

# INVESTMENT FACULTY IRELAND

## Developing Investment Expertise for Credit Unions



FRANK O'BRIEN                      BRIAN O'LOUGHLIN  
RONAN SMITH                      AIDAN CLIFFORD





The focus of this review of the Irish credit union movement is on investment issues. During this decade members loans as a proportion of total assets have declined from 63% in 2001 to 46% at end-September 2006. The corollary of this is a rise in the proportion of assets that are held in cash and investments that accounted for 50% of total assets at end-September 2006.

This large shift in the relative importance of credit unions' investment portfolios coincided with a period of rapid change in the wider financial markets, culminating in the credit crisis that began in summer 2007.

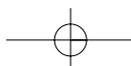
Fundamentals of investment are set out covering topics such as the trade-off between risk and return. The essential requirement to analyse and articulate the particular objectives and risk tolerance of an investment portfolio is highlighted. The characteristics of investment securities are explained such as liquidity, maturity, riskiness and valuation considerations.

We report on our survey of financial products marketed to Irish credit unions by financial institutions. Six financial institutions participated, and whilst not a comprehensive coverage of the market, the survey provides several important insights.

IFI is publishing this document as a first step in addressing the investment education and training needs of organisations such as credit unions. Investment issues are covered at a level of depth and breadth that are pertinent to the directors and senior professional managers of credit unions as they address a complex and changing investment environment.

Statistical and Governance Note: The Irish League of Credit Unions (ILCU) annual report is the main source of information on the Irish Credit union movement. It is an all-Ireland movement and hence the statistics produced by the ILCU include affiliated unions in both jurisdictions. Although some of the summary statistics presented in this report cover the island of Ireland, the analysis is confined to issues facing credit unions in the Republic of Ireland. Therefore, it is the Republic of Ireland tax, regulatory and legal framework that applies.

Investment Faculty Ireland Limited (IFI) designs and delivers investment training programmes at various levels to investment managers and administrators, private wealth managers, accountants, directors, trustees and others. As part of the educational process IFI produces independent reports on selected industry sectors. IFI produced a major report on the Irish venture capital industry in 2006 following a report on Irish pension funds in 2004. This report on the credit union movement is the third in what is intended to be an ongoing series. A key theme emerging from this process is the requirement for personnel at all levels of the financial sector to increase their understanding of the investment process and investment products.



## CONTENTS

		<b>EXECUTIVE SUMMARY</b>
<b>SECTION 1</b>		<b>THE CREDIT UNION MOVEMENT IN IRELAND</b>
	1.1	Credit Union Movement Statistics
	1.2	Credit Union Investment Policies
	1.3	Governance Issues
	1.4	Regulatory Environment
<b>SECTION 2</b>		<b>FUNDAMENTALS OF INVESTMENT</b>
	2.1	Investor Requirements
	2.2	Investment Risk
<b>SECTION 3</b>		<b>THE INVESTMENT ASSETS</b>
	3.1	Bonds – Fixed Interest Securities
	3.2	Other Bond Types
	3.3	Index Linked Securities
	3.4	Corporate Bonds
	3.5	Perpetual Bonds
	3.6	Cash or Bank Deposits
	3.7	Equities
	3.8	Property
	3.9	Collective Investment Schemes
	3.10	Structured Products
<b>SECTION 4</b>		<b>DRIVERS OF INVESTMENT RETURN</b>
	4.1	Security
	4.2	Maturity of Investments – The Yield Curve
	4.3	Liquidity
	4.4	Return
	4.5	Valuation
<b>SECTION 5</b>		<b>ACCOUNTING FOR INVESTMENTS IN NOT-FOR-PROFIT ORGANISATIONS</b>
<b>SECTION 6</b>		<b>SURVEY OF INVESTMENT PRODUCTS CURRENTLY MARKETED TO CREDIT UNIONS</b>
	6.1	Survey Outline
	6.2	Products
	6.3	Drivers and Risks
	6.4	Advice
<b>SECTION 7</b>		<b>THE CREDIT CRISIS</b>
	7.1	Origins and Consequences
	7.2	Implications for the International Banking Sector
	7.3	Implications for Irish Credit Unions
<b>SECTION 8</b>		<b>THE WAY FORWARD FOR CREDIT UNION INVESTMENT POLICIES</b>



## EXECUTIVE SUMMARY

At end-December 2007 members' savings at Irish credit unions amounted to an estimated €13.4bn, with total assets of €15.1bn. The proportion of assets accounted for by loans to members has been declining steadily throughout this decade. Consequently, 'Cash and Investments' now account for as much as 50% of total assets (€7.2bn at end-September 2006).

Credit unions' investment policies are governed by the Credit Union Act 1997 and Statutory Investment No. 28 of the 1998 Trustee (Authorised Investments) Order, 1998 as amended by S.I. No. 595 of 2002 and guidance notes on investments issued by the Registrar of Credit Unions (October 2006). The key underlying principle of these guidelines is that "investments by credit unions must not involve undue risk to members' savings".

Credit unions are Not-for Profit organisations and all of the value created by the business belongs to the membership. Credit unions conduct business with a membership that is characterised by a common bond, which may be community, associational or occupational. Over the past decade the regulatory environment in Ireland has evolved for all financial institutions. Credit unions are no exception as the Financial Regulator has sought to address governance issues, prudential issues and issues surrounding the appropriate investment of surplus funds.

### Fundamentals of Investment

There are three sources of investment return, namely, investment income, capital return and currency return. With the exception of short-term securities issued by Euro-governments, all investment securities involve some element of risk. Risk is multi-faceted and we can identify many types of risk such as systemic risk, counterparty risk and market risk.

**Risk Measurement: Volatility** – If risk is thought about as fluctuation in asset prices, it can be measured statistically using the concepts of normal distributions and standard deviations. Once historical price information is available for a security, its standard deviation can be calculated. Greater fluctuation in prices will be reflected in higher standard deviations. Hence, investment securities can be defined by just two statistics: expected return and standard deviation (risk).

### The Investment Assets

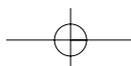
We focus on the mainstream investment assets – bonds, both fixed interest and index linked securities, equities, property and cash. The key characteristics of each security are explained and the advantages/disadvantages of each are set out.

The key drivers of investment return are security, maturity and liquidity. Investment income, and the potential for capital gains (losses).

Security is the ability to get all of one's funds back and any return that is due, at the promised time.

Some investments have fixed maturity dates, and others have a range of possible dates within which the issuer retains the right to redeem the investment at any date or a series of dates. Some bonds are perpetual, meaning that they have no maturity date. Equities, or ordinary shares in companies, are perpetual securities. Maturity matters for three key reasons:

1. The investor may have to meet obligations within a known period. If an investment cannot be used to fund those payments it may be unsuitable.
2. Credit risk is more significant the longer the term to maturity





3. The capital value of a security is a discounted (present) value of the expected future payments; returns therefore increase with falling discount rates and fall as discount rates rise; the sensitivity of this relationship is greater the longer the term to the expected payment.

Liquidity refers to the speed with which an investment can be turned into cash without incurring excessive expense or loss. There is a spectrum of liquidity along which asset types are ranged under normal conditions. Cash and 'cash instruments' are most liquid, with property investments occupying the least liquid end of the spectrum.

All assets experience marked lack of liquidity from time to time, and recent events in world markets have illustrated this starkly.

Total return is the sum of income return and capital return. The key economic drivers of return are:

- Interest rates and expectations of interest rates
- Inflation
- Economic growth
- Long term trends in the formation of debt
- Risk appetite.

## Valuation

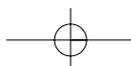
Investment governance requires up-to-date valuation of all securities on a consistent basis. Deposits and quoted bonds and equities have ideal valuation characteristics. Less liquid assets such as unquoted bonds, structured deposits and bonds, often pose a problem for valuation and these can lead to problems with governance.

## Accounting for investments in Not-For-Profit Organisations

There are two main sets of accounting rules allowed in Ireland. The first is UK Generally Accepted Accounting Practice or UK GAAP. It is sometimes referred to as UK/ROI GAAP. UK GAAP rules are issued by the Accounting Standards Board in the UK. The second set of accounting standards allowed in Ireland is International Financial Reporting Standards or IFRS. Quoted companies must use IFRS. All other profit orientated companies may use UK GAAP or IFRS. Not-for-profit organisations must use UK GAAP.

The cost model is the traditional approach and is the simplest to apply. It divides investment products into two categories: short term traded investments and long term investments. The Directors of a not-for-profit organisation designate their investments into one of these two categories and their presentation and valuation will be different depending on whether they are designated long or short term.

Fair value accounting: There are 3 accounting standards governing fair value accounting: FRS 25, FRS 26 and FRS 29 and they extend to 250,000 words. They list four main ways of accounting for investment products: fair value through profit and loss; available for sale; loans and receivables and held to maturity investments. When purchasing an investment, the directors decide why they have made the purchase and this reason will govern the accounting. If the investment has been purchased to be actively traded, the directors will designate it "fair value through profit and loss". This first category is the default option. The second category is "available for sale" and this would be used for investments that are held temporarily pending finding a buyer for them. The third category is "loans and receivables"



and these are usually only encountered in credit unions and banks. This category is used when the entity loans money to third parties. Finally the category most likely to be used by a not for profit organisation is "held to maturity" and this is for investments that are intended to be held until they mature.

The accounting under the fair value model is particularly complex and directors are advised to speak to their auditors prior to entering into an investment purchase contract.

### Survey of Credit Union Investment Products

IFI has undertaken an examination of investment products currently available to credit unions in Ireland, as part of a wider survey of investment products. The investigation took the form of a qualitative survey of providers and distributors of investment products to credit unions. It covered in depth thirteen products from six institutions, including investment managers, life offices and distributors.

The key findings were:

- Credit unions have access to a very limited range of products.
- The key products are money market/liquidity instruments and structured deposits/guaranteed trackers.
- Money market/liquidity instruments offer good choice at reasonable fees.
- It is much more difficult to assess value in structured deposits. It would appear that the net return/risk trade off is quite variable in these instruments.
- Institutions were careful to highlight risks, but not in all cases.
- Credit unions have lost out by not having access to life policies since 2006.
- There was marked variation in institutions' willingness to provide advice on the use of the product.

Respondents were asked about the advice they would give to credit unions concerning the extent to which they might invest in each product.

Half the respondents gave advice and half did not. Of those who did, some did so simply as characterisation of the particular investment. Another perspective was to embrace the credit union's entire portfolio and to advise on its entire composition.

The other half of respondents did not give advice on the proportion of the investment portfolio to be allocated to any product. They regarded the advisory role as separate from their provision of investment products and referred to consultants, or independent advisors as fulfilling that role.

### The Credit Crisis: Implications for Irish Credit Unions

A lasting consequence of the credit crisis for the banking sector will be to reinforce the importance of secure funding. Competition for deposits will intensify. Deleveraging implies tighter lending standards and advances growth will slow. Loans will be more difficult to source. Provisions for impairment will increase sharply in the short term and in a more difficult economic climate will settle at significantly higher levels than previously.

The short term outlook for the Credit Union movement is challenging. For the Credit Union movement these background difficulties will be exacerbated by a domestic banking system under pressure to rebuild profitability, improve funding and improve its capital base.



## The Way Forward for Credit Union Investment Policies

Credit unions have a unique set of investment needs. They are major institutions with very specific responsibilities to their members. Their investment priority is the preservation of capital. Secondly, they need investment income to contribute to the payment of dividends to members. They are, furthermore, subject to a very strict set of regulatory investment guidelines which act as a rigorous constraint on the assets which may be held by most credit unions in Ireland.

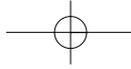
The cornerstones of a well-managed credit union investment portfolio are an investment strategy and an investment policy. Investment strategy matches the credit union's requirements and obligations (largely the terms of its customers' deposits and shares) with the generalised characteristics of available asset classes to form a set of quantified and timed investment objectives.

Investment policy defines how individual investments are selected and how investment management is governed. Investment objectives for credit unions will include a return objective, an income objective and should also include a risk objective.

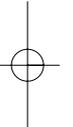
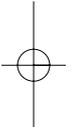
Before committing funds to particular assets or investment products, credit unions need to carefully assess the expected return, liquidity, maturity and security characteristics of each investment. Some of the key risks that need to be assessed with regard to investment products include:

- How much can be lost under the terms of the product and under what circumstances?
- Can funds be accessed during the life of the product?
- Where there are guarantees what company is making each promise and what is their credit standing?

The key conclusion that emanates from this review is that decision-makers in credit unions need to access independent investment expertise before committing funds to investment securities or investment products. There is also a need for directors and professional managers in credit unions, who are usually not investment or financial specialists, to develop a greater understanding of portfolio management and the risks associated with those investment products that are marketed to credit unions.



# Developing Investment Expertise for Credit Unions



## SECTION 1

### THE CREDIT UNION MOVEMENT IN IRELAND

#### 1.1 Credit Union Movement Statistics

Credit Unions are companies that are member-owned with a one-member-one-vote structure, and are not-for-profit organisations. In this respect they are not unique as there are many not-for-profit organisations such as charities, trade unions etc. Credit unions have some of the characteristics of these bodies such as some common bond amongst the membership and a high degree of voluntarism. For example, directors of credit unions are normally not remunerated for their services. What sets credit unions apart however, is that they are financial institutions whose core function is to accept deposits and advance loans. In this respect they compete with commercial financial institutions. Unlike other financial institutions, including mutual building societies, credit unions conduct business solely with their members.

