

CENTRAL BANK OF IRELAND

Annual Report

Report of the Central Bank of Ireland
for the year ended 31 December 2002

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Central Bank of Ireland

13 June 2003

Dear Minister,

I have the honour to enclose herewith the Activities and Annual Accounts of the Central Bank of Ireland for the year ended 31 December 2002.

Yours faithfully,

John Hurley,
Governor

The Minister for Finance

Board of Directors



John Hurley
Governor



David Begg



Donal Byrne



Tom Considine



Gerard Danaher



Friedhelm Danz



Roy Donovan



Michael McBennett



Jim Nugent



Martin O'Donoghue



Brian Halpin
Secretary



Liam Barron
Director General

The Board of Directors and Management of the Bank at end-December 2002

John Hurley, <i>Governor</i>		
David Begg Gerard Danaher Michael McBennett	Donal Byrne Friedhelm Danz Jim Nugent	Tom Considine Roy Donovan Martin O'Donoghue
Liam Barron, <i>Director General</i>		
	Function	Head of Function
<i>Deputy Director General and Secretary</i> Brian Halpin	— <i>Financial Control</i> — <i>Financial Markets</i> — <i>Payments and Securities Settlements</i>	— Pat Treanor — Tony Grimes — Dermot Maher
<i>Assistant Director General</i> Vacant	— <i>European Monetary Affairs and International Relations</i>	— John O'Leary
<i>Assistant Director General</i> Louis O'Byrne	— <i>Currency Issue</i> — <i>Currency Production</i> — <i>Engineering</i>	— Hugh O'Donnell — Daragh Cronin — Declan O'Brien
<i>Assistant Director General</i> Michael Casey	— <i>Economic Analysis, Research and Publications</i> — <i>Monetary Policy and Financial Stability</i> — <i>Statistics</i>	— Tom O'Connell — Frank Browne — Peter Charleton
<i>Assistant Director General</i> Liam O'Reilly	— <i>Banking Supervision</i> — <i>Securities and Exchanges Supervision</i> — <i>IFSC and Funds Supervision</i> — <i>Retail Investments and Insurance Supervision</i> — <i>Regulatory Enforcement and Development</i>	— Adrian Byrne — Pat Neary — Michael Deasy — Con Horan — Mary O'Dea
<i>Assistant Director General</i> Gerry McGrath	— <i>Corporate Services</i> — <i>Human Resources and Planning</i> — <i>Information Systems</i>	— Brian Murphy — Jim Cummins — Pádraig Ó Conaill
	<i>Internal Audit</i>	— Mary Sheehy
Donal Cahalane is currently on secondment to the World Bank as Advisor.		

Contents

	Page		Page
Foreword	9	Management of External Reserves — continued	
Economic Overview	11	Gold Holdings	
Brollach	15	ECB Pooled Reserves	
Activities of the Central Bank of Ireland	17	Risk Management	
Introduction	17	Economics, Research and Statistics	49
Governance	17	Economic Intelligence and Forecasting	
Board Procedures		Inflation and Price Stability	
Codes of Conduct for Directors and Staff		Monetary Issues	
<i>Disclosure of Interests</i>		Econometric Modelling	
<i>Attendance at Board Meetings</i>		Public Finance	
<i>Board Papers</i>		Structural Issues	
<i>Ethics in Public Office Act & Standards</i>		Statistics: Monetary, Financial, Balance of	
<i>in Public Office Act</i>		Payments & Prudential Data	
Accountability		Payments and Settlements	52
Procurement Procedures and Disposal of		Real-Time Gross Settlement/TARGET	
Assets Guidelines		Credit Operations	
Bank Management		Securities	
Restructuring of the Bank		Payment Systems Policy and Regulation	
Internal Audit		<i>Objectives</i>	
European System of Central Banks		<i>Statutory Basis for Regulation</i>	
Monetary Policy	31	IRIS	
ECB Governing Council Decision-Making		Domestic Clearing Arrangements	
Monetary Policy Implementation		Settlement Accounts	
<i>Open Market Operations</i>		Electronic Money Projects	
<i>Standing Facilities</i>		Review of the Organisation of Retail	
<i>Minimum Reserves</i>		Payment Systems	
Measures to Improve the Efficiency of the		Payment Systems Developments	
Operational Framework		Securities Settlement Systems Developments	
Monetary Policy Operations		Consultation Papers	
<i>Main Refinancing Operations</i>		Currency Production and Issue	60
<i>Longer-Term Refinancing Operations</i>		Introduction	
<i>Fine-Tuning Operations</i>		Banknote Production, Issue and Processing	
<i>Standing Facilities</i>		Coin Production and Issue	
Minimum Reserves		Withdrawal of Irish Banknotes and Coin	
Eligible Collateral		Counterfeits	
Interbank Market Developments		Banknote Exchange	
Liquidity Forecasts		Supervision of Financial Institutions	61
Participation in Other International Activities	40	Introduction	
EU Economic and Financial Committee		Supervisory Practices	
EU Economic Policy Committee		Scope of the Bank's Supervisory Remit	
EU Committee on Monetary, Financial &		Policy Developments	
Balance of Payments Statistics		<i>Capital Review</i>	
International Monetary Fund		<i>Prevention of Money Laundering</i>	
Management of External Reserves	43	<i>Auditing and Accounting-Related Issues</i>	
Bank's Official Reserves		<i>Client Money Rules</i>	
Portfolio Restructuring in EMU		<i>Financial Stability</i>	
		<i>Legislation</i>	
		Consumer Protection	
		<i>Registers of Authorised Investment Business</i>	
		<i>Firms</i>	

	Page		Page
Supervision of Financial Institutions — continued		Management and Support Services	79
<i>Unauthorised Activities and Complaints</i>		Human Resources	
<i>Foreign Firms Providing Services to Irish Clients</i>		<i>Remuneration Policies</i>	
<i>The Bank's Advice to Consumers</i>		<i>Training and Development</i>	
<i>Deposit Protection</i>		<i>Equal Employment Opportunities</i>	
<i>Investor Compensation</i>		<i>Employment of People with Disabilities</i>	
Supervision of Credit Institutions		<i>Work/Life Balance</i>	
<i>Inspections and Reviews</i>		<i>Safety, Health and Welfare at Work Act, 1989</i>	
<i>Licence Changes</i>		<i>Technical Assistance</i>	
<i>Credit Growth</i>		<i>Strategic Planning and Organisation Structure</i>	
Supervision of Non-Credit Institutions		Media and External Communications	
<i>Collective Investment Schemes</i>		Legal Services	
<i>Exchanges, Stockbrokers and Investment Firms</i>		Information Systems	
<i>Retail Intermediaries</i>			
<i>Authorisation/Registration of Insurance Intermediaries</i>		Financial Operations	85
<i>Authorisations and Revocations of Firms</i>		Accounting Policies	
<i>Approved Professional Bodies</i>		Auditing and Reporting Standards	
International Dimension		Sharing of Monetary Income	
<i>International Committees</i>		Prompt Payment of Accounts	
<i>Memoranda of Understanding</i>		Financial Results	
<i>Bilateral Meetings with Regulatory Authorities</i>		Balance Sheet Developments	
		Redemption of Irish Banknotes	
		Proceeds of Euro Coin	
		Statement of Accounts	91
		Financial Stability Report	121
		Dr. T.K. Whitaker — Some Reflections	171
		A Chronology of Main Developments, 1992–	173
		Appendices	195

Abbreviations

BIS	Bank for International Settlements
CBFSAI	Central Bank and Financial Services Authority of Ireland
CESR	Committee of European Securities Regulators
ECB	European Central Bank
EEA	European Economic Area
EMU	Economic and Monetary Union
EONIA	Euro Overnight Index Average
ESCB	European System of Central Banks
EU	European Union
FATF	Financial Action Task Force
HICP	Harmonised Index of Consumer Prices
IFSRA	Irish Financial Services Regulatory Authority
IMF	International Monetary Fund
IOSCO	International Organisation of Securities Commissions
IRIS	Irish Real-time Interbank Settlement
LTROs	Longer-Term Refinancing Operations
MFIs	Monetary Financial Institutions
MROs	Main Refinancing Operations
MUFAs	Monetary Union Financial Accounts
NCBs	National Central Banks
OECD	Organisation for Economic Cooperation and Development
Repos	repurchase agreements
RTGS	Real-Time Gross Settlement
TARGET	Trans-European Automated Real-time Gross settlement Express Transfer
UCITs	Undertakings for Collective Investments in Transferable Securities

Foreword



The international background for the Irish economy in 2002 has been difficult and there are few signs that the world economy will achieve its potential in the near future.

Underlying economic growth in Ireland has been weak with real GNP growing a little over $\frac{1}{2}$ per cent in 2002. The Bank's most recently published forecast for 2003 represents some improvement in outlook. Slack domestic as well as foreign demand are responsible for this subdued performance.

Inflation is slow to abate and, combined with a stronger euro, has resulted in a significant loss of competitiveness. This will have an adverse effect on Irish exports, especially in the labour-intensive traditional sectors of the economy. We need to continually bear in mind that since entry to EMU, we are part of a system where the European Central Bank is determined to keep inflation close to 2 per cent. Therefore, the achievement of such an inflation rate must be a key element of economic policy.

The Governing Council of the ECB pursued its normal task of formulating and implementing monetary policy with a view to maintaining price stability. It also made a proposal on the governance and policy-making in the ECB in the context of an expanded euro area after enlargement.

For the Bank, the year 2002 was one of exceptional change and new challenges. Having implemented all of the major changes associated with EMU membership, including the changeover to euro notes and coin, we commenced work on the fundamental restructuring needed to create the Central Bank and Financial Services Authority of Ireland.

Work arising from the euro changeover continued at a high intensity level throughout 2002. The large quantities of Irish banknotes and coins had to be processed and authenticated prior to destruction. The production of new banknotes and particularly new coins continued at a high level in 2002.

We had a successful year in the management of the Bank's investment portfolio of €8.4 billion which yielded a rate of return of 5.47 per cent. This return was a little above that on the benchmark portfolio.

The Bank contributed to the maintenance of financial stability at firm, sectoral and macro level. It maintained very close contact

with financial institutions involved in lending to the property sector. The substantial growth in lending for property at a time when the property market is tending to slow is a cause for concern. I wrote to the Chairpersons of all lending institutions some months ago to remind them of the need to maintain high lending standards in relation to residential and commercial property. More recently, we have recommenced on-site inspections of lending procedures.

The Government's decision to establish the Irish Financial Services Regulatory Authority was passed into law on 1 May 2003. We worked closely throughout the implementation phase with the Chairman and the Interim Board to ensure a smooth transition to the new arrangements.

The principal task of the new Financial Regulator is the regulation of all financial institutions in Ireland. This involves integrating previous responsibilities of the Central Bank and of the Department of Enterprise, Trade and Employment, the Office of the Director of Consumer Affairs and the Registrar of Friendly Societies. In line with the legislation there is an enhanced focus on consumer protection.

A functional relationship will exist between the prudential area of the Financial Regulator and the Central Bank with regard to overall financial stability. A detailed article on financial stability appears in this Annual Report.

I would like to use this opportunity to thank the members of the Central Bank Board and Brian Patterson and the Interim Board for their leadership in restructuring of the Central Bank and the launch of the new Financial Services Regulator.

This year is the 60th Anniversary of the Central Bank. This Report contains a ten-year update of the main activities undertaken by the Bank since its 50th Anniversary.

At my invitation, Dr T K Whitaker was kind enough to submit some personal reflections on Ireland over the past half century.

Finally, I wish to express my sincere thanks to all the staff of the Bank for their contribution in what was a very challenging and successful year.

John Hurley,
Governor.

Economic Overview

In the early part of 2002, there were some signs of an incipient recovery in the major economic regions of the world. This followed a period of weak economic growth from about the middle of the year 2000. From this vantage point, the recovery in early 2002 seems to have occurred in response to the end of a sharp rundown in inventories and, therefore, called for something more persistent to sustain it. While, as the OECD has pointed out, an uneven and hesitant pattern often characterises the early phase of a recovery, there was a particularly sharp fall in industrial countries' equity markets between the end of the first and third quarter last year, with equity indices down by around one-fifth. This suggests that economic and financial fundamentals had not been fully restored, and that equity prices were still too high. A further feature of the current downphase is the overhang of excess capital, partly related to earlier over-investment by the Information, Communications and Technology (ICT) sector. Capacity utilisation rates are significantly below their average levels for the past decade or so, particularly in the US and Japan, although the shortfall is much less in the EU. A number of other factors contributed to global economic weakness – these include the legacy of uncertainty arising from various regional financial crises and the risk of contagion from these, the negative effect that corporate governance failures and accounting scandals had on investor sentiment, and a general tendency towards more risk aversion.

In this rather unfavourable environment, rising geopolitical tensions towards the latter part of 2002, served to sap business and consumer confidence, further weaken equity prices and push up oil prices. In the event, the conflict in Iraq proved to be relatively short-lived, although there remains considerable uncertainty regarding post-war arrangements. Early financial market reactions have been favourable. While this is a positive development, it will take some time for the more fundamental factors to be assessed. It is, therefore, premature to form a judgement as to whether the removal of the uncertainty associated with the Iraqi War will revive business and consumer confidence and lead to the higher investment and consumer expenditure needed to revive global economic growth.

The stance of macroeconomic policy internationally has been supportive of demand, for some time. Interest rates are near historic low levels on both sides of the Atlantic. Fiscal policy is also supportive of a recovery of demand growth. In the EU, this has taken the form of permitting the automatic stabilisers to

operate, while in the US discretionary fiscal policy actions have been taken to maintain demand. However, the scope for fiscal policy to act as a stabilisation mechanism is limited in many countries since the opportunity was not used in the period of strong economic growth up to 2001 to reduce structural fiscal deficits.

Last year the euro appreciated by nearly 19 per cent against the US dollar and by nearly 7 per cent against sterling with a further strengthening through the first four months of this year. An important factor behind the fall in the dollar has been the very large current external deficit of the US — not far off 5 per cent of GDP — and the resulting need for matching inflows. The synchronicity of the economic slowdown across the world has made it difficult to make inroads into the US deficit. In a world of flexible exchange rates and large capital flows, wide swings in exchange rates may occur in response to difficult cyclical positions, prospective growth rates and macroeconomic policy stances. While these movements can be disruptive to trade, they should not be unexpected in the modern world.

Ireland's very high dependence on external trade and foreign direct investment has meant that the deterioration of the external economic environment has been felt throughout the economy. It was clear in any event that infrastructural pressures and labour market tightness were soon going to reduce economic growth from very high rates — $8\frac{1}{2}$ per cent growth in GNP between 1994 and 2000 — to a more sustainable growth rate. However, the speed of the deceleration in GNP growth was much faster, and its extent — from $10\frac{3}{4}$ per cent in 2000 to marginally over $\frac{1}{2}$ per cent last year — was greater than expected. The underlying performance of the economy last year, however, as reflected in consumption spending and in the output of the broad services sector, was somewhat better than that indicated by the overall growth rate. The Bank's most recently published forecast of $1\frac{3}{4}$ per cent for 2003 represents some improvement in outlook.

Most components of demand exhibited sharply reduced growth last year. Exports of goods and services last year increased by $4\frac{1}{4}$ per cent, about one-fifth of the increase recorded only two years previously. Merchandise exports increased by a very modest $1\frac{1}{2}$ per cent, similar to the increase of the OECD area as a whole. However, there was an uneven performance across sectors in that the broad chemicals/pharmaceuticals sector saw its exports increase substantially with exports actually falling for all other sectors combined. Investment spending recorded only a marginal increase with a rise in building and construction activity offsetting a fall in machinery and equipment spending. Consumer spending, which amounts to about 60 per cent of GNP, also showed a marked deceleration in growth. Lower wage increases and more uncertain labour market prospects led to a decline in

consumer confidence and a rise in precautionary savings with the result that consumer spending increased by only 2½ per cent. The only demand component registering substantial growth was public net current spending, which increased by 8¼ per cent last year.

The stance of macroeconomic policy last year continued to be supportive of economic activity in Ireland. The main ECB lending rate was 3¼ per cent until last December when it was reduced by ½ percentage point. This was followed by a further ¼ point reduction in early March 2003. These reductions occurred in the context of weak growth and low prospective inflation in the euro area. Although the euro area is a relatively closed economy, this monetary policy easing is somewhat diluted by the appreciation of the euro during the year. There was a particularly sharp rise against the US dollar — about 19 per cent, as indicated earlier, — with some further increase experienced through the first quarter of 2003. From the perspective of Ireland, the nominal trade-weighted exchange rate appreciated by 5½ per cent. The increase in the real exchange rate was close to 7½ per cent, reflecting Ireland's higher inflation rate compared with its trading partners. This exchange rate appreciation, as indicated, served to weaken the thrust of monetary policy as signalled by interest rates.

So far as fiscal policy is concerned, the commitment to limit the increase in public spending to 7 per cent and to hold the General Government deficit to 0.7 per cent of GDP is to be welcomed. Adherence to this target should help to restrain inflation and help competitiveness.

Inflation in Ireland last year continued to be worryingly high. The Harmonised Index of Consumer Prices accelerated to 4.7 per cent last year from 4 per cent in 2001. By contrast, inflation eased back in the euro area as a whole from 2.4 per cent to 2.2 per cent. Services continued to be the main problem area with services inflation picking up from 6 per cent in 2001 to 7.6 per cent last year. High services sector inflation has for some time reflected strong domestic demand and, related to this, high wage increases. A significant factor in the pick-up in services inflation last year was a range of large increases in administered prices which had been restrained for a period. Abstracting from this, underlying services sector inflation fell somewhat. Nominal wage developments mirrored this pattern and there was a slowdown in wage increases through 2002. Average non-agricultural earnings are now estimated to have increased by about 6¼ per cent last year, well down on the 9¼ per cent increase in 2001. The sharp reduction in demand growth and a further deceleration in wage inflation point to reduced inflationary pressures this year. However, the forecast (HICP) inflation rate of 4 per cent in 2003 will still be more than twice that of the

euro area. In this context the Bank has noted in previous Bulletins that the average price level in Ireland is now some 12 percentage points above the average price level in the euro area.

The combination of relatively high inflation here and the appreciation of the euro has meant a sharp worsening of competitiveness *vis-à-vis* non-euro area countries, in particular the US and UK. A mitigating factor is that the euro had been at an abnormally low level for some time, thereby conferring substantial competitiveness benefits over a protracted period. However, a concern for competitiveness going forward is the potential impact of any worsening of the US current account deficit on the dollar/euro relationship.

One further aspect of our inflation problem has been the protracted rise in housing and commercial property prices until recently, supported as it was by substantial increases in lending. The Bank has been warning about the risks in this area for some time for both borrowers and lenders. The property market has slowed recently with the weakening in economic growth. With modest economic growth in prospect, there is not likely to be a substantial change in this picture for some time.

The limit of a 7 per cent increase on public expenditure, if adhered to, together with reduced demand growth and slower wage increases this year should be helpful in containing inflation. In the current difficult global environment it is more than usually important that we continue to pursue prudent policies, especially those bearing on inflation, competitiveness and employment.

Brollach

Bhí geilleagar na hÉireann ag feidhmiú i dtimpeallacht idirnáisiúnta dheacair i 2002 agus ní dócha go gcomhlíonfaidh an geilleagar domhanda a acmhainneacht gan ró-mhoill.

Bhí an bunfhás eacnamaíochta lag in Éirinn — ní raibh ach fás de thimpeall $\frac{1}{2}$ faoin gcéad sa bhfor-OTN i 2002 agus níltear ag súil le mórán feabhais sa bhliain 2003. Éileamh marbhánta intíre agus coigríche is cúis leis an bhfeidhmiú maolaithe seo.

Toisc nach bhfuil an boilsciú ag laghdú ach go malltriallach agus go bhfuil an euro níos láidre, tá cailliúint shuaithinseach san iomaíochas. Beidh drochthionchar aige seo ar onnmhairí na hÉireann go háirithe in earnálacha dlúthfhostaíochta traidisiúnta an gheilleagair. Cuimhnímís i gcónaí go bhfuilimid páirteach i gcóras, ó chuamar isteach san AEA, ina bhfuil sé de rún daingean ag an mBanc Ceannais Eorpach an boilsciú a choinneáil gar do 2 faoin gcéad. Dá bhrí sin, is gá go mbeidh sé mar aidhm bhunúsach ag an mbeartas eacnamaíochta ráta boilscithe de 2 faoin gcéad a ghnóthú.

Chuir Comhairle Rialaithe an BCE dlús lena gnáthchúram an beartas airgeadaíochta a fhoirmiú agus a chur i bhfeidhm d'fhonn cobhsaíocht phraghsanna a chothabháil. Rinne sí moladh freisin faoi rialachas agus ceapadh beartais don chor a bheidh ann nuair a leathnófar limistéar an euro i ndiaidh méadaithe.

Bhí ar an mBanc aghaidh a thabhairt ar athruithe neamhghnácha agus ar dhúshláin nua i 2002. Tar éis dúinn na mórathruithe go léir a bhain le comhaltas an AEA a chur i bhfeidhm maraon leis an trasdul chuig nótaí agus boinn an euro, thosaíomar ag obair ar an athchóiriú bunúsach a bhí riachtanach chun an Banc Ceannais agus Údarás Seirbhísí Airgeadais na hÉireann a bhunú.

Leanadh leis an dianobair a bhain leis an trasdul chuig an euro i rith 2002. Bhí orainn lear mór de bhancnótaí is boinn na hÉireann a phróiseáil agus a fhíordheimhniú sular scriosadh iad. Leanadh freisin le diantáirgeadh bancnótaí agus go háirthe boinn nua i rith 2002.

D'éirigh go maith linn i rith na bliana maidir le bainistíocht phunainn infheistíochta an Bhainc, €8.4 billiún, a thug ráta fáltais de 5.47 faoin gcéad. Bhí an ráta seo beagáinín níos airde ná an ráta fáltais ón bpunainn tagartha.

Chuidigh an Banc chun cobhsaíocht airgeadais a chothabháil i ngnólachtaí, sna hearnálacha agus ag an maicre-leibhéal. Bhí sé de shíor i ndlúththeagmháil leis na hinstiúidí airgeadais a thugann iasachtaí d'earnáil na maoine. Cúis imní í go bhfuil fás mór in iasachtaí le haghaidh maoine nuair atá comhartha ann go bhfuil margadh na maoine ag maoladh. Scríobh mé chuig Cathaoirligh na n-instiúidí iasachtóireachta cúpla mí ó shin ag cur i gcuimhne dóibh gur gá cloí le hardchaighdeáin maidir le hiasachtaí le haghaidh maoine cónaithe agus maoine tráchtála. Le gairid, atosáiomar ar iniúchadh ar an láthair a dhéanamh ar nósanna imeachta iasachtóireachta.

Ritheadh dlí ar 1 Bealtaine 2003 de chinneadh an Rialtais Údarás Rialála Seirbhísí Airgeadais na hÉireann a bhunú. D'oibríomar i ndlúthchomhar leis an gCathaoirleach agus leis an mBord Idirthréimhseach san tréimhse feidhmiúcháin chun an t-athrú go dtí na socruithe nua a dhéanamh go seolta.

Beidh sé de phríomhchúram ar an Údarás Rialála nua instiúidí airgeadais uile na hÉireann a rialú. Séard atá i gceist anseo ná na freagrachtaí a bhí go dtí seo ag an mBanc Ceannais, ag an Roinn Fiontair, Tráchtála agus Fostaíochta, ag Oifig an Stiúrthóra Gnóthaí Tomhaltóirí agus ag Cláraitheoir na gCara-Chumann a chomhtháthú. Faoi réir ag an reachtaíocht tá béim níos mó á cur ar chosaint an tomhaltóra.

Beidh gaolmhaireacht fheidhmiúil idir raon stuamachta an Údaráis Rialála agus an Bhainc Ceannais maidir le cobhsaíocht fhoriomlán airgeadais. Tá alt mionchruinn ar chobhsaíocht airgeadais san Tuarascáil Bhliantúil seo.

Ba mhaith liom breith ar an bhfaill seo chun buíochas a ghabháil le Bord an Bhainc Ceannais agus le Brian Patterson agus leis an mBord Idirthréimhseach as a gceannaireacht le linn athchóirithe an Bhainc Ceannais agus tionscnaimh an Údaráis Rialála nua.

Bunaíodh an Banc Ceannais seasca bliain ó shin. Tá tuairisc chun dáta ar phríomhghníomhaíochtaí an Bhainc san tréimhse deich mbliana ó chomóradh cothrom caoga bliain lae a bhunaithe. Ba chineálta ón Dochtúr T K Whittaker é glacadh le cuireadh uaimse a athmhachnamh pearsanta a dhéanamh ar an leathchéad bliain atá thart.

Mar chríoch, ba mhaith liom buíochas ó chroí a ghabháil le comhaltaí uile d'fhoireann an Bhainc as a gcion a bheith déanta acu i rith na bliana — bliain a bhí an-dúshlánach ach an-rathúil.

Activities of the Central Bank of Ireland

Introduction

In accordance with Section 20 of the *Central Bank Act, 1989*, the Bank is required to prepare and send to the Minister for Finance, within six months of the end of every year, a report of its activities during the previous year. The report is subsequently laid before each House of the Oireachtas. This chapter of the Annual Report describes the activities of the Central Bank of Ireland for the year 2002.

Reporting Requirement

The structure of the chapter begins with an account of the governance and management of the Bank. An outline of the Bank's role in the formulation and implementation of monetary policy for the euro area and the various areas that support monetary policy are then described. The report then focuses on the Bank's supervisory activities and the preparations for the restructuring of the Bank as the Central Bank and Financial Services Authority of Ireland. The chapter ends with a review of management and support services for the Bank as a whole.

Structure of Report

Governance

The Central Bank and Financial Services Authority of Ireland Act, 2003, implies significant structural changes of a corporate governance nature for the Bank. This issue is dealt with separately under the heading ‘ ‘Restructuring of the Bank’.

The Bank is a statutory body established by the *Central Bank Act, 1942*, and regulated by that Act as amended by subsequent Acts passed in 1961, 1964, 1971, 1989, 1997 and 1998.

The statutory objectives of the Bank, as set out in Section 6 of the *Central Bank Act, 1998*, are as follows:

“6. (1) In discharging its functions as a part of the European System of Central Banks, the primary objective of the Bank shall be to maintain price stability, and without prejudice to the generality of the aforesaid, the Bank may perform such functions and exercise such powers and carry out such duties as are conferred or imposed on it by the Treaty [on European Union 1992 – the Maastricht Treaty] the Statute [of the European System of Central Banks and the European Central Bank], or any Act of the Oireachtas or instrument made thereunder.

Objectives

(2) In addition to the objective referred to in subsection (1) of this section, the objectives of the Bank shall include contributing to the stability of the financial system, promoting the efficient and effective operation of payment and settlement systems and discharging such other functions, duties and powers as are conferred or imposed on it by the Treaty, the Statute or any Act of the Oireachtas or instrument made thereunder.”

Responsibility for the management of the Bank is vested in the Board which comprises the Governor and nine non-executive Directors. The sole shareholder is the Minister for Finance.

Governor

The President, on the advice of the Government, appointed Mr. John Hurley as Governor with effect from 11 March 2002, in succession to Mr. Maurice O’Connell who had accepted reappointment for a second term pending the completion of the changeover to the euro currency. The Governor is, ex-officio, a member of the Governing Council of the European Central Bank (ECB). Since the start of Stage Three of Economic and Monetary Union on 1 January 1999, the Governor has sole authority and responsibility for the performance by the Bank of European System of Central Banks (ESCB) functions and duties and the exercise of ESCB powers. All other functions, duties and powers of the Bank are vested in the Board. Salary payable to the Governors for service during 2002 totalled €279,612. Superannuation benefits attaching to the Governor’s salary are in accordance with the terms of the Civil Service Superannuation Scheme. The Governor was also provided with the use of a car.

Directors

Directors are appointed by the Minister for Finance for renewable fixed terms of five years except in the case of service Director(s) who may be removed by the Minister at any time. Two of the Directors may be service Directors (i.e. in the permanent service of the State), but the practice of successive Ministers for Finance has been to appoint one. The Governor and Board have no role in the nomination or appointment of Directors. Total fees due to Directors of the Bank in 2002 amounted to €99,727.

Members of the Board, as at 31 December 2002, were:

Name	Occupation	Date first Appointed
John Hurley	Governor	11.03.02
David Begg	General Secretary, Irish Congress of Trade Unions	12.05.95
Donal Byrne	Company Chairman (non-executive)	28.06.94
Tom Considine	Secretary General, Department of Finance	11.03.02
Gerard Danaher	Senior Counsel	15.10.98
Friedhelm Danz	Company Chairman	01.02.96
Roy Donovan	Former Member of the Economic & Social Comm. of the EU	01.12.89
Michael McBennett	Farmer	22.02.02
Jim Nugent	Company Chairman	12.02.98
Martin O'Donoghue	University Professor	01.07.98

Board Procedures

The Governor is Chairman of the Board which meets on a monthly basis with the exception of August. By law, a quorum is four and the Governor may exercise a casting vote.

Chairman of the Board

Agendas and Board papers are approved by the Governor for circulation to the Directors one week in advance of meetings. Additional Board meetings may be called by the Governor at short notice either on his own initiative or at the request of any two Directors. Minutes of all Board meetings are kept by the Secretary of the Bank.

The agenda for meetings typically includes:

- (i) Reports on monetary and financial developments;
- (ii) Reports on various issues relating to the Irish economy, the European economy and the international economy;
- (iii) Regulatory issues requiring decision by the Board or for the purpose of keeping the Board fully informed of developments at a general policy level or relating to specific institutions;
- (iv) Management of the official external reserves;
- (v) Substantial financial contracts to be placed by the Bank with suppliers;
- (vi) General management and budgetary issues.

Powers delegated to Governor

The Governor is the only executive member of the Board. As provided for in the *Central Bank Act, 1942*, it is the Board's practice to generally delegate powers to the Governor for the exercise and performance of all functions, powers and duties of the Bank with the exception of those powers which it would either not be possible or appropriate to delegate. These include provisions relating to the Governor's position or which are specified to be Board responsibilities or which require the forming of an opinion by the Bank.

Sub-Committees

There are three sub-committees of the Board as follows:

- The Audit Committee
- The Remuneration and Budget Committee
- The Investments Committee

Board regulations detail the terms of reference of each sub-committee and membership in each case comprises three Directors, of whom one is appointed as Chairman. The Secretary of the Bank, or a nominee, minutes all meetings of the sub-committees and, when approved, these minutes are circulated to the full Board.

The members of the sub-committees, as at 31 December 2002, were as follows:

Audit Committee	Investments Committee	Remuneration and Budget Committee
David Begg (Chair)	Friedhelm Danz (Chair)	Roy Donovan (Chair)
Roy Donovan	Gerard Danaher	Donal Byrne
Martin O'Donoghue	Jim Nugent	Michael McBennett

Codes of Conduct for Directors and Staff

Codes of Conduct

The Governor is prohibited by law from holding shares in or being a Director of any bank or other credit institution, financial institution or insurance undertaking.

Disclosure of Interests

A Code of Conduct for disclosure of interests by members of the Board has been in operation since 23 April 1992. This Code was updated during 2002 in accordance with the Government's 2001 Code of Practice for the Governance of State Bodies, and was adopted by the Board on 19 September 2002. The Code contains the following requirements:

Disclosure of Interests

1. On appointment to the Board, a member shall furnish the Secretary of the Bank with written notice of all his or her business interests including, but not limited to, his or her

employment, shareholdings (not quantified, but above €12,500 in value or more than 5 per cent of the issued share capital of a company), professional relationships, etc.

2. Any interests of a Board member's family or of a person or body connected with him or her, of which he or she should reasonably be aware, and which could give rise to a conflict of interest, or which could materially influence him or her in relation to the performance of his or her functions as a member of the Board, should also be disclosed. (Persons or bodies connected with a Board member include a spouse, parent, sibling, child or step-child, a body corporate with which the member is associated, a person acting as the trustee of any trust, the beneficiaries of which include a Board member or persons set out above, or a person acting as a partner of a Board member or of any person or body set out above who is connected with a member.)
3. Any changes in his or her interests of which a Board member becomes aware during the course of the year which could give rise to a conflict of interest, or which could materially influence him or her in relation to his or her functions as a member of the Board, should also be disclosed to the Secretary of the Bank as soon as possible.
4. Details of the above interests shall be kept by the Secretary of the Bank in a special confidential register to be updated at the beginning of each year; in respect of any disclosures under paragraph 3, it should be updated as and when any such interests are disclosed. Only the Governor, Director General and Secretary of the Bank shall have access to the register. If a Board member has any doubt as to whether this code requires the disclosure of an interest, he or she should consult the Governor or the Secretary of the Bank.

Attendance at Board Meetings

5. A Director should consult the Governor or, in his absence, the Secretary of the Bank, about absenting himself or herself or disclosing his or her interest and any other sources of conflict that he or she is aware of to the other Board members, when the Board is to deliberate or decide on matters in which a Director has an interest or connection.
6. A Board member shall disclose in writing to a meeting of the Board
 - (i) details relating to any direct or indirect pecuniary interests of his or hers; and
 - (ii) if he or she, or a connected person, has a material interest of which he or she has knowledge;

relating to any matter being considered or about to be considered at a meeting of the Board, where such interest

could give rise to a conflict with the proper performance of a Board member's duties in relation to the consideration of that matter. Such disclosure covers directorships, or partnerships in a specified company or body, partnerships, or employment by, a specified person, other interests relating to a specified company or other body, or to a specified person.

7. Once such a disclosure has been made, the Board member may not be present during any deliberation of the Board with respect to that matter, or take part in any decision of the Board with respect to the matter, unless the Board otherwise determines in the absence of the member concerned. A disclosure is not required merely because a Board member is a contributor to a retirement benefits scheme. Nor would a disclosure normally be required in relation to a Board member's non-preferential banking relationships, insurance or managed investment funds scheme in respect of which the member has no operational involvement.

Board Papers

8. Board papers relating to a matter in respect of which a Board member has disclosed an interest shall not be available to that member, subject to the discretion of the Board. (Should the Board member receive such Board papers, they should be returned to the Secretary of the Bank at the earliest possible opportunity.)
9. Details of any disclosure under paragraph 6 above shall be kept by the Secretary of the Bank in a register, which would be available for inspection by the Governor, Directors and the Director General.

Ethics in Public Office Act, 1995 and Standards in Public Office Act, 2001

10. Members of the Board also submit annual statements of interests to the Public Offices Commission and to the Secretary of the Bank under the *Ethics in Public Office Act, 1995* and the *Standards in Public Office Act, 2001*. The statements are requested by the Commission for completion in January, in respect of the preceding year.

On 28 November 2002, the Board of Directors adopted a Code of Conduct for Board Members to record the standards of conduct and integrity expected of each member in the performance of his or her functions as a member of the Board of the Bank. The Code of Conduct consists of the following requirements:

Each Board member will

1. acknowledge the duty of all to conform to the highest standards of business and public service ethics;
2. fulfil all regulatory and statutory obligations as a member of the Board of the Bank;
3. disclose details of business or other interests which could affect his or her independence in accordance with the terms of the Code of Conduct for the Disclosure of Interests by Board Members adopted by the Board at its meeting on 19 September 2002;
4. avoid the use of the Bank's resources or time for personal gain or for the benefit of persons/organisations unconnected with the Bank or its activities;
5. not accept gifts, hospitality, preferential treatment or benefits which might affect or appear to affect his or her ability to make an independent judgement on business transactions;
6. use his or her reasonable endeavours to attend all Board meetings;
7. subject to compliance with the statutory confidentiality provisions governing the Bank, support the provision of public access to information relating to the Bank's activities in a way that is open and that enhances its accountability to the general public;
8. ensure that the Bank has in place an effective system of internal controls including financial controls, operational controls, risk management and fraud prevention;
9. ensure that procedures are in place so that the Bank's accounts/reports accurately reflect the Bank's business performance and are not misleading;
10. ensure that policies are in place to provide equality of opportunity in employment and promotion in the Bank;
11. place the highest priority on promoting and preserving the health and safety of employees, community concerns and minimising any detrimental impact of the Bank on the environment.

The Ethics in Public Office Regulations, 1997, have prescribed membership of the Board of the Bank as a designated directorship for purposes of the *Ethics in Public Office Act, 1995* and the *Standards in Public Office Act, 2001*.

Members of the Board submit annual statements of interests to the Secretary of the Bank and to the Public Offices Commission. The Regulations also prescribe the positions of Director General in the Bank and executive positions at or above the grade of manager as designated positions. Accordingly, the Director General and the Secretary of the Bank submit annual statements of interests to the Governor and the other holders of designated positions submit annual statements of interests to the Secretary of the Bank.

All members of the Board and staff of the Bank are subject to the provisions of the *Prevention of Corruption Acts, 1906 and 1916*. The Bank has a written code of conduct for staff.

Accountability

Reports and Accounts

As required by the *Central Bank Act, 1989*, the Bank submits a report on its proceedings to the Minister for Finance every year and this report, together with the accounts of the Bank, which are audited by the Comptroller and Auditor General, is laid before each House of the Oireachtas and published. The accounts of the Bank are also audited by an independent commercial firm of auditors as required by the Statute of the ESCB.

Within the terms of the *Central Bank Act, 1998*, the Governor meets with the Minister from time to time to keep him informed regarding the Bank's performance of its statutory duties.

Subject to the requirements of the Maastricht Treaty and the confidentiality provisions imposed by law, the Governor appears before Joint Committees of the Oireachtas on request. This practice was put on an obligatory statutory basis in the *Central Bank Acts, 1997 and 1998*. The Governor was not required to appear before any Oireachtas Committees during 2002.

Procurement Procedures and Disposal of Assets Guidelines

Procurement Guidelines

The Bank adheres to the principles set out in the Code of Practice for the Governance of State Bodies in relation to procurement procedures and disposal of assets guidelines.

Bank Management

Management Board

The Director General is the senior member of Management reporting to the Governor and, in that capacity, chairs meetings of the Management Board of the Bank.

The Management Board co-ordinates the planning, budgeting, resourcing and management review processes of the Bank. The meetings of the Management Board are held on a monthly basis and are minuted. Members of the Management Board also attend informal weekly meetings with the Governor for briefing and consideration of current and anticipated issues. Briefing meetings are also held prior to each meeting of the Governing Council of the ECB.

Restructuring of the Bank

Under the *Central Bank and Financial Services Authority of Ireland Act, 2003*, the Bank has become the Central Bank and Financial Services Authority of Ireland (CBFSAI), and the Irish Financial Services Regulatory Authority (IFSRA) has been formally established as an autonomous Authority within the CBFSAI. IFSRA is now the single Regulatory Authority for the Financial Services Industry in Ireland including credit institutions, the securities industry and insurance. It covers both prudential regulation and consumer interests. A second Bill, dealing with various specific provisions such as the establishment of a Financial Services Ombudsman and the setting up of consumer and industry consultative panels, is expected to be published by summer 2003.

Restructuring

An Interim IFSRA Board under the chairmanship of Mr. Brian Patterson was established on 16 April 2002. Those appointed to the Interim Board by the Minister for Finance were:

Interim Board

Name	Occupation
Brian Patterson	Chairman
Liam O'Reilly	Chief Executive
Mary O'Dea	Consumer Director
Alan Ashe	Company Director
Friedhelm Danz	Company Chairman
Gerard Danaher	Senior Counsel
John Dunne	Chairman IDA Ireland
Jim Farrell	CEO National Development Finance Agency
Deirdre Purcell	Author
Dermot Quigley	Former Chairman Revenue Commissioners

Following open competition, and with the approval of the Minister for Finance, the Interim Board appointed Dr. Liam O'Reilly as its Chief Executive Officer designate on 18 November 2002, and Ms. Mary O'Dea as Consumer Director designate on 28 January 2003. On their appointment they became members of the Interim Board. The statutory posts of Registrar of Credit Unions and Secretary will be filled on a similar basis. Total fees paid to members of the Interim Board in 2002 amounted to €112,592.

Interim Board Appointments

Under the new legislation, the Board of the Bank (which currently comprises the Governor and nine non-executive Directors) will comprise the Governor, the Director General of the Bank, the Secretary General of the Department of Finance, the Chairperson of the Regulatory Authority, the Chief Executive of that Authority and seven other Directors appointed by the Minister, of whom four are to be members of the Regulatory Authority.

Composition of Board

Members of Interim IFSRA Board



Brian Patterson
Chairman



Liam O'Reilly



Mary O'Dea



Alan Ashe



Friedhelm Danz



Gerard Danaher



John Dunne



Jim Farrell



Deirdre Purcell



Dermot Quigley

Internal Audit

In the internal audit area, it is the practice to prepare a strategic work plan covering a three year horizon. Audit work undertaken in 2002 was generally in accordance with both the final stage of the function's strategic plan covering the three year period from 2000 to 2002 and with the audit plan for 2002 established by the ESCB Internal Auditors Committee (IAC). In November 2002, a strategic plan for the years 2003 to 2005 was prepared. However, given the evolving nature of the work at both local and ESCB level and the impending establishment of IFSRA, it is planned to conduct a mid-year review of the audit plan for 2003 and at end-year to review the remaining years of the strategic plan.

Internal Audit

The impact of ESCB related work has increased with the introduction of the IAC Audit Manual, which was endorsed by the ECB Governing Council in January 2002. The manual imposes mandatory practices on National Central Bank (NCB) internal auditors for carrying out ESCB audit work and imposes additional responsibilities in relation to audit planning and post audit evaluation. In conjunction with the Internal Audit functions of other ESCB central banks, the Internal Audit function undertook reviews of ESCB systems in operation in the Bank including euro banknote cross-border transportation, sorting and destruction, counterfeit monitoring, financial reporting for euro banknotes in circulation, Currency Information Systems, Statistics and TARGET. The Internal Audit function is represented on the IAC and its Audit Task Forces and reported to the committee on the outcome of the above audit assignments.

During 2002 the Internal Audit function formally reported to the Audit Committee of the Board on the outcome of local audits of the Bank's Engineering services, Government Securities operations, Project Management Procedures, Creditors Ledger, IFSC & Funds Supervision, Securities and Exchanges Supervision and Retail Investments and Insurance Supervision. Audit checks of the Bank's Vault and Treasury stocks were also carried out.

In carrying out its audit objectives and in the evaluation of future audit work, the internal audit process department will, in conjunction with its existing procedures, draw on the Operational Risk Management Framework which is currently being finalised within the Bank.

European System of Central Banks

The Bank is a member of the European System of Central Banks, established under the Maastricht Treaty and comprising the European Central Bank and the National Central Banks of the EU Member States.

ESCB Tasks

The Governor is a member of the Governing Council — the central decision-making body of the ECB — which comprises the Governors of the euro-area NCBs and the six members of the Executive Board, which in turn carries out the day-to-day operations of the ECB. The basic tasks set out in the Treaty are performed by the Eurosystem, that is, the ECB and the twelve euro-area NCBs. These tasks relate to monetary policy, foreign exchange operations, reserves management and promoting the operation of payment systems. The Eurosystem also has an important role to play in relation to prudential supervision and financial stability. The Governor, or in his absence, the Director General, has sole authority and responsibility for the performance of the tasks conferred on the Bank by the Treaty.

Governing Council

During 2002, the Governing Council continued to meet twice monthly. Monetary policy discussions now generally take place, and interest rate decisions are taken, at the first meeting of every month.

In carrying out the other basic tasks conferred on it by the Treaty, the Governing Council monitored the performance of the foreign reserves managed on its behalf by euro-area NCBs and reviewed the strategic benchmark portfolio. It also decided to change the timing of the minimum reserve maintenance period and to shorten the maturity of the main refinancing operations, in order to improve the operational framework for monetary policy. In October, the Governing Council reached a decision in relation to the next generation of the TARGET system, to be known as TARGET2 and to operate as a multi-platform system, consisting of both national components and a shared component.

In relation to its other functions, the Governing Council also agreed procedures relating to the monetary income allocation scheme in 2002 and subsequent years; completed a memorandum of understanding on high level principles of co-operation between banking supervisors and central banks of the EU in crisis management situations; authorised the ESCB publication of the audit policy and the disclosure of the audit manual to accession country central banks; and adopted a Regulation on the provision of monthly statistics on the holders of money market funds and a Guideline covering data needs for the compilation of Monetary Union Financial Accounts.

The Governing Council also made a formal recommendation to the Council of Ministers, with a view to maintaining efficiency in its decision-making process in the context of future expansion of the euro area consequent on EU enlargement; this envisages the eventual introduction of a system of rotation of voting rights,

while leaving unchanged the right of each member of the Governing Council to participate fully in its discussions.

The Governing Council is supported in its work by a range of committees, in which the Bank participates fully. The Director General is the chairperson of the ESCB Budget Committee, which reports directly to the Governing Council. The work of ESCB Committees during the past year included the following:

ESCB Committees

Accounting and Monetary Income Committee: agreement on the accounting treatment of national banknotes that ceased to be legal tender in 2002; review of the accounting techniques of the ESCB including comparisons with International Accounting Standards; and updating of the legal framework for accounting and financial reporting;

Banknote Committee: establishing a strategic stock of banknotes and monitoring developments in banknotes and cash handling, the incidence of euro banknote counterfeits and banknote production;

Banking Supervision Committee: further refinement of its macroprudential analysis, particularly in focusing on topical issues such as the implications of the failure of Enron; publication of its first annual report on structural issues in banking; initial investigation of the structural impact of the implementation of Basle II; and development of memoranda of understanding for (i) exchange of information between central credit registers and (ii) high level principles of cooperation between banking supervisors and central banks in crisis management situations.

Budget Committee: evaluation of budgetary plans and monitoring of budget expenditure of the ECB;

Cash Changeover Coordination Committee: monitoring the issue of euro banknotes and the withdrawal of the banknotes of the legacy currencies; coordinating NCB teleconferences on developments in the euro changeover and overseeing its closure. (The Committee's activities ceased at end-February 2002);

External Communications Committee: completion of the Euro 2002 Information Campaign on the introduction of euro notes and coin; preparation and issue of various ESCB and euro-related public information materials; and coordination of media relations of the ECB and the NCBs with a view to enhancing public understanding of monetary policy and related activities;

Information Technology Committee: implementation of a counterfeit monitoring system; expansion of the monetary and statistical database system; extension of the ESCB's secure e-mail system to the accession countries; and the implementation of a major upgrade to the system for open market tender operations;

Internal Auditors Committee: implementation of audit assignments in the main risk areas of the ESCB, including financial reporting procedures for euro banknotes, monetary policy operations, statistics, cross-border transportation, sorting and destruction of euro banknotes and TARGET;

International Relations Committee: keeping under review international economic, financial and monetary developments, with particular regard to their potential implications for the euro-area economy; preparation of Eurosystem positions on topical IMF issues, including access to IMF resources and aspects of private sector involvement in crisis resolution; and consideration of key issues relating to the accession process;

Legal Committee: Provision of legal input into ongoing reviews of the monetary policy implementation and statistics frameworks and of the list of assets eligible for use as collateral for monetary policy and intra-day credit; expansion of the legal framework for euro banknote production, reproduction and distribution; and, advising on legal changes required from accession countries, on the legal framework of the ECB and on legal matters relating to payment, securities and settlement systems;

Market Operations Committee: formulating measures to improve the monetary policy operational framework; conducting studies of the money and foreign exchange markets; assessing the implications of potential euro-area enlargement for the monetary policy operational framework; and introducing common standards for collateral management within the Eurosystem;

Monetary Policy Committee: review of the assumptions underlying the reference value of M3; preparation of the biannual economic forecasts and the public finance report for the euro area; and completion of two major projects, namely a report on financial structures in the euro area and the introduction of a bank lending survey for the euro area;

Payment and Settlement Systems Committee: continued consideration of the long-term strategy for the TARGET system; ongoing development of the framework for the oversight of payment systems generally; monitoring of developments in the area of retail payment systems (including cross-border developments); and joint work with the Committee of European Securities Regulators in the field of clearing and settlement;

Statistics Committee: development of the statistical framework of the Eurosystem, including two new ECB regulations on MFI balance sheet and interest rate data and updates of the ECB Guidelines on money and banking and balance of payments statistics, respectively; cooperation on statistical matters with the European Commission, with the IMF and with other international institutions; and preparations for statistical reporting by accession countries and pre-in countries.

Monetary Policy

ECB Governing Council Decision Making

Monetary policy in the euro area is determined by the Governing Council of the ECB (the Council), which, as indicated earlier, comprises the Governors of each of the participating members states' central banks (including the Governor of the Central Bank of Ireland) and the six members of the Executive Board.

The primary objective of monetary policy is the maintenance of price stability, defined as a year-on-year increase in the Harmonised Index of Consumer Prices (HICP) for the euro area of below 2 per cent. The Council has adopted a stability-oriented monetary policy strategy, which consists of two pillars. The first pillar assigns an important role to money. In this context, the Council has adopted a reference value for the annual growth rate of euro-area broad money stock (M3) and it monitors the actual growth of M3 relative to this value.

Objectives

An initial reference value of 4.5 per cent annual growth adopted in December 1998 has been reaffirmed by the Council in each year since then, most recently in December 2002. The value is derived on the basis of medium-term assumptions for trend or potential output growth (2 to 2.5 per cent), a trend decline in income velocity of M3 (0.5 to 1 per cent) and an inflation rate consistent with the Eurosystem's definition of price stability (1.5 per cent).

