Oxera

Description and assessment of the national investor compensation schemes established in accordance with Directive 97/9/EC

Report prepared for European Commission (Internal Market DG)

January 2005

Executive Summary

The Investment Compensation Scheme Directive (ICD) (Directive 97/9/EC), and the national measures implementing the Directive in the EU Member States, are regulatory mechanisms that aim to protect investors against the risk of losses in the event of an investment firm's inability to repay money or return assets held on behalf of their investors. The Internal Market Directorate-General of the European Commission commissioned Oxera to undertake research on the national investor compensation schemes established in accordance with the ICD.

The principal objective of Oxera's research study is to provide a comparative description and evaluation of the national investor compensation schemes with respect to their operating performance, financial position and, ultimately, the level of protection they afford to investors. The study comprises four main elements:

– **inventory of the national investor compensation schemes**—a comparative description of the features of the national schemes in the EU 15 and the most important differences between them (section 2). Country descriptions are provided in Appendices 1 to 15 in the separate report, 'Appendices';

– **analysis of the operating arrangements of the national schemes and their performance**—analysis of past claims for compensation on national schemes and the performance of the schemes in handling claims and awarding compensation to investors (section 3);

– **analysis of the funding position and financial resilience of the national schemes**—assessment of the financial situation of the schemes and their capacity to withstand claims made by investors (section 4);

– **analysis of the risks for retail investors and the schemes' coverage of the principal types of loss event**—evaluation of the main types of risk for retail investors and the degree to which these are mitigated by the national schemes, both in isolation and in relation to alternative forms of investor protection (section 5).

The research study focuses on investor compensation arrangements in place in the EU 15; however, an overview is also provided of the most important features of the schemes established in the ten Member States that entered the EU in May 2004 (section 6).

Inventory of the investor compensation schemes in the EU 15

The ICD lays down certain basic requirements for the national investor compensation schemes, to provide a consistent minimum level of investor protection across the EU. The Member States are responsible for implementing appropriate schemes and determining the most suitable way of organising and financing them. Thus, while all EU Member States have implemented the ICD and established one or more statutory schemes to provide investor compensation in the event of failure of an investment firm, there are considerable differences across countries. The differences identified in Oxera's research study relate to the following aspects:

– date of implementation and legal framework;
– organisational structure and governance;
– relationship with the national regulatory authorities;

– relationship with the national deposit guarantee schemes established in accordance with Directive 94/19/EC;
– participation requirements for investment firms, and number and types of firms participating in the schemes;
– definition of investors eligible to claim compensation;
– protected investment services and instruments;
– type of loss covered;
– compensation limits;
– operating arrangements and claims processing;
– funding arrangements.

Analysis of operating arrangements and scheme performance

Overall, there have been few cases of firm failure in the EU Member States that have triggered the operation of investor compensation schemes; in many countries, there has been no failure at all. As such, most schemes have no or very limited experience in handling compensation claims and awarding compensation to investors.

The exception is the UK investor compensation scheme: in 2003 alone, the scheme dealt with 164 cases of firm failure and 12,851 claims from investors. The main reason for this large volume of activity is that the UK is the only country that requires investment advisers to participate in the scheme and provides compensation for losses incurred by investors due to negligent investment advice, when the firm providing the advice is not able to compensate the investor itself.

Where failures do occur, the protection provided by an investor compensation scheme depends on the speed and quality with which investors' claims are handled and compensation paid. Although schemes aim to provide compensation as soon as possible, difficulties can lead to delays in the process—in specific cases, and for reasons beyond the control of the schemes, investors had to wait several years before they received compensation following a firm failure. The principal difficulties relate to:

– delays in the declaration of default of an investment firm by the competent authority or court;
– notifying investors that a compensation event has occurred;
– lack of information required to establish a claim and calculate compensation amounts;
– delays in the legal process—in particular, if claims processing depends on the outcome of the insolvency proceedings against the defaulted firm.

Cases of firm failure that are very complex and that generate a large volume of investor claims impose considerable resource requirements on compensation schemes. Staffing levels of the schemes differ considerably across the EU Member States, with permanent staff numbers ranging from 0 to 100. If firm failures are infrequent, it is not efficient to maintain high permanent staff levels. Instead, drawing in additional resources when required, or explicitly outsourcing parts of the compensation process to an external service provider, may be more cost-effective solutions. Nonetheless, such arrangements should be defined and put in place prior to a compensation event occurring.

Analysis of funding position and financial resilience

Although alternative funding sources are available, the EU compensation schemes are principally financed by contributions levied from participating firms. There are considerable cross-country differences, in particular with regard to when contributions are collected; the degree to which the funds are pooled across participating firms; how contributions are calculated; and whether there are any limits on the amount that can be collected from firms in any one year.

The most important policy question is whether available funds are adequate. In relation to past compensation events, none of the compensation schemes in the EU 15 reported any funding shortfalls that resulted in compensation payments being delayed or not being made. However, there have been funding difficulties in some instances, in particular where compensation costs had to be financed soon after a scheme was established (such that no or low reserve funds were available), or where contributions had to be levied from a relatively small number of participating firms.

The current and past financial position of a compensation scheme is not a robust indicator of funding adequacy going forward: failures to date have in general been infrequent and of a comparatively small scale. Potential loss exposures are higher. This is not to say that the compensation schemes should be able to cover all potential exposures, or that they should be considered inadequately funded because they are not able to cover these exposures. Rather, it suggests the need for a more rigorous assessment of the potential loss exposures and the likelihood of these losses occurring. Only a few EU investor compensation schemes appear to have undertaken such an assessment. A range of methodologies to define and measure funding adequacy has been proposed in the literature, usually with reference to deposit guarantee schemes. The relevance of these techniques and their application to investor compensation schemes could be explored further.

Adequacy of funding arrangements depends on flexibility and, in particular, the availability of multiple funding sources. Unexpected large failures could impose more compensation costs than a compensation scheme had anticipated and participating firms would be able to cover. The scheme therefore needs back-up sources of funding. One main source is borrowing. Most, but not all, EU compensation schemes have borrowing powers, but few have explicit credit facilities in place. The supply of commercial credit may be limited, particularly in larger failures where the lender has no certainty about the capacity of the scheme and its participating firms to repay borrowed funds in the future. This raises the question of whether a guarantee from the state or other forms of state funding may be required in these cases. Even if never activated, the existence of guarantees or similar arrangements can enhance the financial viability and credibility of a compensation scheme. Only a few EU Member States have explicit and irrevocable state guarantees provided under law to fund the compensation costs of a large loss event.

Analysis of risks to retail investors and coverage of loss events

Retail investors are exposed to a range of risks when engaging an investment firm to carry out investment services on their behalf. Investor compensation schemes provide important protection against the risk that, in the event of default, an investment firm is not able to return to investors the monies or investment instruments belonging to them. The schemes therefore protect investors' assets against the risk of theft, embezzlement and other forms of fraudulent misappropriation. They may also provide protection where the loss of investor assets in the event of firm default has resulted from unintentional errors, negligence or breakdowns in the firms' systems and controls.

However, there is a range of other risks that do not qualify for compensation cover under the ICD and national laws, or where compensation is not certain. In particular, with the exception of the UK compensation scheme, there is no compensation for losses arising from bad investment advice. The UK experience suggests that bad advice may be the most significant risk for retail investors, in terms of both frequency of occurrence and potential impact. With the implementation of Directive 2004/39/EC on markets in financial instruments, investment advice will become a core investment service and, for the first time in many EU countries, a regulated activity. Combined with an expected growth in the market for independent financial advice in the EU, this could result in calls for greater regulatory protection. Even if investment advisers were required to participate in a compensation scheme (which they may following the implementation of the 2004 Directive), as is already the case in the UK, current compensation rules under the ICD and in all countries but the UK would not provide this protection. Bad advice is not compensated by schemes that focus on compensating physical losses of investor monies and securities.

Investor compensation schemes provide only one form of protection against the various risk exposures for retail investors. Other protection mechanisms are in place: these either are prescribed by regulation (eg, prudential regulation, segregation requirements, other conduct-of-business rules, supervision and enforcement), or emerge from institutional arrangements (eg, economic capital of investment firms, firm reputation, private insurance cover). The better the protection provided by the alternative protection mechanisms, the less the need and resource requirements for the statutory investor compensation schemes. However, past case experience suggests that there have been instances where the alternative mechanisms have failed and investors would have incurred significant losses, had it not been for the existence of a statutory scheme. The national investor compensation schemes established in the EU therefore play an important complementary role in providing last-resort protection for retail investors.

Investor compensation schemes in the ten new EU Member States

The ten new EU Member States have implemented the ICD and established investor compensation schemes, subject to certain transitional arrangements. Most schemes have yet to experience a compensation event. However, the two countries that have had compensation events have experienced a relatively large number of firm failures. Although the individual failures have tended to be small, there have been problems in claims processing and in raising sufficient funds to pay compensation to investors. In both countries, an element of state funding was required to complement the funds that could be raised from firm contributions. Further analysis may be required to gain a better understanding of the need and requirements for investor compensation arrangements in the new Member States.

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1 Introduction

Oxera is pleased to submit the research report, 'Description and assessment of national investor compensation schemes established in accordance with Directive 97/9/EC', commissioned by the Internal Market Directorate-General of the European Commission.

1.1 Focus of the research and structure of the report

The Investment Compensation Scheme Directive (ICD) (Directive 97/9/EC), and the national measures implementing it in the EU Member States, are important regulatory mechanisms that aim to protect investors against the risk of losses in the event of an investment firm's inability to repay money or return assets held on their behalf.[1] Investor compensation represents a further layer of protection in conjunction with conduct-of-business rules, prudential regulation, and organisational and operational safeguards.

The principal objective of this research study is to provide a comparative description and evaluation of the national investor compensation schemes with respect to their operating performance, financial position and, ultimately, the level of protection they afford to investors. The study comprises four main elements:

- **inventory of the national investor compensation schemes**—a comparative description of the features of the national schemes and the most important differences between them;
- **analysis of the operating arrangements of the national schemes and their performance—**analysis of past claims for compensation on national schemes and the performance of the schemes in handling claims and awarding compensation to investors;
- **analysis of the funding position and financial resilience of the national schemes—** assessment of the financial situation of the schemes and their capacity to withstand claims made by investors;
- **analysis of the risks for retail investors and the schemes' coverage of the principal types of loss event**—evaluation of the main types of risk for retail investors and the degree to which these are mitigated by the national schemes, both in isolation and in relation to alternative forms of investor protection.

This research study focuses on the investor compensation arrangements in place in the EU 15. A comprehensive analysis of the investor compensation schemes established in the ten EU Member States that entered the EU in May 2004 was beyond the scope of this research. Nevertheless, an overview of the most important features of the compensation schemes in these countries is provided. The research was conducted, and the report written, between January 2004 and January 2005.

The structure of this report is as follows.

- Section 2 presents an inventory of the investor compensation schemes in the EU 15. It draws from the detailed country descriptions contained in Appendices 1 to 15, and provides a comparative summary of the most significant features of the schemes.

[1] 'Directive 97/9/EC of the European Parliament and of the Council of 3 March 1997 on investor compensation schemes', *Official Journal of the European Union*, L 084, 26/03/1997 P. 0022–0031.

– Section 3 sets out the past claims for compensation on the national schemes, and the operating arrangements in place to handle claims and award compensation to investors.

– Section 4 focuses on the financial position of the schemes and discusses their capability to fund the cost of compensation claims.

– Section 5 evaluates the risks and losses to which investors are exposed and the extent to which these are covered by the compensation schemes.

– Section 6 summarises the investor compensation arrangements in place in the ten new EU Member States.

A separate document contains the appendices to the report.

– Appendices 1 to 15 present the country-specific descriptions of the compensation arrangements in place in each of the EU 15 Member States.

– Appendix 16 reproduces the questionnaire that was sent to each compensation scheme in the EU 15.

– Appendix 17 lists the participants that completed a similar, but shorter, questionnaire for the ten new EU Member States.

1.2 Methodology

This report required extensive information-gathering and research into the investor compensation arrangements in the EU 15, using the means of analysis outlined below.

– *Review of laws, regulations and other publications*—all relevant national laws and regulations governing investor compensation arrangements, as well as other relevant published documentation (eg, annual reports), were consulted for each of the EU 15 Member States to gain a comprehensive understanding of the structure and operation of the national schemes. The desk-based research also incorporated a comparison of the national legislation with the ICD.

– *Questionnaire analysis*—in addition to the review of the published documentation, a detailed questionnaire was designed, to fill any information gaps and obtain all relevant pieces of information in a consistent format for all countries. A copy of the questionnaire is reproduced in Appendix 16 in the separate 'Appendices' report. Four schemes (operating in Germany, Ireland, Sweden and the UK) provided comments on early drafts of the questionnaire, and three of the schemes participated in a pilot. The finalised questionnaire was sent out to the scheme operators in all EU 15 Member States at the end of March or beginning of April 2004.

– *Country visits and interviews*—early contacts were established with the scheme operators in each country, to inform them about the project and to ask for their research input. During April and June 2004, two members of Oxera's research team visited most EU Member States and conducted interviews with the scheme operators.

  The interviews with scheme operators and regulators were critical to the information-gathering exercise and contributed significantly to the understanding of the compensation arrangements in the countries. The interviews also gave the scheme operators an opportunity to express their views on the research.

Following the information gathering, Oxera sent a first draft of the country-specific descriptions contained in Appendices 1 to 15 to the scheme operators and/or regulators in the EU 15 for comment and correction of factual errors or omissions. All comments and corrections were incorporated.

In addition to collecting country-specific information, Oxera reviewed any existing academic literature and research studies to examine the generic issues addressed in this research.

For the overview of compensation arrangements in the ten new EU Member States, Oxera sent a questionnaire to the relevant regulatory authorities and/or scheme operators, the responses to which provided the basis for the description contained in section 6 of this report.

The inventory of compensation schemes is based on national legislation in place as at April/May 2004. The adoption in April 2004 by the European Parliament and the Council of the new Investment Services Directive (Directive 2004/39/EC on markets in financial instruments) and any resulting (or other) changes in national investment services legislation are not addressed in any detail.[2]

1.3 Acknowledgments

The country descriptions and analysis are the result of an extensive consultation process. Throughout this process, everyone involved has been very helpful, and it would be difficult to single anyone out for special mention. We would like to express general thanks to all those who participated, in particular the scheme representatives from the EU Member States who completed a detailed questionnaire, were available for interview, responded to additional requests for information and clarification, and verified our descriptions of the compensation arrangements governing their schemes. We would like to thank the national regulators who were interviewed and the DG Internal Market staff who supported this study. We would also like to thank the national regulators who were interviewed as part of the research.

In October 2004, we presented the main findings of the research at a meeting of the European Securities Committee (ESC). A draft final report was subsequently sent to all ESC members, and we are grateful for the comments we received. We also incorporated in the final report the comments we received from DG Internal Market staff. We are grateful for their interest and general support with this study.

[2] 'Directive 2004/39/EC of the European Parliament and of the Council of 21 April 2004 on markets in financial instruments amending Council Directives 85/611/EEC and 93/6/EEC and Directive 2000/12/EC of the European Parliament and of the Council and repealing Council Directive 93/22/EEC'.

2 Inventory of the investor compensation schemes in the EU 15

The ICD lays down certain basic requirements for the national investor compensation schemes, to provide a consistent minimum level of investor protection across the EU. Each Member State is responsible for implementing an appropriate scheme and determining the most suitable way of organising and financing the scheme. Thus, while all of the EU 15 have implemented the ICD, the manner in which the Directive has been interpreted and applied varies considerably.

This section provides an inventory of the compensation arrangements in place in each of the EU 15 Member States.[3] It draws from the more detailed country descriptions contained in Appendices 1 to 15, and summarises the most important features of the schemes and the ways in which they differ across countries.

The inventory covers:

– the date of implementation;
– relevant national laws and regulations;
– governance structure and relationship with the regulatory authority;
– participation requirements for investment firms and/or credit institutions;
– eligible claims and claimants;
– compensation limits.

It also summarises basic funding arrangements, with a more detailed description and assessment presented in section 4 of the report.

The inventory and cross-country comparison was conducted in light of the minimum standards laid down in the ICD, and focuses on the manner in which the countries have interpreted and applied the ICD requirements. A short summary of the ICD is provided in the box below.

Box 2.1 Summary of the ICD

Background

In March 1997, the European Council enacted Directive 97/9/EC in relation to the establishment of investor compensation schemes in EU Member States. The ICD was seen as an integral part of the framework for the establishment of a single market in financial services. The Directive stemmed from another key directive, Council Directive 93/22/EEC on investment services in the securities field—the Investment Services Directive.[4] The Investment Services Directive, now replaced by Directive 2004/39/EC on markets in financial instruments, laid down certain regulatory and prudential rules governing investment firms throughout the EU. These rules aimed to protect investors' money and securities. However, the Directive did not offer protection to investors in cases where insolvency resulted in the inability of an investment firm to return securities or money to investors. The purpose of the ICD is to provide a minimum level of protection for investors in such circumstances.

[3] The following exchange rates have been used throughout the report: Danish krone (DKK) 1 = €0.135; Swedish krona (SEK) 1 = €0.11; and £1 = €1.50.

[4] 'Council Directive 93/22/EEC of 10 May 1993 on investment services in the securities field', *Official Journal of the European Union*, L 141, 11/06/1993, P. 0027–0046.

Scope and minimum level of compensation

The ICD provides that:

> each Member State should have an investor compensation scheme that guarantees a harmonised minimum level of protection at least for the small investor in the event of an investment firm being unable to meet its obligations to its investor clients.[5]

It requires Member States to ensure that at least 90% of each investor's claims against an investment firm is met by the compensation scheme, with a limit of no less than €20,000 (Art. 4, paras 1 and 4).

An investor is defined as 'any person who has entrusted money or instruments to an investment firm in connection with investment business' (Art. 1.4). However, protection is principally intended for retail investors; as a result, the ICD allows countries to exclude certain investors from claiming compensation, in particular professional and institutional investors as well as investors connected to the firm in default (Art. 4, para 3).

Investment business is defined in the ICD with reference to the investment services and instruments listed in the Investment Services Directive, now replaced by Directive 2004/39/EC (Art. 1). Investment firms providing such investment business must participate in a compensation scheme. In the event of default where a participating firm is unable to repay money connected with the investment business or return the instruments held for investors, the relevant compensation scheme must compensate eligible claims as soon as possible (Art. 9).

Relationship with Deposit Guarantee Schemes Directive

The ICD was modelled on, and is consistent with, Directive 94/19/EC on deposit guarantee schemes, which sets minimum rules for compensation of depositors where a credit institution becomes insolvent.[6] The need for consistency between the two Directives was seen as essential in the case of banks acting as investment firms. Under the ICD, banks are allowed to comply with both Directives by belonging to a single compensation scheme if the scheme protects both the deposits and investments held by the banks (Art. 2, para 1).

Home-country control and participation of EEA branches

The ICD requires supervisory authorities of an investment firm's home country to be responsible for investor compensation arrangements for that firm, even in cases where firms are established and/or offer services in several Member States, consistent with the home-country control principle (Art. 7, para 1). However, the ICD contains a 'top-up clause' giving branches of investment firms in a host Member State the right to join the host country's scheme if it provides a higher level of compensation than their home country's scheme (Art (Art. 7, para 1).

Organisational structure and funding arrangements

Under the ICD, Member States are obliged to introduce and recognise a compensation scheme to meet the minimum compensation requirements; however, they can exercise discretion as to the organisational structure and financing of the scheme (Preamble (25)).

[5] 'Directive 97/9/EC of the European Parliament and of the Council of 3 March 1997 on investor compensation schemes', *Official Journal of the European Union*, L 084, 26/03/1997 P. 0022–0031, Preamble (4).

[6] 'Directive 94/19/EC of the European Parliament and of the Council of 30 May 1994 on deposit guarantee schemes', *Official Journal of the European Union*, L 135, 31/05/1994 P. 0005–0014.

2.1 Implementation of the ICD in national law and regulation

The ICD requires each Member State to introduce and recognise officially one or more investor compensation schemes (Art. 7, para 1). Table 2.1 below summarises the schemes established in each of the EU 15 Member States in accordance with this requirement. In addition, it shows the principal legislation transposing the ICD into national law, other regulations specifically relating to investor compensation, and the date on which the schemes were established.

Italy and the UK are the only countries that had a comprehensive investor compensation scheme before the ICD.[7] As the UK scheme was established in 1988, implementing the ICD required a few changes to existing compensation arrangements in the UK since they already satisfied and, in many respects, exceeded, the minimum compensation requirements set out in the ICD. The most significant changes required as a result of the ICD involved extending compensation cover to investors elsewhere in the EEA, allowing UK branches of EEA firms to participate in the scheme, and removing the ceiling on the total funds that the compensation scheme can pay to investors in a given period. In Italy, a compensation scheme was set up in 1992, which provided compensation for losses of Italian firms only, subject to a compensation limit of 25% of established claims against a firm in default.

For other EU 15 Member States, investor compensation arrangements were introduced after they became obligatory under the ICD. Member States were due to implement the ICD by September 28th 1998, and most put in place the required arrangements within this timeframe. On July 30th 1999 Austria, France and Luxembourg were issued with ‘reasoned opinions’ (the second stage of infringement proceedings under Article 226 of the EC Treaty) for failure to implement the ICD into national law, but achieved implementation thereafter.[8]

Four Member States (Austria, Germany, the Netherlands and Spain) have established more than one scheme that provide investor compensation in accordance with the ICD. In these countries, there are separate investor compensation schemes for credit institutions and non-bank investment firms. The banking schemes in these countries were originally established as deposit guarantee schemes in accordance with the Deposit Guarantee Schemes Directive, which sets minimum rules for compensating customers for losses of deposits held at credit institutions that fail. The ICD, which has been modelled on and is consistent with the Deposit Guarantee Schemes Directive, allows for banks acting as investment firms to comply with both Directives by belonging to a single compensation scheme. Thus, these four countries have extended their deposit guarantee schemes to cover investment business undertaken by participating credit institutions.

In all other EU 15 Member States, there is a single statutory compensation scheme to cover the activities of non-bank investment firms and credit institutions with respect to their investment business. However, in some cases, this single scheme may operate under the same ownership or management as the deposit guarantee scheme, as is further discussed in section 2.3.

[7] Belgium and France had limited compensation schemes to protect clients of certain brokerage firms (sociétés de bourse).

[8] See European Commission (Internal Market DG) (1999), ‘Financial Services: Infringement Procedures against Italy, Spain, Austria, France and Luxembourg’, Legal Notice, July 30th. In addition, the European Commission took measures against the UK for failure to implement the ICD within the territory of Gibraltar. See European Commission (Internal Market DG) (2001), ‘Financial Services: UK to be referred to Court over Investor Compensation Directive’, Legal Notice, July 27th.

Table 2.1 Establishment of compensation schemes and legal/regulatory framework

	Name of scheme(s)	Principal legislation	Other regulation	Established
Austria	– Investor Compensation Scheme for Securities Firms (Anlegerentschädigungseinrichtung von Wertpapier-dienstleistungsunternehmen GmbH, AeW)—for asset managers – Einlagensicherung der Banken und Bankiers GmbH—for private banks and credit institutions that do not belong to any of the other specialised banking schemes – Sparkassen-Haftungs AG—for savings banks – Österreichische Raiffeisen-Einlagensicherung reg.Gen.mbH—for one type of credit cooperative (Raiffeisenbanken) – Schultze-Delitzsch-Haftungsgenossenschaft reg.Gen.mbH —for another type of credit cooperative (Volksbanken) – Hypo-Haftungs-GmbH—for the Landes-Hypothekenbanken that are (partly) owned by the federal states	Securities Supervision Act 1996 (Wertpapieraufsichtsgesetz) Banking Act 1993 (Bankwesengesetz)	–	1999 The AeW was established in September 1999; the banking schemes were extended in May 1999 to provide investor compensation in addition to deposit guarantee
Belgium	– Deposit and Financial Instruments Protection Fund (Fonds de Protection des Depots et des Instruments des Depots et des Instruments Financiers/Beschermingsfonds Voor Deposito's en Financiële Instrumenten)	Loi créant un fonds de protection des depots et des instruments des depots et des instruments financiers/Wet van 17 December 1998 tot oprichting van een beschermingsfonds voor deposito's en financiële instrumenten en tot reorganisatie van de beschermingsregelingen voor deposito's en financiële instrumenten	–	February 12th 1999 A limited compensation scheme existed prior to this date for brokerage houses
Denmark	– Guarantee Fund for Depositors and Investors (Garantifonden for indskydere og investorer)	Act No. 415 of Guarantee Fund for Depositors and Investors, June 26th 1998 (Lov om en garantifond for indskydere og investorer)	Executive Order No. 1055 of December 8th 2003	October 15th 1998
Finland	– Investors' Compensation Fund (Sijoittajienkorvausrahasto)	Act on Investment Firms (579/1996) (Laki sijoituspalveluyrityksistä); Chapter 6 was fully revised in July 1998	–	September 1st 1998

	Name of scheme(s)	Principal legislation	Other regulation	Established
France	– Securities Guarantee Scheme (Mécanisme de Garantie des Titres) operated by the Deposit Guarantee Fund (Fonds de Garantie des Dépôts, FGD)	Act No. 99-532 dated June 25th 1999 on savings and financial security (Loi sur l'Épargne et la Sécurité)	French Monetary and Financial Code (Code Monétaire et Financier) and corresponding regulations dated September 23rd 1999 of the French Banking and Financial Regulations Committee (Comité de la Réglementation Bancaire et Financière, CRBF)	End of 1999 A limited compensation scheme existed prior to this date for brokerage houses
Germany[1]	– Compensatory Fund for Securities Trading Companies (Entschädigungseinrichtung der Wertpapierhandelsunternehmen, EdW) – Compensatory Fund of German Banks (Entschädigungseinrichtung deutscher Banken, EdB) – Compensatory Fund of the Association of German Public Sector Banks (Entschädigungseinrichtung des Bundesverbandes Öffentlicher Banken Deutschlands GmbH)	Act on Deposit Guarantee and Investor Compensation (Einlagensicherungs- und Anlegerentschädigungsgesetz,)	Regulatory orders governing the contributions of firms issued by the Ministry of Finance (Verordnungen über die Beiträge)	August 1st 1998
Greece	– Athens Stock Exchange (ASE) Members Guarantee Fund (Συνεγγυητικό Κεφάλαιο)	Law No. 2533/1997 on Derivative Exchanges and Other Provisions	–	September 1998
Ireland	– Investor Compensation Company Limited (ICCL)	The Investor Compensation Act 1998	Various Acts regulating the financial services industry	August 1st 1998
Italy	– National Guarantee Fund (Fondo Nazionale di Garanzia, Art. 62, comma 1, decreto legislativo 23 luglio 1996, n. 415)	Decreto legislativo 23 luglio 1996, n. 415 (Suppl. ord. G.U. n. 186 del 9 agosto 1996) Decreto legislativo 24 febbraio 1998, n. 58 (Suppl. ord. G.U. n. 71 del 26 marzo 1998) Decreto del Ministro del Tesoro, del Bilancio e della Programmazione Economica 14 novembre 1997, n. 485 (Suppl. ord. G.U. n. 13 del 17 gennaio 1998)	Statutes and operational regulations of the National Guarantee Fund	July 1998 Replaced previous Guarantee Fund, which was established in 1992

Note: [1] In Germany, separate protection schemes exist for savings banks (Sparkassen) and credit cooperatives (Volksbanken and Raiffeisenbanken). The schemes guarantee the solvency of their members, and participating banks are not required to join a statutory deposit guarantee and investor compensation scheme under German law, consistent with the exemption granted under the ICD (Article 2., para.1, sentence 3). The schemes are therefore not considered in this study.

	Name of scheme(s)	Principal legislation	Other regulation	Established
Luxembourg	– Deposit Guarantee Association Luxembourg (Association pour la Garantie des Dépôts Luxembourg, AGDL)	Law on the Financial Services Sector in Luxembourg (Loi du 5 avril 1993 sur le secteur financier au Luxembourg), and subsequent amendments	–	December 14th 2000
Netherlands	– Investor Compensation Scheme of Securities Institutions for Claims of Investors (ICS) (Beleggerscompensatieregeling van Effecteninstellingen voor Vorderingen van Beleggers) – Collective Guarantee Scheme of Credit Institutions for Repayable Funds and Portfolio Investments (CGS) (Collectieve Garantieregeling van Kredietinstellingen voor Terugbetaalbare Gelden en Beleggingen)	Act on the Supervision of Securities Trade 1995 Act on the Supervision of the Credit System 1992	Decree of January 29th 2004, giving generally binding force to the ICS Decree of September 28th 1998, giving generally binding force to the CGS of September 17th 1998	September 26th 1998
Portugal	– Investor Compensation Scheme (Sistema de Indemnização aos Investidores, SII)	Decree-Law no. 222/99 (Decreto–Lei n.º 222/99 de 22 de Junho)	Decree-Order (Portuaria No. 1266/2001, November 6th)	January 31st 2000
Spain	– Investor Compensation Fund (Fondo General de Garantía de Inversiones, FOGAIN) – Deposit Guarantee Funds (Fondos de Garantía de Depósitos, FGDs) for different types of credit institution (bank institutions, savings banks and credit cooperative banks)	Royal Decree 948/2001 (Real Decreto 948/2001, August 3, sobre sistemas de indemnización de los inversores). Royal Decree 2606/1996, modified by Royal Decree 948/2001	Securities Markets Law (Ley 24/1988, de 28 de Julio, del Mercado de Valores)	FOGAIN was set up in November 2001 FGDs were extended in August 2001 to provide investor compensation in addition to deposit guarantee
Sweden	– Investor Compensation Scheme (Investerarskyddet)	Act on Investor Compensation Scheme (Lag (1999:158) om investerarskydd)	–	May 1st 1999
UK	– Financial Services Compensation Scheme (FSCS)	Financial Services and Markets Act 2000	Financial Services Authority Handbook of Rules and Guidance ('Compensation')	1988 Then referred to as the Investors Compensation Scheme, the FSCS took over on December 1st 2001.

Source: Unless otherwise stated, all information and data presented in the tables in this report were taken from responses to the questionnaires sent to the EU Member States, and from discussions with the schemes' managers.

2.2 Ownership, management and relationship with regulator

Under the ICD, Member States are obliged to introduce and recognise a compensation scheme, but can exercise discretion as to the organisational structure of the scheme.[9] Consequently, a variety of ownership and management models can be observed across the EU 15. While some countries have opted to operate their investor compensation scheme by way of a public body, others have implemented a model of private ownership and management. Some of the public schemes are operated by, or from within, the financial services supervisory authority (eg, the Netherlands or Portugal), and others are administered by a separate public authority (eg, Sweden). Although essentially public, some of the schemes have in place some form of involvement or representation by the participating firms.

Among the private schemes, some are set up as limited companies, with the participating firms constituting the shareholders of the company and electing a board to govern the management of the scheme (eg, the non-bank schemes in Austria and Spain). A common alternative model of private ownership and management is for the trade association representing the participating firms to be responsible for investor compensation. For example, the Austrian and German banking schemes are fully owned subsidiaries of the relevant banking associations. Similarly, the Finnish scheme is set up as a trust that is currently administered by the Finnish Bankers' Association.

Although independent, the schemes generally maintain a close relationship with the financial services regulator, and are accountable and subject to the supervision of that regulator. The regulator is usually the competent authority that declares a firm in default, thereby triggering the operation of the compensation scheme. The schemes and regulators generally cooperate with regard to information-sharing.

Table 2.2 below summarises the ownership and management arrangements observed in the countries, and the relationship between the compensation schemes and the relevant regulatory authority. The number of staff employed to administer the schemes is summarised in section 3.

[9] 'Directive 97/9/EC of the European Parliament and of the Council of 3 March 1997 on investor compensation schemes', *Official Journal of the European Union*, L 084, 26/03/1997 P. 0022–0031, Preamble (25).

Table 2.2 Ownership, management and relationship with regulator

	Ownership and management	Name of the regulator(s)	Relationship with the regulator
Austria	The AeW is a limited liability company under private management; participating firms are shareholders The schemes for banks are owned and administered privately by the relevant banking trade associations	Financial Market Authority (Finanzmarktaufsicht)	Operationally independent from, but accountable to, the regulator
Belgium	The Fund is an autonomous public institution managed by a board of directors, consisting of six members representing the authorities and six members representing participating institutions	Commission for the Banking, Finance and Insurance Sector (Commission Bancaire, Financière et des Assurances/Commissie voor het bank- financie- en assurantiewezen, CBFA)	Independent legal entity, but close relationship with regulator; for example, a representative of the CBFA attends the meetings of the board of directors (without voting rights)
Denmark	The Fund is a private independent body, governed by a board of directors. Although private, the board is appointed by the Minister of Economic and Business Affairs and the Fund operates from within the Central Bank	Financial Supervisory Authority (Finanstilsynet, FSA)	The Fund is supervised by the Financial Supervisory Authority (Finanstilsynet), which also has the power to set further rules and regulations governing the operations of the Fund. The Minister of Economic and Business Affairs lays down rules governing cooperation between the Financial Supervisory Authority and the Fund
Finland	The Fund is a trust, privately managed by participating firms. It is currently operated from within the Finnish Bankers' Association	Financial Supervision Authority (Rahoitustarkastus, FSA)	Operationally independent, but under the direct supervision of the Financial Supervision Authority, and any changes to the rules of the Fund must be authorised by the Ministry of Finance
France	The Securities Guarantee Scheme is not itself a legal entity, but a fund owned and managed by the FGD, a legal entity under private law	Banking Commission (Commission Bancaire). Some involvement of the Financial Markets Authority (Authorité des Marchés Financiers, AMF)	Operationally independent of regulators and government, but close relationship and information-sharing between the regulator and the scheme
Germany	The scheme for securities trading firms (EdW) is publicly administered by the Kreditanstalt für Wiederaufbau, a state-owned bank under public law The schemes for banks are owned and administered privately by the relevant banking associations, which have been granted public-law status to carry out the relevant functions	Federal Financial Supervision Authority (Bundesanstalt für Finanzdienstleistungsaufsicht, BaFin)	Operationally independent of, but accountable to, and subject to the supervision of, BaFin
Greece	The ASE Members Guarantee Fund is a legal entity under public law, which is privately managed and governed by a board of seven directors	Hellenic Capital Market Commission (HCMC, Επιτροπή Κεφαλαιαγοράς)	Operationally independent, but regulated by and accountable to the HCMC

	Ownership and management	Name of the regulator(s)	Relationship with the regulator
Ireland	The ICCL is a publicly owned and managed company (limited by guarantee), with three shareholders (the regulator, the Irish Stock Exchange, and the Irish Association of Investment Managers) and a board of directors	Irish Financial Services Regulatory Authority (FSRA)	Independent legal entity, but certain actions can only be undertaken with approval of the regulator. The FSRA is shareholder of the ICCL and supervisor
Italy	The Fund is an association established under private law. It is managed by a management committee made up of seven representatives of participating firms	– Ministry of the Economy and Finance (Ministero dell'Economia e delle Finanze) – Bank of Italy (Banca d'Italia) – Commissione Nazionale per le Società e la Borsa (Consob)	Operationally independent, but subject to the approval of the Ministry of the Economy and Finance
Luxembourg	The AGDL is a private non-profit association with a registered office in Luxembourg, and a board of 11–15 directors	Commission for the Supervision of the Financial Sector (Commission de Surveillance du Secteur Financier)	Operationally independent, but subject to approval of the Commission de Surveillance du Secteur Financier
Netherlands	Both schemes are operated by the Central Bank, with involvement of the trade associations representing participating firms	Dutch Central Bank (De Nederlandsche Bank) The Authority for the Financial Markets (Autoriteit Financiële Markten) was the relevant regulator for the ICS until March 2004	Schemes are operated by the supervisory division of the Central Bank, which also draws up regulations
Portugal	The SII is a publicly owned and managed entity, operated by the regulatory authority	Comissão do Mercado de Valores Mobiliários (CMVM), Banco de Portugal	The scheme is operated by the CMVM
Spain	FOGAIN is managed by a private limited company with a board of directors whose share capital is held by the participating investment firms The three FGDs are managed by a subsidiary company, the Sociedad Gestora de los Fondos de Garantía de Depósitos en Entidades de Créditos AIE (Society of FGDs). Each FGD is a legal entity with a management committee made up of representatives of the Banco de España and credit institutions (four members each)	Comisión Nacional del Mercado de Valores (CNMV), Banco de España Banco de España	Operationally independent, but supervised and subject to approval of the regulatory authority. The CNMV has a seat on the board of FOGAIN directors. Banco de España has four members on the management committee of each FGD managed by the Society of FGDs
Sweden	The Deposit Guarantee Board (Insättningsgarantinämnden), a public authority reporting to the Ministry of Finance, is responsible for both the Deposit Guarantee Scheme and the Investor Compensation Scheme	Financial Supervisory Authority (Finansinspektionen, FSA)	Independent from the regulator, but cooperation in sharing information about troubled institutions. The FSA provides administrative services to the board

	Ownership and management	Name of the regulator(s)	Relationship with the regulator
UK	The FSCS is a privately owned and managed company ('company limited by guarantee') with a board of ten directors who are appointed by the regulator	Financial Services Authority (FSA)	The FSCS was established by the FSA through the Financial Services and Markets Act 2000. Although operationally independent, the FSCS is approved by and accountable to the FSA (relationship governed by Memorandum of Understanding). The FSA also collects contributions from participating firms

2.3 Relationship with the deposit guarantee scheme

Table 2.3 below lists the names of the deposit guarantee schemes established in the EU 15 in accordance with the Deposit Guarantee Scheme Directive to protect deposits held at credit institutions. Although this research does not include an examination of the deposit guarantee arrangements, they are relevant for the purposes of a study on investor compensation, for four main reasons.

First, as mentioned in section 2.1, in some countries the deposit guarantee schemes in place prior to the implementation of the ICD were extended to provide investor compensation for the investment business undertaken by the participating credit institutions. Thus, for participating institutions, following the implementation of the ICD, a single scheme membership covers both deposit and investment business. This is the case in Austria, Germany, the Netherlands and Spain—compensation in relation to both deposits and investments is provided by the same scheme operator, using the same pool of funds. However, the schemes that were established for non-bank investment firms in these countries are owned, managed and funded separately from the deposit guarantee schemes. Denmark also maintains a separate fund for credit institutions to cover both deposit guarantee and investor compensation; however, the fund is jointly owned and managed by a body also responsible for compensating customers of investment firms.

