

Report of the Working Party on Communicating Investment Risk

June 2011

This is a discussion paper produced by a Working Party of the Society of Actuaries in Ireland. The purpose of the paper is to provoke and contribute to an informed debate that will enhance the profession's consideration of "Communicating Investment Risk" in professional practice. It is intended to stand on its own and be freely interpreted. As such, it is not guidance. Ultimately, it is the Society's Code of Professional Conduct and Actuarial Standards of Practice, together with statutory and regulatory requirements, that govern the professional responsibilities of actuaries. The Working Party believes that expanded discussion of the concepts and suggestions offered in this paper will benefit the profession and will assist actuaries in applying the Code and Standards to their individual situations.

Table of Contents

керс	ort of the working Party on Communicating investment Risk	
1	Executive Summary	3
2	Current Investment Risk Communication Methods	6
3	European Developments	8
4	Disclosure Regimes by Country	17
5	Review of the Consumer Protection Code	27
6	Moneymate Fund Ratings Methodology	29
7	Calibration of Risk Levels	31
8	Conclusion and Proposed key Investment Template	34
Appe	endix 1: CESR Key Investor Information Template	37
Appe	endix 2: Synthetic Risk and Reward Indicator – Volatility Formula	40
Appe	endix 3: Example Financiële Bijsluiter	41
Appe	endix 4: Table of Volatility and CESR risk class for funds tested	44
Appe	endix 5: Proposed "Key Investment Templates"	45
Appe	endix 6: Working Party Membership	50

1 Executive Summary

As the range and complexity of products and fund types increase, consumers struggle to keep up with and interpret the corresponding risks. For some time the financial services industry has searched for effective ways to communicate investment risk. This has been driven by the need to ensure that clients choose products that suit their requirements and also by the increasing force of regulation both at EU and local level. This has led to a divergence of approaches in communicating investment risk and, as a result, considerable debate on their effectiveness and comparability. There is a particular concern that the measures being used may not be helpful to consumers. The holy grail of communicating risk effectively remains elusive.

This paper was produced by a Working Party of the Society of Actuaries in Ireland (the "Society"). The purpose of the paper is as follows:

- To survey the existing methods of communicating investment risk to customers both in an Irish and international context.
- To summarise the latest regulatory developments at an Irish and international level for communicating investment risks to consumers.
- Using some of the methodologies proposed, to carry out our own analysis of the effectiveness of these methods for Irish life assurance unit linked funds.
- Having regard to these findings, to propose a quantitative and qualitative methodology for a consistent measure of investment risk.
- To consider how this links in with existing disclosure and risk measures.
- To generate debate on what a new effective risk communication methodology may look like.

Overall the Working Party has sought to identify a set of consistent principles that companies could apply for the purposes of risk-rating their investment funds on a forward-looking basis. We have not set out detailed rules or regulations.

The following are out of scope of this paper:

- Determination of an investor's risk appetite;
- Aspects of disclosure on investment products beyond disclosure of investment risk;
- Non-investment products (incl. annuities).

Grail hunters will be disappointed as we are not claiming to have the ultimate solution. However, we hope that this paper will advance the debate somewhat.

1.1 Recommendations

The Working Party has considered the Committee of European Securities Regulators¹ (CESR) work and other disclosure methodologies used in various territories throughout the world. In particular, the Working Party agrees that the models set out by the CESR and Authoriteit Financiele Markten (AFM), of the Netherlands, are good foundations for coming up with a regime for communicating investment risks to policyholders.

The Working Party believes that the current disclosure methodology could be supplemented or replaced by the following:

- For each fund a two page document describing the main features of the fund e.g. terms, charges, risks and potential reward:
- At product level, a two page document describing the product features, terms, charges, risks and potential rewards. If the product cannot be explained in two pages, product providers need to determine carefully how the product is sold and what is the level of sophistication of the investors;
- Sample charges expressed in monetary form;
- Intermediary remuneration expressed in monetary form:
- The use of the CESR risk rating methodology for mainstream funds but where fund combinations are used the combined risk rating of the funds should be used;
- Wording around each of the risk levels and wording for risks that are not easily quantifiable (e.g. liquidity and concentration);
- Subtitling the name of funds with a short description of the risk level.
- A warning to potential purchasers that if they do not understand the risk and reward profile of the fund, they should not purchase it;
- The use of stochastic analysis to determine a generic range of outcomes and benefits. This is particularly the case for more complex and/or structured products. A professional body could develop a standard stochastic model and tables to be used for combinations of funds or more complex funds. For clarity it is not intended that the models produced would be complex and mathematically pure. The models need to be relatively simple and be sufficient to demonstrate the uncertainty of returns;
- For funds or products that contain concentration risk (e.g. limited counterparties) or liquidity risk, consideration should be given to increasing the risk rating:
- Each company should have a risk rating committee to review the ratings of funds and determine whether they should be increased or reduced. In the event that the risk rating committee changes the risk rating of the fund, it should communicate this to policyholders and explain why the rating has changed. This could include a sustained change in volatility of the fund (according to CESR principles), a downgrade in counterparty, a change in the liquidity position of the fund, or a fall in the fund value below a certain level;

Now the European Securities and Markets Authority (ESMA)

• It could be argued that the extent and level of communication should be proportionate to the initial risk rating of the fund. For example, a fund with a risk rating of 7 (high risk) may require less extensive communication that a fund rated 1 (low risk). The downgrading of a counterparty of a low risk cash fund may trigger such communication, whereas the fall in value of a technology fund may not trigger a communication.

Overall the Working Party subscribes to the principle that all product providers must demonstrate that they understand in detail the risk and reward profile of funds being offered to the public. In particular, this is the case for more exotic funds.

The Working Party would like to thank those insurers who provided us with the fund data required for our research.

As always, all opinions are our own rather than our employers'. Responsibility for error rests with the Chairman.

2 Current Investment Risk Communication Methods

Current investment risk communication methods include:

- Description of Investment Risk,
- · Historic quantitative measures,
- Risk Ratings.

2.1 Description of Investment Risk

Description of Investment Risk is a traditional and widely used method. It includes providing a list or description of the various risks involved in the particular investment. This ranges from a detailed description of all possible risks (credit, market, liquidity etc.) to a summary of key risks. It can also vary by the depth of assumed prior knowledge, e.g. only describing risks specific to the technology sector rather than equity market risk for a technology fund. Examples of where this method is used include:

- Product brochures and Fund prospectuses,
- The National Consumer Agency's consumer education²,
- Risk warnings required by the Consumer Protection Code.

2.2 Historic quantitative measures

Past performance has been the typical historic quantitative measure, with average return (over a number of time periods) normally being quoted. Risk is only implied. In recent years this has been enhanced by including volatility to reflect the risk/variability of achieving those returns. Other measures often used include the Sharpe ratio, Sortino Ratio, Maximum Drawdown etc.

2.3 Risk ratings

Within the Irish Insurance industry, most providers currently provide a volatility or risk rating for their funds, albeit using different approaches. For example;

Rating	Explanation
Volatility/Risk Rating: 1 to 7	Volatility
Potential Risk/Return Profile: Low / Moderate / Medium /	Return Risk and Capital Risk
High / Higher	
Overall Risk Rating: 1 to 7	Volatility/Diversification

These ratings may be based on a quantitative assessment only or may also include other qualitative factors. Only one out of seven companies reviewed attempts to give an explicit explanation of the relative implications (e.g. minimum return of 100% or may get back less than the investment or may lose all of the investment).

There are also independent investment research companies (e.g. MoneyMate, Morningstar) that provide fund ratings.

² http://www.itsyourmoney.ie/iym/understandingrisk

2.4 Issues with current methods

The level and quality of investment risk communication has improved considerably over the last number of years. However, the following issues still apply to the methods outlined above:

Consistency

The types of risk described vary by provider. The methodology used in determining the risk ratings also vary, e.g. different rating scales, use of volatility and/or other factors, different bases of calculating volatility such as the time period over which volatility is measured or the defined bands of volatility assigned to different risk levels. Ratings may also include subjective elements that may result in similar funds being described or rated differently.

Complexity/Target audience

Some documents contain a significant amount of information that could be perceived as too complicated by the customer. In some cases the level of complexity can be justified on the basis that the target audience may be financial advisors, however this may indicate a lack of customer communication being available. It is therefore a balancing act to provide information at a suitable level for less financially aware customers while ensuring sufficient information is available for more astute customers/advisors to make their own assessment.

Quantitative vs. Qualitative

Even though quantitative assessments enable a more consistent approach, they may not reflect all relevant factors that will influence the risk, e.g. quality of/reliance on the asset manager, characteristics of the asset class (e.g. low historic volatility of property funds may have resulted in a low risk rating in the past).

Relative risk rating

Current risk ratings only give a relative rating. They don't quantify the impact of the risk on potential financial loss (e.g. probabilities of loss or range of potential outcomes).

3 European Developments

Recent European Developments include the:

- UCITS IV Directive: which aims to update the regulatory framework applicable to European investment funds or Undertakings for Collective Investment in Transferable Securities (UCITS);
- Packaged Retail Investment Products (PRIPs) initiative: which aims to create a consistent approach and regulatory environment for all packaged retail investment products with respect to the treatment of consumers and consumer information;
- A paper entitled "Developing a risk rating methodology" that was prepared by the Association of British Insurers (ABI) and Investment Management Association in the UK.

3.1 UCITS IV Directive and CESR guidance

The UCITS IV Directive, which was adopted in 2009, aims to update the regulatory framework applicable to European investment funds or Undertakings for Collective Investment in Transferable Securities (UCITS) – which represent a market of circa €5 trillion in Europe. The scope includes improving investor information by creating a standardised summary information document.

Under the Lamfalussy process the Committee of European Securities Regulators (CESR)— now the European Securities and Markets Authority (ESMA) - has issued Level 2 implementing measures and Level 3 requirements on various aspects of the Directive. One of the key aspects the Working Party considered is the guidance around Key Investor Documentation (KID):

- CESR / 10-673: CESR's guidelines on the methodology for the calculation of the synthetic risk and reward indicator in the Key Investor Information Document;
- CESR / 10-794: Template for the KID.

The deadline for implementation of this Directive is 1 July 2011.

