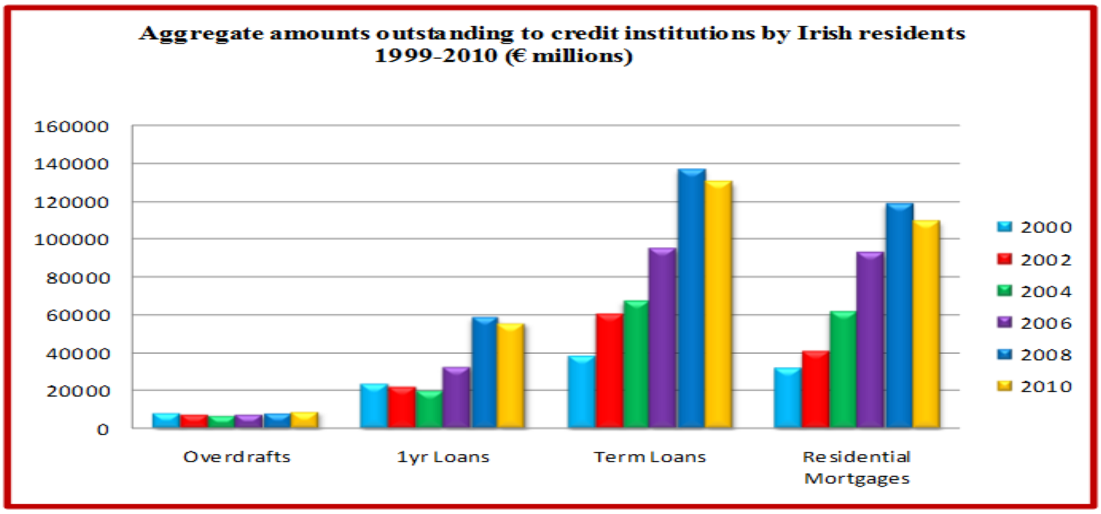


Source: (O'Leary, 2010)

Concentration of assets

Another hallmark of the Irish crisis was the rising risks in financial institutions and their asset concentration in the general property market, the commercial property market and development loans. This is illustrated in the graph below whereby it is evident that there is a steep upward trend in the amount of residential loans outstanding to financial institutions (Oireachtas, 2010). Consequently a market slowdown in the economy and in the property market especially, was unlikely to end in a "*soft landing*" for most of sectors of the banking system (Regling and Watson, 2010).

Graph

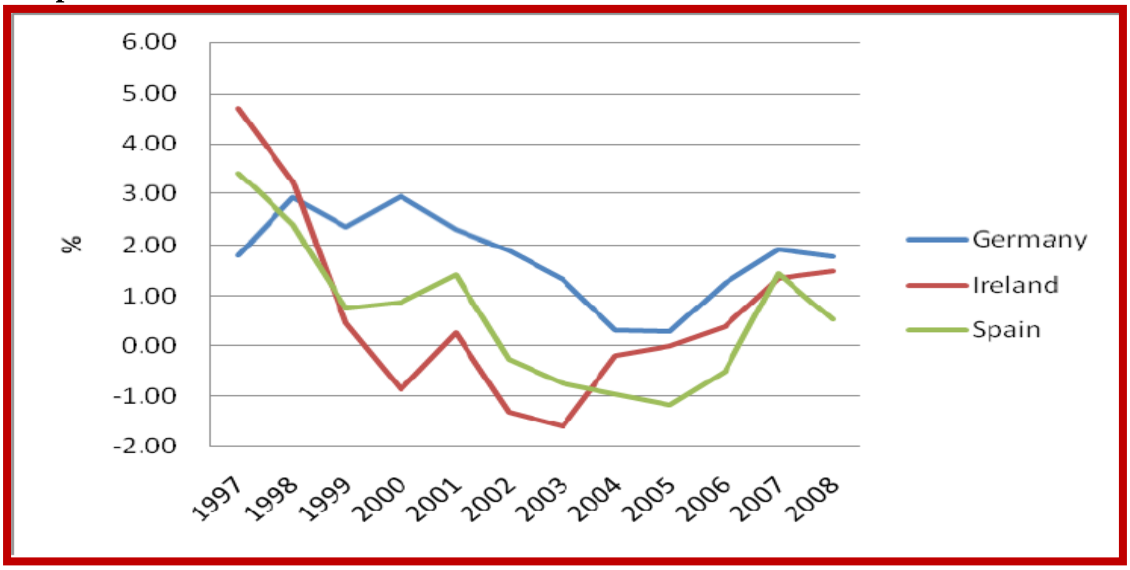


Adapted from: (Oireachtas, 2010)

Interest rates

Regling and Watson (2010) maintain that EMU membership underpinned vulnerability in the Irish economy. The logic behind this is revealed in the graph below as it illustrates Ireland's dramatic decline in short term interest rates by approximately two thirds since its entrance to the EMU. As a result there was an augmentation in household debt, which eventually led to the creation of a property bubble during this credit boom (Regling and Watson, 2010).

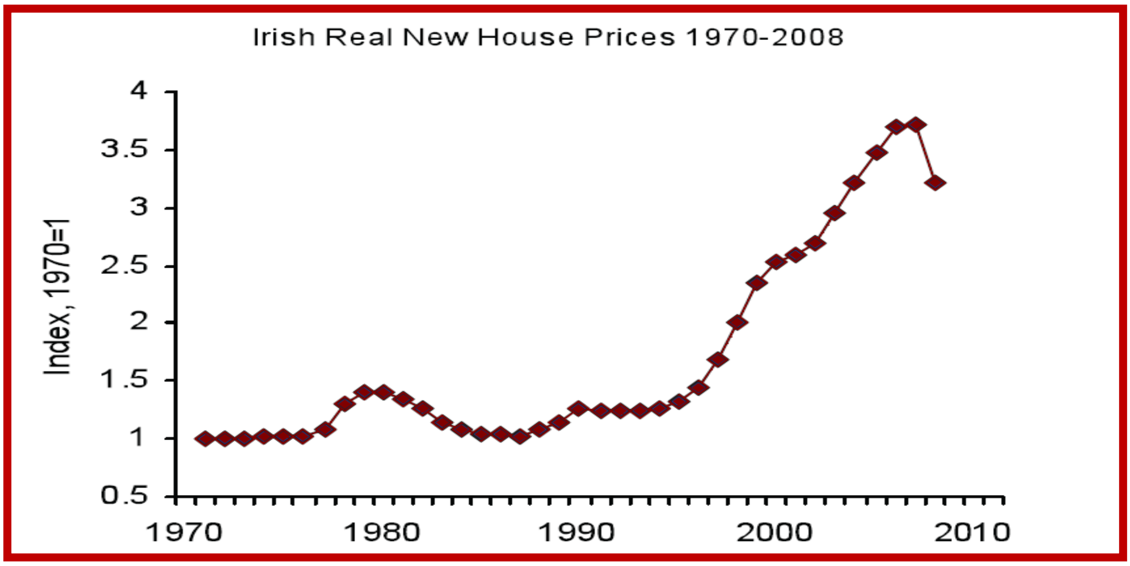
Graph Real short term interest rates



Source: (OECD, 2010)