Second, some countries (Finland, France, Ireland, Italy, Greece, Luxembourg, Portugal, Sweden and the UK) operate a single investor compensation scheme for all types of firms, not distinguishing between non-bank investment firms and credit institutions that undertake investment business. Deposit-taking credit institutions that also carry out investment business must participate in the investor compensation scheme in addition to the deposit guarantee scheme. The funds used for investor compensation purposes are separate from those of the deposit guarantee scheme. While there is no pooling of funds, in some cases the schemes may be jointly owned and managed, or there may be formal or informal links between the schemes.

Third, investor compensation and deposit guarantee schemes may be completely interlinked, not only for ownership and management, but also for funding purposes. This is the case in Belgium, where a single scheme (and a single pool of funds) compensates losses arising in relation to both investments and deposits, and where no membership distinction is drawn between non-bank investment firms and credit institutions.

Fourth, irrespective of joint ownership, management and/or funding structures, the protection afforded by the Deposit Guarantee Scheme Directive can be directly relevant for investors who hold investment monies with a credit institution that carries out investment business in addition to deposit-taking business. As noted in the ICD, where cash is held by a credit institution, it may in certain cases be difficult to distinguish between cash held in connection with investment business and cash held as deposits.[10] For claims relating to investment monies, the ICD allows Member States to determine whether such claims should be regarded as investment claims (and hence fall under the scope of the ICD), or as deposit claims (and hence fall under the scope of the Deposit Guarantee Scheme Directive). The treatment of claims for lost investment monies differs between the countries, as shown below.

– In Finland, Ireland, Italy, Greece, Portugal, Sweden and the UK, claims for money held by credit institutions in relation to investment business are generally treated as securities claims—ie, they are claims against the investor compensation scheme. There have

[10] 'Directive 97/9/EC of the European Parliament and of the Council of 3 March 1997 on investor compensation schemes', *Official Journal of the European Union*, L 084, 26/03/1997 P. 0022–0031, Preamble (9).

been no cases of a default of a credit institution in recent years where it was difficult to distinguish between investment monies and deposits.[11] In the Netherlands, cash balances that are difficult to classify, or could, in principle, be attributed either to the investor compensation scheme or the deposit guarantee scheme are covered by the deposit guarantee scheme.

– In Belgium, Denmark, France, Germany, Luxembourg, and Spain, all investment monies held by a deposit-taking credit institution are generally treated as deposits, which means that all claims for cash are viewed as claims against the deposit guarantee scheme.

– Austrian law distinguishes between different types of investment money, and treats claims accordingly. Specifically, monies entrusted to a deposit-taking credit institution for the acquisition of instruments are attributed to deposit guarantee, but monies that result directly from the crediting of income, disposal or other settlement of securities transactions are attributed to investor compensation.[12]

The treatment of investment monies is relevant with regard to the maximum amount of compensation payable since separate compensation limits apply for investor compensation and deposit guarantee. In countries where investment monies held by credit institutions are generally treated as deposits, an investor holding both monies and securities with a defaulting institution could, in principle, qualify to obtain compensation up to two separate limits. In contrast, countries that treat monies as investment claims would apply a single compensation limit, and provide compensation for the sum of monies and securities up to that compensation limit. This is explained in greater detail in section 2.7.

[11] This distinction is less relevant in countries such as Ireland and the UK where banks tend to separate investment business from deposit-taking business—for example, by placing their investment business in a subsidiary with a separate licence.
[12] Although different types of investment money are specified in law, one of the banking schemes noted that the distinction is not practical and that, in practice, all money claims are treated as deposit claims, irrespective of the type of money.

Table 2.3 Relationship with deposit guarantee schemes

	Name of deposit guarantee scheme	Joint ownership, management and/or pool of funds?
Austria	– Einlagensicherung der Banken und Bankiers GmbH – Sparkassen-Haftungs AG – Österreichische Raiffeisen-Einlagensicherung reg.Gen.mbH – Schultze-Delitzsch-Haftungsgenossenschaft reg.Gen.mbH – Hypo-Haftungs-GmbH	Banking schemes cover both deposit guarantee and investor compensation, and employ the same pool of funds for both types of claim The scheme for asset managers (the AeW) is completely separate from the deposit guarantee schemes
Belgium	– Deposit and Financial Instruments Protection Fund (Fonds de Protection des Depots et des Instruments des Depots et des Instruments Financiers/ Beschermingsfonds Voor Deposito's en Financiele Instrumenten)	The Fund jointly operates investor compensation and deposit guarantee schemes A single pool of funds for all firms with respect to both investment and deposit-taking activities
Denmark	– Guarantee Fund for Depositors and Investors (Garantifonden for indskydere og investorer)	The Fund is divided into three departments (credit institutions, mortgage banks and investment firms) Departments are jointly managed, but separately funded Departments for credit institutions cover both deposit guarantee and investor protection, using the same pool of funds for both types of claim
Finland	– Deposit Guarantee Fund (Talletussuojarahasto)	Investor compensation and deposit guarantee schemes are separate in terms of ownership, management and funding, but both are currently operated from within the Finnish Bankers' Association
France	– Deposit Guarantee Scheme (Mécanisme de Garantie des Dépôts), also operated by the FGD	The investor compensation scheme and deposit guarantee scheme are both owned and managed by the FGD, but maintain separate accounting and no pooling of funds between them
Germany	– Compensatory Fund of German Banks (EdB) – Compensatory Fund of the Association of German Public Sector Banks (Entschädigungseinrichtung des Bundesverbandes Öffentlicher Banken) In addition to statutory deposit guarantee, the schemes offer voluntary protection There are also separate schemes for the regional savings banks and the cooperative banks, which provide institutional protection	The banking schemes cover both deposit guarantee and investor compensation, and employ the same pool of funds for both types of claim The scheme for the securities trading firms (EdW) is completely separate from the deposit guarantee schemes

	Name of deposit guarantee scheme	Joint ownership, management and/or pool of funds?
Greece	– Hellenic Deposit Guarantee Fund	The investor compensation and deposit guarantee schemes are completely separate in terms of ownership, management and funding
Ireland	– Deposit Protection Scheme	The investor compensation and deposit guarantee schemes are completely separate in terms of ownership, management and funding
Italy	– Interbank Deposit Protection Fund (Fondo Interbancario di Tutela dei Depositi) – Deposit Protection Fund for Credit Cooperatives (Fondo di Garanzia dei Depositanti del Credito Cooperativo)	The investor compensation and deposit guarantee schemes are completely separate in terms of ownership, management and funding
Luxembourg	– AGDL	The AGDL handles both deposit guarantee and investor compensation cases, but maintains a separate pool of funds for each scheme
Netherlands	– Collective Guarantee Scheme of Credit Institutions for Repayable Funds and Portfolio Investments (Collectieve Garantieregeling van Kredietinstellingen voor Terugbetaalbare Gelden en Beleggingen)	The banking scheme covers both deposit guarantee and investor compensation, and employs the same pool of funds for both types of claim The ICS is separately managed and funded (although both schemes are operated by the Central Bank)
Portugal	– Deposit Guarantee Fund (Fundo de Garantia de Depósitos, FGD)	The investor compensation and deposit guarantee schemes are completely separate in terms of ownership, management and funding
Spain	– Deposit Guarantee Funds (Fondos de Garantía de Depósitos, FGDs) for different types of credit institution (bank institutions, savings banks and credit cooperative banks)	The FGDs cover both deposit guarantee and investor compensation in relation to participating banks, and employ the same pool of funds for both types of claim The Investor Compensation Fund, FOGAIN, is separately owned, managed and funded (except for the early cases dealt with by FOGAIN, which were largely compensated using FGD resources)
Sweden	– Deposit Guarantee Scheme (Insättningsgarantin), managed by the Deposit Guarantee Board	The investor compensation and deposit guarantee schemes are both administered by the Deposit Guarantee Board, but each scheme is separately financed
UK	– FSCS (deposit sub-scheme)	The investment and deposit sub-schemes are both owned and managed by the FSCS, but separate pools of funds are maintained for each sub-scheme

2.4 General participation requirements

Investment firms (including credit institutions) that carry out regulated investment services are generally required to participate in an investor compensation scheme under the ICD and according to the regulations in place in each Member State.

Table 2.4 below provides an overview of the firms participating in the national schemes. As already explained, some countries (Austria, Germany, the Netherlands and Spain) have set up separate legal entities to compensate claims in relation to different types of firm—deposit-taking credit institutions that carry out investment business participate in separate schemes to those of non-bank investment firms. All other countries have one investor compensation entity in which all investment firms (including credit institutions) participate to the extent that they have a licence to provide investment services. The types of investment services covered by the schemes are summarised in section 2.6 and described in more detail in the country-specific appendices.

One issue is whether investment firms are required to participate in the schemes even if their activities cannot, in principle, give rise to a claim against the compensation scheme. As further discussed in section 2.6, compensation is generally restricted to cases where a firm is unable to return monies or securities held on behalf of retail investors in connection with their investment business. Given these restrictions, two questions arise—do the compensation schemes require participation from firms that:

– do not hold client money or securities (eg, because they have no such authorisation)?
– do not have any eligible clients (eg, because they only undertake wholesale investment business)?

The reasons for not requiring such firms to participate are that no compensation costs arise in relation to these firms. While this is the case in general, there may be instances when losses could arise, if, for example, there is a failure of a firm that held client property even though it was not authorised to do so. Furthermore, there may be a case for requiring all firms in the market to contribute to the funding of the compensation scheme if it generates benefits to the market as a whole—for example, due to the increased public confidence that may result from the existence of a compensation scheme.

In general, the EU 15 require that investment firms that provide investment services listed in the Investment Services Directive[13] participate in the compensation scheme, regardless of whether they are authorised to hold client money/assets. In France and Spain, this requirement has only been implemented recently—when the schemes were initially set up, firms without authorisation to hold client money or provide custody of assets were not required to participate in the scheme. For example, Spain now requires portfolio managers, who, in Spain, are not authorised to hold client assets, to participate in the scheme for non-bank investment firms. Similarly, France changed its laws in August 2003, and currently requires all firms to participate, even those without a custody licence; however, the exemption for portfolio managers, who are never granted such a licence, was retained.

In addition, in general the EU 15 oblige firms that do not have eligible clients to participate, although, in some cases, such firms pay lower contributions to fund the scheme. In Germany and the Netherlands, firms went to court to bring about a judicial decision to exempt their business from participation. In the Netherlands, the suing firms can be described as market makers, which only conduct business for their own account. The Dutch court ruled in favour of the firms; since the end of 2003, market makers in the Netherlands are no longer required

[13] The relevant investment services are listed in section 2.6.

to participate, and the contributions paid by the firms to the scheme were returned. In contrast, a recent German court decision ruled against a firm that sued for its right to be excluded from scheme membership because it had no eligible clients: firms without eligible clients were seen to benefit from the general increase in market trust and confidence in the financial system resulting from the compensation scheme. It was therefore decided that they should participate in the scheme.

Table 2.4 below also reports the total number of firms participating in the countries' compensation schemes. Unless indicated otherwise, the figures are based on the number of firms at the end of 2003. Breakdowns by type of firm are provided in the country-specific appendices. The two largest schemes in terms of membership are observed in the UK (7,706 firms) and Ireland (3,590 firms). Both countries require financial advisers, which make up the largest participant group, to participate in their schemes. Advisers fall outside the current ICD participation requirement,[14] and are therefore not generally covered in other countries. In addition, the structure of the financial services industry in much of Continental Europe tends to be more concentrated, with a significant part of retail investment business being undertaken by universal banks.

[14] The European Council's adoption of Directive 2004/39/EC on markets in financial instruments, and its transposition into the national laws of the EU Member States, will make investment advice a core investment service. The requirement on ICD participation may therefore be expected to change.

Table 2.4 Scheme participation

	Types of firm participating	Total number of participating firms	
Austria	AeW members include non-bank investment firms conducting asset management activities only.	AeW asset managers	*72*
	Banking scheme members are credit institutions. Separate schemes for savings banks, two types of credit cooperative (Raiffeisenbanken and Volksbanken), and public banks (Hypotheken-Banken), and one scheme for all other credit institutions	Banking schemes	813
		of which	
		Savings banks	65
		Raiffeisenbanken	601
		Volksbanken[1]	69
		Hypotheken-Banken	12
		Other credit institutions	66
Belgium	Protection Fund members are all credit institutions (banks, savings banks, and investment banks) and non-bank investment firms (stockbrokers, asset management companies, and financial-instrument-placing firms)		138
Denmark	Guarantee Fund members are investment firms, credit institutions and mortgage banks, with each type of institution being allocated to a separately funded department within the Fund		220
Finland	Compensation Fund members are all investment firms, credit institutions and management companies referred to in the Act on Common Funds that have a licence to provide investment services		376
France	Credit institutions and investment firms, except for asset managers (sociétés de gestion de portefeuille)		374
	Until August 2003, participation was restricted to firms authorised to conduct safekeeping and custody of assets		
Germany	EdW members are all investment firms, including credit institutions that do not take deposits	EdW	776
	Banking scheme members include deposit-taking credit institutions; there are separate schemes for private banks (EdB) and public banks	Scheme for private banks	228
		Scheme for public banks	19
Greece	Investment services providers, including credit institutions. Members are classified into two categories: members of the ASE, and investment firms that are not ASE members		130
Ireland	ICCL members are all authorised investment firms, including credit institutions, licensed to carry out authorised investment business. The definition of investment firms includes insurance intermediaries		3,590[2]
Italy	Credit institutions and non-bank investment firms, including ISD investment firms, portfolio management companies, dealers and instrument-placing firms, and individual stockbrokers.		961

Notes: The number of participating firms relates to 2003 unless otherwise specified, as provided by the schemes in their responses to the questionnaire. [1] The number of firms is based on the number of Volksbanken reported in Dobringer, R. and Schandl-Greyer, M. (2004), 'Österreichs Kreditinstitute im Jahr 2003', *Österreichisches Bank-Archiv (ÖBA)*, **4**, p. 294-301. [2] Of the 3,590 firms, 3,360 are not required to be covered by the Scheme under the ICD.

Table 2.4 Scheme participation (cont'd)

	Types of firm participating		Total number of participating firms
Luxembourg	AGDL members include credit institutions, the Financial Services of the Post Office (Services Financiers de l'Entreprise des Postes et Télécommunications) and non-bank investment firms, which include commission agents, private portfolio managers, professionals acting for their own account, distributors of investment fund shares, underwriters, professional custodians and depositaries. Collective investment scheme management companies are included if they also manage individual portfolios		218
Netherlands	ICS members are investment firms (in general, securities brokers and portfolio managers)		216
	CGS members are credit institutions that may be authorised to carry out investment business in addition to their deposit-taking activities		121
Portugal	SII members are authorised investment firms (brokers, dealers, asset managers, intermediaries for money and foreign-exchange markets) and credit institutions authorised to carry out investment business		76
Spain	FOGAIN members are made up of three types of non-bank investment firms: brokers (agencias de valores), dealers (sociedas de valores) and asset managers (sociedas gestoras de carteras). Since the establishment of FOGAIN in November 2001, asset managers who do not hold client assets are required to participate	FOGAIN	127
	Members of the three FGDs are bank institutions, savings banks, and credit cooperatives	FGDs	223
		of which	
		Banking institutions	89
		Savings banks	47
		Credit cooperatives	87
Sweden	All firms licensed to conduct investment services, including non-bank investment firms and credit institutions		208
The UK	Investment firms (including credit institutions) authorised by the FSA to carry out regulated investment activities		7,706[1]

Notes: The number of participating firms relates to 2003 unless otherwise specified, as provided by the schemes in their responses to the questionnaire. [1] Financial year 2004/05.

2.5 Participation of EEA branches

The national investor compensation schemes cover investors at branches set up by investment firms in other EEA Member States, as required under the ICD (Article 7, para 1). As such, incoming EEA firms, which are passported to conduct regulated activities in the host country, are not required to participate in the host country's compensation scheme for the passported activities, since these are covered by the home country scheme.

However, under the provisions of the ICD, an EEA branch may voluntarily join the compensation scheme of the host state if the level or scope of cover provided by that scheme exceeds that provided by the branch's home state, so as to supplement the cover which its investors receive. These 'top-up' arrangements imply that, if investors in the host state incur losses following the default of an incoming EEA firm, they are entitled to compensation from the home state's scheme up to the payout limit of that scheme, and supplementary compensation from the host state's scheme of an amount equal to the difference between the level of the host and the home state compensation cover.

When an EEA branch applies to join a host country's scheme for supplementary cover, the host and home state enter into a bilateral agreement laying down appropriate rules and procedures for the payment of compensation to investors of that branch (see Annex II of the ICD).

While all of the EU 15 have implemented the ICD provisions on voluntary top-ups, the provisions have been of limited relevance in practice. As summarised in Table 2.5, many schemes only provide the minimum level of compensation cover required under the ICD, making top-up cover irrelevant. Even those compensation schemes with a higher level of cover than that in other countries (such as France and the UK—see section 2.7) do not currently have EEA branches participating in their national schemes. The only two schemes with EEA branch participation are Denmark and the non-bank investment scheme in Spain. The participants in the Danish scheme are Swedish credit institutions, which participate mainly because of the higher cover provided under the Danish deposit guarantee scheme, which is jointly operated with the investor compensation scheme. France, the participant in the Spanish compensation scheme for non-bank investment firms, joined in 2004 because it wanted to offer portfolio management services that are not protected in its home state.

However, as financial services markets within Europe become more closely integrated, cross-scheme participation may increase. In particular, further integration could mean that firms cease to conduct their business through a subsidiary and conduct the same business through branches instead.

Although there is currently no significant cross-scheme participation, a number of schemes have concluded bilateral agreements with other schemes, as summarised in Table 2.5, thereby facilitating increased participation by EEA branches in the future.

Some compensation schemes noted that branch participation could create significant problems, in particular if there are differences in the eligibility requirements and funding arrangements between home and host state.

With regard to participation of firms from outside the EEA, these are generally required to participate in the host countries' schemes, although exemptions may be granted if the firms can show that their home state operates schemes that are comparable in both the level and terms of protection. According to many schemes, these exemptions are not relevant in practice—non-EEA firms providing investment services are required to, and do, participate in the national compensation schemes established in the EU Member States.

Table 2.5 Participation of EEA branches

	Voluntary top-up arrangements as in the ICD	Number of EEA branches using top-up arrangements	Bilateral agreements
Austria	Yes	0	–
Belgium	Yes	0	–
Denmark	Yes	2	Sweden
Finland	Yes	0	Sweden, the UK
France	Yes	0	–
Germany	Yes	0	Luxembourg
Greece	Yes	0	–
Ireland	Yes	0	Ireland
Italy	Yes	0	–
Luxembourg	Yes	0	Germany (EdB), Sweden
Netherlands	Yes	0	–
Portugal	Yes	0	The UK
Spain	Yes	1 (FOGAIN), 0 (FGD)	–
Sweden	Yes	0	Denmark, Germany, the UK
UK	Yes	0	Denmark, Finland, Ireland, Portugal, Sweden

Note: There is an inconsistency in the listing of bilateral agreements, with some countries indicating that they have an agreement with another country, but not vice versa.

2.6 Eligible claims and claimants

2.6.1 Investment business and instruments covered

The ICD defines the minimum scope of investor compensation arrangements in terms of the investment services and investment instruments that must be covered by the national schemes (Article 1, paras 2 and 3).

The ICD coverage is defined with respect to the services and instruments provided for in the 1993 Investment Services Directive (Directive 93/22/EEC), now replaced by Directive 2004/39/EC on markets in financial instruments, which repeals the 1993 Directive. The new Directive alters the definition of investment services and instruments: namely, investment advice will become a core investment service, and the list of instruments will be extended to include commodity derivatives and certain other instruments. Member States are required to implement the new Directive into national legislation within two years (ie, by April 2006).

The following summary of protected investment services and instruments relates to the 1993 Directive and the national legislation in place prior to the implementation of the new Directive.

According to the ICD, protected investment business covers all core investment services as defined in Article 1(1) of the 1993 Investment Services Directive:

- (a) reception and transmission, on behalf of investors, of orders in relation to investment instruments, and (b) execution of such orders other than for own account;
- dealing in investment instruments for own account;
- managing portfolios of investments in accordance with mandates given by investors on a discriminatory, client-by-client basis where such portfolios include investment instruments;

– underwriting in respect of issues of investment instruments and/or the placing of such issues.

In addition to the core investment services, according to the ICD, investment business to be covered by a compensation scheme must include the following non-core service defined in the 1993 Investment Services Directive (Annex, Section C, Point 1):

– safekeeping and administration in relation to investment instruments.

The compensation schemes in all 15 countries have broadly implemented these minimum requirements and cover the investment services required under the ICD, as summarised in Table 2.6. However, in France, portfolio management companies are not required to participate: the companies are not authorised to safekeep and administer client assets, and were therefore excluded from the participation requirement. In all other countries, portfolio managers participate in a compensation scheme.

The management activity covered relates to individual portfolio management under direct mandates given by clients. With the exception of the UK, it does not include collective investment schemes (CIS). CIS lie outside the scope of the ICD, and are subject to a different set of regulations. At the European level, retail investment funds are protected by strict rules that require the separation of fund assets and their safekeeping by a depositary. These rules apply at least to retail funds that qualify as undertakings in collective investments in transferable securities (UCITS), as laid down in Directive 85/611/EEC on the coordination of laws, regulations and administrative provisions relating to UCITS, and implemented in the national laws of Member States.[15] A recent European Directive on the management of UCITS (2001/107/EC) allows the management company of a UCITS to undertake individual portfolio management and other investment services.[16] As a result of this Directive, UCITS managers will be required to participate in a compensation scheme to the extent that they have a licence to carry out individual portfolio management as a secondary business. In some countries, UCITS managers with an additional licence already participate in the scheme; in the others, the laws will be changed to make such participation mandatory following the implementation of the Directive.

Some countries have extended the definition of eligible investment services from that required under the ICD. In particular, as mentioned above, the UK protects the non-core service of investment advice and consequently requires advisers to participate in a compensation scheme. In most other countries, investment advice is not covered by the scheme—indeed, in some, it is currently not a licensed investment activity. As noted above, however, this can be expected to change following the implementation of Directive 2004/39/EC on markets in financial instruments, which makes investment advice a core investment service.

In terms of investment instruments, the ICD requires all instruments to be covered that are listed in Section B of the 1993 Investment Services Directive:

– (a) transferable securities, and (b) units in collective investment undertakings;
– money-market instruments;
– financial-futures contracts, including equivalent cash-settled instruments;
– forward interest-rate agreements;
– interest-rate, currency and equity swaps;

[15] Council Directive 85/611/EEC of 20 December 1985 on the coordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (UCITS), *Official Journal of the European Union*, L 375 of 31.12.1985.

[16] 'European Parliament and Council Directive 2001/107/EC of 21 January 2002', *Official Journal of the European Union*, L 41 of 13.02.2002.

– options to acquire or dispose of any of the above instruments, including equivalent cash-settled instruments. In particular, this category includes options on currency and interest rates.

In most countries, the list of protected instruments is identical to, or at least broadly consistent with, the ICD minimum requirement. However, some countries have adopted a wider definition of protected instruments in their national laws. For example, in the UK, protected instruments include personal pension plans and certain long-term insurance products. In some countries, such as Denmark, Germany, Ireland and Italy, commodity derivatives are covered, although this is not yet a requirement at the European level—however, as noted above, it will become a requirement following the implementation of Directive 2004/39/EC on markets in financial instruments. Some of these main deviations from the current ICD minimum are summarised in Table 2.6.

2.6.2 Currency restrictions

Some countries impose restrictions on compensation depending on the currency in which the investments are denominated. This is consistent with the ICD, which states that funds (not instruments) in currencies other than the euro or other currencies in the EEA may, at the discretion of the Member States, be excluded from compensation. As reported in Table 2.6, four countries (Austria, Belgium, France and Germany) apply a currency restriction—they compensate losses in euros or other EEA currencies, but not those relating to funds denominated in US dollars, Swiss francs or other currencies. The other countries compensate losses of client funds irrespective of the currency in which these are denominated.

2.6.3 Eligible claimants

The compensation schemes in the EU 15 generally protect retail investors only—ie, private individuals and small businesses. Other investors may be excluded because they may be in a better position than retail investors to assess the risk of dealing with particular investment firms, or have a greater capacity to reduce risk either by diversifying their activities between several firms or by obtaining insurance, if available, to cover any consequences to them of the insolvency of a firm. Limiting the scheme to retail investors also substantially reduces the cost of the scheme and/or increases the funds available to compensate those investors. Moreover, the limits on compensation (see section 2.7) may still allow many retail investors to recover all or most of any eligible losses, whereas wholesale clients may only recover an insignificant proportion of those losses unless the limits are set very high.

In addition to excluding non-retail investors from compensation, most schemes impose eligibility restrictions on persons that are connected with the defaulting investment firm, or those who have been responsible for, or have profited from, the financial difficulties of the relevant firm.

These eligibility restrictions are consistent with the ICD (Art. 4, para 2 and Annex 1), which states that the following investors may be excluded from compensation cover of the schemes:

- professional and institutional investors, including:
  - investment firms, as defined in Article 1(2) of Directive 93/22/EEC;
  - credit institutions, as defined in the first indent of Article 1 of Council Directive 77/780/EEC;17

[17] 'First Council Directive 77/780/EEC of 12 December 1977 on the coordination of the laws, regulations and administrative provisions relating to the taking up and pursuit of the business of credit institutions, *Official Journal of the European Union*, L 322/30, 17.12.1977 (the First Banking Coordination Directive).

  - financial institutions, as defined in Article 1(6) of Council Directive 89/646/EEC;18
  - insurance undertakings;
  - collective investment undertakings;
  - pension and retirement funds;
- supranational institutions, government and central administrative authorities;
- provincial, regional, local and municipal authorities;
- directors, managers and personally liable members of investment firms, persons holding 5% or more of the capital of such investment firms, persons responsible for carrying out the statutory audits of investment firms' accounting documents, and investors with similar status in other firms within the same group as a firm;
- close relatives and third parties acting on behalf of the investors referred to in the previous bullet;
- other firms in the same group;
- investors who have any responsibility for, or have taken advantage of, certain facts relating to an investment firm that gave rise to the firm's financial difficulties or contributed to the deterioration of its financial situation;
- companies that are of such a size that they are not permitted to draw up abridged balance sheets under Article 11 of the Fourth Council Directive 78/660/EEC of July 25th 1978 based on Article 54(3)(g) of the Treaty on the annual accounts of certain types of companies.[19]

Most of the EU 15 Member States have broadly adopted the same exclusions in their national laws and regulations, but there are exceptions. The country with the widest definition of eligible clients is Sweden—the Swedish scheme compensates all clients except for those that are investment firms and are therefore themselves members of a compensation scheme. Other exceptions include, for example, Denmark, Finland, France, Greece, Italy, Portugal and Spain, which do not exclude large corporate investors from compensation. These and other exceptions are summarised in Table 2.6 below.

The exclusion of professional and institutional investors from compensation cover raises a question about the treatment of 'referral business', where a retail investor's instructions are, for example, passed by a financial adviser to a stockbroker. In these circumstances, the financial adviser may be treated as the (non-retail) client of the stockbroker. From the perspective of the retail investor, the stockbroker is a third party with whom the investor has no direct relationship, possibly leaving the investor with no remedy under current compensation arrangements for a wrong caused by the stockbroker. The extent to which compensation schemes protect investors against third-party losses is addressed in section 5.

Similarly, retail investment funds and other CIS are not considered eligible clients in most countries (except for Sweden and Denmark). This generally implies that any losses incurred within the fund (eg, due to the failure of a broker transacting on behalf of the fund) would not constitute an eligible claim for the compensation scheme. The fund itself is not eligible to claim for losses; retail investors holding units in the fund cannot claim compensation from the scheme, and rely on other protection mechanisms or on compensation by the fund operator or depositary, depending on their respective responsibilities. This issue is discussed in section 5.

[18] 'Council Directive of 15 December 1989 on the co-ordination of laws, etc, relating to the taking up and pursuit of the business of credit institutions and amending Directive 77/780/EEC' (the Second Banking Co-ordination Directive, 89/646/EEC).

[19] This applies to companies that exceed two of the following three limits: a balance sheet total of €3.65m, net turnover of €7.3m, or average number of employees of 50. One country raised the concern that these limits are regularly revised upwards through amendments in the Directive, meaning that eligibility is expanding, and that the amounts may now be too high.

2.6.4 Sources of loss covered

In accordance with the ICD (Article 2, para. 2), the ICD cover is provided for claims arising as a result of an investment firm's inability to undertake the following activities in accordance with the legal and contractual conditions applicable:

- repay money owed to or belonging to investors, and held on their behalf in connection with investment business;
- return to investors any securities belonging to them, and held, administered or managed on their behalf in connection with investment business.

There are valid arguments to require a compensation scheme to cover losses of customers incurred because the investment firm has misappropriated monies or securities, or otherwise acted illegally. The ICD expressly grants coverage for such claims, and all countries provide this level of coverage.

The question is whether any of the schemes cover losses other than those required under the ICD. For example, do the schemes cover the loss of an investor if the securities can be returned to the investor but their value is lower than they would have been had the investment firm:

- complied with the guidelines set out by the investor;
- properly managed the portfolio of securities;
- provided better investment advice?

The ICD does not require the national schemes to provide compensation cover for these risks; rather, it focuses on compensation for physical losses of investor assets. Correspondingly, with the exception of the UK, claims for compensation resulting from poor investment management or bad investment advice in connection with investment transactions generally do not qualify for compensation. The FSCS in the UK is the only scheme that covers losses of retail investors resulting from poor management and negligent advice. Thus, while the other schemes only compensate losses arising from theft, embezzlement or other misappropriation of client assets, as provided for in the ICD, scheme coverage in the UK extends to other fraudulent and negligent activities of the defaulting firm.

The difference in loss coverage explains the significantly larger volume of cases observed in the UK than in other countries (see section 3.1). In the financial year 2002/03, 88% of the activity of the UK scheme related to claims resulting from cases of pension mis-selling. This would cover, for example, cases where consumers lost out because they were wrongly advised to move out of an occupational pension scheme and instead invest in a personal pension scheme, and where the firm providing the advice or selling the pension product is no longer in operation. Other cases of bad advice that comprise a large part of FSCS activity relate to bad advice in relation to endowment insurance policies. However, as in the other countries, compensation of losses is only triggered in the event of default of the investment firm—if a firm is still trading and has sufficient financial resources to satisfy a claim, the firm is expected to meet the claim itself.

While compensation can go beyond the minimum standards provided in the ICD, as evidenced in the UK, none of the countries' schemes covers failure of investment performance to match a guarantee given, or a contractual obligation to pay or promise to pay a certain return. They also do not cover the fluctuation in the value of an investment or any claim arising from transactions that remain uncompleted at the time of default.

Section 5 provides a more detailed assessment of the principal sources of risks and losses for retail investors and the extent to which compensation schemes provide adequate investor protection.

Table 2.6 Eligible claims and claimants

	Investment business covered	Investment instruments	Currency restrictions	Eligible claimants	Source of loss covered
Austria	Broadly consistent with the ICD	Broadly consistent with the ICD	Only euros or currencies of EEA Member States covered	Exclusions as in the ICD	As in the ICD
Belgium	Broadly consistent with the ICD	Broadly consistent with the ICD	Only euros or currencies of EEA Member States covered (restriction applies to funds held at credit institutions only)	Exclusions as in the ICD	As in the ICD
Denmark	Broadly consistent with the ICD	As in the ICD, but a range of additional instruments included (eg, commodity instruments, negotiable mortgage deals, and real property bills of sale)	No	Many exclusions in the ICD do not apply—eg, eligible clients include insurance companies, CIS, retirement funds, and large companies	As in the ICD
Finland	Broadly consistent with the ICD	Broadly consistent with the ICD	No	Exclusions for professional investors as in the ICD, but eligible clients, unless they have been granted professional investor status, include, for example, large companies, managers and auditors of the firm in default	As in the ICD
France	Broadly consistent with the ICD, although activities of asset managers (sociétés de gestion de portefeuille) are not covered	Broadly consistent with the ICD	Only euros or currencies of EEA Member States covered	Exclusions as in the ICD, except for large companies, which are covered	As in the ICD
Germany	Broadly consistent with the ICD	Broadly consistent with the ICD (although a broader definition of derivatives)	Only euros or currencies of EU Member States covered	Exclusions as in the ICD	As in the ICD
Greece	Broadly consistent with the ICD	Broadly consistent with the ICD	No	Exclusions as in the ICD, except for large companies, which are covered	As in the ICD
Ireland	As in the ICD, but also: – insurance intermediation – acting as deposit broker or deposit agent	As in the ICD, but a range of additional instruments included (eg, non-transferable securities issued on behalf of public bodies, and commodity derivatives)	No	Exclusions as in the ICD	As in the ICD

	Investment business covered	Investment instruments	Currency restrictions	Eligible claimants	Source of loss covered
Italy	Broadly consistent with the ICD	Broadly consistent with the ICD (although a broader definition of derivatives)	No	Exclusions as in the ICD, except for large companies, which are covered	As in the ICD
Luxembourg	As in the ICD, but a range of ancillary services included (eg, investment advice, and foreign exchange services related to investment services)	Broadly consistent with the ICD	No	Exclusions as in the ICD, except for auditors of the firm in default, which are covered	As in the ICD
Netherlands	Broadly consistent with the ICD	Broadly consistent with the ICD	No	Exclusions as in the ICD	As in the ICD
Portugal	Consistent with the ICD	Consistent with the ICD	No	Exclusions as in the ICD, except for large companies, which are covered	As in the ICD
Spain	Broadly consistent with the ICD	Broadly consistent with the ICD (although a broader definition of derivatives)	No	Exclusions as in the ICD, except for large companies, which are covered	As in the ICD
Sweden	Broadly consistent with the ICD	Broadly consistent with the ICD	No	Most of the ICD exclusions do not apply—all investors are covered, except firms that are themselves members of the scheme	As in the ICD
UK	As in the ICD, but also: – providing investment advice – establishing/operating a CIS – acting as trustee or depositary of a CIS – establishing/operating a stakeholder pension scheme	As in the ICD, but also personal pension plans and certain long-term insurance policies, such as endowments	No	Exclusions as in the ICD	In addition to the ICD minimum: losses arising from bad investment advice and poor investment management, but only if the firm is unable to meet claims itself

Note: The definition of what constitutes an investment service or instrument differs between the countries; a detailed evaluation of these differences is beyond the scope of this study. The table highlights some of the main points on which a country's definition deviates from the ICD minimum requirements and otherwise classifies the country's definition to be 'broadly consistent with the ICD requirement'. It does not take into account changes in the definition of investment service and instrument that result from the implementation of Directive 2004/39/EC on markets in financial instruments.

2.7 Compensation limit

All national compensation schemes impose limits on the maximum *amount* of compensation they provide to retail investors in relation to their claims. The ICD (Article 4, para 1) imposes a requirement that the compensation *limit* may not be less than €20,000 for each investor on the failure of an investment firm.

As summarised in Table 2.7, nine Member States have adopted the ICD minimum limit of €20,000. Other countries, however, provide compensation in excess of this minimum level—Greece, Portugal and Sweden compensate losses between €25,000 and €30,000. The most significant departures from the ICD minimum are observed in France and the UK, as described below.

– In France, investors receive compensation up to €70,000 for lost investment instruments. A further €70,000 is available for lost investment monies held by a defaulting investment firm (non-bank investment firm and credit institution alike). The higher limit was adopted mainly because the partial scheme, in place for securities houses before the ICD was implemented, provided a higher cover.

– The UK scheme pays compensation up to a total limit of £48,000 (€75,000). This limit was introduced in 1988, when the compensation scheme was first established. Following the implementation of the ICD, it was decided to retain this level and not reduce it to the minimum requirement.

The compensation limit has not been inflation-adjusted in any of the 15 countries to reflect changes in price levels since the scheme was first established.

A separate issue is whether the schemes provide 100% cover. In deciding on the appropriate level of coverage, there is a trade-off between offering enhanced protection to certain investors, who would be hit particularly hard by any approach that requires them to bear a share of any loss, and the desire to avoid providing a disincentive for investors to make wise decisions about where to place their money or do business. The ICD (Art. 4, para 4) allows schemes to operate a system of co-insurance by offering only partial compensation, but of not less than 90% of losses.

Of the EU 15 Member States, 11 have decided against introducing an element of co-insurance into the structure of their compensation schemes, and instead provide 100% of coverage up to the maximum limit. In Austria, this 100% cover applies to natural persons only; other eligible clients receive only 90% of their claims. However, Finland, Germany and Ireland have adopted the ICD minimum and provide 90% of coverage. In the UK, 100% cover is offered on an initial band of every claim, with the remainder being compensated at 90%.

Some countries distinguish between investment instruments and monies held in connection with investment business, and apply separate compensation limits to the two types of claims. As mentioned above, the French investor compensation scheme pays compensation of €70,000 for instruments and, in addition, the same amount for cash. The scheme in Luxembourg also compensates separately for cash—in contrast to France, however, all cash claims are charged against the deposit guarantee scheme rather than the compensation scheme (both schemes are managed by the same entity), irrespective of whether the firm in default is a deposit-taking credit institution or a non-bank investment firm. Similarly, instruments and investment monies are separately covered for all types of firm in Belgium and Denmark.

A separate treatment of investment monies is also observed in those countries that have established separate legal entities to deal with compensation for credit institutions and non-bank investment firms. While the schemes for non-bank investment firms apply a single compensation limit to cover both investment instruments and monies, the banking schemes tend to treat investment monies as deposits—ie, subject to the separate deposit guarantee limit (in many countries equal to €20,000, as required under the Deposit Guarantee Scheme Directive). This is the case in Austria, Germany, and Spain. It may also be the case in the Netherlands. This means that, in principle, the maximum amount an investor can claim in relation to investment business conducted by a defaulting credit institution in these countries is €40,000, provided they have claims in relation to both investment instruments and monies of at least €20,000 each. While such arrangements may work to the advantage of the investor, the opposite may be the case. Where a credit institution holds deposits and investment monies for an individual (each well in excess of €20,000), for example, but no investment instruments, upon default, the individual would qualify for deposit guarantee cover of up to €20,000 but no investor compensation cover. If investment monies were attributed to investor compensation, the investor would benefit from a total payment of €40,000.