3.1.1 Overview of the Key Investor Document (KID) Template

The KID template is a two page document that sets out the key investor information for the fund in question. A template is provided as part of the Directive (CESR / 10 - 794) detailing what must be included. A copy of this is shown in Appendix 1.

The KID incorporates the following aspects:

1. Objectives and Investment Policy

A plain language description of the objectives and policy of the UCITS to include the following essential features:

- Main categories of financial instruments in which the fund is invested.
- Statement that the investor may redeem units on demand and how frequently units are dealt in.
- Any particular targets in relation to any industrial, geographic and other market sectors.

- Whether discretionary choices regarding particular investments are allowed and whether the fund refers to a benchmark
- Statement of whether any income arising is distributed or reinvested.
- Other relevant information must be included (e.g. how use of hedging/ arbitrage / leverage techniques may determine the fund's performance).

2. Risk and Reward Profile

A horizontal thermometer is presented which is to represent the risk indicator of the fund in question. See Section 3.1.2 below. In addition, a narrative explanation of the indicator is required which should refer to the following limitations:

- Historical data may not be a reliable indicator for the future
- The risk category shown may move over time
- Why the fund is in its specific category and that the lowest category does not mean the fund is risk free
- Details of nature, timing and extent of any capital guarantee or protection
- Narrative on credit, liquidity, counterparty and operational risks are also required to be captured in this section

3. Charges for the Fund

In this section, the charges of running the fund, including marketing and distribution costs, are captured. A table is presented which shows the charges taken in percentage terms. This includes one-off charges (i.e. entry and exit charges) and also ongoing charges. Any performance fees are set out also.

4. Past Performance

Under the past performance heading a graph is presented which shows the performance (in % terms) over the preceding ten years. In this section, there is a requirement to warn again about the graph's limited value in providing a guide to future performance. The currency in which the performance has been calculated needs to be stated as well as disclosing whether charges have been included or excluded.

5. Practical Information

The KID includes practical information such as where and how to obtain further information about the fund (e.g. prospectus, reports, accounts and latest unit prices).

3.1.2 Synthetic Risk & Reward Indicator (SRRI)

Under the "Risk and Reward Profile" section of the KID, a horizontal thermometer, Figure 1, depicts the Synthetic Risk and Reward Indicator (SRRI) of the fund in question.

Figure 1								
Lower risk Higher risk								
Typically lower rewards					Typically hig	her rewards		
1	2	3	4	5	6	7		

CESR found a strong preference from external stakeholders for a synthetic indicator in the KID to allow them to compare funds and assess risk; they indicated that investors seemed to be more confident in their ability to compare funds and assess their level of risk when they are provided with an indicator on a numerical scale.

In deriving an approach to providing a synthetic indicator that would be meaningful, CESR aimed to satisfy the following criteria and objectives:

- Provide investors with a meaningful indication of the overall risk and reward profile of the UCITS;
- Leave no room for manipulation;
- Enable easy and cost-effective implementation by UCITS provider:
- Be easily understood by auditors, advisors and distributors;
- Enable easy and effective supervision by regulators; and
- Achieve an adequate degree of stability in the risk classification process with respect to normal trends and fluctuations of financial markets.

3.1.2.1 General Methodology

The general methodology for calculation of the SRRI is as follows:

- 1. The SRRI is based on the volatility of the fund. The formula is set out in Appendix 2.
- 2. Volatility shall be estimated using the weekly past returns of the fund, or if not available, the monthly returns.
- 3. The returns used in calculating the volatility shall be gathered from a sample period covering the last five years of the life of the fund. These shall be measured taking into account the relevant earnings or dividend payoffs.
- 4. The volatility of the fund is assigned into risk classes 1-7 as shown below. Therefore, for example, if a fund has volatility calculated between 0.5% and 2%, it falls into Risk Class 2 and is indicated as such on the horizontal thermometer above.

Risk Class	Volatility Intervals			
	equal or above	Less than		
1	0%	0.5%		
2	0.5%	2%		
3	2%	5%		
4	5%	10%		
5	10%	15%		
6	15%	25%		
7	25%			

In formulating the table above, CESR took into account the results of two consultations with external stakeholders, several empirical studies by regulators, industry representatives and other external contributors and independent expert advice concerning the potential extent and frequency of funds migrating across the risk classes.

In general, any material change to the risk and reward profile of the UCITS shall be reflected by a prompt revision of the KID. The SRRI shall be revised if the volatility of the UCITS has fallen outside the bucket corresponding to its previous risk category on each weekly or monthly data reference point over the preceding four months. If the volatility of the UCITS has moved so as to correspond to more than one bucket during the four month period, the UCITS shall be attributed the new risk class corresponding to the bucket which its relevant volatility has matched for the majority of the weekly or monthly data reference point during the preceding four months. CESR wanted to prevent a situation where frequent changes would be made to the risk grading in the KID where the volatility of the fund is stable over time but moves around the threshold between two risk categories. In addition, the SRRI shall always be revised when changes to the risk and reward section of the KID are as a result of a decision by the management company regarding the investment policy or strategy of the fund.

In Sections 3.1.2.2 to 3.1.2.6 below we note where slightly different approaches to the general methodology above should be adopted for specific situations or types of funds.

3.1.2.2 Market funds with insufficient performance history

Where a full five year history of returns is unavailable, which is typically for new funds or funds that have been recently revised, the approach that should be adopted to deriving the SRRI is to take the available history that is to hand and then identify the fund's representative portfolio model, target asset mix or benchmark. The SRRI is computed using the combination of the actual history that is available and the representative portfolio model for the five year period.

3.1.2.3 Absolute Return Funds

Absolute Return Funds are defined in CESR / 10-673 as "UCITS that are managed according to investment policies or strategies which envisage a variable allocation of the portfolio of the fund across asset classes, under the constraint of a predetermined risk limit".

The SRRI is computed for Absolute Return Funds as the maximum of the SRRI calculated in 3.1.2.1 above and the volatility that is consistent with the risk limit adopted by the fund (generally expressed in terms of volatility or VaR (Value at Risk) measure).

3.1.2.4 Total Return Funds

Total Return Funds are defined in CESR / 10-673 as "UCITS that are managed according to investment policies and/ or strategies that pursue certain reward objectives by participating, through flexible investment in financial asset classes (e.g. in both equity and fixed-income markets)".

The range of Total Return Funds is broad and includes UCITS that provide some sort of capital protection (e.g. Constant Proportion Portfolio Insurance (CPPI) or Variable Proportion Portfolio Insurance (VPPI)). The SRRI is computed as the maximum of:

- The SRRI calculated in 3.1.2.1 above;
- The annualised volatility of the returns of the pro-forma asset mix that is consistent with the reference asset allocation of the fund at the time of the computation;
- The volatility that is consistent with the risk limit adopted by the fund.

The portfolio allocation can change rapidly over time, following market dynamics or a manager's view and strategies. As a consequence, the SRRI must be calculated taking into account the maximum volatility from past history, the most recent composition of the fund and the risk limits within which these funds are managed.

3.1.2.5 Life Cycle Funds

Life Cycle Funds are defined in CESR / 10-673 as "UCITS that are managed according to investment policies or strategies which imply a shifting over time of their portfolio allocation from equity to fixed-income assets, according to some pre-determined rules as a target maturity date approaches".

To calculate the SRRI:

- Where a full returns history (i.e. over five years) is available and the fund has not changed its target asset mix over this period, the SRRI is calculated as in Section 3.1.2.1 above.
- Where a full returns history is not available (which is often the case as the portfolio composition changes substantially over time), the approach is to:
 - Take the relevant fund history
 - o Identify a representative benchmark, portfolio model or asset mix
 - o The approach then follows Section 3.1.2.1 above.

3.1.2.6 Structured Funds

Structured Funds are defined in CESR / 10-673 as "UCIT which provide investors, at certain predetermined dates, with algorithm-based payoffs that are linked to the performance or the realisation of price changes or other conditions, of financial assets, indices or reference portfolios".

Structured funds can sometimes be assisted by a guarantee, which ensures investors can recover all, or part of, the capital initially invested in the fund. These capital guarantees can be unconditional (some level of protection is always guaranteed) or conditional (the guarantee can be reduced) or fully disappear (knockout feature), according to some contingency. This contingency may be an event, for instance a decrease in the value of a reference index.

Given both the asymmetry of return distributions and the changing nature of its risk exposures, neither the historical volatility of a structured fund nor the volatility associated with its current asset mix are appropriate as an SRRI.

The requirement is that the risk profile of the structured funds must be evaluated by looking at the potential losses that an investment in the fund may incur at maturity under different conditions. For these funds, the SRRI is to be calculated by considering the annualised volatility corresponding to the 99% VAR at maturity.

3.1.3 General Comments

The Working Party agrees that:

- A short covering document which explains the basics of the product in graphical terms is very beneficial:
- The use of volatility appears to be a good measure for determining a risk rating for mainstream funds;
- The charging structure should be explained in simple terms.

However there are a number of aspects where the Working Party believes that these models could be improved as follows:

- The emphasis on past performance in such a short document may be unbalanced;
- There is no wording associated with the different risk ratings;
- The potential benefits and variances in return are not explicitly set out;
- Charges should be expressed in monetary terms;
- There should be a process for determining communication to policyholders if the fund moves outside its risk rating boundary;
- There are additional complexities where an investor chooses more than one fund. Do they receive multiple templates? What about the effects of diversification? What if there is a dynamic investment strategy (e.g. lifestyling);
- For more exotic products such as property funds, absolute return funds, tracker bonds etc. the document needs to address issues which are difficult to quantify (e.g. liquidity, concentration);
- For life assurance products, there is additional complexity in that policyholders may choose a variety of funds and may be using the product to provide future benefits (e.g. pension) for which they need sufficient information to determine what the outcomes could be.