The reference value is a medium term concept and, accordingly, temporary deviations of M3 growth from the reference value do not necessarily have implications for future price developments. Consequently, as the Council has stressed, such deviations do not automatically require a policy response.

The second pillar is a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area as a whole. The latter is based on an examination of macroeconomic projections (including inflation projections) prepared by ECB and NCB staff and a wide range of indicators, including wages, the exchange rate, bond prices and the yield curve, measures of real activity, fiscal policy indicators, price and cost indices and business and consumer surveys.

Monetary Policy Strategy

In December President Duisenberg announced that the Governing Council had decided to undertake a major assessment and evaluation of the monetary policy strategy in the course of 2003. Also in December of last year, the Council decided on proposals for adjustments to its voting modalities to provide for expansion of the euro area in an enlarged European Union. It was proposed that, in order to maintain the Council's capacity for efficient and timely decision-making as its membership increases, the number of NCB Governors permitted to vote at Council meetings should be fixed at fifteen. It was also proposed that, when there are more than fifteen NCB Governors on the Council, voting rights should be exercised on the basis of a rotation system.

Governor Briefings

The Governor is fully briefed by Bank staff for all meetings of the Council. For monetary policy issues, the briefing includes an assessment under both pillars of the monetary policy strategy leading to a judgement on the appropriate interest rate stance for the euro area. Analysis is also provided relating to other monetary policy related matters addressed by the Council, including issues concerning the financial statistics of the Eurosystem and the implementation of monetary policy. In 2002 the Council considered issues relating to, for example, a review of monetary policy instruments and procedures, the collateral policy of the Eurosystem, the establishment of a bank lending survey for the euro area, the application of the minimum reserves regime, and monetary policy coordination between the euro area and the other EU countries.

Interest Rates

The ECB kept its key interest rates unchanged for most of 2002, believing them to be at a level appropriate for the maintenance of price stability over the medium term. This judgment was based on a comprehensive analysis of monetary, financial and economic developments in the euro area within the framework of the two-pillar monetary policy strategy. In December, however, the Governing Council of the ECB decided to reduce each of its key interest rates by 0.5 of a percentage point, bringing the main refinancing operations rate to 2.75 per cent, the marginal lending facility rate to 3.75 per cent and the deposit facility rate to 1.75 per cent. This decision reflected an assessment that inflationary pressures were easing and that downside risks to economic growth persisted. Retail interest rates in Ireland fell following the ECB's action. The average standard variable mortgage rate of all mortgage lenders in the Irish market was 4.23 per cent at end-December 2002 compared with 4.63 per cent a year earlier. The personal overdraft rate of the main clearing banks averaged 11.21 per cent at end-year, down from 11.4 per cent at the end of 2001. The clearing banks' prime rate, on which the lending rate for much commercial lending is based, was steady at just below 4 per cent for most of the year but fell to just over 3.5 per cent by end-December.

The Bank continued to monitor developments with respect to credit aggregates in Ireland. During 2002, the underlying annual rate of private-sector credit growth averaged 13 per cent, compared with 17.3 per cent in 2001. The annual growth rate slowed in the early months of the year — falling to a low of 10.5 per cent in April, the slowest rate for six years — but it gradually picked up thereafter. The acceleration in credit growth was driven by the strength of residential mortgage lending: almost two-thirds of the increase in private-sector credit in 2002 (excluding lending to non-bank IFSC entities) was attributable to mortgage credit growth. The annual rate of increase in residential mortgages (adjusted for securitisations) accelerated steadily over the course of the year, from just below 18 per cent in January to 23.1 per cent in December, the fastest rate of growth since January 2001. Non-mortgage credit growth, on the other hand, was rather weak last year. Excluding residential mortgages, the adjusted annual rate of private-sector credit growth averaged around 9 per cent in 2002, compared with 17 per cent in the previous year.

Credit Growth

Monetary Policy Implementation

The implementation of monetary policy in the euro area is conducted on a decentralised basis (i.e. by the individual NCBs). Within this framework, financial institutions in Dublin submit tenders for Main Refinancing Operations and Longer-Term Refinancing Operations direct to the Bank and allotments of liquidity (the amounts having been determined by the ECB) are carried out by the Bank and reflected in its balance sheet. Overnight standing deposit and lending facilities are also provided by the Bank on behalf of the Eurosystem, while the minimum reserve deposits of credit institutions in Ireland are also maintained at the Bank. At end 2002, Eurosystem financing by the Bank to counterparties in Ireland amounted to €11.2 billion compared with €13.2 billion at end-2001. The Bank also participates in foreign exchange intervention *vis-à-vis* the euro, as and when this arises.

Decentralised Structure

There is also a regular and comprehensive exchange of information between the ECB and NCBs. For example, the Bank forecasts the liquidity requirements of the domestic market and these forecasts, together with those of the other NCBs, are incorporated in the ECB's liquidity allotment decisions. Moreover, the views of domestic banks on current market developments are also transmitted to the ECB on a daily basis and, together with the views of the rest of the euro-area market, are taken into account in the ECB's management of the euro money market.

*Monetary Policy
Instruments*

The main monetary policy instruments used by the Eurosystem to manage liquidity in the money market are open market operations, standing facilities and minimum reserve requirements.

Open Market Operations

Open market operations can be divided into the following four categories:

- (i) *Main Refinancing Operations (MROs)* which are conducted by way of repurchase agreements (repos) on a tender basis with a weekly frequency and a maturity of two weeks. They are liquidity providing operations and are used for the bulk of refinancing to the financial sector.
- (ii) *Longer-Term Refinancing Operations (LTROs)* which are conducted by way of repos on a tender basis with a monthly frequency and a maturity of three months. They are also liquidity providing operations.
- (iii) *Fine-tuning operations* which are *ad hoc* operations that may be carried out in order to smooth the effects on interest rates of unexpected liquidity fluctuations. Fine-tuning operations can be conducted either on a bilateral basis (i.e. direct with individual counterparties) or on a tender basis. They can provide or absorb liquidity.
- (iv) *Structural operations* which may be carried out (on a regular or non-regular basis) whenever the ECB wishes to adjust the structural liquidity position of the money market. These operations can be liquidity providing or absorbing.

Standing Facilities

Two standing facilities are available to eligible counterparties on their own initiative subject to the fulfilment of certain operational access conditions:

- (i) The *marginal lending facility* which can be used by credit institutions to obtain overnight liquidity from the Bank against eligible collateral. The interest rate on the marginal lending facility normally provides a ceiling for the overnight market interest rate.
- (ii) The *deposit facility* which can be used by credit institutions to make overnight deposits with the Bank. The interest rate on the deposit facility normally provides a floor for the overnight market interest rate.

Minimum Reserves

Credit institutions in the euro area are required to hold deposits on account with the NCBs, called minimum or required reserves. The main function of the minimum reserves system is to stabilise money market interest rates by smoothing the effect of daily liquidity fluctuations. This is facilitated by the averaging provision, which allows institutions to draw on their minimum reserve holdings to meet transitory liquidity shortages provided that their average daily holdings meet their reserve requirement over the relevant period. A second function is the enlargement of the structural liquidity shortage, which increases the demand for central bank refinancing making it easier for the ECB to steer money-market interest rates. The minimum reserve requirement for each credit institution is calculated on the basis of selected liabilities (the reserve base). Balances in the minimum reserve account with the NCBs are remunerated at a rate which is an average of the main refinancing operations rate and thus close to market rates, although balances in excess of those required are not remunerated. Where an institution fails to meet its minimum reserve obligations, sanctions may be imposed by the ECB.

Measures to Improve the Efficiency of the Operational Framework

In the course of 2002 the Eurosystem undertook a comprehensive review of the monetary policy operational framework, and the following technical measures designed to improve its efficiency were identified: (i) the timing of the reserve maintenance period to be changed so that it would always start on the settlement day of the MRO following the Governing Council meeting at which the monthly assessment of the monetary policy stance was pre-scheduled; (ii) the maturity of the MROs to be shortened from two weeks to one week; and (iii) the LTRO to be suspended. The combination of the first two measures was intended to minimise the effect of expectations of interest rate changes on bidding behaviour during any particular maintenance period.

Market participants' views on these proposed measures were sought by way of public consultation. The public consultation was well received, and from the ECB's point of view it was felt that the consultation process produced valuable additional input with regard to the planned changes. Market opinion was generally supportive of introducing the first two measures with, however, many participants opposing the abolition of the LTRO, arguing that these operations continue to play a useful part in managing their liquidity needs. The Governing Council took these concerns into account in their deliberations and, in the event, announced on 23 January 2003 that it would not suspend

the LTRO but that it would implement the other two suggestions. Given the preparatory work required, these measures are scheduled to come into effect during the first quarter of 2004.

Monetary Policy Operations

The banking system in Ireland takes a disproportionately high share of funding in ECB operations, reflecting the importance of Dublin as a financial centre. Such lending represents a large part of the assets on the Central Bank's balance sheet.

Main Refinancing Operations

Refinancing

On average, the Eurosystem provided €67 billion each week through MROs. The latter continued to provide the bulk of the refinancing needs of the euro-area financial sector during the year, supplying 71 per cent of the total refinancing volume (MROs and LTROs combined). The share of refinancing provided by way of MROs to counterparties in Ireland increased significantly over the course of the year, thus bringing the balance of refinancing between MROs and LTROs of counterparties in Ireland more in line with that of the Eurosystem as a whole.

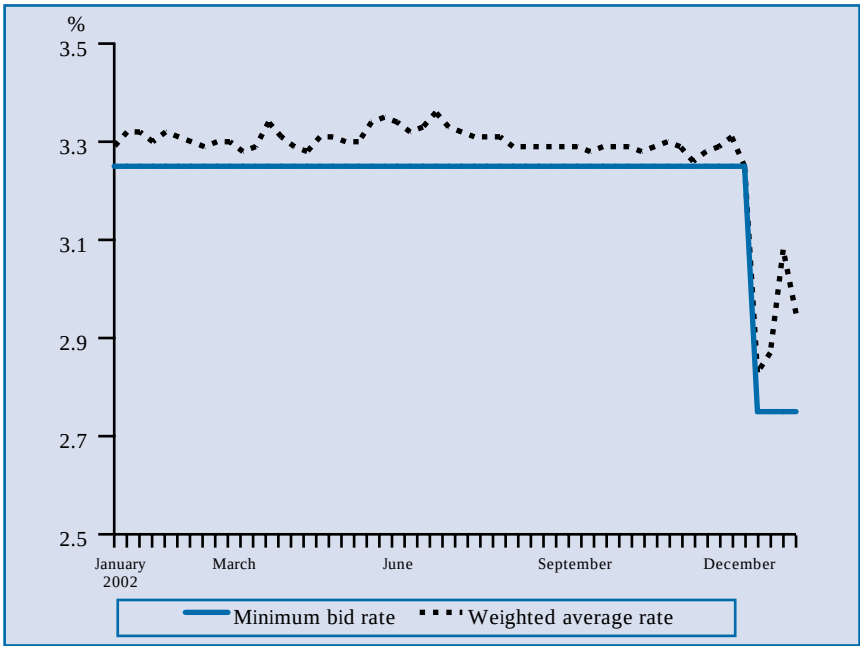
Variable Rate Tenders

All MROs during 2002 were conducted using a variable rate tender system with a minimum bid rate pre-announced by the ECB. The intention of the minimum bid rate is to signal the Eurosystem's monetary policy stance. Under the variable rate tender procedure participants bid for the amount of liquidity they require as well as the rate they are prepared to pay for funds. Amounts bid *in excess* of the lowest (marginal) rate accepted by the ECB in a given MRO are satisfied in full, at the rate bid, while bids *at* the lowest rate accepted are filled on a pro-rata basis.

Cost of Funds in MROs

The cost of funds (i.e. the weighted average interest rate for successful bids) in MROs in 2002 was on average 0.06 percentage points above the minimum bid rate, which was somewhat higher than the previous year's 0.035 percentage points, although still at a relatively low level. This increase in the differential, which reached its peak around June, occurred in an environment of strong market expectations of an increase in official interest rates in the first half of the year; the differential narrowed somewhat in the second half of the year as market expectations shifted towards an easing of policy. In the event, the Governing Council of the ECB changed official interest rates once, a reduction of 0.50 percentage points in early December; this compares with four reductions in 2001 by a cumulative 1.50 percentage points.

Chart 1: Minimum Bid Rate and Weighted Average Rate of MRO's in 2002



The number of counterparties participating in MROs in the Eurosystem as a whole continued to decline in 2002, falling by 25 per cent to an average 307 per operation, although the bid/cover ratio (i.e. the total amount bid compared with the total amount allotted) remained unchanged at around 2:1. The main factor contributing to the reduction in the number of participants was the ongoing consolidation process in the banking industry, including the increased concentration of treasury management activities within banking groups. However, in Ireland there was a slight increase in the number of counterparties to 24 (from 22 in 2001, 18 in 2000, 17 in 1999).

Counterparties

Longer-Term Refinancing Operations

The Eurosystem provided €20 billion in LTRO funding to the financial sector each month in the first half of 2002 and €15 billion each month in the second half of the year. This reduction reflects a decline in the liquidity needs of the euro-area banking system. LTROs continued to be conducted using a variable rate tender procedure but with no minimum bid rate. The lowest rate at which funds were allotted was on average around 0.06 percentage points below the prevailing three-month Euribor¹ reflecting ongoing market expectations of reductions in official interest rates in the euro area.

Longer-Term Refinancing

Fifteen domestic counterparties participated in LTROs during 2002 compared with 11 in 2001, 15 in 2000 and 12 in 1999. As in 2000 and 2001, Irish financial institutions were above average

1 Euro Interbank Offered Rate.

users of LTRO funding in 2002 compared with the rest of the euro area.

Fine-Tuning Operations

To meet the higher-than-expected demand for liquidity as a result of the cash changeover at the start of 2002, the ECB conducted two fine-tuning liquidity-providing operations on 4 and 10 January 2002. In the first operation €25 billion was allotted, while in the second operation €40 billion was injected. Both of these operations had an overnight maturity and were conducted as standard variable rate tenders with the same minimum bid rate as the regular MROs.

In contrast to 2001, when there were four occasions of underbidding² at MRO tenders, there was only one case of underbidding in 2002. This occurred in the last MRO before the end of the maintenance period in December 2002. To alleviate the impact of the resulting liquidity shortage and to smooth market tensions, the ECB on 18 December carried out a third fine-tuning liquidity-providing operation with a one-week maturity. It was conducted as a standard variable rate tender with the same deficit but at the same time to retain an incentive for counterparties to bid sufficiently in MROs.

Standing Facilities

In 2002, Eurosystem credit institutions made less use of standing facilities. This decline is attributable to (i) the fact that underbidding – which contributes to tight liquidity conditions – occurred on only one occasion in 2002; (ii) an improvement in the forecasting of liquidity needs by the Eurosystem; and (iii) better liquidity management by counterparties.

Minimum Reserves

The average level of minimum reserve requirements of credit institutions in Ireland during 2002 (i.e., in the twelve maintenance periods from 24 January to 23 December) was €4.3 billion, compared with just under €4 billion in 2001. On average, institutions held balances in their minimum reserve accounts at the Bank that were €14.7 million (0.3 per cent) in excess of requirements; in 2001, surplus balances averaged €11.4 million.

While there were no changes to the main features of the minimum reserve system in 2002, the Governing Council approved a Regulation (ECB/2002/3) in April 2002 that amended Regulation ECB/1998/15 concerning the application of the minimum reserve requirements of the Eurosystem. The new Regulation had four main features. First, it introduced an automatic exemption from minimum reserve requirements for

² That is, when the total amount bid by euro-area counterparties falls short of the liquidity needs of the financial sector (as estimated by the ECB).

institutions in the event that their licence is withdrawn or they are subject to winding-up proceedings, applicable to the entire maintenance period in which the event takes place. This change was introduced for reasons of administrative efficiency and became effective from the maintenance period beginning on 24 May 2002. The Regulation also made clear that electronic money institutions are subject to minimum reserve obligations; it clarified the position with respect to inclusion in the reserve base of liabilities with respect to branches outside the euro area, and it adjusted the minimum reserve remuneration formula to allow for the possibility of more than one main refinancing operation being settled on the same day. In addition, Council Regulation (EC) No 134/2002 of 22 January 2002 amended Council Regulation (EC) No 2531/98 concerning the application of minimum reserves by the ECB. The amendment had the effect of increasing the period available to the Governing Council to review a sanction imposed on a credit institution for breach of minimum reserve obligations to two months from the receipt of the request for a review, where previously it was fifteen days.

The Bank, on behalf of the ECB, monitors compliance of credit institutions in Ireland with the minimum reserve requirement system. In 2002, there were twelve occasions on which institutions incurred sanctions for breach of their obligations, compared with fifteen in 2001 and sixteen the previous year. In the majority of cases in 2002 the sanction imposed, which is linked to the magnitude of the breach, was less than €2,000.

Eligible Collateral

All Eurosystem credit operations must be fully collateralised by assets approved by the ECB.

Eligible Assets

A distinction is made between two categories of asset eligible for these operations. Tier One collateral encompasses a very broad spectrum of high-quality assets denominated in euro and issued (or guaranteed) by entities established in the European Economic Area. A substantial part of Tier One assets is made up of general government bonds, i.e. assets issued by central, regional and local governments. Other types of asset in Tier One include securities issued by international and supranational institutions. Tier Two collateral consists of assets which are of particular importance for national financial markets and banking systems and for which eligibility standards are established by the NCBs subject to ECB approval. Tier Two assets may be marketable or non-marketable debt instruments or they may be equities. In the event of a default by a counterparty, the Eurosystem as a whole bears the risk in relation to Tier One assets while exposure arising from Tier Two assets is borne by the sponsoring NCB.

In 2002 domestic credit institutions collateralised Eurosystem operations mainly through the use of Tier One eligible assets. Significant use was made of domestic Tier One collateral; in addition the use of Tier One assets issued in other member states continued to increase. The use of Irish mortgage-backed promissory notes which are included on the Tier Two list also increased, underlining their importance to the local market.

Interbank Market Developments

The unsecured segment accounted for the bulk of activity in the euro-area money market in 2002. Some progress was made in the development of the secured (repo) market; in this regard, the introduction of a repo market reference rate (the EUREPO index) in March 2002 was a significant development. Foreign exchange swaps remained an important instrument in satisfying liquidity needs while the use of interest rate swaps, in particular EONIA swaps, grew steadily.

The short-term securities market continued to lag behind other market segments in terms of development and integration. In response to this, the ACI – the financial markets association – established the Short-Term European Paper task force (STEP), which made a number of recommendations. In this regard, the ECB was pleased to act as host for a public consultation on behalf of the ACI on the issue of how the European short-term securities markets could be further integrated, the result of which will be made public in 2003.

Liquidity Forecasts

Liquidity Management

The Bank continued to provide forecasts of the liquidity needs of the domestic market as an input to the ECB's liquidity management decisions. In Ireland, more accurate forecasts of domestic money market liquidity conditions were facilitated by the arrangements for managing the Exchequer account, which have been in operation since May 2000. Trends in banknotes in circulation were closely monitored during the euro currency changeover period. In the first two weeks of the new year, the demand for new euro banknotes by the euro-area banking system (including Ireland) was higher than anticipated while the return of former national banknotes was lower than expected. This resulted in the provision of additional liquidity by the Eurosystem via two fine-tuning operations in early January.

Participation in Other International Activities

EU Economic and Financial Committee (EFC)

Membership

The Bank is represented on the EFC, which comprises representatives from Member States' national administrations, NCBs, the European Commission and the ECB. The main task of the Committee, conferred on it by the Treaty, is to act as an advisory body to the EU Council of Ministers and to the

Commission on relevant economic and financial issues. This includes monitoring the economic and financial situation of Member States, including budgetary developments and prospects; assessing the international, economic and financial environment and its implications for the euro exchange rate; and monitoring financial and other relations with third countries and with international institutions such as the International Monetary Fund (IMF).

A number of issues predominated in the work of the Committee in 2002. Owing to a significant deterioration in budgetary developments and prospects, 2002 proved to be a difficult year for the implementation of the Stability and Growth Pact. In consequence, the Commission launched excessive deficit procedures in relation to Portugal and Germany, while an early warning procedure was also initiated in relation to France in January 2003. The Committee was involved in all aspects of these procedures. Against this background, the Commission issued communications on streamlining economic and employment policy coordination and strengthening the coordination of budgetary policies, both of which were subject to review and comment by the EFC. Another area which received much attention in the Committee in 2002, and which is of considerable relevance to Ireland, was financial market reform. Significant progress was made in formulating proposals to improve financial regulation, supervision and stability within the EU, through the extension to all financial sectors of the “Lamfalussy” framework that had been adopted in the area of securities.

*Stability &
Growth Pact*

The EFCs Working Group on IMF issues continued its work of analysing international, economic and financial issues, with particular regard to the role and operation of the IMF. In 2002 the work of the group, which contributes to the drafting of EU positions and statements on IMF-related issues, focused on such issues as the role of IMF surveillance in preventing crises and the orderly resolution of financial crises, notably through the contractual and statutory approaches.

EU Economic Policy Committee (EPC)

The Bank continued to participate in the work of the European Union’s Economic Policy Committee. As with the EFC, membership of the EPC comprises representatives from national administrations, NCBs, the EU Commission and the ECB. The remit of the EPC is to contribute to the preparation of the work of the ECOFIN Council of coordinating the economic policies of the Member States and of the EU as a whole, and to provide advice to the Commission and the Council. The EPC is particularly required to concern itself with structural policies for improving growth potential and employment. In pursuit of this, the EPC focuses in particular on:

Membership

- (i) The functioning of goods, capital, services and labour markets, including wages, productivity and competitiveness developments
- (ii) The role and efficiency of the public sector and the long-term sustainability of public finances, and
- (iii) The economy-wide implications of specific policies such as those relating to the environment, to research and development and to social cohesion.

The EPC is also required to provide analysis on methodological issues relating to the interaction between structural and macroeconomic policies and on wage developments. The EPC in addition provides the framework within which the macroeconomic dialogue between representatives of various EU Committees, the Commission and the social partners takes place at technical level.

During the year, the EPC conducted a country-by-country examination of progress with structural reform, and the results of this were published in the fourth Annual Report on Structural Reform. The Committee also contributed to the structural aspects of the Broad Economic Policy Guidelines for 2002. Amongst the more specific issues considered last year were an assessment of trends in expenditures on health care and care for the elderly, an examination of the adequacy and sustainability of pension systems, the effectiveness of active labour market policies and measures to promote higher labour force participation and active ageing.

The Bank also participated in the work of the Economic Policy Committee of the OECD which considered current world economic developments and the appropriate policy responses to the general weakness of economic activity.

EU Committee on Monetary, Financial and Balance of Payments Statistics (CMFB)

Work of CMFB

The Bank is also represented on the CMFB, comprising senior representatives from central banks, national statistical institutes, Eurostat and the ECB. The work of the CMFB in 2002 mainly concerned issues of common interest on balance of payments statistics, financial services statistics, the compilation and reporting of government finance data within the context of the Excessive Deficit Procedure (EDP) and the development of euro-area statistical indicators. The Bank also participated in a wide range of CMFB consultations during 2002, including approval of new statistical compilation manuals, the statistical treatment of securitisation operations and the application of best practice by Member States on the compilation of general government deficit and debt levels.

International Monetary Fund (IMF)

The role of the IMF is to promote international monetary co-operation and to facilitate international financial stability. It represents the cornerstone of the international monetary system and plays a key role in the process of multilateral and bilateral surveillance of macroeconomic policies.

Role

The IMF provides financial resources to member countries that require balance of payments assistance, drawing mainly on quota (i.e. membership) subscriptions from other IMF member countries. Access to such finance is normally available on concessionary terms and limited by reference to an individual member’s quota subscription.

Individual country surveillance occurs primarily through “Article IV” missions, whereby IMF staff visit a member country, usually on an annual basis, to assess economic performance and to review fiscal, monetary and regulatory policy. The most recent Article IV mission to Ireland took place in May 2002. Since the start of EMU, missions to member states have been complemented by consultations with the euro area, which take an overall view of economic developments and prospects within the area, focusing particularly on the monetary policy of the ECB. In addition to the Article IV process, the IMF also undertakes Financial Sector Assessment Programmes (FSAPs), which focus on financial sector stability in member countries, and prepares Reports on the Observance of Standards and Codes (ROSCs), which assess compliance with monetary, fiscal and financial standards and codes.

The Central Bank administers all financial transactions and operations between Ireland and the IMF including the payment of quota subscriptions, the supply of financial resources, when required, to assist other IMF members, and the receipt by Ireland from the IMF of remuneration in respect of the use of its currency.

Ireland is a member of the Canadian constituency³ and provides the Alternate Executive Director, who has an important role to play in representing the interests of members of the constituency and providing a source of communication between them and the IMF management.

Management of External Reserves

Bank’s Official Reserves

At end-December 2002, the value of the Bank’s investment portfolios was €8,359 million comprising foreign currency reserves of €4,916 million and euro-denominated assets amounting to €3,443 million. This represents a decrease of €298

Value of Bank’s Portfolio

³ The other members of the constituency are Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Jamaica, St Kitts and Nevis, St Lucia and St Vincent and The Grenadines.

million on the comparable figure at end-December 2001 and is mainly accounted for by valuation effects resulting from the strengthening of the euro in 2002. The Bank's euro portfolio derives mainly from its holdings, prior to January 1999, of EMU legacy currencies; in addition during 2002 the Bank added to its euro portfolio as a result of sales of foreign currency assets.

Total earnings (income and capital gains) on the investment portfolios amounted to €443.7 million in 2002 compared with €530.3 million in 2001. In rate of return terms, earnings on the investment portfolios in 2002 were 5.47 per cent compared with 6.74 per cent in 2001. The somewhat lower return in 2002 can be attributed to the lower absolute level of yields on both money market instruments and bonds.

Over the year, the Bank managed its investment assets (both foreign currency and euro denominated) by reference to benchmark portfolios compiled by Merrill Lynch on behalf of the Bank and modified to reflect the portfolio restructuring undertaken during the year. These benchmark portfolios incorporated the Bank's preferences for liquidity, risk and return. Active portfolio management in 2002 produced results in excess of the return on the benchmark.

The parameters within which the Bank's investment portfolio is managed are determined by the Board of the Bank. These include the currency composition of the non-euro reserves, the choice of investment instruments and the overall degree of risk that the Bank considers appropriate for its investment activities. The risks inherent in managing the Bank's investment portfolio are managed by a comprehensive system of controls, limits and procedures. The organisation of asset management activities at the Bank is as follows:

- (i) An Investments Committee of the Board reviews investment policy and performance.
- (ii) This is supported by the Bank's External Assets Investment Committee which considers policy issues and strategy relating to the investment portfolio. This committee, under the chairmanship of the Deputy Director General, includes senior staff of the Financial Markets Department.
- (iii) A Standing Investment Committee, comprising management of Financial Markets Department, senior dealers and senior analysts, meets weekly to formulate short-term policy.
- (iv) The Bank's Investment Desk carries out the day-to-day dealing activities that are required to implement decisions and to ensure that the reserves are fully invested.
- (v) Risk monitoring and performance measurement are carried out independently of the dealing function.

The framework within which the Bank's investment assets are managed changed with the establishment of the ESCB and the adoption of the single currency. Under the Statute of the ESCB, one of the basic tasks of the System is to hold and manage the official reserves of Member States. Thus, the Bank's foreign currency reserves form part of the foreign reserves of the Eurosystem. The Maastricht Treaty provided for the initial transfer by NCBs of up to €50 billion of foreign reserve assets to the ECB. Moreover, under the EU Treaty, further calls of foreign currency assets may be effected by the ECB from NCBs' foreign-exchange reserves.

Portfolio Restructuring in EMU

The Bank continued to restructure its portfolio during 2002. As mentioned in previous Annual Reports, the Bank is no longer required (post EMU) to maintain a highly liquid portfolio, concentrated in the major global currencies, for possible use in foreign exchange intervention. This allowed changes to be made to the composition of the Bank's foreign currency reserves with a view to minimising the impact of movements in exchange rates on the value of the investment assets. Having regard to these considerations, the size of the US dollar portfolio was reduced in 2002 and the euro portfolio increased. In addition, the size of the Danish krone and Swiss franc portfolios were increased and a Swedish krona portfolio was established, in recognition of the fact that these currencies are less volatile *vis-à-vis* the euro. The portfolios were invested in the same range of instruments as in 2001, that is, government, quasi-sovereign, supranational, US Federal agencies, Pfandbrief and Danish mortgage bond issues. Following the sharp increases in global bond prices and the market consensus that the US economy was at the start of a recovery, a decision was taken to reduce the duration of the US dollar portfolio in the third quarter of 2002, primarily to avoid some of the capital losses that would be associated with a reversal of the upward price movement. In line with this reduction in duration, the credit risk profile of the portfolio was lowered by reducing the holdings of bonds issued by US Federal Agencies and quasi-sovereign issuers.

*Continued
Restructuring*

The management of the investment portfolio follows a two-stage approach. Firstly, the currencies for inclusion in the portfolio are selected and, secondly, these currencies are invested in the major money and capital markets. In the second phase of the investment process, the investment portfolio is invested in a wide range of instruments — deposits, other money market instruments, government bonds and other high-quality fixed income securities. The objective is to maximise return within pre-defined risk parameters. Within this framework, the Bank employs a number of strategic and tactical investment methodologies and techniques. On a day-to-day basis, the investment strategy involves positioning the portfolio within approved parameters to take advantage of opportunities to enhance returns in the international money and capital markets.

Gold Holdings

The Bank holds a small portion of its assets in gold — gold holdings were valued at €63.1 million as at end-December 2002. With the exception of coin stocks held in the Bank, gold is held in the form of gold deposits. The Bank did not purchase or sell any gold during 2002.

ECB Pooled Reserves*Transfer to ECB Reserves*

In January 1999 the Governing Council of the ECB decided that €39.5 billion (that is, €50 billion adjusted downwards for the shares of the countries not participating in the euro area) should be transferred to the ECB at the commencement of EMU. Each NCB's contribution to the ECB reserves was in proportion to its shareholding in the ECB which, in turn, is a function of each Member State's shares of the euro-area's GDP and population. In January 2001 further reserves were transferred to the ECB on the occasion of the Bank of Greece joining EMU. The size of the portfolio managed by the Bank on behalf of the ECB was €450.9 million at the end of 2002.

The basic objective of ECB investment policy is to protect the value of the ECB's reserves in order to ensure that the assets are sufficiently secure and liquid to support the ECB's monetary policy. When intervention takes place, as happened in 2000, the foreign reserve assets of the ECB are used. At the end of 2002, the ECB's net foreign reserve assets amounted to €43 billion^e compared with €46.8 billion at the end of 2001. The fall in the euro value of the portfolio reflects the strengthening of the euro over the year.

The external reserves transferred to the ECB are managed in a decentralised manner by the NCBs. The ECB determines the investment parameters, makes policy decisions including setting performance benchmarks, approving counterparties and setting permitted risk levels, and performs control and monitoring functions. The benchmarking framework is set at both strategic and tactical levels and each NCB's performance is measured against the tactical benchmark. Within this framework each NCB undertakes management and settlement functions associated with their portion of the ECB reserves. NCBs act on behalf of the ECB on a disclosed agency basis so that market participants can differentiate between operations carried out on behalf of the ECB and those undertaken on NCBs' own reserves. The Central Bank enters trades onto the ECB reserve management system, which permits the ECB to monitor positions and exposures and to carry out performance measurement.

Risk Management*Risk Control*

The risk control policy framework governing the Bank's asset management and monetary policy operations is established by

the Board of the Bank and is reviewed regularly. The framework consists of various risk policies, procedures and limits. The Bank's code of conduct for dealers, settlement staff and decision makers covers potential conflicts of interest, private financial accounts, insider trading, dealing limits and related issues.

The Bank's Risk Management Unit is responsible for the measurement, monitoring and reporting of the Bank's risk exposures and for monitoring and reporting compliance with limits etc. The Unit also measures the return on the Bank's investment portfolios. The measurement of performance involves the attribution of return across portfolios, sectors and instruments. The Bank's performance in terms of the return achieved on its portfolios is measured against a notional benchmark portfolio that is compiled externally by Merrill Lynch.

The Risk Management Unit is independent of the dealing function in the Financial Markets Department and presents regular reports to the relevant decision-making bodies of the Bank including the Board, the Audit Committee, the Investment Committee and the Management Board. In addition to the work performed by the Risk Unit, the Bank's asset management and monetary policy operations are audited by the Bank's Internal Audit Department, by the Bank's external auditors — the Comptroller and Auditor General and PricewaterhouseCoopers and by the ECB's external auditors — PricewaterhouseCoopers.

The main risks associated with managing the investment portfolio are currency risk, market risk, credit risk, liquidity risk and operational risk.

Currency Risk is the risk of capital losses as a consequence of fluctuations in exchange rates. This risk is managed by pursuing a policy of portfolio diversification but, as the official external reserves represent an open foreign exchange position for the Bank, exchange rate risk constitutes the largest financial risk for the Bank. The currency distribution of the portfolio is reviewed periodically using quantitative techniques such as currency optimisation models, Value at Risk (VaR) and stress testing as well as a variety of qualitative factors. The Bank managed portfolios denominated in US dollars, Japanese yen, sterling, Swiss franc, Danish Krone and Swedish Krona in 2002.

Market risk relates to the impact of changes in interest rates on the value of the investment portfolio. The management of market risk in the Bank is primarily based on duration. VaR and stress testing techniques are also used. The duration of a portfolio determines its sensitivity to interest rate changes — the higher the duration the more risk is assumed. Global economic conditions, bond yields, view of

market participants, and liquidity requirements are all factors that are taken into account in setting the duration for the investment portfolios.

Table 1 below sets out the VaR on the investment portfolio. The significant fall in VaR reflects the decisions to lower (a) the exchange exposure to the US dollar and (b) the duration of the US dollar portfolio.

Table 1: Value at Risk Analysis of Investment Portfolio

€m	Interest Rate Risk	Foreign Exchange Rate	Total Risk
31 December 2002	121.9	335.3	312.6
31 December 2001	164.1	819.8	784.9

Credit Risk relates to the possible loss in asset value due to the default of counterparty banks, issuers of securities or other counterparties. Credit risk is managed by confining exposures to high-quality instruments and to counterparties with high credit ratings. All approved counterparties and issuers must have an acceptable credit rating from at least one of the international credit rating agencies. For deposits, maximum limits are set for each counterparty according to its credit rating and the maturity of the deposit. The Bank's exposure to banks and issuers of securities analysed by credit rating is shown in Table 2 below.

Table 2: Exposure of Reserves by Credit Rating

% of investment portfolio	Aaa	Aa1	Aa2	Aa3	A1	A2	A3	Total
End December 2002	58	12	20	10	—	—	—	100
End December 2001	65	11	6	17	1	—	—	100

Liquidity Risk refers to the possible losses that could arise in converting assets into cash. This risk is managed by ensuring that reserves are invested in instruments for which deep and active markets exist, such as securities issued by governments and other high-quality issuers and by applying maximum exposure limits.

Operational Risk is the possibility of direct or indirect losses, or of reputational damage, arising from inadequate or failed internal processes, people and systems or from external events. This risk is managed by the segregation of the dealing, settlement and risk management functions; by restricted physical access to the dealing and settlements areas; and by a comprehensive body of controls and procedures aimed at minimising the risk of unauthorised trading. Further organisational changes were made during 2002 and in this regard the operational risk section was established as a formal unit within the Financial Control

Department. The unit is still located adjacent to the Financial Markets dealing area for efficiency and communications reasons. The operations of each function are reviewed regularly to ensure that potential exposures are identified and that appropriate controls are implemented. A high-level committee, chaired by the Deputy Director General, oversees the management of operational risk in the Bank.

Economics, Research and Statistics

The economics function continued to monitor and forecast short-term developments in the Irish and euro-area economy, as well as conducting research into longer-term structural and policy issues. Co-operation with other Eurosystem National Central Banks and the ECB in these areas occurred through a system of Committees and Working Groups. This work provided support to the Governor of the Bank and other members of the ECB Governing Council in discharging their duties during the year. It also assisted the Bank in assessing macroeconomic conditions and the overall stance of policy domestically.

*Domestic and
Euro Area*

Work undertaken during the year can be conveniently summarised under the following broad headings: economic intelligence and forecasting, inflation and price stability, monetary issues, econometric modelling, public finances and structural issues.

Economic Intelligence and Forecasting

During the year, domestic economic developments were carefully considered against the background of a generally weak international economy, the continued effect of the series of shocks that occurred in 2000 and 2001, and increased risks arising from geopolitical uncertainties in 2002 and the possible effect on oil prices. An additional factor was the strengthening of the euro, notably against the US dollar, from around the middle of last year.

The techniques used to assess these developments included the use of econometric models and detailed analysis of macroeconomic data. These continued to be supplemented by assessments of business sentiment, based on contact with leading companies across the main sectors of the economy. This assisted in the assessment of the effect of various events and of the risks pertaining to particular sectors. Participation began in a newly-established Eurosystem business cycle network which will help, *inter alia*, in the analysis of the business cycle and the development of leading and coincident indicators.

Techniques Used

Four forecasting exercises were completed during the year, with two of these conducted within the context of the Eurosystem's Broad Macroeconomic Projection Exercise.

*Inflation Projections***Inflation and Price Stability**

Price developments, domestic costs and competitiveness were monitored closely during the year with assessments published in the Bank's Quarterly Bulletin. Two medium-term inflation projections and four short-term forecasts for five sub-aggregates of the HICP, based on agreed assumptions, were produced as part of coordinated Eurosystem exercises. The effect of the euro changeover on prices was also investigated. Research work in the area of price stability continued on the refinement of time-series based forecasting methods. A substantial project was also undertaken on a structural model of inflation in Ireland; this incorporates external and internal factors, including the effect of wage developments. Work also started, in co-operation with the ESCB, on the analysis of inflation dynamics and persistence in the euro area.

Monetary Issues

Following the focus on the transmission mechanism of monetary policy in the euro area during 2001, a number of other aspects were the main subject of attention last year. One strand dwelt on investigating the links between money and inflation in the euro area, i.e. essentially the first pillar of the ECB monetary strategy. This entailed substantial empirical assessment of cross-country and time-series evidence on these links. A second area of research centred on the effect of monetary shocks on the stock market. Finally, in the area of the transmission mechanism, a study is in progress on whether or not monetary policy is symmetric, i.e. on whether the effects of expansionary and contractionary monetary policy actions are of similar absolute magnitude.

*Bank's Econometric Model***Econometric Modelling**

A considerable amount of work was done on the Bank's econometric model of the economy. The model is part of a system of linked country models of the euro area that is used for forecasting and scenario analysis. The data series were updated and interpolated to generate quarterly series for the model, and a considerable part of the model was re-estimated. The model was used along with the interlinked system during the year to examine various scenarios as part, *inter alia*, of the ESCB forecasting exercises.

In the light of the potentially substantial effect of asset price movements, housing and equity prices, on demand and inflation, the Bank also participated in a technical ESCB group examining this issue; a number of preliminary papers were prepared on this.

Public Finance

Developments in public finance continued to be assessed last year as part of the Bank's role in assessing domestic economic

developments and policy and also as an input to the ECB's annual report on public finances. A review paper was completed on the appropriate role and scope for fiscal policy in a monetary union (the euro area), and the issue of fiscal rules such as the Stability and Growth Pact was also considered. Technical work focussed on clarifying the measurement of cyclical and structural factors on the budget balance. The Bank also participated in the work of an inter-departmental working group reviewing methods for forecasting income tax revenue.

Structural Issues

Further work was undertaken on assessing the growth potential of the economy. The question of whether or not the Irish economy had experienced a 'new economy' productivity improvement was also addressed in this context.

Issues of structural reform at a national and EU level were also examined extensively through participation in the Economic Policy Committee of the EU.

Statistics — Monetary, Financial, Balance of Payments and Prudential Data

The Bank continued to fulfil its statistical reporting obligations at national and international levels, including statistical reporting to the ECB, BIS, IMF, Eurostat and the OECD. The large and growing volume of ECB requirements for money and banking and balance of payments statistics was met in full. Following a review of departmental structures, a separate Statistics Department was established in October 2002. In addition to meeting monetary, financial, balance of payments and prudential needs, the Department initiated a review of data collection and compilation for regulatory purposes in the context of IFSRA requirements.

Work continued on the implementation of reporting requirements arising from the revised ECB Regulation on the consolidated balance sheet of the Monetary Financial Institutions (MFI) sector. Significant efforts were also devoted to the implementation of the new ECB Regulation on MFI interest rate statistics. Full reporting in accordance with both Regulations commenced in February 2003. Work was also progressed on the provision of other data, including securities issues statistics, securitisations and macro-prudential indicators, which are required under the ECB Guideline on Money and Banking Statistics. The Bank also participated in preparations for an update of this Guideline. Work commenced on the development of a secure electronic reporting system in order to allow more efficient collection of the increasing volumes of data now required by the Bank.

The provision of monthly and quarterly balance of payments data and annual international investment position data to the ECB

Reporting Obligations

proceeded smoothly. A formal agreement was concluded between the Bank and the CSO on the modalities of statistical cooperation aimed at ensuring the continuity of national data in support of Eurosystem needs. The Bank contributed to an ECB report outlining steps to be undertaken at national and international levels on enhancing the collection of portfolio investment statistics, including plans for the establishment of a centralised securities database. It also participated in preparations for the update of the ECB Guideline on balance of payments statistics.

A major new project on the design and provision of quarterly monetary union financial accounts (MUFAs) for Ireland was initiated in the context of the ECB Guideline on Financial Accounts Statistics (November 2002). This will be a multi-year project and will entail extensive liaison with the CSO. Partly in anticipation of these requirements, work proceeded in 2002 on the development of data on other financial intermediaries (OFIs).

Payments and Settlements

Real-Time Gross Settlement/TARGET

Settlement System

A Real-Time Gross Settlement (RTGS) system has been operated by the Bank since March 1997. Twenty-two institutions participated in the system at end-2002. The system, which is known as IRIS (Irish Real-time Interbank Settlement), processes payment instructions received electronically from the participating institutions and settles the related payments between participants in real time throughout the day. The payments are effected across settlement accounts of the participating institutions in the Central Bank and can be made either on behalf of customers or on an institution's own behalf. The system, which operates from 06.00 until 17.00, facilitates payments on behalf of customers until 16.00 with inter-bank payments processed until 17.00.

Table 3: Average Daily Payments via IRIS

	2002	2001
<i>Number of payments per day</i>		
Domestic	1,231	1,204
Cross-border	1,052	933
Total	2,283	2,137
<i>Value of payments per day (€ billion)</i>		
Domestic	12.1	11.8
Cross-border	7.1	6.1
Total	19.2	17.9

Since January 1999, IRIS has been linked to the domestic RTGS systems of the 14 other EU Member States and to the ECB Payment Mechanism. This linkage facilitates real-time processing of cross-border payments in euro among the 16 systems. The extended system is known as TARGET (Trans-European

Automated Real-time Gross settlement Express Transfer) and can be accessed by over 35,000 banks (including branches and subsidiaries) across the EU.

A total of nearly 590,000 payments were processed through IRIS during 2002 with the value of those payments amounting to approximately €4,890 billion. Domestic and cross-border payments represented approximately 54 per cent and 46 per cent, respectively, of all payments processed by IRIS in 2002. The average daily volume and value of cross-border and domestic payments made by IRIS participants are shown in Table 3 above.

Payments through IRIS

As indicated in Table 3, the average daily number of domestic and cross-border payments processed by IRIS during 2002 was 2,283. This represented an increase of 7 per cent on the average numbers processed in 2001. The average daily value of €19.2 billion processed in 2002 also represents an increase of 7 per cent on 2001 values.

Payments processed by IRIS represented 1.2 per cent by value and 0.9 per cent by volume of total payments processed by the TARGET system in 2002. Comparable figures for 2001 were 1.4 per cent and 1.0 per cent.

The Bank continues to participate in the ESCB's Payment and Settlement Systems Committee (and its TARGET Management Working Group), which monitors performance on a continuous basis and which is currently considering TARGET2.

Credit Operations

Credit institutions which have entered into the necessary legal arrangements with the Bank may borrow from, or deposit with, the Bank on an overnight basis under the Eurosystem's standing facilities (the overnight Marginal Lending and Deposit Facilities). To avail of these facilities, such credit institutions must notify the Bank of their requirement by 17.30 (this is extended to 18.00 on the last day of each minimum reserves maintenance period). The associated transactions are processed across the settlement accounts which are used for RTGS payment processing.

Eurosystem Standing Facilities

Under the terms of Article 18.1 of the ESCB statute, all credit operations conducted by counterparties with the Bank must be based on adequate collateral provided to the Bank by its counterparties. As described earlier, there are two categories of assets — Tier One and Tier Two.

Assets on the Tier One list include Irish Government bonds, Exchequer notes, certain bonds issued by the Housing Finance Agency and the European Investment Bank for which the Bank acts as Registrar and other assets listed on the Irish Stock Exchange and approved for inclusion on the ESCB Eligible Assets

Database. The Tier Two list includes Irish mortgage-backed promissory notes.

Valuation Haircuts

Risk control measures are applied to assets underlying monetary policy and intra-day operations in order to protect the Eurosystem against the risk of financial loss if underlying assets have to be realised in the event of default of a counterparty. The Bank applies margins in its liquidity-providing reverse transactions (the technique used for taking collateral). This implies that counterparties need to provide underlying assets with a value at least equal to the liquidity provided by the Bank plus the value of an initial margin. The Bank also applies “valuation haircuts” in the valuation of underlying assets with the value of the underlying asset being calculated as the market value of the asset less a certain percentage (haircut).

The Bank requires a specified margin to be maintained over time on the underlying assets used in its liquidity-providing reverse transactions. If the value of the underlying assets falls below a certain level, the Bank will require the counterparty to supply additional assets (i.e., a margin call). Similarly, if the value of the underlying assets, following their revaluation, exceeds a certain level, the Bank returns excess assets to the counterparty on request. This entails the Bank valuing assets put forward by counterparties, both at the time of nomination of assets for a particular credit operation and subsequently on a daily basis until maturity of that operation.

Counterparties may use eligible assets on a cross-border basis, i.e., they may obtain funds from the Bank by making use of eligible assets located in another Member State. The Correspondent Central Banking Model (CCBM) was developed by the ESCB to ensure that all eligible assets may be used on a cross-border basis. Under this model, which has been operated by the Bank and its European counterparts since 4 January 1999, central banks act as custodians (correspondents) for each other in respect of securities accepted in their local depository or settlement system.

Counterparties may also use links between securities settlement systems to transfer collateral to the Bank, subject to those links having been approved by the ECB. Across the Eurosystem, the use of links for delivery of collateral on a cross-border basis is very much less than the use of CCBM, which had originally been expected to be a short-term solution pending market developments to facilitate cross-border transfers.

The Bank's counterparties have used the CCBM quite extensively, availing of the opportunity to use foreign collateral in monetary policy and intra-day liquidity operations and the level of usage continued to increase in the last year. At any one time, up to ten NCBs acted as Correspondent Central Bank for the Bank during 2002.

The settlement function for Irish Government Bonds (and other bonds for which the Bank acts as registrar) was transferred to Euroclear on 4 December 2000. The Bank continues to hold the Register for these bonds and to effect related dividend and redemption payments. The Bank also facilitates transfers of securities holdings between Euroclear participants and accounts maintained on the Bank's register. Since May 2001, all Irish Government Bonds provided to the bank as collateral have been delivered into its account in the Euroclear system.

Securities

The Bank maintains the register of bonds issued on the domestic market by the National Treasury Management Agency, the Housing Finance Agency, the European Investment Bank and Ulysses Securitisation plc. Ulysses Securitisation is a state-sponsored financing vehicle, which was incorporated following the passing of the *Securisation (Proceeds of Certain Mortgages) Act, 1995*.

Bond Register

The Bank, in its role as registrar, effects dividend and redemption payments to account-holders, including Euroclear (on behalf of relevant participants in the Euroclear system). The total of all holdings of Euroclear participants in each bond is recorded in an omnibus account on the Bank's Register in the name of Euroclear Nominees Limited. Transactions between Euroclear participants are effected within the Euroclear system without affecting the Bank's Register, while transactions between the local market and Euroclear participants necessitate updating the Register.

At the end of 2002, the nominal value of bonds on the Register amounted to €23.0 billion, which represented an increase of €2.7 billion over the value outstanding at end-2001 and follows a decrease of €2.2 billion in 2001. A total of 3,893 transfers (including transfers into and out of Euroclear) were processed by the Bank during the year compared with 2,698 during 2001.

The number of accounts on the Register fell from 5,547 at end-2001 to 5,276 at end-2002. A total of 38 dividend issues took place during 2002 involving approximately 7,216 individual payments.

Table 4 below summarises the position in relation to issues and redemptions of Government Bonds during the course of 2002.