This treatment of investment monies by these banking schemes is a result of the fact that, due to the fungible nature of cash, and the possible movements in funds between deposit and investment business for the same client, it can be difficult to distinguish between cash held as deposits in a bank and that held by the bank for investment purposes. As mentioned in section 2.3, under Austrian law, the banking schemes distinguish between types of cash held for investment purposes, and treat claims accordingly. Specifically, monies entrusted to a credit institution for the acquisition of instruments are attributed to deposit guarantee, but monies that result directly from the crediting of income, disposal or other settlement of securities transactions are attributed to investor compensation. However, one of the Austrian banking schemes indicated that this distinction in the law was difficult to implement and may not be applied in practice.

Table 2.7 Limits on compensation

	Maximum compensation (€)	Level of coverage (%)	Separate limit for instruments and monies?
Austria	20,000	100 for natural persons; 90 for other eligible clients	No separate limit for the AeW Banking schemes treat certain types of investment monies as deposits; consequently, the deposit guarantee limit (€20,000) applies separately
Belgium	20,000	100	All investment monies are treated as deposit claims for all firms; consequently, additional compensation under deposit guarantee scheme (up to €20,000)
Denmark	20,000	100	All investment monies are treated as deposit claims for all firms; consequently, additional compensation under deposit guarantee scheme (up to DKr300,000 or €40,000)
Finland	20,000	90	No
France	70,000 on instruments, 70,000 on cash	100	Yes (€70,000 each, up to €140,000 in total)
Germany	20,000	90	No separate limit for EdW Banking schemes treat all investment monies as deposits; consequently, deposit guarantee limit applies (€20,000) separately
Greece	30,000	100	No
Ireland	20,000	90	No
Italy	20,000	100	No
Luxembourg	20,000	100	All investment monies are treated as deposit claims for all firms; consequently, additional compensation under deposit guarantee scheme (up to €20,000)
Netherlands	20,000	100	No separate limit for the ICS Banking scheme may treat investment monies as deposits, so deposit guarantee limit applies (€20,000) separately
Portugal	25,000	100	No
Spain	20,000	100	No separate limit for FOGAIN Banking scheme may treat investment monies as deposits; consequently, deposit guarantee limit applies (€20,000) separately
Sweden	SEK250 000 (€27,000)	100	No
UK	Maximum of £48,000 (€72,000)	100 of the first £30,000 and 90 of the remaining £20,000	No

2.8 Supervision powers and other functions

Some countries have extended the role of compensation schemes beyond the handling of compensation claims and making payments to investors. In Germany, for example, the compensation schemes have explicit permission under law to collect information, request audits, and have other supervisory powers. As Table 2.8 shows, in the majority of other countries, the schemes are not granted similar supervisory powers.

In terms of other functions, in France, for example, the compensation schemes have certain pre-liquidation rights, in that, following a proposal from the Commission Bancaire, they are allowed to provide an injection of funds or other financial support to a firm that is in risk of default, assist with the sale of the firm to another institution, or take other measures to prevent a default event from occurring and compensation to be triggered. Certain intervention rights are also provided in law for the Austrian and Spanish banking schemes and in Belgium and Denmark, although they are of limited relevance in practice as they have not been applied. Pre-emptive action is not provided for in the relevant laws of the other countries.

Table 2.8 Supervision powers and rights to intervene prior to liquidation

	Supervision powers	Pre-liquidation intervention
Austria	Banking schemes have supervisory powers by virtue of the bylaws of the trade associations administering the schemes The AeW can request information from participating firms	Yes, law allows banking schemes to facilitate the rescue of institutions in financial difficulties The AeW does not have similar powers
Belgium	No	Yes, in certain cases, the law allows the scheme to undertake pre-emptive action to assist in the realisation of a settlement, financial reorganisation or a takeover of a member firm
Denmark	No	Yes, according to the law, the Fund can provide funds for, or guarantee the debts of, a failing institution in connection to a takeover bid by other firms
Finland	No	No
France	No	Yes, according to the law, following a proposal by the Commission Bancaire, the FGD can undertake 'preventive engagement', in the form of financial support granted to an institution
Germany	Yes, all schemes can carry out audits of participating firms	No
Greece	No	No
Ireland	No	No
Italy	No	No
Luxembourg	No	No
Netherlands	Yes, indirectly, since schemes are operated from within the supervisory division of the Central Bank	No
Portugal	No	No
Spain	No	Yes, according to the law, the FGDs can provide support to institutions in financial difficulties FOGAIN does not have similar powers
Sweden	No	No
UK	No	No

2.9 Funding arrangements

According to the ICD (Art. 2, para 1), each Member State 'shall ensure that within its territory one or more investor compensation schemes are introduced and officially recognised'. On the face of it, simply establishing a compensation scheme complies with the ICD. However, the obligation of the Member State to create a compensation scheme implies that this scheme must be adequate. If the scheme is quickly unable to meet its payment obligations, the Member State could be accused that it had not fully complied with its obligation because the compensation scheme was not adequately funded. Thus, although Member States can exercise discretion as far as financing arrangements are concerned, these arrangements must be adequate.

Table 2.9 below provides an overview of the main sources of funding of the schemes. A more detailed description of funding arrangements, together with an analysis of their adequacy, is given in section 4.

2.9.1 Contributions from participating firms

All Member States organise the funding of their compensation schemes principally or exclusively by way of contributions of participating firms. Contributions are either collected to build up a reserve in anticipation of future liabilities (ex ante funding), or are levied when needed to cover the compensation costs of failures that have occurred (ex post funding).

Of the EU 15, Austria, Luxembourg, Italy, Sweden and the UK fund their compensation systems on an ex post basis. However, some of these schemes have an element of pre-funding to cover administrative or similar costs. In the Netherlands, the scheme for credit institutions is also funded ex post, but the scheme for non-bank investment firms is funded ex ante. The single Belgian scheme collects contributions ex ante only from credit institutions and brokerage houses, but levies contributions ex post for asset managers and instrument-placing firms.

The other schemes are funded mainly ex ante or involve a sizeable element of ex ante funding. Firms make annual contributions to allow the schemes to build up a standing fund or reserve to finance any future compensation costs. In some countries (Denmark, Greece and Portugal), the annual firm contributions take the form of pledges instead of, or in addition to, cash payments. By making pledges, firms guarantee payment in the event of a failure. All ex ante schemes have the power to levy additional contributions if the built-up reserve are not sufficient to cover compensation costs.

There are considerable cross-country differences in the way in which the amount of firm contribution is calculated. These are examined in section 4.

2.9.2 Borrowing

Compensation schemes can fill any funding gaps by borrowing and, as summarised in Table 2.9, they have in general been granted some borrowing powers in law. However, in some cases, these powers may be restricted to particular forms of borrowing. For example, the French scheme can only borrow from participating firms. In Sweden, any borrowing must come from the treasury of the Swedish central government. Similarly, Spanish law provides for borrowing from the state, but does not specifically address the possibility of commercial borrowing.

As is further outlined in section 4, although borrowing is allowed by law, few countries currently have any borrowing facilities in place. The UK and Finnish schemes are the only schemes that have arranged a binding agreement with a commercial bank to obtain credit, if needed. In the Netherlands, the Central Bank gives the Dutch schemes interest-free advances on payments, which are ultimately repaid by firm contributions.

Some countries where there is more than one compensation scheme and/or where the compensation scheme is separate from the deposit guarantee scheme have arranged borrowing between schemes. Thus, if compensation costs exceed a particular scheme's resources, the scheme can borrow any excess funds available from other schemes. Borrowing arrangements between schemes are considered in section 4.

2.9.3 State funding

State funding of compensation schemes could take a number of forms: the state could make direct contributions to the scheme, offer low- or no interest loans, or otherwise guarantee the long-term financial viability of the scheme. However, explicit state involvement is rare across the EU 15. Except for a small annual grant made by parliament to the Swedish scheme, schemes do not benefit from regular state contributions. As regards other types of state funding, several countries explicitly enable compensation schemes to borrow directly from the state, or with state guarantee from other credit providers. This is the case in Austria (for the banking schemes only), Denmark, the Netherlands, Spain and Sweden. Apart from the Netherlands, the borrowing is restricted to exceptional circumstances. As summarised in Table 2.9, none of the other countries explicitly provides for borrowing or guarantees from the state.

2.9.4 Other funding

Compensation schemes may also take out insurance to meet their funding requirements and to cap the exposure of participating firms. Both the Finnish and the Greek schemes have taken out such insurance with a commercial insurance company. However, since premia were high, the insurance policies were dropped for being too costly. At present, no compensation scheme has any insurance cover in place.

As an additional source of funding, the compensation schemes in Portugal and France receive the fines that are imposed on participants in breach of financial services legislation.

2.9.5 Recovery of funds after liquidation

In general, investor compensation schemes are able to recover some of the compensation costs following the liquidation of firms in default if, upon the settlement of a compensation claim, an investor's rights against a firm in the liquidation proceedings are transferred to the scheme (up to the value of compensation paid).

Table 2.9 Main funding sources

	Ex ante or ex post firm contributions	Borrowing power	State funding	Other funding
Austria	Ex post	Yes	Banking schemes (not the AeW) can issue bonds that are guaranteed by the Ministry of Finance	No
Belgium	Depends on type of firm – Ex ante for credit institutions and brokerage firms (with power to levy additional contributions) – Ex post for asset managers and instrument-placing firms	Yes	No	No
Denmark	Combination—ex ante cash contributions and pledges to guarantee ex post cash contributions Standing fund is rebalanced every year (with power to levy additional contributions)	Yes	Fund can borrow with state guarantee from other credit providers	No
Finland	Ex ante (with power to levy additional contributions)	Yes	No	Previously, the fund was insured, but is no longer because of the cost of insurance
France	Ex ante (with power to levy additional contributions)	Yes, but the FGD can only borrow from participating firms	No	Fines imposed by the AMF for breaches in conduct of investment professionals
Germany	Ex ante (with power to levy additional contributions)	Yes	No	No
Greece	Combination—ex ante cash contributions and letters of credit to guarantee further ex post cash contributions Standing fund is rebalanced every year (with power to levy additional contributions)	Yes	No	Previously, the fund was insured, but is no longer because of the cost of insurance
Ireland	Ex ante (with power to levy additional contributions)	Yes	No	No
Italy	Ex post	No	No	No
Luxembourg	Ex post	Yes	No	No

	Ex ante or ex post firm contributions	Borrowing power	State funding	Other funding
Netherlands	Depends on scheme: – ex ante for ICS (with power to levy additional contributions) – ex post for CGS	Yes	The Central Bank provides interest-free advances to both schemes	No
Portugal	Combination—ex ante pledges, but ex post cash contributions (with power to raise additional contributions)	Yes	No	Fines imposed by the CMVM for breaches against financial services legislation
Spain	Ex ante (with power to levy additional contributions)	Yes, schemes may borrow from the state No explicit provision in law to allow commercial borrowing	Schemes may borrow from the state in exceptional circumstances	No
Sweden	Ex post	Yes, the scheme may borrow from the National Debt Office	Scheme can borrow from the National Debt Office Annual grant made to scheme by parliament (SEK5.9m (€650,000) in 2004)	No
UK	Ex post	Yes	No	No

2.10 Summary

While all countries have implemented the ICD, and established one or more schemes to provide investor compensation in the event of a failure of a firm, there are considerable differences across countries. There appears to be no favoured model for the implementation and operation of a compensation scheme. Some of the key findings or issues emerging from the inventory of schemes are summarised below.

2.10.1 Implementation

All countries have implemented the ICD, generally in 1998 and 1999; however, in a few cases, the compensation scheme was established as late as 2000 or 2001. Most countries did not provide investor compensation prior to the ICD; when investor compensation became obligatory for EU Member States, many adopted only the minimum requirements in their national legislation.

2.10.2 Organisational structure and relationship with regulator

There are considerable differences in the organisational structure of the compensation schemes, with some schemes, for example, being operated by a public authority and others by the industry itself. Regulatory involvement is greatest in the few countries that have fully integrated the operation of the scheme into the regulatory authority. In other countries, the scheme is independent from the regulator, although it is usually subject to supervision and accountability requirements.

2.10.3 Relationship with deposit guarantee scheme

Given the importance of credit institutions in providing retail investment services, particularly in much of Continental Europe, investor compensation schemes cannot be discussed in isolation of the deposit guarantee schemes that were established in line with the Deposit Guarantee Directive. Only a few countries operate completely separate schemes for investor compensation and deposit guarantee. Instead, many countries have integrated investor compensation into the already existing deposit guarantee schemes in terms of either common ownership or management, or, in some countries, in terms of pooling the available funds to protect clients with respect to both their investments and deposits held with credit institutions. A particular issue arising in this respect is how cash held by credit institutions in connection with investment business is distinguished from cash held in deposits, with some countries allocating all claims on investment monies to the deposit guarantee scheme.

2.10.4 Scheme participation

Authorised investment firms, including credit institutions providing investment services, are generally required to participate in the countries' schemes. Some countries have set up different schemes for non-bank investment firms and credit institutions, in some cases further distinguishing by type of institution. There are some differences in the definition of what constitutes an investment firm or credit institution, and participation requirements differ correspondingly across countries. Although all countries allow branches from other EEA Member States to participate in the host country scheme in order to obtain supplementary cover, cross-border participation is very limited to date. In some countries, this can be explained by the fact that the countries do not provide compensation cover beyond the ICD minimum requirements. However, other countries expect that branch participation may increase following further integration of the European financial markets.

2.10.5 Scope of scheme

While many countries only provide the minimum compensation required under the ICD, some have gone further and adopted a broader definition of what constitutes an eligible claim, in terms of eligible clients (eg, allowing certain professional investors to claim compensation), protected investment services (eg, including financial advice and other non-core services), or protected instruments (eg, including pension plans, insurance products and commodity derivatives). Implementation of Directive 2004/39/EC on markets in financial instruments will extend the scope of compensation schemes, in particular by making advice a core investment service and including commodity derivatives in the list of financial instruments.

Notably, the UK scheme is the broadest in terms of loss coverage, as it compensates not only losses resulting from a firm's inability to return its clients' assets, but also those due to poor investment management and bad advice. The inclusion of financial advice as a protected investment service and the coverage of losses resulting from negligent advice explain the significantly higher volume of compensation cases dealt with by the UK scheme. The scope of the schemes in terms of loss coverage is addressed in section 5. The way in which investor claims are handled and compensation for losses awarded is examined in section 3.

2.10.6 Amount of compensation

There are variations in the amount of compensation that an investor can expect to receive from a scheme in different countries. While all countries impose a limit on compensation, the limit ranges from €20,000 (most countries) to €70,000 (France). In addition, some schemes impose separate limits for cash and investment instruments, allowing investors to make two separate claims and thereby potentially receive twice the amount of compensation. Some countries compensate 100% of claims, while others maintain an element of co-insurance and compensate only 90% of claims. The adequacy of compensation limits is discussed in section 5.

2.10.7 Funding arrangements

All schemes are funded by contributions of participating firms, but the ways in which the contributions are levied differ considerably across countries. Some schemes levy contributions after a compensation event has occurred and compensation costs are known; others require firms to make annual ex ante contributions, to accumulate a reserve to cover future compensation costs; and others operate a mixed system by obliging firms to make ex ante pledges to commit cash payments in the event of a future failure.

In addition to obtaining contributions from firms, national laws generally allow the schemes to borrow funds, although only a few have made use of these powers and put borrowing facilities in place. Only a few countries have introduced explicit provisions that allow borrowing from the state, or with state guarantee, in the event of large failures that could not be covered by other funding sources. Section 4 discusses funding arrangements in greater detail.

3 Analysis of operational arrangements and performance

This section describes the operating arrangements of the national investor compensation schemes and issues relating to their performance in handling compensation claims and awarding compensation to investors. It also includes a retrospective analysis of demands that have been made on the schemes since the ICD was implemented into national laws.

3.1 Past experience of compensation cases

Table 3.1 below summarises the past experience of the EU 15. Notably, six countries (Austria, Finland, France, Luxembourg, Portugal and Sweden) have not had a single case of firm failure that triggered the operation of the compensation scheme.[20]

In contrast, the UK scheme dealt with more than 1,609 cases of firm failure between 1999 and 2004. This high level of activity can be attributed to the broader scope of the UK scheme compared with other national schemes, as the former covers negligent investment advice and poor investment management.[21] According to the scheme, the vast majority of cases of firm failure relate to negligent advice. Only 1–2% of cases are due to losses resulting from embezzlement or theft of client assets. Thus, if bad advice cases were not counted, the reported case volume handled by the UK scheme would look more similar to that observed in the other EU Member States.

The table also provides a short overview of the total number of claims against the schemes since 1999, and the highest number of claims and highest total payout for a single failure. Most of the compensation cases have generated only a relatively small number of claims, although some countries have had to deal with larger events. In Spain, for example, a single case resulted in over 6,000 claims being filed. The UK and Ireland have also experienced large individual compensation events, with more than 2,000 claims for a single case of firm failure.

This overview suggests that many schemes have had no or limited experience of the actual operation of their schemes, making an assessment of their operating performance difficult. Nevertheless, this section provides an overview of the operating arrangements in place in all of the EU 15, and focuses on the case experience and operation of schemes in countries that *have* experienced compensation cases.

[20] At the time of writing, the Swedish scheme is in the process of dealing with its first potential compensation event.

[21] The UK scheme has been in existence since 1988. A comparatively high level of compensation activity of the scheme is also reported for the years prior to those shown in Table 3.1, although activity levels have increased considerably over recent years. From August 28th 1988 to March 31st 1998, 380 firms were declared in default and a total of 11,060 investors received compensation from the scheme, resulting in total compensation costs of £125m (€188). See FSA (1999), 'Consumer Compensation: A Further Consultation', FSA Consultation Paper 24, Financial Services Authority, London.

Table 3.1 Compensation cases since 1999

		Number of failures since 1999	Total claims against scheme since 1999	Highest number of claims for a failure	Highest total payout for a failure
Austria	The AeW	0	–	–	–
	Banking schemes (in relation to investment business)	0			
Belgium	(one case since establishment of the scheme, but the Fund dealt with five cases before the scheme's implementation)	1	750	400 (approx.)	€2.6m
Denmark		1	204	204	DKr11.6m (€1.6m)
Finland		0	–	–	–
France		0	–	–	–
Germany	EdW	15	2,411	723	Expected to be just under €7m (case ongoing)
	Banking schemes (in relation to investment business)	0			
Greece		5	n/a	n/a	n/a
Ireland		3	2,924	2,601	Expected to be just under €10m (case ongoing)
Italy	(7 failures in 1998)	10	606[1]	394	€5.7m
Luxembourg		0	–	–	–
Netherlands	ICS	2	245[1]	n/a	n/a
	CGS	0			
Portugal			–	–	–
Spain	FOGAIN but compensation of five failures before the scheme's implementation	0	8,818	6,852	€31.8m in compensation offered in one case (payment ongoing)
	FGDs (in relation to investment business)	0			
Sweden		0	–	–	–
UK	1999	661	8,077	2,633	£15.5m (€23m)
	2000	360	6,913		
	2001	284	7,482		
	2002	139	7,598		
	2003	164	12,851		

Note: n/a, not available.[1] Refers to accepted claims.

3.2 Default declaration and time limits

The ICD sets out the circumstances under which firms are to be declared in default and the operation of the relevant compensation scheme is triggered. It also requests schemes to compensate investors 'as soon as possible' and imposes time limits on the compensation process (Art.9, para 1).

3.2.1 Default declaration

The ICD states that a scheme must provide cover for investors where either:

- the competent authorities have determined that, in their view, for the time being and for reasons directly related to its financial circumstances, an investment firm appears to be unable to meet its obligations arising out of investors' claims and has no early prospect of being able to do so; or if earlier
- a judicial authority has made a ruling, for reasons directly related to an investment firm's financial circumstances, which has the effect of suspending investors' ability to make claims against it (Art 2, para 2).

All of the EU 15 have broadly incorporated the ICD provision into their national laws and regulations. Table 3.2 below summarises the authorities that can trigger a compensation event according to the national laws and regulations of the countries.

The UK is the only country where compensation events can be, and in most cases are, triggered by the compensation scheme itself. In other countries, the compensation process is started following the formal default declaration by the national regulatory authority (or a court, if earlier).

The summary of the authorities declaring the default event in Table 3.2 applies to domestic firms only. For incoming EEA branches, compensation is usually paid when the relevant authority in the home state declares that the firm is in default and investor assets are unavailable. According to the ICD (Annex II), the host country's scheme will meet claims for supplementary compensation after it has been informed by the home state's competent authorities about the default of an incoming firm and the deficiency in investor assets.

A delay in the declaration of default and the formal initiation of the compensation process is one of the factors that may present an obstacle to the speed at which investors are compensated for losses incurred due to the failure of an investment firm. One concern expressed to the research team is that regulatory authorities may have an incentive to delay default declaration. There may also be delays if the default declaration is not communicated to the compensation scheme, or the compensation scheme is only involved at a very late stage about an imminent default declaration. This suggests the need for close cooperation and information-sharing between regulator and scheme operator. An alternative model is observed in the UK, where the compensation scheme itself can trigger the compensation process without formal declaration by the regulator. Where the determination of default has to be referred to a court, further delays may arise in the legal process.

Consistent with the ICD, default is, in general, declared only when the competent authority (regulator or scheme) has satisfied itself that an investment firm cannot meet its obligations to investors' claims and, importantly, that the firm is unable to do so in the near future. There can be difficulties and corresponding delays in establishing such an event, in particular if it requires the conclusive findings of the person appointed to the insolvency or receivership proceedings against the firm.

3.2.2 Time limit on making claims

The ICD requires Member States to take appropriate measures to inform investors about a compensation case and, if they are to be compensated, to compensate them as soon as possible. Member States may fix a period during which investors are required to submit their claims, but this may be no less than five months from the date of the default declaration or publication (ICD, Art 9, para 1).

Six of the EU 15 have not introduced an explicit legal time limit in which investors must apply for compensation (Finland, France, Luxembourg, Portugal, Spain and the UK). The application limit in the other countries ranges from five months to one year following either the declaration of default or the notification of investors.

From an investor protection point of view, time limits may be a concern if failure to apply on time results in an investor not being able to receive compensation. The research showed that there are circumstances when existing time limits are short, especially if the limit is measured from the date of default declaration. For example, if a default is publicised in the press, an investor may be away at the time of publication or otherwise unable to find out about the default due to illness. In some countries, compensation schemes attempt to contact affected investors directly, as further discussed below; however, the schemes may not be able to do so successfully for all investors, for example if the records of the defaulting firm are incomplete or investors have changed address. Once notified, some investors may have problems in completing the relevant application forms and submitting all documents to support their application. Any of these difficulties may impede an investor's ability to apply within a fixed time limit.

All countries that do impose a time limit may grant compensation after the application period has expired, provided that the investor can show that, for reasons beyond their control, they have been unable to assert their rights. However, during the research, concerns were expressed that these extensions may be subject to undue interpretation and may not ensure effective investor protection if the investor cannot challenge a compensation scheme in court for a refusal to process the application.

Compensation schemes in countries that do not impose explicit time limits have received applications from claimants one year or more after default declaration; and schemes in countries where time limits exist have occasionally rejected claimants for failure to submit an application on time. The evidence suggests that time limits can present a binding constraint on some investors' ability to claim compensation. This does not make the case for an unlimited application period, which could impose considerable problems for compensation schemes, for example in terms of increasing the uncertainty about budget and workload, as well as making the assessment of claims more difficult if these relate to failures that date from many years previously. However, it may raise an issue about very short time limits (eg, five or six months), unless the relevant compensation scheme is willing to evaluate late claims in a flexible and non-legalistic manner where this is appropriate from an investor protection point of view.

3.2.3 Time limit on compensation payment and interest payment

The ICD determines the timeframe within which compensation payments must be made as three months after the establishment of the eligibility of a claim and the amount of compensation (Art. 9, para 1). In the event of exceptional circumstances and in certain special cases, the compensation scheme may apply to the competent authority for an extension of the time limit. However, each extension may not exceed three months. The ICD does not provide for any sanctions if payments are not made within the time limit.

Table 3.2 summarises how the countries have implemented the time limit into their national laws and regulations. Notwithstanding these time limits, the compensation schemes in all countries generally suspend payment of compensation if the claimant has been charged with an offence arising out of, or in relation to, money laundering, in line with the ICD (Art 9, para 3).

In general, the time limit relates to the payment of compensation *after* the claims have been processed and the amount of compensation established—except for Belgium, Finland and France, where the legal time limit applies from the date on which a firm is declared to be in default, or in the Netherlands, where the relevant date refers to the point in time when an investor has submitted a compensation claim. The processing of claims may take considerably longer than the payment limits; thus, the limits reported in Table 3.2 do not by themselves indicate how long investors will have to wait before they receive compensation. Claim processing is further discussed below.

Most compensation schemes do not pay interest to investors on any amounts claimed for the duration of the period until their claims are settled. Explicit provisions to pay interest only apply in Finland, Germany, Greece and the UK. Interest to be paid may be included in the compensation claim and subject to the overriding compensation limit, as is the case in Germany and Greece, for example. Alternatively, interest may be unaffected by the compensation limit, as is the case in the UK—ie, investors may receive the compensation limit plus interest.

Table 3.2 Default declaration, time limits, and interest payment

	Default declared by	Time limit for claim application	Time limit on payment	Interest payment
Austria	– The Financial Market Authority (Finanzmarktaufsicht) as regulator – Court	Within one year of default declaration	Three months after the establishment of amount and entitlement of claim (A maximum of two three-month extensions can be granted by regulator)	No, although schemes are required to compensate forgone interest and dividends accrued between default and payment date
Belgium	– The CBFA as regulator – Court	Within five months from the announcement by the Fund of a deficiency of assets held by a firm	Three months from the announcement by the Fund (Three-month extension can be granted by regulator)	No
Denmark	– The FSA as regulator – Court	Within six months of the default declaration	Within three months of the declaration of the bankruptcy, conditional on the claims having been duly verified (Extensions can be granted by regulator, but total period cannot exceed nine months)	No
Finland	– The FSA as regulator – Court	No. The law allows the scheme to set a limit of six months after the default declaration, but this is not applied	Three months from the FSA determination that compensation is payable (Three-month extension can be granted by regulator)	Yes, subject to compensation limit
France	– The Banking Commission as regulator (after consultation with the AMF)	No need to apply for compensation; investors have 15 days to accept or reject compensation offered by scheme	Three months after the regulator requests the scheme to provide compensation (Three-month extension can be granted by regulator)	No
Germany	– BaFin as regulator	Within one year of investor notification	Three months after the eligibility of claims is established and amount calculated (Three-month extension can be granted by regulator)	Yes, subject to compensation limit
Greece	– The HCMC as regulator (with recommendation from the scheme)	Within five months of the default declaration	One month after decision about claim has been reached (Two months' extension may be granted by regulator)	Yes, in the case of an extension of the payment period (subject to compensation limit)
Ireland	– The FSRA as regulator – Court	Within five months of the investor notification	Three months after claim is certified as valid (Extension can be granted by regulator)	No

	Default declared by	Time limit for claim application	Time limit on payment	Interest payment
Italy	– Ministry of Economics and Finance, following recommendation by Bank of Italy or Consob – Court	Within six months from the publication of the default or judgment regarding liabilities of firm	Three months after eligibility and amount of claim is established (Three-month extension can be granted by Ministry of Economy and Finance)	No
Luxembourg	– The Commission de Surveillance du Secteur Financier as regulator – Court	No	Three months after eligibility and amount of claim is established (Three-month extension can be granted by regulator)	No
Netherlands	– Central Bank (De Nederlandsche Bank) as regulator – Court	Within five months of publication of failure	Three months after claim has been submitted (Three-month extension can be granted by Central Bank)	No
Portugal	– Central Bank (Banco de Portugal) as the supervisor in charge of prudential regulation	No	Three months from the admission and verification of the claims by the CMVM (Three-month extension can be granted by regulator)	No
Spain	FOGAIN: – The CNMV as regulator – Court FGDs: – Banco de España as regulator – Court	No	Three months as of the date of default declaration (Three-month extension can be granted by regulator)	No
Sweden	– District Court	Within one year of default declaration	Within two weeks of the determination that compensation is payable	No
UK	– The FSCS as scheme operator – FSA as regulator – Court	No	Three months after a claim has been assessed as valid (Six months' extension can be granted by regulator)	Yes, added to the compensation limit

3.3 Investor notification and processing of claims

The ICD requires compensation schemes to take appropriate measures to inform investors once a participating firm is declared in default and a compensation event is established (Art. 9, para 1). Investor notification differs between the national schemes of the EU 15, as detailed for each country in Appendices 1 to 15. Broadly speaking, two types of approach can be observed, presented below.

– *Direct notification*—following the declaration of a default event, the compensation schemes may notify the firm's investors directly that they may be entitled to receive compensation for any losses incurred due the failure of the firm. This direct notification typically takes the form of a letter, which announces the compensation event and explains to investors what they must to do claim compensation. The letter may enclose an application form, which investors must then return to the scheme, together with any supporting documentation. Alternatively, the letter may already contain an offer of compensation. The compensation schemes in countries such as Denmark, France, Germany and Italy tend to use the direct notification route as the principal way of informing investors about a compensation event.

– *Public announcement*—the alternative route is to inform investors via public announcement. This announcement is usually placed in an official gazette or the press, and contains details about the compensation event and the actions that investors must take to apply for compensation. It is then the responsibility of the investor to contact the compensation scheme directly and launch a claim. In general, public announcement is the main route of investor notification in Austria, Belgium, Greece, Luxembourg, the Netherlands, Portugal, Sweden and the UK.[22]

Direct notification of investors seems preferable from the perspective of the investor, in particular if the investor does not know that there is a compensation scheme or would otherwise not understand that they could claim for compensation. However, attempts to contact directly all affected investors can place a considerable burden on the compensation schemes themselves, in particular if large numbers of investors are involved. In some cases, direct notification may also be difficult or indeed impossible if the compensation scheme does not have the up-to-date address of the investor, or the records of the defaulting firm are so poor that not all investors can be identified. In these cases, public announcement seems to be the only means available to contact investors. The disadvantage of public announcement in the press or official gazettes, however, is that there is no way of ensuring that all affected investors see the announcement, for example if they are away at the time of announcement or otherwise fail to notice it. The compensation schemes in Finland, Ireland and Spain seek to inform investors using a combination of direct notification and public announcement.

Following notification, investors in most countries have to apply officially for compensation by completing an application form and submitting additional documents to support their claim application. The supporting documents tend to include proof of identity, contract details, statements detailing their monetary balances or investment instruments held with the firm, and other available documents to prove a claim against the defaulting firm.

The processing of investor claims by the schemes involves checking each claim for eligibility and calculating the amount of compensation due. The processing varies from case to case; thus, it is difficult to provide a generic description of the compensation process. In addition, a number of schemes have not had a compensation case and therefore have no experience of

[22] In some of these countries, however, there may be some instances where direct notification is also used.

processing claims. However, during the research, the principal issues outlined below have emerged in relation to claims processing and calculating compensation amounts.

3.3.1 Information

Most compensation schemes rely on different information sources to establish a claim and calculate the amount of compensation due. These include account statements, contractual information and other documentation provided by the investor; records kept of the firm in default; assessments by the insolvency practitioner assigned to the case; records or documents made available by the police or the prosecution service; and information provided by the regulatory authority. A number of schemes have noted considerable difficulties in obtaining adequate information, and consider a lack of information to be a key impediment to timely and complete processing of compensation claims.

A significant problem, reported by three schemes, has been the verification of the validity of claims when the information on the failed company's accounts is unavailable or incomplete. This can due to fraudulent behaviour of the firm, whereby firm records are non-existent or have been distorted to hide fraud, or mis-registration of assets for other reasons, such as negligence or unintentional error. In these cases, there are likely to be significant discrepancies between the investor balances shown in the books of the firm and those communicated to investors. The task of the compensation case handler is then to judge the true balance and loss that has arisen to the investor.

One scheme noted a case where reliable information was not available due to the imprisonment of the company's management. The scheme also expressed concerns about its limited powers to instigate official hearings or request implicated managers of the firm to provide information.

If investors' assets have been embezzled or misappropriated, the establishment of claim and amount of compensation payable may be more accurate if they are based on the investor's records rather than those of the firm. However, there have been cases where investors were unable to produce proof of contract or historical statements of account balances that would allow such an assessment. Moreover, one compensation scheme cited a problem of investors knowingly overstating their losses.

Several compensation schemes noted the importance of a close relationship with the regulatory authority (and, in some cases, a lack thereof), in particular as regards information-sharing. Early involvement of the scheme, prior to the official declaration of default of the firm, was seen to facilitate the gathering of information and speed up the compensation process.

3.3.2 Insolvency process

Many schemes incorporate the assessment of the insolvency practitioner assigned to the liquidation or receivership proceedings against a firm; a few schemes rely exclusively on this assessment. For the latter schemes, the liquidator determines each investor's balance in the firm and establishes the entitlement to compensation; the compensation scheme's role is to pay out the determined amounts.

A number of schemes have noted delays in the legal process to establish the ownership of assets held by a firm as well as incomplete information provided by the liquidator, resulting in delays in the payment of compensation. Similar delays have also been noted if prosecution proceedings against the management of the failed firm have been opened or are ongoing at the time of the compensation process.

3.3.3 Processing time

The total time to process claims varies according to factors such as the complexity of the case, the number of claims involved, and the quality of the information available. The schemes that have experience of processing compensation cases noted that they aim to process claims within three to six months. Many are processed within this period, but there have been cases where the process lasted for several years. One scheme mentioned that only one-third of claims in recent years has been processed within three months. Another scheme noted large differences in processing time, with the shortest time being two weeks and the longest three years.

The processing of investor compensation cases was seen by many schemes as considerably more difficult than that of deposit guarantee cases, principally because the latter concerns deposit balances that are more frequently communicated to clients than investment balances and because losses of cash are easier to calculate than losses of investment instruments, especially if the instruments are complex or cannot be valued using market data.

One scheme raised the issue of unclear legal and regulatory guidance on how to process claims and calculate compensation. In particular, given that there is no clear guidance on what information to gather and to what level of detail, the scheme spends considerable time and resources on collecting information and establishing claims, yet it remains exposed to complaints and legal challenge from investors for not having investigated the claims in sufficient detail.

The analysis of national laws and regulations does indeed suggest that, in most countries, there are few rules and little guidance on how compensation schemes should process claims from investors, with the exception of the few countries in which the compensation scheme relies exclusively on the assessment of claims and losses by the liquidator or receiver (meaning that the responsibility for claim processing is shifted from scheme to insolvency practitioner). In many cases, the establishment of eligible claims and calculation of compensation is therefore a matter of judgment and the responsibility of the compensation scheme operator, subject to the general criteria laid down in law and regulation.

Table 3.3 provides an overview of claims processed by the schemes that have experienced compensation cases and were able to provide information. All schemes have rejected claims, with the exception of the Danish scheme. The Danish scheme is one of the schemes that relies on the liquidator's determinations—ie, the liquidator informs the scheme on each eligible investor's entitlement for compensation, and the scheme pays compensation accordingly. The main reasons why claims were rejected by the other schemes are also reported in the table.

Table 3.3 Accepted and rejected claims, 1999–2003

	Accepted	Rejected	Main reasons for rejection
Denmark	204	0	–
Germany—EdW	350	513	No contractual liability; liabilities denominated in US dollars; assets had zero value at the date of bankruptcy; deduction of debit balances reduced claim to zero
Ireland	848	258	Claimant not an eligible investor
Netherlands—ICS	245	n/a	Claims were for losses resulting from malpractice of the firm, which are not covered by scheme
Spain—FOGAIN	5,600	513	Duplicate claims received; claimant without a valid title; claimant not an eligible investor; deceased claimant
UK	20,234	14,857	Loss could not be established; lack of evidence on the claim; claim for bad advice given prior to the establishment of the scheme

Non-residency of an investor has not been a factor that has led to a compensation claim being rejected by a scheme, and, consistent with the ICD, the schemes do not discriminate between domestic investors and non-residents. However, several compensation schemes have noted practical difficulties in the processing of claims by non-residents. These are mainly due to problems in contacting investors who live abroad about a compensation event and obtaining confirmation that they have received compensation, especially within the time limits for the claim application, where such limits apply. Investors may also find it difficult to complete application forms, especially if they have to file their compensation claim in a foreign language, possibly requiring the potentially costly services of a translator.

3.4 Scheme resources and staffing levels

The handling of compensation claims and awarding of compensation to investors can be time-consuming and staff-intensive. To ensure speedy claims processing, a compensation scheme must not only have adequate financial resources but also be able to draw from qualified labour. While details on the administrative and staffing costs were not available for all schemes on a consistent basis, information was gathered on staffing levels, as summarised in Table 3.4.

Table 3.4 shows considerable cross-country variation in terms of staff numbers. The largest scheme is the UK FSCS, with 120 employees in total, some of whom also work on deposit guarantee and insurance protection cases (also dealt with by the FSCS); however, the majority of the work (80%+) is on investor compensation cases. The high staff numbers largely reflect the high volume of cases dealt with by the UK scheme. As noted above, unlike the other schemes, in the UK investors can claim compensation for negligent advice or poor investment management.

By contrast, some schemes do not have any full-time staff; rather, the compensation work forms only one of the functions carried out by the staff. Some of the schemes with no or few employees have explicit agreements which specify that, in the event of a failure, staff can be drawn in at short notice, for example, from the regulatory authority (eg, Portugal and Sweden).

In addition, in countries where the determination of eligible claims is largely the responsibility of the insolvency practitioner assigned to a firm's liquidation process, and where the compensation scheme's role is restricted to administering payment of established claims only, the scheme may not require a large number of staff.

Importantly, some countries have, or would consider establishing when the need arises, explicit outsourcing arrangements by which the claims handling and calculation of compensation payments is contracted out to a third party, usually an accountancy firm. Such outsourcing has two advantages: first, it reduces the need for a compensation scheme to have a large permanent staff base. Outsourcing can therefore generate significant scale economies and reduce costs, and is likely to be particularly beneficial for small schemes or schemes that deal with a small number of cases only. Second, outsourcing may improve the quality of the compensation process if the third party has the expertise and skills that a compensation scheme does not have or could not readily develop. This can be particularly important in complex cases or where adequate firm records are missing and extensive forensic accounting is required to determine the amount of loss arising to investors. If efficient outsourcing arrangements are in place, there may be no need for the compensation scheme itself to have a large number of staff.