3.2 Analysis: ABI and Investment Management Association

In 2010, the ABI and Investment Management Association in the UK prepared a thorough research paper entitled "Developing a risk rating methodology"³. The main conclusions of this paper were that:

Volatility is a good measure to develop a risk rating scale;

³ http://www.abi.org.uk/Publications/ABI Publications Developing a Risk Rating Methodology ecf.aspx

- A minimum of 10 years data is needed to calculate the volatility to try to minimize "jumps" between rating categories;
- The volatility should be based on fund benchmarks rather than actual funds themselves;
- For structured products with capital guarantees, the rating should be higher than government bonds but lower than the risk rating of the asset class that forms the basis of the call option:
- For enhanced income products, the risk rating should be the highest possible;
- For absolute return funds, the rating should be based on the asset class on which the funds are focused and allow for leverage etc.;
- For property and hedge funds, the default rating should be the highest risk rating;
- For multi-asset funds the risk rating should be based on the highest risk asset that the fund is permitted to invest in;
- A committee should be set up to decide on fund ratings, methodologies etc.

The ABI research paper was not keen on CESR proposed measures such as target VAR for the more exotic funds as it doubted whether fund managers would keep within their VAR etc. The ABI also mentioned that the CESR measures would lead to excessive bunching within certain risk categories.

The Working Party believes that the ABI research paper is excellent. However, the conclusions regarding the more exotic funds are somewhat vague and may be excessively prudent (especially given the variety of funds and the fact that they may become more mainstream). The Working Party also believes that, where possible, fund specific data should be used to calculate the volatilities as investment managers themselves may be a source of additional volatility.

3.3 Packaged Retail Investment Products initiative

The European Commission Packaged Retail Investment Products (PRIPs) initiative aims to create a consistent approach and regulatory environment for all packaged retail investment products with respect to the treatment of consumers and consumer information. It is expected that legislative changes will be required in order to implement the requirements. No timeframe has been indicated for when new legislation might be enacted. The most recent activity of the Commission was to carry out a consultation between November 2010 and January 2011.

The main issues currently being addressed are:

- Scope of the initiative;
- Rules on pre-contractual disclosures;
- Rules on selling practices.

3.3.1 Scope of the initiative

The scope of the initiative will determine the products that will be covered by the new legislation. Criteria suggested by the Commission in 2009 were that a PRIP should:

involve an element of packaging;

- be capable of meeting an investor need for capital accumulation; and
- create exposure to investment risk for the investor.

The November 2010 consultation document suggested a definition based on economic criteria: "A PRIP is a product where the amount payable to the investor is exposed to fluctuations in the market value of assets or payouts from assets, through a combination or wrapping of those assets, or other mechanisms than a direct holding."

Clearly, this definition would cover unit-linked and index-linked insurance-based investment products as well as other insurance products where surrender values directly or indirectly depend to some extent on market fluctuations. No decision has yet been made regarding pensions business.

3.3.2 Rules on pre-contractual disclosures

The pre-contractual disclosure benchmark identified by the Commission is the key investor information document (KID) which is part of the requirements of the new UCITS Directive (Directive 2009/65/EC). A template of the KID developed by the CESR to meet the requirements of the new UCITS Directive is set out in Appendix 1. Further details of the CESR KID are set out in Section 3.1.1.

Some elements of disclosure may need to be applied for all PRIPs, with other elements being tailored to particular product types.

The recent consultation on the PRIPs initiative listed some potential requirements to be covered within the KID, which would be detailed in the Level I legislation. They required that a KID must;

- be 'fair, clear and not misleading'.
- be short 2 pages where possible, exceptions to be outlined in detailed implementing measures.
- be written in plain language suited to the target retail investor.
- be presented in an appealing and consumer-friendly manner.
- focus on key information, as necessary for the average investor to make an informed decision on the PRIP in question.
- include, as relevant for the PRIP, information on:
 - the identification of product and who has produced it;
 - o what the product is and how it works the basic investment proposition;
 - the nature / limits of any features provided, including the nature / limits of any guarantees offered:
 - o the broad 'risk / reward' proposition represented by the product;
 - the costs of the product;
 - the performance of the product (where it has a track record) or information about possible performance scenarios (where relevant);
 - practical information (such as information on compensation schemes, on finding the value of the investment, on subscribing to or redeeming an investment, on finding further information, etc).
- be provided to retail clients using a durable medium that is appropriate to the context / manner of the proposed sale of the PRIP;
- be kept 'up to date' and accurate, so that investor can rely on it without reference to other information.

The Working Party considers that the UCITS KID template provides a good basis for enhancing disclosure on insurance-based investment products and for introducing consistency to non-insurance products. Challenges will undoubtedly arise when tailoring the information for specific products, however further guidance in relation to this area is expected to be provided within the Level II implementing measures.

Given the direction the European Commission is taking with regard to PRIPs the Working Party have recommended a similar format for communicating investment risk to consumers in Section 8.

3.3.3 Rules on selling practices

The Selling Practices benchmark identified by the Commission is the conduct of business and conflicts of interest requirements in the Markets in Financial Instruments Directive (Directive 2004/39/EC). This addresses and discloses conflicts of interest and inducements, appropriateness and suitability.

3.3.4 Responses to the consultation

The Commission received 140 responses to the consultation document, which was released in November 2010. The Working Party reviewed the responses submitted by the Association of British Insurers (ABI), the Association of Mutual Insurers and Insurance Cooperatives in Europe (AMICE) and the CEA (the European (re)insurance federation). There was a consensus among these responses in relation to excluding all types of pension products from the PRIPs scope and also with regard to the need for separate disclosure at an insurance product level and at individual fund level.

It is also worth noting that in March 2011 a Financial Times article⁴ⁱ referred to the possibility of life insurance contracts being excluded from the PRIPs initiative. At the date of writing, the Commission has released no official follow-up to the consultation.

3.3.5 Further work

There are several pieces of work being carried out by the Commission to support the PRIPs initiative. They include a study seeking to assess the quality of advice being offered (ongoing) and a study seeking behavioral economics insights on the different factors relevant to investor decision-making, which was published in 2010. Up-to-date information in relation to the PRIPs initiative may be found on the European Commission's website at http://ec.europa.eu/internal_market/finservices-retail/investment_products_en.htm.

⁴ "Brussels warns PRIPs will need revisiting" – 20th March 2011 - http://on.ft.com/PripsMarch2011 4

4 Disclosure Regimes by Country

In this section the Working Party considers the disclosure of investment risk in the following countries;

- Ireland,
- The UK.
- The Netherlands,
- Italy,
- Australia,
- Canada.

4.1 Ireland

The disclosure regime in Ireland for life assurance products is set out in Life Assurance (Provision of Information) Regulations, 2001. These regulations are supplemented by the actuarial guidance issued by the Society, ASP LA-8⁵ and ASP LA-9⁶.

There is a requirement to provide a prospective policyholder with a disclosure notice prior to them taking out a policy. The disclosure notice covers the following areas:

• Information about the policy;

- 1. Make sure the policy meets your needs! This includes information on the purpose of the policy and the policy type.
- 2. What happens if you want to cash in the policy early or stop paying premiums?
- 3. What are the projected benefits under the policy?

 The projected benefits are calculated deterministically using default future rates of return of 6% per annum and 8% per annum (lower rates can be used). The projection table projects premiums, investment return, expenses, cost of life assurance benefits and taxation (where applicable). For pension products, it also projects future pensions and cash benefits in real terms (i.e. after allowing for inflation).
- 4. What intermediary/sales remuneration is payable?
- 5. Are returns guaranteed and can the premium be reviewed?
- 6. Can the policy be cancelled or amended by the insurer?
- 7. Information on taxation issues.
- 8. Additional information in relation to your policy;
 - What are the benefits and options under this plan?
 - What is the term of the plan?
 - Are there any circumstances under which the plan may be ended?
 - How are the payments invested?
 - Is there an opportunity to change your mind?
 - Law applicable to your plan.
 - What to do if you are not happy or have any questions?

Information on service fee;

⁵ ASP LA-8 Life assurance product information - https://web.actuaries.ie/standards/asp/asp-la-8

⁶ ASP LA-9 Life assurance remuneration information - https://web.actuaries.ie/standards/asp/asp-la-9

- Information about the insurer or insurance intermediary or sales employee;
- Information to be supplied to the policyholder during the term of the insurance contract.

4.1.1 General comments

There is no explicit presentation of risk within the disclosure notice. Many Irish life assurance firms have their own methodologies for presenting individual fund risks (i.e. risk ratings etc.) but there is no overall standard and no presentation of the long term risks of a product.

The Irish disclosure system is very useful to the practitioner as it provides:

- Comprehensive coverage of product details, policyholder commitments and risks (in written form);
- Easy comparison between products, charges and surrender values;
- Clear presentation of remuneration;
- Presentation of expected benefits using various assumptions.

However for the policyholder and those not working in the industry, the documents can be long and difficult to understand. Also, there tends to be an impression of the future returns may lie within a certain range as there are two growth rates and annuity rates tend to be fixed (for pension benefits). In addition, there is no similar disclosure for non-life assurance products with the result that it is difficult to compare products across markets.

There have been several proposals to revise these documents over the years (see Section 5, Review of the Consumer Protection Code).

The Consumer Protection Code introduced the use of consistent disclosure methodologies across all tracker bonds (regardless of form). This has been useful and may provide a model going forward.

4.2 The UK

In the UK investment risk is covered in the Key Features and Simplified Prospectus documents as well as in the key features (usually personalised) illustrations. The principles based requirements are set out in the FSA Handbook, Conduct of Business Sourcebook (COBS) 13 (Preparing Product Information)⁷. There are no specific requirements to provide a numerical quantification of risk. However, the contents of a key features document must address key aspects, one of which is risk. The requirement is that the Key Features documentation (KFD) must address "the material risks associated with the product, including a description of the factors that may have an adverse effect on performance or are material to the decision to invest".

