



University of St Andrews
School of Management

WORKING
PAPERS IN
RESPONSIBLE
BANKING &
FINANCE

**Recent Developments in the
Credit Union Movement**

By *Donal McKillop and John
O.S. Wilson*

Abstract: In 2012 there were 55,952 credit unions across 101 countries with more than 200.2 million members and approximately \$1693 billion in assets. There is a great diversity within the credit union movement across these countries. This reflects the various economic, historic and cultural contexts within which credit unions operate. Credit unions have survived and grown over many years and in many countries, demonstrating what can be achieved by a volunteer-led not-for-profit movement.

WP N° 14-002

1st Quarter 2014



University of St Andrews
Scotland's first university

600 YEARS
1413 – 2013

Recent Developments in the Credit Union Movement

Donal G. McKillop^a

John O.S. Wilson^b

Abstract

In 2012 there were 55,952 credit unions across 101 countries with more than 200.2 million members and approximately \$1693 billion in assets. There is a great diversity within the credit union movement across these countries. This reflects the various economic, historic and cultural contexts within which credit unions operate. Credit unions have survived and grown over many years and in many countries, demonstrating what can be achieved by a volunteer-led not-for-profit movement.

Keywords: Banks, Credit unions, Common bonds

^a Queen's University Management School, Queen's University Belfast, Riddel Hall, 185 Stranmillis Road, Belfast, Northern Ireland BT9 5EE, UK. Tel: +44 28 9097 4852. Email: dg.mckillop@qub.ac.uk

^b School of Management, University of St Andrews, The Gateway, North Haugh, St Andrews, Fife, KY16 9SS, UK. Tel: +44 1334 462803. Email: jsw7@st-and.ac.uk

+ Address for correspondence: Professor John O.S. Wilson, School of Management, University of St Andrews, The Gateway, North Haugh, St Andrews, Fife KY16 9AJ, UK. Tel: +44 1334 462803. Fax: +44 1334 462812. e-mail: jsw7@st-andrews.ac.uk

1. Introduction

At the beginning of the 21st century, the widely held belief was that highly developed financial systems dominated by large commercial and investment banks and liquid capital markets supported by state-of-the-art risk management systems would continue to finance investment and stimulate economic growth.¹ However, since the onset of the financial crisis in 2008, turmoil in the financial system has impacted severely on the financial services industry. Many banks have suffered large losses and have had to raise additional capital, either privately or through their respective national governments, via a variety of bailout schemes. The magnitude of government-backed bank bailouts, recapitalization plans, liquidity injections, and credit guarantee schemes raised concerns about the business models pursued by banks in many parts of the developed world.

Policy makers have strived to strengthen regulation and supervision of the financial system by placing limits on the scale and scope of banking activities. However the magnitude of government bailouts in many countries has meant that the financial crisis also became a sovereign debt crisis.² These developments have led academics, practitioners and policy-makers to re-examine the scale, scope, governance, performance and the safety and soundness of financial institutions. It is

¹ The importance of banks in mobilizing savings and allocating resources to investment projects is highlighted in a seminal contribution by Gurley and Shaw (1955). They argue that financial intermediation increases available investment funds by providing credit through banks and other financial intermediaries. Empirical research suggests that financial development stimulates economic growth. However, disentangling the effects of the extent to which financial intermediation determines the volume of available investment funds from how efficiently these investment funds are used is difficult. Levine (2005) provides an analysis of the links between financial development and growth.

² Caprio and Honohan (2014) and Correa and Sapriza (2014) provide useful overviews of banking and sovereign debt crisis. For an historical perspective, see Calomiris (2014).

against this background that we write this article which examines the role of credit unions in the financial system.

Credit unions are self-help cooperative financial organisations geared to attaining the economic and social goals of their members and their local community.³ Credit unions cannot do business with the general public due to limitations based on serving a membership that is characterised by a common bond. Common bonds are effectively the social glue which binds credit union members together. Unlike most other financial institutions credit unions are not required to simultaneously satisfy shareholders' profit expectations and disparate customer needs. Nor are their managers awarded bonuses that are linked to equity shareholder value measures. It could be argued that it has been the drive to maximise shareholder value and employee bonuses which has encouraged other financial organisations to engage in risky investment and unsafe lending practices resulting in the present financial turmoil.