However, from an investor protection point of view, it is important that outsourcing contracts are specified prior to firm failures occurring, and then monitored. They should include a well-defined contingency plan, setting out the responsibilities of the external service provider and allowing the scheme to draw quickly from the provider's resources as soon as a failure does arise. Setting up outsourcing contracts only after a failure has occurred is likely to delay the compensation process unnecessarily. The EU compensation schemes that currently have very low staff numbers and no explicit arrangements in place to draw in external resources (possibly because they have not yet experienced a case of compensation) could be encouraged to consider establishing contracts with external service providers to outsource any compensation work arising or set up other contingency plans.

Table 3.4 Number of staff of compensation schemes

	Number of staff (full-time equivalent, FTE)
Austria	The AeW—2 managers and 2 administrative support staff, all working part-time for the AeW Banking schemes—staff time devoted to investor compensation is small or negligible; largest scheme has 4–5 FTE staff, who mainly deal with deposit guarantee
Belgium	2.5 FTE staff (five staff, who spend half their time on investor compensation and half on deposit guarantee)
Denmark	1.5 FTE staff (including work for deposit guarantee scheme)
Finland	0.25 FTE staff approx. (one staff of banking association working part-time for Fund)
France	5 permanent staff members of the FGD (including deposit guarantee scheme and warranty guarantee scheme managed by the FGD)
Germany	EdW—6 FTE staff (employees of the Kreditanstalt für Wideraufbau) Scheme for private banks: 3–4 FTE staff (mainly dealing with deposit guarantee) Scheme for public banks: 2–3 FTE staff (mainly dealing with deposit guarantee)
Greece	Not available
Ireland	7.5 FTE staff
Italy	11 permanent staff
Luxembourg	2 part-time employees working on both the investor compensation and deposit guarantee schemes of the AGDL (0.7 FTE)
Netherlands	3 part-time employees working for the ICS (less than 1 FTE). Additional staff time for banking scheme (dealing mainly with deposit guarantee)
Portugal	0 (staff is drawn in from CMVM if required)
Spain	FOGAIN: 11 permanent staff (FTE) Society of FGDs: 15 permanent staff (dealing mainly with deposit guarantee)
Sweden	0.2 FTE (two full-time staff who normally spend approximately 10% of their time on investor compensation) Standing agreement whereby scheme can ask for up to 9 staff from the Central Bank, the FSA and/or the National Debt Office at short notice
UK	120 (including deposit and insurance sub-schemes, but most work for investment sub-scheme)

Notes: Staff numbers are based on estimates provided by the compensation schemes in the questionnaire. A more detailed description of compensation staff in each country is contained in Appendices 1–15.

3.5 Some examples

The following presents examples of compensation cases. For each case, the origin and source of the firm failure are outlined, and the operation of the relevant schemes in providing compensation is described. Given that not all schemes have experienced compensation cases and publicly available information on cases is limited, the selection is limited to five cases from Germany, Ireland, Spain and the UK. The examples highlight some generic issues about the types of failure that can occur at firms and the schemes' operations, covering default declaration, investor notification, processing of claims and payment of compensation.

Oxera would like to thank the relevant compensation schemes for allowing us to present these case studies and providing us with the information.

3.5.1 Example 1: Ireland

The first example refers to an Irish stockbroking firm, which on the direction of the Central Bank of Ireland ceased trading in April 2001, following the discovery of financial irregularities.[23] In May 2001, the High Court, on the petition of the Central Bank, appointed a receiver to the firm. In June 2001, the Central Bank made a determination under the Investor Compensation Act 1998 that the firm was unable to meet its obligations to investors. Under the Act, this determination resulted in the ICCL managing the appropriate compensation payments for eligible investors.

Origin of failure

The firm was an established stockbroker, principally serving clients within its local area. Its main activities comprised brokerage services for retail clients.

The failure resulted from the actions of a junior partner of the firm, who had incurred losses in trading derivatives instruments. These losses were covered by the misappropriation of assets from clients' accounts, which included cash as well as securities, and continued over a long period of time. The accounting irregularities were discovered after concerns were raised by another employee. As a result, the firm was unable to submit a routine return to the Central Bank. This in turn led to an immediate inspection by the Central Bank, during which it concluded that the firm was insolvent.

Operation of the scheme

After the determination of the Central Bank, the ICCL wrote to over 9,000 investors, informing them about the incident, the compensation entitlements and how to submit a claim for compensation. Advertisements were also placed in daily national newspapers. The ICCL received approximately 2,600 claims by the closing date for applications in December 2001.

In accordance with the Act, once the ICCL had received the claims from investors, it forwarded them immediately to the Administrator, the official appointed under the Act responsible for certifying investors' claims. In this case, the Administrator was also the receiver in the receivership proceedings. The ICCL itself was not involved in assessing the eligibility of the claims, but subsequently paid the claims as certified by the Administrator.

Legal process

Due to the shortfalls in client assets and as a result of the accounting irregularities, establishing the validity of claims was problematic. Given the nature of the irregularities, all client records of the firm had to be examined and reconciled. The receiver consulted the High Court in July 2002 about the difficulties experienced. These related to asset distribution and establishing the ownership of certain stocks and shares held by the firm. The High Court delivered its judgment in May 2003, concluding that it would appear that particular clients had been targeted. In general, the firm's purchase records were reliable, and, while unauthorised sales of shares had occurred, these sales were not undertaken on a wide scale.

The non-client assets of the firm were insufficient to cover the fees of the receiver, which were substantial. A High Court ruling established that the receiver had a right to be paid and

[23] This overview is largely based on newspaper articles, the ICCL's response to the questionnaire prepared for this study, and an interview with the Chief Operations Officer at the ICCL.

that costs, in accordance with Section 52(5) of the Stock Exchange Act 1995, should be borne pro rata by all of the client assets.[24]

Furthermore, in July 2004, the receiver applied to the High Court for the right to sell such proportions and amounts of shares held by, and to the order of, the firm as was necessary to pay the costs, fees and expenses of the receiver. The High Court ruled that the receiver had the right to sell shares accordingly.

The lengthy legal process considerably delayed the certification of claims, and the payment of compensation to investors. According to the Act, the ICCL has a statutory obligation to pay compensation within three months of the certification of the claims. However, delays in the certification of claims meant that the statutory time limit for the investors to receive their claimed funds was not relevant. By September 2004, the ICCL had dealt with 794 of the 2,600 claims, and made compensation payments amounting to approximately €3m. In other words, more than three years after the default, over two-thirds of the submitted claims remain uncertified and unpaid.

The legal process has also had a major impact on the costs of the compensation process. The total costs of the receiver (which, as noted above, was also the Administrator of the compensation case) are currently estimated at €5.7m. These costs will be deducted from client assets, and the resulting deficit in the client assets will be covered by the ICCL, which in turn is funded by member firms. At the time of writing, the receivership process is ongoing.

Funding the compensation payments

The case also raises a question about scheme funding: the initial estimate of the total compensation cost resulting from the €6m of client asset shortages of Morrogh was approximately €5m. Following the various court rulings, the receiver's fees and other receivership costs must also now be borne out of client assets. The current estimate for compensation payable arising from the receivership costs stands at approximately €5m. In total, therefore, the ICCL is facing compensation costs in the region of €10m. To date, the ICCL has made compensation payments of approximately €3m, and has set aside a provision to cover the unresolved claims.

The rising costs have had a significant financial impact on the firms that participate in the same fund as the defaulting firm (Fund A), since they have to bear the cost of the failure in the form of contribution payments. At its inception, the ICCL had set a target funding level of €5m for Fund A. The target level was to be built up over five years by regular annual contributions of €1m per year in total, levied from the 200 members of Fund A. However, due to the failure of the broker in 2001, the annual contributions collected from the firms increased considerably. Between 2002 and 2004, the regular annual contributions for firms in Fund A were approximately €1.8m instead of €1m. In addition, a top-up contribution of €5.2m was collected from a subset of 65 firms over the period from 2002 to 2004, effectively tripling the expected contribution payments for these firms.

The failure highlights that even a comparatively small compensation event, such as this default, can have a significant financial impact on other scheme members, in particular in a country with a comparatively small financial market. In general, the size of the market is likely to be reflected in the number of firms rather than in the size of the firms. Therefore, the amount of loss in the event of a firm failure can be as high as in a larger market, yet the

[24] Under Section 52(5)(b) 'a liquidator, receiver, administrator, examiner or creditor may have recourse or right against a client's money or a client's investment instruments or a client's documents of title relating to such investment instruments received, held, controlled or paid on behalf of a client by a member firm in respect of such reasonable expenses as are incurred in the carrying out of their functions under this Act or under the Investor Compensation Act, 1998 or incurred in the distribution of client money and investment instruments to clients of the member firm where the assets of the member firm have been exhausted.'

repercussions on the industry can be more severe since a smaller number of firms must bear the compensation costs.

Future developments
The problems revealed by the case have led to the creation of two working groups by the Irish Ministry of Finance—one looking at the issues raised by the time and cost elements of the legal process involved in certifying the claims, and the other examining the scheme funding arrangements. These working groups are expected to deliver recommendations concerning future actions in these areas.

Following its experience from the ongoing case, the ICCL itself has suggested establishing a cap on the contribution payments that can be collected from individual firms in any given year. The proposed size of the cap is twice the annual contribution rate. This is seen as a potentially important feature of the compensation system in protecting member firms from large and unexpected compensation liabilities, given the current, in effect, open-ended liability for the members of the scheme. To facilitate the introduction of such a cap, in its 2003 consultation paper, the ICCL also advocated the possibility of state-guaranteed lending.[25] The ICCL noted that it could be constrained in its commercial borrowing activities, as the lenders are likely to take into account the ICCL's potentially limited ability to collect extra contributions from member firms. This would be the case particularly if a cap on annual contributions were implemented. Therefore, the involvement of the state as an effective last-resort lender is deemed necessary to guarantee the ability of the ICCL to make compensation payments.

3.5.2 Example 2: Germany

The second example of a compensation case concerns the default of a German investment firm that was licensed as a securities trading bank and authorised to conduct a range of investment services, including principal broking.[26] The firm was a member of the EdW, the German compensation scheme for non-bank investment firms and credit institutions that are not authorised to conduct deposit-taking business.

The compensation process of the EdW was triggered by the German regulator (BaFin) in October 2002, and resulted in the most significant case dealt with to date by the EdW in terms of compensation costs.

Origin of failure
Established in 1993, the main business activities of the firm related to the intermediation of a diverse range of financial services and transactions of a highly complicated and speculative nature, including futures business for clients at futures exchanges in the USA. In September 2002, BaFin ordered the suspension of the firm's business for clients, followed by the opening of the insolvency proceedings in October 2002.

BaFin's actions arose from concerns about a potential shortfall of client monies in the range of €30m–€40m, which could not be covered by the firm's own resources. There were indications that the client monies of approximately 500 clients had been embezzled. Although the firm had not been set up for fraudulent reasons, the embezzlement of client monies began when the firm started to run into financial difficulties. The firm continued to receive funds from clients (using code-dialling, where sales staff contacted potential clients via telephone). These funds should have been transferred to foreign brokerage houses to carry

[25] ICCL (2003), 'Consultation Paper in Relation to the Funding of the Scheme', August, Investor Compensation Company Limited.
[26] This overview is largely based on a discussion with the EdW, data contained in EdW's monthly report of April 2004, BaFin press releases, and newspaper articles.

out futures transactions, but no deals actually took place. Instead, managing staff of the firm were said to have misused the monies for other purposes, and the managing director was convicted of fraud in October 2003.

Operation of scheme

In October 2002, BaFin declared the firm in default for the purpose of investor compensation. This triggered the compensation process at the EdW, and allowed clients to claim compensation for any funds lost. BaFin informed potential claimants how to launch claims and set out restrictions on claim eligibility. Separately, the EdW contacted all clients that were known to it and sent them the relevant application forms. The list of potential claimants was made available to the EdW by the firm itself, and by the relevant police authority (Landeskriminalamt). Potential claimants were also notified in the press.

Clients of the firm were not only private individuals, but also 'professional' investors, including banks that had invested through the firm. The latter were not eligible for compensation. The former were able to launch a claim against the EdW, subject to the maximum limits for compensation (90% up to €20,000) and the currency restriction (only funds in euros or one of the other EEA currencies qualify for compensation). Many private clients were therefore expected not to receive full compensation and to suffer losses.

By March 2004, the EDW had received 491 claims from clients—180 claimants had received compensation, for a total sum of €2.66m, and one claim had been rejected. In addition to the 180 successful claimants, the EdW awarded six claimants with partial and preliminary compensation (€36,600 in total). In general, such partial compensation may be paid by the EdW to clients before the final amount of compensation is determined. The compensation process is ongoing, and a further €4m of compensation payments is expected on claims that are still being processed. The delay in compensation in this case (as well as in some other cases of firm default) can be explained by the investigations by the prosecutors against the responsible staff of the firm, the outcome of which was incorporated in the final determination of EdW compensation claims. The prosecutors released the firm's internal documents at the end of 2003, and only after that was EdW able to examine the documents itself.

When processing the compensation claims, the EdW compared the contracts, fund transfers, and account statements made available by each client with the firm's internal documents to decide on the compensation amount due. The EdW also had to gain a clear understanding of the way in which the firm carried out its business, the nature and content of the firm's accounts, and any account movements between firm, clients and third parties. Each investor claim was examined separately, since only small deviations in the contractual agreement between the client and the firm could change decisions on eligibility and amount of compensation due. The processing time of claims received varied between six months and two years. The main problems in the processing resulted from the late release of the firm's internal documents by the prosecutors and the volume of documentation (about 40 large boxes) that had to be examined by the EdW.

The compensation payments paid to date were funded by the standing reserve, accumulated ex ante from annual contributions of firms participating in the EdW, as will any remaining payments. Although the compensation costs incurred from this case could be covered by available funds and, according to EdW, will not result in a shortfall of funds going forward, the total costs appear high when compared with the size of the standing reserve and the annual regular contributions received from firms—the estimated total cost of slightly under €7m compares with annual contributions of €3.3m and €2.2m in 2002 and 2003, respectively. The size of EdW's standing reserve at year-end 2003 was approximately €6.4m, after having deducted the compensation payments made up to that point in time.

This case of firm default has been the most significant case in terms of compensation costs processed by the EdW to date. Other cases generated far lower costs—eg, the seven cases that had been fully processed by April 2004 resulted in total compensation costs of approximately one-tenth of the costs expected for this case (ie, a total of €608,000 for all seven cases). In the event of another case of similar impact, the EdW can request special contributions from firms, as well as borrow funds to cover temporary funding shortfalls.

3.5.3 Example 3: Spain

The third example of a compensation case relates to the default of a Spanish broker (agencia de valores, 'the broker'), principally dedicated to portfolio management. The case was handled by the Spanish compensation scheme for non-bank investment firms, FOGAIN.[27]

In February 1998, the broker was declared in judicial insolvency (ie, payments were suspended), prior to the establishment of FOGAIN in 2001. However, as FOGAIN was established to cover failures that had occurred since July 1993, the default of the broker triggered the operation of FOGAIN. It is the largest case that FOGAIN has dealt with to date, in terms of both the number of claims and the total compensation payment.

Origin of failure

The broker undertook a wide range of discretionary portfolio management activities and financial transactions on behalf its clients. Although clients could expressly exclude certain types of transaction, the exclusions reflected in their contracts with the broker were not relevant to the type of transactions that the broker executed in its clients' names. In effect, upon signing a contract with the broker, clients gave authority to the broker to undertake a broad range of financial transactions in their names.

The broker, as an agencia de valores, opened securities and cash accounts for its clients, in which all the securities in its clients' portfolios were registered. The broker arranged the sub-custody of a significant amount of foreign securities and other financial instruments acquired in its clients' names with a bank in the Bahamas ('the bank'). The securities acquired for the broker on behalf of its clients were held in an omnibus account opened by the bank in the broker's name.

The bank itself then deposited these securities in accounts in its own name at other third parties. In general, the third parties were institutions from which it had bought the securities. The bank financed its activities by disbursing less than the cost of the instruments to these third parties (and therefore less than the monies received from clients of the Spanish broker), in return for ceding a priority pledge over the assets. The broker's clients were unaware that securities bought in their names were being used to guarantee the financing of the bank.

The bank faced serious financial problems, and the third parties executed the pledges. Consequently, after the bank was declared bankrupt in the Bahamas, it was not able to deliver to the Spanish broker the securities and financial instruments held on account of the broker's clients. Thus, the bank's default triggered the failure of the broker, since the latter was unable to meet the claims held against it by its clients.

Evaluation by the compensation scheme

It was questioned whether FOGAIN should cover clients of the broker whose positions in securities and financial instruments were in custody in the bank in the Bahamas. In fact, these clients were not considered creditors of the broker in the Spanish suspension of payments proceedings, since they were considered fiduciary creditors of the bank.

[27] This overview is largely based on de Barrionuevo Urgel, C. (2002), 'Aspectos Operativos del Fondo General de Garantía de Inversiones', *Perspectivas del Sistema Financiero,* **76**, complemented by evidence provided by the General Director and colleagues at FOGAIN.

Accordingly, a possible course of action for FOGAIN was to consider that, since the bank had held securities on behalf of clients of the broker, these individuals were not creditors of the broker itself. Hence, they would not be eligible for compensation from FOGAIN.

Nevertheless, FOGAIN came to the conclusion that clients who claimed for compensation would be compensated, for several reasons.

– The inclusion of this type of failure is consistent with a broad interpretation of the ICD and Spanish legislation, which includes among the financial instruments and cash covered by FOGAIN those kept under management by the relevant investment firm.

– According to Spanish law, the holding positions of the broker's clients with the bank would have been considered creditors of the broker in the suspension of payments proceedings if they had been able to obtain a definitive judicial resolution in Spain, declaring that the bank was not able to return the financial instruments acquired by the broker on behalf of its clients. None of the broker's clients initiated the relevant judicial proceedings.

– The Spanish securities markets regulator (the CNMV) and the National Court's judge responsible for the investigation of criminal responsibilities assigned the duty of representing the broker's clients before the bank and looking after their rights to the judicial administrators as if they were clients of the broker itself. Consequently, the broker had an obligation to its clients even in relation to financial instruments deposited with the bank.

– Clients of the broker were prevented from exercising any rights to compensation as depositors of the bank, as the bank's relationship was uniquely with the broker and not with them. Clients only had recourse to exercising their right to compensation against the broker.

– From a legal perspective, the clients had established a portfolio management relationship with the broker and not with the bank. Any losses for the clients arose from the contractual relationship established with the broker.

– The broker had breached the law by not informing its clients that their assets were held in a third-party institution (the bank) in an omnibus account in the name of the broker and that the third party was domiciled in a tax haven. They were also not informed about the nature of products or the inherent risks.

All the arguments cited above led FOGAIN to decide to cover the broker's clients, including the financial instruments deposited with the bank in the Bahamas.

FOGAIN's regulations expressly exclude from its coverage financial instruments delivered to an investment firm for the provision of investment services in a tax haven. However, in this case, it was concluded that there was no evidence to suggest that the broker had made clear to its clients that it was depositing securities in a third-party bank, nor that this was located in a tax haven. It was concluded that the exclusion from coverage should only apply if there were evidence to support that clients were aware that they were carrying out investment activities in a tax haven, including those cases where express instructions were given to invest in financial instruments issued in a tax haven.

Operation of the scheme

The global position of the broker's clients was calculated as at the insolvency date in February 1998. Specific securities and other financial instruments forming part of its clients' portfolios were valued by an independent assessor, and compensation funds of €31.8m were made available, most which has now been paid out.

There were an estimated 13,000 potential claimants, of which just over a half have come forward. Applications for compensation are still being received, although at a very slow pace. Although Spanish regulations (RD 948/2001) imply that there are restrictions on the period during which claims can be submitted, due to the unclear meaning of the provisions contained therein FOGAIN elected not to apply any time restrictions.[28]

FOGAIN publicised in the press that it was going to indemnify investors affected by the broker's failure. In addition, it maintains a close relationship with the judicial administrators and with other persons belonging to the broker's organisation, which, in turn, are in contact with former clients of the broker. As such, FOGAIN does not tend to believe that a significant number of clients have not requested compensation because they were unaware of the existence of FOGAIN. The true reasons remain unclear.

In processing compensation claims and establishing the amount of compensation due, FOGAIN worked closely with the judicial administrators appointed by the National Court where criminal proceedings are being followed against the broker, the broker's administrators and other persons. These judicial administrators were also appointed as receivers to the insolvency proceedings. FOGAIN has largely relied on the information and conclusions reached by the receivers to establish the claims of individual clients against the broker. Processing the case was very complex, given the number of clients involved, the diverse nature of financial transactions, and, importantly, the fact that some client assets were held overseas rather than in Spain. In addition, FOGAIN has not been able to obtain first-hand information because the failure of the broker occurred three years before FOGAIN was created.

It has taken longer than expected to process compensation claims, since several issues needed to be dealt with before claims were resolved—eg, establishment of FOGAIN procedures, determination of clients' positions according to the judicial administrators' information, and valuation of the securities and other financial instruments forming part of clients' portfolios. At present, the average processing time for a compensation claim is approximately two months from application.

Essentially, the principal difficulties in the compensation process have been, first, to determine whether the positions of the broker's clients in the bank should be covered by FOGAIN; and, second, to identify reliable sources of information in order to establish whether a particular client has a right to obtain compensation from FOGAIN.

The first difficulty raises generic issues about the potential risks of international custody and sub-custody agreements, and the extent to which these are covered by compensation schemes. With regard to the second difficulty, a particular issue was that the broker's failure was one of the failures that were covered due to the retroactive application of FOGAIN coverage. FOGAIN has not had direct access to the broker's files and records, and therefore claims of the broker's clients had to be confirmed using the information provided by the judicial administrators who were legally in charge of these files and records.

Since FOGAIN was only incorporated in 2001, it had no reserves to cover the compensation costs of €31.8m. It would also have been very difficult to raise the funds required at the time by imposing a levy on the other non-bank investment firms that participate in the newly created scheme. Instead, as with other compensation costs incurred by FOGAIN in relation to losses up until the end of 2001, the costs were mainly borne by the separate deposit and

[28] There is a time limit of three months (with a possible extension) for payment of compensation from the date of default declaration. Real Decreto 948/2001 de 3 de agosto, sobre Sistemas de indemnización de los inversores.

investment guarantee schemes for banks, with only a small fraction (0.17%) being borne by FOGAIN and its members.[29]

3.5.4 Example 4: Germany

The fourth example is the default of a German investment firm, which resulted in the largest number of compensation claims dealt with to date by the EdW, the German scheme for non-bank investment firms and non-deposit-taking credit institutions.[30] The compensation process by the EdW was triggered when the regulator declared the compensation event in August 2000.

Origins of failure

Since January 1998, the investment firm had been subject to regulatory supervision by the Bundesaufsichtsamt für das Kreditwesen (BAKred), the regulatory body that preceded BaFin. It was licensed to undertake financial intermediation, underwriting business and own-account trading. As its main business, the investment firm sold shares of a pure holding company within the same holding structure as the firm itself , as well as shares of North American technology companies.

In April 2000, BAKred ordered the suspension of the firm's business because there was an imminent risk of financial insolvency and evidence that the firm had misused client monies. The failure became evident after documents submitted by the firm to BAKred were analysed. At the end of April, the regulator also withdrew the licence of the firm's personally liable director for breaches against German financial services law. Insolvency proceedings were initiated against the investment firm at the end of August 2000, when BAKred finally determined that the firm had not been able to improve its financial position by raising new capital and was therefore insolvent. The compensation event was formally declared by the regulator in August 2000, after which clients where entitled to claim compensation from the EdW.

At the time, BAKred estimated total losses of €2.5m, arising from the difference between the actual value of the securities held for clients and clients' claims against the firm. The firm had advised clients to purchase shares in the holding company and to transfer the funds directly to accounts of the latter. The clients did not know that the share purchase scheme within the holding structure was used to defraud them of their funds.

Operation of the scheme

The investment firm had nearly 1,000 clients, and 723 claims for compensation were received by the EdW. The principal difficulty in establishing if claims were eligible was to decide whether the losses resulting from the fraudulent scheme would qualify for compensation under law. A number of claims were initially rejected, the reason being that while the investment firm was a member of the EdW, clients' funds were paid to the holding company, which did not participate in the EdW. Thus, clients suffered losses due to their investment in the holding company, not due to the failure on the part of the EdW member firm. The rejection of claims by the EdW was challenged in court. Claimants argued that, at the time they were sold shares in the holding company, the investment firm itself knew that the company was a bogus firm without assets and had therefore defrauded clients and embezzled their funds. However, all court judgments made to date have supported the EdW's decisions.

[29] Compensation costs on cases before 2002 were shared among the different schemes in proportion to their non-committed reserves as of December 2001: Deposit Guarantee Fund for Banks (53.98%), Deposit Guarantee Fund of Savings Banks (40.9%), Deposit Guarantee Fund of Credit Cooperatives (4.95%), and FOGAIN (0.17%).

[30] This overview draws from a discussion with the EdW, data contained in the EdW monthly report of April 2004, press releases of the regulator, and articles in the press.

The compensation process is ongoing at the time of writing, with the EdW checking individual claimant's contracts to establish entitlement. This process requires an evaluation of the contractual relationship of each potential claimant with the investment firm and the holding company as the third party.

As at April 2004, the EdW had received 723 claims, of which 299 had been determined. 94 investors were compensated with a total payout of €209,100, and 205 claims were rejected. A further 24 claims had been partly settled, with a total payout of €83,200. The remaining claims remained unsettled. The process is expected to be largely completed by the end of 2005.

3.5.5 Example 5: The UK

Default of a UK independent financial adviser presents the final example of a compensation case.[31] The firm was declared in default in 2001 by the Investors Compensation Scheme, a subsidiary of the newly formed FSCS. The default triggered the largest case of firm failure experienced by the FSCS in terms of number of claims received. In contrast to the other examples reported above, which all compensated losses due to firms' inability to return client assets, compensation in this case was paid to clients for the bad advice they had received from the advisory firm.

Origins of the failure

The firm was a mid-sized firm providing financial advice to retail clients, authorised and regulated by the FSA (and its predecessor the Personal Investment Authority). The firm was declared in default by the FSCS (Investors Compensation Scheme) in 2001 after it was established that the firm was unable to meet the claims against it from pension mis-selling.

The claims arose as part of the wider pensions review conducted in the UK, which affected many other firms in the market and led to the review of pension cases of more than 1.7 million consumers, with compensation costs totalling more than £11 billion. Mis-selling occurred, for example, when people who would have been financially better off at retirement in their employer's pension scheme were advised to leave or not to join their employer's pension scheme. Where the firms involved in the mis-selling could not meet the liabilities or no longer existed for other reasons, the case was passed on by the FSA for compensation to the FSCS. Other cases were compensated by the firms themselves.

Another firm, which had acquired the advisory firm in 2000, discovered the scale of the pension mis-selling liabilities—estimated to be approximately £48m—when preparing the accounts in February 2001. The acquiring firm entered into discussions with the FSA (Personal Investment Authority) and the FSCS (Investors Compensation Scheme) over the advisory firm's pension mis-selling liabilities, and the acquiring firm's shares were suspended following the necessity to make a provision of £48m for the discovered liabilities.

Operation of the scheme

In June 2001, the FSCS announced an agreement whereby it would deal with investor claims against the advisory firm and pay compensation for eligible claims, but the acquiring firm (and a prospective acquirer of that firm at the time) would make some funds available to meet FSCS compensation costs and also compensate non-eligible claims. The advisory firm itself would be wound up, and any surplus assets after paying out creditors would be transferred to the FSCS to contribute to the compensation costs.

[31] The description draws from an FSCS press release, and additional information provided by the FSCS.

More than 2,000 claims for compensation had been received by the FSCS by spring 2004, and the case is ongoing, as more investors have approached the FSCS to claim compensation.

The pension mis-selling claims formed the majority of claims, the bulk of which have now been processed. However, in addition to the pension mis-selling claims, investors launched claims against the FSCS to compensate them for losses arising from endowment policies sold to them by the firm. The endowment mis-selling cases dealt with by the FSCS generally relate to negligent advice to take out an endowment as a mortgage repayment vehicle, rather than a capital repayment mortgage that would have been more suitable for the investor and their circumstances.[32] The FSCS expects to continue receiving endowment claims in relation to the advisory firm.

The pensions review was a proactive review in which potential claimants were contacted directly to find out if they wanted to make a claim. However, for all other types of claim, claimants are required to contact the FSCS and apply for compensation. They were informed about the default declaration of the firm by a press release. In addition, if an investor contacted the firm directly, they would be transferred to the FSCS. There was also general media coverage informing investors that if they had a complaint against a firm that no longer exists, they should contact the FSCS.

Having contacted the FSCS, investors received an application form and submitted the completed form including personal information, details about the investment made and money lost, and documentation to support their application for compensation.

The application form and supporting documentation supplied by the claimant formed part of the information on which the FSCS established and processed a claim. It also retrieved the firm's client file, when available, and requested details from the various product providers involved. The assessment was then based on all the available evidence. For the majority of claims, the loss was calculated using software designed, and used industry-wide, to compare the investor's current financial position with their position had they had not taken out the investment in question—in general, in cases of bad advice, the FSCS aims to compensate investors such that they are returned to their position prior to receiving the advice. For pension review claims, for example, the personal pension is compared with the occupational pension scheme to calculate whether the investor is worse off. For the majority of endowment mis-selling cases, the investor's current position is compared with their position had they made the same payments into a capital repayment mortgage.[33]

Pension mis-selling claims were an industry-wide problem and resulted in a sudden influx of a large number of claims, imposing a considerable burden on the FSCS. While claims in relation to this case posed no specific problems, the most significant processing difficulty for the FSCS with regard to this and other cases relates to receiving timely cooperation from third parties (eg, in providing relevant information). There can also be problems establishing sufficient evidence regarding advice and financial records that can date back over 15 years. In addition, the establishment of pension claims required a comparison between the relevant occupational pension scheme and the personal pension plan using actuarial calculations, which are beyond the capacity of the FSCS to perform in any volume. Software was therefore purchased or licensed to perform the calculation using actuarial figures that are periodically updated by the FSA.

[32] The other endowment mis-selling cases include the endowment term running past the retirement term of the mortgage or an existing endowment being churned.

[33] For claims that are not standard pension/endowment mis-selling, the FSCS develops its own methods for calculating a loss, with the aim of putting the investor in the position they would be in had they not taken out the investment.

Of the applications received to date, some claims were rejected by the FSCS, for the following main reasons:

– the investor had received the advice before August 28th 1988 (since only losses on investment business carried out after the establishment of the compensation scheme are considered);
– there was insufficient evidence of bad advice;
– no loss was found.

For the majority of claims that were accepted, investors received full compensation for losses incurred. The remaining claims received compensation up to the £48,000 compensation limit. However, due to the agreement reached when the advisory firm was declared in default, investors whose compensation amount was reduced due to the FSCS compensation limit would receive the remainder of their compensation from the funds set aside and administered by the firm which had acquired the adviser. The length of time during which these additional funds will be available is currently under review.

By spring 2004, the FSCS had paid £15.5m in compensation to consumers that had received bad advice from the advisory firm. The total compensation costs are not clear because of uncertainty over the number of likely endowment claims that the FSCS may receive from the firm's clients in the future.

3.6 Summary

Many countries in the EU 15 have no or limited experience of operating their investor compensation schemes. However, in countries where there have been failures, retail investors have benefited from the compensation provided by the schemes.

The compensation process is triggered by the default declaration of a participating firm and ends with the payment of compensation to investors (or rejection of claims that are determined not eligible for compensation). This process differs not only from scheme to scheme, but also from case to case, and can be a complex and lengthy one.

The ICD establishes that schemes should compensate investors 'as soon as possible' and imposes time limits on the compensation process. However, the research suggests that there have been instances when compensation of investors was impeded or delayed because of:

– delays in the declaration of default by the competent authority or court, delaying the start of the compensation process;
– difficulties in notifying investors that a compensation event has occurred, especially if investors need to apply for compensation within a short period of time;
– lack of information to establish a claim and calculate compensation amounts;
– volume of claims and case complexity, which requires considerable scheme resources to handle and process claims effectively;
– delays in the legal process—for example, due to ongoing insolvency proceedings against the firm or criminal proceedings against staff of the firm.

While many investors receive compensation within several months following a firm failure, the case experience to date suggests that, in some instances, they may have to wait several years before payment occurs. Such severe delays are generally due to factors outside the control of the relevant compensation schemes.

Claim processing is resource-intensive and complex. Outsourcing parts of the process to an external service provider may be a cost-effective solution. It may be particularly useful for those EU schemes that currently have very low staff numbers and no explicit arrangements in place to draw in additional resources, possibly because they are yet to experience a compensation case.

4 Analysis of funding position and financial resilience

The inventory in section 2 contained a high-level overview of the most important funding arrangements of the national investor compensation schemes. This section examines the schemes' funding positions in more detail and seeks to evaluate the adequacy of funding in light of past and possible future compensation cases against the schemes.

4.1 Funding arrangements: firm contributions

All Member States' compensation schemes are funded principally or exclusively by way of contributions of participating firms. However, there are considerable cross-country differences, in particular as regards when contributions are collected, the degree to which funds are pooled across participating firms, how contributions are calculated, and whether there are any limits on the amount that can be collected from firms for a given period.

This section summarises the most important features that characterise the schemes, with details contained in the country-specific appendices.

4.1.1 Ex ante and ex post funding

Investor compensation schemes can obtain their funds by collecting contributions to build up a reserve in anticipation of future liabilities (ex ante funding), or by levying contributions when needed to cover the compensation costs of failures that have occurred (ex post funding). The principal advantage of ex ante funding is that money is readily available in a fund to compensate investors, if a failure were to occur. It also offers the benefit of smoothing firm contributions over time. However, ex ante funding may raise issues relating to fund management—levies collected ex ante will rarely be equal to losses ex post, such that a fund will always be in a situation of surplus or deficit. Moreover, if funds are invested in safe and liquid assets, participating firms suffer opportunity costs relative to their cost of capital.

Of the EU 15, Austria, Italy, Luxembourg, Sweden and the UK fund their compensation systems on an ex post basis. However, some of these schemes incorporate an element of pre-funding to cover administrative or similar costs. In the Netherlands, the scheme for credit institutions is also funded ex post, but the scheme for non-bank investment firms is funded ex ante. The single Belgian scheme collects ex ante contributions only from credit institutions and brokerage houses, but levies contributions ex post for asset managers and instrument-placing firms.

The other schemes are funded mainly ex ante or involve a sizeable element of ex ante funding. Firms make annual contributions to enable the schemes to build up a standing fund or reserve to finance any future compensation costs. In some countries (Denmark, Greece and Portugal), the annual firm contributions take the form of pledges instead of, or in addition to, cash payments. By making pledges, firms guarantee payment in the event of a failure. All ex ante schemes have the power to levy additional contributions if the accumulated reserve is not sufficient to cover compensation costs.

4.1.2 Pooling of funds and cross-subsidisation

A further funding issue relates to the extent to which funds are pooled across industry sectors and types of investment business. Countries may create one global fund to insure all types of firm and business, or create differentiated funds. The advantage of pooling is that it improves liquidity. A unique global fund would also benefit from diversification and would receive improved solvency, as it would insure a more varied set of institutions and investment business. However, differentiated funds also have advantages—in particular, they can be set up to reflect more closely the characteristics of particular industry segments. They also avoid cross-subsidies between firms and thus potential conflicts between them.

As discussed above, some Member States (Austria, Germany, the Netherlands and Spain) maintain separate compensation schemes for non-bank investment firms and credit institutions, in some cases further distinguishing by type of credit institution. As such, they do not pool funds across industry sectors, and avoid cross-subsidisation between types of firms. However, the banking schemes do pool the funds for deposit guarantee and investor compensation purposes. Although not in the form of legally distinct entities, the Danish scheme also has separate pools of funds for investment firms and credit institutions, the latter to cover both deposit guarantee and investor compensation.

Belgium takes fund pooling furthest—the country has established a single fund for both credit institutions and certain investment firms,[34] and for both deposit guarantee and investor compensation.

Although the other countries do not in general pool deposit guarantee and investor compensation funds, most pool the funds of all types of investment firm, including credit institutions, without distinguishing according to the type of investment business carried out by the participating firms.

The exceptions are Ireland and the UK: in Ireland, two separate funds have been created—these distinguish the providers of some of the core investment services from investment advisers, insurance intermediaries, and tied agents or similar firms. The UK investor compensation scheme differentiates further by type of investment business through splitting into six main contribution groups, as listed in Table 4.1 below. A firm may be allocated to one or more contribution groups, depending on the types of investment business it undertakes. However, compensation payments against a specific contribution group can only be levied on firms in that group. For example, an advisory broker is not required to contribute to the costs of paying claims arising from the failure of a firm dealing on a principal basis or a fund manager. Such differentiation by type of regulated investment business is, with the exception of Ireland, not observed in other countries.

4.1.3 Calculation of firm contributions

The basis on which annual contributions are calculated varies (whether ex ante or ex post). As summarised in Table 4.1, the schemes adopt alternative methods to calculate the level of contributions, using the following main bases of assessment.

– *Investment and cash balances*—under this method, contributions are allocated to participating firms in proportion to each participant's share of the protected investor assets held. This method is used for all firms in France, Luxembourg, Portugal, Spain and Sweden, and for fund managers in the UK. The balance of assets held for eligible investors also form part of the basis for calculating the contribution of Belgian firms (in addition to turnover) and investment firms in Denmark (in addition to the number of employees). For Danish credit institutions, contributions are based on the number of securities accounts held with a central securities depository (rather than the value of the securities) and the value of deposits.

[34] Credit institutions are pooled with brokerage firms, and both types of firm make contributions to the same pool of funds, the former with respect to both deposit and investment business. Only portfolio managers and instrument-placing firms are excluded from the full pooling of funds; however, in the event of a loss of a portfolio manager, the costs are initially borne by credit institutions and brokers, and only later repaid by all remaining portfolio managers.

– *Number of clients*—in Finland and for some firms in Ireland, contributions paid by firms depend principally on the number of clients rather than the value of clients' assets. The number of clients also affects the level of contributions in the Dutch and Spanish schemes for non-bank investment firms.

– *Revenues or income*—in Austria, Greece and Italy, contributions are largely revenue-based and calculated in proportion to turnover or volume of business. An income measure is also used by the German scheme for securities firms, the UK scheme for operators and depositaries of CIS, and the Irish fund for investment advisers and certain other financial intermediaries.