The FSA has sought to improve the quality of the communication through the publication of the following report: 'Good and Poor practices in Key Features Documents' (September 2007)⁸. The key observations and findings from this report were:

http://fsahandbook.info/FSA/html/handbook/COBS/13

http://www.fsa.gov.uk/pubs/other/key_features.pdf

- A sample of 200 key features documents were selected as part of the review. Only a small
 proportion met the COBS requirements and complied with FSA Principle 7 "A firm must pay due
 regard to the information needs of its clients, and communicate information to them in a way which
 is clear, fair and not misleading".
- The main areas of concern identified were explanations of risk, charges and more general
 information about the product itself and its aims. Jargon was also a significant problem, and key
 information was often not prominently communicated. It was difficult even to grasp the type of
 consumer for whom a particular product might be suitable.
- Many of the KFDs were too long and contained too much information. They may have been seen
 as being intended to protect the provider rather than help inform the consumer. Understanding
 does not increase just because more information is provided. There are clear customer preferences
 for more concise documentation.
- Additionally, few of the sample KFDs contained a clear and simple statement to the effect that the
 investments are stock-market based the implications of which most customers would understand.
 Instead the FSA found long and over-technical explanations of various investment instruments.
- Few firms provide an overall summary of the risk and reward profile of a fund in the KFD. However some firms do assist consumers by providing risk and reward categorisations in other documents supplied with KFDs (e.g. in a fund guide).

This study was followed up in 2009 with a further study 'Supplementary Annex to Good and Poor practices in Key Features Documents'. In January and February 2009 the FSA reassessed all of the documents in the worst part of the original sample and a selection of others. All showed at least some improvement with over two thirds showing significant improvements. The majority of the documents which did not make sufficient improvements were produced by asset managers.

4.3 The Netherlands

Over the last decade, regulators in the Netherlands have been working to improve disclosure of risks and returns to consumers. In 2007, the Authoriteit Financiele Markten (AFM) produced an updated basis for calculating risks and an associated disclosure document called the Financiële Bijsluiter ("FB"). It also produced a document which set out the basis for calculating risks and returns⁹.

4.3.1 Financiële Bijsluiter

An example of an FB template is shown in Appendix 3. The FB is limited to two pages and within the two pages contains the following information (mostly in graphical form):

- High level description of the product
- Name of the product and policyholder commitments (e.g. regular payments)
- What happens on early surrender
- The risks of the product
- The costs of the product

⁹ "Een Kwantitatieve Risicoindicator voor financiele producten" - http://www.afm.nl

- Sample projected values based on :
 - 4% per annum growth
 - Past performance
 - A "pessimistic" scenario (lowest 10th percentile of outcomes from a particular model).

The main risk measure used is the GUISE (Gemiddelde Ultbetaling in geval van Slechte Eventualiteiten) or "average payout in a bad scenario". The GUISE is based on the CTE90 (i.e. average of the worst outcomes below the lowest 10th percentile) outcome of the product (net of charges etc.). The GUISE level of the CTE90 outcome and the underlying guarantees of the product determine the risk level as shown in the table below.

Risk Level	GUISE level & Product guarantee		
Very Small	Full amount guaranteed		
Small	>80% guaranteed plus GUISE of 95%		
Quite Large	<80% of premium guaranteed and GUISE of 90%		
Large	GUISE between 75% and 90%		
Very Large	GUISE less than 75%		

The measurement is at the end of the term of the product if it has a fixed term. If there are no fixed terms, a prescribed period should be used.

The distribution and parameters used are prescribed by the regulator. A normal distribution is used and parameters have been drawn from historical returns¹⁰. If there is sufficient fund history (at least 20 years), the parameters based on the fund history can be used. For periods between 4 and 20 years, interpolation can be used to determine the parameters. Where possible, the CTE90 is calculated by weighted average of the lowest 1st, 5th and 10th percentiles. For products with non linear outcomes actual simulation must be undertaken.

4.4 Italy

Since 2001, various regulatory measures have been adopted in Italy which attempt to provide information on the risk attached to financial products and enable investors to make informed investment decisions. The approach is based on three pillars:

- 1. A table showing the probability scenarios of the return of the financial investment at the end of the recommended time horizon;
- 2. A synthetic indicator of the degree of risk of the financial product; and
- 3. The recommended time horizon for the investment.

The basic assumption behind this approach is that the investor chooses an investment by following a threestep process:

- 1. Choose products whose recommended time horizon matches the his/her liquidity preferences;
- 2. Compare the degree of risk of those products with his/her risk appetite; and
- 3. Choose the product with the highest potential returns of those remaining products.

¹⁰ "Triumph of the Optimists" – Dimson, Marsh and Staunton.

4.4.1 Product types

The Italian legislation identifies three types of financial structures which cover most financial products:

- 1. Risk target products, which focus on maximising return for a given level of risk;
- 2. Benchmark products, which are linked to a particular benchmark and can have either a passive or an active investment management policy; and
- 3. Return target products, which include a financial engineering feature and aim to provide a minimum level of return.

4.4.2 Pillar 1

Pillar 1 presents the costs and risk-return profile of financial products through two tables, the financial investment table and the probability table. The price paid for the product (defined as the "notional capital") is made up of the fair value of the product (or the "invested capital") plus the mark-up or costs associated with the product.

The financial investment table

The financial investment table provides details of the present value of the notional capital, fair value and mark-up elements at the product commencement date. The mark-up must make allowance for on-going costs (e.g. investment management fees) and once-off costs incurred at any point during the product's lifetime. For products which are not purely financial in nature, e.g. products containing insurance risk, the mark-up element of the table refers only to the financial investment costs.

The probability table

The probability table attaches probabilities to the various possible final payoffs at the end of the recommend time horizon. The probability distribution of the value of the invested capital at the end of the recommended time horizon can be split into four parts:

- 1. Lower than the notional capital;
- 2. Greater than or equal to the notional capital but lower than the result of investing the notional capital in the risk-free asset over the same time horizon;
- 3. Greater than the notional capital and in line with the result of investing the notional capital in the risk-free asset over the same time horizon; and
- 4. Greater than the notional capital and greater than the result of investing the notional capital in the risk-free asset over the same time horizon.

The comparison with the risk-free asset allows different financial products to be directly compared to each other. Furthermore, as the costs of investing in the risk-free asset tend to be minimal, it can be assumed that the amount invested in the risk-free asset would be equal to the notional capital, and therefore the probabilities of the above four scenarios implicitly take account of the higher costs generally charged by investment products .

The probability table shows a representative value for each of the final payoffs expected to be achieved under the four scenarios, along with the probability of occurrence of each scenario. The representative value for each scenario is taken to be the median of the final payoffs obtained from the simulation described below.

The methodology for determining the probability distribution of the final payoff is not prescribed. However companies are required to use the same method as they use for internal pricing and risk management work.

The simulation used for the value of the final payoff must comply with the principle of risk neutrality. The model used to project the invested capital should allow for all of the risk factors to which the financial

investment is exposed and the parameters should be calibrated by reference to current market data. The simulation must consider the up-front costs, amount and timing of deferred costs and any regular or once-off payments paid out to the investor.

The final value obtained from investing the notional capital in the risk-free asset over the same time horizon should also be simulated using an approach which is consistent with that used for projecting the final value of the invested capital.

4.4.3 Pillar 2

Pillar 2 provides a representation of the product's degree of risk at the commencement date and during the recommended time horizon. The degree of risk is determined using synthetic indicators that process the information contained in the Pillar 1 probability scenarios through suitable volatility measures of the potential returns. Again, the workings are based on companies' internal pricing and risk management models.

The quantitative measure chosen to represent the degree of risk is the annualised volatility of the product's daily returns. For benchmark products, further analysis is undertaken to compare the volatility of the product's returns with those of the benchmark's returns. The difference between these two volatilities is called the "delta-vol".

The quantitative results are translated into qualitative indicators for the purposes of communicating the degree of risk to investors as follows:

Risk class	Volatility Interval
Low	[0.01%, 0.49%]
Medium-Low	[0.50%, 1.59%]
Medium	[1.60%, 3.99%]
Medium-High	[4.00%, 9.99%]
High	[10.00%, 24.99%]
Very High	>=25.00%

The width of the volatility intervals is important. They must be wide enough so as to prevent oversensitivity to very small market movements, but narrow enough so that products with different risk profiles fall into different risk classes. A product will be reclassified if it remains in a different risk class or classes for more than three consecutive months. The new classification will be based on the volatility interval where the product has spent most time throughout those three months.

The delta-vol results are translated into qualitative indicators for the purposes of communicating the extent of deviation from the benchmark as follows:

Risk class	Management class				
	Passive	Limited	Intermediate	Considerable	
	Delta-vol interval	Delta-vol interval	Delta-vol interval	Delta-vol interval	
Low	[0%, 0*%]	[0*%, 0.118%]	[0.1181, 0.176%]	[0.1761%, 0.235%]	
Medium-Low	[0%, 0*%]	[0*%, 0.239%]	[0.2391%, 0.358%]	[0.3581%, 0.477%]	
Medium	[0%, 0*%]	[0*%, 0.600%]	[0.6001%, 0.900%]	[0.9001%, 1.200%]	
Medium-High	[0%, 0*%]	[0*%, 1.250%]	[1.2501%, 1.875%]	[1.8751%, 2.500%]	
High	[0%, 0*%]	[0*%, 3.125%]	[3.1251%, 4.688%]	[4.6881%, 6.249%]	
Very High	[0%, 0*%]	[0*%, 6.250%]	[6.2510%], 9.375%]	[9.3751%, 12.500%]	

0*% represents a positive value reasonably close but not equal to zero.

4.4.4 Pillar 3

Pillar 3 provides the recommended time horizon for the investment product. For return target products and products that are backed by a financial guarantee, the recommended time horizon is equal to the time horizon of the target or guaranteed return. For risk target and benchmark products that are not backed by a financial guarantee, the recommended time horizon is equal to the payback period, i.e. the first year within which the value of the invested capital equals the initial value of the notional capital determined using the risk-neutral probability measure.

4.4.5 General comments

The Working Party believes that the Italian approach is one of the more scientific approaches available and the paper is well researched and detailed. It captures volatility of the benchmark, volatility of the fund managers and payback times. For structured products, it captures the probability of various outcomes.

The Working Party believes that this approach is well thought out but does suffer from a number of practical problems as follows:

- The calculation process is intensive.
- It is heavily dependent on the risk free rate and the results can be quite volatile with respect to the
 risk free rate. For instance, payback periods can be very long if the charges are a significant
 portion of the risk free rate.
- The probability table compares returns on risk free investments (gross of charges) with the return
 on the insurance product (net of charges). The mean return on the insurance product is risk free.
 Therefore it is quite difficult for any high probability to appear in the equivalent to or greater than
 return on risk free investment box.
- Probability tables and payback periods may not be understood by the customer.