Like all cooperatives, credit unions rely on active participation of members to differentiate them from shareholder-owned firms, and to develop and support competitive advantage in the provision of savings and loan products and other ancillary services. In essence the benefit of credit union membership can be thought of as *use it or lose it*. Shareholders of other financial institutions may obtain monetary benefits without actually using the institution's products and services. For all their distinctiveness, credit unions are also subject to the realities of the economic environment – realities that, at times, may not complement, and, at other times,

³ The neoclassical theory of the firm, based on an assumption of profit maximization, is inadequate for understanding the economic behaviour of cooperative organizations, which embody multiple values and objectives. Defining a credit union's objective function is an issue that has exercised researchers since the early 1970s (Smith et al, 1981, Smith, 1984).

directly conflict with, the cooperative ethos and philosophy. As a credit union grows, the struggle to maintain a balance between the social and philosophical objectives on one hand, and the economic realities of a financial intermediary on the other must increasingly be grappled with.

The rest of this article is structured as follows. Section 2 examines the historical development of credit unions and presents a descriptive analysis of their respective stage of development in various parts of the world. In Section 3 we focus on credit unions in the United States, where the movement has been most successful. Section 4 provides some final thoughts.

2. The Development and Evolution of Credit Unions

The credit union is a unique institution deriving its exclusivity from the amalgamation of a number of otherwise common ideas. These include: a consumer co-operative; a micro financial intermediary; a legal corporation; a social movement; and a social philosophy. The Rochdale Society of Equitable Pioneers was formed in Rochdale, England in 1844 and its rules provide the essential principles of consumer co-operation, including credit unions.⁴

Hermann Schulze-Delitzsch, a politician and judge, founded the first urban credit co-operative in 1850 in Germany. Friedrich Wilhelm Raiffeisen, a mayor in Germany's western Rhineland, formed the first rural credit co-operative in 1864. From this point on, co-operative financial institutions flourished in several other

⁴ The Rochdale Principles of Cooperation include: open, voluntary membership; democratic control; limited return, if any, on equity capital; net surplus belongs to user-owners; education; and cooperation among co-operatives

European countries. In Italy, for instance, there was a direct transference of the ideals of Schulze-Delitzsch by Luigi Luzzatti, an Italian scholar who promoted and formed people's banks on the basis of the developments he had observed in Germany.

A close correspondent of Luzzatti was Alphonse Desjardins in Quebec, Canada, who organized the first Canadian credit union (Caisse Populaire) in his hometown of Levis, Quebec in 1901, thus bringing the credit union experience to North America. Desjardins' motivation was a unique blend of Catholic revulsion of usury and the Quebec political and religious philosophy of 'la survivance'. This philosophy was founded upon three fundamentals; the Church, the Soil, and the Hearth. The caisse populaire both buttressed and rested upon these same three pillars (Thompson, 1978). Thompson suggests that Desjardins was in contact with Luzzatti, Henry Wolff of Britain, and Charles Gide of France.⁵ Furthermore that he read of Raiffeisen, Schulze-Delitzsch and the Rochdale Pioneers. Thompson suggests that Desjardins united all of these elements into an institution that was not only unique to Quebec, but also became the basis for the modern credit union structure and operation.⁶

It was from Canada that the credit co-operative ideal entered the United States, with Desjardins helping to organize a credit union in Manchester, New Hampshire for a Franco-American parish. During this time Desjardins met with Pierre Jay, the commissioner of banks in Massachusetts, and Edward Filene, a Boston

⁵ Henry Wolff was the Founder of the International Cooperative Alliance. Charles Gide was a French economist and held professorships at the universities of Bordeaux, Montpellier, and Paris. Gide was an expert on international monetary problems.

⁶ Today in Canada there are 450 Desjardins affiliated caisses populaires, and a further 427 credit unions outside the Desjardins system. The total Canadian movement thus consists of 877 credit unions/caisses with \$256 billion in assets and serving 11.1 million members with each unit averaging an asset base of \$292 million and a membership of 12,616. Credit Unions in Canada are provincially chartered and incorporated.

merchant, and the American credit union movement was born. Overstreet and Rubin (1990,1991) state that Jay is credited with drafting the first general credit union statute in the US, the Massachusetts Credit Union Act of 1909, while Filene was largely responsible for promoting credit unions in Massachusetts and more generally in the US. In 1921, Bergengren, a Massachusetts lawyer and friend of Desjardins, along with Filene, formed the Credit Union National Extension Bureau, which they charged with spearheading credit union legislation in every US state as well as at the federal level. Bergengren was the guiding spirit who was responsible for the drafting of, and lobbying for, credit union legislation in thirty-nine states before writing the 1934 US Federal Credit Union Act.⁷ This Act encapsulated much of his interpretation of what credit unions are, how they would be structured, and how they would operate, into law. Bergengren also drafted the Canadian 1932 Nova Scotia Credit Union Act.