The annual report published by the Irish League of Credit Unions (ILCU) provides benchmark information on the all-Ireland credit union movement. Table 1 presents summary statistics for the Movement.

**TABLE 1: Credit Union Movement Statistics**

	DECEMBER '06	DECEMBER '07 (ESTIMATED)
Number of credit unions	521	521
Membership	2.9m	2.9m
Savings	€13.2bn	€13.4bn
Assets	€14.7bn	€15.1bn
SPS Fund	€93m	€105m

*Source ILCU Annual Report, 2007: Data for the Movement includes ILCU affiliated unions in Northern Ireland and the Republic of Ireland*

Tables 2 presents the asset side of the movement's Consolidated Balance Sheet at end-September 2006.

**TABLE 2: Consolidated Balance Sheet as at 30 September 2006 – Assets (€m)**

	ROI	NI	IRELAND	% TOTAL ASSETS
Members Loans	5,997.4	635.0	6,632.3	45.8%
Cash & Investments	6,787.8	447.8	7,235.6	50.0%
Fixed Assets	424.1	55.1	479.1	3.3%
Other Assets	121.1	4.2	125.3	0.9%
<b>Total</b>	<b>13,330.0</b>	<b>1,142.1</b>	<b>14,472.4</b>	

*Source: ILCU Annual Report 2007: €/£ exchange rate 0.67511*

A notable feature is that loans to members were just 45.8% of total assets at end-September 2006. There has been a strong trend downwards in the loans to assets ratio during this decade. Currently, less than one third of credit union members have loans from their credit union. The corollary of this is a large rise in the relative size of credit union investment portfolios with the 'Percentage Total Investments to Total Assets' standing at 48.5% at end-September 2007. This is slightly down on the end-September 2006 figure of 49.5% according to the ILCU.

This presents unique challenges for credit unions only one of which is the issue of securing investment returns that can sustain the ongoing development of the Movement. It is instructive to compare the credit union balance sheet with those of the EBS and Irish Nationwide building societies, which have a mutual structure.

**TABLE 3: EBS Balance Sheet as at end-December 2006 – Assets (€m)**

	€m	% OF TOTAL ASSETS
Loans and Advances to Customers	14,634.4	75.8%
Cash and Investments	3,327.7	17.2%
Loans to Credit Institutions	1,011.8	5.2%
Other Assets	332.1	1.7%
<b>Total</b>	<b>19,306.0</b>	<b>100.0</b>

*Source: Annual Report, 2007*

In contrast to the credit union movement loans to customers account for 75.8% of assets. A similar picture emerges from the Irish Nationwide balance sheet where loans to customers amount to 71.2%.

**TABLE 4: Irish Nationwide Balance Sheet as at end-December 2006 – Assets (€m)**

	€m	% OF TOTAL ASSETS
Loans and Advances to Customers	10,409.6	71.2%
Cash and Investments	475.5	3.3%
Loans to Credit Institutions	3,555.5	24.3%
Other Assets	181.9	1.2%
<b>Total</b>	<b>14,622.5</b>	<b>100.0</b>

*Source: Annual Report, 2007*

Turning to the Liability side of the balance sheet we find that credit unions are virtually entirely funded from member shares and deposits, which account for 88.8% of total liabilities.


**TABLE 5: Consolidated Balance Sheet as at 30 September 2006 – Liabilities (€m)**

	ROI	NI	IRELAND	% TOTAL LIABILITIES
Members Shares and Deposits	11,926.9	926.1	12,852.9	88.8%
Statutory/General Reserve	1,088.8	136.2	1,225.0	8.5%
Other Reserve/Surplus	264.1	24.7	288.8	1.7%
Other Liabilities	50.5	55.1	105.6	0.9%
<b>Total</b>	<b>13,330.3</b>	<b>1,142.1</b>	<b>14,472.4</b>	

Source: ILCU Annual Report 2007

Statutory and Other Reserves account for just over 10% of total liabilities. Therefore, credit unions have no reliance whatsoever on the wholesale money markets to fund their activities. In contrast retail deposits account for a much smaller proportion of liabilities at most commercial financial institutions. The EBS would be typical in this regard where Customer Accounts at end-December 2006 were €10,071m equivalent to 52.1% of total liabilities.

In absolute terms members' shares and deposits at credit unions at €12,852m compare with Nationwide's customer accounts of €6,603m and EBS's €10,071m.

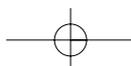
## 1.2 Credit Unions' Investment Policies

The balance sheet analysis above highlights the unusually large size of credit unions' investment portfolios relative to their overall balance sheet. At end-September 2006 'Cash and Investments' amounted to €7,236m. Loans to Members totalled €6,632m compared with total Members Shares and Deposits of €12,852m. The effective management of their investment portfolios has therefore become increasingly important for credit union boards.

The investment policies adopted by credit unions are restricted by:

- Credit unions' investment policies are governed by the Credit Union Act 1997 and Statutory Investment No. 28 of 1998 Trustee (Authorised Investments) Order, 1998 as amended by S.I. No. 595 of 2002.
- Guidance notes on investments by credit unions issued by the Office of the Registrar of Credit Unions.

The Guidance Note on Investments by Credit Unions, October 2006, (the 'Guidelines') (**Box 1 – List of Authorised Investments for Credit Unions**) sets out five classes of allowable investments. Class 5 is Collective Investment Schemes where the underlying investments are in Classes 1-4. Therefore, the Regulator has effectively set out four core classes of investment. Classes 1-3 consist of bonds (government and highly rated bank bonds), and deposits with highly rated credit institutions. A key and overriding consideration of these investments is that there should be virtually no risk to capital where investments are held to maturity. Permissible government bonds are those issued by Irish and EMU member states. Deposits may only be placed with credit institutions that have a long-term credit rating of not less than 'A'. Likewise only bonds issued by similarly rated credit institutions may be held. Class 4 allows investment in equities but this is limited to 5% of the credit union's investment portfolio.



### List of Authorised Investments for Credit Unions

CLASS OF INSTRUMENT	DESCRIPTION	LIMITS
1. Irish and EMU State Securities	Transferable securities issued by the Irish State and other EMU States and traded on a regulated market	(a) Maturity date shall not exceed 10 years. (b) Not more than 30% of holding shall be held in bonds maturing after 7 years. (c) Holding shall not exceed 70% of the total value of the credit union's investment portfolio.
2. Accounts in Authorised Credit Institutions (Irish and Non-Irish based).	Interest bearing deposit accounts (or instruments with similar characteristics) in credit institutions authorised by the Financial Regulator or by the competent authority of another EEA State which has fulfilled the appropriate notification procedures to the Financial Regulator.	(a) Maturity date shall not exceed 10 years. (b) Not more than 50% of deposits shall be held in deposits maturing after 5 years. (c) Not more than 20% of deposits shall be held in deposits maturing after 7 years. (d) The institution shall have a long-term credit rating of not less than "A" issued by a recognised rating agency. (e) Investments in a single institution shall not exceed 25% of the total value of the credit union's investment portfolio
3. Bank Bonds	Bonds issued by Irish or non-Irish credit institutions as described in class 2 and traded on a regulated market	(a) Maturity date shall not exceed 10 years. (b) Not more than 30% of bank bonds shall be held in bank bonds maturing after 7 years. (c) The institution shall have a long term credit rating of not less than "A" issued by a recognised rating agency. (d) Investments in a single institution shall not exceed 25% of the total value of the credit union's investment portfolio. (e) Holding in bank bonds shall not exceed 70% of the total value of the credit union's investment portfolio.
4. Investment in Equities	Euro denominated equities traded on a regulated market within the EU.	(a) The issuing corporate shall have a minimum market capitalisation of not less than €1.5bn. (b) Investment in equities shall not exceed 5% of the total value of the credit union's investment portfolio. (c) Investment in a single equity shall not exceed 1% of the total value of the credit union's investment portfolio.
5. Collective Investment Schemes	Units or shares in open-ended retail collective investment schemes, other than property schemes, authorised by the Financial Regulator.	A credit union may invest in collective investment schemes if the underlying investments of the scheme are composed entirely of instruments falling within the definitions and limits of classes 1 to 4 above.

Source: Guidance Note on Investments by Credit Unions, October 2006, Office of the Registrar of Credit Unions

An unusual aspect of these guidelines is that financial regulators generally tend to shy away from setting specific guidelines or policies for an industry group. The norm is for a statement of principles together with minimum solvency or capital adequacy requirements leaving it to the financial institutions individually to work out their own investment policies and risk management systems. The detailed guidelines in the case of credit unions might reflect some unease that expertise in complicated areas such as investment management requires strengthening. In contrast, in the banking industry the regulators' focus is on capital adequacy, whilst in the insurance industry the focus is on solvency ratios.

Whilst the Guidelines are very specific, they do in fact allow quite wide scope regarding investment policies. The critical principle underlying these guidelines is capital security as exemplified by the following quote from the Guidelines.

**"Investments by credit unions must not involve undue risk to members' savings"**

The Guidelines allow for credit unions to apply for exemption from their investment restrictions, where the credit union can show it has:

- Access to appropriate independent investment advice.
- Adequate skills and systems to manage a more complex investment portfolio.

An unintended consequence of the Guidelines is that they may have limited debate within the credit union movement as to appropriate investment policies generally. Within individual credit unions they may have had the effect of stultifying consideration of their particular requirements.

## Investment Returns

According to the ILCU Total Investment Income as a percentage of Average Total Investments for the quarter ended September 2007 was 3.6%. This has increased from the last year end where the result for 30th September 2006 was 2.9%. The dividend rates paid by credit unions in recent years are summarised in the table below.

**TABLE 6: Irish Credit Unions – Dividend Rate Paid 2004 - 2006**

DIVIDEND RATE PAID	% UNIONS PAYING RATE IN:		
	2004	2005	2006
0 - 0.99%	2.60%	0.21%	0.80%
1% - 1.99%	10.40%	13.68%	16.40%
2% - 2.99%	63.80%	66.11%	63.77%
3% - 3.99%	19.00%	15.37%	14.98%
4% - 4.99%	4.00%	4.42%	3.85%
5% - 5.99%	0.20%	0.21%	0.20%

*Source ILCU Annual Report 2007*



### 1.3 Governance Issues

Credit unions conduct business with a membership that is characterised by a common bond. The main types of common bond are:

- Community
- Occupational
- Associational

Credit unions are Not-for-Profit organisations and all of the value created by the business belongs to the membership. In general commercial organisations will seek to maximise profits (or shareholder wealth). In the Anglo-Saxon capitalist model shareholder wealth maximisation has become the overriding goal for the majority of commercial enterprises. The appropriate financial objective for credit unions is not immediately obvious. For example, credit unions have a membership that have conflicting financial goals depending on whether they are savers or borrowers. Savers will want a high secure return whereas borrowers will want to minimise their interest costs. Even though most members will probably be both savers and borrowers over their respective life cycles, balancing these conflicting goals is a priority for all credit unions.

In general corporate governance is usually framed in the context of the competing interests of the various stakeholders in a business. In developed capitalist economies much of the debate revolves around how to deal with the fact that the owners of companies (shareholders) have delegated operational control of the business to professional managers. This creates the Principal-Agent problem whereby the managers may run the business to maximise their rewards at the expense of the shareholders. In this environment corporate governance issues primarily revolve around building structures that align the interests of managers with those of the shareholders. For example, incentivising managers through profit sharing and share option schemes creates a reward structure that incentivises managers to grow the value of the overall business.

Not-for-profit organisations are faced with a very different scenario. Unlike the shareholder wealth maximisation model, there is no single obvious overriding objective. However, many Irish credit unions are now quite large financial institutions that are run by professional management teams.

As credit unions mature corporate governance becomes more complex. In a comprehensive study of the Irish credit union movement, McKillop *et al* argue that Irish credit unions are in the middle of a 3-stage classification system, which they describe as:

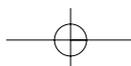
**Nascent Stage:** credit unions typified by a small membership base, basic savings and loan products and are run by volunteers.

**Transitional Stage:** credit unions have moved beyond the Nascent stage and have developed into quite sophisticated financial institutions. However, they have not fully embraced the benefits of information technology.

**Mature Stage:** credit unions offer an extensive range of financial products, have large memberships and are staffed by paid employees.

This conclusion is based on the results of surveys that they conducted of the Canadian credit union movement, which they consider to be mature, and the Irish movement.

*McKillop, D., Goth, P., and Hyndman, N., Credit Unions in Ireland: Structure, Performance and Governance, Institute of Chartered Accountants in Ireland, 2006.*





The authors identify five factors that affect the rate of progression along the development path:

1. The nature of leadership.
2. The complexion of trade associations.
3. Professionalisation.
4. Legislative support for change and innovation.
5. Technological advancement.

The key conclusion is that ultimately credit union movements resemble competing financial institutions when they reach full maturity. The authors conclude that “.. as a credit union movement matures, member credit unions behave more like other competing financial institutions. Within an individual movement a similar phenomenon occurs, with larger entities tending to become more financially sophisticated and viewing themselves as being in competition with other financial institutions”.

#### 1.4 Regulatory Environment

In recent years credit unions have come under increasing scrutiny as the Financial Regulator has sought to address governance issues, prudential issues and issues surrounding the appropriate investment of surplus funds. Issues that are likely to continue to exercise the mind of the Regulator include:

**Build up of surplus funds:** Loans/Assets ratios are now at 48% and have declined sharply from 67% in 2001. The corollary is a sharp increase in the size of investment portfolios which raises the profile of investment guidelines and the need to manage both credit and market risk. The overriding principle in the Guidance Note on Investments issued in October 2006 is “Investment by credit unions must not involve undue risk to members’ savings”.