Table 4: Issues and Redemptions of Government Bonds

€ million	2002	2001
Bonds Issued	8,060.0	—
Bonds Created	14,614.2	5,588.2
Total	22,674.2	5,588.2
Bonds Redeemed	3,056.4	2,188.7
Bonds Cancelled	16,926.6	5,551.9
Total	19,983.0	7,740.6
Net Nominal Increase(+)/Decrease(-)	2,691.2	-2,152.4

On 25 October 2001, the ECB and the Committee of European Securities Regulators (CESR) announced agreement on the conduct of joint work on issues of common interest in the field of securities clearing and settlement systems. The Bank is represented on a joint ESCB/CESR working group, which is working to establish standards and/or recommendations appropriate for securities settlement systems and central counterparties in Europe, including possible adaptation of the CPSS/IOSCO Recommendations for Securities Settlement Systems to the European context. Common standards would contribute to creation of a level playing field for providers of securities clearing and settlement services and to overcoming the significant heterogeneity in the legislative frameworks of European countries.

During 2002, the Bank also continued to participate in the deliberations of the ESCB's Securities Settlement Working Group.

Payment Systems Policy and Regulation

Regulation of Payment Systems

The Objectives of Payment Systems Regulation

The Eurosystem as a whole is concerned with the regulation of payment systems from the standpoint of defining and implementing a monetary policy which will ensure price stability, the stability of the financial system generally and also maintain public confidence in a sound currency. In keeping with this overall policy, the general objectives of the Bank's regulatory regime are to ensure that payment systems in the State are safe, effective and efficient, and that access to such systems is not restricted. In addition, the systems themselves should not cause, or add to, instability in the operation of financial markets.

The Bank's principal aim is to minimize systemic risk, i.e. the risk that the failure of one participant in a payment system to meet its obligations could result in other participants failing to meet theirs, thus leading to a chain reaction in payment systems. In extreme circumstances, an event of this type might have the potential to undermine the stability of financial institutions and markets.

The Bank is also concerned with the efficiency of payment systems, as this is seen as complementary to systemic stability. Moreover, payment systems and instruments must be seen to be secure, in order to maintain public confidence in the currency that these systems and instruments support.

Furthermore, since payment systems are an essential vehicle for the implementation of monetary policy, regulation is aimed at safeguarding the transmission channel for monetary policy operations.

Statutory Basis for Regulation

Under the *Central Bank Act, 1997*, the Bank is empowered to regulate payment systems. The Act provides for the Bank to authorise all payment systems in the State and to approve their rules. The Bank's role in this area stems also from Article 105(2) of the Maastricht Treaty and Article 3 of the statute of the ESCB, which state that ‘ ‘*The basic tasks to be carried out through the ESCB shall be . . . to promote the smooth operation of payment systems*’.

IRIS

Due to its systemic importance, the Bank's primary concern continues to be the domestic RTGS system. This is known by the acronym IRIS and is operated and managed by the Bank. Minimising systemic risk in the payment system is addressed by system participants effecting all large-value interbank payments in Ireland, both on their own account and on behalf of customers, in real-time (i.e. continuously throughout the day), gross (i.e. on an individual basis) and in central bank money via the IRIS system.

All liquidity provided by the Bank to participating banks in IRIS is fully collateralised in accordance with ECB regulations. The system does not permit negative balances; payments that would result in a negative balance if they were to settle are queued in the system. Unsettled payments are rejected by the system at the end of each business day.

Monetary policy operations are settled via IRIS, with no funds being advanced prior to the transfer of ownership of collateral to the Bank. All monetary policy and intra-day liquidity transactions are governed by the terms of a Master Repurchase Agreement signed between each counterparty and the Bank.

Participation by a credit institution in IRIS requires the approval of the Bank. In deciding whether or not to issue such approval, the Bank takes into account an applicant's financial strength and also its technical ability to meet the requirements of the system.

IRIS is linked to TARGET, thereby allowing payments to be made on a cross-border basis within the EU in real-time. The system is subject to regular ESCB risk analysis and its security features are also reviewed on a regular basis.

During 2002, the planned greater emphasis and focus on the development and carrying out of the Bank's responsibility for the policy, regulation and oversight of payment systems was facilitated by an increase in staff resources dedicated to this function. In addition, the Payments and Securities Settlements function was split in two so that responsibility for operations and responsibility for payment systems policy were separated. Such a split reflects concern at Eurosystem level that regulation/oversight personnel should not also be involved in the operation of systems that they oversee.

The increased staffing for this area facilitated greater focus during 2002 on the Bank's responsibilities in relation to payment system regulation. This included carrying out a full review of the RTGS system against the CPSS Core Principles for Systemically Important Payment Systems, which was forwarded to the ECB in January 2003.

Domestic Clearing Arrangements

Clearing Companies

At end-2001, there were three companies managing the clearing process in Ireland: the Irish Paper Debit Clearing Company Limited, the Irish Paper Credit Clearing Company Limited and the Irish Retail Electronic Payments Clearing Company Limited. However, during 2002 it was decided to amalgamate the two 'paper' clearing companies into one entity, to be known as the Irish Paper Clearing Company Limited. This decision was made on the basis that although each dealt with different payment instruments, both had the same membership and were companies essentially performing the same functions with virtually identical procedures. Work continued throughout 2002 in relation to the general legal and organisational arrangements of the clearing companies.

In addition, the Bank has continued to administer the daily interbank settlement process for the clearing companies, which takes place via the IRIS system across the participating banks' settlement accounts.

Settlement Accounts

Terms and conditions for the opening and operation of settlement accounts in the Bank, which were drawn up and agreed with the ECB during 2001, were fully implemented in 2002 with all settlement account holders signing up.

Terms & Conditions

Electronic Money Projects

Apart from a number of single-use schemes such as telephone cards, there were no electronic money (or 'e-money') schemes operating in Ireland at end-2002. The Bank, however, participated throughout the year in the work of two ESCB groups examining e-money issues, with a view to keeping abreast of developments in anticipation of future initiatives in the Irish payments industry. Two reports produced by these groups were the subject of public consultations in 2002.

E-money

Review of the Organisation of Retail Payment Systems

Following up on preliminary research carried out in 2001 in relation to the organisation of the Irish retail payment system, the Bank issued a detailed questionnaire to 22 credit institutions in 2002. The responses to this questionnaire are currently being analysed. This work arises from one of the recommendations contained in the "Report of the Department of Finance/Central Bank Working Group on Strategic Issues Facing the Irish Banking Sector", published in August 2000.

Questionnaire Issued

Payment Systems Developments

The Bank continued to monitor payment systems developments throughout the year. On the domestic front, an important part of this work involved holding quarterly review meetings on payment systems issues with the Irish Payment Services Organisation (IPSO), which acts as the representative body for the payments industry in Ireland. Work also commenced on standardisation/collection of Irish payment statistics with the establishment of a Working Group under the auspices of IPSO.

Developments

At the Eurosystem level, the Bank continued to participate in the ESCB's *Payment and Settlement Systems Committee* and its associated sub-groups. Through these bodies, the Bank has contributed to the work of the ESCB's Payment Systems Directorate. Issues addressed in this forum during 2002 included the following:

- the long-term strategy for the TARGET system;
- the framework for the oversight of payment systems;

- developments in retail payment systems;
- assessment of securities settlement systems;
- developments in the area of e-money and e-payments.

Securities Settlement Systems Developments

The Bank agreed a Memorandum of Understanding between itself and the National Bank of Belgium on their respective roles in relation to the cooperative oversight of Euroclear. The settlement of Irish Government bonds takes place in Euroclear.

The Bank participated in the joint work of the ESCB and the CESR on issues of common interest in the field of securities clearing and settlement systems, including appropriate standards for European securities settlement systems and central counterparties.

Consultation Papers

Following establishment in 2002 of a 'Consultations' home-page link on the Bank's website, five consultation papers were posted there. These papers related to (i) *E-Payments in Europe*, (ii) *Oversight Standards for Euro Retail payment Systems*, (iii) *Electronic Money Systems Security Objectives* (iv) *TARGET2 – Principles and Structure* and (v) *Joint Work of the ESCB and CESR in the Field of Clearing and Settlement*.

Currency Production and Issue

Introduction

Withdrawal of Irish Currency

During the first three months of 2002, the Currency Issue Department's operations were directed mainly at withdrawing the Irish currency from circulation. Following very large levels of frontloading of euro banknotes and euro coin in the last three months of 2001, demand for both euro notes and coin by the retail banks built up gradually in the early months of the year.

Banknote Production, Issue and Processing

280 million Banknotes . . .

The Bank produced 280 million banknotes during 2002 in the €5, €10, €20 and €50 denominations. In addition, some banknotes were procured from other euro-area NCBs. The Bank supplied the retail banks with 268 million banknotes in 2002. This was in addition to the 129 million banknotes distributed during the front-loading operation in the months preceding the launch of the euro currency on 1 January 2002.

Lodgements of euro banknotes by the banks totalled 325 million in 2002. There were 273 million euro banknotes processed during the year and 110 million of these were re-issued.

Coin Production and Issue

*. . . and 531 million coins
produced*

A total of 531 million coins were produced by the Mint in 2002. The Bank issued 609 million coins during the year in addition to

the 970 million coins frontloaded in 2001. Some coin was procured from abroad to cope with unexpectedly high demand for the lower value denominations and there was a publicity campaign in December encouraging the public to spend accumulated coin.

The number of coins issued in 2002 was as follows:

Table 5: Coin Issues

	1c	2c	5c	10c	20c	50c	€1	€2	Total
No. of Coins (m)	78	166	143	106	59	20	14	22	608
Value €m	0.8	3.3	7.2	10.6	11.8	10.0	14.0	44.0	101.7

Withdrawal of Irish Banknotes and Coin

The process of withdrawing Irish banknotes and coin continued throughout 2002. By the end of the year, 93 per cent of the banknotes by value had been withdrawn from circulation. While the rate of withdrawal of coin has been slower, 58 per cent of the value of the coins had been withdrawn by the end of the year.

Counterfeits

In the first half of 2002, there was a slow but steady increase in the number of counterfeits received at the National Analysis Centre (NAC) which is the centre for analysing suspected counterfeits and which is located in the Currency Centre. These were of very poor quality, with limited attention being paid to the replication of security features. However, in the second half of the year there was a substantial increase in detected counterfeits.

Banknote Exchange

Arrangements for the exchange of euro-area national banknotes provided for under Article 52 of the ESCB Statute, which began on 1 January 1999, continued until 31 March 2002. The Bank paid €294 million to other euro-area countries for Irish banknotes exchanged by them and exchanged other euro-area banknotes to the value of €252 million under the arrangements.

Supervision of Financial Institutions

Introduction

During 2002, and until the formal establishment of the Irish Financial Services Regulatory Authority (IFSRA) in May 2003, the Bank’s legal supervisory responsibilities continued to cover a wide range of institutions. These responsibilities encompassed banks and building societies, investment business firms, investment intermediaries, securities exchanges and collective investment schemes. Supervision of these entities was carried out by five separate functions in the Bank as follows:

- (i) Banking Supervision;
- (ii) IFSC and Funds Supervision;



Eamon Campbell and Ceoladh and John Sheehan at the launch of the 2003 Euro Coin set at the Casino in Marino in November.

Increase in Detections

Supervisory Responsibilities

- (iii) Securities and Exchanges Supervision;
- (iv) Retail Investments and Insurance Supervision; and
- (v) Regulatory Enforcement and Development.

New Legislation

In April 2002, the Government published proposed legislation to restructure and rename the Bank as the Central Bank and Financial Services Authority of Ireland (CBFSAI) and to establish within that framework a new single financial services regulator, the Irish Financial Services Regulatory Authority. At the same time, the Minister appointed an Interim Board of the Authority to be responsible for the transition to the new regulatory arrangements and to plan for the implementation of the proposed legislation. (The membership of the Interim Board is set out in the Governance section earlier.) Once operational, the existing regulatory functions of the Bank and certain regulatory functions of the Department of Enterprise, Trade and Employment will transfer to IFSRA. In addition, IFSRA will have an increased role in relation to consumer protection.

In practice, IFSRA will have day-to-day operational independence. However, the Governor and Board of the Bank, may, with respect to their functions, issue to IFSRA guidelines as to the policies and principles that IFSRA is required to implement in performing functions and/or exercising powers of the Bank. The Authority may act on a matter relating to the financial stability of the State's financial system only with the agreement of the Governor.

The legislation to give effect to the Government decision is being developed in two parts:

- (i) The Central Bank and Financial Services Authority of Ireland (No.1) Bill, 2002 which provides for the restructuring of the Central Bank as CBFSAI and the establishment of IFSRA. This Bill was passed by the Houses of the Oireachtas on 22 April 2003.
- (i) The Central Bank and Financial Services Authority of Ireland (No.2) Bill is expected to be published during 2003. This is expected to provide for other recommendations included in the McDowell Report such as the establishment of a statutory Financial Services Ombudsman Scheme, consultative panels of the Financial Services Industry and of Consumers and also makes provisions for matters arising from the report of the Review Group on Auditing and related matters.

To facilitate the transition to the new structure a Financial Regulation Change Unit has been established within the Supervision Division. Its work involves both short-term changes to be implemented for IFSRA and also longer-term organisational issues.

In addition, a high-level Steering Group and an IFSRA Task Force each comprising representatives from the Bank, the Department of Enterprise, Trade and Employment and the Department of Finance have been established with a view to preparing for the establishment of IFSRA on a formal basis.

Supervisory Practices

In accordance with legislation governing its statutory functions (see Appendix 1), the Bank has set out detailed supervisory standards and requirements in order to achieve a well-regulated financial sector. These are continuously reviewed and updated to ensure that they continue to be in line with best international practice and that they strike the right balance in providing a well-regulated environment while not imposing undue costs to end-users of financial services. The full text of the Bank's regulatory standards and requirements in the above areas is available on the Bank's website.

Standards & Requirements

The objectives of supervision and a detailed description of the Bank's supervisory practices with regard to authorisation and on-going supervision are contained in the Bank's Annual Report 2000. In summary, the supervisory regime comprises examination of applications for licence or authorisation, submission of financial returns, conduct of on-site inspections, compliance with minimum capital requirements, holding of regular review meetings with senior management of the regulated institutions and dealing with supervision issues as they arise on a day-to-day basis.

Consumer protection measures have also been implemented. These include the imposition of Conduct of Business rules which require regulated institutions (including credit institutions) to disclose all information relevant to the consumer's investment decision. For example, regulated institutions are required to draw up terms of business which, *inter alia*, provide:

- an outline of the services to be provided;
- an outline of the regulated institution's understanding of the consumer's objectives and investment restrictions; and
- details of the regulated institution's charges.

In addition, the imposition of advertising requirements requires that advertisements be designed in such a way as to make them easily understood and statements relating to risk warnings must not be obscured. Registers are also maintained against which consumers can check the authorisation status of individual regulated institutions and a helpline has been established to deal with enquiries from the public.

The most recent external assessment of the Bank's role as supervisor was carried out by the IMF in 2000 who concluded that the overall framework of the Bank's prudential regulation

and supervision was well developed and showed a high degree of observance of international standards and codes. A link to the IMF report may be found on the Bank's website.

The following pages contain a brief description of the Bank's supervisory remit, an overview of the main policy developments in 2002, a detailed description of the proceedings in 2002 and an outline of international developments.

Scope of the Bank's Supervisory Remit

Institutions Supervised

The Bank's supervisory responsibilities cover a broad range of financial institutions authorised in Ireland, as categorised and quantified⁴ in the following table as at 31 December 2002.

Credit Institutions	86 ⁵
Investment Business Firms	
Authorised under Section 10, IIA	910
Cash Handlers	1
Retail Intermediaries	
Multi-Agency Intermediaries	1,811 ⁶
Authorised Advisors	603 ⁷
Collective Investment Schemes	
Managers/Administrators of Collective Investment Schemes	64
Trustees of Collective Investment Schemes	27
Agency Fund Managers	141
Authorised Collective Investment Schemes (including sub-funds)	3,300
The Irish Stock Exchange	1
Member firms of the Irish Stock Exchange	10
Other	
Firms Supervised under Chapter VII of the <i>Central Bank Act, 1989</i>	4
FINEX ⁸ Trading Members	25
Futures & Options Exchanges ⁹	2
Moneybrokers	7
Approved Professional Bodies	5
The Investor Compensation Company	1

4 The total number of entities supervised by the Bank is less than the total number of the various categories outlined above because some firms appear in more than one category. For example, some credit institutions are trustees of collective investment schemes, while some managers/administrators of collective investment schemes are investment business firms.

5 This figure includes 31 branches of EEA credit institutions.

6 Of which 168 are authorised under Section 10 of IIA, 1995.

7 Of which 541 are authorised under Section 10 of IIA, 1995.

8 FINEX Europe is a futures and options exchange which is a branch of the Financial Instrument Exchange (FINEX), which in turn is the financial division of the New York Board of Trade.

9 FINEX and the NYFE which are sister exchanges owned by the New York Board of Trade.

In addition, at end-December 2002 there were 14 bureaux de change, for which the Bank's role is limited to ensuring compliance with anti-money laundering legislation.

Policy Developments

A Financial Supervision Policy Committee (FSPC), comprising management of the five supervision departments and chaired by the Assistant Director General responsible for financial services regulation, considers issues of supervision policy and ensures, to the extent appropriate, that a standard approach is adopted in relation to such issues.

Internal Committee

The Bank addressed a wide range of supervision policy issues during 2002 including:

- Capital Review proposals
- Prevention of Money Laundering
- Auditing/Accounting related issues
- Client Money Rules
- Financial Stability
- Legislation.

Capital Review

In October, as part of a third quantitative impact study, the Basel Committee on Banking Supervision published a technical guidance document outlining the Committee's proposals for a revised capital framework. A number of Irish banks participated in the study, which took place simultaneously throughout the G10, EU and the other countries. The data, which were received at the end of the year, are being analysed within an overall Global, G10 and EU context.

As well as focusing on more refined measurements of risk, the proposals also place greater emphasis on bank management and supervisory practices. While quantitative data will continue to be the basis of calculating minimum capital requirements, supervisors are encouraged to develop processes to assess not only the risk management controls and procedures in place but also the quality and reliability of data used by institutions as well as more qualitative aspects of management generally. As the complexity of the data and products used by institutions increases so too will the need for supervisors to maintain an adequate level of supervisory expertise and resources to meet these new challenges.

The Committee expects to be in a position to issue a third and final consultative paper in the first half of 2003 with a view to agreement on a final Accord in May 2003. An implementation date of 31 December 2006 is anticipated although parallel

running of both the old and new systems will be expected for the previous 12 month period.

Prevention of Money Laundering

The *Criminal Justice Act, 1994* (the 1994 Act), which became effective from 2 May 1995, is designed to aid the prevention of money laundering in line with an EU directive in this area and in line with FATF (the Financial Action Task Force – an anti-money laundering group established under the auspices of the OECD) recommendations. The 1994 Act makes money laundering an offence.

Guidance Notes Issued

The Bank issued Anti-Money Laundering Guidance Notes, approved by the Money Laundering Steering Committee¹⁰, in April 1995. Revised Guidance Notes for credit institutions were issued in November 2001. Work is continuing on finalising revisions to the Money Laundering Guidance Notes for Financial Institutions (other than Credit Institutions) regulated by the Bank.

The revised Guidance Notes reflect amendments to the anti-money laundering legislation which have occurred since 1995 (e.g. regulations which have designated additional institutions which are subject to the legislation, provisions in the *Criminal Justice Miscellaneous Provisions Act, 1997* on education and training obligations etc.) as well as expanding on the guidance provided in certain areas.

In the revised Guidance Notes, specific reference is made to tax offences as an example of a criminal activity frequently associated with money laundering. Guidance is provided on how such offences fit within the money laundering offence together with the obligation to report such suspicious transactions. In addition, a new identification form which contains photographic identification verified by the Gardai will be of benefit both to persons who do not hold a passport or driving licence and to credit institutions in the account opening process. Finally, guidance is provided on specific identification methods which can be used where business is conducted on a non face-to-face basis (including internet banking).

During 2002, the Bank made five reports to the Garda Síochána in respect of regulated institutions under its supervision. The reports were mainly in respect of failure to establish the identity of clients, failure to retain evidence of identification, checks undertaken or failure to adopt measures to prevent and detect the commission of a money laundering offence.

¹⁰ Established under the aegis of the Department of Finance to oversee the issue of guidelines to facilitate the implementation of the Act, the Directive and the FATF recommendations. The Committee includes representatives from relevant Government Departments, the Central Bank of Ireland, the Garda Síochána and the major representative bodies in the financial sector.

Following the events of 11 September 2001, a number of initiatives occurred in the area of terrorist financing and money laundering. For example, institutions were requested to examine their records for the existence of relationships with any individuals who were under investigation in connection with these events with the aim of reporting them to the Garda Bureau of Fraud Investigation (GBFI), the national financial intelligence unit to which all suspected money laundering transactions are reported. These initiatives continued through 2002.

Auditing and Accounting-Related Issues

During 2002, the practical implementation of certain recommendations contained in the Report of the Review Group on Auditing (RGA) was progressed in a number of areas. In particular, communication has increased between the Bank and external auditors/the accountancy profession in relation to certain issues including, for example, requirements on auditors to prepare reports on unincorporated entities and premium handling requirements.

*Review Group on
Auditing*

The Bank provided assistance to the auditing profession in the development of guidance on the audit of banks and is providing similar assistance in the development of guidance on the audit of investment businesses. A Liaison Group has also been established between the Bank and the accountancy profession which will provide a forum for discussing matters of mutual interest regarding financial institutions.

The Bank has nominated a representative to the interim Board of the Irish Auditing and Accountancy Supervisory Authority (IAASA). The establishment of this Oversight Board was one of the key recommendations contained in the Report of the Review Group on Auditing. It will supervise the regulation by the accountancy bodies of their members' professional standards. New legislation is currently in progress to establish IAASA on a statutory footing.

The Bank's nominated representative to the Accountancy Foundation in the UK, which was established to provide non-statutory independent regulation of the accountancy profession in the UK and the Republic of Ireland, continued to contribute to the workings of this body during 2002.

Client Money Rules

Following an initial consultation in April 2001, a second consultation paper setting out proposed updated client money requirements was published by the Bank in April 2002. Comments received from industry representatives are under consideration by the Bank. It is anticipated the updated requirements will be issued during the course of 2003.

*Second Consultation
Paper Published*

*Monitoring of Financial
Stability Issues*

Financial Stability

A Financial Stability Co-ordination Committee, chaired by the Bank's Director General, monitors issues relating to financial stability. The Committee seeks to identify areas of fragility within the economy and the financial system which could impact on stability, using inputs from the financial supervision, monetary policy, economic research, financial markets and payments oversight areas of the Bank.

Ongoing work on financial stability during 2002 included further development of the Bank's procedures for dealing with financial crises and the identification of a set of macro-prudential indicators for future use in the Bank's Financial Stability Report. In addition, Banking Supervision contributed to an in-house study of the financial stability issues arising from the insurance industry, as well as the Bank's annual Financial Stability Report.

Legislation

Significant resources continue to be deployed in reviewing and providing comments to the Department of Finance on draft legislation relating to the establishment of the new Irish Financial Services Regulatory Authority. The Bank has also consulted with the Department of Finance concerning the transposition of an EU Directive relating to Electronic Money Institutions which was transposed on 29 May 2002.

Consumer Protection

A full description of the Bank's consumer protection role is contained in the 2000 Annual Report. The Bank continues to develop the area of consumer protection including the extension of conduct of business rules, advertising requirements, client money requirements and complaints procedures.

In June 2002, a Consumer Information Unit was established within the Bank. The first consumer information leaflet was published by the Bank in September 2002. Over 130,000 leaflets entitled "Saving and Investing — know your rights" were circulated in this campaign through a variety of channels including libraries, Citizen Information Centres, trade unions and directly from the Bank. A second booklet entitled "Saving and Investing for Beginners" is at an advanced stage and will be published in 2003. The Consumer Information Unit can be contacted on the Bank's Lo-call line 1890 777 777.

Registers of Authorised Investment Business Firms

The Bank maintains two registers of investment business firms¹¹ which are authorised under the *Investment Intermediaries Act, 1995*. Members of the public are encouraged to contact the



Registers of Firms

¹¹ The Bank maintains registers of Investment Business Firms (authorised under Section 10 of the IIA) and Investment Product Intermediaries (i.e. intermediaries holding letters of appointment from product producers) in accordance with Sections 17 and 31, respectively, of the IIA.

Bank to establish whether or not a firm is authorised by the Bank, prior to dealing with the firm. The registers of authorised investment business firms are available to the public on request by calling the Bank's Lo-call line 1890 777 777.

Unauthorised Activities and Complaints

It is an offence for any person or firm to provide investment business services without an appropriate authorisation. Prompt investigations are carried out by the Bank where there is reason to believe a person or firm is carrying out unauthorised activities. During the year ended 31 December 2002, ten warning notices concerning 24 firms carrying on unauthorised investment business were published, bringing the total since the power to publish such notices was given to the Bank in August 1998 to 51 notices concerning 106 firms. Any complaints relating to firms under its supervision are dealt with by the Bank or referred to the appropriate ombudsman, where necessary.

*Ten Warning Notices
Issued*

Foreign Firms Providing Services To Irish Clients

It is an offence for banks or firms not established in Ireland to take deposits from the public or to provide investment services to Irish consumers or to market units in collective investment undertakings without having the appropriate authorisation. EU legislation provides for a system of 'passporting' of services. This enables European Economic Area (EEA) investment firms or banks authorised in their home jurisdiction to provide services in Ireland without the need to obtain a further authorisation from the Bank. The Bank maintains registers of such institutions. If in any doubt, consumers are advised to contact the Bank to ascertain the status of any institution or scheme.

*Appropriate
Authorisation*

The Bank's Advice To Consumers

Be aware of the danger signs when presented with an investment opportunity:

- be suspicious if the investment looks too good to be true;
- be wary of any firm which tells you the investment must be taken advantage of immediately;
- always check that the firm has been authorised;
- do not be pushed into hasty decisions; and
- remember that an investor who invests with an unauthorised firm will not be eligible for compensation under the *Investor Compensation Act, 1998*.
- Public Enquiries to the Bank: Lo-call 1890 200 469.

Deposit Protection

As described in the Bank's 2000 Annual Report the Bank administers a deposit protection scheme funded by credit institutions (banks and building societies). No compensation has been paid to date under this scheme.

Investor Compensation

The Bank is the supervisory authority for the purposes of the *Investor Compensation Act, 1998* (ICA). Its functions in this regard include the making of a determination that an investment firm (including an insurance intermediary) is unable to meet its obligations to its clients and has no reasonable foreseeable opportunity of being able to do so. The Investor Compensation Company Limited (ICCL) is responsible for the payment of compensation to private clients of failed investment business firms.

A total of 2,593 claims have been received for payment of compensation by the ICCL from clients of W&R Morrogh, a stockbroking firm currently in receivership. In July 2002, compensation was approved by the Receiver who is also the Administrator for the purpose of the ICA and paid in respect of 579 of these claims. A further 127 claims were rejected by the Administrator. The Administrator is assessing the remaining claims.

Since the appointment of a Liquidator, who is also the Administrator for the purpose of the ICA, to Money Markets International Stockbrokers Limited, the ICCL has received 306 claims from former clients of the firm. Up to the end of 2002, the Administrator has certified 283 of these claims and compensation has been paid by the ICCL. The remaining claims are being assessed by the Administrator.

One claim for compensation arising from the collapse of Andrew Casey, the Cork-based insurance broker who ceased trading in July 1999, was outstanding at year-end.

Supervision of Credit Institutions*Responsibilities*

The Bank is responsible for the licensing and prudential supervision of all credit institutions incorporated in the State and branches of credit institutions from outside the European Economic Area (EEA). The work of supervising credit institutions is carried out in the Banking Supervision Department.

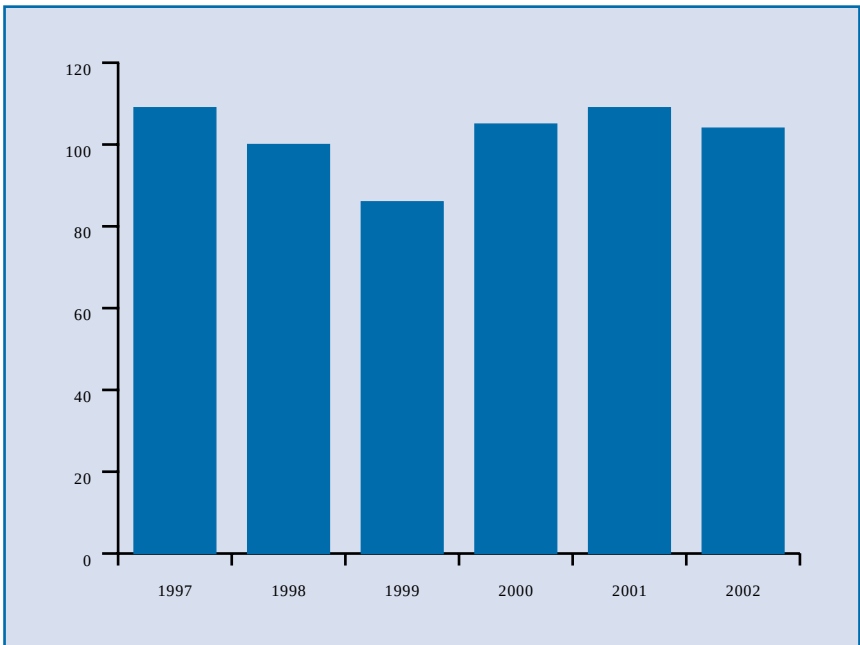
As indicated above, EEA credit institutions are entitled, in accordance with EU legislation, to establish in Ireland either on a branch basis or to provide services on a cross-border basis (i.e. without having a presence in Ireland). 'Passporting' of services in this way is subject to a notification procedure through the home country regulator to the Bank. The home country regulator is responsible for prudential supervision although, in the case of branches established in Ireland, responsibility for the supervision of liquidity is shared between the Bank and the home regulator. The Bank is also responsible for ensuring that EEA branches are in compliance with Irish anti-money laundering procedures.

Statistics are collected from the Irish branches of EEA credit institutions on a monthly basis and the Bank holds regular review meetings with branch management.

Inspections and Reviews

A review of the risk management and internal control systems in 43 credit institutions and banking groups was undertaken during the year. Four routine prudential inspections, four money laundering inspections and 53 routine reviews of credit institutions and related entities were completed.

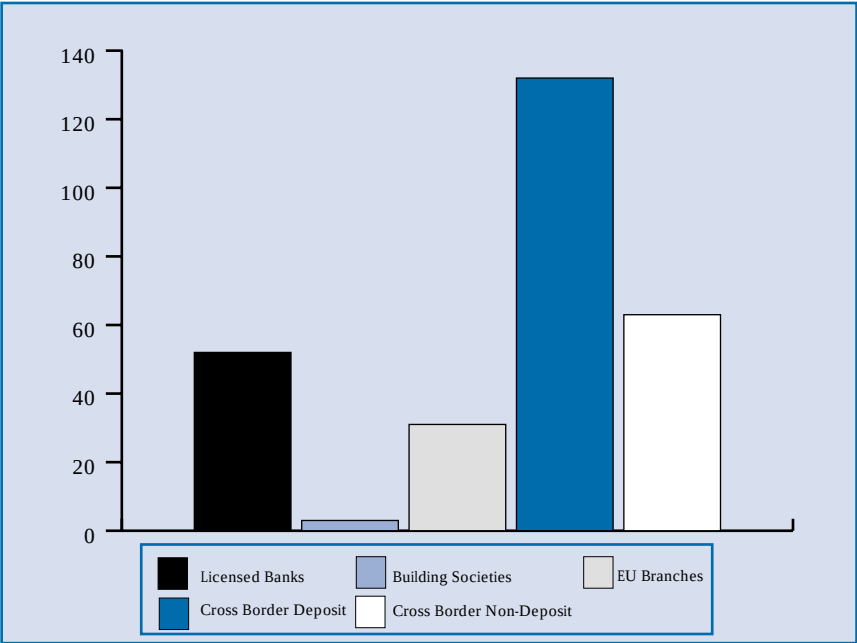
Chart 2: On-site Inspections and Reviews of Credit Institutions



Licence Changes

Six banking licences were issued, two of which were registered as designated public credit institutions, under the *Asset Covered Securities Act, 2001*, last year. Registration permits these banks to issue bonds (similar to the German Pfandbrief) backed by pools of mortgages or public credits. Five banking licences were revoked – all at the request of the licence holders. At the end of 2002, the total number of credit institutions supervised by the Bank was fifty-five. One EU credit institution closed its branch bringing the total number of EU branches operating in Ireland at end-December 2002 to thirty-one.

Chart 3: Authorised Credit Institutions at end 2002



Letter Issued to Institutions

Credit Growth

The high rate of residential mortgage credit growth, well in excess of overall private sector credit growth, continued to be the main prudential concern during 2002. The unexpected surge in the growth of residential mortgage lending towards the end of the year, against a backdrop of weakening economic activity, was a particular concern. On the basis of these developments, combined with the weak economic environment and a detailed examination of credit institutions' mortgage lending policies, the Governor issued a letter to mortgage lending institutions reminding them of the need to maintain high lending standards. The situation remains under close scrutiny and a series of inspections of residential mortgage lenders is underway.

There is a marked difference between residential mortgage growth and the evolution of other private sector lending. The ongoing weakness of the global economy and the marked slowdown in economic activity in Ireland were reflected in a slowing of non-mortgage credit growth during 2002. In addition to the weakening of credit growth, economic conditions also raised concerns about banks' asset quality. This was addressed through close scrutiny of banks' non-performing assets and provisioning data, as well as their exposure to vulnerable industrial sectors.

Supervision of Non-Credit Institutions

Collective Investment Schemes

Collective Investment Schemes are established for the purpose of investing the pooled subscriptions of investors (held as units

or shares in the schemes) in investment assets in accordance with investment objectives published in a prospectus. The Bank is responsible for the authorisation and supervision of collective investment schemes.

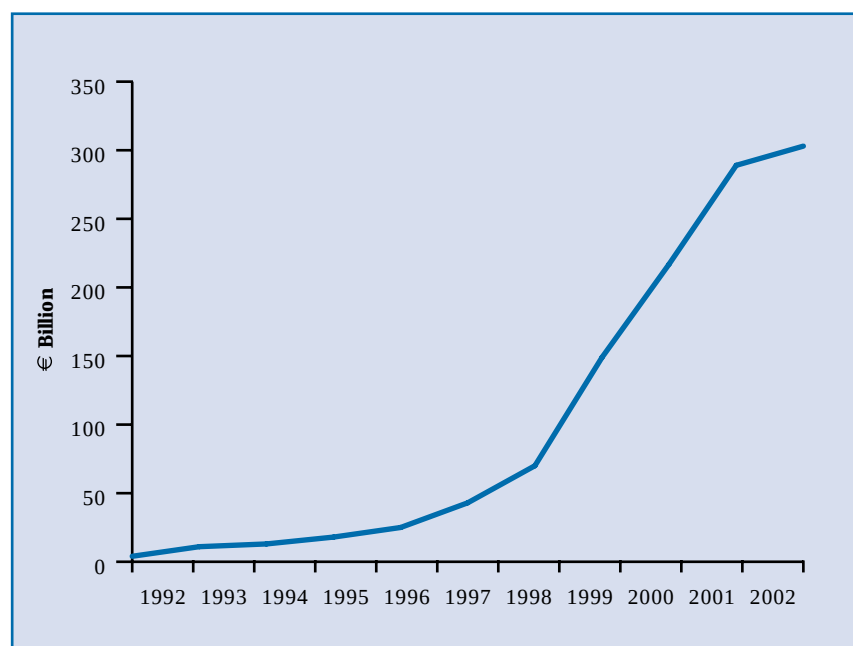
The Bank's role in this area covers the schemes and firms based in Ireland which provide services to such schemes (e.g. administration, trustee and management companies). The regulation of the schemes consists of a detailed assessment of their promoter(s) and other related parties. It also involves the imposition and enforcement of detailed supervisory requirements which are set out in Notices devised by the Bank and which cover, *inter alia*, investment and borrowing restrictions and disclosure of information to investors. The full text of these Notices under the title "Collective Investment Schemes" is available on the Bank's website.

During the year, 118 schemes (684 including sub-funds) were authorised, compared with 176 schemes (696 including sub-funds) in the corresponding period in 2001. This represents a 33 per cent decrease in fund authorisations and a marginal decrease in funds including sub-fund authorisations when compared with 2001 figures. This development reflects the continuing trend by promoters to establish additional sub-funds within existing fund umbrellas rather than seeking authorisation of new funds, thereby reducing costs for promoters. The number of schemes being processed at end-December 2002 was 24 (136 including sub-funds). A monthly average of 800 amendments to existing funds were received during the period under review. The level of net assets under management by authorised collective investment schemes reached €303.9 billion by end-December 2002 represented by 3,300 funds including sub-funds. The slowdown in the high level growth of net assets under management, which was evident in the previous five years, reflects the sharp fall in equity markets over 2002.

118 Schemes Authorised

A process of on-site inspections of service providers (i.e. administration companies and trustee companies) which began in 2001, and was intended to identify those areas and firms that require closer monitoring, was largely complete in mid-year. In August 2002, a communication was issued to all service providers setting out, in composite form, the general findings of the inspections. This was in addition to the specific post-inspection letters which were issued to each firm. There has been a very positive feedback from the industry to this initiative by the Bank. Firms saw it as a very useful guide to compliance issues, particularly in relation to corporate governance. Over the year as a whole the Bank carried out 18 on-site inspections and 19 review meetings of service providers.

Chart 4: Net Asset Value of Collective Schemes

*Position Paper*

On 24 April 2002, the Bank agreed a Joint Position Paper with the Dublin Funds Industry Association (DFIA). The purpose of this paper was to agree changes to the procedures and processes in the authorisation of collective investment schemes with a view to increasing efficiencies within the authorisation regime. Under the provisions of the paper, greater responsibility is placed on fund participants, particularly the legal representatives, in signing off on documentation. For its part, the Bank has committed to a timetable for the completion of authorisations and the introduction of a 'fast-track' authorisation process for similar types of schemes. In order to meet the target timetables for processing applications, the Bank overhauled and updated its internal procedures. These changes have delivered significantly shorter processing times and have been welcomed by the industry.

Two New Directives

Two Directives, amending the 1985 Undertakings for Collective Investments in Transferable Securities (UCITS) Directive, entered into force in February. The 'Product' Directive extends the range of instruments in which a UCITS can invest. The 'Management Company' Directive provides for the authorisation of management companies in their own right and broadens the scope of activity which they are permitted to undertake. The latter Directive also provides for the publication of a simplified prospectus. Member States must transpose both Directives into national legislation by 13 August 2003. The Bank issued a memorandum to the funds industry to highlight a number of key issues from both Directives and met with representatives from the DFIA to discuss the implications of the introduction of a new authorisation regime for management companies. The Bank

collaborated with the Department of Enterprise, Trade and Employment in the drafting of legislation to implement the 'Product' Directive and certain technical amendments to collective investment scheme legislation as agreed with the industry.

The Bank continued its regular meetings with the DFIA and issued a number of papers to the industry dealing with technical issues, including revised rules in relation to the use of stock lending and repurchase agreements. The Bank consulted the industry on cross-investment within umbrella investment companies (invested by one sub-fund of the umbrella into another of its sub-funds) and mergers/amalgamations of collective investment schemes. In December, following an industry consultation, the Bank issued a new non-UCITS Notice which permits the authorisation of retail funds of hedge funds.

The Bank participated in the IFSC Clearing House Group, a body established to oversee and promote developments in the IFSC. It also participated in the IFSC Funds Group and in a sub-group of that Group, which considers possible amendments to collective investment scheme legislation.

Exchanges, Stockbrokers and Investment Firms

The Securities and Exchanges Supervision function is responsible for the supervision of exchanges (including member firms) and certain investment firms. The supervision of the Irish Stock Exchange is focussed on approval of its rules while supervision of its member firms (i.e., stockbrokers) follows the prudential supervisory process described earlier. There are two futures and options exchanges operating in Ireland – FINEX Europe and the New York Futures Exchange (NYFE). These exchanges are divisions of the New York Board of Trade which is regulated in the US by the Commodity Futures Trading Commission (CFTC). The Bank has developed a mechanism for the approval of rules and the supervision of the members in conjunction with the CFTC.

During 2002, there were no additional authorisations issued under Section 18 of the *Stock Exchange Act, 1995*. The authorisation of two member firms of the Irish Stock Exchange was revoked at the request of the firms involved during this period.

During 2002, 13 firms were authorised to provide investment services under Section 10 of the *Investment Intermediaries Act, 1995*. Five authorisations were revoked, at the request of the firms involved, during this period. Twenty-four applications for authorisation were under consideration at 31 December 2002.

*Five Authorisations
Revoked*

On-going supervision of authorised investment and stockbroking firms throughout the year took the form of on-site inspections, formal review meetings, correspondence and communication on specific issues. During the year, 25 inspections and 76 review meetings were held. Resources continued to be directed to dealing with the continuing high level of new applications for authorisation, developments in the stockbroking industry and a number of issues relating to individual stockbroking and investment firms.

Retail Intermediaries

Responsibility for the authorisation and supervision of Retail Intermediaries and the Approved Professional Bodies is undertaken primarily by the Retail Investments and Insurance Supervision function at the Bank.

Intermediaries involved in the sale of investment and insurance (both life and non-life) products to the public are regulated under the *Investment Intermediaries Act, 1995* (as amended). There are two main categories of investment and insurance intermediaries:

- (i) Multi-Agency Intermediary, which may receive and transmit orders and provide advice on investment instruments available only from the product producer from whom the intermediary holds a written letter of appointment; and
- (ii) Authorised Advisor, which provides advice on investment instruments but without the necessity to hold a letter of appointment. The intermediary is obliged to recommend the most suitable investment product available on the market, regardless of whether or not the firm holds an appointment from the relevant product producer.

Authorisation/Registration of Insurance Intermediaries

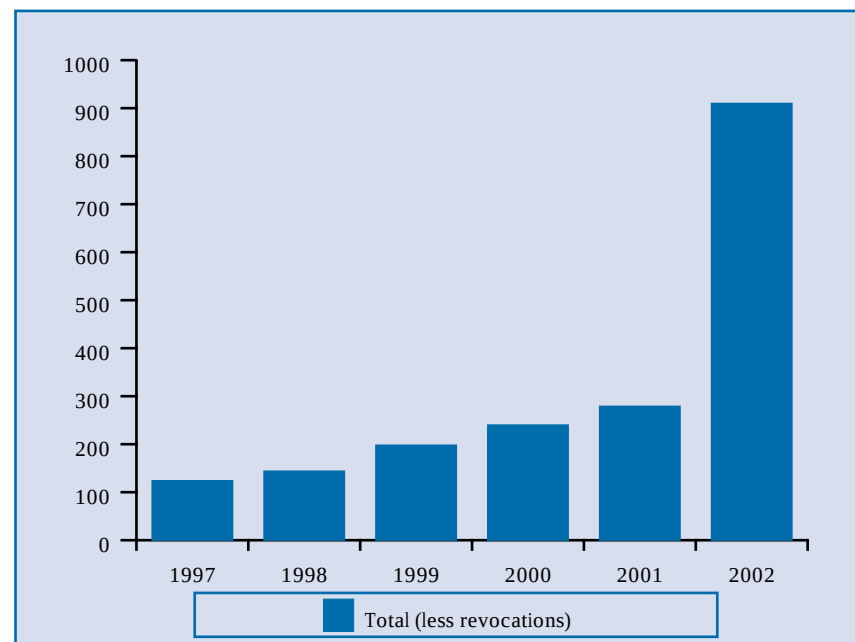
The *Insurance Act, 2000* provides that insurance intermediaries who held an appointment from a product producer on the day before the Act came into effect, i.e., 31 March 2001, could continue to act as insurance intermediaries provided they registered with or applied to the Bank for authorisation by 30 June 2001. Of the 877 firms which stood authorised on 1 April 2001, pending their application for authorisation being approved by the Bank, there were 62 applications outstanding on 31 December 2002. The Bank is pursuing these firms to resolve the outstanding issues and it is intended that the majority of these will be authorised early in 2003.

Authorisations and Revocations of Firms

During 2002, 102 Multi-Agency Intermediaries, 528 Authorised Advisors and one Other Investment Firm were authorised under Section 10 of the *Investment Intermediaries Act, 1995*. The authorisations of six firms were revoked at the request of the firms concerned during the year.

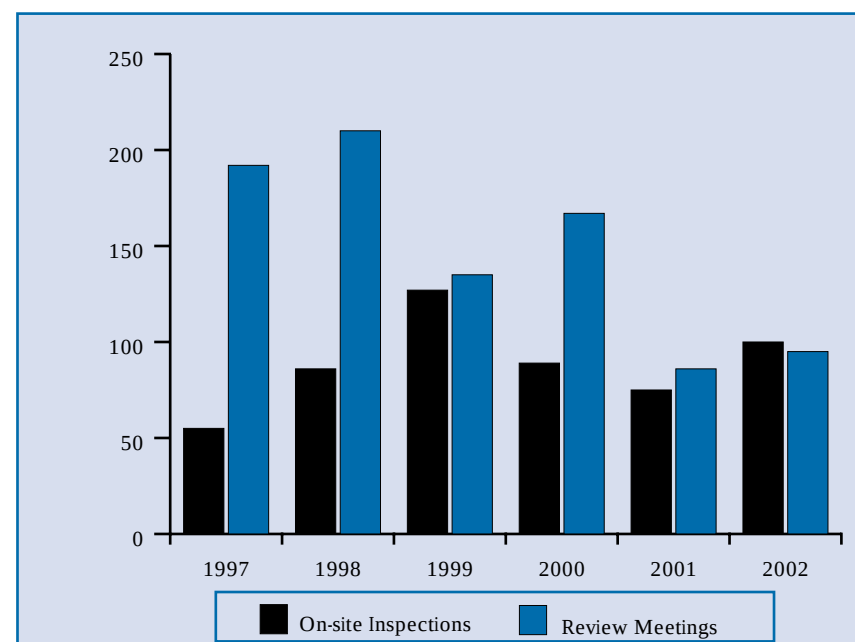
62 Applications Outstanding

Chart 5: Number of Firms Authorised under Section 10 of the Investment Intermediaries Act, 1995



Fifty-seven on-site inspections of retail intermediaries were conducted during the year. The inspections focussed primarily on the Conduct of Business rules which the Bank introduced for the sector in November 2001.

Chart 6: Review Meetings and Inspections of Regulated Entities other than Credit Institutions (Service Providers, Investment Firms and RAIP's)



Approved Professional Bodies

The Bank has approved five accountancy bodies as *Approved Professional Bodies* under the *Investment Intermediaries Act, 1995*. Members of these bodies can become *certified persons* allowing them to carry on investment business services or provide investment business services or investment advice on an incidental basis.

Increasing Focus

International Dimension

Recent decades have been marked by the transformation of international financial markets with globalisation of the financial services industry, functional integration of banking and securities business and financial innovation. The focus of regulation is therefore increasingly on the international scene in addition to the domestic economy. The Bank is part of an international network, with contact and interfaces with the global economy, international financial markets and other banking and investment firm supervisors. The Bank's relationship with other bodies in the conduct of its supervision functions is governed by statutory obligations in respect of the sharing of information.

International Committees

The Bank participates in meetings of:

- (i) the Banking Supervision Committee (BSC) which is a high-level consultative committee reporting to the European Central Bank on supervision of credit institutions,
- (ii) the Banking Advisory Committee (BAC), which deals chiefly with issues relating to the development and implementation of EU law in banking supervision,
- (iii) the Groupe de Contact of EU banking supervisors which meets to exchange views on supervisory policies and practices in Member States,
- (iv) the EU High Level Securities Supervisors Committee which deals with issues relating to investment business,
- (v) the Enlarged Contact Group on the supervision of collective investment schemes which deals with the supervision of the funds industry,
- (vi) The CESR which is an EEA committee established in December 1997 to improve the framework for supervising securities firms and securities markets with a view to improving investor protection and increasing market transparency. CESR-POL is a permanent group of EU securities regulators established to deal with enforcement type issues. CESR-FIN is a permanent group of EU securities regulators established to co-ordinate the

work of CESR members in the area of endorsement and enforcement of internal accounting standards and the other financial disclosure requirements in the EU.

- (vii) The International Organisation of Securities Commissions (IOSCO) which is the international representative body for securities regulators with in excess of 100 members.
- (viii) The IOSCO Standing Committee Number 5, which deals with the regulation, management and distribution of collective investment schemes. It meets three times per year and met in Dublin in March 2003.

Memoranda of Understanding

Cooperation with other supervisory authorities is organised by establishing working relations through formal bilateral Memoranda of Understanding or other written statements or exchange of correspondence which sets out respective supervisory roles and responsibilities. At the end of 2002, the Bank was a party to Memoranda of Understanding or exchange of correspondence with 11 different jurisdictions.

The Bank held discussions during the year with a number of foreign supervisory authorities. This included visits from thirteen overseas regulatory agencies seeking technical assistance.

Bilateral Meetings with Regulatory Authorities

The Bank met with the banking regulatory authorities from Austria, Germany, Italy and the UK, as part of its ongoing exchange of information on entities supervised by the Bank which have a presence in these jurisdictions.

Management and Support Services

Human Resources

In line with the continuing slowdown in economic growth, the Bank experienced a further decline in staff turnover during 2002. Turnover for the year was 8.1 per cent compared with 9.3 per cent in 2001. Staff numbers increased by 44.5 or 5.75 per cent to reach 818 at end-December 2002. The increase mainly reflects the continued expansion of the Bank's supervisory responsibilities, additional staff required for the work of the Monetary Policy and Financial Stability Department and increases in the central services departments resulting from the expansion of the Bank in recent years.