Credit Unions Worldwide

There has been a rapid growth in the credit union movement over the past decade (see Table 1). The World Council of Credit Unions (WOCCU) estimates that in 2012, there were 55,952 credit unions operating in 101 countries. These credit unions had a membership of 200.2 million (population penetration of 7.7%) and had total assets of \$1,693.9 billion. The penetration rate measures credit union prevalence within a particular region. Arguably, it underestimates the effectiveness of credit unions as well-functioning financial intermediaries and this might be

⁷ June 26th 1934 (Chapter 750) "An Act to establish a Federal Credit Union system to establish a further market for securities of the United States and to make available to people of small means credit for provident purposes through a national system of co-operative credit thereby helping to stabilize the credit structure of the United States."

especially the case where penetration rates are very low – the upside is that the scope for improvement would seem quite high within many regions. It should also be emphasised that the penetration rate of less than 4% for Europe is a little misleading since this includes Eastern Europe where credit union development has only recently begun. A related point is that it does not include Continental Europe because credit unions have not emerged as a distinct group within this region as their activities have been subsumed by credit cooperatives.

Insert Table 1 near here

Within this international system of credit unions, there are credit unions such as those in the developing world, which have just a handful of members, provide basic savings and loans products and are run and organised exclusively by volunteers. At the other end of the spectrum there are credit unions in North America which are full-service financial providers, are staffed by paid employees, have hundreds of thousands of members and billions of dollars in assets.

Table 2 presents descriptive statistics on credit unions, by geographic area. Asia dominates in terms of credit unions numbers (39%) but they have only 21% of worldwide members and 10% of worldwide assets. In contrast North America has 13% of credit union numbers but 52% of worldwide members and 79% of total assets. In Table 2 the average reserve to asset ratio (a measure of capital strength) is 9.55% across all countries. However, there is considerable variation by region, ranging from 6.32% for Asia to 14.28% for Latin America. This suggests under- and over-capitalisation in Asia and Latin America respectively. There is also considerable

variation in the loan to asset ratio which ranges from 45.5% in Europe to 88.3% in Africa. WOCCU (2012) suggests that for a credit union to have an excellent effective financial structure it should have a loan-to-asset ratio of 70-80%.

Insert Table 2 near here

Some insights into patterns of credit union development can be uncovered with the aid of organizational life-cycle theory. This assumes credit unions follow an evolutionary development path partitioned into distinct growth phases. These phases comprise Nascent (formative), Transition and Mature. This classification typology was developed by Ferguson and McKillop (1997, 2000). Credit unions positioned within each of these stages can be characterised by various financial and organizational attributes. This is shown on a country-specific basis in Table 3.

Insert Table 3 near here

Credit union movements at a nascent stage of development tend to have a small assets size, high levels of structural and conduct regulation, a tight common bond, a heavy reliance on volunteers, and provide basic savings and loans products. Transition movements are characterised by large asset size, evolving regulatory and supervisory frameworks, less common bond restrictions, higher levels of product diversification, development of professional trade associations, less reliance on volunteers, development of central services and a greater emphasis on growth and efficiency. Finally, mature movements have large asset size, have undergone

structural and conduct deregulation accompanied by increased prudential regulation, a loose common bond, diversified product portfolios, professionalization of senior management, centralised services, adoption of electronic technologies and a deposit insurance scheme.

At the present time, nascent industries can be found primarily in the developing countries of Africa, Asia and the former Soviet bloc. In these regions, they are often seen as vehicles for reducing poverty within more general microfinance programs. There are of course notable exceptions such as Poland and Lithuania where credit union development has been rapid over the last decade with credit unions in these countries extending financial services to the general population. Historically, US credit unions, currently classified as mature, fitted into the nascent categorisation during the 1930s, 1940s and early 1950s. From Table 3 we note that in terms of assets, membership and population penetration the movements in Australia and Canada are also viewed as mature. The interim stage between nascent and maturity is that of transition. The earlier aforementioned movements in Poland and Lithuania could be viewed as in the transition stage as is the movement in Great Britain. Ireland is also classified in the transition stage although it has an extremely high penetration level, (63%; see Table 3). That Ireland is not identified as a mature movement is due to limited product development exacerbated by a failure to adopt an integrated IT system for the delivery of member services.