**Quality of Lending/Arrears:** A lack of consistency across credit unions has recently been tackled. Statutory returns of financial information to the Regulator have been streamlined enhancing the ability of the Regulator to monitor the strength of credit unions. An issue of concern to the Regulator is a lack of experienced underwriting skills across the movement.

## SECTION 2

### FUNDAMENTALS OF INVESTMENT

#### 2.1 Investor Requirements

Investment is the process whereby consumption is deferred and resources are set aside to build a store of future value and to earn a return. Organisations have a broad mix of financial objectives. A charity might, in the short term, require to generate steady or rising distributions to those who depend upon it for income whilst, in the medium to long term, preserving the value of its capital. Credit unions similarly will be concerned with the preservation of capital and in meeting the shorter term liquidity requirements of members. Pension funds will be concerned with meeting their long term obligation to provide pensions to existing and future pensioners but will also be focused on their short term statutory requirement to meet solvency standards. Prudent financial management, at the individual and organisational levels alike, requires that current and future needs are recognised, anticipated and provided for.

#### Investors

In attempting to generate a future increase in value the investor must live with uncertainty. The value he or she realises on the investment will depend on what someone else will pay for it in the future.

This uncertainty is evident in the frequently erratic path followed by the investment markets. The markets are subject to short term fluctuations, to cyclical patterns that reflect the business or economic cycles and to secular, or long term trends which may be driven by changes in demographics, in inflationary expectations or in corporate profitability. In sharp contrast the biblical servant in the Parable of the Talents simply buried the talents (the money) in the ground and eventually returned them to his master. There was no expectation of return or reward. This was not investment. There are also important distinctions between the investor and the gambler:

1. The gambler is prepared to lose all his stake in the pursuit of high and rapid rewards. The investor abhors the prospect of losing all his investment. For the investor it is essential to prevail and to meet his obligations or objectives.
2. Typically, when the gambler places his bet he is committed, unable to change his mind or withdraw. The investor will reserve the right to change his mind, to alter his position or perhaps withdraw his position altogether if economic, investment or business conditions change.

The speculator straddles the ground between the investor and the gambler. The speculator adopts a high risk, short-term approach to investment in the pursuit of rapid gains. This appetite for risk and his short term perspective distinguishes the speculator from the investor

#### Components of Investment Return

There are three sources of investment return:

- a) Investment Income
- b) Capital Return
- c) Currency Return



## Investment Income

Investment income is the recurring payments receivable by an investor on his investment. Included in investment income are:

- Interest on bank deposits.
- Interest on debt instruments (government securities, corporate bonds).
- Dividends on ordinary shares (the regular payment made to shareholders out of profits by companies).
- Rents on properties.

Investment income is the most reliable stream of investment return. It is recurring, forecastable and relatively stable. It normally grows over time as profits and dividends on ordinary shares and rents on property rise in response to rising economic activity.

## Capital Return

The capital component of return refers to the appreciation or depreciation (rise or fall) in the value of the investment over time. The capital value of bank deposits is fixed by contract, although the investor can lose capital if the bank collapses. The capital value of the other investment assets – bonds, equities and property – fluctuates in response to changes in monetary, economic or business conditions. An improving investment environment – lower inflation, lower interest rates, better economic growth, better corporate profitability – will tend to boost capital growth and vice versa. The capital component of investment return is non-recurring, unreliable and difficult to predict and volatile. It may be positive or negative.

## Currency Return

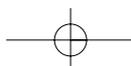
Where the investor invests only within his domestic country or currency bloc (eg. an Irish investor who invests only in Euro-denominated assets) he enjoys only the two streams of return discussed earlier – investment income and capital return. This investor is not exposed to currency gain or loss. Where the investor invests outside his domestic currency (eg. an Irish investor who invests in Sterling denominated U.K. assets) he generates a third stream of return, currency gain or loss. The currency component of investment return is non-recurring, unreliable and difficult to predict and often volatile. It may be positive or negative. Credit unions that are subject to the 'Guidelines' are only permitted to invest in investments denominated in Euro currency.

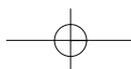
## Inflation

In providing a fund, through investment, to meet future obligations or liabilities the investor must account for inflation. Inflation means that the costs of goods and services will be higher in the future than they are today. The focus of the investor therefore, is on generating a real return on his investment i.e. an increase in the value of the investment after inflation has been allowed or accounted for.

## Compound Interest

If inflation is the enemy of the investor, he has a powerful ally in compound interest. Compound interest generates a steady progression in the value of an investment over the long term. Assume an investor commits €1000 to an investment at a return of 4% per annum compound:



**TABLE 7: The Power of Compound Interest**

Opening Investment	€1,000
After 1 year	€1,040
After 2 years	€1,082
After 5 years	€1,217
After 10 years	€1,480

The power of compound interest, of course, does not work on zero, reinforcing the investor's abhorrence of a permanent loss of capital in contrast to the gambler's willingness to put all his bet at risk. It also only works if investment income is reinvested.

### Investors: Different Drivers

Investors react in different ways to changes in the economic or investment environment. It is this difference in reaction that 'makes the market' with some investors wishing to buy and others wishing to sell in reaction to new information.

The reaction of investors to market developments is driven by:

1. Their different liabilities.
2. Their different time horizons.
3. Their different requirements for income.
4. Their different needs for protection against inflation.
5. Their different requirements to generate real returns above inflation.
6. Their different base currencies.
7. Their different requirements for liquidity.
8. The different tax and regulatory regimes to which they are subject.
9. Their different exposures to transaction costs.

And, finally but importantly

10. Their different attitudes to risk.





## 2.2 Investment Risk

The dictionary defines risk as 'hazard danger, exposure to mischance or peril'.

Investment, as a forward looking activity, is concerned with the uncertain future. The uncertain future will include the possibility that events which are damaging to the financial well-being of the investor may occur. Investors will attempt to account for these uncertainties and to protect themselves against them in the investment strategies they develop. In the mid nineteen-seventies, for example, Irish investors were concerned with protecting their investments from the risk of sustained high inflation. In the late seventies and early eighties the weak state of the national finances and fears of financial collapse were a major concern for investors. In the early nineteen-nineties the focus was on currency devaluations. More recently the fall-out from the credit crunch is the dominant preoccupation.

### Common Concepts of Risk

A survey of investors in the U.S. showed that investors' attitudes to risk varied. The following concepts of risk emerged:

- Risk is the chance of losing some of my original investment.
- Risk is the chance that my investment will not keep pace with inflation.
- Risk is fluctuation in value.
- Risk is not having enough money to meet investment goals.

This latter response is important because it establishes a link between the riskiness of the investment and the consequences for the investor if investment objectives are not met.

The following definition of Investment Risk emerges:

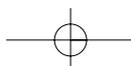
**'Investment risk is the likelihood of not having sufficient cash with which to make essential payments'.**

### Investor Attitudes to Risk

Risk is subjective. The investor's time horizon, requirements and objectives will be key influences on his attitude to risk. A strategy which is entirely prudent for a long-term investor may be totally inappropriate for an investor with short-term time horizons. Risk is multi-faceted and we can identify many different types and sources of risk.

### Types of Risk

Investors are concerned with the uncertain future. Risk, therefore, is an ever present and unavoidable feature of the investment process. No listing of types of risk can be comprehensive. Risk by its very nature is unpredictable and surprising. It catches us unawares. Unexpected events outside the boundaries of our previous experience occur. The financial markets are surprised, unsettled and shocked. Risk takes many forms. The following listing simply illustrates various types of risk encountered by investors in recent years. By definition, other risks, not currently anticipated or discounted by financial markets, will, at some point in the future, shock and confuse us.





## Systemic Risk

Systemic risk is the risk of system-wide collapse. Recent examples of actions by the authorities to prevent a potential system-wide collapse include the Bank of England's rescue of Northern Rock, which was mounted to prevent the run on that bank spreading to other UK banks. In the US the Federal Reserve engineered the take-over of Bear Stearns, America's fifth largest investment bank, by JP Morgan as it teetered on the brink of collapse, to preserve confidence in the overall financial system.

## Specific Risk

Specific risk arises from over-exposure to individual investments. For example, the unavoidable over-exposure by Irish pension funds to leading Irish equities prior to the introduction of the Euro. As soon as Ireland adopted the Euro, pension funds moved to reduce this risk by diversifying their Irish equities across Euro denominated equity markets.

## Currency Risk

Currency risk is the risk of exposure to currency loss, eg. the Sterling devaluation of 1992 and the Asian currency crisis of 1998.

## Counterparty Risk

Counterparty risk is the risk of collapse of a counterparty, i.e. a bank or stockbroker. Even where the investor may be protected by government guarantee or compensation scheme from eventual loss, the inability to access cash or securities may cause financial difficulties.

## Default Risk

Default risk is the risk that the issuer of a bond may default on its obligation to pay interest or repay capital, for example, the default by Russia on its domestic debt in 1998.

## Credit Risk

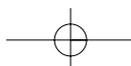
Credit risk is the additional risk taken on by the investor in the search for higher returns when investing in a corporate bond rather than a government bond. If the credit rating of the issuer disimproves the bond value will suffer, for example, the downgrading of General Motors' debt in 2005.

## Market Risk

Market risk is the unavoidable exposure to the uncertainty of the market. This is the uncertainty that the investor must embrace in the search for higher returns. The other types of risk may be diversified away. The investor has to live with market risk.

## Risk Measurement: Volatility

The discussion so far has emphasised the multi-faceted nature of investment risk. It may therefore come as a surprise to learn that nowadays investment theory and practice focuses on quite a narrow, albeit all-embracing, concept of risk. This concept of risk is built upon work carried out by a statistician, Dr Harry Markowitz, in the 1950's. Markowitz defined risk as volatility or fluctuation in prices, as indeed did some of the respondents to the survey discussed above. He further concluded that, by using Normal Distributions and Standard Deviations, the spread of returns on an asset around their average, could be measured and quantified.



Therefore, for the first time, there were now available hard numbers to measure the two elements of investment. Return numbers which had long been available and now risk numbers based on volatility. Investors could address both risk and return in a quantified way and examine the trade offs between them. Markowitz's insights together with the availability of computing power enabled us to prove some of the basic concepts which heretofore we instinctively understood:

- Diversification controls risk.
- The higher the expected return, the higher the risk.

Markowitz's insights were key building blocks in the development of a more scientific and sophisticated approach to investment management. Volatility as a measure of risk has the attraction that we instinctively feel that uncertainty should be associated with something whose value jumps around a lot over a wide range. However volatility has some inherent limitations; it is not a comprehensive measure of risk. Using data from the past can be dangerous, forecasting the future is unreliable. Importantly, volatility is an asset based measure. It tells us nothing about the consequences for the investor of fluctuations in values.

Nevertheless, despite these limitations, volatility has become the standard measure of risk in the investment business today and has wide application in portfolio construction.

**For a more detailed discussion of these issues, see '*Fundamentals of Investment – An Irish Perspective*' by Brian O'Loughlin and Frank O'Brien, Gill & MacMillan 2006.**

## SECTION 3

### THE INVESTMENT ASSETS

In this Section the focus is on the mainstream investment assets – bonds, both fixed interest securities and index linked securities, equities, property and cash. The term ‘Bonds’ is often used to refer to fixed interest securities only even though fixed interest securities are just one type of bond. The characteristics of other types of bonds are also described in this chapter. However, we will follow the market convention and the discussion on bonds refers to fixed interest securities, unless specifically stated otherwise.

#### 3.1 Bonds (Fixed Interest Securities)

Fixed interest securities or bonds are loans raised by borrowers from investors at fixed rates of interest for fixed periods of years. The borrower may be a government, a government agency, a state or a corporation. The lender or investor may be an insurance company, a bank, a pension fund, a private individual, a credit union or a charity.

Typically the borrower, or issuer of the bond, undertakes to pay the investors a fixed rate of interest each year for the fixed period (or fixed term) and to repay principal, i.e. the capital amount originally borrowed, when the loan becomes due (or matures) at the end of the period. Essentially bonds are loans with pre-specified terms and conditions. They have been used by borrowers and lenders for centuries and provide returns in the form of income and repayment at maturity. The early bonds were issued by governments often for the purposes of funding wars or colonial escapades.

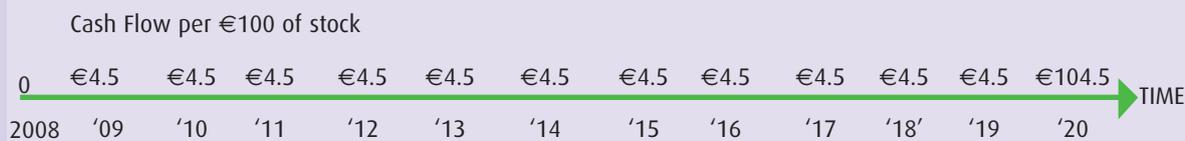
Bonds are divisible and are typically denominated in nominal units of €100 for bonds issued by Eurozone borrowers. The fixed rate of interest refers to the rate payable annually per €100 nominal and normally on maturity bonds are repayable at par, i.e. at €100 per €100 nominal.

Listings of bonds appear frequently in the financial press and in lists prepared by investment houses and stockbrokers. A bond is identified by its fixed rate of interest (or coupon), its issuer and its redemption date. For example, an Irish Government bond (or stock) is described below:

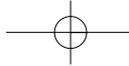
Government Stock 4.5% Treasury 18.4.2020

The coupon on this bond is 4.5% and this means that the issuer, the Irish government, will make an annual interest payment of €4.50 to the holder of each €100 nominal of the bond up to and including the maturity date. On the maturity date (18.4.2020) the issuer will pay the holder €100 per €100 nominal of the bond. It is useful to visualise these payments in the form of a ‘Timeline’ as illustrated in Figure 3.1.