The consistency with any internal models being used is a good suggestion and is very relevant to Solvency II

4.4.6 Further information

Further information on the details of the quantitative methods described above as well as the results of an empirical analysis examining the level of risk of a sample of open-ended mutual funds sold in Europe from 2006-2008 using these methods can be found in the paper "A quantitative risk-based approach to the transparency on non-equity investment products" by Marcello Minenna, Giovanna Maria Boi, Antonio Russo, Paolo Verzella and Adele Oliva¹¹.

4.5 Australia

In Australia, the topic of investment risk relates to 'pure' investment linked products. Products typically fall into the following categories:

¹¹ http://www.consob.it/mainen/consob/publications/papers/qdf63en.htm

- Insurance cover, which is pure risk insurance without any investment component; and
- <u>Investment linked funds</u>, where the policyholder purchases units in a fund and takes on 100% of the investment risk (with no insurance component).

There appears to be no specific guidance on what must be communicated to policyholders on investment risk at outset. However, in a submission to the Australian Regulator in 2009¹², the Institute of Actuaries of Australia recommended that a 'Personal Stress Test' (PST) be required as part of the advice process in the purchase of financial products. This test would reflect the consumer's personal financial position and present the financial outcome arising from the proposed financial strategy under certain adverse events.

In general, companies are required to issue a Product Disclosure Statement (PDS)¹³, in a form prescribed by the Australian Securities and Investments Commission (ASIC), when selling a financial product. There are guidelines around what should be included in a PDS. The guidelines for the preparation of the PDS are quite broad because it applies to a wide range of financial products - e.g. home loans, motor vehicle policies etc as well as life insurance. For investment related products the guidance requires clear, concise and effective disclosure of fees, charges and returns. Typical and material factors that affect returns, including risks, need to be disclosed clearly. PDSs for managed investment products that state or imply that the product will be able to be traded on a financial market must be lodged with ASIC prior to their release to consumers. The ASIC carries out selective compliance reviews of PDS documents from companies.

As part of our work, we have reviewed a sample of PDS documents. In general, broad statements on investment risk are set out for each of the fund choices offered such as stating whether a fund is low, medium or high risk and/ or what type of investor the fund might be suited to. Quantitative analysis such as a volatility measures to indicate the riskiness of the funds were not generally included.

4.6 Canada

In Canada, industry associations are more involved in the issue of consumer disclosure than the actuarial profession. Most of the Canadian Institute of Actuaries' public policy work relates to the issue of retirement and pension reform. Investment risk has been addressed in tangential ways.

4.6.1 Canadian Investment Funds Standards Committee (CIFSC)

Within the investment fund area the Canadian Investment Funds Standards Committee (CIFSC) has been in operation since 1998. It was formed by Canada's major mutual fund database and research firms with a self-imposed mandate to standardise the classifications of Canadian-domiciled retail mutual funds. It developed a common fund classification scheme subject to regular reviews.

CIFSC classification Principles

The CIFSC classifications are based on a combination of both quantitative and qualitative factors. Due to the number of funds in the Canadian investment fund universe, the classification process is largely a quantitative exercise. However, the final category assignments are up to the judgment of the CIFSC committee.

¹² "Ripoll Inquiry" into Financial Products and Services in Australia - http://bit.ly/InquirySubmission

¹³ Regulatory Guide 168, Product Disclosure Statements - http://bit.ly/PDS_ASIC

- a. <u>Quantitative factors</u>: Funds are classified based on the way they actually invest and the CIFSC classification process rests heavily upon the holdings data for each fund. Without holdings data for a fund, the committee will place the fund in the Miscellaneous category.
- b. <u>Qualitative factors:</u> The committee will review any other information it believes is relevant to assessing a fund's risk profile and making an appropriate classification, e.g. the impact of currency hedging positions, intentions of the fund manager.

The most appropriate category classification for any given fund is one that:

- Places a fund in a category with the most similar risk factors (e.g. sector risk, liquidity risk, prepayment risk, credit risk, etc.). Note that risk factors are not equivalent to volatility measures such as standard deviation or beta. While the CIFSC in no way suggests that such volatility measures be ignored, for classification purposes, emphasis must be placed on the risk factors to which a fund is subject; and
- 2. Allows for the most relevant performance comparisons.

Investment Funds Institute of Canada (IFIC)

IFIC has been the most active body in the area of investment risk disclosure. In 2005 they published a report on Recommendations for Fund Volatility Risk Classification.

The key recommendations were:

- 1. The use of benchmark indices as proxies to evaluate the volatility risk for different types of mutual funds in order to establish standard deviation risk bands for various CIFSC categories.
- 2. Use of standard deviation as an acceptable risk measure: quantify the average of the moving 3and 5-year standard deviation of each fund and apply it to the Standard Deviation (SD) Band and corresponding CIFSC category to define the appropriate fund volatility category.
- 3. Time frame of the analysis: as for the fund calculation above, both a rolling historical three and five year measure of standard deviation should be used to analyse the volatility of benchmark indices in order to determine SD Bands
- 4. Six categories of volatility should be used: very low; low; low-moderate; moderate; moderate-high and high.
- 5. All fund companies should classify their funds according to the classifications as determined by the IFIC.
- 6. Managers should have the discretion to deviate from this standard classification based on qualitative factors in order to ensure full disclosure. The following process is suggested for managers to follow as part of completing a prospectus or annual prospectus renewal:
 - a. Determine the average of the rolling 3-year and 5-year standard deviation.
 - b. Use appropriate benchmark index (matching investment mandate/strategy) if there is a lack of data for the fund.
 - c. Compare the fund's average with the specified bands.
 - d. Consider placing it in a different category from the benchmark if the average standard deviation indicates it; or if standard deviation differs materially from the benchmark due to manager style, process or other qualitative factors.
 - e. Repeat the analysis each year.

4.6.2 Task Force on Financial Literacy

The Federal Minister of Finance launched an initiative in 2010 addressing the need for financial literacy among Canadians. The Task Force on Financial Literacy produced a report at the end of 2010 proposing a National Strategy with five priorities;

shared responsibility,
leadership and collaboration,
lifelong learning,
delivery and promotion,
accountability,
and a number of detailed recommendations for implementation.

5 Review of the Consumer Protection Code

In October 2010 the Central Bank of Ireland ("Central Bank") issued Consultation Paper 47 (CP47) "Review of the Consumer Protection Code". The Working Party submitted a response to this consultation on behalf of the Society.

The purpose of the Consumer Protection Code (CPC) review was to "identify areas where the existing provisions should be strengthened to provide increased consumer protection, where provisions need to be amended to provide clarification, where new provisions need to be included and where provisions need to be disapplied because they are no longer appropriate".

The Society's response related mainly to information about products and product producer responsibilities.

5.1 Information about products

The Working Party felt that the same disclosure requirements should be applied in respect of all investment products and recommended that the current disclosure regime for life assurance products should be used as the basis for a new regime. Improvements that could be implemented include:

- summarising some of the information currently provided;
- highlighting the main features and reducing the amount of additional information given to customers
 while ensuring they are given the necessary information to enable them to understand the
 fundamental features of their policies; and
- introducing improved requirements for disclosure of the different risks associated with different investments and the extent to which outcomes on different investments are likely to vary.

The current CPC requires that, for tracker bonds, information must be provided to consumers in a short Key Features Document. In CP47 the Central Bank suggest extending this requirement to other product types. The Working Party supported this suggestion and listed the following items as being suitable for inclusion in such a document:

- the aims of the product and (except for insurance-only products¹⁴) the nature of the underlying assets:
- the customer's commitment (including premium amount and frequency, where applicable);
- the risks involved;
- the risk / reward profile of the underlying assets (except for insurance-only products and deposit accounts);
- information on past performance (except for new funds, insurance-only products and deposit accounts), together with a warning that past performance is not necessarily a guide to future performance;
- the charges and (except for insurance-only products and deposit accounts) the reduction in yield / equivalent annual charge;
- any other key features specific to the product that the customer needs to know about to make an
 informed decision on purchase, e.g. details of insured benefits, guarantees, options, reviewability
 clauses, restrictions on access to funds or payment of benefits, the impact of taxation on the
 proceeds of the contract, the impact of inflation on the proceeds, the rate of interest payable on
 deposit accounts, etc;

¹⁴ Non-life insurance policies and life assurance products that do not have a surrender or maturity value.

- details of intermediary remuneration; and
- details of where to go for further information or to make a complaint.

The working party considered that consumers need to carry some responsibility for purchasing products. In this context, they recommended that a simple but basic message along the lines "If you do not understand this product, do not purchase it" could be effective.

The Society's response also commented on how to disclose risk in a manner that is useful to consumers. Reference was made to an earlier paper presented to the Society "How risky does the public think their investments are?" as well as research from the Association of British Insurers (ABI) which found that consumers relate better to pictorial presentations of risk and that a horizontal thermometer was the most effective design¹⁶. The submission also referred to the CESR and ABI approaches to determining risk based on volatility of past returns, which are described in Sections 3.1 and 3.3 of this paper.

5.2 Product producer responsibilities

CP47 proposed new requirements for product producers "to identify a target market of consumers when designing investment products. The target market must comprise the types of consumer for which the product is likely to be suitable (or not suitable). When determining the target market, the product producer should take account of the nature of the product and its general risk profile."

The Society's response listed areas that should be considered when determining the target market as follows:

- Investment objectives;
- Investment time horizon and need for liquidity;
- Attitude to risk; and
- Level of investment knowledge / experience.

In addition, the Working Party recommended that regulated entities be required to state the types of consumer for which a product is likely to be suitable, and the types for which it is not suitable, in the brochure or other materials normally used to market the product to consumers.

The Working Party agreed with the Central Bank's suggestion of annual product reviews to assess whether a product continues to meet the needs of the target market for which it was designed and also suggested that some products should have specified triggers that lead to an immediate review.

CP47 is available on the Central Bank of Ireland's website at: http://bit.ly/financialregulator_CP47.

The Society's response is available on the Society's website at http://bit.ly/SOAI_CP47_Submission.