Complementing this view, Honohan (2009) states that Ireland's admission to the EMU was a major factor behind the house price explosion (see graph below). This was due to the rapid lowering of both nominal and real interest rates. Disputing these positions, Kelly (2009) argues that it was not the low interest rates that caused the housing bubble but instead the plethora of credit distributed in Ireland. However, Honohan (2009) maintains it was this reduction of mortgage interest rates, combined with an increasing population growth and larger income levels that caused the increase in the demand and supply for credit. Accordingly a general overheating of the economy was occurring.

Graph: Irish housing prices (deflated by CPI) 1970-2008



Source: (Honohan, 2009)

Credit Committee policy

The guidelines to an effective lending policy in credit unions are outlined by the Financial Regulator (2005). These guidelines provide a basis from which credit unions can implement a robust policy in order to assess loan applications and manage credit lucratively (see table below).

The guidelines to what a lending policy should include
1. A meticulous account of how a loan application should be assessed where commitments to other financial institutions should be fully disclosed. It is recommended to use the ICB check or credit agencies to reduce the information asymmetry.
2. This policy should be appraised by the board of directors on a regular basis where changes in economic conditions must be considered when doing so.
3. The authority limits of the Credit Committee and credit department should be included in this credit policy.
4. Each member of the Credit Committee and credit department should acquire the necessary expertise to enable them to assess loans in a proficient manner.
5. The Credit Committee is obliged to present a detailed report in writing to the board for every board meeting.

Adapted from: (Financial Regulator, 2005)

Adhering to the prescribed guidelines is a real challenge for many credit unions given their voluntary nature and the skill set of volunteers. Nonetheless, given the economic climate there has never been more of a reason to implement rigorous processes (Fatemi and Fooldadi, 2006).

Credit control policy

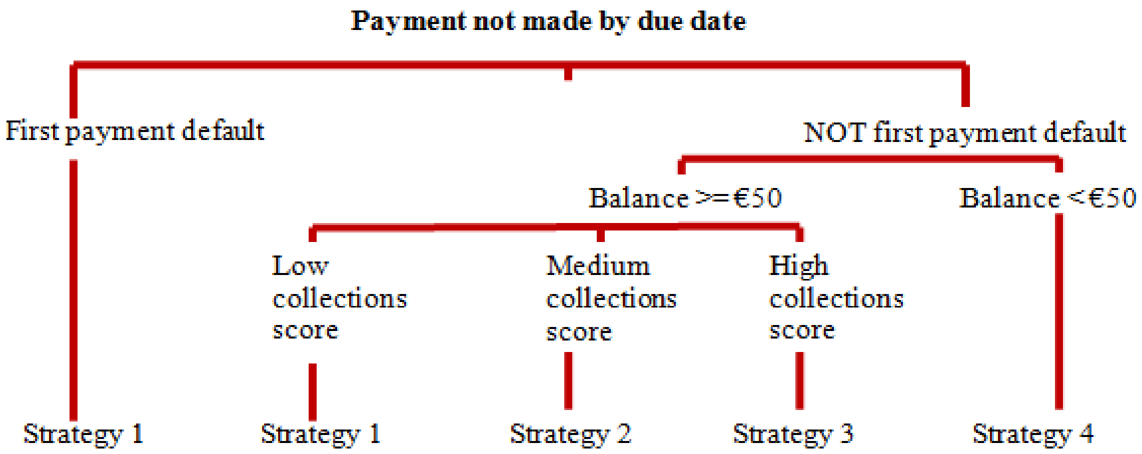
The guidelines to the policy for credit control in credit unions are outlined by the Financial Regulator (2007). These guidelines provide a basis from which credit unions can apply a healthy credit control policy from which they can assess unpaid loans and manage them successfully (Financial Regulator, 2007). These guidelines are outlined in the table below.

The guidelines to what a credit control policy should include	
1.	A written credit control policy must be set in place and approved by the board.
2.	This policy should assist personnel in ensuring that borrowers pay their loan in accordance with the credit policy/agreement.
3.	The policy should further knit with the scale and intricacy of the type of lending conducted by separate credit unions.
4.	Lastly this policy should be re-examined by the board of directors on an ongoing basis.

Adapted from: (Financial Regulator, 2007)

Realising these guidelines is often difficult for credit unions given the challenging nature of recovering arrears and also the time involved in pursuing same.

Collection strategy



Days past due date	Collections strategy			
	Strategy 1	**Strategy 2**	**Strategy 3**	**Strategy 4**
0 (due date)				
1	Phone call 1	Letter 1		
7 (statement date)	SM 1 & Account suspended	SM 1	SM 3	SM 3
23	Letter 3	Letter 2		
30 (due date)		Phone call 2	Letter 1	
37 (statement date)	**Transfer to debt recovery**	SM 2 & Account suspended	SM 3	SM3
46		Letter 3	Letter 2	
53		Phone call 3	Phone call 2 & A/C suspended	Account suspended
60 (due date)		**Transfer to debt recovery**	Letter 3	Letter 3
67 (statement date)			SM 4	SM 4
74			Phone call 3	**Transfer to debt recovery**
81			**Transfer to debt recovery**	

Adapted from: Finlay, S., (2008), *The management of consumer credit; Theory and practice*, Palgrave Macmillan