Of the total staff employed at end-2002, 577 were clerical, administrative and professional staff and 241 were industrial, craft and service staff. Ten staff were on secondment to the ECB at the end of 2002. Staff numbers continue to reflect the Bank's practice of providing services such as security, engineering,

*Further Decline in
Turnover*

catering and cleaning on an in-house basis. The majority of Bank staff are permanent full-time employees on open contracts.

Approximately 53 per cent of Bank staff are female and almost 80 per cent of staff are under 50 years of age, with a Bank average age of 39.

Staff Serving at Year End

	Department	2002	2001
	Governor & Management Board	7	7
Financial	Financial Control	48.5	41
	Payments and Securities Settlements	40	39
	Financial Markets	27.5	29.5
Economic Services	European Monetary Affairs & International Relations	14	14
	Economic Analysis, Research and Publications	20	21.5
	Monetary Policy & Statistics	38	28
Supervision	Banking Supervision	43	35
	Regulatory Enforcement & Development	18	16
	IFSC & Funds Supervision	65	64.5
	Securities and Exchanges Supervision	42	38.5
	Retail Investments & Insurance Supervision	43	31
Currency Services	Currency Issue	98	106.5
	Currency Production	76	76
Resources	Human Resources and Planning	32.5	31.5
	Information Systems	36.5	34
	Corporate Services	133	127.5
	Engineering Services	26	25
Audit	Internal Audit	10	8
	Total	818	773.5
	Of which:		
	Clerical, Administrative and Professional Staff	577	538.5
	Industrial, Craft and Service Staff	241	235

Remuneration Policies

Benchmarking Review

The remuneration policy for staff is on the basis of appropriate comparators in the Public Sector and/or by reference to relevant industry norms. The Bank applies the terms of national pay agreements to all categories of staff. The Bank undertook a benchmarking pay review for clerical, administrative and professional staff during the year. This review examined roles, duties, responsibilities and remuneration structures in comparable organisations in both the public and private sectors.

Training and Development

Under the Bank's Academic and Professional Training Scheme, 30 staff successfully completed professional or university degree courses by attendance at evening lectures and by home study. A further 45 staff members joined the scheme. This scheme covers a wide range of courses for university degrees and qualifications of professional bodies. Five staff were successful in various stages of the Institute of Bankers in Ireland examination. During the year a range of internal and external courses in

management, interpersonal and technical and language skills were provided.

Bank staff attended courses/seminars at the Federal Reserve Bank of New York, the Bank of England, the Banque de France, the Deutsche Bundesbank and participated in the joint training programmes involving the European Central Bank and the other central banks of the European Union.

Attendance at Courses

The Bank provides limited facilities for the provision of work experience and temporary work placements for a small number of Irish students.

Equal Employment Opportunities

The Bank is an equal opportunities employer with recruitment and employment policies administered on this basis. Training programmes, academic training facilities, promotion competitions, atypical working and career break schemes are available to staff.

Employment of People with Disabilities

The Bank is committed to observing the Government's objective for the employment of a minimum target of 3 per cent of people with disabilities within the Public Service.

Work/Life Balance

The Bank recognises the growing social concern for employees to have a balance between paid work and the demands of personal and family life. The Bank has a range of flexible and atypical working arrangements such as job-sharing, part-time work, career break, special leave and short-term contracts.

Safety, Health and Welfare at Work Act, 1989

The Bank continues to actively promote a safe and healthy working environment in accordance with the terms of the *Safety, Health and Welfare at Work Act, 1989*.

Technical Assistance

The Bank hosted study and information visits by officials from the South African Reserve Bank, Interim Credit Unit — Kosovo, Financial Services Authority, Banque Centrale du Luxembourg, Central Bank of Sri Lanka, Capital Market Authority of Egypt, National Bank of Belgium, National Bank of Poland, Investors Group Financial Services — Canada, and Ministry of Foreign Affairs of Thailand. During the year, the Bank also provided bi-lateral technical assistance to the Central Bank of Malta. The Bank has provided technical assistance to the Bank of Botswana over recent years in training staff in the authorisations and supervision of collective investment schemes and their service

Wide Range of Assistance

providers. This culminated in a two week training visit to Botswana in June.

Information visits were also arranged for the following accession countries: Bank of Estonia, Central Bank of Malta, National Bank of Hungary, Bank of Latvia, Bank of Lithuania and Central Bank of Cyprus.

Strategic Planning and Organisation Structure

The Bank's planning and budgeting process incorporates an annual plan, annual manpower plan, annual budget, capital expenditure programme and annual review. There is also a longer term strategic dimension to the planning process. In this context, the major issues impacting on the planning processes at present are the Bank's evolving role within the Eurosystem and the establishment of the CBFSAI and IFSRA during 2003.

Media and External Communications

Activities Relating to Euro Changeover

The Bank's Press Office provided an ongoing information service to the domestic and international media. The first half of the year was dominated by the changeover to the euro. The Bank was involved in the preparation and implementation of various information activities relating to the euro changeover. Among the media-related events held was the handover of the Bank's 'Lady Lavery' portrait, which had featured on all Irish banknotes since 1928, to the National Gallery of Ireland. This event was held on 9 February to mark the last day of circulation of Irish notes and coins as legal tender.

Other Work

Other media related activities included regular press briefings and interviews by the Governor and other senior personnel. The Press Office worked with the newly established Consumer Information Unit on the promotion of supervision-related issues to a wider consumer audience.

The Press Office co-ordinated and managed media relations on a domestic basis for the ECB and the ESCB throughout the year.

As part of its development of educational links, the Bank hosted a number of visits from schools and colleges from both Ireland and overseas.

Legal Services

In 2002, the Legal Unit was heavily involved in the preparation of final legislative proposals for a restructured central bank. It also participated actively in the ongoing refinement and adoption of the legal framework governing the ESCB, with particular reference to currency issues. Preparations for the extension of the *Freedom of Information Act, 1997* to cover the Bank were set in place and extra resources were required to be devoted to

the administration of EU legal sanctions against the financing of terrorism.

Information Systems

The Bank continued its programme of renewing and expanding its Information Technology systems following a high level strategic review which was carried out the previous year. The programme includes changing the underlying technology infrastructure, upgrading existing application systems and introducing new systems to meet expanding business needs.

*Renewal and
Expansion of
Systems*

The upgrading of processes and procedures for designing and writing software and the retraining of all software development staff was completed.

The Bank's network was extended to a number of new buildings which staff occupied during the year, and the process of changing the underlying network topology from Token Ring to Ethernet continued. Automated network management and administration procedures were extended to the new areas.

Supervision and Regulatory systems were expanded and enhanced in response to increases in business activities and responsibilities. Projects were launched to upgrade systems for Collateral Recording and Valuation and for Procurement, and to replace a Stock Register system.

Progress was made towards further increasing the automation of back-up systems in the context of Disaster Recovery and existing back-up arrangements were maintained and tested.

Systems in production were fully supported and the Bank continued to participate successfully in the ESCB common systems.

This is given under the seal of the Central Bank of Ireland.

The 13th day of June, 2003.

John Hurley, Governor

Brian Halpin, Secretary

Financial Operations

Accounting Policies

It is the Bank's policy in preparing its financial statements to follow, as far as possible, generally accepted accounting principles (GAAP). However, because of the unique nature of some of its operations as a central bank, and as a member of the Eurosystem, certain deviations from GAAP are necessary. All such deviations from GAAP are clearly identified in the statement of the Bank's Accounting Policies which is provided as part of the Statement of Accounts.

Auditing and Reporting Standards

Under the *Central Bank Act, 1989*, Section 19, the Bank is required to prepare and submit its Statement of Accounts to the Comptroller and Auditor General within six months of every year-end. The Comptroller and Auditor General must in turn audit and report on the Statement of Accounts to the Minister for Finance who is required to lay them before both houses of the Oireachtas.

Under Article 27 of the Statute of the European System of Central Banks, the Accounts of the Bank must be audited by an independent external auditor recommended by the Governing Council of the ECB and approved by the European Council. PricewaterhouseCoopers was appointed as independent external auditor of the Bank for 2002.

As a member of the Eurosystem, the Bank is obliged to comply with regular extensive reporting requirements to the ECB, comprising both statistical and financial data.

Sharing of Monetary Income

As a member of the Eurosystem, the income the Bank earns from the assets backing currency in circulation and bank deposit liabilities, forms part of the total income of the Eurosystem. Under Article 32 of the Statute of the ESCB this income, described as "monetary income", is to be pooled by all the National Central Banks (NCBs) and then redistributed according to each NCB's share in the capital of the ECB. During the initial years of monetary union, namely 1999-2001 (when each NCB continued to issue their respective domestic currencies), the net effect of this pooling and redistribution of monetary income was designed so as not to have a material impact on NCBs' profits.

From 2002 onwards, a revised system for monetary income allocation was required as national banknotes are no longer issued. Euro banknotes are issued by NCBs on behalf of the Eurosystem as a whole and circulate freely throughout the Euro area and externally. Because NCBs could be expected to undergo significant changes in their relative income positions following the issue of euro banknotes, on which monetary income is earned, the Treaty provided for a gradual progression to the ultimate situation where monetary income on banknotes outstanding would be allocated according to each NCB's share in the capital of the ECB. The agreed scheme provides for a six-year adjustment period extending from 2002 until 2007.

Financial Results for 2002

Profit for the year to 31 December 2002 amounted to €828.6 million, an increase of €265.5 million over the 2001 figure. Included in the profit for 2002 are the exceptional gains of €239.7 million arising from the write-off of unredeemed Irish pound banknotes (see below). Reflecting the lower level of interest rates, there was a decrease in interest income of €165.6 million mainly attributable to reductions in interest receivable on securities of €94.5 million, on monetary policy operations of €59.2 million and €26.3 million in premium/discounts on securities. This was offset somewhat by an increase of €15.7 million in interest received on deposits. The decrease in interest payable of €14.5 million is mainly attributable to reductions in interest payable to credit institutions of €31.2 million and of €55.0 million in intra-Eurosystem balances which were partly offset by a decrease in the average level of Government deposits. The net gain from financial operations increased by €187.4 million to €412.4 million, due to the realisation of exchange rate and capital gains on investments.

Total operating costs, comprising pay, non-pay, banknote raw materials and depreciation, charged against profit increased by €4.7 million, or 6.7 per cent in 2002. Staff costs including pay increased by €7.1 million (22.3 per cent), while other operating costs decreased by €2.4 million (6.4 per cent). The increase in staff-related expenses reflects in particular, additional staff numbers mainly in the Financial Supervision and Regulation departments. A detailed analysis of the Bank's operating costs is given in Note 8 of the Statement of Accounts.

After transfers to reserves, the Bank's Surplus Income amounted to €823.7 million which accrues to the Exchequer. The corresponding figure for 2001 was €530.6 million.

Bank profit levels since 2000 have been exceptionally high primarily due to exchange rate and capital gains and the windfall profit in 2002 from Irish banknotes. It is expected that profits will return to more normal levels in the immediate future.

Table 1: Summary Profit and Loss Account

€million	31 Dec 2002	31 Dec 2001	Change
Interest Income	720.5	886.1	(165.5)
Interest Expense	483.8	498.3	14.5
Net Interest Income	236.7	387.7	(151.0)
Net result of financial operations	412.4	225.0	187.4
Exceptional gain from the write-off of Irish pound banknotes	239.7	—	239.7
Other Income	13.6	19.5	(5.9)
Total Net Income	902.4	632.2	270.2
Staff costs	38.6	31.6	7.0
Administrative expenses	22.2	18.9	3.3
Banknote raw materials	8.0	14.0	(6.0)
Depreciation	5.0	4.8	0.2
Total Operating Costs	73.8	69.2	4.6
Profit (income less expenses and operating costs)	828.6	563.0	265.6

Figures may not sum due to rounding.

Table 2: History of Profit 1996-2002

	1996	1997	1998	1999	2000	2001	2002
€million	152.6	146.5	224.7	248.0	520.5	563.0	828.6

Balance Sheet Developments

Total balance sheet assets as at 31 December 2002 were €20.9 billion, €2,226 million less than the corresponding figure for 31 December 2001. Claims on non-euro area residents denominated in foreign currency decreased by €1,115 million primarily reflecting portfolio investment activities whereas claims in euro on euro and non-euro area residents rose by €427 million and €762 million, respectively. Lending to euro area credit institutions related to monetary policy operations in euro decreased by €2,042 million, due mainly to a reduction in borrowings by IFSC institutions.

At end-year, the Bank's liability for euro banknotes in circulation amounted to €3,470 million, which represented a decrease of €846 million from the previous year when the corresponding figure represented Irish pound banknotes in circulation at that time. Liabilities to euro area credit institutions increased by €112 million mainly due to higher average minimum reserve requirements. Liabilities to other euro area residents denominated in euro, essentially Government deposits, decreased by €1,325 million. This was mainly due to a reduction of €1,000 million in the deposit which was held in the name of the National Pension Reserve Fund. Intra-Eurosystem net liabilities to the ECB increased by €780 million reflecting the Bank's liability of €2,305 million for banknotes issued by the Bank over and above its capital key share of the total euro banknote issue. This was partly offset by a reduction of €1,525 million in the amount due to the ECB in respect of cross-border payments

made by financial institutions in euro through the ESCB's large-value payment system — TARGET.¹ There was a decrease of €775 million in Revaluation Accounts, due to a combination of sales of foreign currency assets which raised exchange rate and capital gains and the appreciation in the exchange rate of the euro. Capital and Reserves decreased by €268 million, primarily due to a reduction of €274 million in the Currency Reserve reflecting the transfer to the Exchequer of net proceeds of coin issued (see below).

Redemption of Irish Banknotes

Irish banknotes ceased to be legal tender with effect from 9 February 2002. As at 31 December 2002, notes to the value of €299.7 million were outstanding. A provision of €60 million was created in respect of future redemptions and windfall gains of €239.7 million relating to the balance of outstanding unredeemed notes have been accounted for through the Profit and Loss account. These gains form part of the payment of Surplus Income to the Exchequer for 2002, as proposed by the Minister for Finance in December 2001.

Proceeds of Irish Coin

Under Irish legislation, the benefit from the coin issued by the Bank on behalf of the Minister for Finance accrued over the years since 1943 to the "Currency Reserve" of the Bank. To coincide with the introduction of euro coin from 1 January 2002, and to bring the position into line with general practice in other EU States, legislation was passed in March 2002 to permit the proceeds from the issue of coin to be transferred in future directly to the Exchequer. Subsequently, a total of €360 million in respect of the net proceeds of coin issued was paid to the Exchequer during the year. During the year, the value of euro coin issued was €356.1 million. Irish coin redeemed totalled €253.8 million. Full details are incorporated in Note 35 of the Statement of Accounts.

Prompt Payment of Accounts 2002

The Bank has been obliged to comply with the provisions of the *Prompt Payment Act, 1997* since the enactment of that legislation, which required public authorities to pay bills within 45 days of the due date. The European Communities (Late Payment in Commercial Transactions) Regulations, 2002, which gave effect to an earlier EU Directive on combating late payments in commercial transactions, and which apply to all contracts entered into from 8 August 2002, introduced significant amendments to the prompt payment requirements as contained in the Act. These included a reduction in the payment period from 45 to 30 days and the extension of the requirements

¹ Trans-European Automated Real-time Gross settlement Express Transfer system.

to amounts due to suppliers in the EU. The regulations do not apply where the interest penalty is less than €5. The rate of interest applicable to late payments is the ECB main refinancing rate plus 7 percentage points, with the relevant rate at 1 January and 1 July each year applying for the six month period after these dates. In 2002, interest was payable at a rate of 10.74 per cent per annum from 1 January until 7 August, and at 10.25 per cent for the remainder of the year.

The following is a summary of interest payments made to suppliers during 2002 in accordance with the provisions of both the Act and the Regulations referred to above.

• Total number of late payments	75
• Total value of all late payments (A)	€417,937.10
• Total value of all payments (B)	€50,740,595.11
• A as % of B	0.82%
• Total amount of interest paid on late payments	€1,299.48

Basic Pay Costs

	Bank			Supervision Division			B as % of A
	Total €000	Increase €000 (A)	%	Total €000	Increase €000 (B)	%	
1998	17,565	—	—	3,364	—	—	—
1999	19,275	1,710	4.7	3,879	515	15.3	30.1
2000	22,255	2,980	15.5	4,777	898	23.2	30.1
2001	26,080	3,825	17.2	6,270	1,493	31.3	39.0
2002	31,097	5,017	19.2	8,075	1,805	28.8	36.0
Average		3,383	15.4		1,178	25.0	

Staff Numbers

	Bank			Supervision Division			D as % of C
	Total	Increase (C)	%	Total	Increase (D)	%	
1998	638½	—	—	117½	—	—	—
1999	668	29½	4.6	132	14½	12.3	49.2
2000	707	39	5.8	148	16	12.1	41.0
2001	773½	66½	9.4	185	37	25.0	55.6
2002	818	44½	5.8	211	26	14.1	58.4
Average		45	6.4		23	15.9	

**Statement of Accounts of the
Central Bank of Ireland
for the year ended 31 December 2002**

Statement of Directors' Responsibilities

The main statutory provisions relating to the role and duties of the Directors are covered in Sections 5, 5A and 6 of the Central Bank Act, 1942, as amended by Section 14 of the Central Bank Act, 1989 and Sections 3, 4 and 5 of the Central Bank Act, 1998. Moreover, under Section 19 of the Central Bank Act, 1989, the Bank is responsible for the maintenance of proper accounting records. This responsibility also extends to the preparation and presentation to the Comptroller and Auditor General of a Statement of Accounts within six months of the end of each financial year and the appointment of external auditors as required by Article 27 of the Statute of the European System of Central Banks.

The Board has overall responsibility for the system of internal financial control in the Bank, which is designed to safeguard the assets of the Bank and to prevent and detect fraud and other irregularities. To discharge this responsibility, the Board has established an appropriate organisational structure. In this regard, the Audit Committee of the Board meets periodically with the Internal and External Auditors and members of the Management of the Bank to discuss control issues, financial reporting and related matters. The Internal and External Auditors have full access to the Audit Committee.

The Board is satisfied that generally accepted accounting principles and standards, adapted to suit the nature of central banking activity and both domestic and European System of Central Banks' statutory provisions which apply to the Bank, have been consistently applied and are supported by reasonable and prudent judgements and estimates.

John Hurley, Governor

David Begg, Director

29 May 2003

Statement on the System of Internal Financial Controls

On behalf of the Board, I acknowledge the Board's responsibility for ensuring that the Bank maintains effective systems of internal financial control and reviewing their effectiveness on an ongoing basis. The Board has formally adopted a code of conduct which requires each Director to ensure that the Bank has in place an effective system of internal controls including financial controls, operational controls, risk management and fraud prevention.

The systems of control in place provide reasonable but not absolute assurance of the safeguarding of assets against unauthorised use or disposition and the maintenance of proper financial records and the reliability of the financial information provided and published. In essence, these systems are designed to manage rather than eliminate inherent financial risks.

The systems of control include:

- A clearly defined organisation structure with specified authorisation limits and reporting requirements to senior management and the Board;
- Appropriate terms of reference for the Board and management committees with responsibility for core policy areas;
- A comprehensive financial and budgeting management information system which incorporates:
 - Approval of annual plan and detailed expenditure budgets by the Board
 - Quarterly reporting to the Board on financial and budgetary performance
 - Regular reporting to the Board on capital expenditure;
- Detailed policies and procedures relating to financial controls.

An operational risk framework has been developed for the whole organisation. Each business area is responsible for the management of risk and the implementation of appropriate controls and procedures aimed at minimising and monitoring such risks. An Operational Risk Committee which comprises senior management, has responsibility for the oversight of the management of operational risk. Further details of the risk controls deployed in respect of the management of investment assets are outlined in the Activities Chapter under Risk Management.

The Internal Audit Department independently and systematically reviews the controls in place and reports to the Board Audit Committee on a regular basis. The Audit Committee approves the Internal Audit Plan and work programme. In addition, the Audit Committee meets with and receives reports from both external auditors. The Chairman of the Audit Committee reports to the Board on all significant issues considered by the Committee.

John Hurley, Governor

29 May 2003

Accounting Policies

(a) Form of Presentation of Accounts

In preparing the accounts, the Bank as a participating member of the ESCB¹ has a policy of following the accounting policies which the Governing Council of the ECB considers to be appropriate to the nature of central banking activity and the statutory provisions² which apply to the Bank.

The accounts have been prepared (i) on the historical cost basis of accounting, modified to include market valuations of securities, unmatured contracts and gold and all assets and liabilities denominated in foreign currency and (ii) in accordance with accounting standards generally accepted in Ireland in as far as it is considered applicable to a participating member of the ESCB. Accounting standards generally accepted in Ireland in preparing accounts giving a true and fair view are those published by the Institute of Chartered Accountants in Ireland and issued by the Accounting Standards Board.

The accounting unit is the euro.

Having regard to the role and activities of a central bank, the Bank is of the opinion that a cash flow statement would not provide any additional or useful information to users of the accounts. Therefore such a statement is not included as part of these accounts.

(b) Income Recognition

The accruals concept in accounting for income and expenses has been adopted.

(c) Fixed Assets

(i) *Measurement*

Fixed assets are stated at cost and are not revalued.

(ii) *Depreciation*

All fixed assets are depreciated on a straight-line basis over their anticipated useful lives as follows:

Freehold Premises (excluding site costs)	—	50 years
Plant and Machinery	—	5 to 15 years
Other	—	5 years

(d) Superannuation

Under the Bank's superannuation scheme permanent Bank staff obtain the same superannuation benefits as established civil servants. The Bank pays these benefits out of current income as they fall due.

1 Throughout this document the use of the term the European System of Central Banks (ESCB) refers to the fifteen National Central Banks (NCBs) of the Member States of the European Union plus the European Central Bank (ECB). The term 'Eurosystem' refers to the twelve National Central Banks of the participating Member States in the Monetary Union, plus the ECB.

2 The principal statutory provisions are Treaty on European Union, 1992, Central Bank Acts 1942-1998, Central Bank of Ireland (Surplus Income) Regulations, 1943, Coinage Act, 1950, Decimal Currency Acts 1969-1990 and the Economic and Monetary Union Act, 1998.

The equivalent of fifteen per cent of salaries and wages is appropriated from profit to the Superannuation Reserve of the Bank under the Central Bank of Ireland (Surplus Income) Regulations, 1943, (see further Note 35 (vi)). In addition, staff superannuation contributions including contributions to the Spouses' and Children's Pension Scheme are credited to the Superannuation Reserve (Note 35 (vii)).

(e) Coin Provision and Issue

Proceeds and expenses relating to the provision and issue of coin are transferred directly to the Currency Reserve under the provisions of the Coinage Act, 1950, the Decimal Currency Acts 1969-1990 and the Economic and Monetary Union Act, 1998. The cost of production of coin is charged to the Currency Reserve in the year in which it is incurred. Proceeds from the issue of coin are credited to the Currency Reserve in the year they are received. Section 137 of the Finance Act, 2002 which came into operation on 25 March 2002 provides for the net proceeds from the issue of coin, from 1 January 2002 to be passed directly to the Exchequer as directed by the Minister.

(f) Foreign Currency Transactions

Accounting transactions denominated in foreign currency are converted to euro equivalents at exchange rates prevailing at the date of transaction.

(g) Amortised Income

Premiums and/or discounts arising on securities are treated as net interest income and amortised on a straight-line basis over the period to their maturity and accounted for through the Profit and Loss account.

(h) Valuation Policy

Assets and liabilities denominated in foreign currency, unmatured investment and foreign currency contracts outstanding and shares in the Bank for International Settlements (BIS) are valued at mid-market closing exchange rates at year-end (Note 34). The exchange rate valuation of assets and liabilities is performed on a currency-by-currency basis.

Gold is valued at the closing market price and securities at mid-market closing prices at year-end. The valuation of securities is performed on a security-by-security basis.

(i) Recognition of Gains and Losses

Realised gains and losses arising from sales of foreign exchange, gold and securities are accounted for through the Profit and Loss account. Foreign exchange realised gains and losses are calculated by reference to average cost, commencing 1 January 1999, with the foreign currency valuation at that date becoming opening cost.

Unrealised gains identified at the end of every financial year in accordance with the Bank's valuation policy (Accounting policy (h)) are accounted for through the Profit and Loss account and transferred therefrom to the Revaluation Accounts.

Unrealised losses are accounted for through the Profit and Loss account to the extent that they exceed revaluation gains since 1 January 1999. Unrealised losses accounted for through the Profit and Loss account in this manner may not be reversed in subsequent years against future unrealised gains.

As all gains and losses are recognised through the Profit and Loss account it is not considered necessary to include a separate Statement of Total Recognised Gains and Losses.

Prior to 1 January 1999, gains and losses arising from the sale or valuation of foreign currency assets and gold were taken directly to reserves. At 1 January 1999, a transfer was made from the General Reserve to the Revaluation Accounts representing realised and unrealised gains and losses previously accounted for through that Reserve.

(j) Repurchase Agreements

Under a Sale and Repurchase Agreement the Bank sells securities from its portfolio for cash and simultaneously agrees to repurchase them at an agreed price on a set date. These agreements to repurchase are reflected on the liability side of the Bank's balance sheet (Note 28) and also lead to an interest expense in the Profit and Loss account (Note 2). At all times the Bank remains the beneficial owner of the securities which remain on its balance sheet.

Under a Reverse Repurchase Agreement the Bank buys securities for cash and simultaneously agrees to sell them back to the counterparty at an agreed price on a set date. These agreements to sell are recorded on the asset side of the balance sheet (Note 11(iv)), but are not included in the Bank's holdings of securities. At no time during the term of the agreement does the Bank acquire beneficial ownership of the underlying securities. These agreements give rise to interest income in the Profit and Loss account (Note 1).

Repurchase agreements may be transacted in both euro and other currencies.

(k) Intra-ESCB Balances

All NCBs of the Eurosystem maintain accounts with each other for the purpose of making bilateral payments including cross-border payments through the TARGET³ system. All bilateral balances at the close of business each day are netted by means of a multilateral netting process and replaced by a single outstanding debt-obligation to the ECB by each NCB or vice versa as appropriate. At end-2002 the three non-participating countries (U.K., Denmark and Sweden) were included in the multilateral netting process.

Intra-Eurosystem balances arising from the allocation of euro banknotes within the Eurosystem are included as a net single asset or liability under 'Net claim/liability related to the allocation of euro banknotes within the Eurosystem' (see Accounting Policy (l)).

(l) Banknotes in Circulation

The ECB and the 12 participating NCBs, which together comprise the Eurosystem, have issued euro banknotes since 1 January 2002⁴. The total value of euro banknotes in circulation is allocated on the last working day of each month in accordance with the banknote allocation key⁵.

The ECB has been allocated a share of 8 per cent of the total value of euro banknotes in circulation as from 2002, whereas the remaining 92 per cent has been allocated to NCBs according to their weightings in the capital key of the ECB. The share of

³ Trans-European Automated Real-time Gross settlement Express Transfer system.

⁴ Decision of the European Central Bank of 6 December 2001 on the issue of euro banknotes (ECB/2001/15), OJ L 337, 20.12.2001, pp. 52-54.

⁵ The banknote allocation key refers to the percentages that result from taking into account the ECB's share of the total euro banknote issue and applying the subscribed capital key to the NCBs' share of such total.

banknotes allocated to each NCB is disclosed under the balance sheet liability item ‘ ‘ Banknotes in Circulation’.

The difference between the value of euro banknotes allocated to each NCB in accordance with the banknote allocation key and the value of the euro banknotes that it actually puts into circulation also gives rise to remunerated intra-Eurosystem balances. These claims or liabilities, which incur interest⁶, are disclosed under sub-item ‘ ‘ intra-Eurosystem: Net claim/liability related to the allocation of euro banknotes within the Eurosystem’ (see Accounting Policy (k)).

From 2002 until 2007 the intra-system balances arising from the allocation of euro banknotes will be adjusted in order to avoid significant changes in NCBs’ relative income positions as compared with previous years⁷. The adjustments are effected by taking into account the differences between the average value of banknotes in circulation of each NCB in the period between July 1999 and June 2001 and the average value of banknotes that would have been allocated to them during that period under the ECB’s capital key. The adjustments will be reduced in annual stages until the end of 2007, after which income on banknotes will be allocated fully in proportion to the NCBs’ paid-up shares in the ECB’s capital.

The interest income and expense on these balances is cleared through the accounts of the ECB and is disclosed under ‘ ‘ Net interest income’.

The Governing Council of the ECB has decided that the seigniorage income of the ECB arising from the 8 per cent share of euro banknotes allocated to the ECB shall be distributed separately to the NCBs in the form of an interim distribution of profit⁸. It shall be so distributed in full unless the ECB’s net profit for the year is less than its income earned on euro banknotes in circulation. An interim distribution in respect of 2002 was made on the second working day of 2003. This is disclosed in the Profit and Loss account under ‘ ‘ Income from equity shares and participating interests’.

From 2003 onwards, interim distributions will be made after the end of each quarter.

(m) Off-Balance Sheet Items

Profits and losses arising from off-balance sheet instruments are recognised and treated in a similar manner to on-balance sheet instruments. Unrealised (valuation) gains are not recognised as income but are accounted for through the Profit and Loss account and transferred therefrom to a revaluation account. Unrealised (valuation) losses are taken to the Profit and Loss account when exceeding previous revaluation gains registered in the revaluation account. Unrealised trade date gains/losses on foreign exchange forward contracts are recorded under ‘ ‘ other liabilities’ in accordance with ESCB guidelines having been accounted for through the Profit and Loss account as outlined above. This method is used for foreign exchange forwards and these techniques cover the most significant off-balance sheet financial instruments which have been identified for possible use by the ESCB i.e. foreign exchange forwards, foreign exchange swaps, interest rate futures, interest rate swaps and forward rate agreements.

6 Decision of the European Central Bank of 6 December 2001 on the allocation of monetary income of the National Central Banks of participating Member States from the financial year 2002 (ECB/2001/16), OJ L 337, 20.12.2001, pp. 55-61.

7 Decision of the European Central Bank of 6 December 2001 on the issue of euro banknotes (ECB/2001/15), OJ L 337, 20.12.2001, pp. 52-54.

8 Decision of the European Central Bank of 21 November 2001 on the distribution of the income of the ECB on euro banknotes in circulation to the NCBs of the participating Member States (ECB/2002/9) OJ L 323.

Profit and Loss and Appropriation Account for year ended 31 December 2002

		2002	2001
	Note	€000	€000
Interest income	1	720,549	886,061
Interest expense	2	(483,813)	(498,343)
NET INTEREST INCOME		236,736	387,718
Realised gains (losses) arising from financial operations	3	420,945	233,376
Write-downs on financial assets and positions	3	(8,517)	(8,382)
Net result of financial operations, write-downs and risk provisions		412,428	224,994
Income from fees and commissions	4	2,480	2,392
Income from equity shares and participating interests	5	14,844	17,123
Net result of pooling of Monetary Income	6	(4,009)	(230)
Exceptional gain from the write-off of Irish pound banknotes	7	239,672	—
Other income		257	231
TOTAL NET INCOME		902,408	632,228
Staff costs	8	(38,618)	(31,553)
Administrative expenses	8	(22,183)	(18,939)
Depreciation	8	(5,031)	(4,753)
Banknote raw materials	8	(8,019)	(13,956)
PROFIT FOR THE YEAR BEFORE UNREALISED GAINS		828,557	563,027
Net movement in unrealised gains	34	(774,991)	145,631
Transfers from/(to) revaluation account	34	774,991	(145,631)
Transfers to reserves	35	(4,838)	(32,388)
SURPLUS INCOME PAYABLE TO THE EXCHEQUER	9	823,719	530,639

The accounting policies together with Notes 1 to 44 form part of these accounts.

Banc Ceannais na hÉireann

29 May 2003

John Hurley, Governor

Brian Halpin, Deputy Director General

Balance Sheet as at 31 December 2002

ASSETS		2002	2001
	Note	€000	€000
Gold and gold receivables	10	63,126	60,875
Claims on non-euro area residents in foreign currency	11	5,172,556	6,327,738
Claims on euro area residents in foreign currency	12	277,583	400,010
Claims on non-euro area residents in euro	13	972,742	211,152
Lending to euro area credit institutions related to monetary policy operations in euro	14	11,158,301	13,200,706
Other Claims on euro area credit institutions in euro	15	39	398
Securities of euro area residents in euro	16	2,406,556	1,979,608
Intra-Eurosystem claims		473,637	467,280
Participating interest in ECB	17	42,480	42,480
Claims equivalent to the transfer of foreign reserves	18	424,800	424,800
Claims relating to other operational requirements within euro	5,19	6,357	—
Items in course of settlement	20	37,118	81,383
Other assets	21	348,765	407,387
Total Assets		20,910,423	23,136,537

The accounting policies together with Notes 1 to 44 form part of these accounts.

Banc Ceannais na hÉireann

29 May 2003

John Hurley, Governor

Brian Halpin, Deputy Director General

Balance Sheet as at 31 December 2002

LIABILITIES	Note	2002	2001
		€000	€000
Banknotes in circulation	23	3,469,708	4,315,706
Liabilities to euro area credit institutions related to monetary policy operations in euro	24	4,499,035	3,506,080
Other liabilities to euro area credit institutions denominated in euro	25	—	881,225
Liabilities to other euro area residents in euro	26	3,826,434	5,151,612
Liabilities to non-euro area residents in euro	27	19,697	22,425
Liabilities to non-euro area residents in foreign currency	28	66,893	67,072
Counterpart of special drawing rights allocated by the IMF	29	113,123	124,306
Intra-Eurosystem liabilities (net)	30	5,893,036	5,112,647
<i>Net Liabilities related to to the allocation of Euro banknotes within the Eurosystem</i>	30	<i>2,304,938</i>	<i>—</i>
<i>Other Liabilities within the Eurosystem (net)</i>	31	<i>3,588,098</i>	<i>5,112,647</i>
Other liabilities	32	1,026,227	976,237
Provisions	33	60,000	—
Revaluation accounts	34	729,101	1,504,092
Capital and reserves	35	1,207,169	1,475,135
Total Liabilities		20,910,423	23,136,537

The accounting policies together with Notes 1 to 44 form part of these accounts.

Banc Ceannais na hÉireann

29 May 2003

John Hurley, Governor

Brian Halpin, Deputy Director General

Notes to the Accounts

Note 1 Interest Income

	2002	2001
	€000	€000
Deposit Income	77,580	62,007
Coupons on Securities	295,647	390,150
Reverse Repurchase Agreements (i)	4,064	1,160
(Premiums)/Discounts on Securities (ii)	(60,343)	(34,014)
Monetary Policy Operations (iii)	391,045	450,274
Income from Transfer of Foreign Reserve Assets to ECB (Note 18)	11,968	15,833
Other	588	651
Total	720,549	886,061

(i) See Accounting Policy (j).

(ii) See Accounting Policy (g).

(iii) This relates to lending to credit institutions by the Bank as part of the Eurosystem's monetary policy operations (Note 14).

Note 2 Interest Expense

	2002	2001
	€000	€000
Government	155,705	104,073
Credit Institutions	151,330	182,541
Intra-Eurosystem Balances (i)	141,040	195,984
Remuneration of Liability in respect of Euro Banknotes in circulation (ii)	32,246	—
Repurchase Agreements (iii)	3,222	11,954
Other	270	3,791
Total	483,813	498,343

(i) The interest income/expense on these balances, which are remunerated at the short-term refinancing rates of the Eurosystem, is calculated by the ECB at the end of each day.

(ii) See Accounting Policies (k) and (l).

(iii) See Accounting Policy (j).

Note 3 Realised Gains arising from Financial Operations

	2002	2001
	€000	€000
Net Realised Price Gains on Securities	101,472	149,598
Net Realised Exchange Rate Gains	319,473	83,778
Total	420,945	233,376

Write Downs on Financial Assets and Positions

	2002	2001
	€000	€000
Unrealised Price Losses on Securities	—	8,382
Unrealised Exchange Rate Losses	8,517	—
Total	8,517	8,382

Note 4 Income from Fees and Commissions

	2002	2001
	€000	€000
Service Fees and Charges	630	895
Security Lending	1,784	1,444
Other	66	53
Total	2,480	2,392

Note 5 Income from Equity Shares and Participating Interests

	2002	2001
	€000	€000
Share of ECB Profits (i)	12,775	15,230
BIS Dividend (ii)	2,069	1,893
Total	14,844	17,123

(i) This item represents Ireland's share of the ECB's distributable profit for the year 2001 (Note 17). See Accounting Policy (I) (Note 19).

(ii) Dividend received on shares in the Bank for International Settlements (Note 21).

Note 6 Net Result of Pooling of Monetary Income

This item represents the net result for the Bank of the pooling and redistribution of monetary income by the NCBs of the Eurosystem. In 2002 the amount of each NCB's monetary income was determined by multiplying the liability base of each NCB by the main refinancing operations rate. The liability base consists of the following items: banknotes in circulation (including both euro banknotes and non-returned national banknotes); liabilities to credit institutions related to monetary policy operations denominated in euro; net intra-Eurosystem liabilities resulting from TARGET transactions; and net intra-Eurosystem liabilities related to the allocation of euro banknotes within the Eurosystem. Any interest paid on liabilities included within the liability base is to be deducted from the monetary income to be pooled. The monetary income pooled by the Eurosystem is to be allocated among NCBs according to the subscribed capital key. The difference between the monetary income pooled by the Central Bank of Ireland, amounting to €105 million, and reallocated to the Central Bank of Ireland, amounting to €101 million is the net result arising from the calculation of monetary income.

Note 7 At 31 December 2002, €299.7 million of Irish pound banknotes remained in circulation. Of this, €239.7 million was transferred to profit to be paid over to the Exchequer. A provision of €60 million has been created for the remaining banknotes that have not yet been redeemed (Note 33).

Annual Report 2002

Note 8 Expenses

€000

	Dame Street		Currency Centre (Excl. Coin) (i)		Total (Excl. Coin) (i)		Coin (i)		Total (i)	
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
Pay (ii)	24,801	19,904	8,326	7,457	33,127	27,361	997	1,082	34,124	28,443
PRSI	1,380	1,021	287	239	1,667	1,260	76	90	1,743	1,350
Pensions	2,638	2,017	1,186	915	3,824	2,932	44	43	3,868	2,975
Staff Expenses	28,819	22,942	9,799	8,611	38,618	31,553	1,117	1,215	39,735	32,768
Training, Recruitment & Other Staff Costs	1,421	1,058	376	296	1,797	1,354	26	23	1,823	1,377
Maintenance of Premises	820	632	1,362	1,251	2,182	1,883	13	14	2,195	1,897
Energy	388	330	496	408	884	738	—	—	884	738
Rates	822	431	403	375	1,225	806	—	—	1,225	806
Equipment, Stationery and Requisites	1,281	1,258	205	222	1,486	1,480	10	41	1,496	1,521
Post and Telecommunications	355	435	70	69	425	504	5	4	430	508
Investment Services and Bank Charges	907	835	6	5	913	840	—	—	913	840
Business Travel	1,188	1,169	269	323	1,457	1,492	35	32	1,492	1,524
Publishing & Media Relations	588	473	13	59	601	532	11	70	612	602
Professional Fees (iii)	1,207	801	41	201	1,248	1,002	93	169	1,341	1,171
Works Machine Maintenance	—	—	957	1,559	957	1,559	283	273	1,240	1,832
RTGS System Costs	489	448	—	—	489	448	—	—	489	448
Miscellaneous	250	446	27	56	277	502	3	31	280	533
Euro Distribution Costs	—	—	8,242	5,799	8,242	5,799	8,072	7,924	16,314	13,723
Other Operating Expenses	9,716	8,316	12,467	10,623	22,183	18,939	8,551	8,581	30,734	27,520
Raw Materials	—	—	8,019	13,956	8,019	13,956	16,031	24,114	24,050	38,070
Depreciation	1,513	1,262	3,518	3,491	5,031	4,753	306	296	5,337	5,049
Total Expenses	40,048	32,520	33,803	36,681	73,851	69,201	26,005	34,206	99,856	103,407

(i) Expenses relating to the provision and issue of coin are charged directly to the Currency Reserve under the provisions of the Coinage Act, 1950, the Decimal Currency Acts 1969-1990 and the Economic and Monetary Union Act, 1998 and not to the Profit and Loss account (Accounting Policy (e)).

(ii) Fees paid to Directors in respect of 2002 were €117,730 (€95,232).

(iii) Auditors fees for 2002 in respect of both the Comptroller and Auditor General and PricewaterhouseCoopers amounted to €179,950 (2001: €135,959).
PricewaterhouseCoopers non-audit services for 2002 amounted to €80,010.

Note 9 Surplus Income

Surplus Income of €823.7 million (2001: €530.6 million) was payable to the Exchequer in respect of the profit earned by the Bank in the year ended 31 December 2002.

A payment on account of €280.6 million (2001: €40.6 million) of Surplus Income was made during 2002 leaving a balance of €543.1 million (2001: €490.0 million) (Note 32). These arrangements are in accordance with Section 23(4) of the Central Bank Act, 1989, which provides that the Bank may at any time pay into the Exchequer such sums on account of Surplus Income as may be agreed upon by the Minister for Finance and the Bank.

Under Section 21 of the Central Bank Act, 1989, the Bank is exempt from Corporation Tax, Income Tax and Capital Gains Tax.

Note 10 Gold and Gold Receivables

With the exception of coin stocks held in the Bank, gold holdings consist of deposits with foreign banks. The change in value is due mainly to the change in the value of gold during the year.

Note 11 Claims on Non-Euro Area Residents in Foreign Currency

	2002	2001
	€000	€000
Receivables from the IMF (i)	510,557	443,194
Balances with banks and security investments, external loans and other external assets (iv)	4,661,999	5,884,544
Total	5,172,556	6,327,738

(i) Receivables from the International Monetary Fund (IMF)

	2002	2001
	€000	€000
Quota	1,086,878	1,194,436
Less IMF Holdings of euro	(639,319)	(813,146)
Reserve Position in IMF (ii)	447,559	381,290
SDR Holdings (iii)	62,998	61,904
Total	510,557	443,194

(ii) *Reserve Position in IMF:*

This asset represents the difference between Ireland's Quota in the IMF and IMF holdings of euro. Ireland's Quota is its membership subscription, twenty five per cent of which was paid for in foreign currencies and the balance in euro. The holdings of euro by the IMF, which initially were equal to seventy five per cent of the Quota, have changed from time to time as a result of the use of the euro by the IMF in its lendings to member countries.

(iii) *Special Drawing Rights (SDRs):*

The SDR is an international reserve asset which was created by the IMF and allocated to member countries in the early 1970s and the early 1980s in order to increase international liquidity. The SDR is defined in terms of a basket of currencies. Its value is determined as the weighted sum of exchange rates of four currencies (US dollar, sterling, yen and euro).

(iv) Balances with Banks and Security Investments, External Loans and Other External Assets

	2002	2001
	€000	€000
Balances with Banks	1,956,348	1,520,935
Security Investments	2,638,758	4,035,562
Reverse Repurchase Agreements (v)	66,893	328,047
Total	4,661,999	5,884,544

(v) See Accounting Policy (j).

Maturity Profile

	2002	2001
	€000	€000
0-3 months	2,212,433	1,997,868
3 months-1 year	477,194	1,096,182
1-5 years	1,972,372	2,790,494
Total	4,661,999	5,884,544

Note 12 Claims on Euro Area Residents in Foreign Currency

	2002	2001
	€000	€000
Balances with Banks	253,123	208,967
Security Investments	24,460	191,043
Total	277,583	400,010
Maturity Profile	2002	2001
	€000	€000
0-3 months	253,123	243,014
3 months-1 year	16,927	32,311
1-5 years	7,533	124,685
Total	277,583	400,010

Note 13 Claims on Non-Euro Area Residents in Euro

	2002	2001
	€000	€000
Balances with Banks	697,131	81,697
Security Investments	275,611	129,455
Total	972,742	211,152
Maturity Profile	2002	2001
	€000	€000
0-3 months	697,131	81,697
3 months-1 year	—	15,802
1-5 years	275,611	113,653
Total	972,742	211,152

Note 14 Lending to Euro Area Credit Institutions related to Monetary Policy Operations in Euro

	2002	2001
	€000	€000
Main Refinancing Operations (i)	8,682,500	5,208,817
Longer Term Refinancing Operations (ii)	2,465,801	7,849,389
Marginal Lending Facility (iii)	10,000	142,500
Total	11,158,301	13,200,706

These consist of advances to local credit institutions and reflect the Bank's participation in Eurosystem monetary policy operations. All the advances are fully secured by collateral approved by the Eurosystem.

- (i) The Main Refinancing Operations comprise weekly tenders for funds with a maturity of two weeks and at rates close to market rates.
- (ii) The Longer Term Refinancing Operations comprise monthly tenders with a maturity of three months and at rates close to market rates.
- (iii) This is an automatic overnight standing facility described as the Marginal Lending Facility (MLF) available to counterparties to the monetary policy operations. The MLF rate is generally above market rates.

Note 15 Other Claims on Euro Area Credit Institutions in Euro

This includes working balances on correspondent accounts with institutions in the euro area.

Note 16 Securities of Euro Area Residents in Euro

These securities comprise debt issued by specified euro area and supranational issuers.

Maturity Profile	2002	2001
	€000	€000
0-3 months	260,457	25,059
3 months-1 year	60,476	83,884
1-5 years	2,085,623	1,870,665
Total	2,406,556	1,979,608

Note 17 Participating Interest in ECB

This represents the Bank's contribution to the capital of the European Central Bank (Note 5).

Note 18 Claims Equivalent to the Transfer of Foreign Reserves

The Treaty on European Union, 1992 and Section 6 of the Central Bank Act, 1998, provides for the transfer of a proportion of foreign reserve assets of participating NCBs in the Monetary Union to the ECB. Section 6 of the Central Bank Act, 1998, gave effect to this provision and accordingly the Bank transferred an amount equivalent to €425 million to the ECB in January 1999 and received in turn a corresponding claim on the ECB equivalent to this amount. The resulting claim on the ECB is remunerated at rates based on euro short-term market rates (Note 1).

Note 19 Claims relating to other Operational Requirements within the Eurosystem

This represents the allocation made to the Bank by the ECB in respect of income earned by the ECB on its 8 per cent share of the banknotes allocation (See Accounting Policy (I)).

Note 20 Items in Course of Settlement

Items in the course of settlement represent a claim on credit institutions in respect of cheques lodged in the Bank by its customers on the last business day of the year and presented to the banks on the first business day of the new year.

Note 21 Other Assets

	2002	2001
	€000	€000
Shares in the Bank for International Settlements (i)	9,257	11,015
Loan to Irish Realtime Interbank Settlement Co. Ltd	32	32
Stocks of Materials for Note Production	3,367	5,134
AIB plc/ICAROM Interest Bearing Loan (ii)	131,900	115,733
Accrued Interest Income	114,448	180,969
Prepayments	519	310
Fixed Assets (Note 22)	50,904	53,965
Other	38,338	40,229
Total	348,765	407,387

- (i) The Bank holds 8,000 shares in the Bank for International Settlements (BIS) of 2,500 Swiss Gold Francs each, of which one quarter has been paid up. The decrease in the value of the BIS holding is due to valuations (Note 34).
- (ii) Under arrangements which commenced in 1993 for the financing of the administration of ICAROM plc (formerly Insurance Corporation of Ireland plc), €11.1 million per annum until 2012 is being collected from Allied Irish Banks plc and passed on to the Administrator of ICAROM plc. The mechanism used to collect these monies is a back-to-back loan and deposit arrangement between Allied Irish Banks plc and the Bank and the reduction of interest paid on the minimum reserve balances held with the Bank. The matching back-to-back deposit is shown in Other Liabilities (Note 32).

Note 22 Fixed Assets

€000

	Premises		Plant and Machinery		Computer Equipment		Other Equipment		Furniture Fixtures & Fittings		Total Fixed Assets	
	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002	2001
At Cost — 1 January	27,941	27,798	44,475	43,981	7,282	6,314	4,822	4,561	5,755	5,473	90,275	88,127
Acquisitions (+)	20	143	554	494	712	968	401	261	588	282	2,275	2,148
At Cost — 31 December	27,961	27,941	45,029	44,475	7,994	7,282	5,223	4,822	6,343	5,755	92,550	90,275
Accumulated Depreciation at 1 January	7,179	6,650	15,784	12,852	4,895	4,181	3,486	2,883	4,966	4,695	36,310	31,261
Depreciation for Year (i)	532	529	2,994	2,932	883	714	617	603	310	271	5,336	5,049
Accumulated Depreciation at 31 December	7,711	7,179	18,778	15,784	5,778	4,895	4,103	3,486	5,276	4,966	41,646	36,310
Net Book Value at 31 December	20,250	20,762	26,251	28,691	2,216	2,387	1,120	1,336	1,067	789	50,904	53,965

- (i) Of the total of €5.3 million (2001: €5.0 million) depreciation charge, €0.3 million (2001: €0.3 million) in respect of Mint machinery was charged to the Currency Reserve (Accounting Policy (e)).