¹⁵ By John Caslin and Damian Fadden (http://bit.ly/HowRiskyNov07)

¹⁶ "Helping Consumers Understand Investment Risk", Driver et al, 2010 (http://bit.ly/ABI_RP25)

6 Moneymate Fund Ratings Methodology

MoneyMate is an independent investment research company that, amongst other things, provide information on Irish fund performance. They have recently developed the MoneyMate Fund Ratings Methodology to provide more information on the risk-adjusted performance of funds. This methodology is carried out in a number of distinct steps as follows:

- Each fund is allocated to one of five risk profile bands depending on its volatility experience over the previous three years.
- Within each band the fund is allocated a rank depending on a weighting of a measure known as Omega and Downside Deviation
- The rankings are reviewed regularly.

These are described in more detail below as follows:

6.1 Allocation to Risk Profile Bands

Moneymate has five volatility risk profile bands as follows:

Min	Max	Description
0%	<2%	Very Low Risk
2%	<5%	Low Risk
5%	<10%	Moderate Risk
10%	<20%	High Risk
>20%		Very High Risk

There are a number of conditions that must be met before a fund can be considered eligible for a profile. These include having a three year track record, open to new investments, valued weekly and the provision of a complete price and income history to Moneymate.

Once allocated to a risk profile the fund remains there until its volatility changes in such a way as to justify a move to another band. Moneymate has set a sensitivity threshold of 15% of the edge of the band (i.e. for Moderate Risk with an upper threshold of 10%, the fund needs to go above 11.5% to move into the higher risk band). The fund will not be moved into a higher band unless its volatility has increased above the threshold for over a quarter or if it encroaches into the higher band for two consecutive quarters.

6.2 Omega and Downside Deviation

Within each risk band, the funds are ranked according to the Omega ratio and the downside deviation. The Omega ratio was developed by Keating and Shadwick¹⁷ and compares the distribution of returns in excess of the risk free rate to those less than the risk free rate. The Omega ratio is the probability adjusted ratio of gains to losses. The purpose of the Omega ratio is to capture all the moments of the actual returns including skewness and kurtosis. The higher the ratio the greater the past return for a given unit of risk. The Omega ratio is based on similar principles to the Sharpe Ratio but is designed to capture the third and fourth moments.

¹⁷ SHADWICK, William F., and KEATING Con, 2002, "A Universal Performance Measure", The Journal of Performance Measurement, 6(3) - http://www.isda.org/c_and_a/pdf/GammaPub.pdf

While a valuable measure the Omega ratio can give undue weight to a single large return rather than a stream of poorer returns. To correct this Moneymate also use a downside deviation statistic. This is similar to the standard deviation but only considers returns which fall below the risk free rate (see Section 7.1.2). The Omega ratio and downside deviation are weighted 80% and 20% respectively.

Both measures are calculated over a three year period and updated quarterly. However Moneymate also calculates a momentum indicator which provides an emphasis on more recent time periods. Therefore the momentum gives a weighting of 50% on the last years combined indicator, 30% on the last 2 years, and 20% on the third and final year.

6.2.1 Working Party Comments

The Moneymate methodology seems to be very appropriate for assessing funds. The overall risk profile bands are not inconsistent with the approaches used elsewhere.

The Omega/Downside deviation approach is innovative but Moneymate seems to recognise the flaws that each method has. While ranking the funds by this measure may be suitable for Moneymate's purposes, using these rankings might be somewhat uncomfortable for insurers. The rankings appear to be spuriously accurate. They may therefore give the misleading impression that one fund is more appropriate than the other.

7 Calibration of Risk Levels

To test the CESR guidance (Section 3.1) and the ABI conclusions (Section 3.2), the Working Party requested daily fund price information from several Irish life insurance companies. The companies were asked to select funds from the following fund types:

- Balanced Managed
- · Cautious Managed
- Irish Equity Fund
- European Equity
- UK Equity Fund
- Global Equity Fund
- North America Fund
- Japan
- Asia Pacific
- · Emerging Market
- Commodities
- Hedge Funds
- Euro Bond Funds
- Global Bond Funds.

Thirty two funds were received from five insurers. These are listed in Appendix 4. There was some overlap between the funds received (e.g. several insurers sent data for managed funds). However, all funds were included in order to assess consistency between insurers. Many funds were of recent vintage (launched post 2000). Therefore to compare measures consistently across all funds we only used periods where the the data was available across all funds provided. In this case, a minimum of six years data was required to apply the measures outlined below.

7.1 Measures of Investment Risk

The following measures of investment risk were applied to the fund data;

7.1.1 Volatility

The variance or standard deviation of an asset's historic return is often used as measure of risk. The standard deviation may be calculated as;

$$\sqrt{\frac{1}{n-1}} \sum_{t=1}^{n} (R_{i,t} - \overline{R}_{i})^{2}$$

where R_{it} is the return on asset i in investment period t, n is the number of investment periods and \overline{R}_{i} is the average return over the full investment period.

7.1.2 Downside deviation

This a measure of downside risk that focuses on returns that fall below a threshold or minimum acceptable return (MAR). It can be calculated as:

$$\sqrt{\frac{1}{n-1}\sum_{t=1}^{n}\min\{(R_{i,t}-MAR),0\}^2}$$

where Rit is the return on asset i in investment period t and n is the number of investment periods.

7.1.3 Sharpe ratio

This is a measure of additional return achieved per unit of risk assumed. The formula is;

$$\frac{[(actual\ return) - (risk\ free\ rate)]}{standard\ deviation}$$

7.1.4 Sortino ratio

This is similar to the Sharpe ratio, except it uses downside deviation for the denominator instead of standard deviation. It may be calculated as;

$$\frac{[(actual\ return) - (risk\ free\ rate)]}{downside\ deviation}$$

7.1.5 Maximum drawdown

This is the lowest return achieved over a defined investment period. It is the lowest actual monthly return in any given month during that period if monthly data is used, or on any given day if daily data is used etc. It represents the worst historic monthly, weekly, or daily return on an investment.

7.1.6 Range

This is the difference between the maximum and minimum return achieved by an investment over a defined period.

7.1.7 Value at Risk (VaR)

This is the largest loss likely to be suffered on an investment portfolio position over a defined period with a given probability or confidence level.

7.2 Results of Risk Measures

The predictive power of the measures in Section 7.1 was applied as follows:

- 1. Taking volatility as an example, the volatility of each fund was calculated over a 5 year interval from 2003 to 2007 inclusive.
- 2. All 32 funds were then ranked by volatility.
- 3. The volatility of each fund was calculated in 2008.

- 4. Again, all 32 funds were ranked by volatility.
- 5. The correlation between the ranks from 2003 to 2007 and 2008 was calculated.
- 6. This was repeated for the 5 year volatility from 2004 to 2008 and the volatility for 2009 and the 5 year volatility from 2005 to 2009 and the volatility for 2010.

This exercise was repeated for each measure.

The results of the correlations between a particular year and the previous 5 years are shown in the table below.

	Volatility	Downside deviation	Sharpe	Sortino	VaR	Max Drawdown	Range
2010	91%	89%	21%	18%	89%	87%	71%
2009	91%	92%	-12%	-8%	93%	89%	93%
2008	86%	92%	-67%	-52%	88%	85%	80%

The high correlation for volatility (and volatility based measures such as VaR, Range and Maximum Drawdown) show that they were relatively good predictive measures. Sharpe and Sortino ratios were poor measures. This was not surprising as they include a return related measure in the calculation (and separately justifies efficient market theory 18!). Volatility is a relatively simple measure. Therefore not surprisingly the Working Party agrees with the CESR and ABI that of the measures above volatility combines simplicity and good predictive power relative to other measures. However it does not easily measure other issues such as liquidity risk and concentration risk. Suggested measures are set out in Section 8.

The volatility and CESR ratings of each fund are contained in Appendix 4. It is worth noting that the CESR ratings of the funds are quite stable over the period. However this may be resulting from the fact that the funds provided were in the higher (and wider) CESR volatility ranges. It is also worth noting that similar funds provided by different companies had very similar volatility. This indicates that the industry is relatively consistent in its volatility management strategies.

¹⁸ The price of an asset fully reflects all available information that is relevant to that asset.

8 Conclusion and Proposed key Investment Template

The Working Party has reviewed a considerable number of models for disclosure of investment risks. In particular, the Working Party believes that the models set out by AFM and the CESR are good foundations for supplementing or replacing the disclosure regime for life insurers.

Based on our review and consideration of specific issues arising for life assurance products and pension products, the Working Party recommends the following:

- For each fund, providing a two page document describing the main features of the fund e.g. terms, charges, risks and potential reward;
- At product level, providing a two page document describing the product features, terms, charges, risks and potential rewards. If the product cannot be explained in two pages, product providers need to determine carefully how the product is sold and the level of sophistication of the investors;
- Providing sample charges expressed in monetary form;
- Providing intermediary remuneration expressed in monetary form;
- The use of the CESR risk rating methodology for mainstream funds but where fund combinations are used the combined risk rating of the funds should be used;
- Providing wording around each of the risk levels and wording for risks that are not easily quantifiable (e.g. liquidity);
- Use of the appropriate risk level wording given as a subtitle to the name of the fund;
- Providing a warning to the potential purchaser that if they do not understand the risk and reward profile of the fund that they should not purchase it;
- The use of stochastic analysis to determine a generic range of outcomes and benefits. This is particularly the case for more complex and/or structured products;

8.1 Stochastic Analysis

The use of stochastic analysis is not intended to add significant complexity to the process. Stochastic analysis is in common use and will be an integral part of Solvency II.

We propose that the level of stochastic analysis be proportional to the product complexity and features. For example, for a mainstream equity or bond fund, a standard table of outcomes could be developed based on log normal returns. Therefore, the table would consist of various percentiles of returns over 1 year, 2 years, etc. Projections could be carried out by simply reading from these tables. The projection graphs provided to the policyholder could be based on a certain percentiles of outcomes. For instance, using a 10th percentile and 90th percentile, a policyholder could compare a bond fund and an equity fund and see that the potential distribution of outcomes is wider under the equity fund. The Working Party considered the appropriate level of disclosure of stochastic outcomes to potential policyholders. One approach, as adopted by AFM, is to explicitly disclose very little to avoid confusing policyholders on the

basis that they may not understand percentiles and probability of outcomes. Alternatively, the policyholder could receive the projections with minimal explanation of the approach used but advisors and professional investors could receive the information on request. There were some concerns expressed in the Working Party that explicitly quoting probabilities may lead to a potential liability for the provider. For example, if an outcome which was indicated with a 1% probability took place several years in a row issues with respect to policyholder expectations may arise

For a complex structured product, the analysis may be more complex to ensure that the risks of the product, such as skewness or kurtosis, are adequately measured.