**FIGURE 3.1: Timeline – 4.5% Treasury 2020**



If today is the 18.04.2008 we can see that the cash flows that will be generated by this bond can be set out with certainty. Starting in April 2009 an interest payment of €4.5 will be made annually per €100 of stock. At the maturity or redemption date a final interest payment of €4.50 is made plus €100 (the nominal value of the bond).



Bonds issued by governments are usually quoted on a stock exchange and therefore trade freely on the open market. Bond prices are quoted per €100 nominal. Between the issue of a bond and its final repayment (or redemption) its market price will fluctuate around €100 depending on the investment environment, most particularly interest rate levels, and the interaction of buyers and sellers. Therefore, it is more often the case that investors purchase bonds at a price that is different to its nominal or par value. Referring to our timeline the par value of €100 only establishes the cash amount that will be repaid to the investor on the maturity date. Assume that for the bond identified in the previous paragraph we find that today this bond is priced at €102.13 per €100 nominal. It will therefore appear as follows in listings of bonds:

GOVERNMENT STOCK	PRICE AT 18/4/08
4.50% Treasury 18.4.2020	102.13

From this information the returns available to an investor who is willing to hold the stock to redemption may be calculated. The investor receives two returns.

#### Annual Yield or Running Yield.

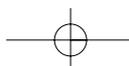
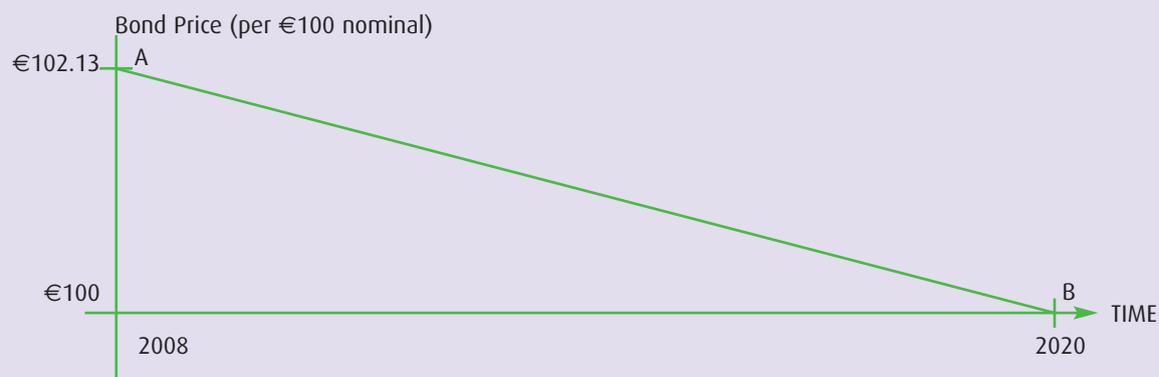
This is the annual cash payment (investment income) of €4.50 for each €100 nominal of stock purchased. As the investor paid €102.13 for each €100 he receives a cash income yield each year between now and 2020 of:

$$\frac{4.50}{102.13} \times 100 \% = 4.4\%$$

In addition, the investor must take into account the movement from the purchase price of €102.13 to the €100 at which the bond will finally be redeemed on 18.4.2020. Because the price of the bond is trading above the par value this is a negative amount of €100 - €102.13 = -€2.13 over the period of some twelve years.

Again it is useful to visualise what is going to happen in terms of the timeline depicted in Figure 3.2. The line AB shows that the bond price will gradually fall towards €100 and on the maturity date the price of the bond will be exactly €100.

**FIGURE 3.2: Projected Capital Loss when Bond is purchased above par value**





### Gross Redemption Yield (GRY) or Yield to Maturity (YTM)

The Annual Yield discussed above does not take this amount into account. A second yield calculation – the Gross Redemption Yield (GRY) or Yield to Maturity (YTM) takes both the annual income and the loss (or gain if bond price is below par) from the current price of €102.13 to the value on redemption of €100 into account. The GRY calculation further assumes that coupons received during the life of the bond are reinvested at the calculated GRY. In the case of the bond discussed above, because the current price €102.13 is above (at a premium to) €100, the GRY will be lower than the Annual Yield. Conversely, a bond which is priced below (at a discount to) its par value will have a GRY that is above its Annual Yield.

Incorporating this information on returns into our bond listing extends its identification as follows:

GOVERNMENT STOCK	PRICE AT 18/4/08	ANNUAL YIELD	GROSS REDEMPTION YIELD
4.50% Treasury 18.4.2020	102.13	4.4%	4.3%

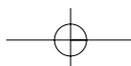
Strictly speaking, the GRY is the interest rate at which the bond's price equals the discounted present value of all future payments (in our example €4.50 each year until 2020 and €100 on 18.4.2020).

Investment decisions in the fixed interest sector – which stocks to buy or sell – are normally made on the basis of Gross Redemption Yield.

### 3.2 Other Bond Types

Not all bonds issued are fixed interest securities although fixed interest bonds account for the lion's share of outstanding bonds in issue. Other types of bonds are set out in the table below.

BOND TYPE	KEY CHARACTERISTIC
Floating Rate Bonds	Coupon payment is variable and usually set with reference to money market interest rates.
Zero-coupon Bonds	Such bonds have no coupon (pay no interest) but trade at a deep discount to par value of €100.
Convertible Bonds	Coupon payments are normally fixed for a period of time but on redemption the holder will have the right to convert into some other security.
Index Linked Bonds	Coupon payments and the final redemption payment are linked to the inflation rate. Each year the coupon paid increases by the relevant rate of inflation and the redemption value also increases in line with the rate of inflation.
Perpetual Bonds	Coupons may be fixed or variable; The bonds are irredeemable but usually subject to a call option on the part of the issuer.





### 3.3 Index Linked Securities

Fixed interest securities, described above, are constrained by their terms of issue. Annual interest payments and eventual repayment of capital on the redemption date are fixed and will not change regardless of changes in the inflationary background. Inflation erodes the purchasing power of the annual interest payments and the final capital repayment, as investors in fixed interest discovered to their heavy cost in the high inflation period of the nineteen seventies and early eighties.

In response to the need of investors for a degree of protection against inflation and to facilitate continued funding of Government borrowing the UK authorities in 1981 issued index linked securities. Over subsequent years a relatively small number of governments have followed suit – the US, Australia, Canada, France and Sweden – though in all cases index linked securities play a relatively minor role in government funding compared to conventional fixed interest securities. Index linked securities protect the investor against the impact of inflation by linking both interest payments and the eventual payment on redemption to an index of retail or consumer prices.

Therefore, when an investor buys an index linked stock he receives a return which will rise with inflation but which will be constant in real terms, i.e., in terms of purchasing power.

The conventions for denominating and describing fixed interest securities apply also to index linked securities:

INDEX LINKED BONDS	PRICE AT 18/4/08	REAL YIELD
UK 2.5% Index Linked 2024	255.53	1.16%
US 3.625% Index Linked 2028	130.33	1.81%

A UK investor, therefore, buying the UK Government 2.5% Index Linked 2024 receives over the remaining life of the stock a real yield of 1.16%, i.e. in excess of inflation. If UK inflation in the period to 2024 is 3% his return in nominal (cash) terms will be 4.16% per annum; if inflation rises to 5% his return will be 6.16% nominal. The UK Government has undertaken to compensate the investor for whatever level of inflation occurs in the period to 2024. Real rates of return available on index linked securities are important in their own right for bond selection within the index linked sector but also as a government guaranteed benchmark for evaluating returns on the other investment assets.

#### Calculating The Real Rate of Interest

The real rate of interest (or return) is given by the expression:

$$R^r = (1 + R^n)/(1 + i) - 1 \quad \text{where: } R^r = \text{real rate of interest}$$

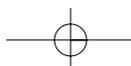
$$R^n = \text{nominal rate of interest}$$

$$i = \text{inflation rate}$$

Therefore, if inflation is 3% and the gross redemption yield on long term fixed interest bonds is 5%, the real rate of interest is:

$$R^r = (1 + .05)/(1 + .03) - 1 = .0194 \text{ i.e. } 1.94\% \text{ p.a}$$

Note that simply subtracting the rate of inflation from the nominal yield gives a close approximation.





### 3.4 Corporate Bonds

There is a large and vibrant global market in bonds issued by companies. The characteristics of such bonds are identical to those issued by governments and only differ in one very important respect, namely, credit risk or default risk. Bonds issued by EMU member states are effectively risk free in the sense that the issuers are virtually certain to meet their contractual obligations to pay interest and repay principal on the maturity date. For corporate bonds the investor needs to take into account the credit worthiness of the issuer. Investors generally will only invest in bonds that have a credit rating from one or more of the independent credit rating agencies. Companies are given a credit rating depending upon their financial strength and an assessment of their ability to meet their obligations.

### 3.5 Perpetual Bonds

Perpetual bonds are bonds which may pay interest indefinitely, usually at a pre-defined coupon rate. If a perpetual bond could be expected to pay a coupon  $C$  indefinitely, its value would be:

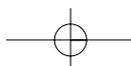
$$\frac{C}{r}$$

where  $r$  is the appropriate discount factor. An increase in interest all along the maturity spectrum will increase this discount factor, and decrease the value of the bond, and vice versa.

However, a number of factors make the valuation of perpetual bonds more difficult:

- They typically confer an option to redeem the bond on the issuer, on terms favourable to themselves. In other words, if interest rates fall substantially, the issuer can repay the bond on terms less favourable to the investor. However, some perpetuals are “stepped” where there is a penalty for the issuer if they fail to redeem the bonds on a particular date. This can turn a perpetual bond into what is effectively a short to medium term corporate bond but with some additional uncertainty as to yield and redemption dates.
- Some perpetual bonds pay variable interest rates rather than a fixed coupon. The sensitivity of these bonds to the spectrum of interest rates may be quite complex.
- As perpetual bonds, there is no reference risk free rate as most governments do not have current perpetual issues. The exception is the UK where there are still some War Loans that trade on the secondary market. Longest available yields (50 years) will normally be used, but a liquidity premium ought to be added to this.
- The additional risk premium to reflect the possibility and consequences of default is also difficult to quantify as the market in these instruments is typically illiquid. It depends on the credit rating of the issuer (if that is accurate) and on the seniority of the debt instrument relative to the issuer’s other debts.

One of the key issues with investing in perpetual bonds is that valuations may be sometimes provided by the companies that issue them. Independent sources of up-to-date valuation are an essential characteristic of a good investment.



### 3.6 Cash or Bank Deposits

The Financial Regulator's Guidance Note on Investments permits credit unions to deposit funds with Irish and non-Irish Authorised Credit Institutions. Deposits are a core asset of credit unions investment portfolios due to their:

- Guaranteed Nature.
- Liquidity Characteristic.
- Regulatory Compliance.

A critical consideration for the investor is to determine the appropriate term (or duration) of the deposit. Cash may be placed on deposit, or may be deployed to purchase money market securities, from periods ranging from one day (or overnight) out to one year or into longer-dated term deposits. Key considerations in determining the deposit term include:

- The investor's view of the outlook for interest rates.
- The investor's requirement to access the deposit to take advantage of market opportunities as they emerge.
- The availability of other sources of finance including cash flows.

Perhaps even more critical is the credit-worthiness of the deposit-taking institution. The marginal improvement in deposit rates that might be achievable by moving a deposit from a strong bank to a weaker bank will never compensate the investor for the loss of the deposit if the weaker bank should fail.

Uniquely of the investment assets cash generates only one stream of return. The nominal value of the deposit is always fixed in absolute terms. An investor who puts €100 on deposit will always receive €100 on maturity of the deposit. Capital value is fixed; there is no capital return, positive or negative.

The investor receives an income return only. The interest rate will be fixed for the duration of the deposit and if the deposit is renewed or rolled over the interest rate for the succeeding period will be set at the levels then prevailing.

Cash therefore provides certainty of income return only for relatively short periods. Because of fluctuations in interest rates there is no certainty of long term income return, either in absolute (nominal) or real (after inflation) terms.

### 3.7 Equities

An equity investment is an investment in the ordinary shares (or share capital) of a limited company. The equity investor is a part-owner of the company and this part-ownership is represented by a share certificate which sets out the number of shares owned. The proportion of the company owned by the investor is determined by the relationship between the number of shares owned as defined by the share certificate and the total number of shares in existence (in issue). This is illustrated in the table below:

Company	Total No of Shares in Issue	No of Shares Owned by Investor A	% of Company Owned by A
Company X	1,000	10	1%
Company Y	1,000	1,000	100%
Company Z	1,000,000	50,000	5%

Where the investor invests in the securities discussed earlier, fixed interest and index linked, he has a contractual relationship with the issuer to receive the interest payments and final redemption payment as set out in the terms of the issue. He is entitled only to these returns; there is no entitlement to any further participation.

The position of the equity investor is dramatically different. His share certificate identifies his co-ownership of the company, the value of which derives from its lands, buildings, plant and machinery; its stocks, work in progress and finished goods; its products, market shares and brand names; its client lists and customer goodwill; the strategic expertise of its management team and the operational skills of its workforce.

Within the legal framework of the company the assets and attributes of the company combine to generate a stream of profits into the future. The equity investor, as co-owner, participates pro rata to his shareholding in this stream of future profits or earnings.