Note 23 Banknotes in Circulation

	2002	2001
	€000	€000
IEP Notes in circulation (i)	—	4,343,425
Euro banknotes (ii)	3,469,708	—
Notes Held Abroad (Under Article 52) (iii)	—	(27,719)
Total	3,469,708	4,315,706

- (i) This item relates to Irish pound banknotes in circulation that are no longer legal tender (Note 7).
- (ii) This item consists of the Bank's share of euro banknotes issued in the Eurosystem. The total value of euro banknotes in circulation is allocated on the last working day of each month in accordance with the banknote allocation key (see Accounting Policy (1)).
- (iii) Notes held abroad under Article 52 of the ESCB statute refer to Irish pound banknotes held by other NCBs for repatriation. This arrangement between NCBs to redeem the banknotes of other Eurosystem NCBs ceased on 31 March 2002.

Note 24 Liabilities to Euro Area Credit Institutions related to Monetary Policy Operations in Euro

	2002	2001
	€000	€000
Minimum Reserves	4,499,035	3,506,080

Credit institutions in the euro area are required to hold minimum average reserve deposits with their respective NCBs. The purpose of these reserve requirements is to maintain a structural liquidity shortage. Interest is paid on these deposits at rates close to short-term market interest rates (Note 14). These accounts are also used as current/settlement accounts through which transactions across the Irish RTGS/TARGET system are settled.

Note 25 Other Liabilities to Euro Area Credit Institutions in Euro

This amount represents deposits used as collateral for the euro banknotes that were frontloaded over the year-end to the credit institutions under the euro changeover plan agreed by the NCBs and the ECB. These deposits were paid back in January 2002. Securities with an accepted value of €2,583 million had been lodged to Central Bank correspondent accounts held with other NCBs as at 31 December 2001. These are not included in the balance sheet.

Note 26 Liabilities to Other Euro Area Residents in Euro

	2002	2001
	€000	€000
General Government (i)	3,826,403	5,151,463
Other	31	149
Total	3,826,434	5,151,612

These items have a maturity of less than one year.

- (i) Included under this heading are deposits totalling €186,721 held by the Official Assignee in Bankruptcy under the provisions of the Bankruptcy Act, 1988.

Note 27 Liabilities to Non-Euro Area Residents in Euro

	2002	2001
	€000	€000
Central Banks	151	147
International Financial Institutions	1,730	1,022
EU Agencies	17,816	21,256
Total	19,697	22,425

These items have a maturity of less than one year.

Note 28 Liabilities to Non-Euro Area Residents in Foreign Currency

Liabilities arising from sale and repurchase agreements are shown under this heading (Accounting Policy (j)). These items have a maturity of less than one year.

Note 29 Counterpart of Special Drawing Rights Allocated by the IMF

This is the liability of the Bank to the IMF in respect of the allocation of SDRs to Ireland. The Bank's SDR assets can change as a result of IMF lending operations or exchanges of SDRs for foreign currency with the IMF itself, IMF members and other official holders of SDRs. SDR holdings may also change as a result of interest payments made by the IMF on the Bank's Reserve Position in the IMF and on the Bank's SDR holdings net of SDR allocations.

Note 30 Net Liabilities related to the Allocation of Euro banknotes within the Eurosystem

This item consists of the liability of the Central Bank of Ireland vis-à-vis the Eurosystem in relation to the allocation of euro banknotes within the Eurosystem (see Accounting Policies (k) and (l)) (Note 23).

Note 31 Other Liabilities within the Eurosystem

This item represents the net claim on the ECB as a result of euro cross-border payments transacted over the TARGET system by all NCBs participating in the ESCB. At end-2002, there was a net liability position due to the ECB (Accounting Policy (k)).

Note 32 Other Liabilities

	2002	2001
	€000	€000
AIB plc/ICAROM Deposit (Note 21)	131,900	115,733
Profit & Loss Appropriations (Note 9)	543,088	490,007
Deposit Protection Accounts (i)	268,354	235,134
Interest Accruals	75,294	53,244
Other Accruals	2,795	3,233
Off-Balance Sheet Instruments Revaluation (Note 34)	—	60,397
Other	4,796	18,489
Total	1,026,227	976,237

(i) These are balances placed by credit institutions with the Bank as part of the Irish deposit protection scheme. The Irish deposit protection scheme is funded by credit institutions which are authorised by the Bank.

Note 33 Provision

A provision of €60 million has been created from which Irish pound banknotes will be redeemed if and when they are presented (Note 7).

Note 34 Revaluation Accounts

	2002	2001
	€000	€000
Opening Balance		
—Pre-EMU	481,908	482,278
—Post-EMU	1,022,184	936,580
Transfer (to)/from Profits (i)	(774,991)	145,631
Total	729,101	1,564,489
Off-balance sheet instruments revaluation (ii)	—	(60,397)
Total	729,101	1,504,092

The balance on the Revaluation Accounts includes pre-EMU (1 January 1999) realised and unrealised gains of €464.2m in respect of foreign exchange gains and €17.6m in respect of gold. Prior to 1 January 1999, gains and losses from the sale or valuation of foreign currency assets and gold were taken directly to reserves. At 1 January 1999, a transfer was made from the General Reserve to the Revaluation Accounts representing realised and unrealised gains and losses previously accounted for through this Reserve. It was not possible to identify separately realised gains and losses at the date of this transfer, nor the years in which the gains were realised.

In accordance with ESCB guidelines, foreign exchange realised gains and losses are calculated by reference to average cost, commencing 1 January 1999, with the foreign currency valuation at that date becoming opening cost. Therefore, any pre-1 January 1999 gains remain in the Revaluation Accounts.

The Bank is currently reviewing the adequacy of its capital and accounting reserves. Without prejudice to the outcome of that review, to the extent that the level of the Bank's accounting reserves may be found to exceed the Bank's requirements as a National Central Bank in the Eurosystem, some or all of the pre-EMU foreign exchange gains in the Revaluation Accounts may be released to the Appropriation Account in future years.

- (i) This shows the net movement in the accounts following their valuation at year-end. The following is the breakdown of the valuation changes recorded in the year:

	2002	2001
	€000	€000
Gold (Note 10)	2,291	4,184
Shares in Bank for International Settlements (Note 21)	(1,758)	582
Foreign Investment Assets	(740,155)	74,603
Net Assets in the International Monetary Fund	(35,369)	5,865
Off-Balance Sheet Instruments Revaluation	—	60,397
Total	(774,991)	145,631

- (ii) This represents off-balance sheet instruments revaluation differences which were transferred to 'Other Liabilities' (Note 32) and relate to unmatured contracts in Foreign Exchange at end-2001.

The foreign exchange rates used vis-à-vis the euro for the end-year valuations are as follows:—

	2002	2001
Currency	Rate	Rate
US dollar	1.0487	0.8813
Japanese yen	124.39	115.33
Australian dollar	1.8556	1.7280
Sterling	0.6505	0.6085
Swiss franc	1.4524	1.4829
Norwegian krone	7.2756	7.9515
Danish krone	7.4288	7.4365
Swedish krona	9.1528	9.3012
Cyprus pound	0.5731	0.5750
Canadian dollar	1.6550	1.4077
SDR	0.7714	0.7020
The gold prices used were:		
US dollars per fine ounce	342.75	277.60

Note 35 Capital and Reserves

	2002		2001	
	€000	€000	€000	€000
Capital (i)		30		30
General Reserve				
Opening Balance	792,625		764,236	
Transfer from Profits (ii)	—	792,625	28,389	792,625
Currency Reserve (iii)				
Opening Balance	627,916		648,761	
Transfer to Exchequer	(360,000)		—	
Net Proceeds of Coin Issue (iv)	86,508		(20,670)	
Transfer to Superannuation Reserve (vi)	(160)	354,264	(175)	627,916
Superannuation Reserve (Note 37)				
Opening Balance	54,430		49,665	
Transfer from Profits (vii)	4,838		3,999	
Transfer from Currency Reserve (vi)	160		175	
Pension Contributions (viii)	688	60,116	591	54,430
Consolidated Banknotes (ix)		134		134
Total		1,207,169		1,475,135

(i) The authorised capital of the Bank is fixed under Section 9(1) of the Central Bank Act, 1942 at €50,970. Issued and paid up capital is €30,474 all of which is held by the Minister for Finance. The balance is payable as agreed by the Board and the Minister.

(ii) Under Central Bank of Ireland (Surplus Income) Regulations, 1943, the Board decided that no transfer would be made to the General Reserve for 2002 (2001: €28.4 million).

(iii) The closing balance includes an amount of €2.7million (2001: €276.5 million) relating to cumulative net proceeds from the issue of coin.

(iv) Net Proceeds of Coin Issue

	2002	2001
	€000	€000
Circulating Coin	356,143	13,280
Specimen Coin Sets	362	631
Withdrawn Irish coin	(253,762)	(375)
Proceeds from smelted coin	9,770	—
Total	112,513	13,536
Less Operating Costs (Note 8)	(26,005)	(34,206)
Net Proceeds	86,508	(20,670)

Under the provisions of the Coinage Act, 1950, the Decimal Currency Acts 1969-1990 and the Economic and Monetary Union Act, 1998, net proceeds of coin issue are transferred directly to the Currency Reserve (Accounting Policy (e), Note 8).

(v) As a result of the Finance Act, 2002, the Bank is permitted to transfer the net proceeds from the issue of coin directly to the Exchequer.

(vi) Under the Central Bank of Ireland (Surplus Income) Regulations, 1943, the Board approved a transfer of €160,000 (2001: €175,000), representing fifteen per cent of salaries and wages

of staff involved in the provision and issue of coin from the Currency Reserve (Accounting Policy (e)) to the Superannuation Reserve.

- (vii) Under Central Bank of Ireland (Surplus Income) Regulations, 1943, the Board approved a transfer of €4.8 million (2001: €4.0 million) to the Superannuation Reserve. No specific investment asset of the Bank is assigned to this reserve and consequently it is not adjusted for income earned (Accounting Policy (d)).
- (viii) Pension contributions were transferred to the Superannuation Reserve during the year as follows:

	2002	2001
	€000	€000
Contributions by staff to the Spouses ' and Children ' s Pension Scheme	348	291
Purchase of Pension Rights	21	14
Pension Contributions by Staff recruited after April 1995	285	205
ICCL Staff Pensions	34	81
Total	688	591

- (ix) Under Section 36(3)(c) of the Central Bank Act, 1942, the Bank is obliged to redeem Consolidated Bank Notes presented to it (Note 36). No notes were redeemed in 2002 and €133,640 remained outstanding at 31 December 2002.

Note 36 Contingencies

Shares in the Bank for International Settlements are one quarter paid up with a contingent liability to pay the balance (Note 21(i)).

Under Article 28 of the Statute of the ESCB the Bank may be called upon in the future, along with all other participating NCBs, to provide further injections of capital to the ECB.

Under Article 33.2 of the Statute of the ESCB the Bank may be called upon to cover annual losses of the ECB (Note 5). In the event of losses arising from exchange rate movements, the ECB can write down the Bank's claim corresponding to the transfer of foreign reserve assets (Note 18) by a maximum of twenty per cent.

The Bank has a contingent liability in relation to Irish pound banknotes that are no longer legal tender and that may be presented at a future date (Note 7).

Note 37 Superannuation Liabilities

The pension entitlements of past and current permanent employees of the Central Bank arise under a defined benefit pension scheme. The scheme results in the Bank's staff receiving the same entitlements as established civil servants. The Scheme is operated on a non-contributory basis with the exception of contributions made to the Spouses' and Children's Pension Scheme, contributions from salary in respect of the main scheme in the case of staff recruited since 1 April 1995 and payments received from eligible staff for the purchase of notional added years of service. The Central Bank and Financial Services Authority Act, 2003, includes a provision for the Bank to establish a funded pension scheme.

Section 15(5)(a) of the Central Bank Act, 1989, enables the Bank to meet its pension obligations as they fall due from current revenues (Note 8). In this regard the Bank's accounts do not comply with Statement of Standard Accounting Practice 24 — Accounting for Pension Costs or Financial Reporting Standard 17 — Retirement Benefits — in that it does not recognise the cost of providing pensions over the period during which it benefits from the employees' services. The balance sheet does not make any provision for the ongoing commitments of the accrued pension rights of either current or retired employees.

The policy of the Bank is to arrange an independent actuarial valuation every three years. The last full actuarial valuation was carried out by Coyle Hamilton at 31 December 2001 using the Projected Unit Method. The major assumptions used by the actuary were: that the rate of increase of salaries would be 4 per cent; the rate of increase of pensions in payment would be 4 per cent; and the rate used to discount the scheme's liabilities was 6 per cent. The assumed rate of inflation was 2 per cent. The actuarial review assumes that the Superannuation Reserve (Note 35) represents assets of the scheme with an initial value equivalent to the reserve balance at 31 December 2001, which would need to be invested to achieve a suitable real rate of investment return.

Following the valuation at 31 December 2001 using the Projected Unit Method, the actuarial report indicates that the net present value of accrued superannuation liabilities was €85.0 million (without making allowance for salary inflation) and €155.93 million (allowing for salary inflation). There have been no material changes in the Bank's pension commitments since the actuarial valuation was last carried out.

On the basis that the then current deficit of €155.93 million was funded immediately by the Bank, the actuarial report estimates a regular cost to the Bank for the year ended 31 December 2002 of €6.8million. This compares with €4.8 million which was charged to the Profit and Loss and Appropriation account this year.

As noted above, the pension scheme operated by the Bank is an unfunded scheme in that assets are not separately identified by the Bank to provide for the Bank's pension liabilities. Instead, pension liabilities are met out of the Bank's total resources.

The disclosures required under the transitional arrangements of FRS 17 'Retirement Benefits' have been calculated by independent actuaries, Coyle Hamilton, based on the most recent full actuarial valuations at 31 December 2001, updated to 31 December 2002. The financial assumptions used by the actuary at 31 December were:

	2002	2001
	%	%
Rate of increase in salaries	3.5	4.0
Rate of increase in pensions	3.5	4.0
Discount Rate	5.5	6.0
Rate of price inflation	2.0	2.0

The following amounts were measured in accordance with the requirements of FRS 17 – Retirement Benefits:

	2002	2001
	€000	€000
Present value of the scheme's liabilities	(182,174)	(155,930)

The balance on the Bank's Superannuation Reserve at 31 December 2002 €60.1 million (€54.4 million).

If the above amounts had been recognised in the Statement of Accounts, the Bank's Capital and Reserves at 31 December 2002 and 2001 would be as follows:

	2002	2001
	€000	€000
Capital and Reserves including Superannuation Reserve	1,207,169	1,475,135
Present value of schemes liabilities	(182,174)	(155,930)
Adjusted Capital and Reserves	1,024,995	1,319,205

The following amounts would have been recognised in the Profit and Loss and Appropriation Account and in a separate Statement of Total Recognised Gains and Losses:

Profit and Loss and Appropriation Account

	2002
	€000
Current service cost	3,849
Past service cost	211
Total	4,060
Interest on pension scheme liabilities	9,505
Total charge	13,565

Statement of Total Recognised Gains and Losses

	2002
	€000
Experience losses arising on the pension scheme liabilities	(15,823)
Changes in assumptions underlying the present value of the pension scheme Liabilities	—
Actuarial loss recognised in the Statement of Total Recognised Gains and Losses	(15,823)

Movement in pension scheme liabilities during the year

	2002
	€000
Pension scheme liabilities as at 1 January 2002	155,930
Movement in year:	
Current service cost	3,849
Past service cost	211
Contributions paid	(3,144)
Interest on pension scheme liabilities	9,505
Experience losses arising on the pension scheme liabilities	15,823
Pension scheme liabilities at 31 December 2002	182,174

Details of experience gains and losses for the year to 31 December 2002

Experience losses arising on the pension scheme liabilities (€000)	15,823
Percentage of the present value of the pension scheme liabilities	8.7%
Total amount recognised in the Statement of Total Recognised Gains and Losses (€000)	15,823
Percentage of the present value of the pension scheme liabilities	8.7%

Note 38 Management of Financial Risk

The liabilities and assets of the Bank are primarily determined by the nature of the Bank's statutory functions, rather than commercial considerations. At the same time the Bank actively manages the market risks associated with its investment portfolio (i.e. holdings of foreign currency and euro-denominated assets).

The parameters within which the Bank's investment portfolio is managed are determined by the Board of the Bank; these include the currency composition of assets, the choice of investment instruments and the overall degree of risk that the Bank considers appropriate for its investment activities.

The risks (i.e. currency, market, credit, liquidity and operational) inherent in the investment portfolio are managed by a comprehensive system of limits and procedures. An Investment Committee of the Board reviews investment policy and performance, and is supported by the Bank's External

Assets Investment Committee which considers policy issues and strategy relating to the investment of the reserves. This committee, under the chairperson of the Deputy Director General, consists of senior staff of the Financial Markets and Financial Control (Risk Management Unit) Departments. A Standing Investment Strategy Committee, comprising Financial Markets management and dealers meet weekly to formulate short-term investment strategy.

An Investment Desk comprising a team of dealers carries out the day-to-day dealing activities that are required to implement decisions and to ensure that the portfolios are fully invested. The Risk Management Unit in the Financial Control Department is responsible for the measurement, monitoring and reporting of the Bank's risk exposures and for monitoring and reporting compliance with limits etc. The unit also measures the return on the Bank's investment portfolios.

The Bank is exposed to operational risk, which is the possibility of direct or indirect losses, or of reputational damage, arising from inadequate or failed internal processes, people and systems or from external events. This risk is managed by the segregation of the dealing, settlement and risk management functions; by restricted physical access to the dealing and settlement areas; and by a comprehensive body of controls and procedures aimed at minimising the risk of unauthorised trading. Each business area has responsibility for management of its operational risk. The operations of each business area are reviewed regularly to ensure that potential exposures are identified and that appropriate controls are implemented. A high-level committee, chaired by the Deputy Director General, oversees the management of operational risk in the Bank.

Note 39 Investor Compensation Act, 1998

Under Section 10 of the Investor Compensation Act, 1998, the Bank has formed and registered 'The Investor Compensation Company Limited', a company limited by guarantee. The Company administers the investor compensation scheme to reimburse the clients of failed investment firms. The Bank provides administrative and other services to the Company, the costs of which are recovered from the Company. The Company prepares its own Statement of Accounts and Annual Report.

Note 40 Unmatured Contracts in Foreign Exchange

There were no unmatured Foreign Exchange Contracts at 31 December 2002.

Note 41 Unmatured Contracts in Securities

As a result of commitments made in December 2002, there were unmatured net forward purchases of nominal US dollar 62.2 million, Sterling 4.5 million, Danish krone 70.0 million and Euro 29.1 million.

All contracts had matured by 17 January 2003.

Total net forward purchases valued at mid-market closing exchange rates of 31 December had a nominal value of €104.8 million.

Note 42 Related Parties

(a) The Bank provides several services to the Minister for Finance, its sole shareholder, and to other government departments and bodies.

The main services during the year to 31 December 2002 were:

- provision of banking services including holding the principal accounts of Government;
- provision and issue of coin;
- holding and maintaining the register of Irish Government securities.

(b) As a participating member of the ESCB, the Bank has ongoing relationships with the other NCBs and the ECB.

Note 43 Post-Balance Sheet Events

There were no adjusting post-balance sheet events.

Note 44 Approval of Accounts

The Board of Directors approved the Statement of Accounts on 29 May 2003.

Report of the Comptroller and Auditor General for Presentation to the Houses of the Oireachtas

I have audited the Statement of Accounts on pages 91 to 116 under Section 19(2) of the Central Bank Act, 1989.

Respective Responsibilities of the Central Bank and the Comptroller and Auditor General

The accounting responsibilities of the Bank are set out in the Statement of Directors' Responsibilities on page 93. It is my responsibility to audit, certify and report on the Statement of Accounts transmitted to me by the Bank. As the result of my audit I form an independent opinion on the Statement of Accounts.

I review whether the statement on page 94 reflects the Bank's compliance with applicable guidance on corporate governance and report any material instance where it does not do so, or if the statement is misleading or inconsistent with other information of which I am aware from my audit of the Statement of Accounts.

Basis of Audit Opinion

In the exercise of my function as Comptroller and Auditor General, I conduct my audit of the Statement of Accounts in accordance with auditing standards issued by the Auditing Practices Board and by reference to the special considerations which attach to State bodies in relation to their management and operation.

An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the Statement of Accounts. It also includes an assessment of the significant estimates and judgements made in the preparation of the Statement of Accounts, and of whether the Accounting Policies are appropriate to the Bank's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations that I considered necessary to provide me with sufficient evidence to give reasonable assurance that the Statement of Accounts is free from material misstatement whether caused by fraud or other irregularity or error. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the Statement of Accounts.

I draw attention to Accounting Policy (i) and Note 34 to the financial statements which explain how the Bank has accounted for exchange gains arising from transactions entered into prior to 1999 and to the fact that a review of its capital requirements may lead to the release of part of the balance of the revaluation accounts to surplus income in the future.

Certificate

In my opinion, proper books of accounts and records have been kept by the Bank and the Statement of Accounts, which is in agreement with them, gives a true and fair view of the state of the Bank's affairs at 31 December 2002 and of its surplus income for the year then ended.

John Purcell
Comptroller and Auditor General
29 May 2003

Report of PricewaterhouseCoopers

Independent auditors' report to the Board of Directors of the Central Bank of Ireland

We have audited the Statement of Accounts on pages 91 to 116.

Respective responsibilities of directors and auditors

The directors, as described on page 93 are responsible for preparing the Statement of Accounts.

Pursuant to the requirements of Article 27 of the Statute of the European Central Bank, we have been appointed to audit the Statement of Accounts of the Central Bank of Ireland (' the Bank'). Our responsibilities, as independent auditors, are established by Article 27, the Auditing Practices Board, and our profession's ethical guidance. This report, including the opinion, has been prepared for and only for the Bank's Board of Directors as a body in accordance with Article 27 of the Statute of the European Central Bank and for no other purpose. We do not, in giving this opinion, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

We report to you our opinion as to whether the Statement of Accounts gives a true and fair view and is properly prepared on the basis described in paragraph (a) of the Accounting Policies. We state whether we have obtained all the information and explanations we consider necessary for the purposes of our audit and whether the Statement of Accounts is in agreement with the accounting records. We also report to you our opinion as to whether the Bank has maintained proper accounting records. We are not required to form an opinion on the effectiveness of the Bank's system of internal financial controls.

Basis of audit opinion

We conducted our audit in accordance with the Auditing Standards issued by the Auditing Practices Board. An audit includes examination, on a test basis, of evidence relevant to the amounts and disclosures in the Statement of Accounts. It also includes an assessment of the significant estimates and judgements made by the directors in the preparation of the Statement of Accounts, and of whether the Accounting Policies are appropriate to the Bank's circumstances, consistently applied and adequately disclosed.

We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the Statement of Accounts is free from material misstatement, whether caused by fraud or other irregularity or error. In forming our opinion we also evaluated the overall adequacy of the presentation of information in the Statement of Accounts, the basis of which is described in paragraph (a) of the Accounting Policies.

Opinion

In our opinion the Statement of Accounts has been properly prepared on the basis described in paragraph (a) of the Accounting Policies and, on this basis, the Statement of Accounts gives a true and fair view of the state of the Bank's affairs as at 31 December 2002 and of its profit for the year then ended.

We have obtained all the information and explanations we consider necessary for the purposes of our audit. In our opinion, proper accounting records have been kept by the Bank. The Statement of Accounts is in agreement with the accounting records.

PricewaterhouseCoopers
Chartered Accountants and Registered Auditors
Dublin
29 May 2003

Notes:

- (a) The maintenance and integrity of the Central Bank of Ireland's website is the responsibility of the directors; the work carried out by the auditors does not involve consideration of these matters and, accordingly, the auditors accept no responsibility for any changes that may have occurred to the financial statements since they were initially presented on the website.
- (b) Legislation in Ireland governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Financial Stability Report

CONTENTS

Page

Executive Summary

1. Introduction

2. Assessment of Irish Financial Sector and Resilience to Risks

2.1 Household Sector

2.2 Corporate Sector

2.3 Banking Sector

2.3.1 Banking Sector Developments

2.3.2 Other Significant Events

2.3.3 Aggregated Micro-Prudential Indicators

2.3.4 Conclusion

2.4 Insurance Industry

3. The External Dimension

3.1 United States

3.1.1 The Household Sector

3.1.2 Corporate Sector

3.1.3 Banking Sector

3.2 Japan

3.2.1 Household and Corporate Sectors

3.2.2 Banking Sector

3.3 Euro-Area

3.3.1 Household Sector

3.3.2 Corporate Sector

3.3.3 Banking Sector

3.4 United Kingdom

3.4.1 Household Sector

3.4.2 Corporate Sector

3.4.3 Banking Sector

3.5 EU Assessment Countries

3.5.1 Banking Sector

3.6 Emerging Markets

4. Conclusions

Annex A: Employment at Risk from Exchange Rate Appreciation

Annex B: Business Failures and Financial Instability

Annex C: Mortgage Equity Withdrawal and Household Balance Sheets

Annex D: Profitability of the Irish Banking Sector

Annex E: Lending under Commitment for US Banks

Financial Stability Report

Executive Summary

The Irish financial system continues to be stable. However, the deterioration since the last report in domestic and international economic and financial market conditions means that the risks to the system have increased somewhat. The system is still in a sufficiently healthy position to weather a significant adverse shock, though this resilience has been eroded somewhat over the past year. Though there is no room for complacency in the current difficult global environment there is no significant cause for concern regarding financial stability in Ireland.

A full assessment of the overall risks to financial stability in Ireland requires that domestic sources of financial fragility in the household, corporate and banking sectors, as well as international sources, be examined. With regard to domestic factors, the main channel by which economic developments could feed through to financial instability is likely to be increased unemployment. This could be triggered by generalised weakness in economic activity (itself likely to reflect weaker international conditions) and/or an excessively rapidly appreciating exchange rate and the associated adverse competitiveness developments. This would exacerbate the loss of competitiveness arising from higher unit labour costs domestically. Ireland's high level of inflation — about twice the euro area average — is increasingly affecting competitiveness, with consequent risks to unemployment. An increase in unemployment would place financial strains on those losing jobs and undermine their debt-servicing capabilities. So far, economic weakness has not resulted in a significant increase in unemployment in Ireland. Although the labour market is expected to deteriorate somewhat in the coming year, the prospect of the rate of unemployment increasing to a level that would give rise to systemic concerns is considered to be remote. Moreover, disposable income growth, while slowing, is not expected to fall dramatically in the near future.

The Irish banking system has remained profitable, well capitalised and diversified. However, two sources of risk emanating from the domestic economy — the renewed acceleration in residential property prices and credit growth — have been reignited over the past year. The Bank has written to lending institutions indicating its concern about these developments and is following this up with on-site inspections. The Bank is concerned also about the recent re-acceleration in house prices particularly, in the light of emerging excess supply and flat rental prices. The

situation that now seems to be emerging is quite different from the one that prevailed in the mid-1990s when the last sharp house price acceleration started, in the sense that the fundamental driving forces that were then present, high rates of personal disposable income growth, rapidly falling nominal and real interest rates and favourable demographics along with housing supply blockages, are now either absent or are much weaker. This makes it much more difficult to justify this recent acceleration.

It is unlikely that mortgage repayment burdens will fall much further since mortgage rates and unemployment are at historically low levels. Although average household mortgage repayment burdens have eased back recently, this average would significantly underestimate the position of new property market entrants. In light of the substantial rise in credit growth recently, any significant increase in interest rates and unemployment could lead to an increased incidence of defaults. This concern is inspired by the fact that there are several examples of past financial crises which were preceded by rapid loan growth and asset price escalation. International experience suggests that substantial declines in property prices are much more damaging than falling equity prices. House price declines have larger adverse effects on consumption and the banking system, which typically has high exposure to property. Although a steep decline in the Irish property market is unlikely, excessive risks should not be taken given the severity of the likely consequences both for the overall economy and for financial stability in Ireland.

In any analysis of Irish financial stability, the international situation is a critical factor in assessing the existing and emerging risks given the extreme openness of the Irish economy. The uncertainty created by adverse international shocks – such as equity market falls, major debt defaults such as Enron and Argentina, a drawn-out weak macroeconomic environment and, latterly, severe geopolitical tensions accompanied by oil price volatility – has endured much longer than originally anticipated. This has delayed a return to trend growth, thereby potentially reducing the resilience of the international financial system to further adverse shocks. The recent coalition success in the war on Iraq would suggest a rapid dissipation of the associated uncertainty and some improvement in consumer confidence and in equity markets worldwide. However, the effects on the markets and corporate sentiment could remain muted as market participants and corporate management turn their attention to a number of other remaining uncertainties such as weak demand and continuing excess capacity in industry in many countries. Overall, the risks to the domestic financial system from the global economy have therefore increased since the last Financial Stability Report.

There is little room for complacency over the short term. There are still important imbalances in the US economy, especially the interrelated imbalances of a substantial balance-of-payments deficit and a very low personal savings ratio. This is partly reflected in a value for the dollar *vis-à-vis* other major currencies which some commentators deem to be still too high. The unusually low yields on government bonds, especially in view of the current stance of fiscal policy, could pose a threat of significant capital losses particularly for many banks, if these yields were to adjust quickly back to more normal levels. The prospects for house prices also have to take into account the fact that nominal interest rates are now at very low levels. If the risks just identified were to be realised, a significant risk could be posed for financial stability and economic growth in the US and this could spill over to the global economy. A mitigating factor for the US economy is the fact that the increase in the growth rate of productivity, much in evidence during the latter half of the 1990s, has apparently been sustained during the recession in 2001 and the subsequent sluggish recovery.

Serious concerns regarding the situation in the Japanese financial system remain with the recent large falls in equity prices further eroding the capital of commercial banks. The non-financial corporate and banking sectors remain fragile but any spillover of this fragility to other countries in the region has to date been fairly well contained. However, an additional source of worry for prospects for continued economic growth in South-East Asia is the SARS influenza virus, which is already curtailing business and tourist travel in the area.

The euro area is again experiencing below trend growth this year and a recovery is further delayed. While the euro area remains free of the severe macroeconomic imbalances, which characterise other regions, there are significant structural rigidities holding back growth in many euro area economies. Moreover, there have been adverse developments in some European financial institutions, in particular the insurance sector, which have reduced financial system resilience to shocks. Within certain euro area countries, the banking sector is displaying some signs of weakness, partly related to the weak conjunctural situation.

In the UK, the most pressing financial stability concerns continue to be historically high household indebtedness and escalating residential property prices. Although household gearing remains at manageable levels, this is partly reflective of the current low interest-rate environment and low unemployment which may not last.

Despite the pitfalls for global financial stability caused by the current environment of heightened uncertainty, there are some

reasons to be optimistic about the prospects for financial stability in the medium to long term. In the face of the adverse shocks experienced by economies throughout the industrialised world, financial institutions in these economies have, so far, shown resilience. This may be attributable to a combination of a few long-run and possibly mutually reinforcing influences, some of which are internal to these institutions themselves and some external. An important internal influence is no doubt due to these institutions' investment in risk management techniques, which overall, has helped to disperse risk. The effect of any specific shock will therefore tend to be diffused more widely and will be less likely to give rise to systemic dangers for the financial system. An important external influence is the increasing stability of output growth in the main industrial economies, a process that has been going on for decades. The extent of the decline in volatility is noteworthy with the volatility of overall output estimated to have fallen by a factor of three in the US with steep falls also being experienced in other advanced industrial countries. Both of these influences are, no doubt, making an important contribution to overall financial stability.

The worldwide fall in equity prices has been a major shock. However, it has substantially attenuated a main source of tension in the financial system in all industrialised countries, i.e., serious equity price misalignment. This occurred without seriously threatening the systemic health of the overall financial system. Nevertheless, price-earnings ratios still seem fairly high in some countries and so the risk of a further fall in share prices has not been completely removed.

Despite the fact that the continuing downward trend in long-term interest rates since April 2002 is probably a reflection for the most part of the poor prospects for future economic activity, it may nevertheless have helped to reduce the cost of economic adjustment by reducing the cost of debt servicing and debt funding for individuals and corporations, thereby reducing the risks to financial stability. A further, perhaps more powerful factor, contributing to sustaining demand is the buoyant state of housing markets. Steady house price increases in a number of industrialised countries (particularly in the US and the UK), which may have been boosted by substitution out of equities, facilitated through equity release products, have supported the continuation of relatively strong household consumption. If, however, the process of equity withdrawal were to run out of steam and the current depressed level of corporate investment were to continue into the future, some major economies would slow further and could tip into recession. Such developments would obviously have important negative repercussions for the stability of the international financial system.

1. Introduction

This is the third annual report published by the Bank on the stability of the financial system in Ireland. The report is structured as follows: Section 2 below contains the overall assessment of the Irish financial sector and its resilience to risks, which is arrived at by analysing developments in the Irish household, corporate and financial (banking and insurance only) sectors. This section highlights developments in credit and property markets which are of some concern to the Bank, especially the escalation in residential mortgage lending. In view of the importance of international developments to the Irish economy and financial system, Section 3 contains an assessment of the main developments from a financial stability perspective in the US, Japan, euro area, UK and emerging economies. The final section sets out the conclusions from this analysis.¹

2. Assessment of Irish Financial Sector and Resilience to Risks

Two factors have had a positive impact on the external financial stability environment since the last report. First, the collapse of the world equity markets has taken much of the heat out of the global financial system and has done so, to date at least, with very little spill-over to the whole financial system. To the extent that share prices are now closer to their fundamental values, this is a welcome development. Second, banking systems in two of Ireland's most important trading partners, the UK and the US, have remained in a healthy state. Overall, however, the risks for Ireland coming from the real and financial international environment have increased since the Bank's last report on financial stability, particularly as prospects for the international economic environment have weakened considerably, and financial markets have become more volatile.

The most likely channel for the transmission of shocks from the global economy, and in particular the US economy, to Ireland's financial stability would probably be through an increase in unemployment. This risk could be propagated in a number of ways. Given the uncertainty surrounding future US economic growth, should further retrenchments in investment and continued cost cutting by the US corporate sector occur, this could result in significant falls in foreign direct investment and, in the extreme case, foreign firms closing their Irish operations altogether. As highlighted in previous Financial Stability Reports, exchange-rate risk is another channel through which employment in Ireland could be adversely affected. A sharp appreciation of the euro against either the dollar or sterling would affect the competitive position of Irish businesses selling into the US and UK markets, thereby affecting profitability and possibly resulting in layoffs. A sharp depreciation in the dollar has previously been

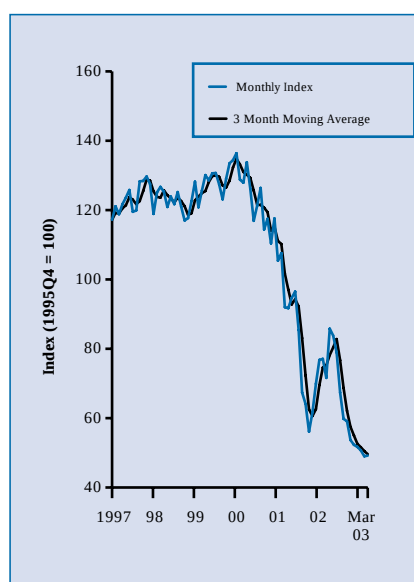
¹ The commentary in this report is based on data available up to mid-April 2003.

perceived as the more prominent risk given the large US current account imbalance. While unemployment has increased only marginally, from a low of 3.7 per cent to 4.5 per cent in 2002 Q4, the labour market is expected to deteriorate in the coming year with unemployment forecast to rise to 5.8 per cent. However, the prospect of the rate of unemployment increasing to a level that would give rise to systemic concerns is considered to be remote. The resilience of the household, corporate and banking sectors are discussed below.

2.1 Household Sector

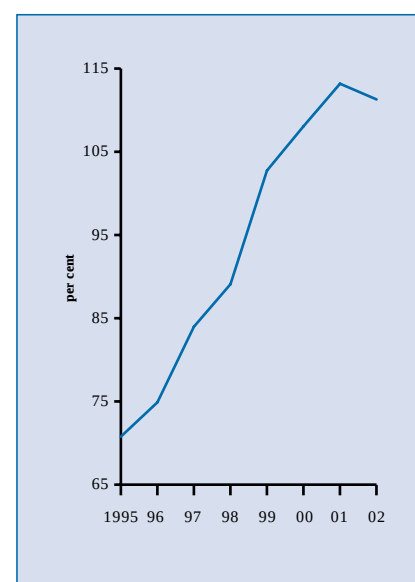
Private consumption growth weakened considerably in 2002 to 2.5 per cent, in comparison with strong growth of 9.6 per cent in the previous year. This deterioration in growth is a result of a slowdown in the growth of disposable income and the increased uncertainty of future economic conditions, which has prompted an increase in precautionary savings. The outlook is for a continuation of modest consumer expenditure as surveys of consumer sentiment point to continued pessimism. The IIB/ESRI Index of Consumer Expectations, which measures consumers' expectations of their future financial situation, the economic outlook and their employment expectations, has declined consistently since May 2002 (Chart 1).

Chart 1: IIB/ESRI Index of Consumer Expectations



Source: IIB Bank/ESRI

Chart 2: Private-Sector Credit as a % of GDP



Source: Central Bank of Ireland

At the time of the last Financial Stability Report it appeared that the rate of credit growth was decelerating gradually. The average annual growth in private-sector credit in 2002 was 13.1 per cent, which compares with 17.3 per cent in the previous year. The previous upward trend in private-sector credit as a percentage of GDP appears to have stabilised, declining marginally from 113.2 per cent in 2001 to an estimated 111.3 per cent in 2002

(Chart 2). However, since mid-2002 credit growth has been accelerating, reaching 16.1 per cent in January of this year².

Private-sector credit is dominated by lending to the personal sector, in particular residential mortgage lending which accounted for 80 per cent of the growth in private-sector credit in 2002 Q4. The pace of growth in housing credit strengthened significantly in the fourth quarter of 2002, with year-on-year growth reaching 27.1 per cent, compared to 15.5 per cent in the first quarter (Chart 3). This is consistent with the increased activity in the housing market since earlier in the year. Such escalations have been identified by the Bank as a significant cause for concern and warrant continued attention.

The estimated average mortgage repayment burden has eased in 2002 to 25.4 per cent from 28.7 per cent in the previous year, due to a fall in the average mortgage rate. While this is a favourable development, it is again important to stress that this figure may underestimate the position of some new entrants in the property market. Households, however, should remain in a reasonably strong position to meet mortgage repayments in the current low interest rate environment, and given the current forecast that disposable incomes and employment levels are unlikely to fall dramatically in the near future. However, the risks to income gearing are on the downside since mortgage rates and unemployment are at historically low levels and can only reasonably be expected to increase in the medium term.

Chart 3: Housing and Non-Housing Credit Growth



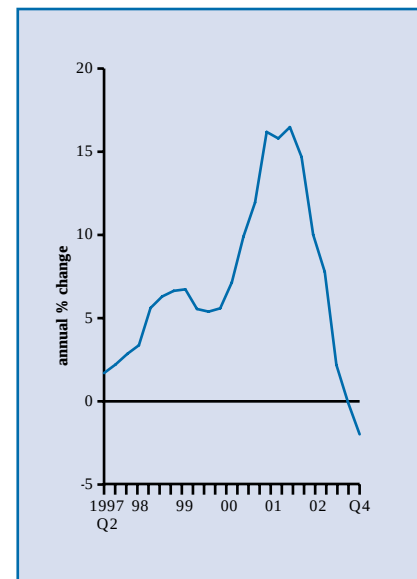
Source: Central Bank of Ireland

Chart 4: PTSB House Price Index



Source: Permanent TSB/ESRI

² This is the adjusted growth rate whereby data are adjusted for transactions between credit institutions and non-MFI IFSC companies and valuation effects arising from exchange-rate movements.

Chart 5: Rental Values

Source: CSO

The previous Financial Stability Report noted that house prices were beginning to increase again early in 2002, following declining prices in the latter part of 2001 and warned that a resumption of rapid house price inflation could pose considerable risks to the banking sector. In fact, prices rebounded strongly over the year according to the Permanent-TSB (PTSB) index of house prices, growing nationally by 13.3 per cent. This pick up in growth was fuelled by increased demand by investors due to favourable budgetary tax changes and pent-up demand on the part of first-time buyers. In the year to February 2002, the price of existing houses increased significantly at a rate of 18.6 per cent, while new house prices increased at a more moderate rate of 7.3 per cent (Chart 4). The more moderate increase in new house prices is an indication of the increased supply in this market. The month-on-month increases in house prices, however, have moderated somewhat in recent months in 2003, with national prices increasing by 0.9 per cent in February, compared with a monthly average of 1.3 per cent in the months August to December last year. A deceleration in house price inflation could be expected in the coming year, in the light of subdued disposable income growth, weak employment prospects and over-supply in the rental market as reflected in falling rental values (Chart 5). Falling rental values may be particularly worrying for relatively new and inexperienced investors. New investors may not have had sufficient time to reap a significant enough capital appreciation on their properties to cover fully the initial costs of purchasing the property. The latest survey evidence suggests that nearly 40 per cent of landlords have invested in the property market for one year or less while a further 21 per cent have been investing

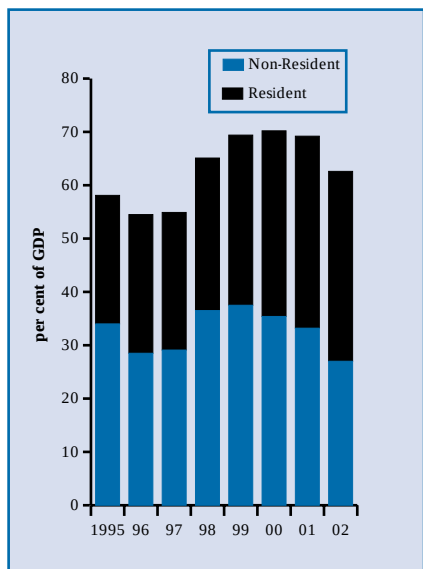
for only 2 to 3 years.³ This substantial number of relatively new investors may be particularly vulnerable to any fall in property and/or rental values.

The health of the Irish household sector is dependent on developments in the economic environment in the coming year. An increase in unemployment would place strains on the finances of those losing their jobs and would undermine their ability to service their debts, particularly in the light of increasing credit growth, leading to an increased incidence of defaults. However, the prospect of the rate of unemployment increasing to a level that would give rise to systemic concerns is, given current conditions and the current prospects for the future, considered to be remote.

2.2 Corporate Sector

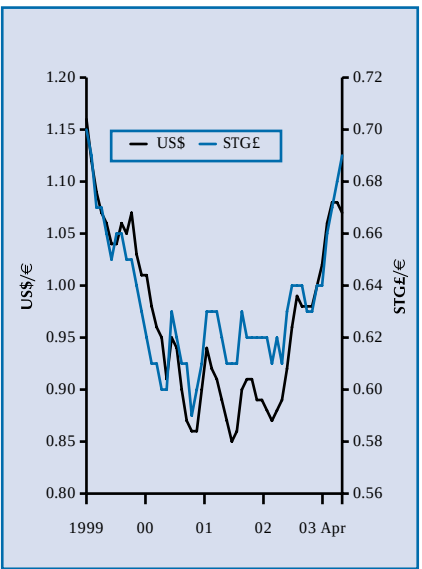
In contrast to the personal sector, the growth of credit extended to the non-financial corporate sector almost halved, increasing by 9.4 per cent in the year to 2002 Q4 compared with 17.4 per cent in the previous year. However, the full extent of corporate sector indebtedness is difficult to measure due to the availability of many alternative resident and non-resident sources of finance (for example, foreign banks and capital markets). Adding the value of borrowing from non-resident credit institutions and borrowing from resident institutions, the indebtedness of the corporate sector has fallen further since the last report (Chart 6). Between 1995 and 2000 the ratio of all bank loans to GDP rose from 58.1 per cent to 70.3 per cent but had fallen back to 62.6 per cent during 2002.

Chart 6: Corporate Borrowing from Resident and Non-Resident Credit Institutions^(a)



Source: Central Bank of Ireland and BIS
(a) non-resident figure as at 2002 Q3.

Chart 7: Exchange Rate of the Euro vis-à-vis the US\$ and STG£



Source: Central Bank of Ireland

3 See ‘The residential property market – an analysis of the facts’ published by Gunne (February 2003).

The aggregate credit growth figure hides the variation in credit growth across various sectors. There are some sectors where credit growth is well above the aggregate rate. For example, the growth in credit to the real estate sector, which accounts for 28 per cent of all outstanding non-financial corporate sector loans from resident credit institutions, is currently growing at an annual rate of 28 per cent. The wholesale and retail trade sectors and the hotels and restaurants sectors are growing at 17.3 per cent and 14.5 per cent, respectively. The high rates in these sectors are in stark contrast to the manufacturing sector where credit growth is currently at –14.2 per cent. Despite the high credit growth in the trade and hospitality sectors, the share of total lending accounted for by these sectors has remained constant throughout 2002. Thus, the health of the banking system has not become more dependent on these sectors during the last year.

A slowdown in investment in recent times is one explanation behind the slowdown in credit growth. Investment declined in real terms by 0.7 per cent in the first three quarters of 2002. It appears likely that investment will remain flat or may fall in the near future. Furthermore, the efficiency of existing investment projects is an important indicator of financial stability. If loans have been used efficiently to finance profitable and productive projects then these projects can be self-financing and the credit repayments are assured. The value of the incremental capital output ratio, a measure of the efficiency of investment, fell during 2002. Although this variable is difficult to interpret over short horizons, this fall may reflect investment expenditure becoming more efficient during 2002 after several years of a rising incremental capital output ratio suggesting investment had become increasingly inefficient.⁴

It becomes more difficult for corporates to service existing debt repayments in the face of falling income. Manufacturing output grew by 8.5 per cent during 2002. However, this is almost half the rate of growth recorded in 2000 and well below the 13.5 per cent average growth experienced over the previous decade. The high-tech sub-sectors within the manufacturing sector grew at 11.5 per cent but the output of the traditional sectors contracted by 4.8 per cent. The services sector continued to grow during 2002. More moderate growth rates are expected for both the services and manufacturing sectors during 2003, with the growth rate of the manufacturing sector expected to be under 3 per cent. Survey data (IBEC/ESRI) suggests expectations for growth in domestic sales are more optimistic than export sales. The output of the services sectors will be dependent on domestic consumption. Public and private consumption is expected to slow down further during 2002. This fall off in consumption may

⁴ We use the incremental capital output ratio (ICRO) to measure the efficiency of investment. See the Annual Report 2000 (p.112) for a fuller discussion of the ICRO.

impact significantly on individual sectors. For example, the construction sector may be particularly hit by cutbacks in public capital expenditure.

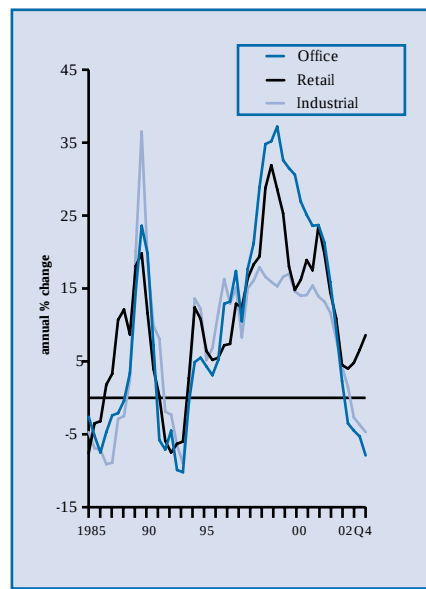
The income of exporting firms may be particularly at risk from any further erosion of competitiveness. The recent appreciation of the euro, most significantly against the US dollar, but also more moderately against sterling has had an adverse effect on the competitiveness of exporting firms. Since the last report the dollar and sterling have depreciated *vis-à-vis* the euro by approximately 19 per cent and 10 per cent, respectively (Chart 7). This appreciation has compounded the adverse impact on competitiveness coming from continuing high rates of domestic wage and price inflation. Earnings growth exceeded productivity growth in the manufacturing sector (excluding chemicals and pharmaceuticals sectors which employ 1.3 per cent of labour force). The nominal trade-weighted competitiveness indicator suggests competitiveness is currently at a two-year low. The moderate rate of growth forecast for the manufacturing sector in the coming year may fall further if the euro appreciates further and/or wage and price inflation increases further.

Corporates can be a source of severe financial pressure on households in the event of widespread reductions in employment levels. A common defensive reaction of firms that have suffered an adverse income shock is to reduce discretionary expenses such as wages. Employment levels have remained pretty flat during 2002 and into 2003. The unemployment rate has increased marginally from 3.7 per cent to 4.4 per cent. Survey evidence suggests a slight increase in the balance of firms expecting to decrease employment in the near future. One survey (Manpower) suggests the net jobs balance will fall in the transport, storage and communications sector, the restaurant and hotels sector and the wholesale and retail trade sector. The ESRI/IBEC survey of manufacturing firms suggests that employment levels will fall in a majority of the sub-sectors in the coming months (the significant exceptions being plastics and data processing). Overall the unemployment rate is forecast to rise to 5.8 per cent during 2003. Particularly at risk may be employees in exporting firms where the income and profitability are dependent on the exchange rate (for more details see Annex A). On the other hand, the costs of imports for importing firms will fall and this may help to increase the job security of employees in these firms.