A professional body (e.g. the Society of Actuaries in Ireland) could develop standard tables for individual funds and the parameters of models to be used for combinations of funds or more complex funds.

For clarity it is not intended that the models produced would be complex and mathematically pure. The models need to be relatively simple and be sufficient to demonstrate the uncertainty of returns.

Appendix 5 sets out some sample templates for an equity fund and a single premium pension product. The model used is a simple log normal model and the graphs are based on a lower 10th percentile and upper 75th percentile. For the single premium pension product, the annuity rate is also stochastic and the results are expressed in real terms. This is just for illustrative purposes and the Working Party are not advocating the use of particular models, percentiles and assumptions.

8.2 Liquidity/Concentration

For UCITS funds there are limitations around liquidity and concentration risk. Therefore, the CESR may not have considered this in depth in their review. Life assurance funds tend to be more diverse and may exhibit these characteristics. For funds where there is a potential for illiquidity, the policy conditions are likely to state what the deferral period can be if the policyholder wants to encash the policy. The Working Party suggests that where illiquidity is potentially an issue, the risk rating of the fund is increased. For instance, if the policy conditions permit a deferral period of 6 months, the rating could be increased by 1 notch. Similarly for a deferral period of 12 months it could be two notches.

For concentration risk, a similar principle would apply to the number of counterparties. Therefore if the number of counterparties is less than (say) 5, the risk rating could increase by 5 less the actual number of counterparties.

Proposed disclosure documents or "Key Investment Templates" for an equity fund and a life assurance product are shown in Appendix 5.

8.3 Committees and Communications

The Working Party believes that each company should have a risk rating committee to review the ratings of funds and determine whether they should be increased or reduced. In the event that the risk rating committee changes the risk rating of the fund, it should communicate this to policyholders and explain why the rating has changed. This could include a sustained change in volatility of the fund (according to CESR principles), a downgrade in counterparty, a change in the liquidity position of the fund, or a fall in the fund value below a certain level.

It could be argued that the extent and level of communication should be proportionate to the initial risk rating of the fund. For example, a fund with a risk rating of 7 (high risk) may require less extensive

communication that a fund rated 1 (low risk). The downgrading of a counterparty of a low risk cash fund may trigger such communication, whereas the fall in value of a technology fund may not trigger a communication.

Appendix 1: CESR	Key Investor	Information	Template
------------------	--------------	-------------	----------

An example of the Key Investor Information Template is shown on the following two pages. Alternatively, see http://bit.ly/ESMA_KID.

Key Investor Information

This document provides you with key investor information about this fund. It is not marketing material. The information is required by law to help you understand the nature and the risks of investing in this fund. You are advised to read it so you can make an informed decision about whether to invest.

123 Fund, a sub-fund of ABC Fund SICAV (ISIN: 4321)

This fund is managed by ABC Fund Managers Ltd, part of the XYZ group of companies

Objectives and Investment Policy

Joint description of the objectives and policy of the UCITS in plain language (it is suggested not to copy-out the prospectus)

Essential features of the product which a typical investor should know:

- main categories of eligible financial instruments that are the object of investment
- a statement that the investor may redeem units on demand, and how frequently units are dealt in
- whether the UCITS has a particular target in relation to any industrial, geographic or other market sectors or specific classes of assets
- whether discretionary choices regarding particular investments are allowed, and whether the fund refers to a benchmark and if so which one
- a statement of whether any income arising from the fund is distributed or reinvested

Other information if relevant, such as:

- what type of debt securities the UCITS invests in
- information regarding any pre-determined pay off and the factors expected to determine performance
- if choice of assets is guided by growth, value or high dividends
- how use of hedging / arbitrage / leverage techniques may determine the fund's performance
- that portfolio transaction costs will have a material impact on performance
- minimum recommended holding term

Risk and Reward Profile

Narrative explanation of the indicator and its main limitations:

- Historical data may not be a reliable indication for the future
- Risk category shown is not guaranteed and may shift over time
- The lowest category does not mean 'risk free'
- Why the fund is in its specific category
- Details of nature, timing and extent of any capital guarantee or protection

Narrative presentation of risks materially relevant to the fund which are not adequately captured by the indicator:

- Credit risk, where a significant level of investment is made in debt securities
- Liquidity risk, where a significant level of investment is made in financial instruments that are likely to have a low level of liquidity in some circumstances
- Counterparty risk, where a fund is backed by a guarantee from, or has material investment exposure through contracts with, a third party
- Operational risks including safekeeping of assets
- Impact of any techniques such as derivative contracts

Charges for this Fund

The charges you pay are used to pay the costs of running the fund, including the costs of marketing and distributing it. These charges reduce the potential growth of your investment.

One-off charges tak	en before or after you invest			
Entry charge	[]%			
Exit charge	[]%			
This is the maximun	n that might be taken out of your			
money [before it is in	nvested][before the proceeds of			
your investment are	paid out].			
Charges taken from	the fund over a year			
Ongoing charges []%				
Charges taken from the fund under specific				
conditions				
	[]% a year of any returns the			
Performance fund achieves above the				
Fee	benchmark for these fees,			
[insert name of benchmark].				

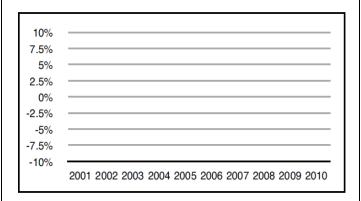
The **entry** and **exit charges** shown are maximum figures. In some cases you might pay less – you can find this out from your financial adviser.

The **ongoing charges** figure is based on expenses for the year ending []. This figure may vary from year to year. It excludes:

- Performance fees
- Portfolio transaction costs, except in the case of an entry/exit charge paid by the UCITS when buying or selling units in another collective investment undertaking

For more information about charges, please [see pages x to x / section x] of the fund'sprospectus, which is available at www.ucitsfund/prospectus

Past Performance



The chart will be supplemented with prominent statements which:

- warn about its limited value as a guide to future performance
- indicate briefly which charges have been included or excluded
- state the year when the fund started to issue units
- indicate the currency in which past performance has been calculated.

Practical Information

- Name of the depositary
- Where and how to obtain further information about the UCITS (prospectus, reports & accounts)
- Where and how to obtain other practical information (e.g. where to find latest unit prices)
- A statement that tax legislation of the fund's Home State may have an impact on the personal tax position of the investor
- A statement that "[Name of management company] may be held liable solely on the basis of any statement contained in this document that is misleading, inaccurate or inconsistent with the relevant parts of the prospectus for the fund"
- Specific information relating to umbrella funds (e.g. any switching rights between sub funds)
- Information about other share classes, if applicable (KII may be based on a representative class)

This fund is authorised in [name of Member State] and regulated by [identity of competent authority].

[Name of management company] is authorised in [name of Member state] on and regulated by [identity of competent authority].

This key investor information is accurate as at [the date of publication].

Appendix 2: Synthetic Risk and Reward Indicator – Volatility Formula

The volatility of the fund shall be computed, and then rescaled to a yearly basis, using the following standard method:

$$\sigma_f = \sqrt{\frac{m}{T-1} \sum_{t=1}^{T} (r_{f,t} - \overline{r_f})^2}$$

where the returns of the fund $(r_{f,t})$ are measured over T non overlapping periods of the duration of 1/m years. This means m=52 and T= 260 for weekly returns, and m=12 and T=60 for monthly returns; and where \overline{r}_f is the arithmetic mean of the returns of the fund over the T periods:

$$\overline{r_f} = \frac{1}{T} \sum_{t=1}^{T} r_{f,t}$$

Appendix 3: Example Financiële Bijsluiter

An example of the Financiële Bijsluiter is shown on the following two pages. Alternatively, see http://bit.ly/FinancialInformationLeaflet.

Financial Information Leaflet

[Name of product]

[Name of financial institution]



The product



The risks







Premature termination

If you have any questions, please contact:

[name, address and telephone number of financial institution] or contact an advisor.

further information, go to: www.definancielebijsluiter.nl

Please note:

Calculations are based on an annual deposit of € 1,200 and investments in shares and bonds, each of which account for 50% of the investment.

This Financial Information Leaflet was compiled on [date] according to the conditions set out by the Netherlands Authority for the Financial Markets (AFM) (www.afm.nl), which is the supervisory authority for the savings, loans, investment and insurance markets.

Consult the Financial Information Leaflet before you decide to take out [a/an] [the product name] [type of product]. You should also compare this Financial Information Leaflet with the leaflet available for other [types of product]. Be sure to also read the offer and the general terms and

Calculations in this leaflet are based on an annual deposit of € 1,200 and investments consisting of a combination of shares and bonds, each of which account for 50% of the investment. For

What is [Name of product]?



When you	You must	You can
invest	pay in a fixed monthly amount Inquire about the amount and what you are investing in	accumulate an amount of money
and take out insurance	pay a monthly premium Inquire about the amount	bequeath a fixed amount to next of kin upon your death

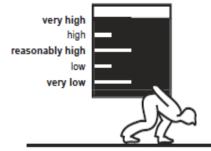
What are the risks?



Risk that you will lose your deposit

If the product is terminated prematurely (1 year)

After the full term (10 years)



very high high reasonably high low very low



What can happen in the worst-case scenario?

if the product is terminated prematurely, you could lose your entire deposit

at the end of the full term (10 years), you could lose your entire deposit

What are the costs?



The resulting costs based on a forecastof a 4% increase in the value of the investment

	Value		Co	sts invo	lved		What you retain
After 1 year			€	100	insurance premium other costs if terminated prematurely		
	€ 1,230	-	€	200		=	€ 1,030
After 5 years	€ 6,600		€ €	600	insurance premium other costs if terminated prematurely		£ 5 500
After 10 years			€	600	insurance premium other costs if terminated prematurely	_	€ 5,500
	€ 14,280	-	€	2,280		=	€ 12,000

What could the [Name of product] yield?