– *Number of employees*—in the UK, dealers, brokers and advisory firms pay contributions in proportion to the number of persons who are authorised or approved within the firm to conduct the specific activities on behalf of its investors. The contributions made by Danish investment firms are also influenced by the number of employees in a firm.

– *Capital*—the level of capital of a firm is one of the factors that determines the level of firm contributions in Finland. It is also used in Germany to calculate the initial one-off levy (as opposed to the regular payments) imposed on firms when they first join a compensation scheme. In addition, some countries use capital to determine the limit on contributions that can be raised from firms in any year. In France risk-weighted contributions are applied, which are influenced by the solvency of the participating firm.

– *Deposits of credit institutions*—for credit institutions that participate in the German banking schemes, the amount of contribution is determined by their deposit-taking activities rather than the volume of their investment business. The banks make a single contribution based on their balance-sheet liabilities to customers in order to cover their participation in the banking schemes, which protect both deposits and investments. Similarly, contributions of Dutch banks do not relate to investment business and are exclusively based on deposits. In Austria, Spain and Denmark, credit institutions also make contributions in proportion to deposits (including investment monies), but separate contributions are levied to reflect the volume of their securities operations.

In general, although many countries adopt a uniform assessment basis, some distinguish between types of firm and investment business. For example, the UK uses three broad methods to calculate contributions depending on the type of business (funds under management, income, number of authorised persons). Ireland uses the number of clients and income to measure contributions for different business types. Germany distinguishes by type of institution, and uses income to calculate contributions for securities firms but deposits for credit institutions. Table 4.1 provides a more comprehensive overview.

Some of the compensation schemes that are funded on an ex ante basis require minimum levels of annual contributions from participating firms (eg, France and Germany), irrespective of the result of the size-based calculation of contributions.

Other countries incorporate a fixed element into the contributions imposed on firms, in addition to the above variable components. For example, in Finland, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal and Sweden, the fixed element takes the form of an equal payment for all firms irrespective of firm size or business volume. In many cases, this fixed payment covers the annual administrative costs of the schemes.

The compensation schemes in some countries require firms to make an initial one-off payment when first joining the scheme—eg, in the Austrian scheme for securities firms, this takes the form of a fixed subscription charge to the share capital of the scheme, whereas in Germany, the initial charge depends on firm capital. In France, new firms are required to make supplementary contributions and purchase a certificate of association on joining, which pays annual interest and is remunerated at par value when the firms leave the scheme.

An important issue on which the national schemes diverge is the extent to which the schemes adopt an explicit risk weighting in the calculation of contributions. Risk-weighted as opposed to fixed levels of contributions can have several advantages.[35] For example, they can serve their purpose of controlling risk-taking by participating firms that may otherwise have incentives to engage in riskier activities while the cost is kept constant by the compensation scheme—ie, risk-weighted contributions can reduce concerns about moral hazard. Risk weighting may also contribute to maintaining a fair and level playing field if firms that undertake activities that are more likely to draw from scheme resources are required to make higher contributions. At the same time, however, risk weighting may impose considerable information and human resource requirements on a compensation scheme and is more costly to operate than a flat-rate contribution system. Most compensation schemes in the EU were sceptical about their ability to operate a system of risk-weighted contributions. Some were also concerned that the system may be counterproductive and destabilising if it imposed a greater financial burden on the weaker institutions.

The French scheme adopts such a risk weighting by aiming to take into account explicitly the probability of default of a firm when setting the level of contribution the firm is required to make. Specifically, when calculating the level of a firm's contributions, the assessment base (investor assets held by the firm) is multiplied by a risk indicator that reflects the capital adequacy and operating profitability of the firm. No other scheme adopts a similarly explicit risk weighting.

In some countries, contributions are set to take into account implicitly that some types of investment business expose investors to a greater risk of loss—eg, the German scheme for securities firms applies higher contribution rates for firms that are authorised to hold client assets and trade for their own account than those that are not. Similarly, in Finland, higher contributions are required for some investment services (eg, stockbroking or custody) than others (eg, portfolio management or own-account dealing). However, in most of the EU 15, contributions depend on the size or volume of investment business of participating firms, without further taking account of risks.

4.1.4 Limits on contributions

In general, schemes have the power to levy additional contributions on participating firms, if required in light of large or unexpected failures. This may raise the concern that participating firms have effectively a potentially open-ended liability to fund the scheme through annual and additional contributions. In particular, in the event of a substantial failure, contributions could be so large that the resulting costs to firms could have a significant impact on firms' ability to continue to operate in the industry, which, in turn, could have adverse effects on competition and investor choice.[36] Given these concerns, some countries have adopted an overriding limit on the amount that can be levied in a given year. The exceptions are Finland, France, Germany (banking schemes only), Ireland, Italy, Spain and Sweden, which currently do not have an explicit limit in their laws or scheme statutes.

If a scheme includes a contribution limit, in many cases, it is expressed as a percentage of the capital or net income of a participating firm—eg, 5% or 10% of the equity capital, or 10% of the net income of a firm. A different type of limit is observed in the UK, for example, where the maximum that the compensation scheme can levy in a given year is constrained by a

[35] The advantages and disadvantages of risk weighting have been examined in the literature on deposit guarantee schemes. See, for example, Jean, R. (2000), 'A Preliminary Analysis of Deposit Insurance Funding Issues', paper prepared for the International Association of Deposit Insurers; or Blair, C. and Fissel, G. (1991), 'A Framework for Analyzing Deposit Insurance Pricing', *FDIC Banking Review,* **4**, 25–38.

[36] The ICD states that, while the cost of funding the schemes should be borne by investment firms themselves, this should not 'jeopardise the stability of the financial system of the Member state concerned'—see of Preamble (23).

total limit on industry-wide contributions (£400m or approximately €600m). Aggregate industry limits (rather than firm-specific ones) are also applied in Belgium, Denmark, Greece and Portugal. The limits on contributions are summarised in Table 4.1.

Table 4.1 Type of funding by firms and calculation methods

	Ex ante or ex post	Different pools of funds by type of business	Calculation of contributions	Risk weighting	Limit on contributions
Austria					
AeW	Ex post	No	Funding requirement allocated on a pro rata basis based on gross commission income Initial payment for new firms as subscription charge to the AeW	No	10% of a firm's equity capital
Banking schemes	Ex post	Different schemes for different types of banks. But no separation by activity, and same pool of funds for deposit guarantee and investor compensation	Funding requirement related to claims on investments allocated on a pro rata basis based on gross commission income Some investment monies treated as deposits, for which allocation depends on amount of total protected deposits	No	0.83% of the assessment basis for calculating the capital requirement of a bank
Belgium	Depends on type of firm: – ex ante for credit institutions and brokerage firms (with power to levy additional contributions) – ex post for asset managers and instrument-placing firms	No	For credit institutions and brokerage firms, annual contributions based on 0.7% of turnover, 0.0175% of covered deposits and 0.001% of the covered financial instruments Contributions for asset managers and instrument-placing firms levied ex post (compensation costs initially financed from standing fund, but repayable by firms); firms contribute annually to administration costs (€131.82)	No	Aggregate annual contributions cannot exceed twice the regular annual contributions
Denmark	Combination—ex ante cash contributions and pledges to guarantee ex post cash contributions Standing fund is rebalanced every year (Power to levy additional contributions)	Separate funds by type of firm (for credit institution, mortgage bank and investment firm). But no separation by activity and same pool of funds for deposit guarantee and investor compensation	Total annual contributions set to achieve required capital of DKr3.2 billion (€430m), divided between credit institutions (DKr3.18 billion), mortgage banks (DKr10m) and investment firms (DKr10m). 25% of contributions due in cash, 75% in pledges Contributions rebalanced every year For credit institutions, assessment basis is value of protected deposits (95%) and number of securities accounts (5%) For mortgage banks, basis is cash balances (1%) and the number of securities accounts (99%) For investment firms, basis is value of securities and cash balances (55%) and number of employees (45%)	No (Law provides that investment firm contributions may take account of the size of the balance sheet and gearing level. However, to avoid complications, provision is not applied in practice)	Aggregate annual cash contributions cannot exceed: – 0.2% of total protected deposits for credit institutions – 50% of minimum required capital of fund for mortgage banks and investment firms

	Ex ante or ex post	Different pools of funds by type of business	Calculation of contributions	Risk weighting	Limit on contributions
Finland	Ex ante (with power to levy additional contributions)	No	Total contributions set to achieve minimum capital requirement Contributions divided between providers of different investment services (higher weighting for some services—eg, custodians pay more than traders) 10% of total contributions is fixed, and 90% is variable depending on number of eligible clients adjusted by firm capital Separate fixed fee to cover administration costs	Implicit risk weighting by imposing different contribution rates for different investment services	No
France	Ex ante (with power to levy additional contributions after a decision by the regulator)	No	Contributions allocated according to half of the value of securities and, for non-bank investment firms, all cash balances, weighted by a risk indicator Firms make a one-time contribution by purchasing certificates of association	Assessment base (funds held by firm) is weighted using a risk indicator which takes account of capital adequacy and operating profitability	No
Germany					
EdW	Ex ante (with power to levy additional contributions)	No	0.35%, 1.1% or 2.2% of gross income from commissions and financial transactions: 0.35% applies to firms not authorised to hold client money or assets; 1.1% to firms with client money or asset authorisation; and 2.2% to institutions that also trade on their own account Special provisions apply (eg, 90% of gross receipts from transactions with non-eligible clients are deductible from the assessment base) Minimum annual contribution for all EdW-participating firms is €300 Initial one-off contribution of 0.1% or 1% of liable capital, depending on licence	Implicit risk weighting by imposing three levels of contribution rates for different types of authorised business	10% of a firm's net income

	Ex ante or ex post	Different pools of funds by type of business	Calculation of contributions	Risk weighting	Limit on contributions
Banking schemes	Ex ante (with power to levy additional contributions)	Different schemes for different types of banks, but no separation by activity, and same pool of funds for deposit guarantee and investor compensation	Contribution level determined by the amount of deposit-taking activities rather than investment business 0.008% of the balance-sheet item 'liabilities to customers', to cover both deposits and investor compensation (minimum contribution is €1,000) One-off payment for new credit institutions amounting to 0.05% (0.03%) of liabilities to customers, with a minimum payment of €15,000 (€5,000) to the EdB (scheme for public-sector banks)	No	No
Greece	Combination— ex ante cash contributions and letters of credit to guarantee further ex post cash contributions Standing fund is rebalanced every year (Power to levy additional contributions)	No	Size of standing reserve assessed every year, and contributions raised from firms accordingly (with redistribution of previously collected funds, if required) Contributions comprise fixed element that is equal for all firms, and variable element based on turnover Contributions consist of cash (2/3) and letters of guarantee by credit institution (1/3)	No	Aggregate annual contributions cannot exceed twice the regular annual contributions
Ireland	Ex ante (with power to levy additional contributions)	Yes—two funding groups: – Fund A: investment business firms authorised under Section 10 of the Investment Intermediaries Act, stockbrokers, credit institutions, certain certified professionals providing investment business services – Fund B: authorised advisers, multi-agency intermediaries, insurance intermediaries, tied insurance agents	Fund A firms pay a fixed contribution (€9,520, which is reduced for firms with no or only a few eligible clients), plus a variable contribution, the rate of which depends on the number of eligible clients Fund B firms pay a fixed contribution, the amount of which depends on the type and income band of firm (€250–€3,800)	No	No limit at present (under review)
Italy	Ex post	No	Funding requirement allocated according to gross revenues (most investment services) or transaction volume (own-account dealing). Minimum contribution of €260 Separate fixed annual fee to cover administrative costs	No	No

	Ex ante or ex post	Different pools of funds by type of business	Calculation of contributions	Risk weighting	Limit on contributions
Luxembourg	Ex post	No	Total funding requirement for compensation costs allocated to firms proportionately according to the amount of protected investment balances as at December 31st of the year preceding the failure In addition, fixed (equal) contributions to cover administration expenses	No	5% of a firm's equity capital
Netherlands					
ICS	Ex ante (with power to levy additional contributions)	Yes	Annual contributions calculated as a fixed fee (€1,600) plus a variable component, depending on the number of eligible clients (€5.80 per client, with a maximum of 11,000 clients)	No	5% of a firm's equity capital
CGS	Ex post	Yes	Funding requirement allocated to banks in proportion to the amount of balance-sheet items, which can be decided by the Central Bank Item is likely to be total of (protected and unprotected) deposits	No	5% of a firm's equity capital
Portugal	Combination—ex ante pledges, but ex post cash contributions (also power to raise additional contributions)	No	Contributions are collected in the form of binding pledges. All firms must commit 0.05% of the total funds and securities they hold for eligible clients Annual payment of €2,500 to cover administrative costs (although waived in recent years, except for new firms)	No	0.2% per year of total protected funds and securities of a firm
Spain					
FOGAIN	Ex ante (with power to levy additional contributions)	No	Annual contributions calculated as 0.2% of investment monies and 0.005% of value of financial instruments Some account is taken of fee volume and number of eligible customers	No	No
FGDs	Ex ante (with power to levy additional contributions)	No	Assessment basis is the value of protected deposits held, plus 5% of the value of securities Contributions to each of the FGDs are calculated as a fixed percentage of the assessment basis: – banking institutions: 0.06% – savings banks: 0.04% – credit cooperatives: 0.08%	No	No (but cease contributions when accumulated funds reach 1% of protected deposits and 5% of securities)

	Ex ante or ex post	Different pools of funds by type of business	Calculation of contributions	Risk weighting	Limit on contributions
Sweden	Ex post	No	Compensation-related contributions are collected in proportion to the value of covered funds and securities held by a firm Administration costs are split equally between firms	No	No
UK	Ex post	Yes—six contribution groups: – fund managers; – CIS operators and depositaries; – firms dealing on principal basis; – advisory brokers with client-money authorisation; – advisory brokers without client-money authorisation; – corporate finance advisers. Also special contribution group for pension mis-selling cases	Total funding requirement split across firms in relevant contribution group according to: – funds under management, for fund managers; – gross income, for CIS operators and depositaries: – number of traders, for dealers; – number of approved persons, for brokers and advisory firms. All firms contribute to the management expenses, but compensation costs are allocated only to firms in the same contribution group as the defaulting firm	No	Aggregate limit of £400m (€600m) on all firms participating in the investment sub-scheme

4.2 Other funding arrangements

In addition to differences in the levying of contributions from participating firms, the funding arrangements of the compensation schemes in the EU 15 differ with regard to the factors outlined below, as summarised in Table 4.2.

– *Standing fund and minimum capital requirements*—schemes funded on an ex ante basis aim to build up a reserve or standing fund to deal with compensation cases in the future. As detailed above, this is the case in Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Netherlands (only for scheme of non-bank investment firm), Portugal and Spain. However, not all of these countries have imposed explicit requirements on the minimum size of the fund. Explicit capital requirements are observed in Denmark, Finland, Greece and Germany (only for banking schemes).

  In Denmark and Greece, the capital requirement is reallocated every year among participating firms, with additional contributions or reimbursements of previous contributions, depending on whether a firm has increased or reduced the volume of its business compared with the preceding year. Similarly, in Portugal, firms pledge securities in relation to the volume of their business in a given year.

  For the other schemes, annual cash contributions by firms imply that, in principle, the size of the standing fund can continue to increase in the absence of compensation cases. However, many countries have an informal or explicit target fund size, and may cease to collect contributions once the target has been reached.

  The size of the standing fund differs considerably among countries. It tends to be particularly large when the investor compensation scheme is integrated with the deposit guarantee scheme in a single fund.

  Schemes that opt for ex ante funding need to decide how to manage and invest the accumulated standing fund efficiently. To be readily accessible, the fund assets should be low-risk and have high liquidity. Correspondingly, most schemes opt to invest in time deposits, government bonds, or other low-risk debt securities (or are required to do so), even if this may come at the cost of lower returns.

– *Borrowing power*—compensation schemes can fill any funding gaps by borrowing, and most schemes have been granted some borrowing powers. However, in some cases, these may be restricted to particular forms of borrowing. For example, the French scheme can only borrow from participating firms. In Sweden, any borrowing comes from the treasury of the Swedish central government. Similarly, Spanish law provides for borrowing by the banking schemes from the state, but does not specifically address the possibility of commercial borrowing.

  Although borrowing is allowed by law, few countries currently have any external borrowing facilities in place. The UK and Finnish schemes are the only schemes that have arranged a binding agreement with a commercial bank to obtain credit if needed. In the Netherlands, the Central Bank gives the Dutch schemes interest-free advances on payments, which are ultimately repaid by firm contributions.

– *Borrowing between schemes*—some countries with more than one compensation scheme and/or where the investor compensation scheme is separated from the deposit guarantee scheme have arranged borrowing between schemes. Thus, if compensation costs exceed a particular scheme's resources, the scheme can borrow any excess funds available from the other schemes. Such borrowing arrangements are observed between the five banking schemes in Austria. In the UK, the three sub-schemes managed by the UK protection scheme for investments, deposits and insurance can borrow from each other, as can the two funds managed by the Irish scheme for different types of investment service providers. Similarly, in Denmark, the otherwise strictly separate funds managed by the Danish scheme for credit institutions, mortgage banks and investment firms can borrow from each other. In all cases, borrowing between schemes occurs only within the borders of the countries—ie, bilateral or multilateral borrowing agreements between schemes of different EU Member States are not observed.

– *State funding*—state funding of compensation schemes can take various forms: the state can make direct contributions to the scheme, offer low-interest or interest-free loans, or otherwise guarantee the long-term financial viability of the scheme. However, explicit involvement of the state is rare in the EU 15. Schemes do not benefit from regular state contributions, except for a small annual grant made by parliament to the Swedish scheme. As regards other types of state funding, several countries explicitly enable compensation schemes to borrow directly from the state, or borrow with state guarantee from commercial credit providers. This is the case in Austria (only for the banking schemes), Denmark, the Netherlands, Spain and Sweden. With the exception of the Netherlands, the borrowing is restricted to exceptional circumstances. None of the other countries explicitly provides for borrowing or guarantees from the state.

– *Insurance*—compensation schemes may also take out insurance to meet their funding requirements and to cap the exposure of participating firms. Both the Finnish and the Greek schemes have, in the past, taken out such insurance with a commercial insurance company, but, since the premia were high, the policies were dropped as being too costly. Currently, no compensation scheme has any insurance cover in place.

– *Other funding*—as an additional source of funding, the compensation schemes in Portugal and France receive fines imposed on participants in breach of financial services legislation.

Furthermore, investor compensation schemes are in general able to recover some of the compensation costs following the liquidation of firms that have defaulted. Data on recovery rates was not generally available, but one scheme suggested that, depending on the case, they can recover up to 80% of costs. The recovered funds can be used to cover the costs of future compensation cases.

Table 4.2 Capital requirements, borrowing, state funding, and insurance

	Standing fund and capital requirements	Borrowing power	Borrowing between schemes	External borrowing facility	Contributions from the state	Other state funding	Insurance	Other funding
Austria	No	Yes	If default in one banking scheme, contributions can be collected from firms in other schemes on a borrowing basis No borrowing between the AeW and banking schemes	Currently, no external facility in place	No	Banking schemes (not the AeW) can issue bonds which are guaranteed by the Ministry of Finance	No	No
Belgium	Yes, a standing fund in place, but no minimum capital requirement Standing fund was €639m in 2003 to cover both deposit guarantee and investor compensation	Yes	n/a	Currently, no external facility in place	No	No	No	No
Denmark	Yes, minimum capital requirement of DKr3.2 billion (€430m), divided between credit institutions, mortgage banks and investment firms. Covers both deposit guarantee and investor compensation	Yes	Yes, investment firm department of Guarantee Fund may borrow surplus funds from credit institutions department and vice versa	Currently, no external facility in place	No	Fund can borrow with state guarantee from other credit providers	No	No
Finland	Yes, capital requirement of €12m, of which €4.2m has to be held in cash, and the rest is covered by a guaranteed credit facility with a foreign bank	Yes	No	Yes, external credit facility in place with a non-Finnish bank over €4.2m	No	No	Fund previously insured, but dropped as too costly; replaced by guaranteed credit facility	No
France	Yes, a standing fund is in place, but no minimum capital requirement	Yes, but the FGD can only borrow from participating firms	No	No	No	No	No	Fines imposed by the AMF for breaches in conduct of investment professional s

	Standing fund and capital requirements	Borrowing power	Borrowing between schemes	External borrowing facility	Contributions from the state	Other state funding	Insurance	Other funding
Germany	Yes, minimum requirement for banking schemes is twice the sum of the most recently paid annual contributions No minimum requirement for the EdW. In 2003, the EdW fund was €6.3m	Yes	No	Currently, no external facility in place	No	No	No	No
Greece	Yes, size of standing fund is set annually in an HCMC decision (€187m in 2004)	Yes	No	Currently, no external facility in place	No	No	Fund previously insured, but dropped as too costly	No
Ireland	Yes, standing fund with a target size of €20m overall by 2007 Standing reserve in 2003 was €0.5m (Fund A) and €5.5m (Fund B)	Yes	No borrowing between the ICCL and deposit guarantee scheme, but borrowing between Funds A and B managed by the ICCL is permitted, having consulted the FSRA	Currently, no external facility in place	No	No	No	No
Italy	No	No	No	No	No	No	No	No
Luxembourg	No	Yes	No	Currently, no external facility in place	No	No	No	No
Netherlands	The ICS has a standing fund with no minimum capital requirement, but target fund of €11.3m. In 2003, the standing fund was €3.4m. No standing fund for banking scheme	Yes	No borrowing between the ICS and the CGS. However, in cases of large failure, contributions of securities firms and credit institutions can be pooled	Currently, no external facility in place	No	The Central Bank provides interest-free advance to both schemes	No	No
Portugal	Yes, standing fund is made up of pledged assets and funds raised from fines No explicit minimum capital requirement In 2003, €41.5m (pledges) and €2m (fines)	Yes	No	Currently, no external facility in place	No	No	No	Fines imposed by the CMVM for breaches against financial services legislation

	Standing fund and capital requirements	Borrowing power	Borrowing between schemes	External borrowing facility	Contributions from the state	Other state funding	Insurance	Other funding
Spain	Yes, a standing fund in place, but no minimum capital requirement In 2003, funds were €10.3m (FOGAIN) and €4.1 billion (FGDs). The FGDs' funds apply to both deposit guarantee and investor compensation	Yes, schemes may borrow from state FOGAIN may borrow commercially. No explicit provision to allow commercial borrowing by FGDs.	No	No	No	Schemes may borrow from the state in exceptional circumstances	No	No
Sweden	No	Yes, the Board may borrow from the National Debt Office	No	No	Yes, annual grant made to Deposit Guarantee Board by parliament: SEK5.9m (€650,000) in 2004	Scheme can borrow from the National Debt Office	No	No
UK	No	Yes	Yes, investment sub-scheme can borrow excess funds of deposit and insurance sub-schemes of the FSCS	Yes, external credit facility in place of £50m (€75m) for all sub-schemes of the FSCS	No	No	No	No

4.3 Adequacy of scheme funding

The level of investor protection afforded by the national compensation schemes depends on the schemes' financial position and their ability to raise finance to fund compensation payments to investors. To determine whether a given level of funding is sufficient, it is necessary to compare the potential needs or losses resulting from compensation claims with the resources available to a compensation scheme. Conceptually, funding adequacy could be defined as a level such that the probability of a shortage of funds is inferior to some acceptably low probability. The literature has examined the factors that affect the 'optimal' funding level and proposed a range of methodologies to determine funding adequacy, usually with application to deposit guarantee schemes.

Funding adequacy depends on the exposure of a compensation scheme to compensation demands—the greater the exposure, the greater the funding requirement. Assessing the exposure is complex as it requires the probability of default of participating institutions to be measured and the amount of losses and compensation payable given that default. This, in turn, depends on the amount of investor assets at risk, the probability of these assets being misappropriated or otherwise lost due to operational failures of firms, and the degree to which the losses are covered by the schemes. This is the subject of section 5.

This section examines funding adequacy by considering the following.

– *Funding adequacy in relation to past compensation costs*—have the compensation schemes been able to fund compensation payments arising from claims in the past?

– *Funding adequacy in relation to future losses*—are the schemes adequately funded to provide compensation against potential future losses, and how could adequacy be measured in this respect?

– *Stress testing*—what loss scenarios would result in financial difficulties for the scheme, and how could stress tests of scheme funding be conducted?

– *Adequacy of different types of funding arrangement*—should a compensation scheme be funded ex ante or ex post, and is there a need for alternative funding sources to ensure that funds are adequate?

4.3.1 Historical losses and funding adequacy

The easiest way to examine the adequacy of funding is to look at past compensation cases, and the financial resources that were available to deal with the compensation claims. This allows conclusions to be drawn about the past funding adequacy of the relevant schemes, and, provided that historical patterns of losses continue, may also give an indication of funding requirements or potential funding difficulties going forward.

Table 4.3 reports the annual total amounts of compensation provided by eight schemes since 1999. The compensation costs incurred by most schemes did not exceed or were significantly lower than several million euros, which may be considered reasonably low when compared with the size of the pool of firms making contributions to fund the costs. The compensation costs of the UK scheme were significantly higher than in the other countries due to the wider scope of the scheme and the higher level of compensation activity. The comparatively high costs, however, did not create any funding difficulties for the scheme—costs were spread across a large number of participating firms and collected by means of ex post levies on the industry; in addition, the scheme had recovered funds from past cases of firm insolvencies and could have used its borrowing facility if necessary.

Table 4.3 Total compensation costs, 1999–2003 (€ 000)

	1999	2000	2001	2002	2003
Belgium [1]	1,600	2,800	700	200	200
Denmark	1,116	444	–	–	–
Germany—EdW [2]	–	37	395	249	2,331
Ireland [3]	20	533	192	2,244	583
Italy	772	5,704	–	1,728	
Netherlands—ICS	–	–	–	157	127
Spain—FOGAIN [4]	–	–	–	5,179	15,419
UK[5]	n/a	87,780	46,569	94,535	98,768

Note: [1] Compensation paid is rounded to nearest 100. [2] Refers to compensation paid. Further payments on existing cases are expected. [3] Refers to compensation paid, and excludes, for example, a provision of €4.5m made in 2003 to cover expected liabilities for uncertified claims. [4] Compensation costs principally borne by banking schemes. Further compensation payments on existing cases are expected. [5] Compensation costs related to total investment business, based on Investors Compensation Scheme annual report 2001/02, and FSCS annual reports 2002/03 and 2003/04 (amounts restated in euro, using an exchange rate of £1 = €1.5).

None of the schemes reported any funding shortfalls or major difficulties in raising sufficient funds to cover the compensation costs. The Italian and UK schemes were able to collect sufficient ex post contributions without problems, and the schemes in the other countries were in general able to draw funds from previous annual contributions that had accumulated to a standing fund.

The sizes of the standing funds are reported in Table 4.4. The reported amounts in general refer to fund reserves in 2003 rather than the date at which the failures occurred and compensation costs needed to be funded.

In most cases, the schemes were able to use existing standing funds to finance the compensation payments. However, the funds that remain in the standing funds after payment (as reported in Table 4.4) appear low compared with the compensation costs incurred (as reported in Table 4.3). The exception is the Belgian scheme, which has the largest standing fund of £639m to cover the compensation costs that arise from both investor compensation and deposit guarantee claims.

Table 4.4 Size of the standing funds

	Standing fund (€ 000)
Belgium [1]	639,000
Denmark [2]	1,350
Germany—EdW [3]	6,300
Ireland [4]	6,000
Italy	ex post
Netherlands—ICS[3]	3,399
Spain—FOGAIN [3]	10,300
UK	ex post

Notes: [1] Combined fund for investor compensation and deposit guarantee claims in 2003. [2] Capital requirement for investment companies department.[3] Level of funding in 2003. [4] Level of funding in 2003 combined for Fund A (€0.5m) and Fund B (€5.5m); combined target fund size is €20m by 2007. Details are provided in Tables 4.1 and 4.2 and Appendices 1 to 15.

Although no scheme experienced funding shortfalls that resulted in payments being delayed or not being made, there have been cases of funding difficulties.

The Spanish scheme for non-bank investment firms (FOGAIN) was required to fund compensation costs of cases that had occurred prior to incorporation of the scheme. The scheme therefore had no existing reserves to cover the compensation costs arising from these inherited cases, including the case described in more detail in section 3.5. According to the scheme, it would also have been difficult to raise the funds required at the time by imposing a levy on the participating firms. Instead, the costs incurred in relation to the early compensation cases were principally borne by the funds held by the separate deposit and investment guarantee schemes for banks, with only a small fraction (0.17%) being borne by FOGAIN and its members.

The Irish scheme experienced a comparatively large compensation event in 2001, which significantly exceeded the scheme's standing fund at the time (see case description in section 3.5). The scheme noted that if it had been required to raise the full cost of the failure from its members within a single year, this would have been problematic. The processing of claims relating to this failure extended over several years, giving the scheme time to build up the required funds over a longer period. This involved raising additional firm contributions, which, considering that Ireland is a small economy, imposed a significant burden on the comparatively few firms that participate in the fund. Although sufficient funds were raised, the case experience has led the Irish scheme to initiate a review of its funding arrangements.

The experience of an investor compensation scheme in one of the new EU Member States also highlights the problems that may arise if newly created schemes with comparatively few resources have to deal with a compensation case and raise funds to cover the resulting costs. The Czech Republic scheme has experienced six cases of firm failure to date and noted that it has been unable to collect sufficient funds for the payment of compensation claims submitted to it in relation to those failures. The scheme was able to negotiate a state loan to make part of the payments, although there was no statutory obligation for the state to provide such help. Problems were also cited by the Hungarian scheme, which received direct financial contributions from the state to fund past compensation payments.

There have, therefore, been some funding difficulties, in particular where compensation costs had to be financed soon after a scheme was established, or where membership in a scheme is limited such that compensation costs cannot be spread across many firms and firm contributions impose a significant burden on individual firms.

Overall, however, none of the compensation schemes in the EU 15 has experienced any funding shortfalls or faced significant difficulties in raising sufficient funding to finance compensation payments. This is for a number of reasons: the schemes have not yet experienced any firm failures, so that funding has not been an issue to date; the failures that did occur were comparatively small; a standing fund was available; or schemes were able to raise any required funds by imposing levies on firms. Thus, funding can be considered adequate in the sense that compensation payouts were in general not hindered or delayed because of insufficient funds.

4.3.2 Measurement of funding adequacy for potential losses

Nevertheless, the current and past financial position of a scheme may not be a robust indicator of funding adequacy going forward: failures to date have tended to be infrequent and comparatively small-scale, involving small or medium-sized firms only. Potential exposures may be much higher.

To evaluate the potential exposures of different investor compensation schemes, Oxera has sought to obtain data on the protected client monies and securities held by firms participating in the schemes, the number of eligible investors, and a breakdown of 'typical' balances held for eligible investors by different firms. This would have provided useful information, for example about the capacity of schemes to cover the costs that could arise if a ‘typical’ firm in a given market failed, or the costs arising from an ‘extreme’ failure. However, most schemes either do not hold this data or were not willing to disclose the information for reasons of confidentiality. Nevertheless, three sources of data were available to provide an indication of potential exposures.

First, the Danish Deposit and Investor Guarantee Fund provided Oxera with statistics on the aggregated total money and securities balances held for eligible investors by the 28 non-bank investment firms that participate in the scheme. Table 4.5 shows that the aggregate balances of these firms amount to €36m, with the average balance being €1.3m. The largest balance observed for a single firm is €9.5m. The average balance of investment firms closely matches the capital that the scheme is required to hold for these firms (see Table 4.4). Thus, if the ‘average’ firm failed and all protected investor assets were lost, the total compensation costs could, in principle, be covered using existing capital. A larger failure or failures of multiple firms would have to be financed by levying additional contributions or by borrowing funds. The average and aggregate balances are relatively small, given that the data is restricted to Danish non-bank investment firms participating in the scheme. No data was available for credit institutions, which carry out the majority of retail investment business in Denmark.

Table 4.5 Total value of investment instruments and monies in Denmark and Portugal, 2003

	Number of firms	Total value of assets (€m)	Average value per firm (€m)
Denmark[1]	28	36	1.3
Portugal[2]	76	63,026	829.2

Source: [1] Provided to Oxera by Danish Guarantee Fund for Depositors and Investors. [2] SII (2003), *Annual Report*.

Second, the Portuguese compensation scheme (SII) disclosed the aggregate protected assets held by both non-bank investment firms and credit institutions that participate in the scheme. As reported in Table 4.5, on aggregate, firms held more than €63 billion on behalf of eligible clients in 2003, with an average balance of €829m per firm. Information on the distribution of these balances across firms was not available, but is likely to be highly skewed, with a few firms holding large balances and many other firms holding small amounts. The protected amounts indicate that potential exposures, in terms of investor assets held, could be considerably higher than those indicated by the past compensation costs reported in Table 4.4.

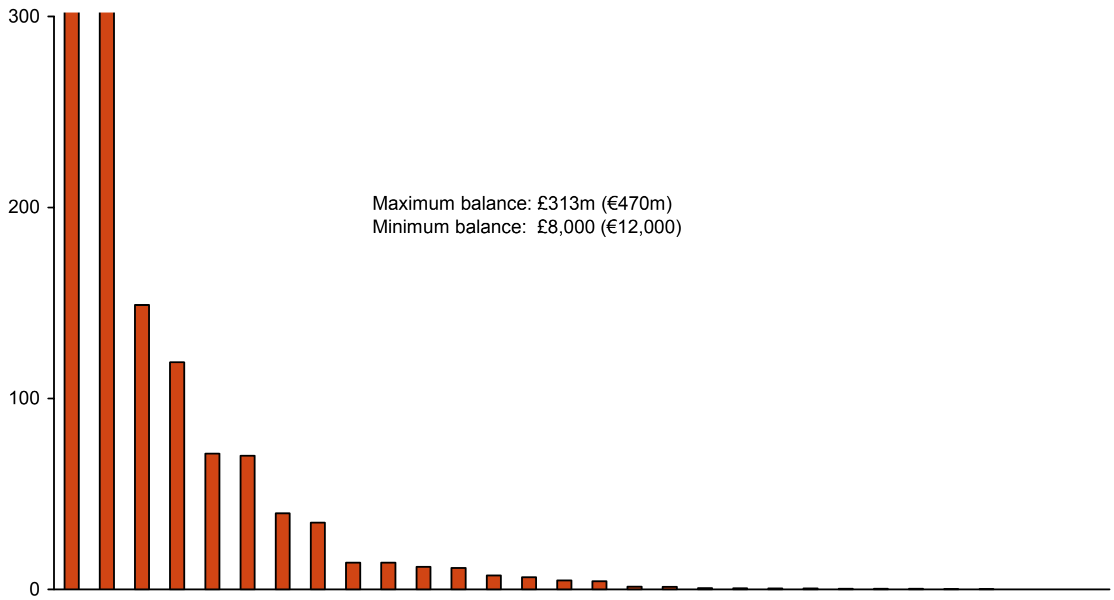
Third, as part of a research project for the UK FSA, Oxera conducted a survey among UK investment firms in relation to client money.[37] The 51 survey respondents provided data on the amount of monies they held for institutional and retail clients in 2001; no data was collected on the value of investment instruments held. The total client money balance held by the 51 firms amounted to £7.4 billion (€11 billion). This total refers to all client money balances held, including institutional as well as retail investor balances.

Retail balances could be identified for 31 firms in the sample. On aggregate, the firms held approximately £1.2 billion (€1.8 billion) for retail investors. The average holding was £38m (€57m). However, balances were concentrated among a few firms, as shown in Figure 4.1.

[37] Oxera research for the UK FSA 2001, unpublished.

The balance for the largest firm was £313m (€470m), or 26% of the total retail balances. In contrast, the smallest firm held only £8,000 (€12,000) at the time the survey was conducted.

Figure 4.1 UK retail client money balances held by 31 investment firms (£m)



Source: Oxera research for the UK FSA 2001, unpublished.

The survey participants also provided data on the balances held for individual retail investors. The number of retail investors per firm ranged from fewer than 100 to more than 100,000. For most firms, the majority of money balances held for these investors were below the compensation limit that applies under the UK scheme (ie, £48,000), although some of the larger firms dealt with individuals with a high net worth for whom they held funds in excess of this limit. Thus, if any of the firms with the larger client money balances failed, the potential losses could be higher than any of the losses experienced to date by the compensation schemes.

Overall, standing funds of the EU compensation schemes appear small when compared with the amounts of client assets held by many firms. Similarly, for schemes that raise contributions ex post, the levies that would have to be imposed on participating firms to cover such high-loss events could have a significant impact on the firms, or, indeed, may be impossible to raise.

This is not to say that compensation schemes should be able to cover all or some of these potential exposures, or that they should be considered inadequately funded because they may not be able to cover these exposures. High-impact failures are likely to be of low probability, as confirmed by the historical case experience, and occurrence of such failures depends on a range of factors, including prudential and conduct-of-business regulation.

However, the above discussion does suggest that defining funding adequacy in relation to historical losses is problematic since potential exposures are higher than the compensation costs borne by schemes to date. Defining and measuring funding adequacy is complex, and efforts to carry out such an assessment are worth further exploration.

During the research, it emerged that only a few compensation schemes had undertaken a rigorous assessment of the adequacy of their funding arrangements. For example, schemes that operate an ex ante funding system indicated that they had either set ex ante premia on an ad hoc basis or had used simple rules of thumb to determine a target size for their standing funds. Similarly, most ex post schemes had not analysed their potential exposures to firm defaults or the implications of these exposures for required firm contributions (eg, in relation to the financial resources available to participating firms to meet such contributions).

Some schemes did not appear to have information about the firms that participated in the scheme (eg, in terms of asset balances held for investors or the number of investors), and therefore did not know the size of the total pool of assets they were protecting or the losses that could arise from the failure of a 'typical' firm, for example. Given the limited information available to many schemes, it was also argued that funding adequacy is a matter for the relevant regulatory authority.

However, a number of compensation schemes suggested that they felt confident that, under the current funding arrangements, they would be able to finance a few defaults of smaller firms (similar to those observed in the past) or instead up to approximately two medium-sized defaults. Some shared the opinion that it would be impossible to provide sufficient funds to compensate investors if one of the larger participating firms defaulted.

A more rigorous assessment of the funding adequacy of the investor compensation schemes could be based on the methodologies put forward in the literature, usually in relation to deposit guarantee schemes.[38] These methodologies could be applied to investor compensation schemes, subject to appropriate adjustments. In particular, unlike in the case of deposits, client assets are in general segregated from the firm's own assets. Thus, it is important to consider the probability of assets being lost in the event of default due to misappropriation or other forms of non-segregation.