Commercial property prices also remain a potential source of vulnerability for the Irish banking system. The office and industrial sectors have continued to weaken, since the previous report, with capital values declining over a number of quarters. In the year to 2002 Q4, office values have fallen by 7.9 per cent and industrial values have declined by 4.7 per cent (Chart 8). Also,

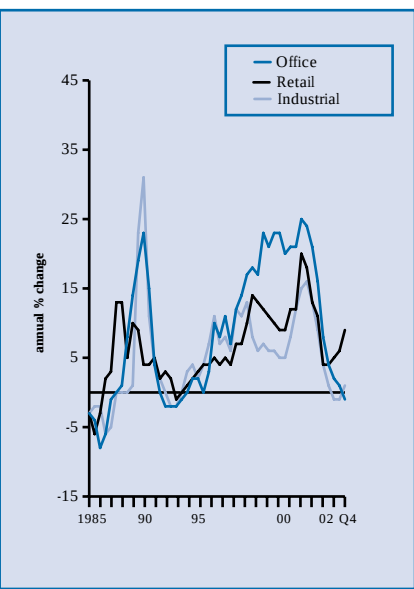
rental values in these two categories of property have contracted for the first time in almost a decade (Chart 9) perhaps explained by a significant rise in vacancy rates, particularly in the office sector where the overall vacancy rate in Dublin is now 14 per cent⁵. The exception is the retail sector, with increasing capital values and rents growing at a faster rate now than in 2001. However, the growth of retail sales is falling and there must be a risk that this will have a knock-on effect on capital values and rental values of retail properties. If the economy picks up at a slower rate than expected in the year ahead, the returns to commercial property investment could worsen further, and possibly impact on institutions with large exposures to commercial property lending.

Chart 8: Capital Values of JLLS Commercial Property Price Index^(a)



Source: Jones Lang LaSalle
(a) Data are available twice yearly 1985-1996 and quarterly 1997 to date.

Chart 9: Rental Values of JLLS Commercial Property Price Index^(a)



Source: Jones Lang LaSalle
(a) Data are available twice yearly 1985-1996 and quarterly 1997 to date.

The number of business failures may give some summary indication of the overall health of the corporate sector. International experience suggests that historically high indebtedness can lead to an increase in the rate of failure among companies as the higher level of debt finance increases the vulnerability of firms to adverse income shocks.⁶ The number of liquidations in Ireland increased in 2002 although the share of potentially insolvent liquidations (i.e., those liquidations where there will be default on outstanding debts) in the overall total dropped significantly (see Annex B for more details).

⁵ Source of data is Insignia Richard Ellis Gunne, *Dublin Office Market Bulletin*, Spring 2003.
⁶ See Vlieghe, J. (2001), 'Indicators of fragility in the UK corporate sector', *Bank of England Working Paper*, No. 146.

2.3 Banking Sector

2.3.1 Banking Sector Developments

The business environment facing the Irish credit institutions has deteriorated markedly since the last report, in line with weaker-than-expected economic activity both domestically and globally. During 2002 adverse sentiment was underpinned by a continuous stream of high profile credit events, in the form of company failures and revelations of dubious accounting practices. This has been replaced by uncertainty surrounding the economic outlook, particularly in light of the war in Iraq. As noted earlier in Section 2, there is a sharp dichotomy within overall private-sector lending. Commercial lending activity has weakened reflecting the fragile economic situation, while residential mortgage lending, and to a lesser extent commercial property lending, continue to grow strongly.

Looking at lending to the commercial sector as a whole, credit growth slowed consistently during 2002, but has increased marginally in recent months. As noted earlier, this may be due to firms being cautious about increasing their borrowing against a backdrop of reduced business volumes and an uncertain economic outlook. Similarly, reduced business volumes imply that firms require less external financing. On the supply side, banks continue to scrutinise carefully borrowers' ability to repay in the face of a less benign economic outlook. However, lending for property related purposes, namely lending to the real estate and construction sectors, has shown a divergence from the slow growth pattern. Growth in lending to these sectors averaged 20.5 per cent during 2002. From a financial stability perspective, notwithstanding the lags in the commercial property market, this raises the question of how banks are evaluating this type of lending. Although credit institutions have indicated in recent years that they have been cautious in lending to this sector, in terms of pre-letting conditions and other requirements, the Bank is currently planning a series of themed inspections on commercial property lending to assess underwriting practices.

In the personal sector there has been a marked resurgence in credit growth, with residential mortgage lending recording its largest increase for two years in February 2003. Although there are a number of sound fundamental reasons underlying the strong demand for mortgage credit, namely, demographic changes, increased affordability of mortgages and income growth, unemployment and interest rates are at historic lows and can only move in a manner that reverses these positive factors. In addition, there appear to be other worrying developments driving the supply of mortgage credit.

Over a long time period there appears to have been an increase in competition in the home mortgage market, with lenders

competing on both price and non-price terms. Non-price competition has taken the form of a relaxation of the traditional quantity constraints on lending. This has taken the form of a relaxation of Loan-to-Value (LTV) and Income-Multiple limits and a move to loan assessment based more on the repayment capacity of the borrower. Although this represents a significant innovation in lending practice, if lenders do not take due account of borrowers' ability to repay over the course of the full economic cycle this innovation could have adverse consequences for financial stability. In addition, there is a strong sense that lenders are focusing on volume growth and market share, given the collateralised nature of mortgage lending and the weakness in other business areas. Such behaviour is often a leading indicator of financial fragility, which concerns the Bank in an increasingly uncertain economic environment. There is a risk that the pressures prevailing in the Irish property lending market could undermine lenders' assessment of borrowers' ability to service increasingly large loans in more difficult times. This concern is inspired by the fact that recent history is replete with examples of financial crises being preceded by rapid loan growth and asset price escalation. Cross-country experience⁷ suggests that the consequences of a bust in house prices would inflict double the damage inflicted by an equity price bust. This is mostly because they have larger adverse effects on consumption and the banking system, which typically have high exposure to property. In response to this concern, the Governor has written to all mortgage-lending institutions to stress the need for the highest lending standards to be applied. In addition, the Bank has commenced a series of inspections of mortgage lenders, to examine the quality of underwriting standards and practices.

Another innovation in the personal lending market is the introduction of loan consolidation and mortgage equity withdrawal products. In essence, these products allow borrowers to mobilise housing equity for home improvements, to repay short-term loans or to increase their consumption. Again these types of products represent a significant innovation and can be very flexible in terms of repayment options. However, any product involving the withdrawal of housing equity through a mortgage increase will have long-term effects on the borrower's financial situation. For example, if a mortgage is extended within the original term, then the monthly repayment will increase. These issues and some of the potential financial stability effects of equity withdrawal are set out in Annex C.

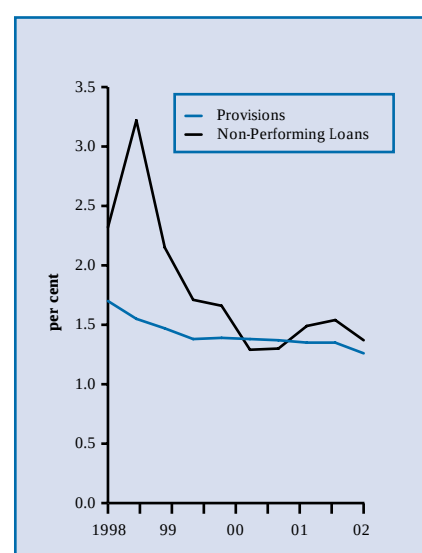
2.3.2 Other Significant Events

As noted in the previous Financial Stability Report, the Bank requested all credit institutions to arrange independent

⁷ See IMF (April 2003): 'When Bubbles Burst', *World Economic Outlook*, Chapter 2.

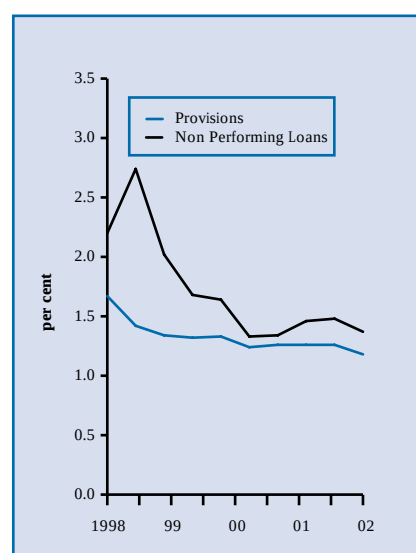
verification of their compliance with the best international standards of risk management and control. This was carried out during 2002 in the form of an 'Internal Controls and Risk Management Systems Review' co-ordinated by the Bank. The Bank and the audit profession jointly developed templates of control objectives and controls applied, covering, inter alia, corporate governance, management control and treasury operations. The review process then entailed credit institutions outlining how they meet each control objective (controls applied), with their responses then being reviewed and commented on by an independent reporting party (typically their auditors). The results of this exercise were then collated and analysed by the Bank and any issues that were identified are being followed up with individual banks. It is also envisaged that the broad results of the exercise will be published in a future Quarterly Bulletin.

Chart 10: Provisions and Non-Performing Loans as a % of Private-Sector Credit: Mortgage Lenders



Source: Central Bank of Ireland

Chart 11: Provisions and Non-Performing Loans as a % of Private-Sector Credit: Domestic Credit Institutions



Source: Central Bank of Ireland

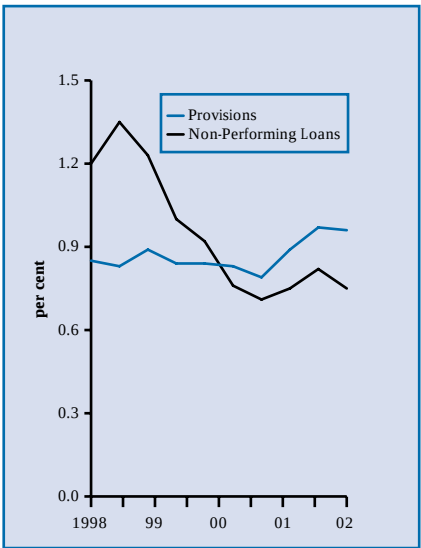
2.3.3 Aggregated Micro-Prudential Indicators

Notwithstanding the poor economic outlook and the concerns noted above, aggregate data on non-performing loans suggest asset quality improved marginally over the course of 2002 (Charts 10 and 11)^{8,9}. This pattern was replicated for the mortgage lending institutions, a subset of the overall system. A common pattern across institutions has been the broad stability of provisions relative to private-sector credit over the course of

⁸ These ratios are calculated as simple arithmetic averages from data collected on a monthly basis. Mortgage Lenders as a group are those credit institutions active in the Irish residential mortgage market.

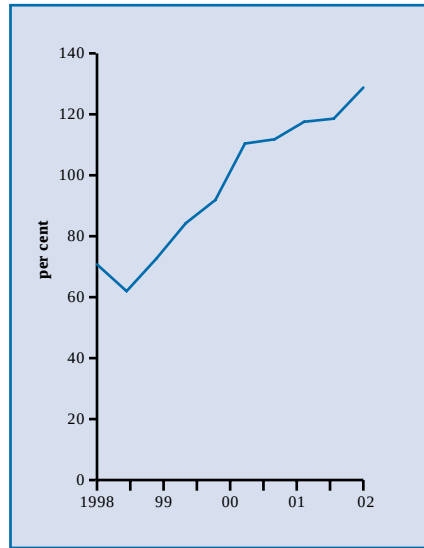
⁹ Domestic credit institutions as a group are those credit institutions that are focused on the Irish market, there is considerable overlap between the domestic and mortgage banking groups.

Chart 12: Provisions and Non-Performing Loans as a % of Private-Sector Credit: All Credit Institutions



Source: Central Bank of Ireland

Chart 13: Provisions as a % of Non-Performing Loans: All Credit Institutions



Source: Central Bank of Ireland

the economic cycle. Given the patterns in non-performing loans, this has lead to a secular increase in the ratio of provisions to non-performing loans over time.

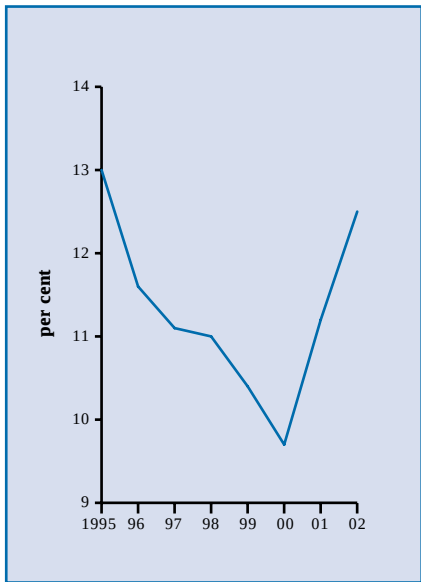
Looking at the banking sector overall (Charts 12 and 13)¹⁰, provisions are greater than non-performing loans and coverage has increased to 129 per cent at end-2002 from 118 per cent in 2001. Focusing on the mortgage lenders, the ratio of provisions to non-performing loans is almost always less than 100 per cent due to the collateralised nature of their business. The assumption being that the mortgaged property will always be available for disposal in the event of a default.

This relatively positive picture is also reflected in the aggregate data on bank solvency. Looking across all domestic credit institutions, the banking sector has shown an increased average solvency ratio¹¹ over recent years (Chart 14). The pattern in the average solvency ratio for mortgage lenders is shown in Chart 15 and suggests a rather different pattern. This reflects a small number of credit institutions that reduced their solvency ratios from the previously high levels prevailing prior to 1996. This decline is due to a number of factors including share buy backs, rapid balance sheet growth and more efficient use of capital. Over time there has been a convergence of solvency ratios in the 10 to 11 per cent range and a sharp decline in the distribution of solvency ratios across institutions. Despite this pattern, it must be

¹⁰ The ratios are calculated as defined in footnote 8. All credit institutions includes all credit institutions licensed under the Central Bank Act 1971 or the Building Societies Act 1989.

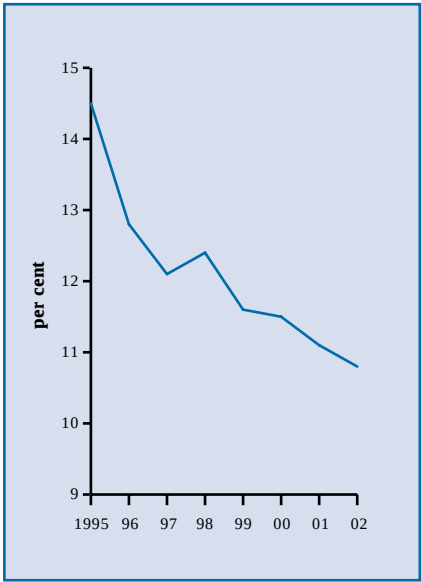
¹¹ The average solvency ratio is calculated as average of the ratios of eligible capital to risk weighted assets for the institutions in the samples defined in footnote 8.

Chart 14: Average Solvency Ratios of Domestic Credit Institutions



Source: Central Bank of Ireland

Chart 15: Average Solvency Ratios of Mortgage Lenders



Source: Central Bank of Ireland

noted that mortgage lenders remain well capitalised with solvency ratios in excess of the regulatory minimum.

In terms of profitability, 2001 saw a further decline in the profitability of Irish credit institutions, relative to the very strong performance of previous years. Although this partly reflected the difficult economic environment, there were other factors at play also. Annex D presents a very brief analysis of some of the drivers of bank profitability in recent years.

2.3.4 Conclusion

Aggregate data on solvency and asset quality, indicate that Irish credit institutions have been very resilient in the face of a marked economic slowdown. In part, this reflects their strong profitability and healthy capital positions prior to the economic downturn. However, it also reflects strong underwriting standards as evidenced by the low incidence of bad debts. The key challenge facing the industry in the current economic environment is to maintain such lending standards in an uncertain economic environment, while at the same time meeting market expectations on profitability. Such conditions can always create a temptation to cut corners in the pursuit of income, a development the Bank would not welcome. Given recent lending patterns, the Bank is inspecting residential mortgage lenders, and will inspect commercial property lenders, to examine the quality of underwriting.

2.4 Insurance Industry

The international insurance sector has recently exhibited increased strain on its profitability and solvency, arising from the

combination of higher claims (general insurers), significant fixed-payment commitments (life insurers), falling equity values and investment income and more risk exposure (e.g., possible falls in property and bond prices, higher creditor defaults). Insurers now face more direct exposures to credit risk (i.e., holding problem bonds or loans) and, through the credit derivatives market, much more indirect risk of potential credit losses. Reflecting concerns and uncertainty regarding insurers' exposures, the sector experienced ratings downgrades in some countries and sharp falls in their equity prices.

The Irish Financial Services Regulatory Authority became responsible for the regulation of the insurance industry in Ireland with effect from 1 May 2003. Thus, the Bank will broaden its analysis of the stability of the insurance sector in future Financial Stability Reports by capitalising on the increased data available to the Bank from 1 May 2003. A preliminary assessment by the Bank based on limited data available is that the Irish insurance sector appears to have been somewhat more resilient by comparison with the international sector. This reflects the fact that life insurers, which dominate the Irish insurance market, offer limited guaranteed payouts and generally the investment risk in these savings products is carried by the policy holders. Moreover, exposures of the Irish banking sector to the insurance sector as a whole appear limited, while the bancassurance groups in the Irish market have a very small insurance element, which minimises the scope for internal 'contagion' from the insurance to the banking arm.

3. The External Dimension

3.1 United States

The Bank's last Financial Stability Report highlighted a number of sources of risk to financial stability in the US including the large current-account imbalance, high levels of indebtedness particularly in the household sector, inflating house prices, the possible further downward corrections of equity prices and exchange-rate overvaluation. Uncertainty about the strength of recovery in economic growth has meant that these risks have not waned — with perhaps the exception of the exchange-rate risk — and have been supplemented by risks associated with the rising fiscal deficit and possible overvaluation of the US bond market.

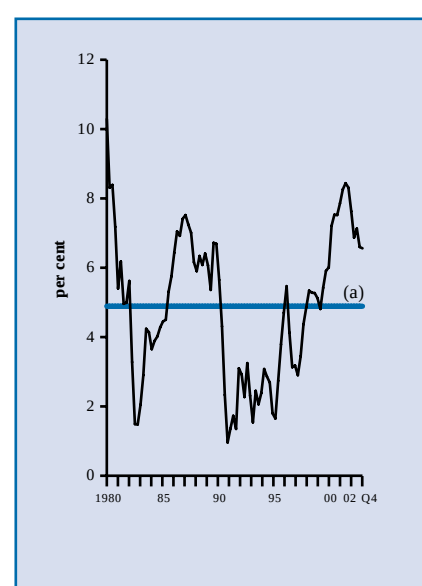
The current-account deficit reached a historic high of 4.8 per cent of GDP in 2002 Q3 and is likely to widen further. The financing of this deficit, however, is threatened by the deterioration in economic growth prospects, which may discourage foreign investors from investing in the US assets. The recent weakening of the dollar is a symptom of investors' greater reluctance to invest in US assets in the face of uncertainty.

The increasing fiscal deficit is also a source of concern as it contributes to concerns regarding financing. Foreign investors have been willing to support the budget deficit, investing in US treasuries in a portfolio shift from riskier equities and as a result has been pushing up bond prices. This has contributed to speculation of bond market overvaluation in the light of the increasing budget deficit, which, should it continue, will require an increase in the supply of US treasuries and hence a lowering of bond prices will result. Any unwinding of such an imbalance in the bond market would be a negative shock for the financial system. Moreover, the possibility of further equity price corrections remains a threat to the stability of the financial system. Uncertainties about the economic recovery, corporate earnings and geopolitical tensions have seen a weakening in equity markets in early 2003. Price-earnings ratios still remain higher than their pre-bubble average and so the risk of a further fall has not been completely removed.

3.1.1 Household Sector

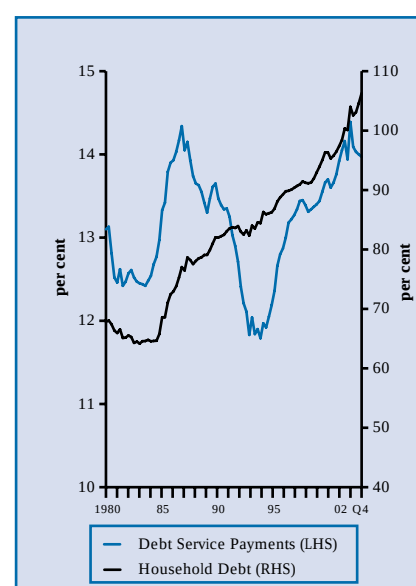
The financial position of US households deteriorated somewhat over the course of 2002. Although this was not as significant as might have been expected, given the balance-sheet adjustment required following the excesses of the boom years. Personal consumption expenditure remained the driving force behind economic growth last year, contributing 2.1 per cent of a total GDP growth rate of 2.4 per cent. The asset side of the household balance sheet was principally weakened by significant declines in equity prices, although the impact of these declines on household wealth were mitigated somewhat by the considerable increases in the value of residential real estate. House prices grew by 6.9 per cent last year, bringing the cumulative rise in prices over the past three years to 25 per cent (Chart 16).

Chart 16: House Price Index, Annual Growth Rates



Source: Freddie Mac
(a) Average 1980-2002

Chart 17: Household Debt to Income and Debt Service Payment to Income



Source: Federal Reserve Board of Governors

Households also benefited from a rise in disposable incomes. Real disposable income did not stop growing despite the slowdown and expanded by 4.5 per cent last year, reflecting tax cuts and increased transfer payments, but also higher real wages.

On the liability side, household indebtedness remains historically high. Although the debt service burden fell last year the average burden remains high by historical comparison (Chart 17). Most of the recent expansion in consumer debt has been in the form of mortgage debt reflecting favourable tax treatment, rising incomes and, especially, the combination of rising house prices and low interest rates. The latter two factors drove a surge of mortgage refinancing in 2002, as households restructured to a more efficient form of debt.

Balance sheet adjustment however, has yet to be completed. More specifically, the savings rate has yet to fully correct for the decline in household wealth, which occurred in recent years. As a result savings are expected to increase over the course of the coming year, reducing consumers contribution to economic growth. The labour market remains weak with the unemployment rate increasing to 5.8 per cent in February, while various measures of consumer confidence have hit decade long lows. If these negative trends continue, households could retrench spending.

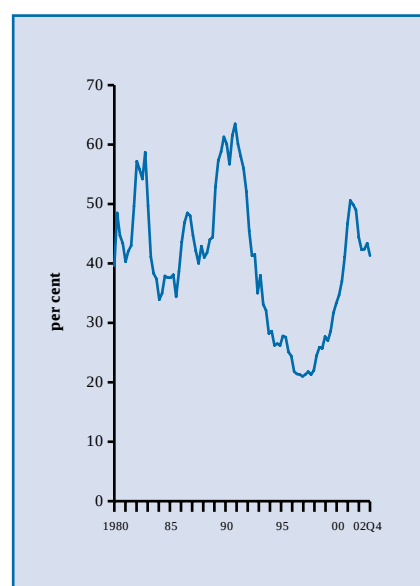
3.1.2 Corporate Sector

The health of the non-financial corporate sector in the US has considerable implications for international financial stability due to the extent of foreign investment in recent years and, in particular, the exposure of foreign banks through their US-based affiliates. The extent to which global economic growth is seen to depend on the US economy means that developments in the US play a significant role in driving fluctuations in business confidence and corporate financing conditions internationally. The current phase of weakness in the US economy, which began in early 2001, is unusual in that it has been driven by retrenchment in the corporate sector while household spending has held up reasonably well. This reflects a greater degree of progress in the unwinding of economic imbalances in the corporate sector.

Corporations have made moderate progress in improving balance sheets over the course of the downturn. Cash flows have increased significantly since the middle of 2001 due to tighter control of costs, particularly labour costs, cutbacks in capital expenditure and reductions in inventories. The significant increase in labour productivity during the late 1990s has been improved upon during 2002. With the restructuring of short-term debt to longer maturities, the ratio of liquid assets to short-run liabilities rose to over 100 per cent by late last year from 65 per

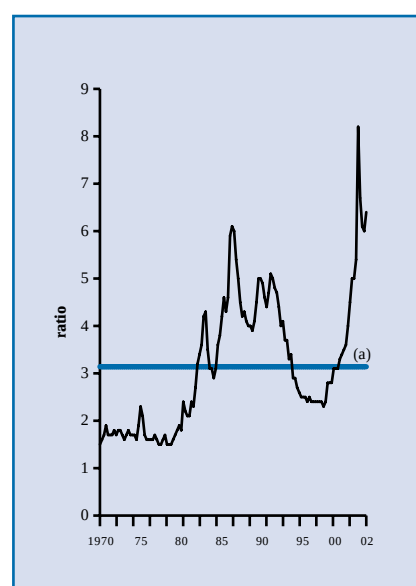
cent at the start of the downturn. With interest rates declining, income gearing (i.e., the ratio of net interest payments to profits) declined to just over 40 per cent in late 2002 from over 50 per cent in early 2001 (Chart 18). However, weak producer prices and rising energy costs mean that profitability remains weak at about 8 per cent of GDP, well below a peak of 13 per cent in 1997. Furthermore, while the ratio of corporate debt to profits has declined significantly, it remains well above historical averages (Chart 19).

Chart 18: Corporate Income Gearing



Source: US Department of Commerce, BEA

Chart 19: Corporate Debt to Profits

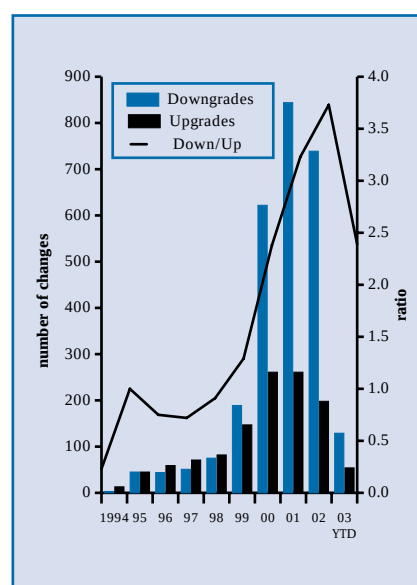


Source: US Flow of Funds
(a) Average 1970-2002.

In sharp contrast to previous recovery phases, financing conditions for corporations deteriorated over the course of last year. This reflected in large part heightened concerns regarding corporate governance and the reliability of earnings estimates earlier in the year, which subsequently gave way to general uncertainty over the prospects for recovery in earnings amid rising geopolitical tensions. When bank borrowing slowed in 2001, firms appeared to compensate by raising equity and bond finance. However, these channels were markedly restricted last year. Equity prices declined sharply over the course of the year, with the Standard & Poors 500 index contracting by over 20 per cent. Meanwhile, credit spreads for firms of lower investment grade widened considerably to levels comparable with the recession of 1990-91, an effect compounded by credit rating downgrades outnumbering upgrades by around 3 to 1 (Chart 20). Alongside a general increase in risk aversion, this reflected a strong rise in the rate of corporate bond defaults, particularly by telecom firms, and the persistence of a high rate of corporate bankruptcies, which were little improved from a sharp increase in 2001.

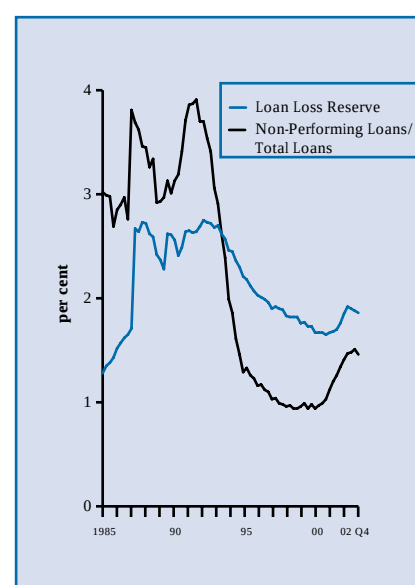
On balance, the progress of firms in rebuilding balance sheets and the effect of accommodative monetary policy has, to an extent, been offset by developments in financial markets. For example, the rate of increase in the ratio of capital gearing to net worth slowed significantly over the course of last year when net worth is measured at replacement cost but rose sharply on a market capitalisation measure. Nevertheless, increased cash flows provide some comfort that the underlying position of firms has improved over the course of last year. However, there remains considerable potential for a slowdown in consumer spending, or renewed declines in equity prices, to spark more intense rationalisation in the corporate sector this year.

Chart 20: Credit Ratings Changes^(a)



Source: Bloomberg
(a) Issuer rating changes only

Chart 21: Non-Performing Loans and Loan-Loss Reserve as a % of Total Loans



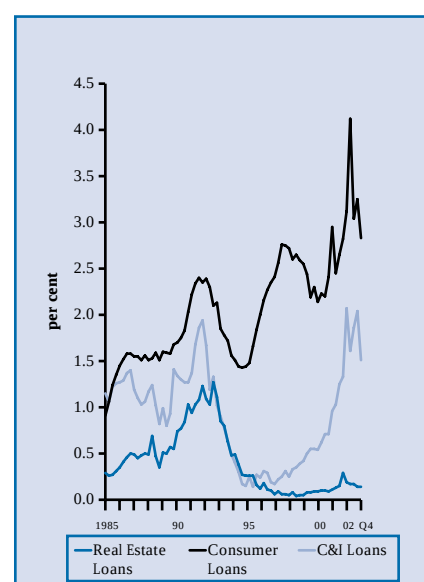
Source: Federal Reserve Board of Governors

3.1.3 Banking Sector

On the whole, US banks have remained well capitalised and liquid. Continuing the trend evident over the past decade, US commercial banks have maintained high profits and returns on assets (which are now well above comparable rates in other industrial countries). This has helped their efforts to contain costs and to maintain high standards of credit quality. Loan loss performance has remained low by historical standards (Chart 21), not only because of better credit evaluation techniques, but also because of the continued active management of credit risks, through the use of secondary loan markets and derivative instruments such as credit default swaps. The recent trend in charge-off rates (i.e., the value of loans written-off against total loans) highlights the corporate sector as the main source of new problem loans (Chart 22). The charge-off rates on commercial and industrial (C&I) loans in late 2001 and early 2002 are the highest rates since the early 1990s. The data on delinquent loans (i.e., loans past due 30 days or more) suggests that this trend

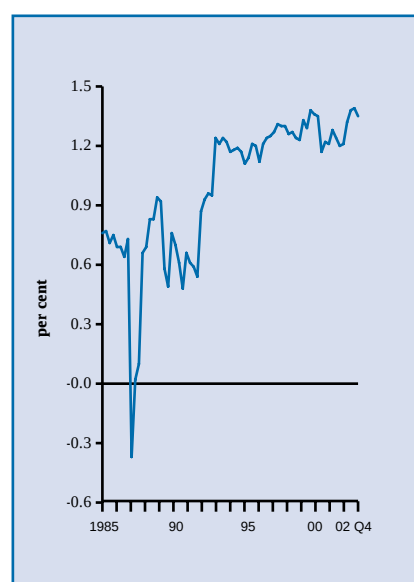
may continue as the delinquency rate for C&I loans recently reached its highest rate since 1993. In contrast, neither the charge-off rates nor delinquency rates for residential and commercial real estate and consumer borrowing have been increasing lately nor are they particularly high by comparison with recent years. Given their sufficiency of both deposits and capital, banks have been willing and able to lend, a situation, which contrasts with that following the 1990-91 recession. The Fed's Senior Loan Officer Survey shows little tightening of loan standards for consumers, either in regard to residential mortgages or other types of consumer loans, with the demand for the former, in particular, being strong. Business lending, on the other hand, has been weak. While, in part, this may reflect some tightening of lending standards, the main factor here has been the weak demand for business credit, reflecting the reluctance of firms to invest and also the lack of merger and acquisition activity. The corporate sector has, however, taken advantage of low long-term interest rates to substitute long-term financing for bank loans and short-term liabilities. However, banks remain exposed to substantial values of loan commitments which may involve the banks accepting a higher level of credit risk than originally foreseen when the agreements were made (see Annex E for more details).

Chart 22: Charge-off Rates, All Banks



Source: FFIEC

Chart 23: Return on Average Assets, All Banks



Source: FFIEC

The strong growth in both bank deposits and purchases of Government securities as well as the rapid expansion of mortgage credit raises some issues for financial stability. With banks effectively funding their purchase of Government and mortgage-backed securities through issuing deposits, they have essentially built-up 'carry trade' positions that profit from the spread between short-term and long-term interest rates. These

trades, which are largely unhedged, expose banks to interest-rate risk and an unexpected rise in interest rates could spark an unwinding in carry trade positions in securities, resulting in market volatility (this type of phenomenon was witnessed in 1994). A second risk stems from the prominent role of mortgage finance in the carry trade and the rapid growth in mortgage credit in recent years.

While these agencies have managed these exposures without any great difficulty to date, the large size of the agencies' holdings (over \$1 trillion), suggests that an unfavourable outcome not anticipated in their risk models could have adverse consequences for financial market stability.

Some reassurance, however, is provided by the fact that, in contrast to some occasions in the past, market participants seem aware of the risks involved in these positions. Moreover, the tools for hedging, such as interest rate swaps and swaptions, are readily available. Thus, as long as derivatives' markets remain liquid, the adjustment to eventual changes in the shape of the yield curve may be smoother than in the past.

More generally, there appears to be a few important secular influences at play, which are contributing to the stability of the financial sectors of the US and other leading industrialised economies. An important factor endogenous to these industries themselves is the increasing application of risk management techniques which are helping to de-concentrate risks with the result that the effects of shocks tend to be diffused more widely and therefore pose less of a threat to the systemic health of the financial system. Another important influence is the increasing stability of overall output growth. The volatility of output growth has declined steadily in the post-Second World War period and for the US economy is estimated to have fallen by a factor of three with similar falls being experienced by a number of other major industrialised countries¹².

3.2 Japan

Japan's underlying domestic economic weakness persists, hampering the pass through from strong export growth to domestic demand. With the economic outlook highly dependent on the evolution of external demand, the weak global economy has resulted in growth stagnating in the early part of this year. The root causes of this underlying weakness are the financial problems that arose following the bursting of the asset price bubble in 1991, which have still not been adequately addressed. Although the authorities tried to achieve a revival in growth so that the economic upheaval from reforms might be less painfully

¹² See Blanchard and Simon (2001): 'The Long and Large Decline in US Output Volatility', *Brookings Papers on Economic Activity*, vol. 1 of 2001.

undertaken, the balance sheets of financial and corporate enterprises were so weakened by the bursting of the asset price bubble that both fiscal and monetary policy had, and continue to have, a much weaker effect on the overall economy than would normally be the case. The result is that large debts in the financial and corporate sectors remain unresolved while public debt has escalated to a level that gives serious cause for concern.

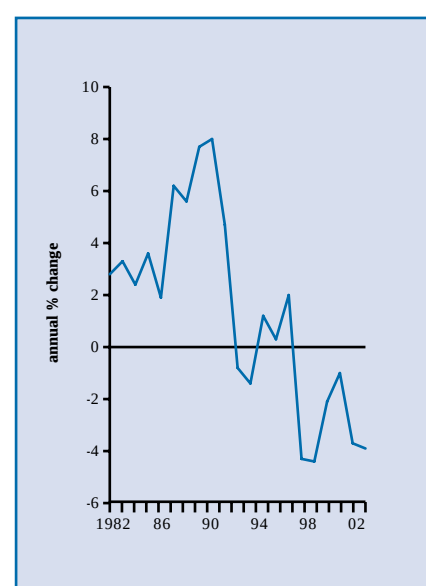
The spillover effects of developments in Japan on the international financial system have been mild so far. Furthermore, foreign investors have taken significant steps to limit their exposure to Japanese equities, bonds and the foreign branches of Japanese banks in recent years. The main risk of contagion arises from the possibility that the international lending of Japanese banks could be curtailed by domestic circumstances, which would have a particularly adverse effect on the health of emerging economies in Asia, where significant levels of bad debts remain in the banking sector.

3.2.1 Household and Corporate Sectors

Household behaviour did not change during 2002 with retail sales continuing to be weak. This reflected a continuing decline in wages and high unemployment (5.5 per cent in January). This, in turn, has a strong dampening effect on private consumption (Chart 24).

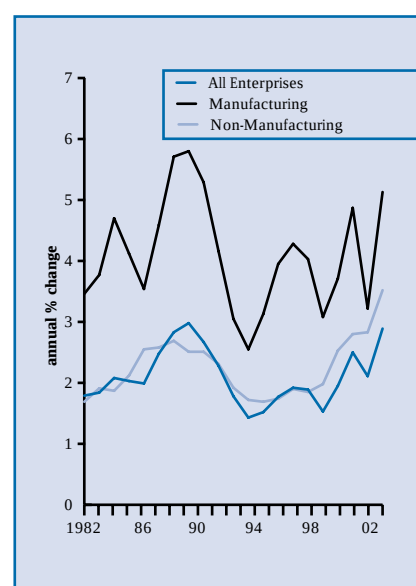
Corporate indebtedness has decreased further in recent times as profitability has stabilised and the value of total outstanding debt has fallen. Income gearing remains substantially below the levels recorded in the early 1990s.

Chart 24: Retail Sales



Source: Ministry of Finance and Bank of Japan

Chart 25: Corporate Profit Margins



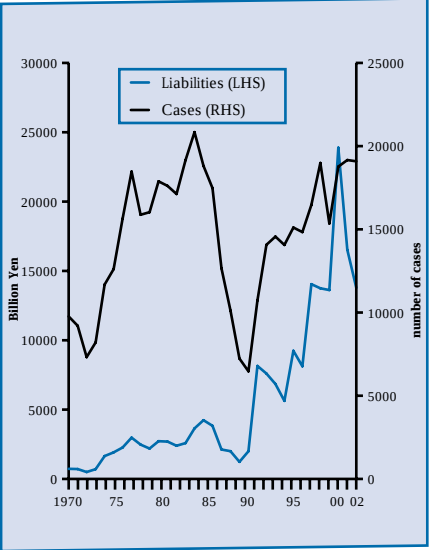
Source: Ministry of Finance and Bank of Japan

While corporate profit margins improved in late 2002 (Chart 25), improvements in profits have been mainly channelled into rebuilding weak balance sheets. Business investment continued to decline for most of last year, reflecting the persistence of both economic and financial market uncertainty. The lending environment for firms, in the banking sector and bond markets, also remains restrictive for firms without high credit ratings¹³. While the number of corporate bankruptcies fell slightly during 2002, the number of failures recorded in both 2001 and 2002 are high by historical comparison (Chart 26). However, the total value of liabilities of bankrupt firms in 2002 is approximately half the value of liabilities of firms bankrupted in 2000. This lower value of outstanding liabilities in bankrupt companies will reduce the adverse impact of the historically high number of bankruptcies on the banks' balance sheets.

3.2.2 Banking Sector

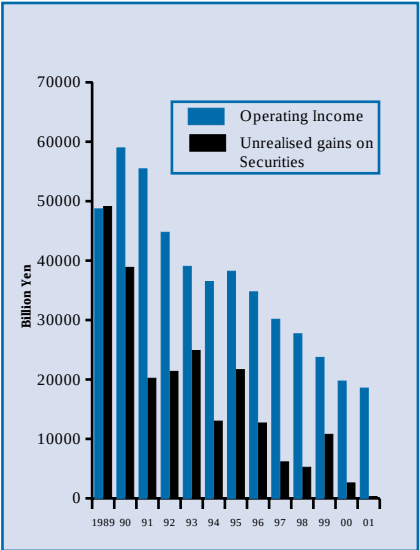
The volume of intermediation conducted by banks continues to fall with the most notable decline in loans outstanding to the corporate sector (almost 6 per cent during 2002). Japanese banks increased the value of non-performing loans (NPLs) written off to ¥9.7 trillion in 2001 but the total value of NPLs has increased further to ¥43.2 trillion (approximately 8 per cent of GDP). This increasing total value of NPLs has emerged following further inspections of loan books by the FSA and is in part a reflection of the historically high number of corporate bankruptcies.

Chart 26: Number and Value of Bankruptcies



Source: Bank of Japan and TSR Ltd.

Chart 27: Operating Income and Unrealised Gains/Losses Arising from Revaluation of Investment Securities, All Banks



Source: Bank of Japan

13 The responses on 'financial position' are a summary indicator of the state of each firm's liquidity, the attitude of its lending institutions and its payment and repayment terms.

The banks' capital ratios have fallen further making this the second year during which the financial strength of banks has weakened. One of the primary explanations is falling stock markets and how the subsequent revaluation of securities held by banks turned unrealised capital gains on investment securities to net losses (Chart 27). This effect can only have worsened since, as stock markets have fallen further. This concern may partly explain the Bank of Japan's decision to purchase approximately one third of the value of equities held by banks. The pressure on the non-banking financial sector, including life insurance and pension funds, also intensified due to the failure of returns on investments to cover guaranteed payoffs to clients. This helped to drive a strong rise in the level of bank deposits as an aging population replenished its savings, in an environment of persisting deflation and a weak outlook for consumer income, compounding the effect of portfolio shifts of investors into low risk positions in the light of high uncertainty in international economic and financial markets.

3.3 Euro Area

With the euro area economy expanding only moderately in 2002 and the current outlook for economic growth in 2003 dominated by a high degree of uncertainty, the euro area banking sector has faced a difficult period since the last Financial Stability Report, but has emerged resilient to the shocks encountered. Going forward, an improvement in the financial health of the banking sector relies upon continued resilience in the household sector and an improvement in conditions in the corporate sector, but this scenario faces significant downside risk.

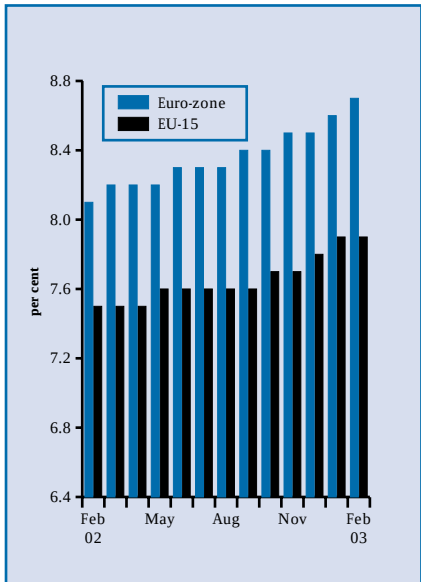
3.3.1 Household Sector

While private consumption growth remained relatively robust in the euro area in 2002 the outlook is for a weakening in growth in the early part of this year. Unemployment, which has been increasing since mid-2001, experienced its greatest monthly increase since then in January 2003 to 8.6 per cent (Chart 28), with labour markets in Portugal, Luxembourg and the Netherlands being particularly hard hit. Employment prospects in the euro area remain uncertain, with survey evidence showing mixed results.

Household wealth was adversely affected by falls in the values of financial assets, especially stock prices, during 2002. However, this may have been partly negated by rising property prices in some euro area countries. Household indebtedness in the euro area is relatively contained, with debt to GDP increasing to just above 50 per cent in 2002 Q4, compared with 106 per cent in the US. However, loans extended to households grew at a steady rate in 2002, largely driven by lending for housing (Chart 29). The historically low levels of mortgage interest rates and the ongoing increases in property prices in some euro area countries have fed this growth. While household debt financing is at relatively

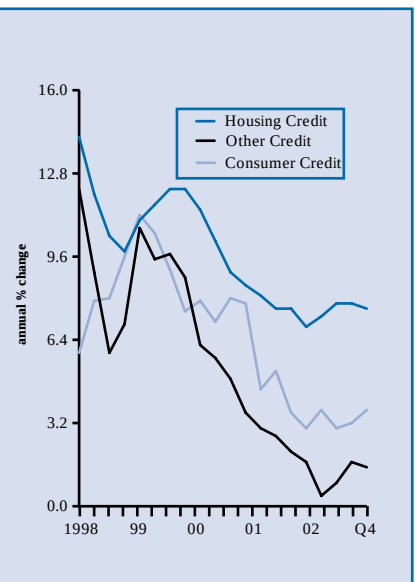
moderate levels, it must be borne in mind that households in some euro area countries may be more indebted than others and could encounter difficulties if the economic environment does not enter a recovery phase in the near term.

Chart 28: Unemployment Rate



Source: Eurostat

Chart 29: Loans to Households



Source: ECB

3.3.2 Corporate Sector

The corporate sector was in quite a fragile state last year, indicated by increased default rates and downgrades, with the TMT sector being particularly badly affected. Since then persistent declines in investment, industrial production and industrial confidence have occurred. The annual growth rate of debt financing¹⁴ of non-financial corporations is estimated to have declined in 2002 Q4 to 3.8 per cent from 4.2 per cent in the previous quarter, which is at a slower pace than previously in 2002. There was also a considerable drop in the issuance of debt securities in the fourth quarter. The annual growth rate of loans advanced to non-financial corporations continued to slow in 2002 (Chart 30) and given that the value of financial assets declined in 2002, firms' financial leverage has increased, meaning there could be some concern as to the credit quality of some firms. However, while growth in credit to non-financial corporations has declined, there is no evidence of credit constraints emerging in the euro area as a whole.

3.3.3 Banking Sector

While the slowdown in the world economy and falling equity prices have had a negative impact on financial institutions across the world, it is those in Europe which have been particularly

14 Debt financing includes loans, debt securities issued, pension fund reserves of non-financial corporations.

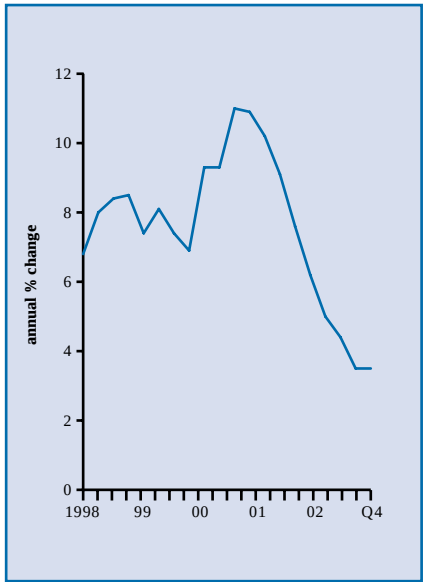
adversely affected by falling profitability both in 2001 and 2002. According to the ECB¹⁵ the return on equity (ROE) of all banks in the EU fell by 2.3 percentage points to 10.1 in 2001 (Table 1). For large banks the ROE fell from 13.8 in 2001 to 12.3 in mid-2002.¹⁶ Deteriorating economic conditions adversely affected borrowers' credit quality, resulting in increasing banks' bad debts and loan-loss provisions, thereby negatively affecting operating profits. As Table 1 indicates, loan-loss provisions increased substantially in 2001 to 67.9 per cent. The decline in equity prices particularly in European markets (Chart 31) resulted in falling income from commissions and investment banking activities. Increased investor risk aversion thereby reduced the demand for equities, while banks heavily involved in investment banking suffered due to the fall-off in market activities such as initial public offerings and bond issuances. Despite these shocks to the banks' operating environment, solvency levels remained solid in 2001 and into 2002. Only a few banks, the majority of which were in the medium and small size category, had a capital ratio of below 9 per cent at end-2001.

Table 1: EU Banks' Performance Statistics

	2000	2001
ROE (% of Tier One capital)	12.44	10.11
Total non-performing and doubtful assets (% of loans and advances)	2.50	2.76
Total provisioning (% of total non-performing loans and doubtful assets)	59.90	67.88
Solvency ratio — total capital ratio	11.90	12.04

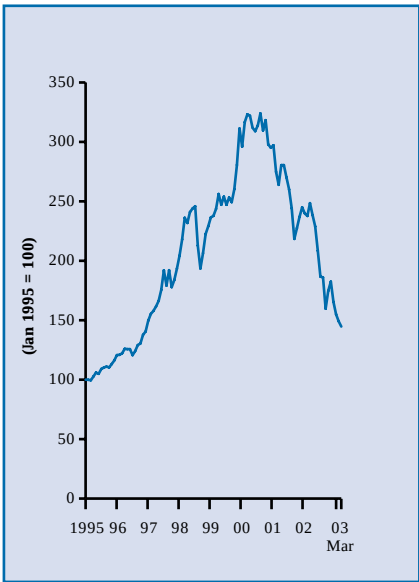
Source: ECB (2003), *EU Banking Sector Stability*, February 2003

Chart 30: Loans to Non-Financial Corporations



Source: ECB

Chart 31: DJ EuroStoxx Index



Source: Bloomberg

15 See ECB (2003), *EU Banking Sector Stability*, February 2003.
16 The mid-2002 cumulated profits are annualised.

While there has been no threat to the overall stability of the euro-area banking system, the ability of banks to withstand further adverse shocks has certainly been reduced. An improvement in banks' financial conditions is dependant on the recovery of the euro area economy. Should a recovery in economic growth fail to materialise, for example, due to increased corporate fragility and increased consumer pessimism, the negative impact on corporate and household financial positions could place additional strain on banks' balance sheets.

Although the overall performance of the euro area economy has been much less impressive than that of the US (aside from the short recession in the US in 2001), the euro area does not face the US problem of sustained macroeconomic imbalances. With action on structural reform now more in evidence, the threat to financial stability in the euro area, although it has increased in the wake of a succession of shocks, is fairly well contained.