Where the company is successful and enjoys powerful growth in profits the equity investor may enjoy very large returns. After the company has paid its workforce, its various suppliers, its lenders for any interest charges arising and its taxes all the remaining surplus, no matter how large, belongs (is attributable) to the ordinary shareholders.

On the other hand, if the company is unsuccessful and plunges into bankruptcy all those with a legitimate claim on its assets must be satisfied before any repayment is due to shareholders. Typically, when a company fails there is little or nothing left for shareholders. Shareholders, of course, enjoy the benefit of limited liability; they have the comfort of knowing that they cannot lose more than 100% of their investment.

Equities normally account for a high proportion of investment portfolios with long term time horizons such as pension funds. The asset characteristics that are of prime importance to credit unions include minimal risk to capital and high liquidity. Equities afford no capital protection and liquidity comes at a price of very high share price volatility. Therefore equities are only suitable investments for credit unions where liquidity and capital requirements are fully met by other investment assets. The Guidelines permit investment in equities but limit the exposure to 5% of a credit union's total investment portfolio.

### 3.8 Property

A property investment is an investment in bricks and mortar. Property investment may embrace both residential and commercial properties. Commercial property investments typically include offices, retail shops and industrial (factories, warehouses). Developing opportunities include factory outlets (out of town retail shopping malls) and leisure.

A variety of investment vehicles have been developed to enable smaller investors to access commercial property investment indirectly including real estate investment trusts, e.g., Land Securities in the UK, property unit trusts, e.g., Irish Property Unit Trust (IPUT) in Ireland and property unit linked funds promoted by the life assurance industry.

Like equities, property returns are not guaranteed. The investment return from property depends upon rents and the rate of growth in rents over time. Movements in interest rates and bond yields also exert a large influence on property values.

A defining characteristic of property compared with other assets is its lack of marketability. Property is one of the most illiquid investments and this makes it particularly unsuitable for credit union investment portfolios. Property is not a permissible investment under the Investment Guidelines.

ASSET	TYPE OF RETURN	ADVANTAGES	DISADVANTAGES
Cash	Interest income only	Capital is secure	Rate of return lower than other assets
Bonds (Fixed Interest)	Income return is known in advance; prospect of capital appreciation if bond is traded	Bonds issued by developed world governments considered to be risk free (credit risk); cashflows are definite	Returns are not protected against inflation; long term returns are likely to be lower than property or equities
Bonds (Index Linked)	Income return starts low but rises in line with inflation; principal amount at maturity rises in line with cumulative inflation over the life of the bond	Provides automatic protection against inflation by raising the coupon payments and the principal sum to be paid at maturity in line with the relevant inflation index	Likely to under-perform in a low inflation environment
Property	Income in the form of rents which can be expected to grow over time; prospects for capital appreciation	Total returns will reflect the performance of the relevant local economy	Transaction costs are very high and property investments can be very illiquid
Equities	Income in the form of dividends which can be expected to grow over time; prospects for capital appreciation	Total returns will reflect the performance of individual companies	Asset class that experiences the highest volatility of returns

### 3.9 Collective Investment Schemes (CIS)

The Investment Guidelines permit investment in 'units or shares in open-ended retail collective investment schemes, other than property schemes, authorised by the Financial Regulator.' Furthermore a CIS is only permissible as long as the underlying investments are composed of instruments falling within the definitions and limits of permitted investments under the Guidelines.

### 3.10 Structured Products

Financial institutions have become very innovative in producing structured financial products and there is now a wide variety of such products on the market. Three generic types of structured investment are set out below, that are being, or have been, marketed to credit unions:

1. Enhanced Deposit Structures: Returns depend upon yield curve movements.
2. Equity market linked structures.
3. Products with Guaranteed Minimum Returns/Capped Upside linked to commodities and other assets.

(See Section 6 for the results of our survey covering investment products currently marketed to Irish credit unions)

## SECTION 4

### DRIVERS OF INVESTMENT RETURNS

Sections 2 and 3 surveyed the fundamental principles of investment and described the characteristics of the main asset classes that are used by credit unions.

In this section, we extend our insight into these asset classes by identifying, for each asset type, the factors and circumstances that are foremost in shaping their returns, and the pattern of their returns. We also consider the potential for critical losses or disappointments in each case.

It is only by understanding these drivers, and the way they can influence the value of investments, that trustees and directors can exercise judicious governance of their investment portfolios.

The key drivers of investment return are:

#### Prudential Factors

- Security
- Maturity
- Liquidity

#### Valuation Factors

- Income
- Capital gains (losses)
- Availability of a valid pricing mechanism

### 4.1 Security

The first consideration when handing over funds to an investment is security, or the ability to get all of one's funds back at the promised time. The investor relies on the promises of security issuers or guarantors as well as on the competence and credit worthiness of those holding and effecting transfers in securities.

The investor will also be concerned whether the return of capital is guaranteed.

The investments typically undertaken by Irish credit unions are listed below, broadly ranked in terms of their 'Security.'

BROAD ASSET	TYPES OF SECURITIES	COMMENT ON 'DEGREE OF SECURITY'
Short dated notes issued by Euro government	Government bills	The most secure investment
Cash	Bank deposits where the initial deposit is guaranteed	Credit worthiness of the deposit taker is critical  Some deposits do not carry a capital guarantee
Government Bonds	Medium Dated issues by Euro governments	Credit ratings of issuing governments a factor e.g. Italy v. Germany  Longer dated bonds are subject to greater credit risk
Corporate or Bank Bonds	Bonds issued by companies	Guaranteed by the issuer: credit worthiness of issuer critical  Bank Guaranteed: credit risk is to the relevant bank  Terms of guarantee need to be fully understood
Longer Dated Bank Deposits	Term deposits – specifics vary	Credit rating of deposit taker more critical than for short term deposits  Capital usually guaranteed but not for some deposits
Equities	Ordinary Shares Preference Shares Convertible Securities	Some or all of the initial investment may be lost
Collective investment instruments	Unit trusts, unit linked funds, investment companies, exchange traded funds	Not generally guaranteed, even when underlying assets are guaranteed; derive security from credit quality of permitted investments; diversification  May have credit rating  May have credit risk to issuer
Structured deposits/guaranteed trackers	Deposits with upside participation in index performance	Usually guaranteed capital or some percentage of capital;  Guarantee may be by issuer or by third party;  Some not guaranteed



## 4.2 Maturity

Some investments have fixed stated maturity dates. This is a promise (guarantee) by the issuer to redeem the investment (repay or fulfill the value entitlement) at a certain date. Others have a range of possible dates within which the issuer retains the right to redeem the investment at any date or on one of a series of dates.

Some bonds are perpetual, meaning they have no maturity date. The investment amount is committed for ever, in return for which an income stream (fixed or variable) is promised to the investor in perpetuity, unless there is an early maturity option in the hands of the issuer.

Equities are perpetual. Companies, however, have the right in certain circumstances to wind up and pay off equity holders.

Open-ended collective investment instruments do not, either, have maturity dates. Closed ended instruments do, typically 7-10 years.

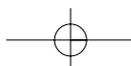
Structured deposits and bonds are usually issued for maturity periods of 3 to 7 years but may have variable maturity.

Maturity matters for three key reasons:

1. The investor may have to meet obligations within a known period. If an investment cannot be used to fund those payments it may be unsuitable.
2. Credit risk is more significant the longer the term to maturity.
3. The capital value of a security is a discounted (present) value of the expected future payments; returns therefore increase with falling discount rates and fall as discount rates rise; the sensitivity of this relationship is greater the longer the term to the expected payment.

Investors, therefore, must pay close attention to when they may need to access their investments – the maturity pattern of their obligations. Investing in longer dated assets than their liabilities creates significant risks that should be taken only after full consideration. It can lead to liquidity problems if the asset can not be realised when cash is needed. It can also lead to valuation difficulties, when longer dated assets experience significant capital losses resulting from interest rate (yield) increases.

This is why the regulations for credit union investments (where no exemption has been obtained) contain a series of maturity limits applicable to bonds and deposits.



## The Yield Curve

If the majority of investments are held to maturity then the rationale for investing in longer duration fixed interest securities is dependent on two factors:

1. A 'normal' yield curve i.e. that longer dated investments yield more than shorter dated investments.
2. A reasonably stable overall level of interest rates and yields over the course of the life of each security.

Since interest rates can change in an unpredictable fashion the interest rate cycle will have a significant impact on the market value of credit union investment portfolios. This creates accounting issues such as whether a bond portfolio should be marked to market, or amortised if it is to be held to maturity. Changes in interest rates also raise investment issues such as whether credit unions should actively manage bond portfolios in order to enhance investment performance. Furthermore, the performance of many structured products that are sold to credit unions depend on changes in the level and pattern of bond yields.

## Money Market and Bond Returns – Recent Experience

The table below shows Irish 3-Month Money, 10-Year bond yields and data on the total return (income and capital change) for the Under-3 year Bond Index and the Over-10-year Bond Index. Part 1 shows 3-month interbank interest rates and 10-year bond yields at end-December from 2003 to 2007. It can be seen that the 10-year bond yield declined sharply during 2004, from 4.61% to 3.67%, while 3-month money was stable. Falling yields are inversely related to fixed interest bond prices and therefore the prices of 10-year bonds rose sharply in 2004.

**TABLE 8: Interest Rates, Bond Yields and Total Returns 2003 to 2007**

PART 1 END-PERIOD INTEREST RATES AND BOND YIELDS		
End Month	3-Month Money %	10-Year Bond Yield %
December 2003	2.12	4.61
December 2004	2.12	3.67
December 2005	2.49	3.27
December 2006	3.76	3.95
December 2007	4.68	4.50

PART 2 ANNUAL TOTAL RETURNS		
Year	Under 3-Year Bond Index %	Over-10 Year Bond Index %
2004	3.1	12.5
2005	2.1	8.7
2006	2.0	-1.3
2007	3.8	-0.6

*Note: The returns in this table are calculated from the relevant total return indices produced by the Irish Stock Exchange. Changes in a bond total return index are determined by the annual income generated by the bonds forming the index, which is always positive, and by the change in the capital value of such bonds from the start to the end of the period, which will be negative if bond yields rise and positive if bond yields fall.*



This is confirmed in Part 2 of the table which shows the total returns for the Under-3 Year Bond Index and the Over-10-year Bond Index. In 2004 the Under-3 Year index produced a return of 3.1% whilst the Over-10 Year index produced a return of 12.5%. Therefore, assume three notional portfolios that are invested as follows:

<b>PORTFOLIO A:</b>	3-Month Interbank deposits.
<b>PORTFOLIO B:</b>	Fixed interest bonds with maturities out to 3 years.
<b>PORTFOLIO C:</b>	Fixed interest bonds with maturities longer than 10 years.

Based on the total return indices, the respective returns from these three portfolios in 2004 would have been:

<b>PORTFOLIO A</b>	<b>PORTFOLIO B</b>	<b>PORTFOLIO C</b>
2.12%	3.1%	12.5%

In contrast, bond yields rose during 2006 so that the performance of the three notional portfolios in that year would have been:

<b>PORTFOLIO A</b>	<b>PORTFOLIO B</b>	<b>PORTFOLIO C</b>
3.12%	2.0%	-1.3%

This illustrates that the market value of a portfolio that consists of even some fixed interest bonds will be very sensitive to changes in bond yields at different maturities. Furthermore, the market value of many structured products will also be determined by changes in bond yields, given that there is a bond element embedded into most of these structured products.

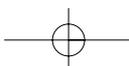
### 4.3 Liquidity

Liquidity is a function of the size of the market in an investment instrument, and the cost of transacting in it. It refers to the speed with which the investment can be turned into cash without incurring excessive expense or loss.

There is a spectrum of liquidity along which asset types are ranged under normal conditions. A current bank account is effectively as liquid as notes and coins for most commercial purposes. Other 'cash' instruments (bank and government instruments up to one year in maturity) are also generally quite liquid and under normal conditions can be considered almost perfectly convertible at negligible cost.

Longer term deposits may be reasonably liquid prior to maturity when the term may be broken with little penalty. In some cases, however, the cost of such a 'break' may be significant. In some conditions, the depositor will simply not be allowed to break the term of the deposit. These conditions should be understood by investors before placing deposits.

Government bonds, as a class, exhibit a very high degree of liquidity. Within this class, however, it is generally found that some particular issues, known as benchmark bonds, are issued in large amounts and trade easily and cheaply,





while others exist in only small sizes and may experience less regular demand. The liquidity of government bonds arises from their quoted status in the secondary market.

Bonds issued by banks and other corporates, exhibit varying degrees of liquidity, but generally less than government bonds. Their liquidity varies with the size of the issue, the size of the issuer, the credit worthiness of the issuer, whether they are listed, and the pattern of ownership of the issue.

As we move to structured instruments (e.g. guaranteed bonds) we generally find that liquidity prior to maturity is seriously constrained or non-existent.

Equities, like quoted bonds, rely for liquidity on their secondary market listings. Shares of companies with large market capitalisations quoted on the major markets tend to offer good liquidity but not as good as government bonds.

Most open-ended collective instruments that invest in equities provide substantially greater liquidity than the typical equities they hold, as the product provider stands willing to redeem units. There is a cost attached to this and it is unlikely to be less than the cost of effecting the equivalent transactions in the market. However, where liquidity could be an issue with some underlying investments the collective instrument can absorb some of this by dealing directly with the investor at the unit level.

Real estate investments occupy the far end of the liquidity spectrum and this is why they do not constitute an approved element of a credit union's investment portfolio. Even longer term institutions generally hold only a minority of their growth assets in property.