Insert Table 3 here

The typology contains an assumption about a development path for credit unions albeit that within any one credit union movement, at a given moment in time, individual credit unions may not be, nor want to be, at the same stage of development. With its emphasis on maturity as an implicit goal, the typology contains an implied convergence thesis for the highest stage of credit union development. However, it must also be recognised that there is nothing, in theory, to prevent a further stage beyond maturity which entails the transformation of credit unions beyond their current cooperative form to an entirely new form of organization through, for example, demutualisation.

3. Credit Unions in the United States

Arguably the US credit union movement is the most developed. As of December 2012 there were 6,819 credit unions in the US (12% of worldwide numbers) down from a peak of almost 23,866 in 1969. These credit unions had under management \$1021.73 billion in assets (60.3% of worldwide assets) and a membership of 93.8 million (47% of worldwide membership).

Credit unions in the US are owned by individual members voting on the basis of one member one vote. At the end of 2012 credit unions accounted for approximately 10% of all consumer savings and deposits in the US. In Table 4 the profile of US credit unions is charted over the period 2003 to 2012. Over this period, the number of credit unions declined by 2.7%, membership size increased by 14.2% and total assets increased by million to 93.8 million and total assets increased by 66.4%.

Insert Table 4 near here

Originally credit union membership was restricted to a common bond. In 2003, the National Credit Union Administration (NCUA) released new field of membership rules for federal credit unions. The new rules expand what constitutes an occupational common bond and a community. Under the new regulations, for single common bond credit unions, an occupational common bond can include designations based on employment in a trade, industry, or profession. Therefore, a single common bond credit union can have a field of membership beyond a single employer if the members share the same profession or trade, or participate in the same industry. In addition, the NCUA regulations expand what constitutes a local community for the purpose of granting community charters. Credit unions were initially distinguished by their emphasis on small value unsecured short term loans to individuals. However, credit unions in the US have since diversified to provide a wide range of services. Federal credit unions began to offer long-term mortgages to their members following legislative amendment allowing them to do so in 1977. A further legislative change in 1998 allowed credit unions to offer business loans, for commercial, corporate, business investment or property purposes, up to a maximum of 12.25% of assets. There has been a continued rapid increase in the amount of noninterest income being generated by credit unions since 2000 arising from diversification into areas such as stock and bond brokerage, mutual funds, financial planning and business checking. At the end of 2012, on average 28.2% of credit union income came from non-interest generating activities.

The overall consequence of deregulation was changes in the patterns of growth across different types of credit unions. Larger credit unions tended to grow faster than their smaller counterparts (Goddard, McKillop and Wilson, 2002, 2014). Much of this growth was via diversification into non-interest earning activities, albeit that this did not lead to enhanced returns for members (Goddard, McKillop and Wilson, 2008). Externally generated growth also took place via acquisition and merger, whereby larger, well capitalised and technologically advanced credit unions acquired smaller, less capitalised counterparts that failed to adopt interactive and transactional internet banking technologies (Goddard, McKillop and Wilson, 2009). A small number of new credit unions entered the industry, while many of those not grasping the new challenges have exited through failure or merged with other credit unions. Between 2003 and 2012, the number of credit unions reduced by approximately 3% per year. Consequently there has been a rapid growth in credit union asset size. The average credit union had assets of \$149.9 million in 2012 compared to \$65.6 million in 2003, see Table 4. At the end of 2012, 197 US credit unions had assets in excess of \$1 billion with their loan portfolios extending to first and second mortgages, construction and development loans and business loans: a loan portfolio structure similar to that of a commercial bank.⁸

In common with commercial banks, credit unions are subject to capital regulation. Before 2000, the NCUA required that credit unions transfer a certain percentage of annual income into a reserve account. The level of net worth was

⁸ There are also a significant number of small credit unions in the US. There are 814 (11.5%) credit unions with less than \$2 million in assets. They primarily offer their members shares and loans. The average membership for these credit unions is 469; the average savings per member is \$2,595 and the average size of a loan outstanding is \$4,172. There are a further 756 (10.7%) with assets between \$2m and \$5m and 854 (12.1%) with assets between \$5m and \$10m.

viewed by supervisors as an indicator of financial health, and was used in an algorithm to calculate a CAMEL (capital adequacy, asset quality, management, earnings and asset/liability management) score. The PCA framework, included in Section 301 of the Credit Union Membership Access Act (CUMAA) of 1998 and implemented in August 2000, defines five categories of capitalization, in terms of the ratio of net worth-to-assets, denoted KA: well capitalized, $KA \geq 7\%$; adequately capitalized, $6\% \leq KA \leq 6.99\%$; undercapitalized, $4\% \leq KA \leq 5.99\%$; significantly undercapitalized, $2\% \leq KA \leq 3.99\%$; and critically undercapitalized, $KA < 2\%$. Credit unions classified as well capitalized are free from supervisory intervention. Credit unions classified as adequately capitalized or below are required to take steps to restore net worth to adequate levels.⁹ In 2012 the average capital ratio was 10.44%. In 2012 only 254 (3.6%) credit unions were classified as being less than well capitalized.