3.4 United Kingdom

Although the UK economy has slowed in recent quarters, it has enjoyed continuing growth in domestic demand (especially private and public consumption). Concerns for financial stability in the UK are predominantly based on the historically high indebtedness of both the household and corporate sectors and the unsustainable high growth rate of residential property prices. Historically low rates of household arrears and company insolvencies, improving net income and improving capital ratios have maintained the health of the UK banking system.

3.4.1 Household Sector

Households' indebtedness has continued to rise and remains at a historically high level (Chart 32).¹⁷ Bank of England data show growth in both secured and unsecured lending to households has increased or remained high since the last assessment. High growth rates of mortgage borrowing reflects a combination of historically low interest rates, intense competition among competing lenders, rising house prices (Chart 33) and mortgage equity withdrawal.¹⁸

This indebtedness was not previously perceived as a threat to the financial well being of the household sector because the sector had a surplus of income over expenditure and income gearing was low by historical comparison. However, the household sector returned to deficit¹⁹ during 2002 and the distribution of indebtedness across households suggests the

¹⁷ Since quarterly data became available in 1987.

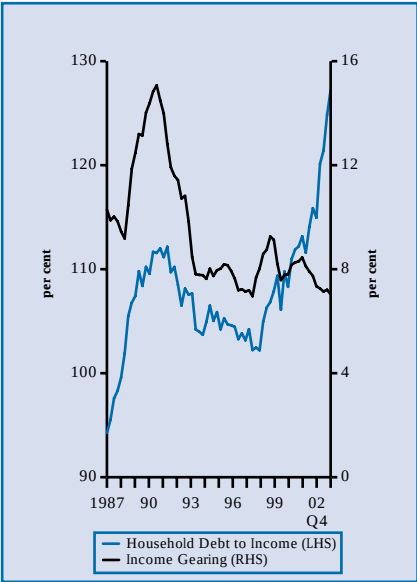
¹⁸ See the latest *Financial Stability Review* published by the Bank of England.

¹⁹ A financial deficit (surplus) occurs when a sector's total income is less (more) than their total expenditure on current and capital items during a particular time period.

aggregate measure of income gearing may be misleadingly optimistic.

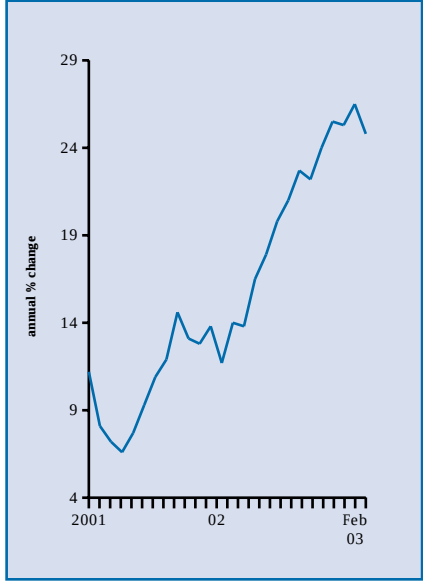
In aggregate, UK households now have an excess of capital and current expenditure over income that has to be funded by borrowing. This deficit could be reversed if consumers adjust their spending downwards and there may be evidence to suggest that this is occurring already. The average quarterly growth rate in consumption slowed during 2002 to below the rates recorded in 2000 and 2001, and survey evidence suggests retail sales volumes have fallen in early 2003.

Chart 32: Household Debt as a % of Disposable Income and Household Income Gearing



Source: ONS

Chart 33: Nationwide House Price Index



Source: Nationwide

With regard to income gearing (which is at an historic low) the aggregate measure can be misleadingly optimistic because it masks the underlying distribution of debt across households. Recent research suggests that consumer debt is disproportionately held by borrowers with low incomes and few liquid assets.²⁰ The risks to income gearing may be on the downside with interest rates more likely to rise than to fall in the near future because of the stability of the underlying low inflation rate.

While it is unclear how falling asset prices might impact on households' immediate health, a fall in house prices may be the type of asset price shock that most affects UK households. Rapid house price inflation, has facilitated mortgage equity withdrawal (MEW) to continue rising in excess of levels last seen in the late 1980s. Economic growth generated from consumer demand, has

²⁰ See Banks, J., Smith, Z. and Wakefield, M. (2002), "The distribution of financial wealth in the UK: evidence from 2000 BHPS data", *Institute for Fiscal Studies*, No. W02/221.

been facilitated by mortgage and other borrowing channels as approximately 10 per cent of consumption (the highest share since 1988), is being funded by borrowing. Therefore, a sudden reversal in house prices could reduce economic growth and increase unemployment thereby increasing difficulties for the affected households to service their existing debt. However, some comfort can be taken from the fact that arrears and possessions have fallen to their lowest levels for twenty years as have the number of properties taken into possession. Personal insolvencies in general totalled 30,587 in 2002 and represented a marginal increase over the 2001 and 2000 totals.

3.4.2 Corporate Sector

The financial health of the corporate sector has stabilised since the last assessment despite the continuing slowdown in economic growth. The trend increase in the sector's indebtedness is now being matched by stable profitability and a stronger balance sheet.

The outstanding value of private non-financial corporates' (PNFCs') bank and non-bank debt grew strongly throughout 2002 and shows no sign of easing in 2003. The debt-to-profits ratio (Chart 34) has increased further and the value of debt against the market value of capital assets increased further due to the continuing falls in equity prices.

The aggregate profitability data for 2002 suggested an end to the trend decline in corporate profitability over the previous years. This was the first time in five years where the net rate of return of manufacturing companies showed some improvement. However, the outlook for profitability is uncertain as profit warnings, a leading indicator of falling profitability²¹, rose in 2002 H2 and look set to continue on an upward trend. However, it may matter less that profitability remains subdued because:

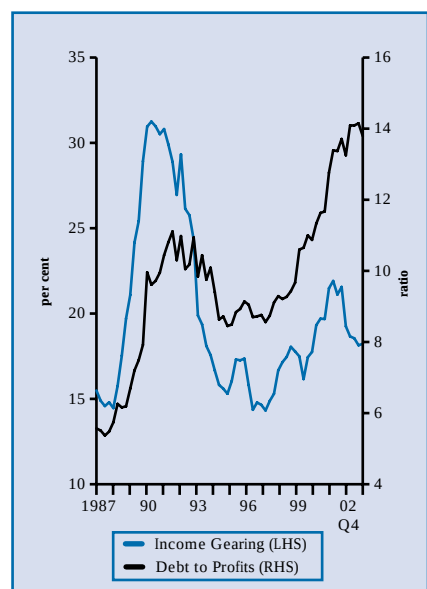
- (i) the debt-service burden (i.e., income gearing) continued to fall during 2002 and remains approximately half the level of the early 1990s (Chart 33);
- (ii) liquidity remains high by past experience; and
- (iii) company insolvencies are at historically low levels (Chart 35).

PNFCs may have been repairing their balance sheets for some time. Business investment expenditure has fallen almost continuously for two years, the share of operating surplus paid out in dividends decreased by 8.9 percentage points to 34.9 per cent in the year to 2002 Q3 and the number and value of

²¹ See Kearns, A. and Whitley, J. (2002), 'The balance-sheet information content of UK company profit warnings', *Bank of England Quarterly Bulletin*, Autumn.

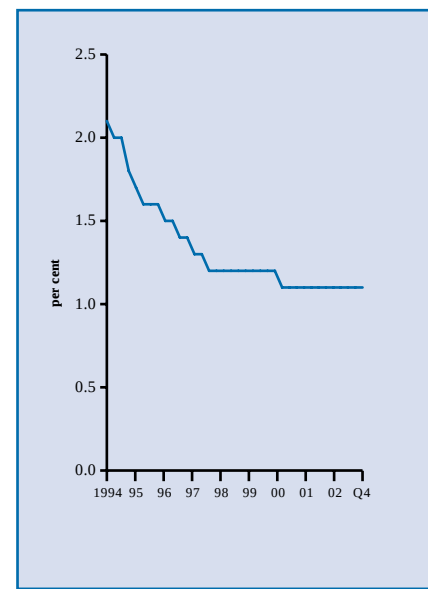
mergers and acquisitions (M&A) by UK companies, both at home and abroad, is at its lowest levels for several years. Lower dividend payments, lower investment expenditures and lower M&A expenditures helped PNFCs to move into financial surplus²² for the first three quarters of 2002. This is the first time in four years that the corporate sector is in surplus for two or more consecutive quarters. This surplus combined with high liquidity suggests that UK corporates might not be in immediate need for external finance and therefore might not be as affected by the recent increase in the cost of both equity and bond finance.

Chart 34: Corporate Debt to Profits and Corporate Income Gearing



Source: ONS

Chart 35: Rate of Corporate Insolvencies



Source: Department of Trade and Industry

The growth rate of lending for commercial property has been very high in recent years, as has the share of commercial property loans in total non-financial private sector loans. This sustained rate of borrowing is difficult to understand when set against the recent slowdown in growth of both capital values and rents. The continuing high level of investment in property is perhaps explained by the low returns currently available from depressed equity markets and/or low interest rates. Investors in commercial property are also vulnerable to any significant rise in interest rates in the near future.

3.4.3 Banking Sector

Almost two thirds of non-financial private sector lending by UK banks is to UK households, 10 per cent to real estate and only 6 per cent to manufacturing industry. This skewed distribution of lending towards the currently designated 'healthy' household sector may explain partly the comparatively healthy state of UK banks despite the recent slowdown in overall economic growth.

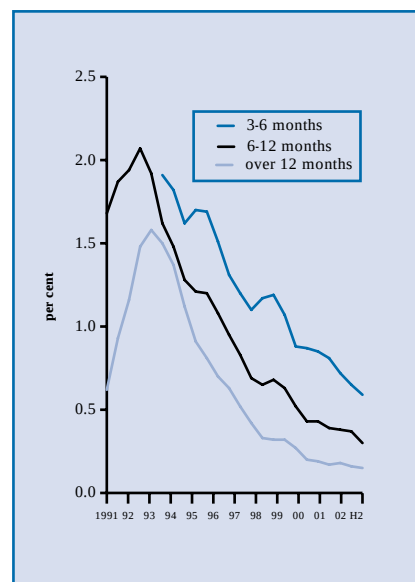
22 See footnote 19 for the definition of a financial surplus and deficit.

Bank of England calculations²³ show that the large UK banks remain highly profitable and highly capitalised by comparison with the early 1990s.

Current write-offs and revaluations are below 0.001 per cent of total loans outstanding for both the PNFC and household sector and mortgage arrears are at low levels (Chart 36). Net income of UK banks for 2002 is significantly above net income for the comparable period in recent years because loan volumes have compensated for falling net interest margins.

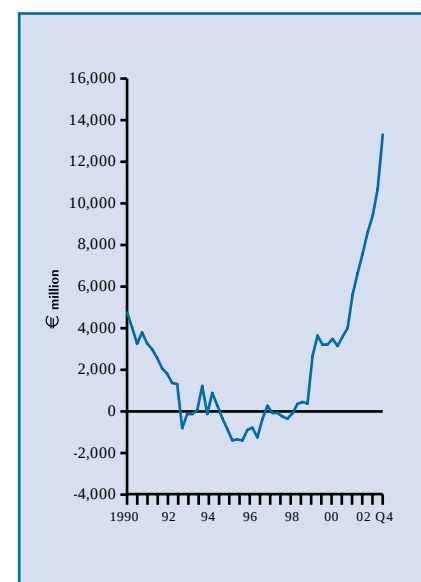
There is some concern that the banks remain vulnerable to a sharp fall in residential real estate prices and memories of the 20 per cent fall in prices in the early 1990s are still relatively fresh. However, typical loan-to-value ratios are lower and the recent significant increase in prices has decreased further the loan-to-value ratios on seasoned mortgages. Nonetheless, any further acceleration in the rate of MEW (Chart 37) risks eroding further the safety margin provided by lower loan-to-value ratios. Finally, it has been suggested that those banks that experienced the least deterioration in credit quality in the early 1990s were those banks with the greatest share of their assets in mortgage loans.

Chart 36: Mortgage Arrears as a % of All Loans



Source: Council of Mortgage Lenders

Chart 37: Mortgage Equity Withdrawal



Source: Bank of England

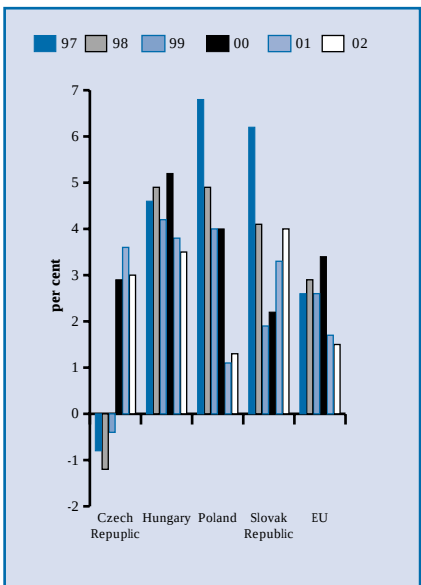
3.5 EU Accession Countries

Both prudent fiscal and monetary policy, coupled with the reforms to the banking structure, have generated high levels of growth within the European Union accession countries (EA) in recent years (Chart 38). While the implementation of stronger

²³ See the latest *Financial Stability Review* published by the Bank of England.

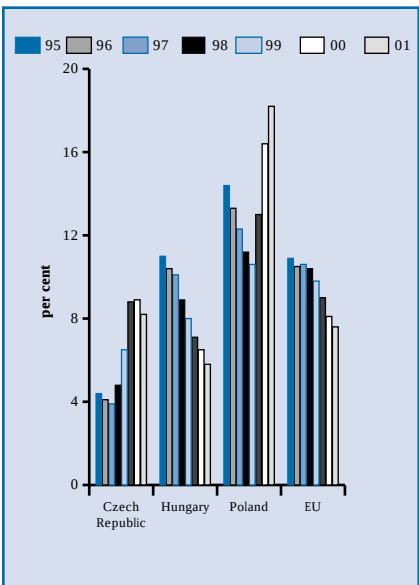
regulations and sound governance has aided solid growth, the expectation of entry into the EU has contributed greatly to their prosperity. Though growth remains robust in spite of a weakening global economy, high unemployment is the norm in most of the EA countries (Chart 39). Both real private consumption expenditure growth and real investment growth have remained strong, with investment growth ranging from 5 to 8 per cent in EA countries²⁴ compared to stagnant investment within the EU.

Chart 38: Real GDP Growth, 1997 to 2002



Source: OECD

Chart 39: Unemployment Rates, 1995 to 2001



Source: OECD

3.5.1 Banking Sector

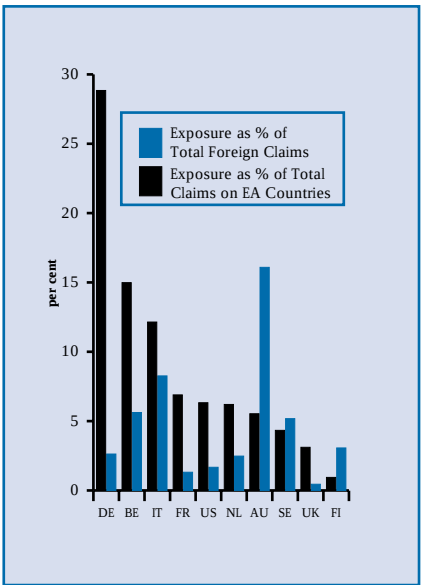
The financial structure of EA countries has undergone significant change over the last decade as capital markets have been slowly developing and the previous monobank system was restructured into a two-tier banking system with a central bank and commercial banks. The financial system of EA countries is dominated by the banking system, which has become increasingly stable in recent years, following episodes of crises in the early 1990s.

Much of the stability has been aided by privatisation and the entry of foreign banks. Foreign investment has taken place to such a degree that the banking sector is predominantly in foreign ownership in practically all countries. Approximately two thirds of the banking system in EA countries is under foreign ownership, with predominantly EU countries' banks actively involved in EA countries' banking systems. Chart 40 depicts the exposure of BIS

24 Figures related to OECD data for the Czech Republic, Hungary, Poland and the Slovak Republic and data for 2002 are projections.

banks' claims on EA countries.²⁵ While Germany has the largest exposure to EA countries banking system, comprising almost 29 per cent of total claims on EA countries, this only accounts for 2.6 per cent of German banks' total foreign claims. However, Austria on the other hand has a relatively small proportion of EA countries' claims at 5.5 per cent but this comprises 16 per cent of Austrian banks' foreign claims, possibly meaning relatively greater difficulties for Austrian banks' should difficulties be experienced by EA banking systems.

Chart 40: BIS Banks' Claims on EU Accession Countries^(a)



Source: BIS and Central Bank of Ireland
(a) Data as at September 2002

While banking systems in EA countries are increasingly stable, they will face challenging times ahead in terms of greater exposure to international financial events as their capital markets develop further and increased competition on accession to the EU.

3.6 Emerging Markets

Among the emerging market regions of the world, Latin America continues to face the most difficult economic and financing conditions. In 2002, real GDP fell by about 0.5 per cent for the region as a whole, led by a sharp recession in Argentina and negative spillover effects on Uruguay and Paraguay. The adverse economic and political environment brutally exposed weaknesses in the domestic policy frameworks. There were, however, some bright spots in the region, notably Mexico and Chile, which retained a stable positive outlook. Improving policies in Brazil, Colombia and Peru also allowed these countries to weather the storm reasonably well in 2002. Looking ahead, the prospects for Latin America in 2003 are for a weak

25 Consistent statistics are not available regarding Irish banks' exposure to the region.

recovery, which appears to be already under way, with growth of around 2 per cent forecast in 2003.

Developments in Latin America can affect the global financial system through credit exposures of banks and portfolio holdings of non-bank investors. US and Spanish banks have traditionally been Brazil and Argentina's largest creditors. The deterioration in economic and political conditions in Latin America in 2002 led to a sharp fall-off in capital flows to the region, and a widening in bond spreads. The effects were most acute following the Argentinian debt default and in advance of the Brazilian elections in the second and third quarters of the year.

4. Conclusions

The world financial system has been buffeted by a number of disconcerting shocks over the last two years or so, but has shown remarkable resilience to the deterioration in the overall macroeconomic and financial market environment. In the face of steep falls in equity prices, two of the largest corporate and sovereign defaults ever (Enron and Argentina, respectively) and a drawn out weak macroeconomic environment, the system of intermediation and payments has continued to function smoothly. However, the risks to the health of the global financial system appear to have increased again in recent months, with agents facing increasing uncertainty in the financial and economic environment.

The last Financial Stability Report concluded that the Irish banking system was in a sufficiently healthy position to weather a significant adverse shock and that domestic pressures in the credit and housing market had moderated. While there has been no major deterioration in domestic sources of financial instability in Ireland in the intervening period, the re-emergence of rapid personal-sector credit growth and house price inflation in recent months could, if it persists, pose risks to the health of the financial sector. Furthermore, the risks posed by recent international developments have also increased. Although the environment facing the Irish banking system is now less benign than in recent years, primarily due to the difficult global environment, there is no significant cause for concern regarding financial stability in Ireland.

Annex A: Employment at Risk from Exchange Rate Appreciation

The recent appreciation of the euro has rekindled worries over the implication of exchange rate movements for financial stability within Ireland. An appreciating euro erodes the competitiveness of Irish firms who export outside of the single currency region. This may reduce the profitability of exporting firms, potentially increasing the number of business failures. A common defensive reaction of firms facing an adverse income shock is to reduce discretionary expenditure, such as wages. This suggests that there is an increased risk of unemployment for employees in exporting firms, which could be a significant number. But the exact number of employees at risk is dependent on the number of firms that export and the markets that they trade with.

Table A.1: Share of Exports

	% share of manufacturing firms in exports	% share of manufacturing employment in exports
1991	63.5	79.6
1999	54.9	81.0

Source: CSO — Census of Industrial Production 1999.

A greater share of employment in exporting units increases the severity of potential action in response to an appreciation of the euro *vis-à-vis* trading partners' currencies. The period 1991-99 has seen a decline in both the number and share of manufacturing firms exporting (Table A.1). Over the same period the share of manufacturing employment associated with exports has increased marginally.

Irish exports are unevenly distributed throughout the world. For this reason unfavourable movements in certain currencies can have a disproportionate effect on employment (Table A.2). The introduction of the euro has helped limit the potential risk to employment by eliminating currency fluctuations between member states. The UK remains the largest source of currency risk for employees although it has fallen since 1991. The percentage share of employment in firms exporting to the US, on the other hand, has more than doubled in the period 1991-99.

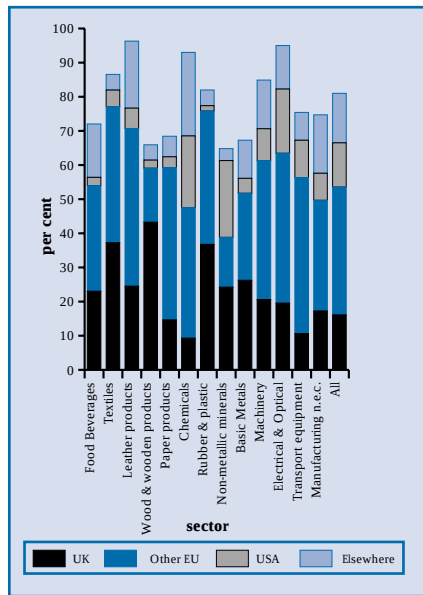
Table A.2: Employment Exposure by Export Destination

	Percentage of employees	
	1991	1999
US	6.4	13.0
UK	21.6	16.1
Other EU	36.3	37.4
Elsewhere	15.3	14.5
All	79.6	81.0

Source: CSO — Census of Industrial Production 1999.

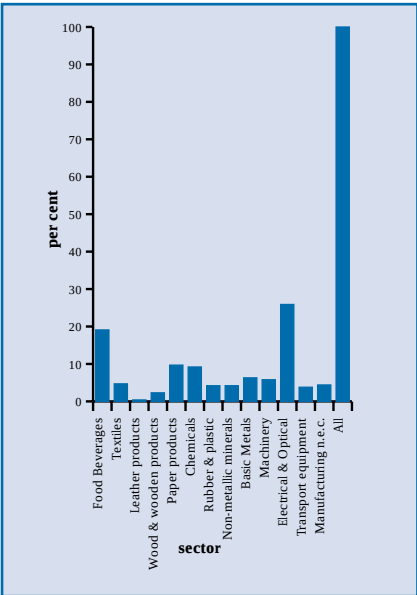
Certain sectors may be more vulnerable to currency movements than others; most at risk are sectors that trade heavily with depreciating currencies *vis-à-vis* the euro. Chart A.1 shows the fraction of employment involved in exports according to geographical destination¹. The sectors that are particularly exposed to the value of sterling are mainly traditional sectors including the food and beverage sector, textile production and the manufacturing of basic metals. Areas most exposed to the dollar tend to be high-tech sectors such as the chemical production sector. Though sectors may be asymmetrically exposed to currencies the full effect on the economy will depend on their share of total industrial employment (Chart A.2).

Chart A.1: Share of Sectoral Employment in Exporting Firms by Destination



Source: CSO Census of Industrial Production (1999)

Chart A.2: Share of Total Industrial Employment Across Sectors



Source: CSO Census of Industrial Production (1999)

1 With the share of employment divided up by destination of exports.

Annex B: Business Failures and Financial Instability¹

Observing the number of corporate failures is important because of the importance of the financial health of non-financial firms for other agents in the economy. Corporate failures in sufficiently high numbers can be a cause of financial instability by forcing banks to write off bad debts. Corporate failures also transmit financial distress to other corporates (similarly through bad debts) and households (through layoffs).

Business failures can directly increase the probability of banking failures by forcing the banks to write off the failed firms' outstanding debt. These write-offs reduce the profitability of the banks. These write-offs are also more damaging to the bank if the bad debt is unanticipated and no provisions out of past profits have been made to cover the losses.

Business failures increase the probability of financial distress in other associated firms and households. In a similar fashion to banks, these firms may be forced to write-off outstanding credit to the company. Corporate failures can cause liquidity problems in other firms and/or households in two ways. First, a succession of bankruptcies can make all lenders in the economy more nervous. This can lead to a general tightening of the availability and/or cost of credit across the economy. This will hurt other firms who require additional financing to compensate for falling levels of internal finance (i.e., income). Second, the legal proceedings of bankruptcy freezes the assets of failing firms. This renders assets due to the short-term creditors illiquid and worsens the creditors' liquidity situation. The employees will face a corresponding liquidity crisis, albeit temporary, arising from their unemployed status.

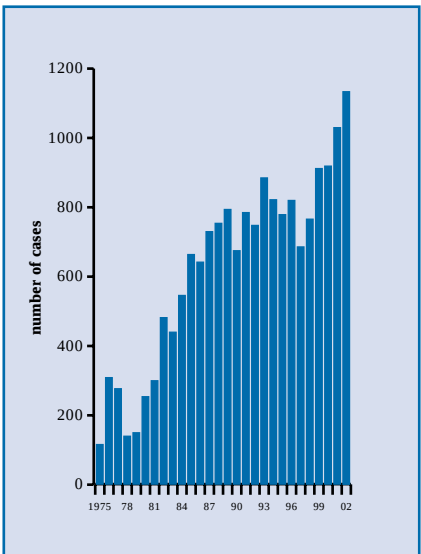
These write-offs and liquidity crises are first round effects on firms and households that were stakeholders in the failed firms. However, there is the possibility of second-round effects where these stakeholders adjust to their worsened financial situation and cut back on their discretionary expenditures. For example, financial accelerator models of economic growth highlight the importance of firms' spending decisions on access to finance and the financial health of firms. These firms might cut investment (which will impact on the health of capital-goods firms) and cut dividends and wages (which reduces the income of households and other shareholders). These cutbacks in discretionary expenditures reduce economic growth and may start another round of adverse income shocks for corporates and households.

¹ For a fuller discussion of these issues see Kearns, A. (2003) 'Corporate indebtedness and bankruptcy in Ireland' presented at the Irish Economics Association Conference (April 2003).

The number of corporate liquidations initiated is one measure of corporate failure. The number of liquidations initiated has risen almost continuously since 1975 and totalled 1,132 in 2002. Two time periods can be identified during which the number of liquidations fell for more than one year: 1976-79 and 1993-97.

There are three types of liquidations: members voluntary liquidations (MVLs), creditors voluntary liquidations (CVLs) and court-ordered liquidations (COs). The important distinction is between MVLs and the other categories. A necessary condition for an MVL is a declaration of solvency. A majority of the directors must agree that the company can pay its debts in full within one year. There is no such declaration of solvency in the remaining two types of liquidations. The creditors and court-ordered liquidations are of interest from a financial stability perspective because these are the liquidated firms who are unlikely to be able to pay all outstanding debts. In essence these are potentially insolvent liquidations.

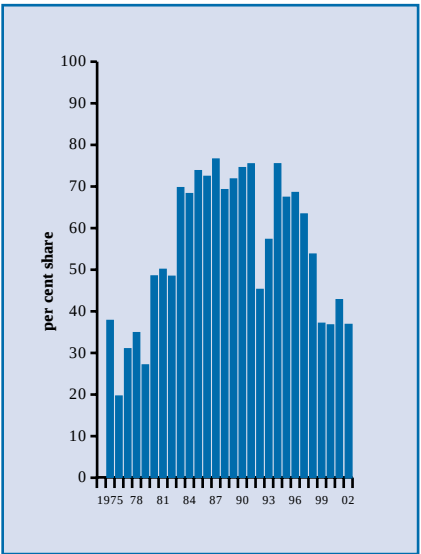
Chart B.1: Number of Liquidations Initiated^(a)



Source: Department of Enterprise, Trade and Employment.

(a) Total includes members voluntary liquidations, creditors voluntary liquidations and court-ordered (compulsory) liquidations.

Chart B.2: Share of Potentially Insolvent Liquidations^(a)



Source: Department of Enterprise, Trade and Employment.

(a) Potentially insolvent liquidations is the ratio of creditors voluntary and court-ordered liquidations to total liquidations initiated.

The share of potentially insolvent liquidations fluctuates over time; on average 54 per cent over the period 1975 to 2002 but fluctuating between a minimum recorded share of 20 per cent in 1976 and a maximum share of 76 per cent in 1987. The share of potentially insolvent liquidations fell significantly in 2002.

Annex C: Mortgage Equity Withdrawal and Household Balance Sheets

After a prolonged period of rapid house price growth, many households now have very significant housing equity holdings — namely the difference between the value of their home and their level of mortgage indebtedness on a marked-to-market basis. This is illustrated in Chart C.1, which shows the growth in the stock of mortgage equity of a hypothetical borrower who bought a house in 1997.

As can be seen in Chart C.1, net housing wealth has grown by a factor of 6 from €33,500 in 1997 to about €196,000 at end-2002¹. There are a number of ways in which a borrower might mobilise this stock of wealth by withdrawing equity from the property:

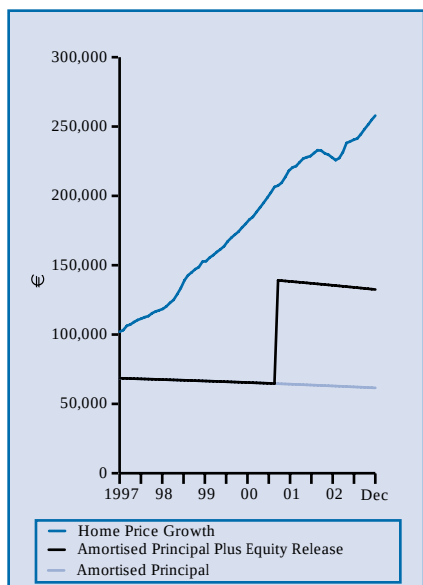
- *last-time sale* — the property is sold and no new property purchased. All equity is withdrawn;
- *trading down* — an owner occupier moves to a cheaper property but reduces the mortgage by less to net a cash sum;
- *over-mortgaging* — a moving owner occupier increases their mortgage by more than the difference between the old and new house prices;
- *remortgaging* — a borrower takes a new mortgage and increases its debt without moving properties or improving the property to the same extent; it uses an increased value of the property as collateral for the new mortgage; and
- *specialist equity withdrawal products* — these products allow borrowers to consolidate existing term loans into an extended mortgage or allow the mortgage to be increased and cash to be drawn down at the borrowers' discretion, but within given limits again using the value of the existing property as collateral.

In principle, there is nothing wrong with mortgage equity withdrawal in so far as it represents a completion of financial markets that allows wealth to be mobilised and reallocated. International experience shows, however, that these products can add to financial instability if they are not carefully controlled. This risk arises through three channels: first, there is a radical alteration in household balance sheets, net wealth and cash flow. Second, there is scope for these products to fuel house price increases thereby generating further equity to be mobilised

¹ This estimate is based on a €68,500 mortgage drawn down at the beginning of 1997 and repaid on annuity basis at a fixed interest rate of 7.5 per cent. The initial house price is assumed to have been €102,000 and was grown on a monthly basis using the PTSB Home Price Index. The original LTV was 67 per cent implying an initial equity contribution of €33,500.

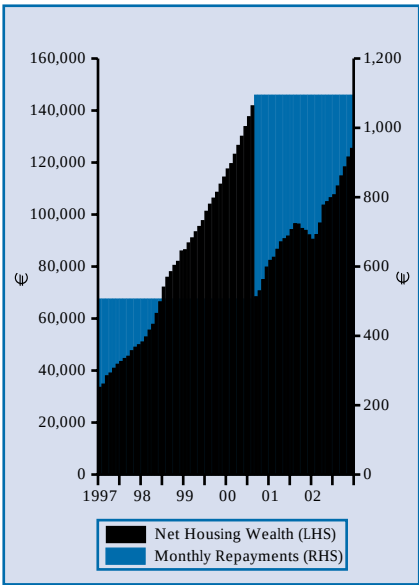
potentially by equity withdrawal products, leading to even more indebtedness. Finally, equity may simply be consumed, thereby fuelling aggregate demand and inflation, while at the same time increasing long-term indebtedness.²

Chart C.1: Mortgage Equity Growth January 1997-December 2002



Source: Central Bank of Ireland

Chart C.2: Net Housing Wealth January 1997-December 2002



Source: Central Bank of Ireland

In terms of the first risk, Chart C.2 shows the effect on a hypothetical household's balance sheet of equity withdrawal. In 2000, mortgage equity of about €75,000 from a stock of over €140,000 is withdrawn to bring the LTV back to 67 per cent. As can be seen from the chart, the household's net housing wealth position declines sharply. Furthermore, in order to maintain the term of the mortgage the monthly repayment must double from about €500 to €1,000. If not used carefully, households could find themselves making larger mortgage repayments for longer than anticipated, which could affect their financial resources into later life.

The second risk can only be evaluated using actual data on how withdrawn equity is used. UK data suggest that two thirds of those withdrawing equity spent it within six months, with one fifth indicating that the money withdrawn was used to repay other debts.

Of those who spent the cash, three quarters did so on home improvements. In the Irish case, however, there is anecdotal evidence of parents making significant cash contributions to their children for house purchase. If this cash is being raised through equity withdrawal, it may be an important factor in driving the demand for housing and house prices, thereby generating more

² There are other more subtle effects of increases in housing wealth on consumption that are beyond the scope of this box.

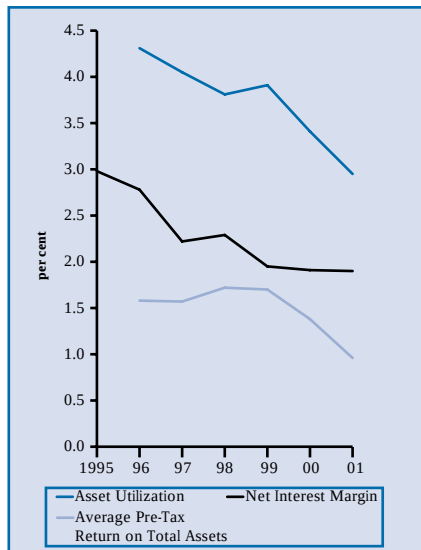
equity that could be withdrawn. In so far as mortgage credit is cheaper than non-mortgage credit, if the equity withdrawn is used to amortise existing non-mortgage debt, then the cash flow of the household can improve.

Although recent UK evidence does not suggest that equity withdrawal has fuelled consumption in recent years, it is generally cited as a factor in the inflationary experience of the late-1980s. There is currently no data available in the Irish context to assess whether this effect is currently operating.

Annex D: Profitability of the Irish Banking Sector

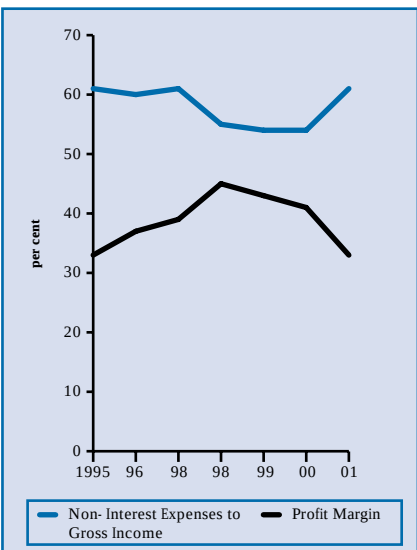
In recent years, Ireland’s banking sector has experienced increasing competition with the entry of foreign banks into retail deposit and home mortgage markets. Looking at aggregate data for the whole banking system, this had the effect of compressing net interest margins and helping to sustain a downward trend in Irish credit institutions’ net interest margin since 1995.

Chart D.1: Asset Utilisation, Net Interest Margin and Average Pre-tax Return on Total Assets: Domestic Credit Institutions^(a)



Source: Central Bank of Ireland
(a) Domestic banks are banks focused on the domestic market.

Chart D.2: Profit Margin and Non-Interest Expenses to Gross Income: Domestic Credit Institutions



Source: Central Bank of Ireland

Looking at profitability more broadly, return on assets (ROA)¹ for the Irish banking system rose slightly during the period 1996 to 1999. Although the net interest margin and asset utilisation fell over this period, the adverse effect of this on ROA was more than offset by the ratio of non-interest expenses to gross income. Subsequently, however, non-interest expenses rose markedly as a percentage of income. Although the net interest margin stabilised in 2000, cost increases and declining asset utilisation further depressed the ROA. In an effort to address diminishing profitability, Irish banks have, overtime, concentrated on reducing operating costs (non-interest expenses) and increasing gross income through the provision of more diversified financial products. However, 2001 saw a marked reversal of the downward trend in non-interest expense to gross income. Given that staff and property costs remained subdued, this would appear to reflect once-off restructuring expenses that occurred

1 Profitability is analysed here in terms of a return on assets model, where return on assets is calculated as the product of the profit margin and asset utilisation. Asset utilisation indicates the gross return on assets, while profit margin gives an indication of how well costs are controlled and how much net return is achieved. Net interest margin gives an indication of how interest based business is operating, while the ratio of non-interest expenses to gross income gives an indication of efficiency and cost control.

in some banks. These efforts to change their structures should result in improvements in efficiency and profitability in the coming years. Despite these trends, Irish banks remain comfortably profitable relative to other international banks (Table D.1).

Table D.1: Bank Profitability (Profit Before Tax as a Percentage of Average Balance Sheet Total)

	Coverage	1995	1996	1997	1998	1999	2000	2001
Ireland	All Banks	1.50	1.46	1.35	1.43	1.37	1.21	0.87
France	All Banks	0.15	0.18	0.28	0.35	0.47	0.67	0.72
Germany	All Banks	0.57	0.53	0.47	0.71	0.38	0.32	0.21
Netherlands	All Banks	0.75	0.78	0.74	0.61	0.78	0.75	0.61
Portugal	Commercial Banks	0.65	0.77	0.88	0.83	0.80	1.03	0.78
UK	Commercial Banks	1.17	1.14	1.15	1.23	1.37	1.30	1.09
USA	Commercial Banks	1.81	1.85	1.93	1.81	2.03	1.81	1.77

Source: OECD.

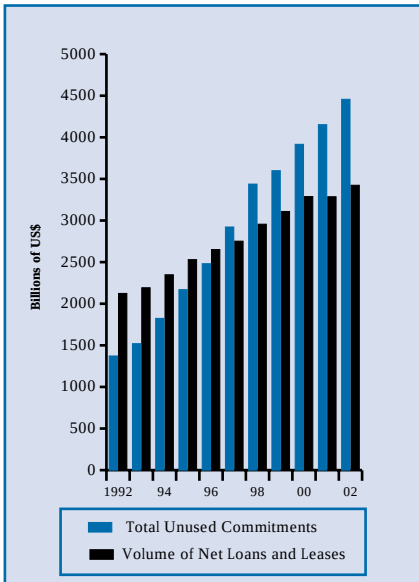
2 Domestic credit institutions cover banks focused on the Irish market.

Annex E: Lending under Commitment for US Banks

A loan commitment is a bank’s contractual promise to provide a borrower with funds up to a pre-negotiated ceiling under pre-determined terms during a specific time interval. The term ‘loan commitment’ covers an array of arrangements; back-up lines of credit, term loan commitments and revolving credit agreements. The fee structure of a loan commitment frequently includes an up-front fee, paid when the loan commitment agreement is negotiated, the formula for the interest to be charged when the commitment is drawn on and a usage fee on the unused portion of the commitment.

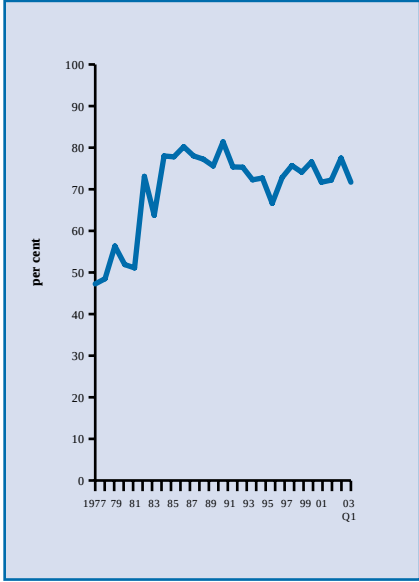
There is currently a substantial value of outstanding loan commitments from US banks. The data in Chart E.1 shows that the outstanding value of unused loan commitments is currently in excess of the total value of outstanding loans and has been since 1997.

Chart E.1: Total Loans Outstanding and un-used Loan Commitments



Source: FDIC

Chart E.2: Share of C&I Loans made under Commitment



Source: Federal Reserve Board of Governors

A pre-arranged line of credit is a form of insurance for firms. A firm with concerns over its ability to arrange finance at short notice and in adverse circumstances might be well advised to arrange such credit in advance. These adverse circumstances might arise from an internal source (for example, an unexpected fall in cash flows) or from an external source (for example, a sudden rise in the cost of alternative sources of finance). For example, the majority of commercial and industrial (C&I) loans made to US companies by US banks are made currently under

commitment.¹ This share rose quite sharply through the 1970s and 1980s and on average 74 per cent of loans has been made under commitment since the late 1980s (Chart E.2).

Loan commitments can pose serious problems for banks that enter into such agreements. The key risk for these credit institutions in providing committed lines of credit is the very real possibility that companies are very likely to borrow under their pre-arranged lines of credit when the financial health does not permit them access to other sources of finance. For example, it was reported in the aftermath of the Enron crisis and the subsequent fall in confidence in the bond and equity markets, that banks were obliged to lend under pre-arranged contracts to companies who were considered by the markets to have prohibitively high credit risk. Banks became in essence lenders of last resort to these companies. Furthermore, the pre-arranged lines of credit were priced at ‘wafer-thin’ relationship margins that significantly under-priced the credit risks the banks were in the event assuming.² As the data in Chart E.1 illustrate, the banking system might be forced into a position whereby it is required to extend a very substantial value of credit in circumstances where it would otherwise choose not to lend.

1 The USA is used as an example in this box because of the long time series of data available for that country.

2 See Chapter 2 of the IMF Global Financial Stability Report (March 2002).

Dr. T. K. Whitaker — Some Reflections



I was appointed a Director of the Central Bank in 1958, when I was Secretary-General (as it is now called) of the Department of Finance. That was the year of Economic Development' and the First Programme for Economic Expansion and of emergence from a period I have described as one of palpable national despondency, when political independence seemed to have yielded only emigration, unemployment and negligible improvement in living standards.

I succeeded Maurice Moynihan as Governor in 1969. He was preceded by the two earliest Governors, Joseph Brennan and James McElligott, whose cautious administration of the public finances did much to establish the reputability of the new State. I find it almost incredible that, in the immediate aftermath of civil war, a national loan of £10 million — equivalent to well over €400 million today — was oversubscribed!

It had become clear by the 1950s that the economic policies pursued up to then were ineffective and inappropriate. The reversal of these policies — the decision to abandon protectionism in favour of competitive participation in a free trade world and to welcome foreign investment instead of virtually prohibiting it — was the greatest change of my time as a public servant. The unprecedented growth which followed in the 1960s owed something also to the revival of confidence and the buoyancy of world trade.

Unfortunately, my arrival as Governor coincided with a worldwide upturn in prices, accelerated in 1973 by the first oil crisis. Opposition to borrowing abroad to sustain current expenditure and emphasis on the desirability of general acquiescence in a moderate rate of income increase were dominant advice themes of my period of office. While excessive foreign borrowing continued into the 1980s, incomes policy took shape as national pay, or social partnership, agreements from 1975 on. The contribution of these agreements to competitiveness, the tax concessions for profits from exports, the infrastructural and other benefits of EU membership, the return to fiscal rectitude in the latter half of the 1980s, the significant increase in US investment in high-technology industries, the spread of higher education, the competitive edge afforded by a

weak euro, all played a part in the almost miraculous upsurge of 50% in real national income in the 1990s. The rapid rise in the workforce meant that immigration replaced emigration. Although this phase is over for the time being, it has raised us to a plateau from which we are unlikely to be displaced, even should further advance be slow or erratic.

The Central Bank I knew was still concerned with managing a sterling exchange standard, a balance-of-payments deficit being a sensitive indicator of inflationary pressure. In the Eurosystem, such a deficit has a lower profile, though still potentially restrictive and harmful. The rate at which costs rise in Ireland relative to other EU countries is now the critical concern. The functions of the Central Bank, like much else on the Irish scene, have greatly changed. I wish it success in all its new duties, in continuation of the sixty years of public service already completed.

I am particularly pleased that three of my principal collaborators in 1958, who have also in their time been Governors — Charles Murray, Maurice Doyle, and Tomás Ó Cofaigh — are still happily with us, evidence, perhaps, that central banking holds the key to longevity!

A Chronology of Main Developments, 1992 –

1992

Mid-September	Turbulence in international foreign exchange markets leads to pressures on the Irish pound in the European Monetary System (EMS) exchange rate mechanism and consequently on domestic interest rates.
9 November	The Bank begins the issue of the new £20 note, the first in the new ‘ ‘C’ ’ series designed by Robert Ballagh.
23 November	Amid continued turbulence on foreign exchange markets the Bank suspends the Short-Term Facility. By end-November, the Bank’s overnight support rate has risen to 100 per cent, and this level is reached again (twice) in January 1993.
December	Minister for Finance announces that the Government has decided to assign responsibility for the prudential supervision of investment intermediaries (previously unregulated) to the Bank.



1993

1 January	Remaining exchange controls are removed on schedule. Implementation of the Second Banking Coordination Directive.
1 February	Continued turbulence in the foreign-exchange markets contributes to a realignment of the Irish pound within the narrow ERM (exchange rate mechanism) band, with its central rate against other ERM currencies being reduced by 10 per cent.
5 February	Following the resolution of the currency crisis, the Bank’s Short-Term Facility is restored.



March	Formal adoption of Capital Adequacy Directive.
May	Special edition of the Annual Report is published to mark the 50 th anniversary of the Central Bank. European Council formally adopts EU Investment Services Directive.
1 August	The ERM fluctuation bands are widened to +/-15 per cent with bilateral central rates remaining unchanged.
20 September	The Bank issues the second in the ‘ ‘C’ series of banknotes (£10).
September	NTMA commences trading gilt futures contracts on the Irish Futures & Options Exchange (IFOX) in addition to 2 and 3 year swap contracts.
15 November	New and smaller 10p is put into circulation.
November	The primaryliquidity ratio applying to licensed banks is reduced by 1 percentage point to 4 per cent in late November.

1994

1 January	At the start of the second stage of EMU, the Committee of Governors is replaced by the European Monetary Institute (EMI); Governor Doyle becomes a member of the Council of the EMI. The secondary liquidity ratio is terminated in accordance with Article 104 of the Maastricht Treaty, which prohibits privileged access to funds by Governments from financial institutions.
20 January	The primary liquidity ratio applying to licensed banks is reduced by 1 percentage point to 3 per cent.
January	A Steering Committee and Project Group are established by the Bank and the members of the Daily Interbank Settlement system to commence a project to institute real-time gross settlement for large-value interbank payments.

February	Having regard to the widening of the fluctuation bands within the EMS in August 1993, the Bank's <i>Statement on Monetary Policy 1994</i> reaffirms that the price stability objective of monetary policy would continue to be served by preserving a stable currency relationship with other low-inflation countries and that the exchange rate of the Irish pound would be managed within the ERM in a manner fully consistent with that objective.
21 February	The primary liquidity ratio for credit institutions other than licensed banks is increased from 2 to 3 per cent.
February	Implementation of Directive on the monitoring and control of Large Exposures of credit institutions.
March	The Financial Action Task Force (FATF) of the OECD conducts an inspection of Ireland's anti-money laundering procedures. The inspection concludes that Ireland's anti-money laundering legislation would provide a generally comprehensive legal framework for combating money laundering.
18 April	New £5 note, third in the 'C' series, is issued.
30 April	Maurice Doyle, Governor, retires.
1 May	Maurice O'Connell appointed as Governor.
1 May	In order to enhance the efficiency of the foreign exchange market, and to promote a more orderly trading environment, an operational understanding on market-making between the Bank and the main foreign exchange market participants is introduced.
17 June	Finex Europe, which is a branch of the Financial Instrument Exchange and a division of the New York Cotton Exchange (NYCE), commences trading in the International Financial Services Centre (IFSC).
30 June	Enactment of <i>Criminal Justice Act, 1994</i> .
September	Publication of the Stock Exchange Bill providing for supervision by the Bank of the Irish Stock Exchange (ISE) and its member firms.



October The Bank introduces an information note for the media on the principal statistical developments as part of its publication *Monthly Statistics*.

Late 1994 The Bank-sponsored Central Exchange is subsumed into the Dublin Bankers' Clearing.

1995

27 February The *Statement on Monetary Policy 1995* emphasises that the maintenance of price stability is the most effective way in which the Bank can contribute to balanced economic growth and sustainable employment.

2 May Record-keeping and reporting obligations under Sections 32 and 57 of the Criminal Justice Act come into operation. Money Laundering Guidance Notes issued to all credit and financial institutions.

July Netting of *Financial Contracts Act, 1995*, is enacted. This Act clarifies the legal validity of the netting of obligations under derivatives contracts in Irish law in preparation for the implementation of the EU Contractual Netting Directive in June 1996. The Directive allows the Bank to recognise, for capital adequacy purposes, the reduced credit risk for banks who can set off their claims on counterparties on certain derivative contracts against their liabilities to those same counterparties.

1 August Commencement of *Stock Exchange Act, 1995* (SEA) which provides for the approval and supervision of stock exchanges and for the authorisation and supervision of their member firms and the *Investment Intermediaries Act, 1995* (IIA) which transposes the 1993 EU Investment Services Directive into Irish Law, appointing the Bank as the competent authority for investment firms covered by the Directive and its related Directive the EU Capital Adequacy Directive.