***SM = Statement message**

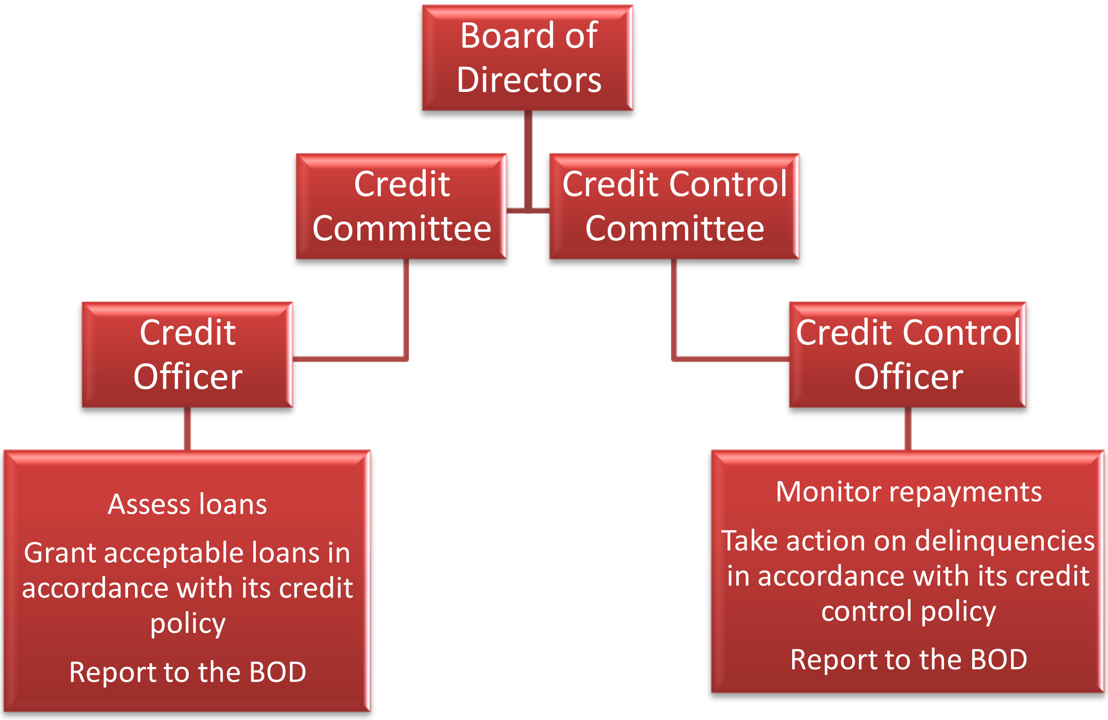
***A/C= Account**

Governance

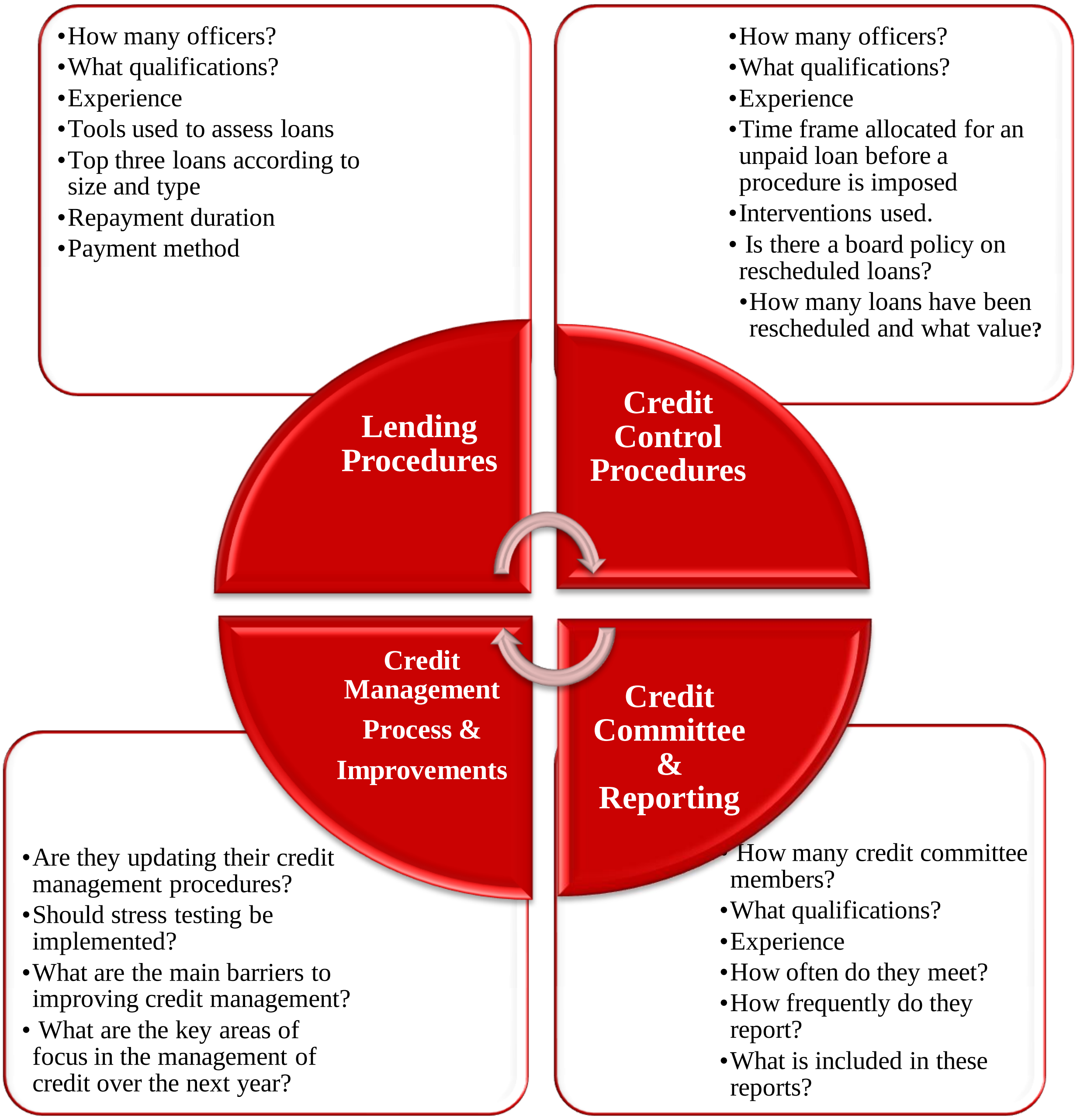
Cornejo (2007) argues that all credit initiation operations must be independent. Therefore each sector of the firm must be independent of one another e.g. a loans department, credit control department etc. Finlay (2008) further states that by divisionally orientating your credit business (by product) each business function in that division can expertly deal with the product that that division is responsible for. It also allows good coordination and cooperation with each other in order to manage customer relationships. However "*it appears clear…that bank governance and risk management were weak; in some cases disastrously so*", (Regling and Watson 2010).