Most credit unions are low risk, due to restrictions on their activities embodied in cooperative principles and the common bond. Since credit unions cannot issue equity, however, they are exposed to automatic regulatory PCA intervention in the event of unexpected growth in assets. This was evidenced in the early 2000s, when many investors liquidated investments in risky securities and deposited the proceeds with credit unions. The pressure on capitalization drove some credit unions to refuse deposits, reduce services, convert to Savings and Loans or Community Banks, or merge with other credit unions.

⁹ The CUMAA specifies mandatory actions for credit unions that do not meet capital adequacy standards. These include: annual earnings retentions of at least 0.4% of total assets; the submission and adherence to a net worth restoration plan (NWRP); lending restrictions; and the prohibition of increases in assets until net worth is restored. The CUMAA allows the NCUA to use 14 supervisory actions to supplement the mandatory actions.

Owing partly to the remaining restrictions on their activities and their high capitalization, credit unions have, in general, withstood the current financial crisis better than many banks (Smith and Woodbury, 2010). The crisis in the real-estate market has impacted on the credit union sector, primarily through the investment policies of a number of corporate credit unions, which used cash deposits received from retail credit unions to purchase risky asset-backed securities, and realized large losses in several cases.¹⁰

Although capitalisation levels are higher in US credit unions than in other financial organisations there was a fall in average capitalisation levels during the financial crisis (see Table 4). Unlike other retail financial institutions, credit unions are not permitted to raise capital by issuing new equity. Over time, capital accumulates through the retention of (tax exempt) earnings that are not distributed to members, in the form of dividends on share accounts, or favourable rates paid on deposit accounts, or subsidized rates charged on loans. In 2013, legislative amendments were proposed to allow US credit unions to manage their balance sheets more effectively. H.R. 2572, the 'Regulatory Relief for Credit Unions Act of 2013' calls for the introduction of a risk-based regulatory system, which effectively reduces the level of required capital. H.R. 719, the 'Capital Access for Small Businesses and Jobs Act of 2013' provides for additional capital flexibility with federal credit unions permitted to receive payments on uninsured, non-share capital accounts, provided the accounts are offered by a credit union that is sufficiently well capitalized.

¹⁰ Corporate credit unions provide services for (retail) credit unions, including deposit of excess funds, payment services and access to liquid funds if required.

In most countries, including the US, credit unions are tax exempt. Tatom (2005) quantifies the tax loss of the non-taxation of US credit unions at an annual tax loss of \$2 billion and projects a tax loss of \$12.6 billion for the period 2004 to 2008. The Joint Committee on Taxation (2013) estimates that the credit union tax exemption will result in a corporate revenue loss of \$500 million in 2012 rising to \$1 billion in 2017 (the exemption value is calculated at \$3.9 billion over 2012 -2017). In defence of tax exemption, it may be argued that credit unions provide subsidized financial services to their members, many of whom are of modest means.¹¹ A tax levy would create pressure to reduce or eliminate subsidized services. A further justification for tax exemption is that credit unions are subject to more onerous capital regulation than competing financial service providers including commercial banks. Banks have the option of raising capital in the equity markets, while credit unions must rely on retained earnings. Preferential tax treatment for credit union goes some way towards easing the difficulties that arise in accumulating capital.

It is difficult to resolve the taxation debate on purely theoretical grounds. Credit unions are undoubtedly challenged by calls for the creation of a level playing field. It is perhaps understandable that tax concessions on offer to credit unions have come under the most intense scrutiny in the United States where the credit union movement has reached maturity, and credit unions compete directly with other financial-service providers.

¹¹ Reschovsky (2010) contends that the core issue concerning continued tax exemption for credit unions relate to whether credit unions fulfil a public purpose, such as providing access to credit markets for families, individuals and businesses that commercial banks do not lend to.

4. Final Comments

Credit unions are constantly evolving, influenced by the ever-changing environment within which they operate. Credit unions have survived and grown over many years and in many countries, demonstrating what can be achieved by a volunteer-led not-for-profit movement. This has been possible because the credit union sector enjoys intrinsic strengths. The credit union ethos has allowed credit unions to carve a niche in the market and differentiate themselves from mainstream financial services providers by meeting the common needs of their members rather than maximise profit for shareholders. The corporate governance based around the one-member/one vote system also ensures credit unions serve common needs rather than the needs of a handful of individuals. Furthermore, credit unions invest a significant portion of their profits in improving service to members and promoting the well-being of their communities.