At the most basic level, a scheme could obtain data on the total balance of assets held for eligible investors by all participating firms. Abstracting from any compensation limits that apply to these balances, adequacy can then be defined and measured as a simple ratio of protected assets. In the case of deposit guarantee schemes, Garcia (2000) reports that some countries set the target level of their funds in this way, with the target value ranging between 0.4% and 5% of total deposits, or between 0.5% and 20% of protected deposits.[39] The percentages may be further differentiated by risk classification of different groups of firms. A similar approach could be used by the investor compensation schemes, and a number of schemes already set contributions or establish a target fund size in this way.

The factors could be set by drawing from the tools developed to regulate and control the capital adequacy of banks. In the same way as a bank views its assets portfolio as a collection of individual credit risks, a compensation scheme could regard its exposure to the set of its member firms as a collection of risks. Under the new Basel Accord, the standardised approach for determining the capital charge for credit risk requires banks to hold a minimum of 8% of capital to risk-weighted assets. As summarised in Table 4.6, the risk weights are determined by the rating of the borrower, with reference to the rating provided by an external credit-assessment institution.

[38] For an overview of the methodologies, see, for example, Roy, J. (2000), 'A Preliminary Analysis of Deposit Insurance Funding Issues', a paper prepared for the International Association of Deposit Insurers.
[39] Garcia, G.G.H. (2000), 'Deposit Insurance: Actual and Good Practices', *IMF Occasional Paper*, 197, International Monetary Fund.

Table 4.6 Risk weightings under the standardised approach (%)

	AAA to AA–	A+ to A–	BBB+ to BB–	Below BB–	Unrated
New Accord	20	50	100	150	100

Source: Basel Committee on Banking Supervision (2003), 'The New Basel Capital Accord', consultative document, April.

If this approach were applied to a compensation scheme in order to determine a funding adequacy ratio, every firm participating in a scheme could (in principle at least) be assigned something similar to a credit rating, based on its financial situation. For simplicity, if it is assumed that all investment firms that participate in the scheme are in a financial situation that would correspond to a rating between A+ and A–, under the unrealistic assumption that all client assets would be lost in the event of default, the compensation scheme would therefore need to have access to funds equal to a minimum of 4% of protected assets (ie, 50% × 8%). If it were more likely that between 5% and 20% of protected assets were lost, funding could be considered adequate if the scheme had available, or could easily raise, 0.02–0.08% of protected assets.

Alternatively, rather than ad hoc specification, the percentage factors could be estimated using market information. In particular, default probabilities could be inferred from the credit rating or credit risk premium on the bonds of participating firms.[40] For example, the credit rating agencies provide default probabilities of companies with different rating quality.[41] These probabilities could be applied to the value of protected assets, adjusted by a probability of assets being lost in the event of default.

At a more sophisticated level, the measurement of funding adequacy could resemble the credit risk modelling that has been developed in the banking sector to determine banks' economic capital. A review of the credit risk models is available in Saunders (1999),[42] and a short discussion of their relevance in the context of deposit guarantee schemes is provided in Roy (2000).[43] These more sophisticated approaches would require an estimation of the compensation schemes' risk exposures to losses arising from individual firms participating in the schemes, taking account of individual firms' default probabilities, the amount of protected client assets at risk, the probability of client assets being lost in the event of default, and any limits imposed by the schemes on compensation payments. A compensation scheme could then aggregate the individual loss exposures into a distribution of expected total losses, taking into account any correlation between individual loss exposures.[44] Such a loss distribution is illustrated in Figure 4.2.

[40] See Cardinal, L. and Lee, E. (1996), 'Estimating a CRIC General Reserve based on Market Perception', Canada Deposit Insurance Corporation, June.

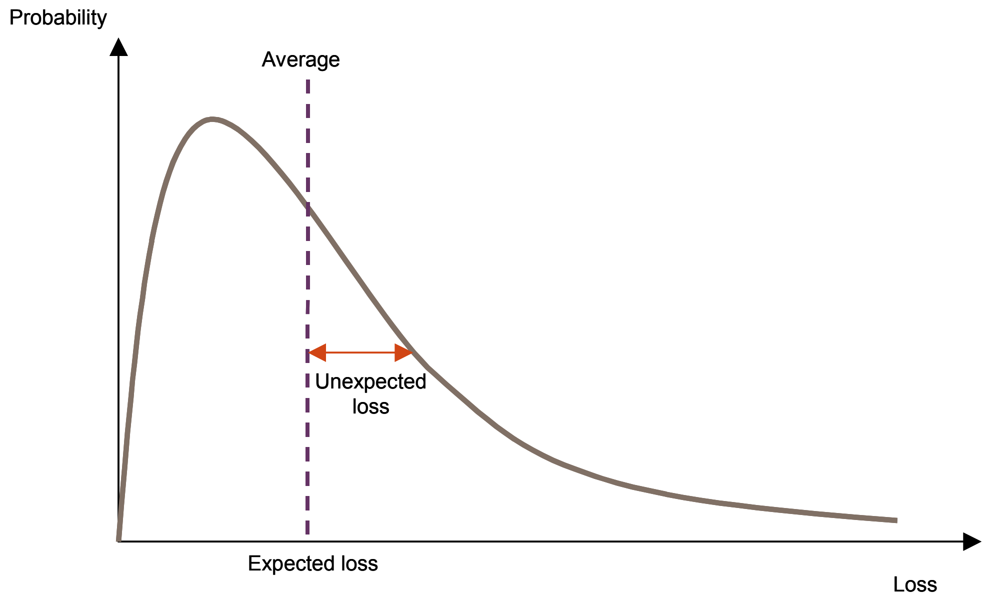
[41] See, for example, Moody's Investors Service (1997), 'Moody's Rating Migration and Credit Quality Correlation', Global Credit Research, June.

[42] Saunders, A. (1999), *Credit Risk Measurement: New Approaches to Value at Risk and Other Paradigms*, John Wiley & Sons.

[43] Roy (2000), op. cit.

[44] For a discussion in the context of deposit guarantee schemes, see Federal Deposit Insurance Corporation (2000), 'Options Paper', August.

Figure 4.2 Stylised illustration of loss distribution



Source: Adapted from Federal Deposit Insurance Corporation (2000), 'Options Paper', August.

The distribution is likely to be heavily skewed: it has a long right tail, meaning that, most often, losses are relatively small, but there are cases in which large losses may arise. The potential for large losses will be a result, in part, of the participation of larger firms in the scheme, or because there is a possibility of defaults of multiple firms. Such a loss distribution would allow a scheme to compare directly the potential for loss with the funds that the scheme has readily available or could easily raise. For example, are funds sufficient to cover average expected losses, and how should compensation costs be funded if losses turn out larger than expected?

The scheme could also reverse the analysis to determine what level of funding is required to reach a chosen standard for funding adequacy. In this context, funding adequacy does not mean that the scheme should be able to fund all losses that may arise, irrespective of how low their probability. Rather, conceptually, funding adequacy should be defined as the level of funding such that the probability of a shortage of funds is inferior to an acceptable low probability. That is, the adequate funding level is the one at which a scheme is able to finance payments of all its obligations, with a minimum desired confidence level. For example, what financial resources are needed to ensure that a scheme can be 95% confident that it meets its obligations?

The more sophisticated measurement techniques to derive a loss distribution are likely to be burdensome and may be difficult to apply if limited data is available. Costs of measurement may indeed outweigh the benefits to the compensation schemes of having a more precise understanding of their potential loss exposure and funding adequacy. Nevertheless, for those compensation schemes that to date have experienced limited or no compensation events, and have not yet evaluated their funding adequacy in light of potential demands for compensation, it would be useful to undertake analysis to measure their funding needs. At the minimum level, this should involve gathering and examining data on the amount of assets held by participating firms, the number of eligible clients, and the balances held by firms on behalf of those clients. The level of funding deemed adequate should then be compared against the existing standing fund or the fund target, the capacity of the scheme to raise contributions from participating firms, and other available funding sources.

4.3.3 Stress testing the funding of compensation schemes

As part of undertaking a forward-looking assessment of investors' demands for compensation and the resulting potential loss exposures, it could be useful to examine funding adequacy by considering hypothetical scenarios to 'stress test' compensation schemes and determine their capacity to withstand possible future surges in claims. The aim is to evaluate the scale or range of claims that could be settled by the national schemes on the basis of current funding arrangements, and the level of claims that would result in difficulties for the scheme.

As noted above, a number of compensation schemes suggested that while they were in a position to finance a few defaults of smaller firms (similar to those observed in the past) or up to about two medium-sized failures, losses arising from larger or more widespread failures would be difficult or impossible to finance. However, few schemes appear to have adopted explicit stress tests or analysed how they would raise the funds required for various loss scenarios, including extreme ones.

Stress tests are adopted in other areas, in particular in the banking sector where they are a common supplement to credit risk models used by banks for day-to-day risk management. Stress testing is widely used within the financial services sector, and could become a useful tool for compensation schemes, in particular to identify the need for contingency plans that may need to be implemented in the event of very large failures.

There is now also a considerable body of literature on how stress tests are, and should be, conducted.[45] Stress testing can be understood as one of the following:[46]

– simulating shocks considered more likely to occur than historical observation suggests;
– simulating shocks that have never occurred;
– simulating shocks that reflect the possibility that historical patterns could break down in some circumstances;
– simulating shocks that reflect some kind of structural break that could occur in the future.

The important part of the analysis is the specification of the adverse shock scenarios, the probability of the scenarios occurring, and the impact on the compensation scheme in terms of losses to be compensated under the scenarios. Two main scenarios could be considered:

– *scenario 1: high volume but low intensity*—what is the capacity of the scheme to withstand surges in claims due to the failure of many small investment firms?

– *scenario 2: low volume but high intensity*—what is the capacity of the national schemes to absorb surges in claims due to the failure of a few large firms with many retail clients?[47]

While such scenario analysis may be integrated in a formal and potentially complex risk model, it can also be applied in a simple way to produce useful results. For example, for scenario 1, compensation schemes that have experienced cases could start with the typical number of firm failures and total payouts in any year, as measured by historical data. They could then increase the typical number of failures by several multiples in order to reflect the

[45] See, for example, Berkowitz, J. (1999), 'A Coherent Framework for Stress-Testing', working paper, Federal Reserve Board, Washington; Breuer, T. and Krenn, G. (1999), 'Stress Testing', *Guidelines for Market Risk Vol. 5*, Austrian National Bank; Laubsch, A.J. (1999), 'Risk Management: A Practical Guide', RiskMetrics Group, New York; and Kim, J. and Finger, C.C. (2000), 'A Stress Test to Incorporate Correlation Breakdown', RiskMetrics Group, New York.

[46] See Berkowitz (1999), op. cit.

[47] The third and most severe scenario that could be considered in the analysis is one where many large firms fail. Such systemic failures are covered by prudential regulation, and therefore not the immediate concern of investor compensation schemes.

worst-case scenario and calculate the hypothetical volume of claims what would have to be met by the schemes. Similarly, compensation schemes that have not yet had any case experience could draw from data of other countries to establish the relevant scenario.

In general, the compensation cases observed in the Member States since the implementation of the ICD have involved smaller firms, with the largest payment observed for a single case of failure being just over €30m (see Table 3.1). However, high-intensity events cannot be ruled out, and scenario 2 could capture such events. This would again require data on the distribution of investor asset balances held by different firms, the number of investors eligible for compensation, and the balances of these investors, so as to identify the losses that could emerge in the event of default of firms in the upper tail of the loss distribution.

Having determined the losses that could emerge under the scenarios, the compensation schemes funded on an ex ante basis could compare these losses with the funds available in the standing reserve. As noted above, there is considerable variation in the size of standing funds across countries, with the large funds usually being observed only in schemes which pool the funds of both investor compensation and deposit guarantee schemes (see Tables 4.2 and 4.4). It appears that the smaller funds, amounting to between €1m and €10m, may be sufficient to compensate losses of the magnitude observed in the past, but would be unlikely to be able to cover a doubling or tripling of these losses, or, indeed, the loss that would emerge if a single but larger firm failed.

Ex ante schemes do have the power to levy additional contributions if required, as the ex post schemes levy contributions solely at the time when funds are required. Thus, in principle, if losses doubled or tripled or if a larger firm failed, the schemes could correspondingly increase firm levies to raise the required funds. However, the funding needs of the compensation schemes must be balanced against the participating firms' capacity to pay. This capacity is not infinite, since contributions above a certain level may be politically difficult to implement and, if very high, could endanger the stability of participating firms and trigger further bankruptcies.

Participating firms' capacity to pay may be estimated using a number of indicators—eg, the ratio of liquid assets to total assets, different profitability ratios, or the ratio of operating cash flow to total debt.[48] The higher these ratios, the greater the possibility of extracting further levies without endangering firms. Data on individual firm contributions and how they compare with the financial position of the firms was not available for this research.

In many countries, firm contributions are capped to limit the liability of firms to cover losses resulting from other firms' failures. In the UK, the contribution limit is specified as an industry aggregate of £400m (or about €600m). In comparison, the compensation costs in the financial year 2003/04 amounted to £65.8m (€99m) (see Table 4.3). This suggests that, in principle, the magnitude of losses could increase by a factor of six before the limit is reached (although firms' capacity to pay may be reached before this limit). In the other countries, the limit tends to be specified as an individual firm limit, expressed as a percentage of firm income or capital. As noted above, data on contributing firms was not available for this research; however, if information were available, it would be possible to stress test the schemes' funding against these limits on firm contributions.

Such stress tests would allow the compensation schemes to determine the loss scenarios they could fund from firm contributions, and those that would stretch firms' capacity to pay and require access to other sources of finance. In other words, stress tests could be applied

[48] These measures are discussed in Roy (2000), op. cit.

to evaluate the need for alternative funding sources and allow schemes to specify a contingency plan, should a loss scenario arise that stretched funding requirements beyond contribution limits or firms' capacity to pay.

4.3.4 Adequacy of different types of funding arrangements

In addition to establishing the required amount of funding for a compensation scheme, schemes must resolve the issue of how to raise the funds they need to ensure funding adequacy. Tables 4.1 and 4.2 above summarised the principal sources of funding available to the schemes in the EU Member States.

Compensation claims can be met from a fund that has been accumulated from firm contributions ex ante or by imposing an ex post levy on participating firms. As discussed above, ex ante systems have a number of advantages: in particular, they ensure that a firm that fails has contributed to the fund that will compensate its investors; they reduce cross-subsidisation of weak firms by their stronger peers; funding requirements are spread out over time; and compensation costs can be paid more quickly. For these reasons, ex ante funding has been proposed as best practice for deposit guarantee schemes.[49]

In contrast, more than half of the investor compensation schemes in the EU Member States are funded on an ex post basis or have a strong ex post element in their funding structure. However, this does not imply that this funding mechanism is inadequate. Ex ante systems have a number of drawbacks relative to ex post systems.[50] First, a fund needs to be managed, which involves costs that have to be weighed against the benefits. A well-managed fund may facilitate the procedure of payment to investors in cases where a firm has failed. If there are many failures, this advantage may outweigh the management costs. However, if firm failures are rare and require low compensation payments, as has historically been the case in the EU Member States, the management costs are likely to be quite high in relation to the efficiency gain in cases of firm failures.

Second, the fund assets should be low-risk and have high liquidity, meaning that they are likely to earn a low return relative to the return participating firms could earn on alternative investments. If the likelihood of compensation cases occurring is extremely low, participating firms could argue that the fund size is too high and/or management costs are too high relative to expected layouts. Again, based on the case experience of the EU compensation schemes, this argument supports the use of an ex post system. Even the compensation scheme with the largest volume of claims and payouts in recent years (ie, the UK) relies on ex post funding and, to date, has not experienced funding shortfalls or difficulties in raising sufficient funds to cover its costs.

Third, the adequacy of a funding structure depends on the scheme's objective. This has been argued by Roy (2000) in the context of deposit guarantee schemes: if the objective is to protect depositors against individual bank failure rather than to protect the financial system against systemic risk, ex post assessment may be sufficient.[51] Similarly, if the economy and the banking sector in general are strong, such that the probability of systemic failure is low, ex ante funding may not be required. Systemic risks are in general associated with deposit-taking activities of banks, but are less evident or non-existent in the provision of most investment services. This would suggest that, while adequate for deposit guarantee systems, ex ante funding may be not as necessary for investor compensation schemes.

[49] Garcia (2000), op. cit.

[50] For a discussion of the relative advantages of ex ante and ex post systems in the context of deposit guarantee, see Roy (2000), op. cit. and Garcia, G.G.H. and Prast, H. (2004), 'Depositor and Investor Protection in the Netherlands: Past, Present and Future', *DNB Occasional Studies*, **2** Nr 2, Dutch National Bank.

[51] Roy (2000), op. cit.

Adequacy of funding structures does not therefore depend on the choice between ex ante or ex post contributions. Instead, what matters is flexibility of funding and, in particular, the availability of multiple funding sources. Unexpected large failures could impose more costs than a compensation scheme had anticipated and participating firms are able to cover (eg, because required contributions would exceed either firms' capacity to pay or statutory annual contribution limits). The scheme therefore needs back-up sources of funding to cover this contingency. One main source is borrowing, which can either be pre-arranged or implemented when a failure occurs. Most (but not all) EU compensation schemes have borrowing powers, but few have explicit credit facilities in place.

In addition to external borrowing, compensation schemes could consider arrangements between themselves, either bilateral or multilateral. Such agreements would allow a scheme to borrow from other schemes when in need. Borrowing between schemes is already observed between investor compensation and/or deposit guarantee schemes in a few countries. Another possibility would be cross-border borrowing between schemes, although this funding source is not observed in practice.

Borrowing can be guaranteed by the state to reduce borrowing costs. The state can also lend or grant funds to the scheme, via either the central bank or the government. Explicit guarantees may be required in particular in the event of very large failures that cannot be funded using other available resources. Even if never activated, the existence of guarantees can enhance the financial viability and credibility of schemes. Such guarantees are therefore considered best practice in the context of deposit guarantee schemes.[52]

Very few EU Member States have explicit and irrevocable state guarantees provided under national law that establishes the investor compensation scheme. Instead, many compensation schemes perceive there to be an implicit involvement of the government—ie, the government would consider some institutions to be 'too big to fail' and intervene to prevent large failures. Thus, although available scheme resources would in principle not be sufficient to cover the failures of larger firms participating in the schemes, this is not perceived to be a concern in practice, as the relevant authorities would step in and bail out the failing firms.

Overall, funding adequacy is ensured if schemes have available flexible and multiple means of securing funds to cover compensation costs. These include the ability to raise contributions when required from firms (either ex ante or ex post); powers and arrangements in place to borrow commercially between schemes or from the state; and government guarantees. Most EU compensation schemes have recourse to different funding sources, thereby meeting the criteria for adequate funding. However, only a few schemes have access to all of the main funding sources, and few have a contingency plan in place (including an explicit government guarantee) to fund the costs of a large loss event.

4.4 Summary

There are considerable cross-country differences in the way in which the EU Member States have organised the funding of their investor compensation schemes. Past cases of firm failure have been infrequent and have had a comparatively low impact in terms of compensation costs needing to be financed. Therefore, although funding difficulties have been reported in some instances, to date no EU compensation scheme has experienced a significant shortfall of funds that would have prevented it from making payments to investors.

[52] Garcia (2000), op. cit.

However, this does not necessarily imply that scheme funding can be considered adequate going forward. Few EU compensation schemes have undertaken a rigorous assessment of the adequacy of their funding arrangements in light of potential loss exposures. Defining and measuring funding adequacy is complex, but the potential for carrying out such assessments (eg, using the methodologies proposed in the literature) could be explored further.

Funding can be raised from various sources: the principal one being contributions from participating firms. These can be levied ex ante or ex post, and there is a debate as to which type of contribution system is more adequate. However, a more important consideration is the flexibility of funding and, in particular, the availability of multiple sources of funding. Even if firm contributions are sufficient to cover average expected losses, there is always a possibility that losses turn out larger than expected, potentially so large that required contributions would go beyond firms' capacity to pay (or exceed statutory contribution limits).

Shortfalls in firm contributions may be financed through borrowing. Most EU compensation schemes have been given borrowing powers by statute, although few have credit facilities in place. However, there may be problems in the supply of credit, in particular since a commercial lender may not be willing or able to provide credit for large cases of firm failure unless the borrowed funds are guaranteed. Such guarantees may be granted by the state.

Few compensation schemes have in place explicit government guarantees or otherwise involve the state in the funding of compensation schemes. Even if never activated, the existence of government guarantees (or similar arrangements) is likely to enhance the financial viability of compensation schemes. Moreover, guarantees may be the only credible means of funding the costs of a large loss event.

5 Analysis of the risks and coverage of loss events for retail investors

This section evaluates the coverage of the principal types of loss event for retail investors. It first provides a description of the main risks of loss to which retail investors are exposed when engaging an investment firm to carry out investment services on their behalf. It then examines the extent to which the investor compensation schemes provide protection against these risks, also taking account of the alternative regulatory and institutional mechanisms available to protect investors.

5.1 The types of risk for retail investors

There are several classes of risk to which an investor may be exposed when passing funds to a firm for investment purposes. First, there is a risk of loss due to market devaluation of the assets held by the firm on behalf of the investor. Such *investment risk* is inherent in all financial decisions. While significant, it is not the subject of regulation;[53] correspondingly, the ICD and national laws do not provide compensation for losses incurred as a result of investments losing market value. As such, this report does not consider investment risk further and instead focuses on two other classes of risk: financial risks and operational risks.

5.1.1 Financial risks

Financial risks refer to risks to which investors are exposed when a firm goes into default. The default of an investment firm exposes a client to losses in two ways: first, if client monies or securities are not clearly segregated from firm assets, all creditors of the firm may have a claim against client assets in the case of an insolvency. In that case, the client simply becomes a creditor of the firm in receivership or liquidation. Under current regulations, in many (but not all) countries, investment firms generally have to segregate client assets from firm assets so that client assets are protected and do not contribute to settling creditors' claims in the event of a firm default. However, even under these regulations, if firms fail to segregate client assets properly, whether by mistake or intentionally, the firms remain exposed to losses from financial risks. Moreover, even if regulations stipulate that client balances need to be segregated as soon as possible or within a specific time period (eg, one day), overnight failure of the firm could place unsegregated client assets temporarily at risk.

Where client assets are clearly segregated, in the event of a firm default, the potential loss to clients is limited to disruption and inconvenience. Disruption arises from the freezing of client assets during insolvency proceedings, leading to a loss of liquidity and associated opportunity costs in terms of forgone returns; once assets are unfrozen, investors incur costs in the form of inconvenience from transferring their investment business to a new firm.

Investors may also be exposed to financial risks of the default of a third party. The third party may be a bank where client money balances are held, a custodian that is safekeeping client securities, or any other party to which client funds have been transferred for transaction purposes (eg, intermediate brokers, clearing houses, settlement agents, and exchanges).

[53] The performance of assets may reflect the quality of the firm's portfolio selection or investment recommendation. In this case, investment risk may become a regulatory concern if minimum investment returns have been guaranteed or negligence of the firm can be proven.

5.1.2 Operational risks

Operational risks encompass a broad range of risk: essentially, they relate to problems in the processing or servicing of client assets by the investment firm (or a third party). For example, there can be mistakes in the execution of client transactions, delays in their settling, errors in segregating client assets from firm assets, reconciliation or record-keeping errors, or fraud or theft of client assets. These failures can be either unintentional and due to negligence, or the result of intentional and potentially criminal activities of the firm or its employees. Operational failures may also be broadly defined to include bad or negligent financial advice, or any other form of false, misleading or deceptive conduct by the firm.

The potential loss to investors from operational failures depends on the type of failure, whether it is detected, and whether it is associated with the financial failure of the firm (or a third party). For example, in the case of a segregation error, a firm may incorrectly identify client assets as belonging to the firm and, as a result, segregate insufficient assets for clients. The error may be easily discovered and corrected by the firm at no cost to, and without being noticed by, its clients. However, this would not be the case if the firm defaults before correcting the error. In such an event, client assets incorrectly held in the firm's account may be unprotected and available to the general creditors of the firm. Similarly, errors in settling and recording client transactions may, by themselves, not lead to losses of client assets, but they may exacerbate the impact of a financial insolvency.

Of particular concern is fraud: if fraud is revealed and the firm remains solvent, investors are likely to be fully compensated for any losses of assets. However, fraudulent behaviour may be difficult to detect; in which case, misappropriation may continue for a period of time. Where a firm default occurs, the concern does not relate to detection. Rather, the risk to the investors is that full compensation for fraud and theft cannot be paid. Risks may be greater for client money than securities balances. Given the fungibility of cash, especially where firms pool funds of different clients in the same account, it can be difficult to establish ownership rights and beneficial interests of cash balances. Such balances are therefore likely to be more susceptible to the possibility of firms misusing the funds than securities.

Table 5.1 below provides a summary of the principal types of risks to which retail investors may be exposed, distinguishing between financial and operational risks.

Table 5.1 Classification of risks

Main types of risk	Description
Financial risks	
Firm default	The risk that, in the event of a default by the firm, client assets are treated as part of the assets of the defaulting entity rather than belonging to clients Firm default may also impose costs to clients in terms of disruption and inconvenience
Third-party default	The risk of client asset losses in the event of a default by a third party The third party may be a custodian bank that holds client accounts, or an intermediate broker, clearing house or other party to which the firm transfers client funds for transaction purposes
Operational risks	
Theft or embezzlement	The risk of client assets being stolen or otherwise misappropriated by employees or managers of the firm or third party
Fraud	The risk of an unauthorised transfer or fraudulent use of client assets (eg, to cover own-account trading losses, or other dishonest behaviour conducted by employees or managers of the firm or third party)
Segregation error	The risk that client assets are incorrectly identified as firm assets rather than client assets, or vice versa
Settlement error	The risk that there is a mismatch between delivery of securities and payment of client funds
Reconciliation error	The risk that the firm is unable to reconcile client balances in its own internal records with those in the reports of third parties
Accounting or record-keeping error	The risk that, due to recording problems, the firm is unable to allocate client assets to individual clients
Failure to execute (or other breaches of) client instructions	The risk of losses arising from a firm's failure to execute a client's transaction on time or in the correct manner, or to otherwise breach instructions
Other poor investment management	The risk of churning, mispricing, corporate action failures, stocklending failures, etc
Bad investment advice	The risk of receiving negligent financial advice (eg, advice without a reasonable basis)

Risks differ in terms of probability and impact: *probability* refers to the frequency of a particular risk occurring; *impact* depends on the size of losses that could be suffered by clients. It can be assessed in absolute terms (ie, the total amount of assets at risk) or in relation to each client's financial circumstances (eg, a small loss may have more severe consequences for a retail investor with limited financial resources than for an individual with a high net worth).

The following provides an overview of the empirical relevance of the principal types of risk exposures for investors and their importance in terms of probability and frequency. In addition to summarising the risk events that have been compensated by EU investor compensation schemes, evidence was obtained from existing research studies that have sought to assess risks empirically.

5.1.3 Evidence based on past compensation cases

One way to measure potential risk exposures to retail investors is to consider past cases of firm failure handled by the compensation schemes. As noted above, six countries (Austria, Finland, France, Luxembourg, Portugal and Sweden) have not experienced any failures that would have triggered the operation of the compensation scheme. In all other countries (except for the special case of the UK), failures have occurred but only infrequently. For reference, Table 5.2 repeats the information provided in Table 3.1 on the number of firm failures that have been dealt with by those countries, ranging from one failure in Denmark to 15 failures of non-bank investment firms in Germany.

The reported number of failures does not reflect the total number of firm defaults in these countries. Moreover, the absence of compensation cases in the six countries omitted from the table does not imply that there have been no defaults in these countries. Nevertheless, the numbers do provide some indication that the probability of default risk is low. The probability of default combined with an operational failure that results in a firm not being able to return client assets tends to be even lower, given that the total number of firm defaults is likely to exceed the number of failures that trigger compensation by the schemes.

Although historically infrequent, where such failures occur, the impact can be significant for the individual investors concerned. As discussed in section 5.3 (see Table 5.7), the majority of claims launched by investors against the schemes were lower than the maximum compensation limit of €20,000; however, some investors incurred losses above this amount and hence did not receive full compensation from the schemes. Depending on the financial circumstances of the individuals, such losses can be detrimental (and would have been even more significant in the absence of the statutory compensation). Moreover, although most failures generally related to smaller firms with comparatively few clients, the number of investors affected in some failures is non-negligible. As discussed in section 3.1, in Spain, for example, a single case led to the filing of well over 6,000 claims from investors.

The most frequent sources of operational failure that led to client asset shortfalls and required compensation by the schemes are reported in Table 5.2.

Table 5.2 Number and source of failures experienced by compensation schemes

	Number of failures since 1999	Main sources of failure
Belgium	1 since establishment, but Fund dealt with 5 failures that occurred previously	Fraudulent misappropriation of client funds
Denmark	1	Misregistration of securities
Germany—EdW	15	Fraud Embezzlement of client assets
Greece	5	Mismanagement Embezzlement of client assets
Ireland	3	Missegregation Embezzlement of client assets
Italy	10	Mismanagement of client assets, including segregation errors and fraud
Netherlands—ICS	2	Malpractice (broadly defined)
Spain—FOGAIN	0 since establishment, but scheme dealt with 5 failures that occurred previously	Embezzlement of client assets Third-party default
UK	1999: 661 2000: 360 2001: 284 2002: 139 2003: 164	Negligent advice—in particular, mis-selling of personal pension and endowment insurance policies

The sources of failures included fraud and embezzlement of client assets. Four of the cases summarised in section 3.5 are examples of such failures. In other cases, the operational problems were unintentional and due to negligence on the part of the firm’s employees, or inadequate systems and controls. This led to insufficient client assets being segregated or the assets being poorly recorded such that, at the time of default, the firms were unable to identify those that belonged to clients and return the assets to them. There has also been at least one case where investors were exposed to losses resulting from the default of a third party (see the Spanish case described in section 3.5).

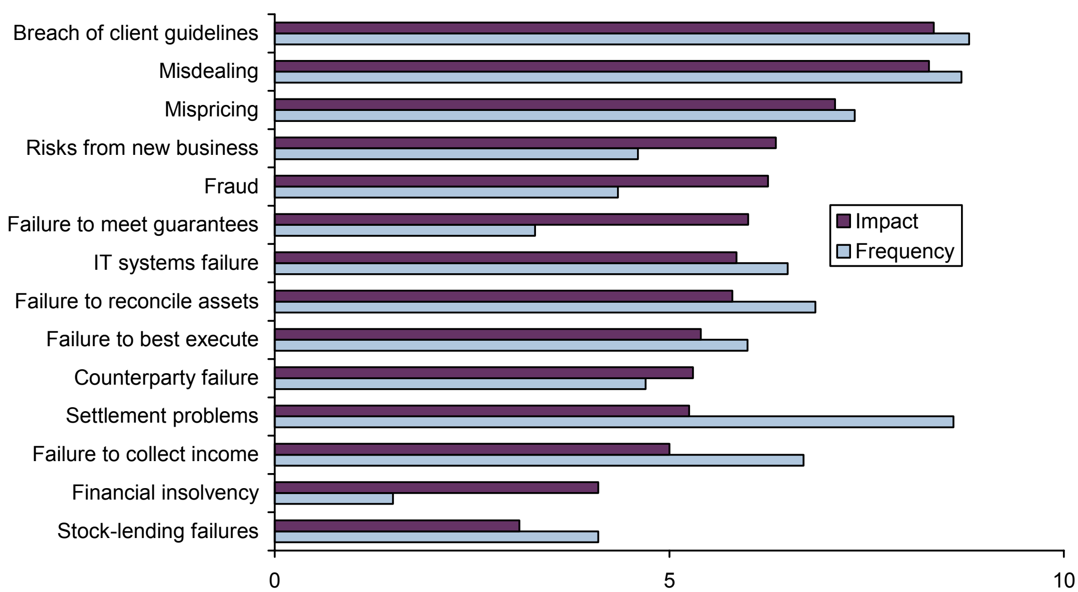
These compensation cases do not give a complete picture of the types of risks to which investors are exposed when engaging an investment firm to conduct investment services on their behalf. Under the ICD, investor compensation schemes only protect against the risk of losses of client assets in the event of a firm default. Although important, at least in terms of potential impact, this is neither the only nor the most significant risk for investors. In particular, the number of cases of bad advice that are dealt with by the UK compensation scheme suggests that this may be a more frequent source of risk, with a potentially significant impact in terms of losses. Bad advice as a special risk is addressed below, after a summary of the results of other studies that have examined the types of risk arising in the provision of investment services.

5.1.4 Evidence on risks in the European asset management industry

Evidence on risks in the European asset management industry is examined in Oxera (2001),[54] and, more recently, Biais et al (2003)[55]. Although these studies look at asset managers only, the findings on the impact and frequency of different risks are likely to be of relevance for other types of investment service providers.

Oxera conducted a survey among 39 asset management firms in six European countries. Firms were asked to rank types of risks, in terms of both frequency of occurrence and amount of possible losses, with a value of 1 assigned to risks that had the smallest financial impact and were least likely to occur. The results are reported in Figure 5.1.

Figure 5.1 Ranking of impact and frequency of risks in asset management



Source: Franks, J., Mayer, C. and Oxera (2001), op. cit.

[54] Franks, J., Mayer, C. and Oxera (2001), 'Risks and Regulation in European Asset Management: Is there a Role for Capital Requirements', a report prepared for the European Asset Management Association.

[55] Biais, B., Casamatta, C. and Rochet, J.C. (2003), 'Operational Risk and Capital Requirements in the European Investment Fund Industry', a report prepared for the Fédération Européenne des Fonds et Sociétés d'Investissement.

The principal risks are operational in nature. Asset managers were asked to assess the likelihood and impact of a financial insolvency, but losses from financial risks were considered infrequent and had a comparatively limited impact. This is mainly due to the segregation requirements imposed on asset managers and the safeguarding of client assets under custody or depositary arrangements.

The results reported in Figure 5.1 suggest that the principal operational risks, in terms of both impact and frequency, are twofold.

– *Breach of client guidelines*—this refers to the violation of the guidelines as set out by the client in its contract with the asset manager. For example, a client may specifically request that its portfolio does not contain emerging market stocks. Purchasing such stocks for this client would therefore contravene the client's guidelines. To reverse the transaction, the asset manager must sell shares. In the meantime, the price of the share could have fallen, resulting in losses.

– *Misdealing*—this refers to errors, often unintentional ones, for example in issuing orders to brokers. For example, a buy-order may be confused with a sell-order, or the transmission of orders may result in too many shares being bought or sold.

Another important type of risk is mispricing: normally, the value of an investment fund must be computed and published every day. The prices of some of the assets owned by the funds may be difficult to obtain, possibly because the assets are infrequently traded or there can be mistakes (eg, forgetting that a share is ex-dividend or that there has been a stock-split). This raises the possibility that the price used to compute the value of the fund is out of line with the underlying asset value.

The risk of operational failures resulting from new business acquisition, which can be caused by a lack of information about the new business or a new client, was also ranked as having a potentially high financial impact, followed by fraud of employees of the asset manager. Problems in the settlement process, however, are observed to occur frequently but in general involve small financial losses.

22 survey respondents also provided information about actual losses incurred. On average, losses in the year analysed in the survey (1999) amounted to just over €1m per investment manager. However, the distribution of losses varied between firms and between types of loss. Table 5.3 reports losses for the five types of largest loss events observed in the survey. The largest loss reported arose from misdealing and amounted to €7.2m (average losses from misdealing were less than €1m). The next largest losses arose from a breach of client guidelines and a failure to collect client income, followed by fund mispricing and a loss incurred in the process of taking over new business.

Table 5.3 Actual losses for the five most frequent risks

	No. of firms reporting loss	Average loss (€m)	Largest loss (€m)	Largest loss/AuM (bp)[1]	Largest loss/capital (%)
Misdealing	13	0.9	7.2	0.94	37.5
Breach of client guidelines	10	0.6	3	0.57	4.4
Failure to collect income (incl. corporate action failure)	6	0.9	2.6	0.11	0.16
Settlement problem	8	0.1	0.2	0.05	0.29
Mispricing	7	0.1	0.3	0.04	0.10

Note: [1]AuM, assets under management (in basis points).
Source: Franks et al (2001), op. cit.

In all of these cases, the largest loss was less than 1bp relative to assets under management. Importantly, however, none of the losses was borne by the clients. Where the firms were not able to recover the losses from insurance or other parties, they used internal profits or capital to cover the losses. From an investors' point of view, it is therefore relevant to compare the losses with the level of capital available to the firm—if capital is insufficient to cover the losses, investors are likely to lose out. In the survey, no loss occurred in excess of the actual capital held by the firms. While the largest misdealing loss was greater than one-third of capital, in the other cases, it was less than 5% of capital.

Many of these findings are supported in the subsequent study by Biais et al. (2003). Based on a survey of 46 European fund management companies, the principal sources of risk highlighted in this study are also reported to be:

– misdealing;
– breaches of fund rules;
– pricing errors;
– settlement problems.

Average total losses per company over one year (2001) amount to about €0.93m, of the same order of magnitude as the average reported by Oxera. Notably, the distribution of losses is markedly skewed—there are many small loss events, along with few, but much larger, losses. Relative to assets under management of these firms, median operational losses amount to 0.3bp while the mean amounts to 0.96bp.

Table 5.4 reports the total losses of the five firms that incurred the largest operational failures in relation to their assets under management in the survey year. These companies are relatively small, indicating that size is important for operational risks since there are likely to be fixed costs and economies of scale in the control of these risks.

The upper tail of the distribution of operational losses is particularly interesting: investors stand to incur losses due to operational risk only for the largest losses that exceed the financial resources of the fund management company. As in the Oxera survey, such losses are not observed in the sample. Although in two of the five cases reported in Table 5.4 losses exceeded measured profits, sufficient capital was available to finance the losses. In the two cases, losses ranged between 2.8% and 7.8% of the capital of the firms. Taking account of all 46 management companies in the sample, operational losses are below 10% of capital. However, one firm experienced a loss as high as 74% of its capital.

Table 5.4 Five largest total losses ranked in terms of fraction of assets under management

Total loss/AuM (bp)	Total loss amount (€m)	Profits minus total loss(€m)	Total loss/capital (%)
17.3	0.4	–1.4	7.8
9.2	0.7	–2.5	2.8
1.4	0.2	n/a	74
0.9	0.7	3.8	5
0.7	0.1	4.5	n/a

Source: Biais et al. (2003).