As a result, stringent governance standards have been put in place by the Financial Regulator (2007). He declares that credit unions, under Section 55 of the Act, must maintain a board of directors which aid in the decision making on loan applications, adjust interest rates on loans and alter the limit to which all members can borrow up to. Similarly under Section 67 of the Act, as stated by the Financial Regulator (2007), there must be a Credit Committee and Credit Control Committee which will assess and grant loans, and warrant that the repayment of these loans will be adhered to by credit union members (see Figure below).

Figure: Governance structure of credit unions credit management process



Survey elements



Letter for Chapter Presidents to read out at Chapter meeting to Promote survey responses

Laura Walsh
Address Line
Ireland
Email:
Mob:
15th January 2010

To Whom It May Concern,

I am currently a Masters student in Waterford Institute of Technology of which Economics and Finance is the stream I am specialising in. During this academic year I am conducting research on Credit Unions, which is titled "Assessing the Credit Management Process of Credit Unions: A Case Study of Three Chapters". I am also working in Waterford Credit Union for the past five years hence this area is of great interest to me, where the aim for this research is to be of both knowledge and practical use.

This research imposes a requirement for Credit Unions to update their credit management processes in order to overcome the economic turmoil which is facing us at present. As we all know the Credit Union is currently facing very tough decisions of which the ethos of the Credit Union comes into play. We need to take care of our customers and provide finance to them as well as preserving a solid loan portfolio i.e. minimising the arrears on loans that were distributed to our customer base. This is an issue which needs attending to and perhaps a different approach or an addition to the current process is indispensable.

Through this research I will conduct a survey on three Credit Union Chapters regarding their approaches to managing credit. It is important that collectively all credit unions, namely Chapter 8, 9 and 10, will participate in the survey. When the thesis is completed there will be an opportunity to disseminate the findings to those that participated in the research. Ergo the research has a more practical value to it and the findings can be implemented in order to improve the quality of credit management in each Credit Union.

I hope my research is of interest to each Credit Union and would very much appreciate your cooperation on same. I will circulate the surveys in due course and those that are interested if you could either let your Chapter President or I know so I can include you in this beneficial research.

Thank you for your time and I hope to hear from you soon,

Yours Faithfully,

____
Laura Walsh
MBS-Economics and Finance Student @ WIT

Email to a contact from a credit union to promote survey responses

Laura Walsh
Address Line
Waterford
Ireland
Email:
Mob:

15th January 2010

xxxx
xxxx Credit Union,
Address Line,
Address Line,
Ireland

Dear xxxx

I am currently a Masters student in Waterford Institute of Technology of which Economics and Finance is the stream I am specialising in. During this academic year I am conducting research on Credit Unions, which is titled "An Assessment of the Credit Management Process of Credit Unions: An Investigation of Three Chapters", of which John Maher is my thesis supervisor and gave me your email contact. I am also working in Waterford Credit Union for the past five years hence this area is of great interest to me, where the aim for this research is to be of both knowledge and practical use.

This research imposes a requirement for Credit Unions to update their credit management processes in order to overcome the economic turmoil which is facing us at present. As we all know the Credit Union is currently facing very tough decisions of which the ethos of the Credit Union comes into play. We need to take care of our customers and provide finance to them as well as preserving a solid loan portfolio i.e. minimising the arrears on loans that were distributed to our customer base. This is an issue which needs attending to and perhaps a different approach or an addition to the current process is indispensable.

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However I need contact details to conduct research on same and would appreciate it immensely if you could send me on any contacts of which you think would assist this research e.g. the Presidents of the Chapters etc. I also hope that your credit union will be interested in participating in the survey as your cooperation would be of great value. I will circulate the surveys in due course and if you know any other credit unions that are interested could you give them my contact details or vice versa.

Thank you for your time and help and I hope to hear from you soon,

Yours Sincerely,

____

Laura Walsh
MBS Economics&Finance Student @ WIT

Letter enclosed with survey

Laura Walsh
Address Line
Address Line
Ireland
Date

Dear Secretary,

I am completing my Masters in Waterford Institute of Technology in Economics and Finance, part of which involves completing a dissertation. My research consists of an assessment of the **credit management process of credit unions** and my supervisor is John Maher (Treasurer of Waterford Credit Union).

For the purpose of my research I am conducting a survey on a number of credit union Chapters regarding their approaches to managing credit. Enclosed is a copy of my survey. Given the time constraints on the thesis, I would be very grateful if you could answer the survey and **return** same in the self addressed prepaid envelope provided by the **30th of June 2010**. I assure you that your responses will be kept strictly **confidential** and **anonymous** and will be only used for academic research; no person or credit union will be identified.

When the thesis is completed there will be an opportunity to **disseminate the findings** to those that participated in the research. Ergo the research has a more practical value to it and the findings can be implemented in order to improve the quality of credit management in each credit union.

Thanking you in advance for your cooperation and time.

Yours Sincerely,

____

Laura Walsh
MBS Economics & Finance Student @ WIT

Email: xxx
Mob: xxx

SURVEY

An Assessment of the Credit Management Process of Credit Unions

Waterford Institute *of* Technology

There are **4 Sections** in this questionnaire. Please answer the questions by either **(✓)** the appropriate box or circling whichever option **BEST** describes your situation.

All information provided will be kept strictly **CONFIDENTIAL** & **ANONYMOUS**, used only for academic research; no person or company will be identified.

The findings of the survey will be disseminated to all those that participated once the research is complete

Please answer as many questions as you can.

Thanking you in advance for your cooperation.

SECTION A: Current stance of the credit union with regards to lending

IN THIS SECTION WE WOULD LIKE TO GAIN A GREATER UNDERSTANDING OF THE NATURE OF THE ISSUES WITH REGARDS TO LENDING PRACTICES, PROCEDURES AND QUALIFICATIONS

1. Can you please state your position in the credit union?

General Manger	☐
Credit Control Manager	☐
Lending Manager	☐
Credit Committee Chairperson	☐
Other	☐

If other please state your position:

____

____

2. How many lending officers are there in your credit union (**including** lending manager(s) and **excluding** committee)?