We have taken the position that credit union movements tend to pursue a distinct developmental path. We classify this path as one that moves from a nascent stage to a transitional stage through to a mature stage of development. Although this classification system implicitly assumes that credit union movements should pass through each stage in turn, we also emphasise that this linear path is not guaranteed in all instances. As well as facilitating the benchmarking of a movement, the development typology can be used to identify and understand the interplay of factors which create a progression, or hindrance to progression, between the different developmental stages. The US, Canadian and Australian movements are

identified as having gone through the three stages of development to reach maturity.

Of course there is a further stage beyond maturity which is that of demutualisation and the transformation to a different organisational form. This has already occurred in both the US and Australia. If mutuality is seen as a necessary characteristic of credit unions, demutualisation is equivalent to the demise of the credit union not least because demutualisation enables new owners to impose a profit objective at the expense of the social goals articulated by credit unions. However demutualisation may not necessarily be a bad outcome if the economic and social functions which credit unions originally evolved to provide are now provided efficiently and effectively by other suppliers or if the regulatory strictures under which credit unions operate are no longer appropriate for their developmental needs.

To ensure that credit unions make decisions in the best interest of members, good governance is imperative. Effective credit union governance depends heavily on the willingness of members to exercise their rights of ownership to express their views to the board of directors and to hold them accountable for the progress of the credit union. The original credit union model accomplished this by positioning the member as the key control element of the actions and performance of the credit union. This has been somewhat diluted as credit unions have developed into professional managed multi-product financial organizations but if the credit union model is to survive it is imperative that new mechanisms are found to enable directors, members and management to actively contribute to the building of an

effective governance regime which places at its centre credit union members (owners).

Credit unions in many countries have weathered the financial crisis better than their commercial banking counterparts. Nevertheless, the recent financial crisis has placed severe downward pressure on capitalization. Unlike other retail financial institutions, credit unions in most jurisdictions are not permitted to raise capital by issuing new equity. This places them at a significant disadvantage. Greater flexibility is required in capital formation. The US is instrumental as to how this enhanced flexibility can be achieved. The ongoing legislative agenda in US Congress is likely to lead to regulatory change which will provide a new risk-based capital regime alongside existing leverage arrangements. This is likely to provide credit unions with more flexibility in the forms of capital held, and increase their ability to meet regulatory minima when changes in economic conditions (and resultant shocks to balance sheets) occur.

In many countries credit unions are operating at a loan to asset ratio which is much lower than WOCCU guidance. This is due to intensified competition in the financial market, the failure of credit unions in some countries to significantly embrace information technology to both market and deliver their loan products and reluctance by the regulators to be more permissive in the provision of additional product freedoms. Certain product areas are outside the credit union remit and others may only be appropriate for larger credit unions which have the necessary resources to appoint specialised personnel. A solution, as adopted in more mature movements, is for the establishment of a centralised body, funded by member credit

unions, to provide for example mortgages and other high-risk and high-value loan products.

Sustainable credit union development requires an appropriate and adaptive regulatory and supervisory framework. The correct framework ensures members' funds are safeguarded and promotes confidence in individual credit unions and the movement in general. In contrast, too strict a framework may stifle credit union development while too lax an environment is also detrimental as it may lead to credit union failures and, through systemic risk, place the movement as a whole in jeopardy. There is a risk that a fallout from the financial (banking) crisis will be that regulators impose an inappropriate overly onerous regulatory and supervisory framework on credit unions.

In today's turbulent global environment, the need for cooperative organisations has never been greater. Credit unions are shaped by their environment and need to stay relevant to new times. Irrespective of this they remain cooperative member-driven financial organisations. Thus membership participation is the critical element necessary to ensure on going advance of the movement.