All assets experience a marked lack of liquidity from time to time. Recent events in world markets have illustrated this clearly. The liquidity crisis has called into question the convertibility of even short dated securities issued by hitherto highly rated names. Equity markets have dried up from time to time resulting in very jagged price movements, and properties have proved very difficult to sell. Credit based securities (where a lender on-sells loans in the form of a security whose performance is linked to the original loan) have been at the source of the recent problems and their liquidity has virtually disappeared.

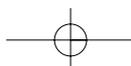
### Total return

Total return is the sum of income return and capital return. It may be compounded when the income is reinvested. Where income is an objective in its own right and is withdrawn, total return in the long term will be substantially lower.

The key economic drivers of return are;

- Interest rates and expectations of interest rates,
- Inflation
- Economic growth
- Long term trends in the formation of debt
- Risk appetite.

Higher economic growth increases interest rates. This results in higher returns over time from cash but capital losses on longer dated instruments. Growth beyond a sustainable rate, however, increases inflation too. If inflation fears rise, the loss on long bonds becomes more significant.





While the same process affects corporate bonds when interest rates and inflation rise, the economic growth generating the pressure may well result in higher profits which provide a cushion against default on the bonds. This may reduce the spread between the corporate bond yield and the government bond yield. This reduction in corporate bond yields will mitigate, or may even dominate, the effect of rising interest rates.

Equities derive their value from expected dividends, which come from expected earnings. Earnings generally do well when growth increases and, in the long term, benefit in money terms when inflation increases. This is why equities are called real assets.

However, equities usually experience price declines initially when interest rates rise, at least when the rise is expected to be a lasting one. Equities behave badly in the short term when inflation increases.

Equities also respond poorly to uncertainty, and positively to confidence about the future.

Capital and total return patterns for structured instruments and for bonds with call features, convertibility and other conditional features have to be assessed carefully with reference to the particular terms of each issue. In the case of a complex structured deposit recently issued, the terms are:

- 5 years maximum maturity.
- But matures at end of any year if the Equity Index on which it is based is above its initial level.
- Return is 15% of initial capital per annum until maturity (simple interest).
- Capital guaranteed if Index stays above 50% of its initial level at all times: otherwise investor gets the index return (capital only) if negative; can still be called early if market recovers to positive.
- All costs are included in these terms.

This is clearly quite complex. The attraction of the structure is for investors who see likely moderate market upside over the next few years but are uncertain about the market (i.e. it may fall, though not by 50%). To assess the expected payoff from the instrument, the investor must identify each of the possible outcomes, identify the index movement pattern and the time to maturity in each outcome, gauge the probability of each outcome over the relevant timescale and build a payoff probability profile from this analysis. They could compare this to a payoff profile from the underlying equity index and, taking account of the credit risk of the issuer of the deposit instrument, make a relative assessment of value and suitability.

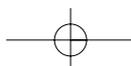
#### 4.5 Valuation

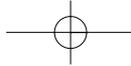
Investment governance requires up-to-date valuation of all securities on a consistent basis. No valuation technique exists that measures perfectly realisable values for all holdings. The management of the overall portfolio may be complicated by the presence of assets whose valuation is not reasonably close to a realisable value.

Deposit accounts, quoted bonds and equities, including exchange traded funds, have ideal valuation characteristics (but see Section 5 for issues in valuation). Open ended collective investment instruments are generally adequately priced but some offer only infrequent pricing and some are slow to publish prices. The availability of appropriate pricing should be investigated by the investor before committing funds to such a vehicle.

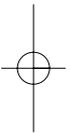
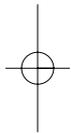
Less liquid assets often pose a problem for valuation and this can lead to problems with governance.

Unquoted bonds, structured deposits and bonds, closed-ended vehicles and property are all difficult to value in varying degrees. A key point here is that, at times of market difficulty, the valuation of these instruments is likely to be least reliable.





# Developing Investment Expertise for Credit Unions



## SECTION 5

### ACCOUNTING FOR INVESTMENTS IN NOT-FOR-PROFIT ORGANISATIONS

There are two main sets of accounting rules allowed in Ireland. The first is UK Generally Accepted Accounting Practice or UK GAAP. It is sometimes referred to as UK/ROI GAAP. UK GAAP rules are issued by the Accounting Standards Board in the UK. The second set of accounting standards allowed in Ireland is International Financial Reporting Standards or IFRS. Quoted companies must use IFRS. All other profit orientated companies may use UK GAAP or IFRS. Not-for-profit organisations must use UK GAAP.

In respect of investment products, under UK GAAP there is a choice of using "fair value" accounting or "cost" accounting. The Credit Union regulator has expressed the view that "fair value" is contrary to the Credit Union Act, although this is still a matter under discussion. Other not-for-profit organisations are entitled to choose whichever model they prefer. The cost model is simpler to apply but arrives at counter-intuitive answers to the accounting for some products. The fair value model is very complex but gives a more logical accounting solution.

#### Cost model

The cost model is the traditional approach and is the simplest to apply. It divides investment products into two categories: short term traded investments and long term investments. The directors of a not-for-profit organisation designate their investments into one of these two categories and their presentation and valuation will be different depending on whether they are designated long or short term.

Short term traded investments are shown as a current asset alongside debtors and cash and are valued at the lower of cost or their market price. Gains are only recognised when they are sold, losses are recognised immediately when they happen.

Long term investments are shown alongside fixed assets and are valued at cost less any impairment losses. An impairment is where the asset has materially gone down in value and a recovery in value is not immediately foreseeable. An impairment review involves two comparisons: first, compare the carrying value to the market value and, second, compare the carrying value to the so called "value in use". Value in use is an addition of all future cash receipts from the investment, discounted to take account of the time value of money. The discount rate used is the entity's own cost of capital, although this can be problematic to determine in a not-for-profit organisation. Some common investment products are listed below:

### Cost model accounting

PRODUCT	SHORT TERM INVESTMENT	LONG TERM INVESTMENT
Government securities	Lower of cost and net realisable value <sup>1</sup>	Cost less impairment
On demand deposit and term deposits <1 year.	Cost	Cost
Term deposit >1 year	Lower of cost and net realisable value <sup>2</sup>	Cost less impairment
Tracker bond – capital guaranteed	Lower of cost and net realisable value (fair value) – no income recognised until the end of the period.	Cost less impairment <sup>3</sup>
Perpetual bonds	Lower of cost and net realisable value (see separate note below).	Cost less impairment (see separate note below).
With profit bonds	Lower of cost and encashment or fair value. Increases in fair value to P/L	Cost less impairment, income recognised based on the increase in the market value of the bond not declared bonuses.
Equities	Lower of cost and net realisable value – do not account for increases in value unless sold. Profits may be realised but under the cost model they are not recognised.	Cost less impairment, do not account for increases in value unless sold. Profits may be realised but under the cost model they are not recognised.
Collective investment schemes	Lower of cost and encashment value. Recognise income when irrevocably entitled to receive it having also met all conditions including a requirement to hold to the end of the term.	Cost less impairment, Recognise income when irrevocably entitled to receive it having also met all conditions including a requirement to hold to the end of the term.

<sup>1</sup>While the interest paid on Government bonds is guaranteed the capital value can fluctuate when interest rates change. Where the Government bonds mature in less than 5 years the changes in capital value may be immaterial. The capital value of longer term Government bonds can fluctuate substantially.

<sup>2</sup>In practice there is no second hand market in term deposits although in theory the capital value of a long term, term deposit will change when interest rates change or the banks credit rating changes. Where the term deposit is less than 5 years any changes in capital value are likely to be immaterial. The capital value of longer term deposits can fluctuate substantially and the capital value of a term deposit will change if the banks credit rating changes.

<sup>3</sup>A capital guaranteed tracker bond could be impaired if all you were going to get back was your capital and you would have lost the time value of your money.



## Term deposits

There is no accounting standard in respect of the cost model that spells out exactly how to account for certain products. In respect of, for example, term deposits which, for example, would pay 25% at the end of 5 years, the 5% a year simple interest (which corresponds to an annualised compound rate of 4.56%) is not "realised" until you are irrevocably entitled to the return and therefore some argue that under the cost model you can only accrue the encashment value and not 5% a year as intuitively you would do. Some argue that you are more likely than not to receive the 25% and that you should therefore record the 5% income each year. There is also a suggestion that no income be recognised until the product has less than one year to run to maturity. So in the example above, no income would be recognised until year 4 when 20% would be recognised with the final 5% recognised in year 5. The profession is divided on this and until a conclusive answer is obtained it is open to the directors of the entity to decide on the most appropriate method and disclose the method used.

## Perpetual Bonds

Perpetual bonds are tier 1 capital for a bank – the same category as ordinary shares. The value of perpetual bonds changes based on the yield curve on long term bonds and the credit rating of the issuer.

According to the text books perpetual bonds should be valued by the following formula:

$$\text{Annual coupon} \div R = \text{Capital value}$$

where R is the required return based on the risk weighting of the issuer. R can be difficult to calculate.

## Fair value accounting

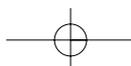
There are three accounting standards governing fair value accounting: FRS 25, FRS 26 and FRS 29 and they extend to 250,000 words. They list four main ways of accounting for investment products: fair value through profit and loss; available for sale; loans and receivables and held to maturity investments. When purchasing an investment, the directors decide why they have made the purchase and this reason will govern the accounting. If the investment has been purchased to be actively traded, the directors will designate it "fair value through profit and loss". This first category is the default option. The second category is "available for sale" and this would be used for investments that are held temporarily pending finding a buyer for them. The third category is "loans and receivables" and these are usually only encountered in credit unions and banks. This category is used when the entity lends money to third parties. Finally the category most likely to be used by a not for profit organisation is "held to maturity" and this is for investments that are intended to be held until they mature. A summary of the accounting for these four types of investments is listed below.

There are two separate reasons why financial assets at fair value through profit and loss might be used:

1. Any financial asset/investment that is designated on initial recognition as one to be measured at fair value with fair value changes in profit or loss.
2. Any financial asset/investment that is held for trading. The second category includes all derivatives.

Available-for-sale financial assets (AFS) are any non-derivative financial assets or investment designated on initial recognition as available-for-sale. AFS assets are measured at fair value in the balance sheet. Fair value changes on AFS assets are recognised in equity and recycled into the profit and loss account when sold.

Loans and receivables are non-derivative financial assets with fixed or determinable payments, originated or acquired, that are not quoted in an active market, not held for trading, and not designated on initial recognition as





assets at fair value through profit or loss or as available-for-sale. An example of this is a credit union loan book which is valued at amortised cost less impairment for bad debts.

Held-to-maturity (HTM) investments are non-derivative financial assets with fixed or determinable payments that an entity intends and is able to hold to maturity and is measured at amortised cost (if a HTM is sold before it matures then this category cannot be used for 2 years)

The basic assumption is that all products are financial assets valued at fair value with increases or decreases posted to the profit and loss account. Fair value is the amount for which an asset could be exchanged between knowledgeable, willing parties in an arm's length transaction. To be categorised as "available-for-sale" (AFS) or Held-to-maturity investments (HTM) requires that the investments are designated as such from the outset and this paperwork would need to be made available to the auditor. Re-classification post initial designation is difficult and could impose restrictions of future use of a category. The different categories have different accounting, so for example, if interests rates increase and the charity is part way through a 10 year term on a fixed interest bond, it will have to recognise a capital loss under the fair value category but will not have a capital loss if the bond were designated HTM.

Applying the rules to the more common categories of investment gives the following result:

### Deposits – demand

FV accrue interest on a time basis and value at the balance sheet date at deposit amount per the bank statement plus accrued interest.

AFS N/A

HTM N/A

### Deposits – term less than one year

FV accrue interest on a time basis and value at the balance sheet date at deposit amount per the bank statement plus accrued interest less/plus any capital losses/profits due to interest rate changes (capital losses/profits likely to be immaterial as term is less than one year).

AFS N/A

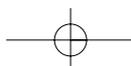
HTM accrue interest on a time basis and value at the balance sheet date at deposit amount per the bank statement plus accrued interest.

### Deposits - fixed interest term longer than 1 year

FV accrue interest on a time basis and value at the balance sheet date at deposit amount per the bank statement plus accrued interest less/plus any capital losses/profits due to interest rate changes.

AFS N/A.

HTM accrue interest on a time basis and value at the balance sheet date at deposit amount per the bank statement plus accrued interest.





### Unit funds – variable

- FV all increases or decreases in unit values to be recognised in income; year end value per unit value.
- AFS all increases or decreases in unit values to be recognised in a special reserve within equity; year end value per unit value. When sold recycle the amount posted to the special reserve through income statement.
- HTM N/A

### Bonds – fixed maturity value variable income

- FV all increases or decreases in bond values (capital and income) to be recognised in income; year end value per market value of the bond.
- AFS all increases or decreases in bond values to be recognised in a special reserve within equity; year end value per bond market value. When sold recycle the amount posted to the special reserve through income statement.
- HTM all income from the bond to be recognised in income; year end value per market value of the bond but not less than guaranteed value.

### Bonds – guaranteed minimum income

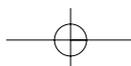
- FV all increases or decreases in bond values (capital and income) to be recognised in income; year end value per market value of the bond.
- AFS all increases or decreases in bond values to be recognised in special reserve within equity; year end value per bond market value. When sold recycle the amount posted to the special reserve through income statement.
- HTM recognise the higher of all increases or decreases in bond values or the guaranteed income from the bond and any capital gain or loss on bond; year end value per market value of the bond.