0 – 2	☐
3 – 4	☐
5 – 6	☐
>6	☐

3. What qualification(s) do each of the lending officers (L 1…) have?

	L1	L2	L3	L4	L5	L6	L7	L8
Leaving Cert								
Undergraduate Degree	☐	☐	☐	☐	☐	☐	☐	☐
Masters Degree	☐	☐	☐	☐	☐	☐	☐	☐
PHD	☐	☐	☐	☐	☐	☐	☐	☐
Fetac/ECDL	☐	☐	☐	☐	☐	☐	☐	☐
QFA	☐	☐	☐	☐	☐	☐	☐	☐
Diploma in Credit Union Studies (UCC)	☐	☐	☐	☐	☐	☐	☐	☐
ACCUP (Advanced Certificate in Credit Union Practice)	☐	☐	☐	☐	☐	☐	☐	☐

Other (Please Specify) ______________________________

____

4. How many years experience do each of the lending officers (L 1…) have?

	L1	L2	L3	L4	L5	L6	L7	L8
0 – 2	☐	☐	☐	☐	☐	☐	☐	☐
3 – 5	☐	☐	☐	☐	☐	☐	☐	☐
6 – 8	☐	☐	☐	☐	☐	☐	☐	☐
9 – 11	☐	☐	☐	☐	☐	☐	☐	☐
> 11	☐	☐	☐	☐	☐	☐	☐	☐

5. Rate the importance of the following tools and factors used in your credit union to assess loans? (**Circle** the level of importance for each factor)

	Not Important	**Of Little Importance**	**Neutral**	**Important**	**Very Important**
Affordability Calculator	1	2	3	4	5
ICB run	1	2	3	4	5
View loan history in CU	1	2	3	4	5
Any delinquency correspondence	1	2	3	4	5
The amount of loans held elsewhere	1	2	3	4	5
The size of loans held elsewhere	1	2	3	4	5
The share to loan ratio	1	2	3	4	5
Savings pattern	1	2	3	4	5
Job Security	1	2	3	4	5
Wage/Salary Level	1	2	3	4	5
Family loan history in CU	1	2	3	4	5
Any committal orders > 5yrs	1	2	3	4	5
Any committal orders < 5yrs	1	2	3	4	5
Guarantee by third Party	1	2	3	4	5

6. Rank the top **three** loans of which are given out according to size (**1-3**) and type **(1-3)**

	Size	**Type**
Secured	☐	☐
Car loans (incl. Tax, Insurance etc.)	☐	☐
Business Loans	☐	☐
Home developments/Improvements	☐	☐
Travel/Holiday	☐	☐
Education Loans	☐	☐
Personal loans	☐	☐
Refinancing Loans	☐	☐
Other (Please State)	☐	☐

____

7. What is the longest duration given for repayment on your basic loans (i.e. loans **excluding** mortgages and secured loans)?

0.5 – 1.5 years	☐
2.0 – 3.0 years	☐
3.5 – 4.5 years	☐
5.0 – 6.0 years	☐

Other (Please State) ____________

8. What method of payment is most used to pay off loans? (**Rank 1 to 3**, where 1 is the most used method and 3 is the least used method)

Cash over counter	☐
Standing Order	☐
Direct Debit	☐

SECTION B: Current stance of the credit union with regards to credit control

IN THIS SECTION WE WOULD LIKE TO GAIN A GREATER UNDERSTANDING OF THE NATURE OF THE ISSUES WITH REGARDS TO CREDIT CONTROL PRACTICES, PROCEDURES AND QUALIFICATIONS

9. How many credit control officers are there in your credit union (**including** credit control manager(s) & **excluding** committee)?

0 – 2 ☐

3 – 4 ☐

5 – 6 ☐

>6 ☐

10. What qualification(s) do each of the credit control officers (C 1…) have?

	C1	C2	C3	C4	C5	C6	C7	C8
Leaving Cert	☐	☐	☐	☐	☐	☐	☐	☐
Undergraduate Degree	☐	☐	☐	☐	☐	☐	☐	☐
Masters Degree	☐	☐	☐	☐	☐	☐	☐	☐
PHD	☐	☐	☐	☐	☐	☐	☐	☐
Fetac/ECDL	☐	☐	☐	☐	☐	☐	☐	☐
QFA	☐	☐	☐	☐	☐	☐	☐	☐
Diploma in Credit Union Studies (UCC)	☐	☐	☐	☐	☐	☐	☐	☐
ACCUP (Advanced Certificate in Credit Union Practice)	☐	☐	☐	☐	☐	☐	☐	☐

Other (Please Specify)

____

____

11. How many years experience do each of the credit control officers (C 1…) have?

	C1	C2	C3	C4	C5	C6	C7	C8
0 – 2	☐	☐	☐	☐	☐	☐	☐	☐
3 – 5	☐	☐	☐	☐	☐	☐	☐	☐
6 – 8	☐	☐	☐	☐	☐	☐	☐	☐
9 – 11	☐	☐	☐	☐	☐	☐	☐	☐
> 11	☐	☐	☐	☐	☐	☐	☐	☐

12. What is the time frame allocated for each of the stages of an unpaid loan before a procedure is implemented? (Please **circle** the correct numbers which represent the **number of weeks**)

First Reminder	1	2	3	4	5	6	7	8	9	10
Second Reminder	1	2	3	4	5	6	7	8	9	10
Transfer to Solicitor	1	2	3	4	5	6	7	8	9	10

If longer than above please state the procedure and duration here: ____________________

13. What level of effectiveness are the following **interventions in recovering arrears** to your credit union? (**Circle** the level of importance for each factor)

	Not Important	**Of Little Importance**	**Neutral**	**Important**	**Very Important**
The issuance of letters	1	2	3	4	5
Loan Rescheduling	1	2	3	4	5
Loan Freezing (Interest only to be paid)	1	2	3	4	5
Share to Loan Transfer	1	2	3	4	5
Reduction of payments (Temporarily)	1	2	3	4	5

14. Is there a policy on rescheduling loans that has been implemented by the board?

Yes ☐

No ☐

15. In the year 2009 how **many loans** approximately have been rescheduled?

- <100 ☐
- 100-300 ☐
- 301-500 ☐
- 501-700 ☐
- >700 ☐

16. In the year 2009 what was the **value of loans** approximately that had to be rescheduled?

- 0 - €2,000,000 ☐
- €2,000,001 - €4,000,000 ☐
- €4,000,001 - €6,000,000 ☐
- €6,000,001 - €8,000,000 ☐
- €8,000,001 - €10,000,000 ☐
- >€10,000,000 ☐

SECTION C: Current stance of the credit union with regards to the credit committee and reporting procedures

IN THIS SECTION WE WOULD LIKE TO GAIN A GREATER UNDERSTANDING OF THE NATURE OF THE ISSUES WITH REGARDS TO CREDIT COMMITTEE PRACTICES, PROCEDURES, QUALIFICATIONS AND REPORTING