Table 1: Credit Unions Worldwide 2003-2012

Year	Countries	Credit Unions	Members (\$000S)	Savings (\$000S)	Loans (\$000S)	Reserves (\$000S)	Assets (\$000S)
2003	84	40,457	123.5	656370.2	482574.2	74674.2	758478.7
2004	82	41,042	128.3	707438.2	531418.5	82926.7	824653.4
2005	92	42,705	157.1	763819.9	612201.6	91557.5	894454.8
2006	96	46,367	172.0	904120.9	758208.7	106825.7	1092135.9
2007	96	49,134	177.4	987861.2	847896.1	115358.5	1181465.9
2008	97	53,689	185.8	995741.2	847058.7	115316.5	1193811.9
2009	97	49,330	183.9	1145851.2	911752.6	119738.2	1352608.9
2010	100	52,945	188.0	1229389.4	960089.3	131659.5	1459605.6
2011	100	51,013	196.5	1221635.1	1016243.7	141314.9	1563529.2
2012	101	55,952	200.2	1293256.2	1083819.0	161810.3	1693949.4

Table 2: Regional Distribution of Credit Unions in 2012

Region (number of countries)	Number Of Credit Unions	Members (millions)	Savings (US\$ millions)	Loans (US\$ millions)	Assets (US\$ millions)	Reserves (US\$ millions)	Loans / Assets (%)	Reserves /Assets (%)	Penetration (%)
TOTAL for Africa (23)	20831	16.03	4817	4945	5600	481	88.3	8.59	6.43
TOTAL for Asia (21)	21934	41.32	127965	106744	176239	11135	60.6	6.32	2.74
TOTAL for Caribbean (19)	412	3.06	4595	3664	5591	732	65.5	13.09	1.50
TOTAL for Europe (12)	2320	8.57	22587	12026	26452	3358	45.5	12.69	3.67
TOTAL for Latin America (15)	2446	20.83	35046	31887	57344	8186	55.6	14.28	6.39
TOTAL for North America (2)	7590	104.07	1025779	851049	1318583	130638	64.5	9.81	45.23
TOTAL for Oceania (9)	278	5.15	72466	73503	91000	7280	80.8	8.00	21.62
Worldwide Credit Unions (101)	55811	199.02	1293256	1083318	1680812	161810	64.5	9.55	7.72

Source: World Council of Credit Unions (Raw Statistical Data, 2012); The total for Europe is only for credit unions and does not include cooperative banks

Table 3: Geographic Location of Industry Types (Selected countries), 2012

Country/Region	No. of Credit Unions	Membership	Assets (\$million)	Penetration ¹ (%)
Mature Credit Unions				
US	6,819	93,839,566	1021,731	45.4
Canada	771	10,229,741	296,852	43.8
Australia	103	4,504,000	90,071	30.1
Korea	950	5,924,654	51,794	16.5
Transitional Credit Unions				
Kenya	5,000	4722126	4180	19.5
Hong Kong	44	78000	1182	1.5
Taiwan	340	211047	775	1.2
Sri Lanka	8440	902863	72	6.2
Singapore	25	127315	702	3.0
Thailand	2220	3748967	48536	7.8
Ireland	487	2900000	17919	63.0
Great Britain	397	1025919	1579	2.5
Poland	55	2590713	5472	10.67
Fiji	29	15243	24	2.6
New Zealand	19	197593	673	6.9
Nascent Credit Unions				
Russia	250	298,456	162	0.3
Ukraine	617	1095,883	330	3.5

Source World Council of Credit Unions (Raw Statistical Data, 2012)

Table 4: US Credit Unions 2003 to 2012

Year	Number of Credit Unions	Members (000s)	Total Assets \$m	Average Credit Union Size \$m	Exit Rate	Capital Ratio (%)	Delinquency Ratio (%)
2003	9360	82145	614016	65.6	3.45	10.66	
2004	9014	83564	646970	72.4	3.80	10.96	0.72
2005	8695	84507	678665	78.7	3.67	11.24	0.73
2006	8362	85754	709949	85.6	3.94	11.54	0.68
2007	8101	86824	754990	93.8	3.20	11.41	0.93
2008	7806	88587	811117	104.5	3.72	10.61	1.38
2009	4554	88931	884757	117.3	3.29	9.91	1.82
2010	7339	90486	914341	124.8	2.89	10.06	1.76
2011	7094	91828	961697	135.7	3.30	10.21	1.60
2012	6819	93839	1021731	149.9	3.90	10.44	1.18

Note: Data based on the National Credit Union Association data and the authors' own calculations.