### Bonds – guaranteed capital at end of term

- FV all increases or decreases in bond values (capital and income) to be recognised in income; year end value per market value of the bond.
- AFS all increases or decreases in bond values to be recognised in a special reserve within equity; year end value per bond market value. When sold recycle the amount posted to the special reserve through income statement.
- HTM recognise the income from the bond and any capital gain on the bond; year end value per market value of the bond but not less than guaranteed value.

### With profit bonds – income and capital only guaranteed at end of term

- FV Any increases or decreases in encashment value to income statement. Balance sheet amount is encashment value.
- AFS all increases or decreases in bond encashment values to be recognised in a special reserve within equity; year end value per encashment value. When sold recycle the amount posted to the special reserve through income statement.
- HTM recognise the declared bonuses in income statement.





### Perpetual bonds – fixed interest but capital value fluctuates

FV Any increases or decreases in market value plus any interest received to income statement. Balance sheet amount is market value of bond.

AFS Any increases or decreases in market value to be recognised in a special reserve within equity. Interest received to income; year end value per market value. When sold recycle the amount posted to the special reserve through income statement.

HTM N/A they never mature.

### Direct stock market investments

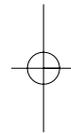
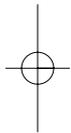
FV all increases or decreases in market values to be recognised in income; year end value per market value. Dividends to income statement.

AFS all increases or decreases in market values to be recognised in a special reserve within equity; year end value per market value. When sold recycle the amount posted to the special reserve through income statement. Dividends to income statement.

HTM N/A

### Conclusion

The accounting under the fair value model is particularly complex and directors are advised to speak to their auditors prior to entering into an investment purchase contract.



## SECTION 6

### SURVEY OF CREDIT UNION INVESTMENT PRODUCTS

#### 6.1 Survey Outline

IFI has undertaken an examination of investment products currently available to credit unions in Ireland, as part of a wider survey of investment products. The investigation took the form of a qualitative survey of providers and distributors of investment products to credit unions. It covered in depth thirteen products from six institutions, including investment managers, life offices and distributors.

The survey was carried out in March and April, 2008 by means of a brief initial questionnaire and a follow-up face-to-face interview addressing the key products in detail. The thirteen products were selected from a total of 45 products that were identified by the institutions, based on their commercial importance. They fall into four key categories:

- Money market/liquidity funds
- Structured deposits/guaranteed trackers
- Longer dated fixed income funds
- Equity funds

The organisations which took part in the survey were:

- NCB Wealth Management
- Le Cheile Consulting
- AIB Investment Managers Limited
- Irish Life Investment Managers
- Canada Life
- Bank of Ireland Asset Management

Respondents were asked, in respect of each targeted product, to specify its features in detail, sufficient to allow an investor to assess whether to choose to invest in the instrument. They were then asked a series of questions about the suitability of the products for credit unions, and what risks they would point out to investors.

The formal aspects of the product were examined: the legal structure, issuer, guarantor, nature of guarantee, and credit ratings, as were detailed aspects of all fees and expenses, including costs indirectly incurred by investing in the instrument. Respondents were asked how much money had been invested in the product, specifically by credit unions, and how big they believed was the total of Irish credit union investment in similar products.

They were also asked what advice they would give to a credit union on the proportion of its investment portfolio to be committed to the instrument.



The key findings were:

- Credit unions have access to a very limited range of products.
- The key products are money market/liquidity instruments and structured deposits/guaranteed trackers.
- Money market/liquidity instruments offer good choice at reasonable fees.
- It is much more difficult to assess value in structured deposits. It would appear that the net return/risk trade off is quite variable in these instruments.
- Institutions were careful to highlight risks, but not in all cases.
- Credit unions have lost out by not having access to life policies since 2006.
- There was marked variation in institutions' willingness to provide advice on the use of the product.

## 6.2 The Products

Although the survey was not intended to be representative, a very clear and uniform picture emerged of the type of products available to credit unions and of those in which there is most investment activity. We believe this pattern is indicative of the wider credit union market.

Most organisations selling investment products to credit unions include either a money market fund or another form of cash or liquidity fund. The emphasis on key benefits varies slightly among these, some having a primary focus on beating interbank rates, while others emphasise liquidity and security. In general, these are high quality vehicles that allow credit unions to achieve better rates of return than they could by managing their own liquidity. They are not undermined by excessive costs or fees.

Providers also emphasise products that offer a guarantee of capital, and some upside from participation in the performance of an index. These are most commonly in the form of structured deposits, with a maturity of 3 to 7 years. As such, they meet the regulatory criteria for term deposits of given maturities and are sold on that basis.

The Investment Guidelines of October 2006 were introduced to safeguard credit unions by imposing very prudent restrictions on their investments. They allow a large proportion of the fund to be invested in deposits and bank bonds of sufficient credit quality, since these are guaranteed instruments. However, certain deposits may now, legally, return less than the initial deposit in some circumstances and credit unions need to make absolutely sure that they know before buying any structured deposit whether their capital is guaranteed. One of the products we surveyed was a structured deposit which was capable of generating a large negative total return.

Guaranteed trackers are also available as life policies and, according to one supplier, these are now saleable again to credit unions, after a hiatus of nearly two years.

All trackers/structured deposits are priced so that the terms of the product represent the net return to the investor. It is helpful to know how much expense is taken from the investment by the providers. This is usually taken as a front end margin in the pricing of the product, but it may be paid to the manager as an annual fee over the product's life. Fees ranged from 0.2% per annum to 1.5% per annum on these products.



Although structured deposits are deposits and most of them provide a capital guarantee, there are two key differences between them and ordinary deposits:

- The issuer of the deposit may not be the provider of the product. The entire product can be guaranteed by one party, or it can be a non-guaranteed structure which itself invests in guaranteed instruments.
- The instrument is, in all likelihood, less liquid than a bank term deposit of equal maturity. While bank term deposits are fixed contracts, they usually have break clauses that allow early repayment without a penal cost. Structured deposits can have very restrictive terms for early withdrawal, up to and including absolutely no possible early withdrawal.

Other product categories discussed were: unit funds investing in (slightly) longer dated fixed income instruments than a money market fund, thereby enhancing expected returns; and an equity fund, restricted to Euro denominated equities to satisfy the investment guidelines for credit unions.

### 6.3 Drivers and Risk

#### Money market funds

Money market and liquidity funds generate returns reasonably close to interbank bid rates and are therefore affected over time directly by interest rates. As rates rise, so, predominantly, do the returns on these funds.

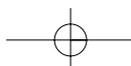
Some of them attempt to generate excess returns by taking maturity positions and earning credit premiums. These positions, however, expose the investor to some risk of underperformance when interest rates move in a way or at a time that was not anticipated correctly by the risk-taking manager or when credit spreads widen. In extreme circumstances, the loss can be greater than the interest accrued in a given period with the result that the capital value of the investment declines. This happened to a number of money market funds in recent months.

Providers of such funds generally point out the risks associated with these funds, as exemplified by the survey respondents. It is not always made clear, however, that capital may not be guaranteed, that there is some duration risk, or that credit risk can damage returns and capital.

#### Fixed income funds

For longer dated fixed income funds, the key drivers are: yields (interest rates), duration, liquidity and timing. A slightly longer dated fund than liquidity funds investing only in short dated instruments (up to 5 years) was included in the survey. It seeks higher returns from a combination of liquidity premium and timing. Timing consists of investing in longer dated instruments when rates are expected to fall and shorter dates when they are expected to rise. The fund would benefit overall when all interest rates fall.

The risks associated with such a fund are: rising interest rates; rising liquidity premia (such as we observed in the recent credit crisis); manager timing error; and credit risk of each of the issuers of securities and deposits in which the fund invests. The fund surveyed was described as "low risk" because of its very constrained maturity and credit profile. It was clearly pointed out that capital was not guaranteed. As a diversified collective investment instrument, its credit risks are well spread.





## Equity funds

The Euro equity fund covered by the survey is driven by the factors that drive equity markets in general, those that drive equities in the Euro area countries, and the factors specific to the companies whose shares are chosen at any time by the active manager of the fund.

Its risks are: equity market risk (affected by economic weakness, declining profitability, disappointed expectations, rising interest rates, increased risk and a host of other factors); European specific commercial, political and other risks; specific risk at the stock level (undiversified risk); manager error.

## Structured deposits/guaranteed trackers

Structured deposits/guaranteed trackers are driven by completely diverse factors, depending on the particular indices their returns are linked to and the nature of the link, which can differ enormously from product to product. It can, however, be instructive to look at the elements of these products that are common, at least to a significant proportion of them.

They are typically of fixed maturity date, usually between three and seven years. Capital is often guaranteed at maturity and this is achieved by holding a fixed term bullet bond, or its equivalent. To generate €100 in 5 years, with the 5 year interest rate at 5.6%, we invest €76.15 today and are guaranteed by the bond issuer that we will have €100 in 5 years' time. At times of high interest rates it is cheaper to provide this guarantee. When interest rates are very low, a bigger proportion of the €100 is used up providing the guarantee, leaving less to generate 'participation' or income.

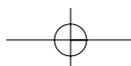
The upside, in a guaranteed tracker linked to an equity index, is provided by a call option or its equivalent. The product provider can, for a premium buy the right to buy the index at today's price but to exercise that in 5 years' time. That premium (say, for example, €20 for €100 worth of index stock) depends on interest rates and the forecast volatility of the index. The more volatility that is expected (in turn, driven by the amount of volatility experienced) the more will be paid for a call option because it has a bigger chance of making more money, and it cannot lose money. The premium also depends on interest rates. The higher interest rates are, the more an option will cost because it is funding a possible acquisition without the need to put up the principle.

If the tracker is for a longer period, the guarantee will be cheaper but the option will be more expensive.

The amount spent on the option determines the 'participation' the product can offer. In the above example, investing €20 buys 100% participation in the upward performance of the index, but if the product provider only spends €15, the product will get 75% participation. It should be noted that the index will be a capital only index and the product will not benefit from dividends.

The actual instruments covered by the survey were typically more complex than the 'plain vanilla' version just described and involved exposure to hedge fund indices, high yield equities, and baskets of equity indices. Some involved income generation and some of these used range options that pay when interest rates (or some other variable) stay within a defined band, but do not if they move outside.

The risks in such instruments may include risk to capital under the terms of the contract (not all are guaranteed) and do include credit risk to capital. The risk of underperforming risk-free returns exists as most structures provide an attractive payoff (the upside) only if certain performance conditions will be met. There is usually a non-trivial probability of not earning any return. Some vehicles provide an element of minimum return.



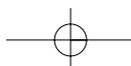
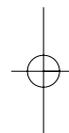


## 6.4 Advice

Respondents were asked about the advice they would give to credit unions about the extent to which they might invest in each product. There was a wide divergence of approaches in a small selection of providers/distributors.

Half the respondents gave advice and half did not. Of those who did, some did so simply as characterisation of the particular investment. For example, one house suggested their trackers should each constitute a small element of the portfolio (unlikely to exceed 5%), as part of a diversified holding of trackers (particularly against maturity date). Another perspective was to embrace the credit union's entire portfolio and to advise on its entire composition.

The other half of respondents did not give advice on the proportion of the investment portfolio to be allocated to any product. They regarded the advisory role as separate from their provision of investment products and referred to consultants, or independent advisors as fulfilling that role.



## SECTION 7

### THE CREDIT CRISIS

#### 7.1 Origins and Consequences

Excess liquidity, flowing from the recycled surpluses of the Middle and Far East, created an environment over the past few years of cheap and freely available credit. Low interest rates expanded risk appetites. Bank lending standards weakened dramatically permitting enormous growth in leverage. Bank loans and debt were securitised and distributed throughout the financial system via a series of complex, opaque and ever-more geared financial instruments. The true risk characteristics of these instruments were ignored by rating agencies which attached high quality investment grade ratings to them. This encouraged buyers who had little real understanding of their underlying exposures to invest. Amongst these buyers were the monoline insurance companies who play a critical role in the financial system by insuring US municipal debt. An environment of easy credit, weak lending standards, low interest rates and expanded leverage encouraged consumer spending, economic growth and speculative rises in asset values, particularly, in residential and commercial property.

A sharp downturn in U.S. house prices exposed the recklessness of lending to the U.S. sub-prime mortgage market. The credibility of all types of bank lending was brought into question, threatening the stability of the financial system. Confidence and trust between banks themselves and between banks and their customers broke down sparking an unprecedented liquidity crisis in the money markets. Spreads between official rates and interbank rates rose to previously unimagined levels. The collapse in sub-prime debt undermined the fragile and highly leveraged financial instruments of which sub-prime debt formed a relatively minor but critical component. Prices of investment grade and non-investment grade paper fell sharply. Deleveraging, reintermediation as debt is brought back onto bank balance sheets, forced selling and massive write-offs threatened to erode the capital base of the banking industry. The exposure of the monoline insurers to these credit losses introduced the prospect of further waves of losses and write-offs. Massive injections of liquidity by the major central banks have stabilised the money markets, though in the UK this was too late to prevent the collapse of a major UK bank, Northern Rock.

Central bank intervention has stabilised the money markets. Bank reliance on official funding is huge. Normality cannot be considered to be restored until this funding is unwound. The condition of the money markets is fragile. Amidst all the turmoil, the Government bond markets have been a beacon of solidity and have performed their essential role of being a safe haven in a crisis. Government bond yields have fallen sharply as they benefited from a "flight to quality" effect. In sharp contrast, the corporate bond market is in turmoil, spreads have widened for both investment and non-investment grade debt whilst distress in the corporate loans market is now so severe that anomalies where loans are valued more cheaply than lower-ranking debt are widespread. The debt markets are largely closed to new issuance. Equity markets peaked in late 2007 and have subsequently fallen, led lower by a sharp correction in the prices of financial sector stocks.