17. How many people are on the credit committee?

☐

18. What qualification(s) do each of the credit committee (CC 1…) have?

	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8
Leaving Cert								
Undergraduate Degree	☐	☐	☐	☐	☐	☐	☐	☐
Masters Degree	☐	☐	☐	☐	☐	☐	☐	☐
PHD	☐	☐	☐	☐	☐	☐	☐	☐
Fetac/ECDL	☐	☐	☐	☐	☐	☐	☐	☐
QFA	☐	☐	☐	☐	☐	☐	☐	☐
Diploma in Credit Union Studies (UCC)	☐	☐	☐	☐	☐	☐	☐	☐
ACCUP (Advanced Certificate in Credit Union Practice)	☐	☐	☐	☐	☐	☐	☐	☐

Other (Please Specify) ______________________________

____

19. How many years experience does each of the credit committee members (CC 1…) have?

	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8
0 – 2	☐	☐	☐	☐	☐	☐	☐	☐
3 – 5	☐	☐	☐	☐	☐	☐	☐	☐
6 – 8	☐	☐	☐	☐	☐	☐	☐	☐
9 – 11	☐	☐	☐	☐	☐	☐	☐	☐
> 11	☐	☐	☐	☐	☐	☐	☐	☐

20. How often does the credit committee meet?

Twice a week ☐
Once a week ☐
Once every fortnight ☐
Once every month ☐
Other (Please Specify) ______________

21. How frequently does the credit committee report to the Board?

Monthly ☐
Quarterly ☐
Half Yearly ☐
Other (Please Specify) ☐

____

22. Please rate the level of importance of the following information regarding the inclusion of same in your credit unions credit committee reports. (Please **circle** the level of importance of each factor)

	Not Important	**Of Little Importance**	**Neutral**	**Important**	**Very Important**
Aged analysis of arrears in money	1	2	3	4	5
Aged analysis of arrears by loan size	1	2	3	4	5
Aged analysis of arrears by loan purpose (e.g. car, education, etc.)	1	2	3	4	5
Actions taken since last report	1	2	3	4	5
Effect of actions since last report	1	2	3	4	5
Provisions made for bad debt	1	2	3	4	5

Write off/Charge offs	1	2	3	4	5
Number of accounts with solicitors	1	2	3	4	5
Number of accounts with debt collection agency	1	2	3	4	5
Number and value of rescheduled loans	1	2	3	4	5
Recovery of arrears	1	2	3	4	5
Compliance with rescheduling conditions	1	2	3	4	5

SECTION D: Current stance of the credit union and future improvements on credit management

IN THIS SECTION WE WOULD LIKE TO GAIN A GREATER UNDERSTANDING OF THE NATURE OF THE ISSUES WITH REGARDS TO CREDIT MANAGEMENT PRACTICES AND WHAT IMPROVEMENTS NEED TO BE MADE.

23. Which of the following statements best describes your organisation's current status with the review of its credit management processes in response to recent market events?

We have already conducted a thorough overhaul of our credit management processes. ☐

We intend to conduct a thorough overhaul of our credit management processes, but have not yet completed it. ☐

We have made some minor changes to our credit management processes. ☐

We intend to make some minor changes to our credit management processes, but have not yet completed them. ☐

We do not intend to make any changes to our credit management processes. ☐

We are waiting to see how the market develops before deciding whether to review our credit management processes. ☐

24. Do you think ***stress testing**** of a credit union's loan portfolio might help a credit union plan for unwelcome developments and respond to them accordingly?

Yes ☐

No ☐

- ***Stress Testing*** *is a technique used on loan portfolios to determine their reactions to different financial situations. E.g. If a major employer locally were to close, what impact would it have on loan repayments?*

25. Does your credit union currently stress test its loan portfolio when budgeting or forecasting its fundamental results?

Yes ☐

No ☐

26. Please indicate to what extent you agree/disagree with the following suggestions as being **the main barriers** to improving credit management in your Credit Union.
(Please **circle** the appropriate number in each row)

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
a. Insufficient quality of data	1	2	3	4	5
b. Lack of expertise	1	2	3	4	5
c. Inadequate systems	1	2	3	4	5
d. Poor communication across organisational silos	1	2	3	4	5
e. Insufficient quantity of data	1	2	3	4	5
f. Lack of authority for credit management	1	2	3	4	5
g. Insufficient credit representation at senior management level	1	2	3	4	5
j. Insufficient credit representation at non-executive board level	1	2	3	4	5

Other (Please Specify) ______________________________

27. Please indicate to what extent you agree/disagree with the following statements regarding the **key areas of focus** in the management of credit in your credit union over the next year. (Please **circle** the appropriate number in each row)

	Strongly Disagree	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
a. We will focus on improving managers information on the performance of the credit unions loans	1	2	3	4	5
b. We will focus on improving the credit control policy of the credit union	1	2	3	4	5
c. We will focus on building credit risk expertise at management level	1	2	3	4	5
d. We will focus on building credit risk expertise at board/committee level	1	2	3	4	5
e. We will focus on changing the collection process or procedure for loan arrears	1	2	3	4	5
f. We will focus on integrating credit decisions with credit control experience	1	2	3	4	5
g. We will focus on strengthening technology infrastructure	1	2	3	4	5
h. We will focus on regulatory compliance (e.g. with Basel II or Solvency II)	1	2	3	4	5
i. We will focus on recruiting experienced credit professionals	1	2	3	4	5

Any other suggestions (Please specify) ______________________________

28. Any additional comments that you have regarding your credit management process will be appreciated:

____

____

____

____

____

ONCE AGAIN, I ASSURE OF YOU OF THE STRICT **CONFIDENTIALITY** OF YOUR RESPONSES.
I SINCERELY THANK YOU FOR TAKING THE TIME TO COMPLETE THIS SURVEY

If you want me to send you a copy of the survey results please (✓) this box ☐

PLEASE RETURN THE COMPLETE QUESTIONNAIRE USING THE PRE-PAID ENVELOPE PROVIDED

LAURA JANE WALSH
58 LISMORE PARK
WATERFORD CITY
WATERFORD

(STUDENT AT WIT: MASTERS OF BUSINESS-ECONOMIC AND FINANCE)

☐ This box contains a reference number used for administration purposes only.

Reminder letter to sample frame about survey

Laura Walsh
Address Line
Address Line
Ireland
Date

Dear Secretary,

Recently a questionnaire was sent to you which requested information on the credit management process of your credit union.