References

- Calomiris, C. (2014) Bank failures, The Great Depression and other contagious events, in Berger, A.N., Molyneux, P., Wilson, J.O.S. (Eds.) *Oxford Handbook of Banking*, forthcoming. Oxford: Oxford University Press.
- Caprio and Honohan (2014) Banking Crises: Those Hardy Perennials, in Berger, A.N., Molyneux, P., Wilson, J.O.S. (Eds.) *Oxford Handbook of Banking*, forthcoming. Oxford: Oxford University Press.
- Correa and Sapriza (2014) Sovereign Debt Crises, in Berger, A.N., Molyneux, P., Wilson, J.O.S. (Eds.) *Oxford Handbook of Banking*, forthcoming. Oxford: Oxford University Press.
- Ferguson, C. and McKillop, D.G. 1997. *The Strategic Development of Credit Unions*. Chichester: John Wiley.
- Ferguson, C. and McKillop, D.G. 2000. Classifying Credit Union Development in Terms of Mature, Transition and Nascent Industry Types, *Service Industries Journal*, 20, 103-20.
- Goddard, J, McKillop, D.G. and Wilson, J.O.S., 2002. The Growth of US Credit Unions, *Journal of Banking & Finance*, 26, 2327-2356.
- Goddard, J., McKillop, D.G. and Wilson, J.O.S., 2008. The Diversification and Financial Performance of US Credit Unions, *Journal of Banking & Finance*, 32, 1836-1849.
- Goddard, J., McKillop, D.G., and Wilson, J.O.S. 2009. Consolidation in the US Credit Union Sector: Determinants of the Hazard of Acquisition, *Journal of Financial Services Research*, 36, 231-252.
- Goddard, J., McKillop, D.G., and Wilson, J.O.S. 2014. US Credit Unions: Survival, consolidation and growth, *Economic Inquiry*, 52, 304-319.
- Gurley, J. and Shaw, E. 1955. Financial aspects of economic development, *American Economic Review*, 45, 515-538.

Joint Committee on Taxation. 2013. *Estimates Of Federal Tax Expenditures For Fiscal Years 2012-2017*. Washington DC: Joint Committee on Taxation.

Levine, R. 2005. Finance and growth: theory and evidence, in Aghion, P. and Durlauf, S. (eds.) *Handbook of Economic Growth*. Amsterdam: Elsevier.

Overstreet, G.A., Rubin, G.M. 1990. *A Dynamic Theory of the Credit Union*. Filene Research Institute.

Overstreet, G. and Rubin, G. M. 1991. *Blurred Vision: Challenges in Credit Union Research Modelling*, Filene Research Institute.

Reschovsky, A. 2010. Banks take aim at credit unions' tax-exempt status, cited in the CAP Times, 5th September 2010.

Smith D.J., Cargill, T.F. and Meyer, R. 1981. Credit unions: an economic theory of a credit union, *Journal of Finance*, 34, 519-57.

Smith, D.J. 1984. A theoretic framework for the analysis of credit union decision making, *Journal of Finance*, 39, 1155-1168.

Smith, D.M. and Woodbury, S. 2010. *Withstanding a Financial Firestorm: Credit Unions vs. Banks*. Filene Research Institute.

Tatom, J.A. 2005. *Competitive Advantage: A Study of the Federal Tax Exemption for Credit Unions*. Washington: US Tax Foundation.

Thompson, R. 1978. *No Ordinary Concern. The Law and Practice of Credit Unions*, Creduco Services Limited, Nanaimo, BC.

World Council of Credit Unions. 2012. *Statistical Report*, World Council of Credit Unions Inc.



**The Centre for Responsible Banking and
Finance**
RBF Working Paper Series
School of Management, University of St Andrews
The Gateway, North Haugh,
St Andrews, Fife,
KY16 9RJ.
Scotland, United Kingdom
<http://www.st-andrews.ac.uk/business/rbf/>



Recent RBF Working papers published in this Series

First Quarter | 2014

14-001 **Duc Duy (Louis) Nguyen, Jens Hagendorff, and Arman Eshraghi:** The Value of Executive Heterogeneity in Banking: Evidence from Appointment Announcements.

Fourth Quarter | 2013

13-011 **Choudhry Tanveer Shehzad and Bert Scholtens:** The Impact of the Organization of Bank Supervision on Banks' Risk-Taking Behavior.

13-010 **Andreas G. F. Hoepner, Michael Rezec and Sebastian Siegl:** Does pension funds' fiduciary duty prohibit the integration of environmental responsibility criteria in investment processes? A realistic prudent investment test.

Third Quarter | 2013

13-009 **Manouchehr Tavakoli, David McMillan and Phillip J. McKnight:** The Credit Crunch and Insider Trading.

Second Quarter | 2013

13-008 **Robert D. J. Anderson, John K. Ashton and Robert S. Hudson:** The Influence of Product Age on Pricing Decisions: An examination of bank deposit interest rate setting.

13-007 **Dimitris K. Chronopoulos, Hong Liu, Fiona J. McMillan and John O.S. Wilson:** The Dynamics of US Bank Profitability.



University of St Andrews
Scotland's first university

600 YEARS
1413 – 2013