The resulting yield based on historical data

The resulting yield based on a forecast of a 4% increase in the value

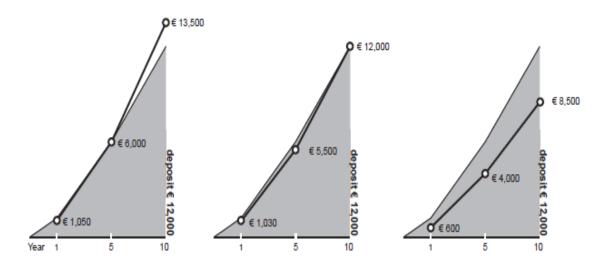
of the investment

The resulting yield based on a pessimistic forecast

The yield is greater than the deposit

The yield is about the same as the deposit

The yield is lower than the deposit



What happens in the event of premature termination?



Premature termination

upon your death

Consequences

your next of kin receives a fixed amount Inquire about the conditions

if terminated due to other circumstances, such as divorce, loss of job or occupational Inquire about the amounts

penalty costs apply

Appendix 4: Table of Volatility and CESR risk class for funds tested

	Volatility				CESR Risk Class			
	5 yrs -> 2010	5 yrs -> 2009	5 yrs -> 2008	5 yrs -> 2007	5 yrs -> 2010	5 yrs -> 2009	5 yrs -> 2008	5 yrs -> 2007
Asia Pacific Equity Gross	25%	25%	24%	17%	7	6	6	6
Balance Managed Gross	15%	14%	13%		5	5	5	
Balance Managed Gross 2	13%	13%	12%	9%	5	5	5	4
Balanced Managed Gross 3	15%	14%	13%		5	5	5	
Cautious Managed Gross	5%	4%	4%	3%	3	3	3	3
Consensus	14%	13%	13%		5	5	5	
Emerging Market Gross	41%	41%			7	7		
Euro Equity	24%	23%	20%		6	6	6	
Euro Equity 2	16%	15%	14%	11%	6	6	5	5
Euro Equity Gross 2	26%	24%	22%		7	6	6	
Eurobond	6%	6%	6%		4	4	4	
Eurobond Gross	8%	8%	8%		4	4	4	
European Equity	23%	22%	20%	16%	6	6	6	6
Eurozone Equity Gross	24%	23%	20%		6	6	6	
Fixed Interest Net	6%	5%	5%	5%	4	4	4	3
Global Bond	6%	6%	5%		4	4	4	
Global Equity	22%	21%			6	6		
Global Equity Gross	18%	18%	17%	12%	6	6	6	5
Global Equity Gross 2	19%	18%			6	6		
International Eq	18%	18%	16%	13%	6	6	6	5
Irish Equity	31%	29%	25%	16%	7	7	7	6
Irish Equity 2	32%	30%	26%		7	7	7	
Irish Equity Gross	30%	29%	25%	16%	7	7	6	6
Japan Equity	25%	25%	24%		6	6	6	
Japan Equity Gross	24%	24%	24%	21%	6	6	6	6
Managed Net	14%	13%	12%	9%	5	5	5	4
Managed Net 2	9%	9%	8%	6%	4	4	4	4
North American Equity	26%	25%	23%		7	7	6	
North American Equity Gross	25%	25%	23%	17%	7	6	6	6
Pacific Equity	26%	26%	24%		7	7	6	
UK Equity	26%	25%	23%		7	6	6	
UK Equity Gross	24%	24%	21%		6	6	6	

Appendix 5: Proposed "Key Investment Temp

Proposed disclosure documents or "Key Investment Templates" for an equity fund and a life assurance product are shown on the following pages.

"ABC Equity Fund"

A high risk fund with potential for high returns¹⁹

Managed by ABC Fund Managers

Objectives and Investment Policy

- Invests in a range of equities across European markets only.
- Units may be redeemed on demand. Units are dealt on a daily basis.
- Benchmark is MSCI Europe Index.
- All income is reinvested.
- No hedging instruments are used.

Risk and Reward Profile

Lower risk						Higher	risk
<							>
Typically lower rewards Poter						ially higher rewa	ırds
							_
1	2	3	4	5	6	7^{20}	

- This is a high risk fund and is expected to demonstrate significant positive and negative movements over short periods of time.
- The main risks to which you are exposed are equity risk, currency risk etc. 21
- There is a significant chance that you will lose a significant portion of your original investment over the term of the investment.
- The risk category shown is not guaranteed and may shift over time.
- The lowest category does not mean risk free.

Charges for this Fund

The charges you pay are used to pay the costs of running the fund, including the costs of marketing and distribute it. These charges reduce the potential growth of your investment.

Type	Percentage	Amount based on
Турс	1 creentage	
		€50,000
Entry Charge	5% of premium	€2,500
Exit Charge	0%	€0
Annual Charge	1.5% of fund value	€750
Performance Fee	0%	€0

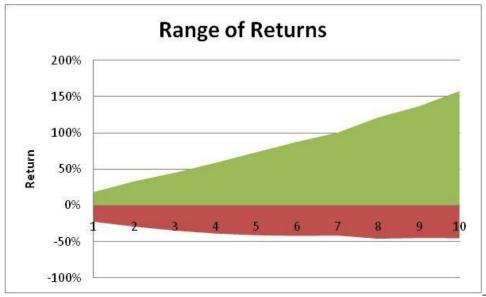
Average annual reduction in performance due to charges is 2% (or €1,000).

¹⁹ This would be a standard statement based on the risk level indicated in the table below.

²⁰ There would be a definition (one sentence) of each level of risk

²¹ A short indication of the main risk exposures would be provided here. A glossary of "equity risk" etc. could be provided separately.

Range of Returns



The graph above illustrates a possible range of returns. Returns may exceed or fall below the range shown

The returns are net of policyholder tax at [].

There is a significant chance that you will lose a significant portion of your original investment

Commission

Your adviser will receive the following payments

Type	Percentage	Amount based on €50,000
At Entry	5% of premium	€2,500
On each policy	0.5% of fund value	€250
anniversary		

Practical Information

Policy provided by Insurance Company Limited.

You can obtain further information at [].

You have the right to surrender the fund at any time or switch to another fund.

This information has been certified by:

[]

Managing Director of Insurance Company Limited

Single Premium Pension Policy

What is a Single Premium Pension Policy?

- You are a male aged 55 years old and are intending to retire at age 65
- You invest a single lump sum into the policy
- On retirement, you can use some of the funds to purchase an annuity, take cash or invest in an ARF (if permitted).
- You cannot encash the policy but you can transfer it to another pension product or another pension provider. Early transfers attract a surrender penalty.
- On death, the value of the fund will be passed to your dependents.
- Invested in ABC Equity Fund Managed by ABC Fund Managers (see separate leaflet)

What is the Product Risk and Reward Profile?

Lower risk
Typically lower rewards

Typically lower rewards

Typically higher rewards

Typically higher rewards

- The choice of fund makes this a high risk product and is expected to demonstrate significant positive and negative movements over short periods of time.
- The main risks to which you are exposed are equity risk, currency risk etc²³
- There is a significant chance that you will lose a significant portion of your original investment over the term of the investment.
- The risk category shown is not guaranteed and may shift over time.
- The lowest category does not mean risk free.

What are the charges you pay for this product?

The charges you pay are used to pay the costs of running the product, risk benefits and other costs including the costs of marketing and distribute it. These charges reduce the potential growth of your investment. The following are based on 0% investment return. What you retain depends on the actual performance of the fund and may be greater or lesser than the figure shown.

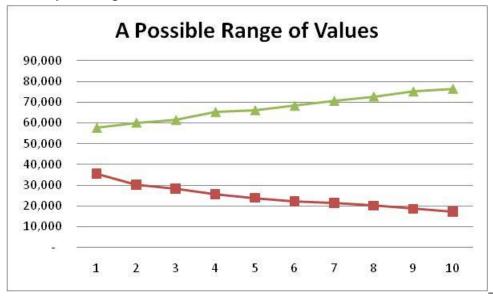
	After 1 year	After 5 years	After 10 years
Total Premiums	€50,000	€50,000	€50,000
Costs of insurance	- € 0	- € 0	-€ 0
Other costs	-€ 3,500	-€ 4,950	-€ 7,281
Surrender cost	-€ 0	-€ 0	- € 0
Tax	-€ 0	-€ 0	- € 0
What you retain	= €46,500	=€45,050	=€42,719

Average annual reduction in performance due to charges is 1% per annum.

²² There would be a definition (one sentence) of each level of risk

²³ A short indication of the main risk exposures would be provided here. A glossary of "equity risk" etc. could be provided separately.

What you might receive?



The graph above illustrates the projected fund value after inflation is taken in to account. Returns may exceed or fall below the range shown.

The equivalent projected pensions (after inflation) are

- €1,500 p.a. (lower end of the range)
- \notin 4,500 per annum (upper end of the range).

Pension is based on a retirement age of 65 single life.

There is a significant chance that you will lose a significant portion of your original investment

Commission

Your adviser will receive the following payments

	6 T . 7	* ***
Type	Percentage	Amount based on
		€50,000
At Entry	5% of premium	€2,500
Every year	0.5% of fund value	€250
thereafter		

Practical Information

Policy provided by Insurance Company Limited.

You can obtain further information at [].

This information has been certified by:

Γ

Managing Director of Insurance Company Limited

Appendix 6: Working Party Membership

The membership of the Working Party that prepared this paper was comprised of the following:

- Maria McLaughlin
- Colin Murray (Chairman)
- Emily O'Gara
- Marie Phelan
- Hendri Solomon.

With thanks to Louis Hui for the numerical work on funds and to Yvonne Lynch for critiquing the paper.



THE SOCIETY OF ACTUARIES IN IRELAND

102 Pembroke Road, Dublin 4, Ireland

tel: +353 1 660-3064 fax: +353 1 660-3074

mail: <u>info@actuaries.ie</u> website: www.actuaries.ie