If you have already returned this questionnaire to me, please accept my sincere thanks. If not, I would be very grateful if you could do so at your earliest convenience. It is hoped that the results of the survey will provide a broad view of the nature and extent of the credit management process conducted by credit unions. When the thesis is completed there will be an opportunity to **disseminate the findings** to those that participated in the research.

If by some chance you did not receive the questionnaire, or it was misplaced, please do not hesitate to contact me at the details given below. Another questionnaire will be forwarded to you immediately.

Once again I assure you that your responses will be kept strictly **confidential** and **anonymous** and will be only used for academic research; no person or credit union will be identified.

Thanking you in advance for your cooperation and time.

Yours Sincerely,

Laura Walsh
MBS Economics & Finance Student @ WIT

Email:

Mob:

Email to CUMA representative to help promote survey responses

Reply Reply all Forward

RE: Research on the credit management process of credit unions

From: **laura walsh** (laurawalsh1988@hotmail.com)
Sent: 01 July 2010 16:49:22
To: @cuma.ie

Dear

I am currently a masters student of Waterford Institute of Technology in Economics and Finance and am conducting research on the credit management process of credit unions. My thesis supervisor is John Maher (Treasurer of Waterford Credit Union) who passed on your contact details to me.

The method of which I am conducting this research is through the distribution of surveys to each credit union in Chapters 8, 9 and 10 of which is the area I am focusing my research on. I have contacted the presidents of these Chapters and they are in full support of this research. However the response rate from the credit unions has been low which will effect the outcome of the research. I am looking to increase this response rate greatly and was wondering if you could promote this research to this area as it would be of great help to me.

The findings will be disseminated to each credit union that participates in the survey also. I feel this research will have a more practical element to it as each credit union can implement the findings into their everyday credit managment process.

If you could help in any way possible I would appreciate it immensely.

Kind Regards,

Laura Walsh

@hotmail.com
MOB:
MBS Student-Eco & Fin @ WIT

Confidentiality agreement signed prior to interview

Confidentiality agreement

All information received during this interview will be kept strictly **CONFIDENTIAL** and **ANONYMOUS**, used only for academic research; no person or company will be identified.

The recording of the interview will be kept strictly **CONFIDENTIAL** and **ANONYMOUS**, used only for academic research; no person or company will be identified.

The position of the interviewee will be the **only** information identified in this research i.e. manager, loans officer etc.

Signed: ______________________________

Interviewer

Signed: ______________________________

Interviewee

Interview Questions

- What are the main barriers to lending in your credit union?
- What are the current interventions used in your credit union to assist in the loan decision process?
- Do you think that all lending officers should acquire a required skill set i.e. specific education qualifications and experience?
- Which qualifications do you think is of greatest benefit to your credit union?
- How does the level of training contribute to credit management?
- What is your opinion on this statement: The longer the duration of a loan distributed in your credit union the more likely the loan will default.
- What are the current interventions used in the recovery of arrears?
- Do you think your current credit management process needs revision?
- What extra elements do you think could be incorporated into your credit management process to make it more robust?
- Do you think the reporting standards in your credit union are meticulous enough?

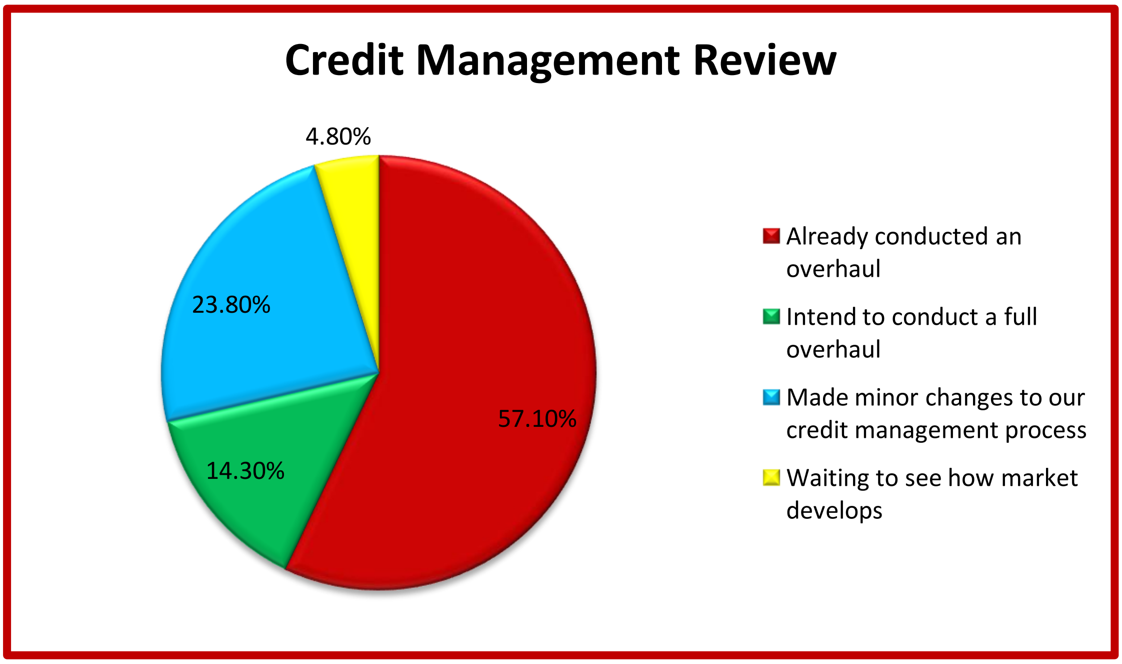
- Are there any gaps in your credit unions reports?

- What are the main challenges do you think your credit union will face in implementing any necessary changes to your current credit management process?