Both studies therefore suggest that although operational failures occur relatively frequently, losses tend to be small, and can in general be absorbed by the management firm. In both surveys, respondents confirmed that the primary source of financing losses is profits. Capital has a secondary role, and actual capital exceeded even the largest losses observed in the two surveys. Operational failures where investors stand to lose because losses exceed capital and other means of financing (eg, parent guarantees or insurance) are not available are rare.

However, despite being infrequent, large-scale losses cannot be ruled out. As summarised in Oxera (2001), a prominent case occurred in 1996 at Morgan Grenfell Asset Management, the UK asset management arm of Deutsche Morgan Grenfell and part of the Deutsche Bank Group. Asset management failures could have imposed significant losses on a large number of investors who had invested in the firm's mutual funds; however, investors were fully compensated by the firm and its parent, with total compensation costs amounting to more than £210m (approximately €315m).[56] Nevertheless, if similar failures occurred and there was no parent to bail out the firm and compensate investors, investors could have incurred losses.

5.1.5 Evidence on risks to client money

Another source of evidence on the risks to which retail investors are potentially exposed is the research conducted by Oxera for the UK FSA in relation to the regulatory regime in place to protect the client money held by UK investment firms.[57]

The research findings allowed a number of important conclusions to be drawn.

– Risks to client money differ widely in terms of impact and probability. Risks that have a high impact in terms of potential client money losses have a low probability of occurrence. In contrast, higher-frequency risks tend to have a lower impact.

– Financial risks associated with defaults can lead to potentially large client money losses, but these risks occur infrequently. Under UK client money regulations, investment firms have to segregate client money from firm assets and hold it in client accounts at banks or other third parties. The default of a third party is therefore the risk with the largest potential impact—larger than the default of the investment firm itself. Most client money balances are held with UK banks, and the risk of these banks defaulting is small. The risk of default of other third parties, in particular those based overseas, was evaluated as being more likely to occur.

– Despite the segregation requirements, a few cases were observed where the default of the investment firm itself resulted in client money losses. These losses mainly occurred in smaller and poorly capitalised firms. In these cases, losses arose because insufficient funds had been segregated or because the poor record-keeping and control system of the firm resulted in a lengthy and difficult process to allocate and distribute funds to investors.

– Operational risks have a higher probability of occurrence than default risks, with settlement and segregation errors ranked as the most frequent risks. Although less frequent, there have also been instances where firms handled client money although they were not permitted by the regulator to do so. This type of breach against regulation has principally been observed among smaller independent financial advisers (IFAs), most of which are not permitted to hold client money. There have also been instances of client money misappropriation (fraud or theft of client money by employees) as well as errors and delays in allocating client entitlements, such as dividend or interest on securities.

[56] Investment Management Regulation Organisation Ltd, press releases 05/97, 07/98, 01/99.

[57] Oxera research for the UK FSA, 2001/02, unpublished.

– In general, such operational risks did not lead to client money losses, as the operational issues were either resolved quickly by firms before any losses were incurred (in some cases, the resolution was worked out with the regulator), or, if losses did occur, they were covered by the firms. However, operational failures do exacerbate the impact of a default, and, if severe, can even trigger a default.

5.1.6 Evidence on operational risks in the banking sector

Data on risks has also been obtained from the Bank for International Settlements (BIS). The BIS undertook a comprehensive data-collection exercise as a part of the preparations for the new Basel Capital Accord for banks.[58] The BIS dataset included data on operational losses across business functions for a sample of 89 international banks in 2001. The following focuses on operational losses in the asset management and retail brokerage functions of the banks, not taking into account losses that arose in other functions. Although the data is for banks only and does not include non-bank investment firms, the operational risks related to the asset management and brokerage activities of the banks are likely to be similar to the risks affecting the same activities of non-bank investment firms.

Table 5.5 reports the number of events leading to operational losses, together with the total and average monetary losses incurred. Operational risks appear to be higher in brokerage than in asset management, in terms of both frequency and average loss per failure. A total of 4,377 loss events were reported by the banks in the sample, of which nearly two-thirds occurred as part of retail brokerage activities. Total operational losses amounted to over €1.1 billion, of which €216m related to failures in asset management and €914m in retail brokerage.

Table 5.5 Operational failures in asset management and retail brokerage functions of banks, 2001

	Number of loss events	Total loss (€m)	Average loss per event (€m)
Asset management	1,109	216	0.19
Retail brokerage	3,268	914	0.28

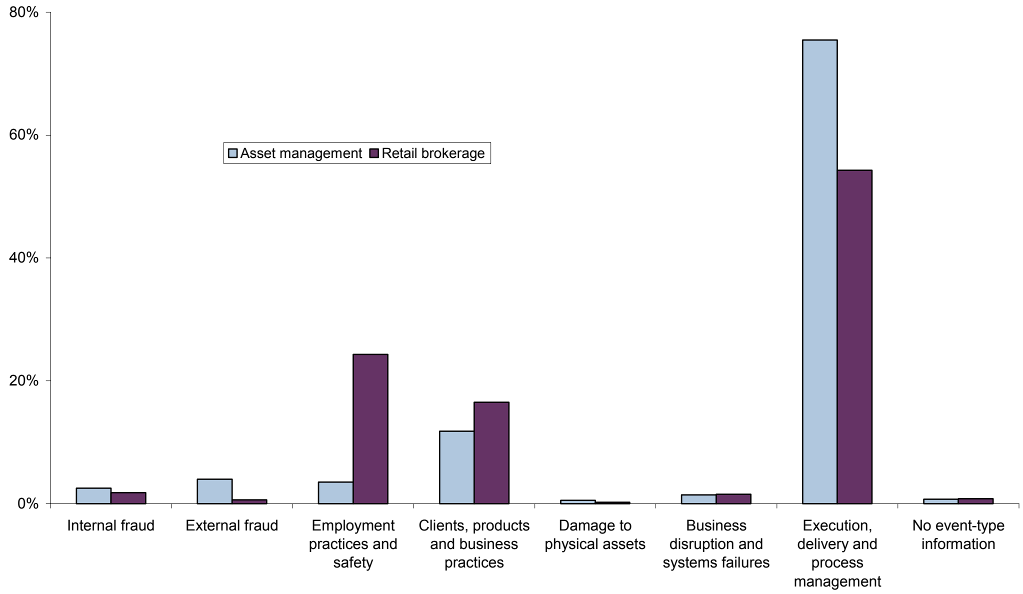
Sources: BIS (2003), 'The 2002 Loss Data Collection Exercise for Operational Risk: Summary of the Data Collected', March, and Oxera calculations.

Figures 5.2 and 5.3 provide a breakdown of the operational failures according to the type of event that caused the losses, in terms of frequency (Figure 5.2) and average amount of loss (Figure 5.3).

For both asset management and brokerage, the majority of problems arose from failures in execution, delivery and processing. This included losses from failed transaction processing, delivery failures, accounting and reporting errors, and counterparty failures. 75% of all failures in asset management, and 54% of failures in retail brokerage, fell into this category. There were also losses arising from acts inconsistent with employment, health or safety laws or agreements ('employment practices and safety'), and losses arising from fiduciary breaches, guideline violations, improper market practices, product flaws and other related failures ('clients, products and business practices'). Cases of internal or external fraud, including misappropriation of client assets, were also reported, but less frequently.

[58] BIS (2003), 'The 2002 Loss Data Collection Exercise for Operational Risk: Summary of the Data Collected', Bank for International Settlements, March.

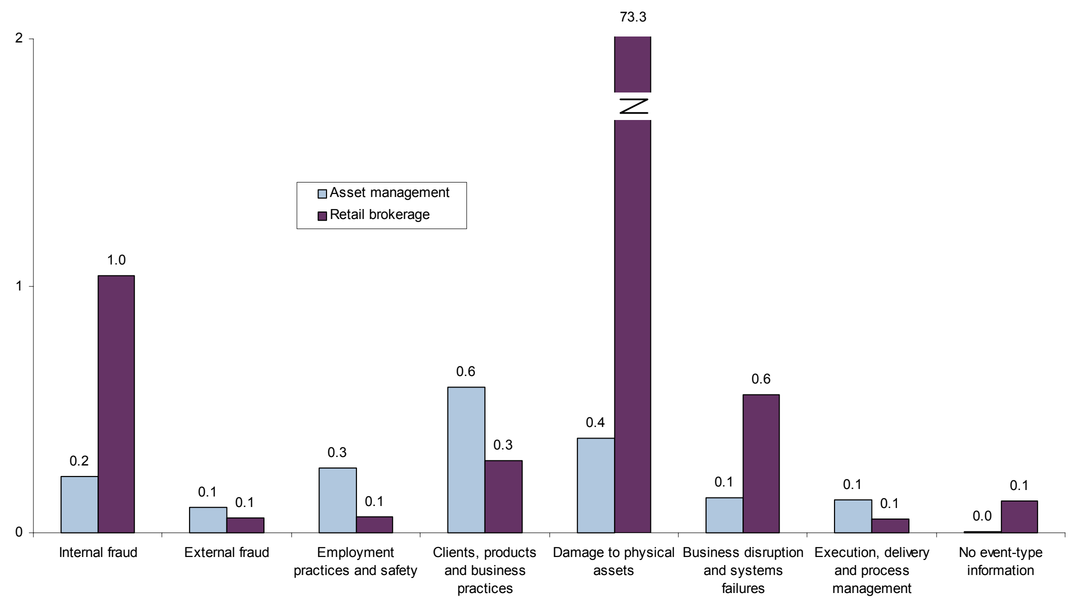
Figure 5.2 Operational loss events in asset management and retail brokerage by type of event (%)



Sources: BIS (2003), op. cit., and Oxera calculations.

The most frequent losses are not necessarily the largest ones. Figure 5.3 below shows the amount of average losses for the different types of operational failure. Overall, average losses for the firms tended to be relatively low, amounting to a little under €200,000 for asset management and €300,000 for retail brokerage. Execution and processing failures that constituted the most frequent risk appear comparatively low in terms of impact. The risks from damage to physical assets, due to natural disasters or other external events, in turn are low in terms of frequency—only six events were recorded in this asset class—but have had a high average impact, especially for the brokerage function (€73.3m). This figure is likely to be driven by one firm reporting a very large loss event. Among the other loss types, internal fraud is shown to have a relatively high impact (average loss of more than €1m in brokerage), as are unintentional or negligent failures to meet client obligations or business and product standards (with an average loss of approximately €600,000 in asset management).

Figure 5.3 Average loss by type of event (€m)



Sources: BIS (2003), op. cit., and Oxera calculations.

The above data cannot be used directly to draw inferences about risk exposures for investors. Losses that were not recovered through insurance claims or other means were covered by the banks' internal resources. In particular, losses were low in comparison with the capital held by the banks; thus, there was no issue of banks being unable to cover the losses. Nevertheless, the data suggests that operational failures do occur and that resulting loss exposures for investors could be significant if the failures occurred at firms that were insufficiently well capitalised to cover the losses internally. Moreover, there may also be certain instances if an operational failure were to occur but the firm were not contractually liable to cover the loss. The firm may decide to cover the losses nonetheless; however, if it does not, investors may be exposed to losses even if the firm were to remain solvent.

5.1.7 The case of bad advice

As discussed above, the UK compensation scheme is the only scheme that provides compensation if investors have incurred losses due to the bad advice received from an investment firm. This broadened scope of the compensation scheme explains the significantly greater volume of cases and claims handled by the scheme. For example, in 2003 alone, the UK scheme dealt with 164 cases of firm failure and received more than 12,800 claims from investors (see Tables 3.1 and 5.2).

Examples of cases relating to bad advice dealt with by the UK scheme are outlined below.

– *Pension mis-selling*—an investor has been mis-sold a personal pension. Such mis-selling could have occurred because the individual, who would have been better off in their employer's pension scheme when they retired, was advised to leave or not join their employer's pension scheme (opt-out or non-joiner cases), or where they transferred pension benefits from a previous employer's scheme to a personal pension plan instead. A general pension review was initiated in the UK to examine cases of people who were wrongly sold pensions between 1988 and 1994. In many cases, redress was provided by the firms themselves. However, for cases where the firms which gave the advice were unable to meet the redress liabilities, compensation was provided by the UK compensation scheme. Such cases constituted the bulk of compensation events dealt with by the scheme. One specific case is described in more detail as one of the examples in section 3.5.

– *Endowment insurance mis-selling*—the other frequent type of compensation case relates to endowment insurance mis-selling. Using a specific example, a consumer approached an IFA to ask for advice on raising extra cash for home improvements. The consumer was advised to remortgage their home and to take out an endowment policy to repay the loan. The consumer was told that at the end of the 15-year term of the policy, they would be able to repay their mortgage and have a lump sum to use in retirement. They became aware that there was a problem with the endowment policy when the product provider told them that there was likely to be a shortfall of several thousand pounds on maturity. Because the financial adviser who had provided the advice was no longer trading, the consumer contacted the compensation scheme, which investigated and paid compensation.[59]

– *Advice to invest in 'inappropriate' products*—while most of the compensation cases relate to pension and endowment insurance mis-selling, the scheme has also provided compensation to investors who have been advised to purchase investment products that are unsuitable for their risk profile or when investors were poorly informed about the risk implications. Using again a specific example, an individual had saved for retirement. The individual wanted to invest the funds in a way that produced some income without risk to their capital and approached an IFA. The firm advised the individual to invest in two high-income ('precipice') bonds. The individual did not realise that an adverse movement in the stock market would have a significant impact on the value of their investments, or that their capital was at risk. When the bonds matured, the individual found that they had made a significant loss. The firm that gave the advice became insolvent. The compensation scheme found that the individual's circumstances indicated that they was not a high-risk investor, and therefore the investment was inappropriate for that particular individual. The scheme was able to provide compensation for most of the losses.[60]

While some of the cases of bad advice are specific to the UK market (eg, pension mis-selling), investors in other countries are also likely to be exposed to the risk of receiving inappropriate advice. The case experience from the UK suggests that bad advice is one of the most, if not *the* most, significant risk to retail investors, in terms of both frequency and potential impact. However, whether such risks should qualify for compensation by a statutory compensation scheme is a separate issue.

5.1.8 Summary of main risks to retail investors

Retail investors are exposed to a range of risks when engaging an investment firm to carry out investment services on their behalf. Financial risks refer to loss exposures that may arise in the event of the default of an investment firm. Although a low-probability risk, the impact of a default can be significant if investors' assets are not properly segregated from those of the firm in default. This may be the case if there has been theft, embezzlement or other fraudulent misappropriation of assets. Segregation errors may also arise from negligence or system failures. If assets are segregated and held with a third party, another source of low-probability but potentially high-impact risk is that of the default of a third party.

Investors are exposed to losses from a range of other operational failures when an investment firm handles their funds or manages their investment. Such failures occur

[59] For more information, see FSCS (2004), 'Annual Report 2003/04'.
[60] Ibid.

relatively frequently, but tend to be of limited impact for investors. However, where an operational weakness coincides with a financial default, the likelihood of loss is increased and the impact may be amplified. Investors also stand to lose where an operational failure is so large that the firm's financial resources are insufficient to cover the loss and compensate investors, possibly triggering default.

In addition to the risk of losing funds or securities belonging to them, investors are exposed to the risk of losses arising from inappropriate and negligent investment advice they have received from a firm. Experience from the UK, where the advisory market is already fully regulated and compensation is offered for bad advice, suggests that this may be the most significant risk for retail investors. Greater reliance of retail investors on financial advisers in the future, not only in the UK but also in other EU countries, could increase the importance of this risk.

5.2 Differences in industry structure and investment patterns

Financial and operational risk exposures for retail investors cannot be considered without reference to the structure of the market within which the investment activity takes place. For example, the risks are affected by the types of product in which investors in a particular market invest, and the types of intermediary through which the investment is undertaken. Therefore, the risks to investors need to be analysed in the context of the financial market structures of the EU countries. These structures are not static: investment patterns and market structures change over time, and what seems a comparatively low risk now may become more significant in the future. A comprehensive forward-looking risk assessment that takes into account cross-country differences in market structures lies beyond the scope of this report. Nevertheless, the following highlights some stylised facts that are relevant in the context of the discussion about compensation schemes.

5.2.1 Investment patterns

There are significant country differences in the way in which EU households save and invest. For example, the UK has traditionally represented a more market-based investment culture, with private investors holding more direct equity than most of their Continental European counterparts. In much of Continental Europe, investors have only recently invested more in equity, and have tended to place their funds in bank deposits or opted for other forms of saving. Another important difference relates to the private provision of pensions in the UK, whereas much of Continental Europe still places greater emphasis on state pensions. The risk exposures are likely to be more significant—and investor protection through a compensation scheme more important—in a country where retail investment in financial instruments is widespread and where individuals rely on those investments to save for retirement.

Table 5.6 reviews the total savings and investments currently held by households in a number of EU Member States. The table reports significant country differences in the amount of savings per capita: Belgium has the highest total per-capita savings of over €47,000 in 2003, whereas, in Sweden, the average savings per capita were only €16,500. There are also major differences in the composition of the savings by type of investment. UK investors hold by far the largest amount of direct equity investment (€355 billion), although Irish investors hold the largest proportion of their total savings directly in equities (31%). By contrast, investors in Belgium, France and Italy are the lowest direct investors in equity, with direct equity holdings representing less than 10% of total savings in these countries. The role of bank deposits is still close to or above 50% in almost all countries. In Italy, deposits account for only 26%, the majority of savings being in direct bond investments.

Table 5.6 Saving and investment patterns in European countries, 2003

	Total savings (€ billion)	Total direct equity (€ billion)	Total savings per capita (€)	% deposits	% direct equity	% direct bond	% mutual funds
Belgium	491	35	47,364	41	7	29	22
Denmark	135	17	25,101	45	12	18	25
France	1,217	73	20,410	66	6	5	23
Germany	2,188	230	26,509	63	11	7	20
Italy	1,548	141	27,423	26	9	42	23
Ireland	72	22	18,265	67	31	1	2
Netherlands	468	89	28,898	52	19	10	20
Spain	732	103	17,990	55	14	5	26
Sweden	148	34	16,549	41	23	7	29
UK	1,640	355	27,747	59	22	2	16

Source: Datamonitor (2004), 'European Retail Savings and Investments Databook 2004', July.

It has been noted that European countries are moving away from a deposit-based savings culture. Indeed, the financial landscape in Europe has already taken significant steps in a more market-based direction, which has affected individuals' savings patterns.

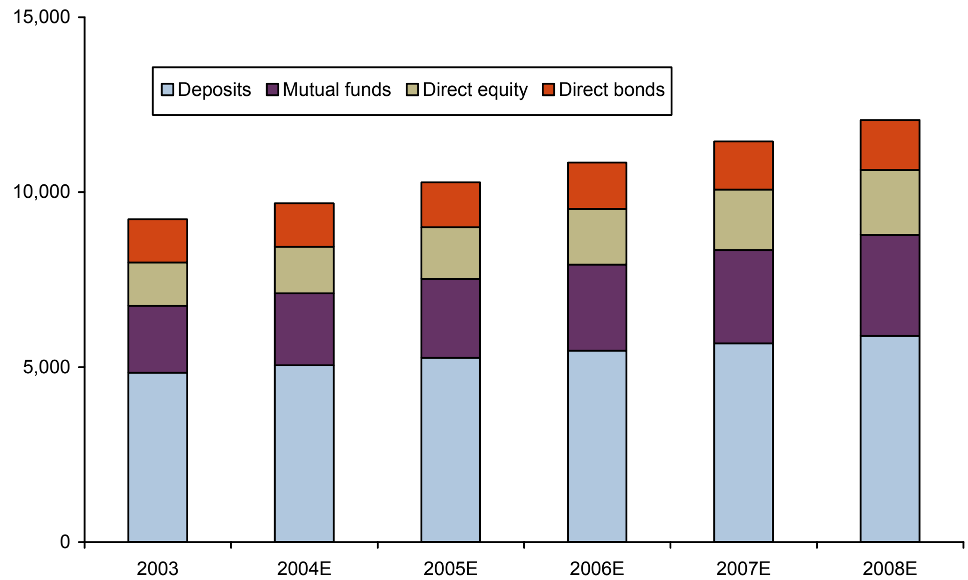
One reason underlying the developments in the European savings and investments markets are governments' efforts to reform the national pensions systems, as the standard state pension schemes have become increasingly unsustainable. This process is likely to continue, as private provision of pensions through personal and occupational schemes will be further encouraged. According to some estimates, only one in every five Europeans owns a private pension; however, in the future, the market for private pension savings could increase to be worth approximately €4,000 billion by 2010, and €11,000 billion by 2030.[61] The pension market in the UK is already significant, and it is likely that developments in other countries will take the same direction. Investment in private pensions is likely to result in increased usage of investment instruments, and therefore may induce a further change in the profile of households' saving and investment patterns.

The second major catalyst for change has been ongoing regulatory reform aiming to create a single European financial market. It is envisaged that increasing cross-border competition, along with increasing integration, will make providers more efficient, as well as widen the range of savings and investment products available to retail investors.

Figure 5.4 shows the expected growth in the total value of savings and investment activity for general product categories across a selection of EU countries. The aggregate value of savings is expected to rise by an average of 6% per annum. However, the majority of the expected growth is attributed to mutual funds and direct equity investments, both expected to grow on average by more than 10% per annum. This will reduce the relative importance of deposits in household savings.

[61] Datamonitor (2002), 'European Investment Management,' October.

Figure 5.4 Expected growth in total savings in Europe by type of product, 2003–08 (€ billion)



Source: Datamonitor (2004), 'European Retail Savings and Investments Databook 2004', July.

Thus, going forward, the risk exposures of retail investors can be expected to increase, as the volume of retail saving and investment grows, and households shift their financial portfolios increasingly towards equity and other investment instruments, either through direct holdings or investments in mutual funds.

5.2.2 Industry structure

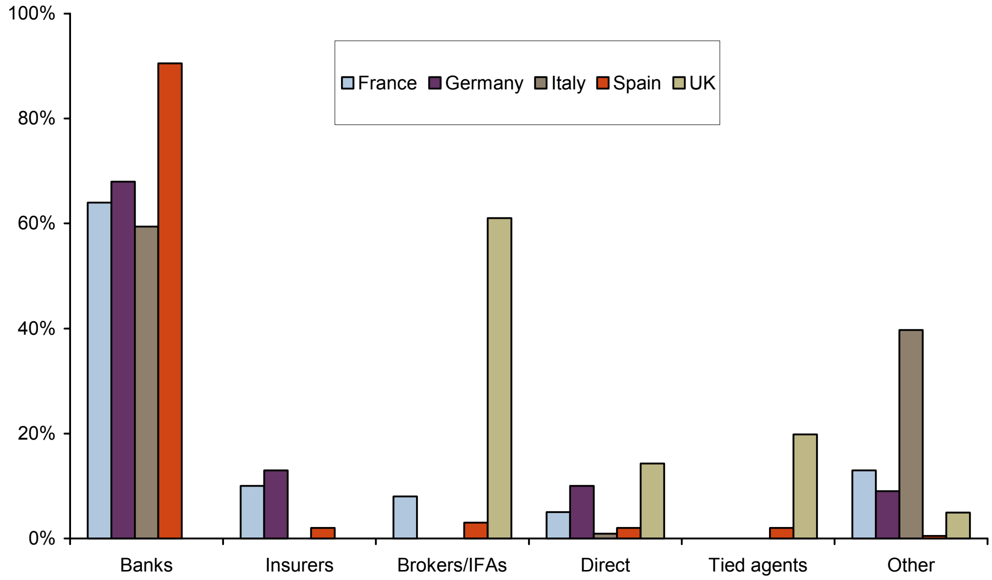
Risk exposures to retail investors are also affected by the type of investment intermediary through which the investments are undertaken. For example, the default risk of a large well-capitalised credit institution or a firm that belongs to a well-capitalised financial group is likely to be lower than the risk of financial insolvency of a small, independent investment firm with limited capital. The former may also have more resources to invest in adequate systems and controls to reduce operational risks. Thus, in markets where most retail investment business is carried out by large financial groups, investors may be protected through institutional arrangements, reducing the need for comprehensive regulatory protection. In contrast, where retail investors principally conduct their investment business through smaller firms, there may be a greater role for a compensation scheme that protects investors against losses that may result from the default of these firms, or for other forms of regulatory protection.

Market structures differ significantly across the EU Member States. In particular, many Continental European markets tend to be more concentrated, with the majority of retail investment services being carried out by banks or firms belonging to a banking or insurance group. However, in the UK and Ireland, the market still has a considerable number of small and independent players. This is partly reflected in the larger number of firms participating in the investor compensation schemes in these countries (as detailed in Table 2.4).

Country differences are also confirmed by Figure 5.5, which summarises the main distribution channels of mutual funds in five EU countries. In France, Germany, and Italy, approximately 60% of all mutual fund investments are undertaken through a bank—in Spain, the figure is above 90%. The UK differs significantly from the other four countries: in the UK, IFAs and retail brokers control more than 60% of the sales of retail mutual fund units to investors.

At present, the UK is the only main country with a fully developed and regulated market for independent financial advice.[62] Given the number of firms in the market and its importance for retail investors, it may therefore not be surprising that this market has long been regulated, that financial advisers are required to participate in the statutory compensation scheme, and also that compensation is provided for negligent investment advice.

Figure 5.5 Distribution channels for retail mutual funds, 2003



Notes: Figures were not available for *tied agents* in France, Germany and Italy; for *brokers/IFAs* in Germany and Italy; for *insurers* in Italy and the UK; and for *banks* in the UK.
Source: Datamonitor (2002), 'European Financial Advisers 2003', December.

Current market structures are expected to change: not only is the market likely to move towards a third-party fund distribution system in the future, but there is also an expectation of significant growth in the general market for independent financial advice. The potential growth in the next years may be at the expense of banks as the demand for high-quality independent advice grows.[63] To the extent that retail investors will increasingly use IFAs or smaller retail brokers instead of the large credit institutions, as they already do in the UK, this is likely to have implications for their risk exposure. Moreover, as investment advice becomes a core investment service under European requirements, this may increase calls for regulatory protection of investors in this market segment.

In summary, the savings and investments of European households are shifting away from deposits and towards equity, mutual funds or other, potentially more risky, investment instruments. Also, third-party distribution of products may increase, and the market for independent financial advice is likely to grow. These developments are likely to have a major impact on the risk exposures of retail investors, and therefore increase the importance of regulatory protection mechanisms addressing the risks going forward.

[62] See Datamonitor (2002), op. cit.
[63] See Datamonitor (2002), op.cit.

5.3 The coverage of loss events by investor compensation schemes

According to the ICD (Art. 2, para 2), as a minimum requirement the investor compensation schemes must cover investor losses arising from

> an investment firm's inability to:
>
> > repay money owed to or belonging to investors and held on their behalf in connection with investment business, or
> >
> > return to investors any securities belonging to them and held, administered or managed on their behalf in connection with investment business,
>
> in accordance with the legal and contractual conditions applicable.

As discussed in section 2.6, all countries have adopted this minimum requirement. The national compensation schemes therefore provide an important safeguard for investor protection if an investment firm is unable to meet its obligations out of investors' claims and defaults. Examples of loss events covered are situations where:

- money is entrusted with a firm for the purchase of a financial instrument, but the firm does not arrange for the purchase of the instrument or repay the funds;
- financial instruments are held on behalf of the client pending sale, but the firm does not account for the proceeds or return the financial instruments;
- unauthorised transfer of financial instruments occurs, or certificates are wrongly cancelled.

Investor compensation schemes therefore protect investors' monies and securities against the risk of theft, embezzlement or other forms of fraudulent misappropriation. They may also provide protection where the loss of investor assets in the event of firm default has resulted from negligence or breakdowns in the firms' systems and controls

However, the definition of loss event provided in the ICD and implemented in national law also suggests that there is a range of risks that do not qualify for compensation cover, at least in some Member States, or where compensation is not certain.

- *Bad advice*—with the exception of the UK compensation scheme, there is no compensation for losses arising from bad advice. According to the UK scheme, negligent advice is the single largest risk for retail investors and, correspondingly, most of the scheme's activities relate to such cases. Bad advice is compensated only if the firm has ceased operating or is unable to compensate investors itself. In the other countries, investors can complain to the regulator or financial ombudsman and seek compensation directly from the firm. However, they may not be compensated if the firm has insufficient assets to do so.

  With the implementation of the 2004 Directive on Markets in Financial Instruments, investment advice will become a core investment service and, in many EU countries, for the first time a regulated activity. Combined with an increased reliance of retail investors on investment advisers, this could result in calls for greater regulatory protection in relation to this activity. Even if investment advisers were required to participate in a compensation scheme (which they may, following implementation of the 2004 Directive), as they already are in the UK, current compensation rules under the ICD and in all countries but the UK would not provide this protection. Bad advice is not compensated by schemes that focus on compensating physical losses of investor monies and securities.

- *Investment business*—as summarised in section 2.6, the countries' compensation schemes differ in terms of the scope of investment business covered. The business of investment advice referred to above is one example. The UK scheme requires investment advisers to participate in the compensation scheme even if they are not licensed to receive client funds or securities. In other countries, similar firms do not participate in the scheme and, in some cases, are unregulated entities. Failure of such firms and any resulting losses (in particular, arising from the unauthorised holding of client assets) would therefore be compensated in the UK but not elsewhere. Another example is the exclusion of portfolio managers in France: these are not authorised to hold client assets, and are therefore not required to participate in the French scheme. In contrast, other countries require similar firms to participate in a compensation scheme. Any investor losses arising from the default of a portfolio manager (eg, again involving unauthorised holding of client funds) may therefore not be covered in France but may in most other countries.

– *Retail investment funds*—as discussed above, investment funds are already an important part of retail investors' portfolios in Europe and are expected to grow further in importance. However, with a few exceptions, retail investment fund activities are not covered by the compensation schemes. Thus, investors holding units in a fund generally do not receive compensation for failures in the operation or management of the fund. Retail funds and their management are subject to strict regulations in all countries (provided for since the UCITS Directive of 1985),[64] thereby reducing the likelihood of losses arising to investors. However, losses cannot be ruled out. The prominent case of Morgan Grenfell Asset Management (see section 5.2) is one example. Asset management failures could have imposed significant losses on a large number of investors who had invested in the firm's mutual funds; however, investors were fully compensated by the firm and its parent, with total compensation costs amounting to more than £210m (approximately €315m).[65] Nevertheless, if similar failures occurred and there was no parent with 'deep pockets' to bail out the firm and compensate investors, it would not be clear to what extent investors would be offered compensation. In addition, retail investors may be exposed to risk of loss if the depositary responsible for safe-keeping the fund assets defaulted. Most schemes suggested that such losses would not qualify for compensation, given that the retail fund business is generally outside the scope of compensation schemes; depositaries are not usually required to participate in most schemes; and individual unit-holders in the fund do not have a direct contractual relationship with the depositary (and the fund itself does not generally qualify as an eligible investor to claim compensation).

– *Investments*—another issue relates to the difference in the cover of investment instruments. For example, some countries already include commodity derivatives in their list of protected instruments, whereas others may only start doing so once this becomes a European requirement. Correspondingly, there are differences in loss coverage according to type of investment instrument. However, all countries cover the investment instruments that are of relevance to the average retail investor, and the omission of more complex, high-risk instruments should therefore not be a concern. More relevant from an investor protection point of view is the fact that some countries (eg, the UK) extend the definition of investment instrument to explicitly include certain life insurance

[64] Council Directive of 20 December 1985 on the co-ordination of laws, regulations and administrative provisions relating to undertakings for collective investment in transferable securities (No. 85/611/EEC), OJ No. L 375, 31.12.1985, p. 3-18, as amended.

[65] IMRO Press Releases, Ref. 05/97, 07/98, 01/99.

and pension products that have investment characteristics. This protection seems particularly important given the observed trends towards private pension provision.[66]

Differences in compensation cover across countries may also arise due to the currency restrictions applied in some countries but not in others. For example, investor funds denominated in US dollars or other non-EEA currencies would qualify for compensation in Luxembourg or the Netherlands, but not in Austria or Germany (see Table 2.6 for a complete list). There have been cases where investor claims for compensation were rejected for this reason (see Table 3.3).

– *Execution failures and other poor investment management*—poor investment management is generally not compensated by schemes. For example, if the client instructs the firm to purchase securities on a given day, but the firm fails to follow the client's instructions and defaults before execution takes place, the client may have suffered a loss in the form of a capital gain, dividend or bonus issue. Although it could be considered a contractual breach, the loss is generally not compensated for by the schemes. Similarly, in general, no compensation is provided for churning, breaches of client guidelines, or certain other failures that can arise in the investment management process (described in section 5.2). Investors do not stand to lose out from these failures if the firm provides compensation for any losses incurred. However, there may be instances where the firm is unable to cover these losses because it has insufficient financial resources to do so.

– *Default*—the schemes only pay compensation in the event of default of a firm. Although the establishment of a formal insolvency is not always necessary, no scheme provides payment prior to the point where a firm is declared to be in default due to its inability to return client assets. The argument against covering situations prior to default is that the client has other avenues of redress at this point, and that there are presumably assets to satisfy successful claims. However, there may be situations where an investor has suffered a loss (eg, from operational failures), but where they are unable to hold the firm or another party liable for the loss. This may be the case in situations where contractual arrangements and responsibilities are poorly defined and an investor is not able to successfully sue the firm in court. This is not to say that investor compensation schemes should step in and compensate prior to firm default. By design, the schemes are insolvency schemes. However, it does suggest a need for alternative regulatory mechanisms that provide investors with a means of redress prior to firm default (eg, ombudsmen or independent complaint boards). Such redress mechanisms are established in the EU Member States, although to varying degrees.

– *Third-party losses*—in a case where an investment firm holds investor funds at a bank or transfers the funds to another party, such as a broker, in order to undertake transactions on behalf of the investor, investors may not only be exposed to failures of the firm, but also to failures at the level of these third parties. The example of the Spanish compensation case described in section 3.5 provides such a third-party scenario.

  If the default of the third party holding the client assets triggers the default of the firm itself, compensation may be payable by the schemes. This was ultimately the outcome in the Spanish case, although lengthy legal analysis was required to establish compensation, not least because of the added complication in this case of the defaulting third party being located overseas.

[66] Life insurance instruments and similar products may also be covered in other countries, but not within the scope of the statutory investor compensation scheme. For example, countries may have a protection fund for insurance undertakings.

The other scenario arises where the third party defaults but the firm itself remains solvent. In particular, this may arise if the firm has applied due care and diligence in selecting the third party to which it transfers client assets. In this case, the firm may not be held liable for any losses of client assets arising if the third party defaults. The question is whether an investor can claim compensation for losses incurred at the third party, especially given that the investor may not have a direct contractual relationship with that party.

The issue of third-party losses has been discussed with the scheme operators and regulators in the different countries, but it is not clear to what extent such losses would be compensated by the schemes. Some schemes explicitly ruled out compensation, noting that compensation can only be provided if the third-party default triggered default of the investment firm itself. In addition, investors themselves may not have a direct contractual relationship with the third party (and the investment firm itself does not qualify as an eligible client to claim compensation on the investors' behalf), thereby further ruling out compensation for any loss exposures that may arise from failures at the level of the third party. Other schemes stated that compensation would be provided—for example, if the third party is located in the EU and is itself a member of a compensation scheme. Yet others said that the rules are unclear in this respect and would have to be tested in the event of such a failure.

– *Proof of loss*—for claims to be successful, investors usually have to provide proof that they held assets with a firm and have suffered a loss as a result of the default of the firm. Several schemes pointed out that it is difficult to process and decide on claims of investors if the investors' records are inadequate (eg, the contract is missing) or if investor records do not match firm records. The latter is particularly observed where investor losses are due to fraud. Some schemes said they would try to take account of the contract and documentation held by the investor even if the information did not match what was in the firm's books. Some schemes have experienced cases where investors were not able to provide any contract or documentation and had simply handed over their funds to an investment firm in blind trust. Claims where investors have no proof at all tend to be rejected.

– *Unauthorised business*—in general, clients dealing with unauthorised firms cannot claim compensation. Such firms do not have a licence to undertake investment business and hence do not participate in a compensation scheme. There have been a number of cases in different countries where poorly informed investors trusted rogue traders in the market and suffered losses accordingly. It is not clear that the schemes could, or should, provide compensation for these cases. Instead, the responsibility may have to remain with the regulator—for example, by enforcing the authorisation regime as well as informing and educating investors about the risks of dealing with unauthorised firms.

Separate from the *types* of loss covered by the compensation schemes is the issue of the *amounts* of loss covered. As summarised in section 2.7, different schemes impose varying compensation limits, ranging from €20,000 to €70,000, with separate compensation limits applying to cash and securities in some cases. However, the limits have not been adjusted to reflect general inflation or the increased exposure of European households to investments compared to the time the ICD was designed. What constituted an appropriate limit then may not be adequate now.

Table 5.7 shows a breakdown of compensation claims received by schemes in seven countries according to whether the claims were for losses below or above the compensation limit.

Table 5.7 Amounts claimed relative to the compensation limit (%)

	Claims < €20,000	Claims > €20,000
Denmark	80	20
Germany—EdW[1]	31	69
Ireland	93	7
Italy	66	34
Netherlands—ICS	100	0
Spain—FOGAIN	83	17
UK[2]	85	15

Notes: Actual figures or best estimates provided by the schemes. [1] Estimate refers to claims 2003 only. [2] Claims measured against limit of £30,000 (€45,000).

For the majority of investors, the compensation limit was not binding as they were compensated for the full amount of their claim. The breakdown of claims for the German scheme suggests otherwise, with more than two-thirds of claims exceeding the compensation limit of €20,000. However, unlike for the other schemes, this breakdown may be considered unusual as it applies to claims received in 2003 only and not to all claims since the scheme was established.

In general, therefore, compensation limits seem adequate in relation to historical cases of firm failure, at least for the majority of retail investors. Nonetheless, there are investors that have suffered larger losses. Moreover, going forward, compensation limits may no longer be appropriate if households' investment balances increase (eg, by saving more to provide for a private pension or by rebalancing portfolios away from deposits to investment instruments) and if these balances are not diversified and held with one or only a few investment firms. An ongoing review of the adequacy of the compensation limit, relative to the typical investment balances held by firms on behalf of retail investors, therefore seems useful.