#### 7.2 Implications for the International Banking Sector

The expansionary phase of the credit bubble created a uniquely profitable environment for global banking. In the first instance, traditional banking benefited from a favourable funding background, from strong loan demand as economic growth expanded and from the operational gearing of these volume increases on the fixed cost base. Investment banking operations prospered as market-linked activities benefited from proprietary trading, debt and equity issuance and merger and acquisition activity. The private equity boom proved a particularly beneficial source



of fee and interest income for banks. Finally, and importantly, the development of the “shadow banking system” based on securitisation, leverage, disintermediation and derivatives provided a lucrative, fast growing and highly opaque platform for bank profitability.

The contractionary phase of the credit bubble has uncovered issues and pressures which will combine to create a much more difficult operating environment for banks in the future. The medium term prospect for banking is for lower profitability.

The bank funding issues at the heart of the credit crisis have been stabilised, but not cured, by massive intervention in the money markets by global central banks. These monies will have to be withdrawn as normality is restored. Given the scale of these interventions, the long term prospect must be for spreads between money market and official rates to eventually settle at higher levels than those which heretofore have prevailed. Bank balance sheets will be deleveraged. In particular, Advance/Deposit ratios will decline. On the one hand stricter lending standards will constrain loan growth and, on the other, competition between banks for deposits will intensify, pushing up the cost of retail deposits. Net interest margins will come under pressure.

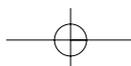
Massive write-offs of toxic treasury assets and re-intermediation, as off-balance sheet assets and structures come back onto balance sheets, have eroded bank sector capital bases. Recapitalisation of the U.S. and European bank sectors has already begun as sovereign wealth funds supply fresh capital, often on very demanding terms. A series of rights issues and secondary offerings is likely as confidence returns to the sector. However, central to the rebuilding of the capital base will be a steeply inverted yield curve as central banks keep short term money cheap and longer term money expensive.

Bank revenues will decline, firstly as deleveraging impacts loan volumes and secondly as investment banking activities suffer from lower appetites for risk on the part of bank clients and the banks themselves. Finally, the implosion of the “securitise and distribute” model will remove a high-margin and fast growing stream of revenues. Reliance on traditional banking activities will increase, hence the critical importance of the yield curve effect discussed above. Focus on cost control will significantly increase. Cost cuts will be imposed on all discretionary costs. Consolidation, particularly within regional markets where cost synergies are greatest, is likely to accelerate. The inevitable outcome of these pressures, despite the likely corrective action, is lower return on equity.

As the credit crisis migrates into the real economy and causes slowdown or recession political clamour for greater regulatory control of the banking system is likely to grow. The regulators themselves are likely to face criticism for allowing the crisis to develop in the first place. They, in turn, will increase their scrutiny of the banking system. Demands for stronger capital ratios and lower levels of leverage will increase. Banks will be required to restrain their risk appetites. Greater transparency of bank activities, products and structures will be demanded. These requirements will exacerbate the pressures on bank profitability.

Finally, the credibility of the credit rating agencies has been a major casualty of this crisis. Their assessments of risk have been demonstrated to be inadequate. Concern over their conflicts of interest in generating fees from the financial institutions and corporates whose paper they rate has grown.

There is a possibility that the rating agencies themselves will be subjected to regulatory review and that they in turn will intensify the level of scrutiny they apply in their rating processes.





### 7.3 Implications for Irish Credit Unions

A lasting consequence of the credit crisis will be to reinforce the importance of secure funding. Competition for deposits will intensify. Deleveraging implies tighter lending standards, advances growth will slow. Loans will be more difficult to source. Provisions for impairment across the banking system will increase sharply in the short term, and in a more difficult economic climate will settle at significantly higher levels than those reported previously.

The short term outlook for the credit union movement is challenging. We have described above a difficult international and domestic economic environment over the next year or two. For the credit union movement these background difficulties will be exacerbated by a domestic banking system under pressure to rebuild profitability, improve funding and improve its capital base.

For credit unions over the next two years this may mean:

1. Strain on asset quality as members and borrowers come under pressure from the difficult economy.
2. Conversely, this may lead to an increase in loan demand as borrowers attempt to maintain living standards by augmenting household income with debt. The more constrained attitudes to lending by the banking sector will also act to increase credit union lending demand.
3. Competition from the banking sector for deposits will intensify at a time when savings from the membership will be under pressure.
4. Finally, government bonds have been a significant beneficiary of the credit crisis. Government bond yields have fallen to levels which by historical standards do not appear attractive.

## SECTION 8

### THE WAY FORWARD FOR CREDIT UNION INVESTMENT POLICIES

#### 8.1 Credit union objectives

Credit unions have a unique set of investment needs. They are major institutions with very specific responsibilities to their members. Their investment priority is the preservation of capital. Secondly, they need investment income to contribute to the payment of dividends to members. They experience a unique difficulty in trying to balance the interests of their members as savers and as borrowers. This can put pressure on credit unions to attempt to generate extra investment returns at times when the interest rates they are charging on loans to members is low compared to market driven rates charged by other financial institutions.

They are, furthermore, subject to a very strict set of regulatory investment guidelines which act as a rigorous constraint on the assets which may be held for most credit unions in Ireland.

#### 8.2 Developing an investment policy

The cornerstones of a well-managed credit union investment portfolio are an investment strategy and an investment policy.

Investment strategy matches the credit union's requirements and obligations (largely the terms of its customers' deposits and shares), with the generalised characteristics of available asset classes to form a set of quantified and timed investment objectives. These may be reflected in a selected weighted portfolio of assets that is designed to best meet the credit union's requirements. This ideal or benchmark mix should be changed only infrequently, by way of strategic review.

Investment policy defines:

How individual investments will be selected?

What deviations will be permitted from strategy and why?

What providers will be used to implement elements of the investment policy?

How will investment management be governed?

Clearly, investment strategies and policies need to be formulated and agreed by the individual credit union.

Investment objectives for credit unions will include a return objective, an income objective and should also include a risk objective. The return objective in most cases will have to be a modest target, not much above the return that is available at any time on very high quality (government) short term debt and medium term debt, reflecting the importance of asset security and liquidity.

This is because investments that are capable of providing enhanced returns might disappoint, thereby eating into the basic return. When specifying the return and risk objectives, the credit union will work out fully what level of return is the minimum acceptable, and over what time periods it is required. Assets with enhanced return opportunities (and risk) should then be held only in the proportion that will still leave sufficient overall investment income from the entire portfolio.

If the overall return target is modest, the income target is likely to make up a large element of this return.



### 8.3 Investment Checklist

Our analysis of credit union requirements and objectives and of asset characteristics leads us to the following categorisation of the assets typically employed by credit unions.

#### 1. Dominant Assets: Low Return but Low Risk

- Short dated notes issued by Euro governments.
- Cash deposits.
- Government bonds – short-dated.

The key issues here are maturity (in term of deposit) and in the case of deposits the creditworthiness of the deposit taking institution.

#### 2. Subsidiary Assets: Moderate Return with Moderate Risk

- Corporate bonds.
- Longer dated bonds.
- Structured products with capital guaranteed.

The key issues here are maturity, liquidity, creditworthiness of the issuer and guarantor of capital.

#### 3. Subsidiary Assets: High Return with High Risk

- Equities.
- Structured Products/Guaranteed Trackers.
- Collective Investment Schemes.

The key issues here are liquidity and management costs. For equities, the qualities of the company and share price volatility are relevant. The nature of the underlying investments is critical for collective investment schemes. For structured products the nature of the guarantee and the nature of the participation are important.

### Considerations Applying to Investment Products

#### Money Market Funds

Before investing the credit union should be sure to understand the discretion allowed to the managers to add value. They should understand especially the characteristics of all permitted securities and the constraints on their use and should monitor compliance with these guidelines strictly.

#### Structured Deposits/Trackers

Credit unions should insist that managers are clear and transparent about all charges and fees taken from the product. These include the size of margin taken by providers of underlying instruments in the manufacture of the product, and commissions where the product is sold by another party.

To make a good investment decision, however, credit unions need to be able to evaluate the probability of alternative net returns from these products. This involves some complex forecasting and computation of probabilities. Key risks that need to be addressed, however, are:

- Exactly what is guaranteed (capital is not always)?
- Under what circumstances does the product promise other returns and how likely are they?
- How much can be lost under the terms of the product and under what circumstances?
- Can funds be accessed during the life of the product?
- What company is making each promise and what is their credit standing?

Credit unions must be vigilant about two key differences between structured and ordinary deposits:

- The issuer of the deposit may not be the provider of the product. The entire product can be guaranteed by one party, or it can be a non-guaranteed structure which itself invests in guaranteed instruments. The investor needs to be sure who is guaranteeing the capital, and who is guaranteeing the return and to be aware of the credit ratings of each and of the instruments.
- The instrument is, in all likelihood, less liquid than a bank term deposit of equal maturity. While bank term deposits are fixed contracts, they usually have break clauses that allow early repayment without a penal cost. Structured deposits can have very restrictive terms for early withdrawal, up to and including absolutely no possible early withdrawal.

## Equity and Bond Funds

Before investing in such funds, the credit union should be satisfied that they understand: the objective of the fund; the diversification, spread and quality of the underlying equity or bond portfolio; whether the fund is actively or passively managed and whether the extra risk and cost of active management is justified in terms of higher expected return.

### 8.4 Expertise

The regulator has made it clear that credit unions need access to investment expertise. Ideally, such expertise could be developed, within the company, as it might in some of the larger unions. For most, however, they will need to access appropriate, independent expertise elsewhere while at the same time ensuring that the management and directors have sufficient grasp of the investment fundamentals to govern the process effectively. The requirement for personnel at all levels of the financial sector to increase their understanding of the investment process and investment products is a key theme throughout the financial sector, both at home and abroad. In seeking to improve investment knowledge and skills, credit unions are engaging in a process that is common to all financial institutions.

#### **Important Note**

*This publication is designed to provide information regarding the Irish Credit Union Movement. It is a discussion document and it is intended to be used in an educational and training context. It does not purport to be comprehensive or to render legal advice. No responsibility can be accepted for loss occasioned to any person acting or refraining from acting as a result of any statement in the publication.*



### FRANK O'BRIEN

Frank O'Brien has over forty years' experience of investment research and fund management as an investment analyst, fund manager and chief investment officer.

Frank is a Certified Accountant. He was Chairman of ACCA Ireland's Financial Services Network, 1998-2000, and President ACCA Ireland in 2004/5. He is a founding member and a former Chairman of the Society of Investment Analysts in Ireland.

Under the Investment Faculty Ireland brand, together with Brian O'Loughlin, Frank delivers specialist investment training, produces customised investment research and co-wrote "Fundamentals of Investment – An Irish Perspective", Gill & MacMillan, 2006.

During 2002/3 Frank wrote, under a commission from the Irish Association of Pension Funds, a series of three booklets on investment for pension fund trustees.

### BRIAN O'LOUGHLIN

Brian O'Loughlin has over 25 years experience of the investment management industry and has gained extensive knowledge of both the securities and investment management aspects of the industry in senior positions with Irish Life Investment Managers, NCB Stockbrokers and ABN Amro Stockbrokers.

Brian is an Investment practitioner and his current activities encompass investment education and training. In recent years he has lectured on several finance programmes at the Centre for Executive Education at Dublin City University, and at the Irish Management Institute.

Together with Frank O'Brien he set up Investment Faculty Ireland in 2002 to design and deliver specialist investment training programmes. In 2006 he co-authored 'The Fundamentals of Investment – An Irish Perspective', Gill & Macmillan, 2006 with Frank O'Brien.

### RONAN SMITH

Ronan is an independent consultant on investment for investing institutions and managers. He has over 25 years' experience in investment management, chiefly in leading positions with Bank of Ireland Asset Management where he pioneered the use of passive management and in specialist currency management. He also develops and delivers investment training programs with IFI.

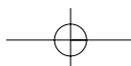
Ronan is a past chairman of the Society of Investment Analysts in Ireland (SIAI). He was a co-founder and program board member of the M.Sc. in Investment and Treasury in Dublin City University.

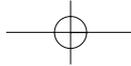
Ronan was Ireland's representative on the European Investment Performance Council, the body which represented Europe's perspective in the development and implementation of the Global Investment Performance Standards which are now the accepted standards for the fair and accurate presentation of investment track records.

He also served for three years as a council member of the Irish Association of Pension Funds.

### AIDAN CLIFFORD, ACCA IRELAND

Aidan works full time for ACCA as Advisory Services Manager, providing advice to accountants on technical auditing, accounting, ethical and investment business issues. He also lectures extensively for ACCA on auditing and accounting to qualified members and students both in Ireland and overseas. Aidan formerly worked as a Compliance Officer for ACCA, monitoring the compliance by professional accounting firms with auditing and professional standards.





# INVESTMENT FACULTY IRELAND



FRANK O'BRIEN  
+353 1 231 4600  
E: [fobinvest@eircom.net](mailto:fobinvest@eircom.net)

BRIAN O'LOUGHLIN  
+353 87 267 5015  
E: [blfm@indigo.ie](mailto:blfm@indigo.ie)

RONAN SMITH  
+353 86 385 2560  
E: [rs@ronansmith.com](mailto:rs@ronansmith.com)

INVESTMENT FACULTY IRELAND LIMITED  
Guardian House  
12 Priors Hall  
Stillorgan Road  
Co. Dublin