Barriers from findings

Respondents level of agreement with the following variables being the main barriers to improving credit management in their credit union	
Variable	***Median***
Insufficient quality of data	Agree
Lack of expertise	Neutral
Inadequate systems	Neutral
Poor communication across organisational silos	Neutral
Insufficient quantity of data	Neutral
Lack of authority for credit management	Neutral
Insufficient credit representation at senior management level	Disagree
Insufficient credit representation at non-executive level	Disagree

Current status of credit unions' credit management



The key area of focus regarding credit unions' credit management process

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Improve managers information on the performance of loans	0%	0%	9.5%	66.7%	23.8%
Improve credit control policy	0%	0%	4.8%	61.9%	33.3%
Build credit risk expertise at management level	0%	0%	9.5%	61.9%	28.6%
Build credit risk expertise at board level	0%	4.8%	28.6%	38.1%	28.6%
Change collection process/procedure for arrears	0%	0%	14.3%	71.4%	14.3%
Integrate credit, credit control decisions and experience	0%	0%	14.3%	71.4%	14.3%
Strengthening technology	0%	4.8%	14.3%	57.1%	23.8%
Regulatory compliance	0%	0%	19%	42.9%	38.1%
Recruiting experienced credit professionals	0%	28.6%	47.6%	14.3%	9.5%

Findings: Loan history and monetary factors

Other factors that are tested in the survey for their contribution to assessing loans are the history of the loan applicant and their monetary stance. The history of a loan applicant incorporates the applicants loan history, the applicants family loan history, delinquency correspondence and any committals over or under five years. Subsequently the monetary stance of a loan applicant includes the amount and size of loans that the applicant holds elsewhere, share-to-loan ratios, savings pattern, job security, salary, and guarantee by third party. The results shown in the table below illustrate that both the history of a loan applicant and their monetary stance are considered to add value in the loan decision making process where the mean of the responses are 4.57 and 4.05 respectively. This is further established as both variables are negatively skewed thus the answers tend to cluster towards the left and there is a long 'tail' to the right. Thus this signifies that the respondents' opinion on these two factors is that they are between important and very important in assessing a loan applicant.

Table 5.4 Lending factors

	History of applicant	**Monetary stance of applicant**
Mean	4.57	4.05
Skewness	-1.078	-0.052
Kurtosis	0.348	-0.498
The level of importance of each factor		
Neutral	4.8%	19%
Important	33.3%	57.2%
Very Important	61.9%	23.8%

A summary of the sources used in this research

	2000-2010	1990-1999	1980-1989	Pre 1980	Total
Academic Journals	33	9	0	1	43
Texts	28	15	0	1	44
Reports	12	0	0	0	12
Financial Press	9	0	0	0	9
Websites	35	1	0	0	36
Total	117	25	0	2	144

Reflective Diary

"Study without reflection is a waste of time; reflection without study is dangerous"

Confucius

When my journey of knowledge and discovery commenced, numerous questions and fears regarding this research surfaced. I speculated how I would begin to assume such a comprehensive and contemporary research topic. Moreover I appreciated that I would encounter various barriers; however I feared some would be too big to surmount. I further was apprehensive about the time constraints, thus was worried whether the finished product would be completed on time. Lastly I questioned what form the research would take, would it progress seamlessly and would the research as a whole reflect the abundance of work and time that was put into it? Although these issues were apparent, an infamous Chinese proverb provided me with the necessary motivation to start this project and put these concerns aside. It stated that "*a journey of a thousand miles must begin with a single step*". From completing this research, I now know that this is indubitably the case where the sooner you begin your research the more composed you feel throughout its process.

Given my undergraduate background in maths and economics along with the economics and finance stream that I am currently undertaking my masters in, I wanted to perform research that was of particular interest to me and complemented my skill set. This would then enable me to produce work that was consistent throughout the research and was to the best of my ability. Considering that I work in a large credit union and I have a profound knowledge of credit unions, I knew this was the area that I wished to focus my research towards. It was perceptible that credit unions were facing their most taxing period to date given the abundance of loan defaults on their portfolios. With a changing environment and changing society and credit culture, credit unions were finding it difficult to maintain their social role duty in addition to sustaining their business performance. In general, a call for action was a prerequisite. Accordingly I decided that this was the topic I wanted to address and explore further. It was appealing to me, yet the research would have a more practical value to it as those credit unions who participated in the research would receive a copy of the findings. This would then allow them to assess their current management processes and consider implementing the various recommendations from this study.

Although I had experience in credit unions, from conducting this research the knowledge and understanding gained pertaining to the culture of credit unions and their processes has been incalculable. I now query can credit unions sustain their ethos in order to survive the economic environment? Or do they need to maintain it in order to remain unique in the financial sector? It was intriguing for me to acknowledge the amount of complications that may arise in credit unions if they are to implement improved credit management processes, for example meticulous arrears interventions or more complex technology. It is a case of whether credit unions given their size and often volunteer nature can consider such advances in their credit management processes. Therefore this research showed me that it is never as easy as stating what needs to be done and that is it. People need to think of the pros and cons of every recommendation, the capacity for the subject to implement same, the cost and time to incorporate such ideas and the requirement for a subject or body to change their current position. Overall, research has opened my eyes to think outside the box, to not take every recommendation or study as fact, to assess extant literature that debates the issue, to conduct my own research and to recommend and derive my own conclusion on same. It has most definitely changed my method of thinking.

Although the research journey is rewarding and provides a great sense of achievement, it is also difficult as it encounters many barriers in its path. Firstly, due to the contentious nature of this topic, several credit unions were not willing to participate in the survey. This research therefore taught me that confidentiality is extremely important in business society, especially at present. Secondly, if I was to do this research again, I would definitely have chosen a subject that has more research done on it. This was the main difficulty I encountered during this study as there is no research conducted specifically on the credit management process of Irish credit unions. Thirdly, prior to this research, I was a person who was reluctant to cause any inconvenience to others for example to email or contact someone in order to obtain what I want. This has now changed, where I have learned that in order to facilitate what you need, you have to be assertive in your approach to achieve it. Therefore, for this research to obtain as many respondents as possible I emailed and contacted various bodies so as to realise a good response rate. Lastly, stemming from this research I now appreciate that during the writing process it is essential that a strong sense of rigor is placed throughout. I always had an issue with over elaborating on issues and thus going over the word count in a project. During this research, cutting down words was a time consuming and tiring process. Therefore, in the future I will place more emphasis on managing my writing and explaining an idea or topic in an effective and efficient manner.

Overall, this thesis has surfaced numerous emotions within me whether it being anxious, upset, happy, a sense of pride and achievement or a sense of relief. Throughout the process and the emotions I have received a relentless amount of help from my thesis supervisor, from other lecturers, my family, boyfriend and friends. I have discovered that although this study was arduous, the support from these people made it a lot easier than what it would have been without them. As a whole, this research in my view is the perfect ending to a successful year where I have developed my skill set to inexorable amounts and have achieved numerous networks which I know I can rely on. I now know that I wish to pursue my career somewhere within the credit union sector as I have the experience and knowledge regarding same. I have an immense interest in credit unions and credit management and I realise if I put in the time and effort I will achieve my goals in life. As the famous Greek playwright Euripides states, with "*much effort [comes] much prosperity*". This concept I will carry with me throughout life.