5.4 Other investor protection mechanisms

A compensation scheme presents only one form of protection against the various financial and operational risks to which investors are exposed when conducting investment business through investment firms. There are other investor protection mechanisms in place, which take the form of specific *institutional* arrangements or are prescribed by *regulation*. Moreover, protection mechanisms may be in place ex ante, thereby reducing the likelihood of a failure occurring, or ex post, thereby mitigating the loss to clients in the event of a failure.

Investor compensation schemes present an ex post and *regulatory* form of protection. Compensation is laid down in the ICD and national laws and regulations, and protection is provided after a failure has occurred. As such, the schemes present one further layer of investor protection in addition to a number of other protection mechanisms. A classification of the main alternative mechanisms is provided in Table 5.8.

Table 5.8 Classification of the main investor protection mechanisms

	Regulatory protection	Institutional protection
Ex ante protection	– segregation of client assets – other conduct-of-business rules (eg, disclosure) – audit, supervision and enforcement – regulatory capital	– reputation – economic capital – external custody
Ex post protection	– investor compensation scheme – regulatory capital	– private insurance – reputation – economic capital

A detailed examination of all other protection mechanisms for each of the EU 15 Member States is beyond the scope of this report. The following therefore only presents an overview of the alternative mechanisms reported in Table 5.8, with a view to providing a qualitative assessment of the extent to which these mechanisms mitigate the risks for retail investors and need to be complemented by a compensation scheme to provide adequate investor protection.

5.4.1 Segregation of client assets and external custody

Investor compensation schemes provide protection against an investment firm's inability to return the monies and securities it holds on behalf of its clients. The need for such schemes therefore depends critically on the extent to which client assets are adequately safeguarded.

Requirements for investment firms to safeguard client assets are laid down in both the old and new Investment Services Directives. The 2004 Directive sets out the requirements as follows (Art 13, paras 8 and 9):[67]

> An investment firm shall, when holding financial instruments belonging to clients, make adequate arrangements so as to safeguard clients' ownership rights, especially in the event of the investment firm's insolvency, and to prevent the use of a client's instruments on own account except with the client's express consent.
>
> An investment firm shall, when holding funds belonging to clients, make adequate arrangements to safeguard the clients' rights and, except in the case of credit institutions, prevent the use of client funds for its own account.

These broad principles have been implemented in each of the EU Member States' regulatory frameworks. However, since there are no requirements that prescribe what constitutes 'adequate arrangements' for the safeguarding of client assets, regulatory differences can be observed between countries.

Some countries seek to establish protection by not allowing any, or certain types of, non-bank investment firms to hold monies or securities belonging to clients. Thus, the failure of such firms should in principle not lead to client losses since assets are held in the custody of third-party custodians (ie, banks with a licence to provide custody). However, the risk of firms obtaining access to client assets despite not having authorisation to do so cannot be ruled out. There have been instances where clients wrongly made payable cheques to their portfolio manager or financial adviser, and were subsequently misappropriated of their funds.

[67] See also Article 10 of the 1993 ISD.

Other countries allow non-bank investment firms to hold client assets, but usually have imposed requirements to ensure that client assets are not used for the firms' own account and are instead segregated from the assets of the firm. In some countries, segregation requirements have only recently been introduced or are in the process of being introduced or strengthened. The requirements differ between countries and may also differ by type of asset, with varying rules applying to client monies and securities.

As discussed above, in general, clients are protected against losses resulting from the default of an investment firm if their assets are segregated from the firm's own assets and not available to the general creditors of the firm in receivership or liquidation. If these conditions were met at all times, there would be no need for a statutory scheme that seeks to compensate investors for losses incurred due to a firm's inability to return client assets.

Asset segregation can take various forms: in some countries, client assets can be held in the custody of the firm itself and are segregated from the firm's own assets only by record—ie, to company with regulatory requirements, firms must only ensure proper and separate records for client assets. Such 'book segregation' can be distinguished from external custody where client assets are *strictly* segregated and kept safe by a third party. From an investor protection point of view, strict segregation and the use of third-party custodianship is preferable for many reasons. For example, in the light of financial difficulties, the line between client and firm assets is easily blurred, and the prospect of firm failure may provide incentives to use accessible client funds to support the firm's operation. The risk of misappropriation is likely to increase, the more accessible the funds. Placing assets with a third party reduces accessibility, thereby lessening the risk of fraud or theft of client funds. In addition to providing secure premises for client assets, third-party custodians may reduce the incidence of other operational risks—for example, by taking on responsibilities for settlement, collection of client entitlements, record-keeping and reporting, valuation, and monitoring.[68]

Many countries require non-bank investment firms to segregate client funds and place these with a third party. However, even under these regulations, exposure to losses in the event of a firm default remains if the firms fail to segregate client funds in a proper way, whether by mistake or with intention. Moreover, although regulations require that client balances have to be segregated, there are exceptions to the general rule. These result in funds being at risk for short periods of time. Even the strict requirement to segregate funds within one day would mean that overnight failure of a firm could place temporarily unsegregated client funds at risk.

Another risk that remains despite segregation is the treatment of client assets in insolvency proceedings. This depends on the bankruptcy code of the country in question. In some countries, client assets may still contribute to settling creditors' claims in the event of insolvency even if the assets are segregated in compliance with regulatory rules. In addition, the use of third parties for safe-keeping entails its own risks if clients become exposed to financial or operational failures at the level of the third party.

Thus, asset segregation and custody arrangements provide important investor protection, but do not by themselves eliminate risks. There appears to be a role for investor compensation schemes in those cases where asset segregation fails.

[68] The role of custody as a protection mechanism is assessed in more detail, with reference to the European asset management industry, in Oxera (2002), 'The Role of Custody in European Asset Management', report prepared for the European Asset Management Association.

5.4.2 Other conduct-of-business rules

In addition to rules on asset segregation, the regulatory frameworks in the EU Member States provide investor protection by imposing other conduct-of-business rules. These rules seek to ensure that investment firms operate efficiently, honestly, and in the best interest of their clients. They include rules that govern conflicts of interest, code of conduct of firm management and staff, execution of clients' orders, and management of their portfolios.

Of particular importance are disclosure provisions that set out contractual or other information that firms need to provide to investors to enable them to make their investment decisions on an informed basis and monitor performance after they have entered into a contract. If investors were informed about the risk of actual and potential losses they might incur when conducting their investment business through a particular firm, the role of investor protection regulation would be limited or non-existent. Investors would be able to fully take into account any risks, and prices in the market would develop to reflect these risks. It is asymmetric information between investment firms and investors that makes the case for all types of investor protection regulation.

The provision of information is, or can be, in the commercial interest of firms (eg, to advertise the quality of services). Also, firms that value their reputation will be careful to ensure that the information they provide is accurate; those that do not will find themselves being criticised and facing complaints by clients. Thus, provision of information can develop as an *institutional* form of ex ante investor protection. However, the question is whether the amount and quality of information provided in an unregulated market would be adequate. For example, it may not be in the firm's commercial interest to disclose all information to clients, particularly those relating to possible risks. Even if it were, the information might be poorly disclosed. This would make the case for the *regulatory* disclosure requirements that are observed in the EU.

Nevertheless, even if information were fully disclosed, investors (in particular small retail investors with limited investment experience) might not be able to understand fully and assimilate the information in their decision-making, thus requiring additional investor protection.

Audit, supervision and enforcement

Any regulatory requirement imposed on firms to protect investors can be breached, either by mistake or with intention. Rules are therefore complemented by monitoring and supervision. This includes internal control procedures (eg, firms have compliance departments), audits by external auditors, and direct supervision by the national regulatory authority, as well as enforcement in the case of breaches of the rules.

The threat of being caught of non-compliance, and any resulting enforcement action, provides incentives to firms to develop better internal systems and controls, and reduces operational risks ex ante. In addition to ensuring compliance through conduct-of-business rules and organisational requirements, the financial risks of firm default can be reduced through prudential supervision and capital adequacy tests.

Both audit and regulatory supervision and enforcement assess the performance of firms and reduce risks once the firms' operations have begun. In addition, regulators operate an authorisation process that provides an evaluation of the quality of firms prior to the commencement of operation. This process involves 'screening' before firms are given permission to carry out investment services. Emphasis here is on the capital adequacy of entrants, thereby reducing the risk of firm defaults, and minimum organisational standards, which additionally have an impact on operational risks.

5.4.3 Regulatory and economic capital

Capital as a protection mechanism can be divided into economic capital, which results from a firm's own capital structure decision, and capital requirements, as imposed by national regulators and provided for under the European capital adequacy framework. Capital may provide protection both ex post and ex ante, but against different risks. The 'deep pockets' of a firm or its parent provide some measure of protection against the financial risk of default, since such a firm is less likely to default. This is ex ante protection. However, capital provides little ex ante protection against operational risks. For example, capital is unlikely to be correlated with fraud—ie, a well-capitalised firm may be as likely to misappropriate funds as firms with little capital.

With operational risks, the protection provided is ex post, to the extent that capital constitutes a buffer against losses. Firms' expectation that they have to compensate clients if problems arise may affect ex ante behaviour and thereby reduce the incidence of operational losses.

Where firms are well capitalised, default risk will not be significant. Availability of capital can also provide investor protection against other risks—eg, investor complaints for bad advice or poor investment management could then be compensated by the firms themselves. However, if compensation is not contracted for between client and firm and there is no legal obligation to compensate for losses arising from particular risks, investor protection comes down to the firm's commercial interest to preserve its reputation (discussed below).

Investor compensation schemes provide protection in the event that a firm is unable to return to its clients any funds or securities entrusted to it for the conduct of investment business. Abstracting from asset segregation requirements, the ability of investment firms to cover such losses themselves therefore depends on the extent to which total potential losses (ie, the total money and securities balances held by the firms) compares with the capitalisation of the firms or their parents. Previous research conducted by Oxera for the UK FSA compared the client money balances held for a sample of 51 UK investment firms with the firms' total regulatory capital requirements.[69] The findings showed that 80% of firms held money for institutional and retail clients in excess of capital requirements, and that 11% of firms held balances in excess of 50 times their capital. In these cases, capital by itself is unlikely to provide sufficient investor protection.

As noted above, there are differences in industry structure in the European financial services industry. In countries where retail investment business is largely conducted by well-capitalised firms or firms belonging to well-capitalised groups, such as the universal banks or bancassurers in many Continental European countries, concerns about capital are likely to be less significant than in countries where retail investors transact with smaller independent firms, such as in the UK. The need for statutory investor compensation due to a lack of firm capital is therefore likely to differ across countries. However, even in countries where large parties dominate retail investment business, there are retail investors that deal with smaller firms, and they may increasingly do so in the future. Although historical default rates have been low, the fact that there have been cases of firm failure in the EU Member States suggests that there is a role for statutory investor compensation.

5.4.4 Reputation

A firm's reputation is an institutional form of investor protection that may work both ex ante and ex post. Firms that value their reputation will be careful to ensure that they are consistently delivering high-quality work and acting in the best interest of their clients. This will help to induce the firms to reduce the likelihood of risks that may lead to losses to

[69] Oxera research for the UK FSA, 2001/02, unpublished.

investors, for example by implementing internal systems and controls as part of a risk management strategy. Where problems do arise, firms may compensate investors for any losses they incur, so as to preserve their reputation.

The effectiveness of reputation as a protection mechanism is likely to depend on the trade-off between the cost of compensation and the cost of damage to firm reputation. The latter partly depends on corporate governance structures. For example, the costs of losing reputation are greater for firms belonging to a group where the reputation of the entire group is at stake. Another example refers to management and control structures within the firm: if employees are not concerned about their employers' reputation, some firms may have put in place structures to help realign employee incentives to reduce conflicts of interest. In other firms, however, management and control mechanisms may not be consistent with achieving the objective of preserving reputation.

Past cases of fraud, misappropriation or other operational failures suggest that reputational concerns are not always strong enough to ensure sufficient investor protection. Also, where a firm would like to preserve its reputation ex post by compensating investors for losses incurred, it may not have the financial resources to do so adequately.

5.4.5 Insurance

Like firm capital, insurance provides ex post protection by compensating investors in the event of financial or operational failures leading to losses for investors. By pooling capital across many firms, insurance may provide a more cost-effective method of investor protection than any firm's own capital.

The insurance solution is attractive in many respects: in particular, having insurance creates a market for risks. Insurance premia that reflect the probability and impact of potential losses make risks explicit and improve the pricing of risks. Nonetheless, there are a number of problems with insurance as an investor protection mechanism: in the first instance, if insurance is voluntary, it depends on firms' willingness to insure against different types of risk. Just as reputational concerns may not be sufficiently strong to induce investors to compensate client losses using their own capital, they may not be sufficient to make firms buy insurance cover.

Importantly, insurance against the most significant risks may not be adequately provided in the market. Firms may be able to purchase insurance for certain risks, such as professional indemnity or other liability insurance that may cover losses resulting from fraud or misappropriation of client assets by employees. For example, Directive 2004/39/EC on markets in financial instruments provides that if investment advisers purchase appropriate professional indemnity insurance cover, they may be excluded from regulatory capital requirements that would otherwise apply to the firms. Thus, insurance is seen as an alternative protection mechanism to firm capital.

However, professional indemnity or other types of insurance may come at a high price. Insurance companies may find it difficult to price the underlying risk correctly or set premia to reflect risk differences across firms. There is also an issue about the nature of available insurance contracts and insurers' willingness to pay should a loss occur. For example, a clause in the insurance contract may exclude payment for losses that have arisen due to a breach of regulatory rules. Similarly, an insurance contract may become void following the default of an investment firm, thereby excluding insurance coverage in the event of firm default. Moreover, insurance against some risks, such as firm default or failures of third parties with which firms transact, may not be provided at all in the market.[70] In these circumstances, investor compensation schemes may be the only way for investors to recover losses they have incurred due to failures at the level of the firm.

Investor compensation schemes are essentially a form of insurance against the risk of losses. Instead of purchasing private insurance, compensation schemes provide statutory insurance cover. In this way, a compensation scheme can be seen as a substitute for private insurance and may be particularly important in the absence of well-functioning markets for insurance.

5.4.6 Summary of the effectiveness of alternative protection mechanisms

The above alternatives are important regulatory or institutional mechanisms to protect investors' monies and securities, either by reducing the risk of losses ex ante or, where they do occur, covering them ex post. While no single mechanism is likely to be effective on its own, the combined operation may be viewed by some as providing sufficient protection. The rare occurrence of compensation cases in the past tends to support this view. However, there have been instances where the alternative mechanisms failed and investors would have incurred significant losses if a statutory compensation scheme had not been in place. As such, compensation schemes have a role in complementing the other mechanisms and providing last-resort protection, in particular when misappropriation and insolvency result in the inability of an investment firm to return assets to investors.

The better the protection provided by the alternative mechanisms, the less the need for statutory investor compensation. In particular, if asset segregation is strictly applied or firms are generally well capitalised such that failures are rare, the role of a scheme is reduced. There may still be a case for having a last-resort scheme for extraordinary events, but the scheme does not require large resources—ie, accumulating large funds ex ante or having a large permanent staff base would seem inefficient given the rare occurrence of a compensation event. Thus, the existence of alternative protection mechanisms, while not eliminating the need for a statutory compensation scheme, will have implications for the design and resourcing of the schemes.

Investor compensation schemes complement other protection mechanisms to cover the risk of losses of investors' monies and securities in the event of firm default. The UK scheme has been extended to protect the risk of bad advice received by investors from a firm that is no longer in the market and hence is unable to compensate affected investors using its own resources. Case experience in the UK suggests that bad advice may be the most significant risk to which retail investors are exposed. The volume of cases dealt with by the UK compensation scheme also suggests that alternative protection mechanisms, in particular capital requirements or professional indemnity insurance, do not always provide adequate protection. Given that the independent investment advice market is growing and becoming a core investment service under European regulation, it would be interesting to assess the mechanisms available in the EU Member States to protect against the risk of bad advice and the potential need for a last-resort protection scheme.

5.5 Summary

Retail investors are exposed to a range of risks when engaging an investment firm to conduct investment business on their behalf. Investor compensation schemes provide important protection against the risk that, in the event of default, an investment firm is not

[70] For example, the findings of Oxera (2001), op. cit. and Biais (2003), op. cit. suggest that insurance tends to play a limited role in covering losses that arise in the asset management industry.

able to return to investors the monies or investment instruments belonging to them. This may be the result of fraud, embezzlement or theft of investor assets, or due to unintentional errors, negligence or other operational failures that result in those assets not being available following default.

Such loss events for retail investors are rare, as evidenced by the relatively low volume of compensation cases in the EU Member States. The frequency and impact of losses is reduced because of the existence of alternative protection mechanisms, including in particular firm capital, custody and segregation requirements, other conduct-of-business rules, supervision and enforcement, firm reputation, and insurance. These alternative mechanisms reduce, but do not eliminate, risks. Investor compensation schemes play an important complementary role—they provide last-resort protection for investors in cases where the other mechanisms have failed.

The risk of losses of investor assets in the event of firm default is only one category of risk for retail investors. There is a range of other risk exposures that are not covered by the investor compensation schemes or where scheme coverage is unclear.

One important risk that is not covered is the risk of losses resulting from bad investment advice. Only the UK compensation scheme provides compensation for such losses, and the case volume dealt with by the scheme suggests that this may be the most important risk exposure for investors. Retail investors' reliance on independent investment advice is likely to grow in the EU, and investment advice will become a core investment service under European requirements. This may result in calls for greater regulatory protection, which may include statutory compensation.

6 Investor compensation schemes in the ten new EU Member States

On May 1st 2004, ten new Member States assumed their full membership status in the EU. These Member States now have a statutory obligation to comply with the requirements of the ICD, subject to transitional arrangements granted in membership negotiations.

This section presents an overview of the most significant features of the investor compensation schemes in the ten new Member States.[71] The description is relatively high-level, and the coverage of individual schemes does not contain the same level of detail as was provided for the EU 15. The description is based on a questionnaire sent to representatives from the compensation schemes or regulatory authorities in the countries. The list of representatives is included in Appendix 17, in the separate 'Appendices' report.

6.1 Legal framework and scheme administration

All ten new Member States have complied with the requirement in the ICD to set up an investor compensation scheme. The schemes' names, establishment dates and principal pieces of legislation are reviewed in Table 6.1. As shown in the table, nine of the ten countries have opted for only one scheme to cover the ICD requirements—ie, the schemes in these countries cover the investment business of various investment firms, including credit institutions. Only Cyprus has established separate schemes for non-bank investment firms and credit institutions.

The majority of the schemes were established between 2002 and 2004; the exceptions being Hungary and Poland. Hungary has had a compensation scheme in place since 1997, which, as described below, is one of the two schemes that have experienced compensation events. Poland has had a system functioning since the start of 2001.

[71] The following exchange rates have been used throughout this report: Czech koruna (CZK) 1 = 0.0316; Estonian kroon (EEK) 1 = €0.064; Hungarian forint (HUF) 1 = €0.004; Latvian lati (LVL) 1 = €1.5; Lithuanian lita (LTL) 1 = €0.29.

Table 6.1 Establishment of compensation schemes and legislation

	Name(s) of the scheme(s)	Date of establishment	Principal legislation
Cyprus	Investors' Compensation Fund of Investment Firms' Clients (Ταμείο Αποζημίωσης Επενδυτών Πελατών ΚΕΠΕΥ)	May 30th 2004	Investment Firms Laws of 2002–04 (Οι περί των Επιχειρήσεων Παροχής Επενδυτικών Υπηρεσιών Νόμων του 2002–2004)
	Compensation Fund for Investor Clients of Banks (Ταμείου Αποζημίωσης Επενδυτών Πελατών Τραπεζών Κανονισμοί)	June 2004	Investment Firms Law of 2002, No. 148(I) of 2002 (Ο περί των Επιχειρήσεων Παροχής Επενδυτικών Υπηρεσιών (Νόμος Ν. 148(I)/2002))
Czech Republic	Securities Brokers Guarantee Fund (Garanční fond obchodníků s cennými papíry)	January 1st 2002	Securities Act No. 591,1992 (Zákon o cenných papírech)
Estonia	The Investor Protection Sectoral Fund (Investorikaitse osafond)	July 1st 2002	The Guarantee Fund Act (Tagatisfondi seadus)
Hungary	Investor Protection Fund (Befektető-védelmi Alap)	April 14th 1997	Securities Act CXI of 1996, later Act CXX. of 2001 (1996. évi CXI. Törvény (Épt.))
Latvia	Investor Protection Scheme (Ieguldītāju aizsradzības sistēma)	January 1st 2002	Investor Protection Law (Leguldītāju aizsardzības likums)
Lithuania	The Liabilities to Investors Insurance Fund (Įsipareigojimų investuotojams draudimo fondas)	June 20th 2002	The Law on Deposit Insurance and Insurance of Liabilities to Investors of the Republic of Lithuania No. IX-975 (Lietuvos Respublikos indėlių ir įsipareigojimų investuotojams draudimo įstatymas Nr. IX-975)
Malta	Investor Compensation Scheme (Skema ta' Kumpens Lill-Investitur)	January 3rd 2003	Legal Notice 368 of 2003 - Investor Compensation Scheme Regulations, 2003 (Avviż.Legali 368 Ta' L-2003 - Regolamenti ta' L-2003 Għal Skema Ta' Kumpens Lill-Investitur)
Poland	The Mandatory Compensation Scheme (Obowiązkowy system rekompensat)	January 15th 2001	The Law on the Public Trading in Securities (ustawa – Prawo o publicznym obrocie papierami wartościowymi)
Slovakia	Investment Guarantee Fund (Garančný fond investícií)	January 1st 2002	Act No. 566/2001 Coll. on Securities and Investment Services (Zákon č. 566/2001 Z.z. o cenných papieroch a investičných službách)
Slovenia	Guarantee System for the Claims of Investors in Investment Firms (sistemu jamstva za terjatve vlagateljev pri borzno posredniških družbah)	January 1st 2002	Securities Market Act (Articles 279 to 286) (Zakon o trgu vrednostnih papirjev)

Table 6.2 reviews the ownership and management structures of the schemes and their relationships with the national financial market regulators. Some schemes are managed by an administration or supervisory board, which may have representation from the industry, the relevant ministries and the regulators. Other countries have preferred public ownership and management, whereby schemes' operations are controlled by public authorities.

While the regulator is involved to some extent in all countries, this involvement is much less where the schemes operate as independent entities. In such cases, the regulator's powers are often limited to information-sharing and approval of particular types of decisions. This contrasts with Latvia and Slovenia, for example, where the regulator is fully responsible for the operation of the scheme.

Table 6.2 Ownership, management and relationship with regulator

	Ownership and management structure	Name of the regulator	Relationship with the regulator
Cyprus	Managed by an Administration Board, set up in accordance with the Investment Firms Law	Cyprus Securities and Exchange Commission (Επιτροπή Κεφαλαιαγοράς Κύπρου)	Some decisions of the Administrative Board have to be approved by the regulator
	Managed by a board of five members, chaired by the Governor of the Bank Cyprus	Central Bank of Cyprus	The scheme is operated by the Central Bank
Czech Republic	The Fund is a non-state entity, established in law. Managed by an Administration Board, which is appointed by the Ministry of Finance	Securities Commission (Komise pro cenné papíry)	No formal ties with the regulator, but cooperation is necessary for starting new compensation cases and calculating annual fees
Estonia	The Fund is a legal entity established in law, managed by a Supervisory Board	Financial Supervision Authority (Finantsinspektsioon)	Cooperation on information-sharing basis. Both bodies have the right to request information from the other that is deemed necessary for performing their respective duties
Hungary	The Fund is an independent legal entity, managed by a board of directors	Hungarian Financial Supervisory Authority (Pénzügyi Szervezetek Állami Felügyelete)	The regulator nominates one member to the Board of Directors. The Fund reports regularly to the regulator about its activities and financial position
Latvia	The Scheme is publicly owned and managed, and operated by the regulator	Financial and Capital Market Commission (Finanšu un kapitāla tirgus komisija)	The Scheme is operated by the regulator
Lithuania	The Fund is a publicly owned state company, managed by a Council and Administration. The members of the Council are chosen from the Ministry of Finance, Central Bank and the Lithuanian Securities Commission	Lithuanian Securities Commission (Lietuvos Respublikos Vertybinių Popierių Komisija)	No formal links with the regulator
Malta	The Scheme is an independent legal entity administered by a Management Committee, which has representation from the Central Bank, the regulator, member firms and customers	Malta Financial Services Authority (Awtorità Għas-Servizzi Finanzjarji Ta' Malta)	The regulator nominates the Management Committee. The Committee is accountable to the regulator, and some decisions by the Committee are subject to approval by the regulator
Poland	The Scheme is operated by the National Depository of Securities, which is a joint-stock company, and is jointly owned by the Central Bank, State Treasury and the Warsaw Stock Exchange	The Securities and Exchange Commission (Komisja Papierów Wartościowych i Giełd)	The Scheme is supervised by the regulator, and some of its decisions are subject to approval by the regulator
Slovakia	The Fund is a legal entity established by law, managed by an executive board, which comprises representatives from the Central Bank, Ministry of Finance, the Financial Market Authority and the firms participating in the compensation scheme.	The Financial Market Authority (Úrad pre finančný trh)	The Scheme is supervised by the Financial Market Authority
Slovenia	The Guarantee System is operated by the Securities Market Agency	Securities Market Agency (Agencija za trg vrednostnih papirjev)	The regulator operates and regulates the scheme

6.2 Relationship with the deposit guarantee scheme

All ten new Member States have also established a deposit guarantee scheme, according to the 1994 Deposit Guarantee Scheme Directive to protect the deposits held at credit institutions. The names of these schemes and their relationships with the investor compensation schemes are summarised in Table 6.3 below.

In the majority of countries, there are no formal links between the two schemes. The management of the national investor compensation and deposit guarantee schemes has been combined only in Estonia and Lithuania. Nevertheless, the schemes are considered separate entities for the purposes of funding and compensation payments. In Malta, the investor compensation and deposit guarantee schemes are managed by the same management committee, but the two schemes have been established in separate regulations and have separate funding structures.

The compensation framework in Cyprus differs from that in the other new Member States: separate schemes have been established for the investment business provided by investment firms, the investment business of credit institutions, and the deposit business of banks. Both the deposit guarantee and the investor compensation scheme for banks are operated by the Central Bank, but are managed by separate committees. However, both committees have the Governor of the Central Bank as their chairman, and the Senior Manager of the Banking Supervision and Regulation Division as their vice chairman. The scheme for investment firms has no ties with the banking schemes.

Table 6.3 Relationship with the deposit guarantee scheme

	Name of the deposit guarantee scheme	Relationship between schemes
Cyprus	Depositors' Compensation Scheme	Both the Depositors' Compensation Scheme and the Compensation Fund for Investor Clients of Banks are operated by the Central Bank, and have the Governor of the Central Bank as their chairman, and the Senior Manager of the Banking Supervision and Regulation Division as their vice chairman. No relationship with the scheme for investment firms' clients
Czech Republic	Deposit Insurance Fund	No formal links between schemes
Estonia	The Deposit Guarantee Sectoral Fund (Hoiuste tagamise osafond)	Fully owned and managed by the same entity, the Guarantee Fund. The Guarantee Fund runs separate sectoral funds for deposit guarantee, investor protection and pension protection
Hungary	National Deposit Insurance Fund of Hungary (Országos Betétbiztosítási Alap)	No formal ties, but the two schemes cooperate on information-sharing basis
Latvia	Deposit Guarantee Fund	No relationship between the schemes
Lithuania	The Deposit Insurance Fund (Indėlių draudimo fondas)	Both schemes are established by the same statutes, and managed by the same Council and Administration. Although the schemes collect separate funding, borrowing is allowed between schemes if needed
Malta	Depositor Compensation Scheme (Skema Ta' Kumpens Lid-Depożitant)	The Depositor Compensation Scheme and the Investor Compensation Scheme are two distinct schemes set up by separate regulations, and separately funded. However, both schemes are administered and managed by the same Management Committee
Poland	The Guarantee Fund for Banks	No relationship between the schemes
Slovakia	Deposit Protection Fund	No relationship between the schemes
Slovenia	Deposit Guarantee Scheme	No relationship between the schemes

6.3 Participation rules

The ICD specifies general participation requirements for the national investor compensation schemes, based on the definition of core and non-core investment services included in the Investment Services Directive.

Table 6.4 below summarises the participation requirements in the ten new Member States. In terms of the number of participating firms, the table shows that the two largest schemes are in the Czech Republic and Hungary, with 70 and 58 member firms respectively. However, even these are small in comparison with the schemes in the EU 15 (see section 2.4).

Table 6.4 Participation in compensation schemes

	Types of firm participating in the scheme	Total number of participating firms
Cyprus[1]	Investment firms licensed by the regulator	28
Czech Republic	Securities brokers licensed by the regulator	70
Estonia	Investment firms, credit institutions and management companies	18
Hungary	Investment management firms, credit institutions and brokerage firms	58
Latvia	All firms licensed to provide investment services, including credit institutions	26
Lithuania	All firms providing investment services, including credit institutions, financial brokerage firms and management companies	32
Malta[2]	All firms licensed to provide investment services, including credit institutions	44
Poland	Brokerage firms and credit institutions conducting brokerage activities or maintaining securities accounts	39
Slovakia	All firms licensed to provide investment services, including brokerage firms, credit institutions and management companies	40
Slovenia	Investment firms, including credit institutions providing investment services	29

Notes: [1] This figure refers only to the number of firms in the Investors' Compensation Fund of Investment Firms' Clients. The membership procedure for the Compensation Fund for Investor Clients of Banks had not been finalised at the time of writing. [2] Licence holders providing investment services solely and exclusively to persons who do not fall within the definition of investor in the Maltese regulations are not required to participate and contribute to the Scheme.

6.4 Compensation limits

Table 6.5 below reviews the compensation limits currently applied by the schemes. The overall limits up to which investors may claim compensation for their losses differ between countries—only Cyprus, the Czech Republic, Malta and Slovenia currently comply with the €20,000 minimum limit set in the ICD.

As is customary with EU legislation, new entrants to the EU may be granted transitional periods during which national legislation may remain in breach of certain EU Directives. These transitional arrangements serve to ensure smooth transposition of the Directives into national law happens, preventing potential shocks to markets affected by the legislation. This argument also applies in the present context, where the ICD could have unintended consequences for the less-developed financial markets of the new Member States.

In addition, Table 6.5 summarises the transitional arrangements granted to seven of the ten new Member States: only Cyprus, the Czech Republic and Malta have already fully implemented the ICD. Where transitional arrangements are in place, these relate primarily to the compensation limit. A limit lower than the required €20,000 is in place in Estonia, Hungary, Latvia, Lithuania, Poland and Slovakia. The compensation limits in these countries will gradually increase to the required level by 2008 or earlier. Having a lower compensation limit reduces the possible payout in the case of a compensation event, and thereby reduces the short-term burden for the schemes to achieve an appropriate level of funding.

Slovenia has negotiated an export ban, which affects the maximum compensation the home schemes of foreign investment firms and credit institutions are allowed to provide for the investment business these firms undertake in Slovenia. According to the provision, the home schemes' compensation for investment business undertaken by foreign firms in Slovenia cannot exceed the maximum limit of the Slovenian scheme. This is to prevent foreign operators gaining a competitive advantage over Slovenian firms, due to better compensation arrangements available for investors.

Table 6.5 Compensation limit

	Current compensation limit	Transitional arrangements
Cyprus	Investment firms: 100% of claims up to €20,000 in total	No transitional arrangements
	Banks: 100% of claims up to €20,000 in total	No transitional arrangements
Czech Republic	90% of claims up to €20,000	No transitional arrangements
Estonia	90% of claims up to EEK100 000 (€6,400)	Compensation limit will be increased gradually to the statutory level, reaching the required €20,000 by January 1st 2008, at the latest
Hungary	100% of claims up to HUF1m (€4,000)	Compensation limit will be increased gradually to the statutory level, reaching HUF6m (approximately €24,000) by January 1st 2008
Latvia	90% of claims up to LVL6,000 (€9,000)	Compensation limit will be increased gradually to the statutory level, reaching LVL13,000 (approximately €20,000) by January 1st 2008
Lithuania	100% of claims up to LTL10,000 (€2,900), and 90% of the remaining claims up to LTL50,000 (€14,500)	Compensation limit will be increased gradually to the statutory level, reaching €20,000 (or the amount of LTL equivalent to €20,000) by January 1st 2008
Malta	90% of claims up to €20,000 in total	No transitional arrangements
Poland	100% of claims up to amount equivalent to €3,000, and 90% of the rest of the claims up to amount equivalent to €7,000	Compensation limit will be increased gradually to the statutory level, reaching €22,000 by January 1st 2008
Slovakia	90% of claims up to €10,000	Compensation limit will be increased gradually to the statutory level, reaching €20,000 by January 1st 2007
Slovenia	100% of claims up to €20,000	Negotiated provision on the Directive in the form of an export ban until December 2005. If extension is not granted, transitional period of three years will ensue

6.5 Funding arrangements

Table 6.6 below presents an overview of the funding arrangements of the ten new schemes.

Only the scheme in Latvia is funded on an ex post basis. The remaining nine schemes are funded ex ante, although they generally have powers to raise further contributions ex post. In Slovenia, the ex ante element is in the form of guarantees: firms are required to hold liquid funds on their balance sheets in the form of pledges, which are paid in the event of a failure.

In almost all countries, a firm-specific upper limit has been set for annual contributions. This limits the adverse effects that a large compensation case could have on the remaining firms in the industry. The exceptions are the schemes in the Czech Republic and Slovenia, which are permitted to levy unlimited annual contributions on the member firms.

Seven of the ten schemes have the ability to set up an outside borrowing facility, although only the Hungarian scheme currently has such a facility in place. The Lithuanian, Polish and

Slovenian schemes are not allowed to borrow funds externally to finance potential compensation payments.

In general, state involvement in the funding of investor compensation schemes in the new Member States is limited. The Hungarian scheme has benefited from direct contributions from the state to finance past compensation cases, and also benefits from an unlimited credit guarantee. The Estonian and the Slovakian schemes are also able to borrow with a state guarantee. The scheme in the Czech Republic experienced difficulties in raising sufficient funds to cover compensation costs and has negotiated a state loan. However, there is no statutory obligation for the state to provide such finance. In all the other countries, the state plays no explicit role in funding compensation payments.

Table 6.6 Funding arrangements

	Ex ante or ex post	Assessment basis for firm contributions	Risk weighting	Annual contribution ceiling	Borrowing power	State involvement
Cyprus						
investment firms	Ex ante (with ability to raise additional contributions)	Initial contribution determined according to the services provided, and annual contributions according to clients' assets	No	Yes	Yes, although currently no facilities in place	No
banks	Ex ante	Investment services offered (procedures for collecting contributions not yet finalised)	No	No	No	No
Czech Republic	Ex ante	Average value of clients' assets	No	No	Yes, although currently no commercial borrowing facilities in place	No official state involvement. However, scheme has negotiated a state loan to cover compensation payments
Estonia	Ex ante (with ability to raise additional contributions)	Average turnover of securities transactions, and the market value of monies and securities held or managed by the firm	No	Yes	Yes, although currently no facilities in place	Borrowing with a state guarantee
Hungary	Ex ante (with ability to raise additional contributions)	Average size of client portfolio, and the average number of clients	No explicit risk weighting, although higher contributions for firms that have been penalised by the regulator	Yes	Yes, overdraft facility of HUF320m (€13m)	Contributions from the state, and an unlimited credit guarantee
Latvia	Ex post	Value of financial instruments held by the firm	No	Yes	Yes, although currently no facilities in place	No
Lithuania	Ex ante	Value of transactions undertaken	No	Yes	No	No

	Ex ante or ex post	Assessment basis for firm contributions	Risk weighting	Annual contribution ceiling	Borrowing power	State involvement
Malta	Ex ante (with ability to raise additional contributions)	Fixed contributions determined according to the type of licence, and variable contributions according to total annual revenue	No	Yes	Yes, although currently no facilities in place.	No
Poland	Ex ante	For brokerage firms, the average value of total clients' assets. For banks, the average value of clients' securities registered in securities accounts	No	Yes	No	No
Slovakia	Ex ante (with ability to raise additional contributions)	Currently the volume of investment services provided. In the future the value of clients' assets will also be considered	No	Yes	Yes, although currently no facilities in place	Borrowing with a state guarantee
Slovenia	Ex ante pledges to guarantee ex post payment (Firms are required to invest funds in liquid Bank of Slovenia securities)	Volume of investment services provided	No	No	No	No

6.6 Compensation events

The ten new Member States have no or limited experience with firm failures that have led to compensation events. Only the Czech Republic and Hungary have experienced such events. In Hungary, 13 compensation events occurred between 1998 and 2003, which led, on aggregate, to almost 10,000 accepted claims for compensation. About €17.5m of compensation has been paid to cover these claims to date. The number of cases in Hungary is not directly comparable with that in the other countries, as Hungary had investor compensation arrangements in place several years before the other new Member States. Indeed, the majority of the 13 events occurred during the three years from 1998 to 2000. The scheme indicated that it experienced difficulties in acquiring sufficient funding to pay the compensation claims in a timely manner. These difficulties were addressed by state-guaranteed lending and by levying additional contributions on the member firms.

In the Czech Republic, six compensation events have taken place, which have generated over 20,000 claims to date. However, only a fraction of these claims has been paid so far, due to difficulties in raising the required funds and the lengthy legal process that was required to establish some of the claims.

Table 6.7 Compensation cases

	Number of compensation cases	Total number of accepted claims to date	Total amount of compensation paid to date
Cyprus	0	–	–
	0	–	–
Czech Republic	6	22,370	CZK 153m (€4.8m)
Estonia	0	–	–
Hungary	13	9,758	HUF 4,302m (€17.5m)
Latvia	0	–	–
Lithuania	0	–	–
Malta	0	–	–
Poland	0	–	–
Slovakia	0	–	–
Slovenia	0	–	–

6.7 Summary

The ten new EU Member States have implemented compensation arrangements at the level prescribed in the ICD, subject to transitional arrangements. Where transitional arrangements have been negotiated, these principally concern the compensation limit, which will be increased gradually to comply with the minimum statutory requirement of €20,000.

Most of the schemes have not experienced compensation events, but in the two countries where such events have occurred, there were a comparatively large number of failures. Although the individual failures have tended to be relatively small, there have been problems in processing claims and raising sufficient funds to pay the compensation.

The description of the compensation arrangements presented in this section is a high-level overview only. A more in-depth study would be required to analyse the principal risks for investors in the new Member States, and would provide a better understanding of the requirements for investor compensation arrangements in these countries, in terms of both operations and funding of the schemes.

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