6 November New £50 note from ‘ ‘C’ ’ series is issued.

8 December ISE formally separates from the London Stock Exchange.

15/16 December European Council in Madrid agrees and adopts a scenario for the changeover to the single European currency, to be called the euro.

21 December Bank formally approves the ISE. Bank is appointed as competent supervisory authority for ISE member firms.

29 December Bank issues EU Capital Adequacy Directive Implementation Notices to credit institutions and investment firms.

Publication of the revised Licensing and Supervision Requirements and Standards for credit institutions.

1996

1 January Implementation of EU Capital Adequacy Directive.

EU Investment Services Directive comes into force.

27 February The *Statement of Monetary Policy 1996* emphasises, among other things, that price stability is predicated on maintaining a firm exchange rate *vis-à-vis* other low inflation countries, supported by changes in interest rates as required.

March Bank signs declaration endorsing a memorandum of understanding entered into by a number of international futures exchanges.

April The Irish Real-time Interbank Settlement Company Limited (IRISCO) is incorporated to enable its members to purchase and establish a real-time gross settlement system for large-value interbank payments.

May The Bank introduces a new category of collective investment scheme, which will market solely to qualifying investors. This new category is suitable for investment by high net worth individuals and institutional investors.

Responsibility for bank charges transfers to the Director of Consumer Affairs following the coming into force of the *Consumer Credit Act, 1995*.



27 June	The EU Directive on the recognition of contractual netting is implemented by the Bank.
June	Bank issues General Supervisory Requirements for investment firms on codes of conduct.
July	A Report entitled <i>Statistical Requirements for Stage Three of Monetary Union – Implementation Package</i> is published by the EMI.
9 September	Minister for Finance signs SI No. 267 of 1996 (Supervision of Credit institutions, Stock Exchange Member firms and Investment Business Firms Regulations, 1996).
16 September	Last in the ‘ ‘C’ ’ series of banknotes (£100) designed by Robert Ballagh is issued. Bank issues General Supervisory Requirements for investment firms on client money.
October	The Bank, along with the CSO and the Department of Finance, commences detailed preparations to enable Ireland to be among the first group of countries to subscribe to the IMF’s Special Data Dissemination Standard (SDDS).
23 October	Bank revokes rules of IFOX, at the request of the company.
November	Bank issues General Supervisory Requirements for investment firms on advertising.
13/14 December	European Council in Dublin agrees on new exchange rate mechanism (ERM II) and on Stability and Growth Pact.

1997

25 January	The <i>Statement on Monetary Policy 1997</i> emphasises that monetary policy would be conducted in such a manner as to ensure that the price stability criterion for joining EMU would be satisfied and that the scene would be set for successful membership of the monetary union on an ongoing basis.
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February	A report entitled <i>The Single Monetary Policy in Stage Three: Elements of the Monetary Policy Strategy of the ESCB</i> is published by the EMI.
3 March	The Irish Real-Time Gross Settlement system (RTGS) commences live operations and replaces the Daily Interbank Settlement system. The system facilitates settlement of individual payments between participating credit institutions across their settlement accounts at the Bank in real-time throughout the working day.
9 April	The <i>Central Bank Act, 1997</i> comes into operation and empowers the Bank to regulate payment systems. The Act provides for the Bank to authorise all payment systems in the State and to approve their rules.
April	The Bank becomes responsible for the authorisation and supervision of bureaux de change in the context of ensuring the effective implementation of the money laundering provision of the <i>Criminal Justice Act, 1994</i> .
June	The Irish Payment Services Organisation is established to act as the umbrella organisation for the payments industry in Ireland.
September	EMI issues report entitled <i>The Single Monetary Policy in Stage Three: General Documentation on ESCB Monetary Policy Instruments and Procedures</i> .
10 September	Introduction of procedures relating to the operation of the Determinations Committee (for the purpose of Section 74 of the IIA and Section 65 of the SEA).
20 November	In order to prepare the market for the advent of EMU and the operational framework that will apply for implementing a single monetary policy, the Bank introduces a weekly tendering system for repos as its main management instrument and an averaging provision in relation to the reserve requirement system for credit institutions.
November	Bank signs Declaration of Cooperation with Hong Kong Securities and Futures Commission.

December Bank approves the rules of a second exchange located at the Dublin Exchange Facility, the New York Futures Exchange (NYFE).

Founding of Forum of European Securities Commissions (FESCO).

1998

6 January The *Statement on Monetary Policy 1998* notes that, with the approach of EMU, monetary policy is being formulated in unique circumstances and that the room to make independent use of traditional monetary policy instruments will be reduced as the year progresses.

16 March The central rate of the Irish pound in the ERM band is revalued upwards by 3 per cent.

18 March *Central Bank Act, 1998* enacted.

April FATF expert group undertakes second evaluation of Ireland's anti-money laundering legislation.

28 April Revision of the Bank's criteria on bank ownership in order to deal with applicants where the ultimate parent had a dominant commercial interest.

2 May EU Council confirms that eleven EU Member States, including Ireland, fulfil the necessary conditions for the adoption of a single currency on 1 January 1999. It also agrees that the prevailing ERM bilateral central exchange rates will be used for determining the irrevocable conversion rates *vis-à-vis* the euro.

1 June The European Central Bank and the European System of Central Banks are established; Governor O'Connell becomes a member of the Governing Council.

June EU Council issues Guidance Note on the information technology implications of Year 2000 for Financial Institutions. The Bank surveys all regulated entities to assess their readiness for Year 2000.

July	EU Commission publishes amendments to Capital Adequacy, Solvency Ratio and First Banking Directives.
7 July	The Governing Council of the ECB adopts a Recommendation for a Council Regulation (EC) concerning the application of minimum reserves by the Eurosystem central banks in Stage Three of Economic and Monetary Union.
1 August	<i>Investor Compensation Act, 1998</i> , comes into force (implementing the EU Investor Compensation Directive) providing for the establishment of the Investor Compensation Company Limited (ICCL). Bank commences publication of warning notices in relation to unauthorised investment firms.
1 September	The Governing Council of the ECB endorses the Report entitled <i>The Single Monetary Policy in Stage Three: General Documentation on ESCB Monetary Policy Instruments and Procedures</i> .
September	The International Organisation of Securities Commissions (IOSCO) publishes <i>Principles of Securities Regulation</i> .
13 October	The Governing Council of the ECB announces the main features of the stability-oriented monetary policy strategy that the Eurosystem will pursue in Stage Three of Economic and Monetary Union.
23 November	Council Regulations (EC) on the collection of statistical information by the European Central Bank (No. 2533/98), on minimum reserves (No. 2531/98) and powers of the ECB to impose sanctions (No. 2532/98) are issued.
1 December	ECB Regulations on money and banking statistics (ECB/1998/16) and on minimum reserves (ECB/1998/15) are issued. Also, ECB Guideline and ECB Recommendation on balance of payments and international investment position statistics are issued (ECB/1998/17). The Governing Council of the ECB decides that the first reference value for monetary growth will be 4.5 per cent with this referring to the broad monetary aggregate M3 for the euro area.

22 December The Governing Council of the ECB decides the first main refinancing operation of the Eurosystem will be a fixed rate tender offered at an interest rate of 3 per cent. It also decides that the interest rate for the marginal lending facility will be at a level of 4.5 per cent and the interest rate for the deposit facility at a level of 2 per cent for the start of Stage Three, i.e., from 1 January 1999.

December Restricted Activity Investment Product Intermediaries (RAIPs) now require authorisation from the Bank.

EU Directive 98/26/EC on Settlement Finality in Payment and Securities Settlement Systems — the ‘Settlement Finality Directive’ — is transposed into Irish law on 31 December (with effect from 4 January 1999) by the European Communities (Finality of Settlement in Payment and Securities Settlement Systems) Regulations, 1998.

Allegation of malpractice in the banking sector, particularly relating to fees, charges and taxation compliance, generate extensive public debate and lead to a number of investigations and inquiries by the Bank.

1999

1 January Stage Three of EMU commences with eleven countries, including Ireland, now sharing a common currency, the euro. Euro-denominated statistical reporting commences for money and banking statistics that take account of the new currency and a number of conceptual changes. New balance of payments reporting requirements are also introduced.

4 January The Irish Real-Time Gross Settlement (RTGS) system is linked to the domestic RTGS systems of the 14 other EU Member States and to the ECB Payment Mechanism to form the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) system, which facilitates cross-border payments in euro between the 16 systems.

Credit institutions, which have entered into the necessary legal arrangements with the Bank, may avail of the Eurosystem’s Standing Facilities and Monetary Policy Operations.

The Correspondent Central Banking Model (CCBM) is introduced to enable counterparties to deliver to national central banks eligible assets located in another Member State which are required as collateral for credit operations. Under the CCBM, central banks act as custodians for each other in respect of securities accepted in their local depository or settlement system.

January	Bank is a signatory to the FESCO Memorandum of Understanding. As provided for in the Maastricht treaty, the Bank transfers €425 million to the foreign reserve assets of the European Central Bank – which is Ireland's share of the ECB's pooled reserve assets – in return for a claim on the ECB.
15 March	MMI Stockbrokers Ltd placed in liquidation by order of the High Court.
31 March	Bank launches its lo-call investor line, providing an enquiry facility for the public on the authorisation status of firms.
July	FATF issues its report on assessment of Ireland's anti money-laundering regime. The Dublin Bankers' Clearing is split into three separate entities, as follows: the <i>Irish Retail Electronic Clearing Company</i> – to maintain and operate a clearing and settlement system for domestic electronic payments, the <i>Irish Paper Credit Clearing Company</i> for domestic paper credits and the <i>Irish Paper Debit Clearing Company</i> for domestic paper debits.
14 August	EU Directive 97/5/EC on Cross-Border Credit Transfers is transposed into Irish law by the European Communities (Cross-Border Credit Transfers) Regulations, 1999.
September	Euro coin production commences in the Currency Centre in Sandyford.
23 September	ECB Regulation is issued on the power of the ECB to impose sanctions (ECB/1999/14).

29 November	A millennium commemorative coin, with a design based on the Broughter boat in the National Museum of Ireland, is launched. Of this design 38,000 silver proof coins were sold out by the end of 1999. Subsequently, five million circulating coins are issued during the year 2000.
21 December	<i>Insurance Bill, 1999</i> published.
December	The Governing Council of the ECB endorses the manual entitled <i>European Union Balance of Payments/International Investment Position Statistical Methods</i>. Publication of the Comptroller and Auditor General's (C&AG) report on <i>Evaluation of Effectiveness: Central Bank Financial Regulation</i>.
31 December	The maximum payout under the Deposit Protection Guarantee Scheme and the Investor Compensation Scheme increases to €20,000.
2000	
1 January	Bank establishes new supervision department — IFSC and Funds Supervision.
18 February	Revised requirements for deposit agents and other RAIPs are issued during the year.
April	Euro banknote production commences.
11 May	An ECB Guideline and an ECB Recommendation are issued on the statistical reporting requirements in the field of balance of payments statistics, the international reserves template and international investment position statistics, which replace the former Guideline and Recommendation of 1 December 1998.
May	In order to improve the Bank's ability to forecast the liquidity requirements of the domestic market, a new arrangement for managing the Exchequer account is implemented whereby the balance is stabilised by the NTMA around a target level.

June	In view of the severe overbidding that had developed in the context of the fixed rate tender procedure, the Governing Council of the ECB decides that the main refinancing operations of the Eurosystem will be conducted as variable rate tenders, with a minimum bid rate. In conjunction with this, the ECB decides to publish liquidity forecasts at the time of announcements of weekly tenders in order to assist credit institutions in preparing their bids.
August	An ECB report on the statistical requirements of the ECB in the field of general economic statistics is published.
22 September	For the first time since the introduction of the euro, the ECB and other Eurosystem central banks take part in concerted foreign exchange intervention to support the euro.
September	Irish coin production ends.
November	Bank publishes Guidance Note on the valuation of assets of collective investment schemes. The ECB publishes a document entitled <i>The Single Monetary Policy in Stage Three: General Documentation on Euro System Monetary Policy Instruments and Procedures</i>. Bank issues its revised Handbook for Investment and Stockbroking Firms. The Bank participates with the ECB and other central banks of the Eurosystem in foreign exchange intervention to support the euro.
13 November	An ECB Guideline on statistical reporting requirements in the field of money and banking statistics is issued (ECB/2000/13).
1 December	Following a strategic review by a study group, which was established in September 1998, the Central Bank of Ireland Securities Settlements Office — formerly known as the Gilts Settlement Office, which was established in 1989 — ceases operations.

4 December The settlement function in respect of Irish Government bonds is transferred to Euroclear. Following transfer of the settlement function, the Bank continues to maintain the register of bonds issued on the domestic market by the National Treasury Management Agency, the Housing Finance Agency, and the European Investment Bank and Ulysses Securitisation plc.

December Bank issues a consultation paper to industry on proposed regulation of insurance intermediaries.

An external assessment by the IMF's Financial Sector Assessment Programme (FSAP) of the Bank's role as supervisor (in 2000) concluded that the overall framework of the Bank's prudential regulation and supervision was well developed and showed a high degree of observance with international standards and codes.

20 December *Insurance Act, 2000* signed into law.

2001

1 January Greece becomes the twelfth EU Member State to adopt the single currency.

During 2001, the Bank is invited to become a member of the IOSCO Standing Committee Number 5, which deals with the regulation, management and distribution of collective investment schemes.

1 April *Insurance Act, 2000* confers responsibility on the Central Bank for the authorisation and supervision of Insurance Intermediaries.

12 April Bank publishes consultation paper to industry on proposed amendments to its client money requirements.

April Irish banknote production ends.

1 May Maurice O'Connell, Governor, reappointed for second term.

May	Bank issues two draft handbooks; Authorised Advisors and Restricted Intermediaries.
21 May	W&R Morrogh dissolved by order of the High Court.
June	The Committee of European Securities Regulators (CESR) is established by the European Commission.
July	Codes of Conduct for the banking industry are prescribed for all credit institutions operating in the State, following consultation with the Minister for Finance.
August	Establishment of two new supervision departments: Regulatory Enforcement & Development and Retail Investments & Insurance Supervision.
10 September	The Bank commences administration of the daily interbank settlements in respect of the interbank clearing process.
September	In order to facilitate the functioning of the financial markets in the aftermath of the terrorist attacks in the United States on 11 September, the Governing Council of the ECB issues a press release stating that the Eurosystem stands ready to support normal functioning of markets and will provide additional liquidity, if needed. In addition, the ECB and the US Federal Open Market Committee agree on a swap arrangement whereby liquidity in dollars is made available to euro-area market participants. Other measures are taken on issues of common interest in relation to securities settlements systems and information-sharing concerning cross-border transactions.
Sept.-December	In preparation for the euro changeover, 970 million euro coins are distributed to financial institutions, their agents and customers.
Oct.-December	Similarly, 129.4 million euro banknotes are distributed.

22 November An ECB Regulation is issued on the collection of data concerning the consolidated balance sheet of the monetary financial institutions sector (ECB/2001/13).

November Revised Money Laundering Guidance Notes for credit institutions are issued.

20 December An ECB Regulation is issued on ECB statistical requirements concerning the interest rates applied by monetary financial institutions to deposits and loans *vis-à-vis* households and non-financial corporations (ECB/2001/18).

December Legislation relating to Asset Covered Securities enacted.

The level of net assets under management by Irish authorised collective investment schemes reaches €285.2 billion by end-year.

The Bank issues a revised guidance note on investment by authorised collective investment schemes in overseas schemes established in jurisdictions which allow unregulated schemes.

2002

1 January Euro notes and coins are introduced.

February Amendments to EU Directive 85/611 regarding Undertakings for Collective Investment in Transferable Securities (UCITS) come into force by way of two separate Directives. Member States must transpose both Directives into national legislation by 13 August 2003.

9 February By the end of the dual-circulation period, when the Irish pound ceases to hold legal tender status, the Bank has withdrawn 119.5 million Irish banknotes and 686 million Irish coin.

21 February An ECB Guideline is issued on the statistical reporting requirements of the ECB in the field of quarterly financial accounts.

26 February A formal agreement is concluded between the Bank and the Central Statistics Office aimed at fulfilling the statistical standards and requirements of the ECB for balance of payments and international investment position statistics.

10 March	Maurice O'Connell retires as Governor.
11 March	John Hurley, Bank Director and former Secretary General of Department of Finance, appointed as Governor.
15 March	Consultation Paper <i>Joint Work of the ESCB and the Committee of European Securities Regulators in the Field of Clearing and Settlement</i> published on the Bank's website.
19 March	<i>Electronic Money Systems Security Objectives</i> – Consultation Paper published on the Bank's website.
9 April	<i>A European Regime of Investor Protection – The Harmonisation of Conduct of Business Rules</i> is published by CESR.
12 April	Bank publishes second consultation paper on proposed changes to its client money requirements.
13 April	Enactment of <i>Pensions Act, 2002</i> .
16 April	Publication of the <i>Central Bank and Financial Services Authority of Ireland Bill, 2000</i> to establish the Irish Financial Services Regulatory Authority (IFSRA) within the new structure of the Central Bank and the Financial Services Authority of Ireland (CBFSAI). The appointment of the interim Board of IFSRA is announced. The Directors are: Brian Patterson (Chairman), Liam O'Reilly (Chief Executive), Mary O'Dea (Consumer Director), Alan Ashe, Friedhelm Danz, Gerard Danaher, John Dunne, Jim Farrell, Deirdre Purcell and Dermot Quigley.
26 April	The ECB publishes an updated version of the document entitled <i>The Single Monetary Policy in the Euro Area: General Documentation on Euro System Monetary Policy Instruments and Procedures</i> replacing version published in November 2000.
29 May	<i>European Communities (Electronic Money) Regulations 2002</i> (which implement the provisions of two EU Directives on this issue) are signed by the Minister for Finance.

1 July	Regulation (EC) No. 2560/2001 of the European Parliament and of the Council of 19 December 2001 is transposed into Irish law by the European Communities (Cross Border Payments in Euro) Regulations, 2002. This legislation provides that charges to bank customers in respect of ATM withdrawals and use of bank cards should be the same for both national and cross-border transactions; from 1 July 2003, this proviso will also apply to credit transfers.
8 July	<i>Oversight Standards for Euro Retail Payment Systems</i> – Consultation Paper published on Bank's website.
30 July	An ECB Guideline on the procedures for reporting by national central banks of statistical information in the field of money and banking statistics is issued, replacing earlier Guidelines (ECB/2000/13).
16 September	Consultation Paper <i>E-Payments in Europe</i> – published on Bank's website.
7 October	<i>Measures to Improve the Efficiency of the Operational Framework for Monetary Policy</i> – Consultation Paper published on Bank's website.
21 November	An ECB Guideline is issued on the statistical reporting requirements of the ECB in the field of quarterly financial accounts.
16 December	Consultation Paper on <i>Target2 – Principles and Structure</i> published on Bank's website.
December	Following an industry consultation, the Bank issues a new non-UCITS Notice that will permit the authorisation of retail funds of hedge funds. The level of net assets under management by authorised collective investment schemes reached €303.9 billion by end-year represented by 3,300 funds including sub-funds.

2003

23 January	The Governing Council of the ECB announces measures to improve the efficiency of the operational framework for monetary policy, to be implemented during the first quarter of 2004.
4 February	The Governing Council formally recommends a new voting system, which will become necessary to maintain its capacity for efficient and timely decision-making in an enlarged euro area.
6 February	The Governing Council of the ECB adopts a new Guideline on the statistical reporting requirements of statistical information in the field of money and banking statistics by central banks.
20 March	The ECB issues a press release following the start of military action in Iraq, stating that financial markets can rely on the provision of sufficient liquidity even under exceptional circumstances, as was demonstrated in the past.
16 April	Twenty-five heads of state sign the EU accession treaties, formally recognising that ten new members, on top of the current fifteen, will join the EU on 1 May 2004.
1 May	Commencement date of Central Bank and Financial Services Authority of Ireland.



Central Bank Governors past and present (left to right): Maurice O'Connell (1994-2002), Charles H. Murray (1976-1981), Thomas K. Whitaker (1969-1976), John Hurley (2002-), Tomás Ó Cofaigh (1981-1987), Maurice F. Doyle (1987-1994).

Chronology of Director Appointments, 1992 –

1992

14 September Eoin Ryan appointed.

1993

16 June Vincent Ferguson’s term expires.

1 July Mary Walsh reappointed.

29 July Billy McCann appointed.

1994

1 June Stephen O’Connor resigns.

12 June Sean Cromien’s term expires.

13 June Patrick Mullarkey appointed.

28 June Donal Byrne appointed.

1 December Roy Donovan and Patrick Moriarty reappointed.

1995

14 January Michael Murphy’s term expires.

12 May David Begg appointed.

15 September Donal Byrne reappointed.

1996

31 January Dermot McAleese’s term expires.

1 February Friedhelm Danz appointed.

1997

29 June Patrick Moriarty deceased.

14 September Eoin Ryan reappointed.

1998

12 February Jim Nugent appointed.

30 June Mary Walsh’s term expires.

1 July Martin O’Donoghue appointed.

28 July Billy McCann’s term expires.

15 October Gerard Danaher appointed.

1999

1 December Roy Donovan reappointed.

2000

9 March Patrick Mullarkey’s term expires.

10 March John Hurley appointed.

12 May David Begg reappointed.

15 September Donal Byrne reappointed.

2001

1 February Friedhelm Danz reappointed.

14 December Eoin Ryan deceased.

2002

22 February Michael McBennett appointed.

11 March Tom Considine appointed.

2003

11 February Jim Nugent’s term expires.

30 April Board of Directors dissolved.

Index to Appendices

	Page
1. Legislative Basis for Supervisory Functions	197
2. Credit Institutions licensed in Ireland to carry on Banking Business	198
3. Credit Institutions authorised in another EU Member State and operating in Ireland	200
4. Undertakings for Collective Investment in Transferable Securities (UCITS) authorised in Ireland	204
5. Unit Trust Schemes authorised in Ireland	220
6. Authorised Designated Investment Companies	230
7. Authorised Non-Designated Investment Companies	250
8. Authorised Investment Limited Partnerships	251
9. UCITS authorised in another EU Member State marketing in Ireland	252
10. Collective Investment Schemes (Other than UCITS) authorised in another country marketing in Ireland	253
11. Moneybrokers	253
12. Bureaux de Change	254
13. Memoranda of Understanding to which the Bank is a signatory	254

Appendix 1

Legislative Basis for Bank ’ s Supervisory Functions

Principal Irish Statutes

Central Bank Acts, 1942-2001
Building Societies Act, 1989 and 1992
Trustee Savings Bank Act, 1989 and 2001
Companies Act, 1990
Unit Trust Act, 1990
Investment Limited Partnerships Act, 1994
Criminal Justice Act, 1994
Criminal Justice (Miscellaneous Provisions) Act, 1997
Criminal Justice (Theft and Fraud Offences) Act, 2001
Investment Intermediaries Act, 1995 (IIA)
Stock Exchange Act, 1995 (SEA)
Investor Compensation Act, 1998
Insurance Act, 2000
Dormant Accounts Act, 2001
Asset Covered Securities Act, 2001
Pensions (Amendment) Act, 2002

Principal European Directives

Codified Directive (2000/12/EC)
(Has codified and combined in a single text the following Directives (and amendments))
First Banking Directive (77/780/EEC)
Own Funds Directive (89/299/EEC)
Solvency Ratio Directive (89/647/EEC)
Second Banking Directive (89/646/EEC)
Consolidated Supervision Directive (92/30/EEC)
Large Exposures Directive (92/121/EEC)

Annual Accounts Directive (86/635/EEC)
Branch Accounts Directive (89/117/EEC)
Money Laundering Directive (91/308/EEC)

Investment Services Directive (93/22/EEC)
Capital Adequacy Directive (93/6/EEC and 98/31/EC and 98/33/EC)
Deposit Guarantee Directive (94/19/EEC)

‘ Post-BCCI’ Directive (95/26/EC)
UCITS Directive (85/611/EEC & 88/220/EEC)
Investor Compensation Schemes Directive (97/9/EC)
Electronic Money Directives (2000/28/EC and 2000/46/EC)

Implemented by:

S.I. No. 414 of 1979 and Central Bank Acts, 1942-1998
Administrative Notice
Administrative Notice
S.I. No. 395 of 1992 and S.I. No. 86 of 2003
S.I. No. 396 of 1992
Administrative Notices

S.I. No. 294 of 1992 and S.I. No 84 of 2003
S.I. No. 294 of 1992 and S.I. No. 84 of 2003
Criminal Justice Act, 1994 and Criminal Justice (Miscellaneous Provisions) Act, 1997
IIA and SEA
IIA, SEA & Administrative Notices

S.I. No. 168 of 1995 and S.I. No. 468 of 1999 and S.I.No.104 of 2002 and S.I. No. 85 of 2003 and Central Bank Act, 1997
S.I. No. 267 of 1996 and S.I. No. 50 of 1999
S.I. No. 78 of 1989
Investor Compensation Act, 1998
S.I. No. 221 of 2002

Appendix 2

Credit Institutions Authorised to Carry on Banking Business in the State under Irish Legislation

Holders, as at end December 2002, of Banking Licences issued under Section 9 of the Central Bank Act, 1971

ACC Bank plc
AIB Capital Markets plc
AIB Finance Limited
Allied Irish Banks plc
Anglo Irish Bank Corporation plc
Bank of America National Association
Bank of Bermuda (Europe) plc
Bank of Ireland, The Governor and Company of the
Bank of Montreal Ireland plc
Bank of Scotland (Ireland) Limited
Bankgesellschaft Berlin (Ireland) plc
Bear Stearns Bank plc
BW Bank Ireland plc
CIBC World Markets Ireland Limited
Citibank Ireland Financial Services plc
Commerzbank Europe (Ireland)
Commerzbank International (Ireland)
DePfa-Bank Europe plc
DePfa Bank plc
Deutsche Bank/DB Ireland plc
Dresdner Bank (Ireland) plc
DZ-Bank Ireland plc
First Active plc
Garras Bank – Naspá Dublin
GMAC Commercial Mortgage Bank plc
Helaba Dublin Landesbank Hessen-Thüringen International
Hewlett-Packard International Bank plc
HVB Bank Ireland
IIB Bank Limited
IntesaBci Bank Ireland plc
Investment Bank of Ireland Limited
Irish Life & Permanent plc
Irish Trust Bank Limited (in liquidation)*
J.P. Morgan Bank (Ireland) plc
KBL Bank Ireland
LGT Bank in Liechtenstein (Ireland) Limited
maxblue Limited
Merchant Banking Limited (in liquidation)**
Merrill Lynch Capital Markets Bank Limited
National Irish Bank Limited
National Irish Investment Bank Limited
Pfizer International Bank Europe
Rabobank Ireland plc
Rheinhyp Bank Europe plc
Sachsen LB Europe plc
Sanpaolo IMI Bank Ireland plc
Scotiabank (Ireland) Limited
Ulster Bank Ireland Limited
UniCredito Italiano Bank (Ireland) plc

WestLB Ireland plc
WGZ-Bank Ireland plc
Zurich Bank

* An order for the winding-up of Irish Trust Bank Limited was made by the Supreme Court on 26 March 1976.
** An order for the winding-up of Merchant Banking Limited was made by the High Court on 24 May 1982.

Note: Under the terms of Section 7 of the Central Bank Act, 1971, as amended by Section 30 of the Central Bank Act, 1989, the following bodies are exempted from the requirement to hold a banking licence:

Post Office Savings Bank
Building Societies
Industrial and Provident Societies
Friendly Societies
Credit Unions
Managers or Trustees of Unit Trusts or Collective Investment Schemes (in respect of the business of such schemes)

Holders, as at end December 2002 of Banking Licences issued under Section 9 of the Central Bank Act, 1971, and registered as designated public credit institutions under Section 14 of the Asset Covered Securities Act, 2001

DePfa ACS Bank
WestLB Covered Bond Bank plc

Building Societies, as at end 2002, authorised to raise funds under the Building Societies Act, 1989

EBS Building Society
ICS Building Society
Irish Nationwide Building Society

Appendix 3

Credit Institutions Authorised in Another Member State of the European Union Operating in Ireland

Branch Basis	Member State of Origin
Aareal Bank AG	Germany
ABN AMRO Bank NV	Netherlands
Associates Capital Corporation plc	United Kingdom
Bankinter SA	Spain
Banque Bruxelles Lambert	Belgium
Barclays Bank plc	United Kingdom
BNP Paribas	France
BNP Paribas Securities Services	France
Caja de Ahorros Y Monte de Piedad de Madrid (Caja de Madrid)	Spain
Citco Bank Nederland NV	Netherlands
Citibank International plc	United Kingdom
Crédit Agricole Indosuez Luxembourg	Belgium
Daiwa Securities Trust and Banking (Europe) plc	United Kingdom
Dexia Banque Belgique	Belgium
Dexia Banque Internationale à Luxembourg SA	Luxembourg
Dexia Crédit Local	France
Europäische Hypothekenbank SA	Luxembourg
FCE Bank plc	United Kingdom
HFC Bank plc	United Kingdom
HSBC Bank plc	United Kingdom
ING Bank NV	Netherlands
Investec Bank (UK) Ltd	United Kingdom
KBC Bank NV Dublin Branch	Belgium
Landesbank Hessen – Thüringen Girozentrale	Germany
Marks and Spencer Financial Services Ltd	United Kingdom
MBNA Europe Bank Ltd	United Kingdom
Merrill Lynch International Bank Ltd	United Kingdom
Northern Rock plc	United Kingdom
Rabobank Nederland	Netherlands
Société Générale SA	France
Volkswagen Bank GmbH	Germany
Cross Border Basis	
Deposit-Taking and Other Services	Member State of Origin
ABN AMRO Bank NV	Netherlands
ABN AMRO Bouwfonds Nederlandse Gemeenten NV	Netherlands
ABN AMRO Lease Holding NV	Netherlands
Allied Trust Bank Limited	United Kingdom
Banca Commerciale Italiana (France) SA	France
Banca Lombarda International SA	Luxembourg
Banco Essi SA	Portugal
Bank Austria Aktiengesellschaft	Austria
Bank for Europe Ltd	Luxembourg
Bank Labouchere NV	Netherlands
Bank of China International (UK) Ltd	United Kingdom
Bank One Capital Markets Limited	United Kingdom
Bank Sarasin Benelux SA	Luxembourg
Bankers Trust International plc	United Kingdom
Bankgesellschaft Berlin AG	Germany
Bankinter SA	Spain
Banque AIG	France
Banque Artesia Nederland NV	Netherlands
Banque De Bretagne	France

Cross Border Basis Deposit-Taking and Other Services — continued

Banque De La Cité	France
Banque et Caisse d'Epargne de L'Etat, Luxembourg	Luxembourg
Banque Generale du Luxembourg SA	Luxembourg
Banque General Du Phenix Et Du Credit Chimique	France
Banque LB Lux SA	Luxembourg
Banque Lehman Brothers	France
Banque Nationale De Paris Guyane	France
Banque Nationale De Paris Intercontinentale	France
Banque Nationale De Paris SA	France
Banque Pour L'Expansion Industrielle	France
Banque Sofirec	France
Barclays Bank plc	United Kingdom
Barclays Private Bank Limited	United Kingdom
Bayerische Hypotheken-und Wechsel-Bank AG	Germany
BHF-Bank Aktiengesellschaft	Germany
BNP Finance	France
BNP Paribas	France
BNP Paribas (Luxembourg)	Luxembourg
Bouwfonds Hypotheken BV	Netherlands
Bouwfonds Property Finance BV	Netherlands
Carnegie Bank A/S	Denmark
CDC Finance	France
Chase Investment Bank Limited	United Kingdom
Chiao Tung Bank Europe NV	Netherlands
Christiania Bank OG Kreditkasse ASA	Norway
CIBC World Markets plc	United Kingdom
Citibank España SA	Spain
Citibank International plc	United Kingdom
comdirect Bank AG	Germany
Commerzbank Aktiengesellschaft	Germany
Compagnie Du Credit Universel	France
Compagnie Financiere De CIC Et De L'Union Europeenne	France
Coöperatieve Centrale Raiffeisen-Boerenleenbank BA	Netherlands
Crédit Européen SA	Luxembourg
Crédit Industriel D'Alsace Et De Lorraine	France
Crédit Lyonnais	France
Crédit Suisse (Luxembourg) SA	Luxembourg
Credit Suisse (UK) Limited	United Kingdom
Crédit Universel	France
Creditanstalt — Bankverin Aktiengesellschaft	Austria
Danske Bank A/S	Denmark
Danske Bank International SA	Luxembourg
Den Københavnske Bank A/S	Denmark
Den Norske Bank ASA	Norway
Deutsche Ausgleichsbank	Germany
Deutsche Bank AG	Germany
Deutsche Bank Luxembourg SA	Luxembourg
Deutsche Hypothekenbank — Hannover	Germany
Deutsche Siedlungs-und Landesrentenbank	Germany
DG Bank Deutsche Genossenschaftsbank AG	Germany
Dornbirner Sparkasse	Austria
Dresdner Bank Luxembourg SA	Luxembourg
eQ Bank Limited	Finland
Erste Bank der oesterreichischen Sparkassen AG	Austria
Evli Bank plc	Finland
F. van Lanschot Bankiers NV	Netherlands
Finansbank (Holland) NV, Amsterdam	Netherlands
Fleet Bank (Europe) Ltd	United Kingdom
Fortis Bank (Nederland) N.V	Netherlands
Fortis Bank N.V	Belgium

Cross Border Basis Deposit-Taking and Other Services — continued

Goldman Sachs Paris Inc et Cie	France
Halifax plc	United Kingdom
Havana International Bank Ltd.	United Kingdom
Henry Ansbacher & Co. Ltd	United Kingdom
HSBC Bank plc	United Kingdom
HSBC Equator Bank plc	United Kingdom
HSBC Republic Bank (Luxembourg) SA	Luxembourg
HSBC Republic Bank (UK) Limited	United Kingdom
IBM France Financement SA	France
ING Bank NV	Netherlands
Investec Bank (UK) Ltd	United Kingdom
J.P. Morgan Europe Limited	United Kingdom
J.P. Morgan International Bank Limited	United Kingdom
Kas-Associatie NV	Netherlands
Keytrade Bank SA	Belgium
Kredietbank SA Luxembourgeoise	Luxembourg
Landesbank Schleswig-Holstein Girozentrale	Germany
Lehman Brothers Bankhaus Aktiengesellschaft	Germany
Marks and Spencer Financial Services Ltd	United Kingdom
Matteus Bank AB	Sweden
Merrill Lynch International Bank Limited	United Kingdom
Mizuho Bank Nederland NV	Netherlands
Morgan Stanley Dean Witter Bank Ltd	United Kingdom
NABAB SA	France
NationsBank Europe Limited	United Kingdom
NM Rothschild & Sons Limited	United Kingdom
NV Bank Nederlandse Gemeenten	Netherlands
NV De Indonesische Overzeese Bank	Netherlands
P-H Bank A/S	Denmark
Prudential-Bache International	United Kingdom
Raiffeisen Zentralbank Österreich AG	Austria
RBS Trust Bank Limited	United Kingdom
Rheinhyp Rheinische Hypothekenbank AG	Germany
Royal Bank of Canada Europe Limited	United Kingdom
Sabancı Bank plc	United Kingdom
Sampo Bank plc	Finland
Scotiabank (UK) Ltd	United Kingdom
Société Européenne de Banque SA Luxembourg	Luxembourg
Société Générale	France
Société Générale Bank Nederland NV	Netherlands
Société Nanceienne Varin — Bernier	France
State Street Banque SA	France
State Street Bank Europe	United Kingdom
3i Group plc	United Kingdom
The Royal Bank of Scotland plc	United Kingdom
Toronto Dominion Bank Europe Limited	United Kingdom
UBS Warburg Ltd	United Kingdom
Ulster Bank Limited	United Kingdom
West Merchant Bank	United Kingdom
Westdeutsche Immobilienbank	Germany
Westdeutsche Landesbank Girozentrale	Germany
Westland/Utrecht Hypotheekbank NV	Netherland
Yorkshire Building Society	United Kingdom
Services Other Than Deposit-Taking	Member State of Origin
ABN AMRO Bank (Luxembourg) SA	Luxembourg
Alliance & Leicester Group Treasury plc.	United Kingdom
Allied Bank Philippines (UK) plc	United Kingdom
Assemblies of God Property Trust	United Kingdom
Banco Bilbao Vizcaya Argentaria SA	Spain

Cross Border Basis Services Other Than Deposit-Taking — continued

Banca Popolare di Sondrio	Italy
Banco Popular Español SA	Spain
Bank Degroof SA	Belgium
Bangesellschaft Berlin (UK) plc	United Kingdom
Bank of America International Ltd	United Kingdom
Bank of America SA Madrid	Spain
Bank of Scotland	United Kingdom
Bank of Tokyo-Mitsubishi (Holland) NV	Netherlands
Banque Privée Edmond de Rothschild Luxembourg SA	Luxembourg
Banque Sanpaolo	France
Brown Brothers Harriman (Luxembourg) S.C.A.	Luxembourg
CDC IXIS Capital Markets	France
Citibank Belgium	Belgium
Citicapital SAS	France
County NatWest Limited	United Kingdom
Crédit Agricole Indosuez	France
Crédit Communal de Belgique SA	Belgium
Crédit Lyonnais Rouse (France) S.N.C.	France
Crown Agents Financial Services Ltd	United Kingdom
Deutsche Hyp Deutsche Hypothekenbank Frankfurt — Hamburg AG	Germany
Deutsche VerkehrsBank AG	Germany
Ester Finance Titrisation	France
Euler-SFAC Credit	France
Euroclear Bank SA	Belgium
Europäische Hypothekenbank SA, Luxembourg	Luxembourg
Exane Finance	France
Finansbanken ASA	United Kingdom
First National Bank plc	United Kingdom
First Personal Bank plc	United Kingdom
GE Sovac	France
Goldman Sachs International Bank	United Kingdom
Goldman, Sachs & Co.oHG	Germany
Gudme Raaschou Bankaktieselskab	Denmark
Hamburgische Landesbank Girozentrale	Germany
IKB Deutsche Industriebank AG	Germany
ING Securities Bank (France)	France
J.P. Morgan & Cie SA	France
Landesbank Rheinland-Pfalz Girozentrale	Germany
Mediofactoring SpA	Italy
Merrill Lynch Capital Markets (France) SA	France
Morgan Stanley Bank AG	Germany
Münchener Hypothekenbank eG	Germany
Natexis Banque	France
Natexis Banques Populaires	France
National Westminster Bank plc	United Kingdom
Pinatton Finance	France
Prominnofi (SA)-Centrale de Cotation et de Contrepartie	France
Santander Central Hispano	Spain
Sanwa International plc	United Kingdom
Saxo Bank A/S	Denmark
Schroder & Co Limited	United Kingdom
Schroder Munchmeyer Hengst AG	Germany
SNVB Financements	France
Standard Chartered Bank	United Kingdom
Tesco Personal Finance Limited	United Kingdom
Triodas Bank NV	Netherlands
3i plc	United Kingdom
Württembergischen Hypotheken Bank AG	Germany

Appendix 4

Undertakings for Collective Investment in Transferable Securities (UCITS)

The following schemes have been authorised by the Central Bank of Ireland, as at 31 December 2002, as Undertakings for Collective Investment in Transferable Securities under the powers conferred on the Bank by the European Communities (Undertakings for Collective Investment in Transferable Securities) Regulations, 1989 (Statutory Instrument No 78 of 1989).

Name of UCITS	Name of Management Company	Name of Trustee
Aberdeen Accumulation Fund plc	Aberdeen International Management Ireland Limited	The Governor & Company of the Bank of Ireland
Aberdeen International Fund plc	Aberdeen International Management Ireland Limited	The Governor & Company of the Bank of Ireland
Aberdeen Umbrella Cash Fund plc	Aberdeen International Management Ireland Limited	The Governor & Company of the Bank of Ireland
ABN AMRO Global Liquidity Funds plc	—	Deutsche International Custodial Services (Ireland) Limited
ACM International Reserves II plc	—	The Governor & Company of the Bank of Ireland
Advanced Capital Fund plc	—	PFPC Trustee & Custodial Services Limited
Advantage Funds plc	Billenium Finance Limited	Société Générale
AIB Indexmaster Funds	AIB Fund Management Limited	AIB/BNY Trust Company Limited
AIB Investment Fund	AIB Fund Management Limited	AIB/BNY Trust Company Limited
AIG American Equity Trust	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Asia Balanced Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Balanced World Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Dynamic Emerging World Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Emerging Europe Equity Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Emerging Markets Bond Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Euro-Optimizer Fund	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Europe Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Europe Small Companies Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland

Name of UCITS	Name of Management Company	Name of Trustee
AIG European Opportunities Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Global Bond Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Global Emerging Markets Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Global Equities Growth Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Global Equities Value Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Global Managed Cash Funds plc	AIG Global Investment Fund Management Limited	Investors Trust & Custodial Services (Ireland) Limited
AIG Greater China Equity Fund plc	AIG Global Investment Fund Management Limited	The Governor and Company of the Bank of Ireland
AIG Japan Small Companies Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Latin America Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Liquidity Fund — Euro	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Liquidity Fund — Swiss Franc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG Liquidity Fund — US Dollar	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG New Asia Capital Opportunities Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG South East Asia Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG South East Asia Small Companies Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIG/SunAmerica International Funds	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
AIM Capital Funds plc	AIM Capital Management Company Limited	The Governor & Company of the Bank of Ireland
AIMIC Japan New Horizon Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
Akelius Fonder plc	Akelius Fund Management (Ireland) Limited	Barings (Ireland) Limited
All Points Multi-Manager plc	—	Bermuda Trust (Dublin) Limited
Amadeus Capital Vision plc	Dresdner International Management Services Limited	J. P. Morgan Bank (Ireland) plc

Annual Report 2002

Name of UCITS	Name of Management Company	Name of Trustee
AMB Ireland Capital Fund	CICM Fund Management Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
American Century World Investors plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
American Diversified Funds plc	—	PFPC Trustee and Custodial Services Limited
Antonveneta ABN AMRO Funds	Antonveneta ABN AMRO Investment Funds Limited	AIB/BNY Trust Company Limited
AON International Funds plc	—	AIB/BNY Trust Company Limited
Aon Investment Company plc	Aon Management Limited	Deutsche International Custodial Services (Ireland) Limited
APS Growth Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Area Asset Advisor Funds plc	Area International Management (Ireland) Limited	Dexia Banque Internationale à Luxembourg, Dublin Branch
Asia Small Company Growth Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Atlantis Asian Recovery Fund plc	Atlantis Investment Management (Ireland) Limited	Barings (Ireland) Limited
Attica Institutional Multi-Manager plc	—	Dexia Banque Internationale à Luxembourg, Dublin Branch
AXA Rosenberg Equity Alpha Trust	AXA Rosenberg Management Ireland Limited	PFPC Trustee & Custodial Services Limited
Bank of America Global Liquidity Funds plc	Banc of America Capital Management (Ireland) Limited	AIB/BNY Trust Company Limited
Bank of Ireland Asset Management Equity Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Asset Management Managed Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Asset Management Mutual Investment Fund	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Funds plc	—	J. P. Morgan Bank (Ireland) plc
Barclays Global Investors Fixed Income Selection Fund plc	Barclays Global Investors Ireland Limited	The Governor & Company of the Bank of Ireland
Barclays Global Investors Index Selection Fund	Barclays Global Investors Ireland Limited	The Governor & Company of the Bank of Ireland
Barclays Private Clients Discretionary Fund plc	—	The Governor & Company of the Bank of Ireland
BDT Invest Funds plc	—	Bermuda Trust (Dublin) Limited
Bedlam Funds plc	—	Northern Trust Custodial Services (Ireland) Limited

Name of UCITS	Name of Management Company	Name of Trustee
Belinvest Realty Fund plc	—	Bermuda Trust (Dublin) Limited
BG Bolsa Crecimiento plc	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited
Billenium Funds plc	Billenium Finance Limited	Barings (Ireland) Limited
BiscayneAmericas Euro Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
BlackRock Global Series plc	—	PFPC Trustee and Custodial Services Limited
Blevins Franks International Select Funds plc	Blevins Franks Managers Ireland Limited	J.P. Morgan Bank (Ireland) plc
BN Multimanagers plc	—	AIB/BNY Trust Company Limited
BNL Global Funds plc	—	Dexia Banque Internationale à Luxembourg S.A., Dublin Branch
BNY Hamilton Funds plc	—	AIB/BNY Trust Company Limited
BOC International Fund	BOC International Fund Management Limited	The Governor & Company of the Bank of Ireland
Brandes Investment Funds plc	—	Northern Trust Custodial Services (Ireland) Limited
Bright OAK plc	Mantovana Management Limited	AIB/BNY Trust Company Limited
BT & T Telecommunications & Technology Fund plc	BT & T Asset Management (Ireland) Limited	The Governor & Company of the Bank of Ireland
BT Global Assets Funds	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited
BT Global Liquidity Fund plc	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited
Buchanan Performance Funds plc	Buchanan Asset Management (Ireland) Limited	The Governor & Company of the Bank of Ireland
Cardinal Fund Plc	—	AIB/BNY Trust Company Limited
Cash Reserve Funds plc	—	Northern Trust Custodial Services (Ireland) Limited
Cazenove International Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
CB Clients plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CB Global Sector Fund plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CDC AM-Loomis Sayles International Funds plc	—	The Governor and Company of the Bank of Ireland
CHALLENGE Funds	Mediolanum International Funds Limited	Dexia Banque Internationale à Luxembourg Dublin Branch
Charles Schwab Worldwide Funds plc	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harrimann Trustee Services (Ireland) Limited

Annual Report 2002

Name of UCITS	Name of Management Company	Name of Trustee
Charles Schwab Worldwide Trust	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Christows Investments plc	Christows Investments (Dublin) Limited	Mellon Trustees (Dublin) Limited
CICM International Investments plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CICM International Portfolios plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Citi Institutional Liquidity Fund plc	—	PFPC Trustee and Custodial Services Limited
Close Finsbury Global Investment Funds plc	—	J. P. Morgan Bank (Ireland) plc
COBA Clients plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Comgest Growth plc	—	Dexia Banque Internationale à Luxembourg, Dublin Branch
Conseq Invest Plc	—	Citibank International plc, Ireland Branch
Coronation Retail Fund	Coronation Fund Managers (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Coutts Liquidity Fund plc	Coutts Fund Managers Limited	AIB/BNY Trust Company Limited
Daiwa TAA Japan Fund plc	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
DBLA-Dresdner RCM Latin American Selections Fund plc	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
DekaTeam — BioTech	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam — EM Bond	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam Konsumwerte	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-Emerging Markets	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-Global Resources	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-GlobalBond	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-GlobalEnterprises	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-GlobalSelect	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-ImmoFlex USA	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
DekaTeam-PharmaTech	Deka International (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Deutsche Direkt Funds plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Deutsche Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche Global Liquidity Series plc	—	Deutsche International Custodial Services (Ireland) Limited

Name of UCITS	Name of Management Company	Name of Trustee
Deutsche Global Select Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche GlobalSpectrum Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche International Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Dimensional Funds plc	—	PFPC Trustee and Custodial Services Limited
DIT-Dresdner Global Opportunities Fund	Dresdner International Management Services Limited	J. P. Morgan Bank (Ireland) plc
DIT-Dresdner Bond Strategies Fund	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
DIT-Dresdner Global Strategies Fund	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
Dolmen Securities Funds plc	—	Barings (Ireland) Limited
Dresdner RCM Asian Selection Funds plc	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
Dresdner RCM India Fund plc	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
Dresdner Thornton India Fund plc	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
dSAM Investment Fund plc	—	BT Trustee Company (Ireland) Limited
Dublin International Funds	BPM Fund Management (Ireland) Limited	Citibank International plc, Ireland Branch
Eaton Vance Emerald Funds plc	Eaton Vance Advisors (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Egerton Capital European Fund plc	—	Daiwa Europe Trustees Ireland Limited
EII Voyager Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Electra Active Management plc	—	Barings (Ireland) Limited
Ennismore Smaller Companies plc	—	Deutsche International Custodial Services (Ireland) Limited
Enterprise Global Funds plc	—	Brown Brother Harriman Trustee Services (Ireland) Limited
Equator Investment Programmes	Coutts Fund Managers Limited	Allied Irish Banks plc
European Exchange-Traded Fund Company plc	Merrill Lynch Investment Managers (Dublin) Limited	AIB/BNY Trust Company Limited
F.I.T. — Galileo China Fund	F.I.T. — Galileo Investment Trust Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited

Annual Report 2002		
Name of UCITS	Name of Management Company	Name of Trustee
F.I.T. — Galileo Global Fund	F.I.T. — Galileo Investment Trust Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
F.I.T. Asian Fund	F.I.T. — Galileo Investment Trust Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
F.I.T. Delta Growth Fund	F.I.T. — Galileo Investment Trust Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
F.I.T. Japan Fund	F.I.T. — Galileo Investment Trust Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Federated International Funds plc	Federated International Management Limited	AIB/BNY Trust Company Limited
Federated Unit Trust	Federated International Management Limited	J. P. Morgan Bank (Ireland) plc
Fidelity Institutional Cash Fund plc	—	J. P. Morgan Bank (Ireland) plc
Findlay Park US Smaller Companies Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
First State Global Umbrella Fund plc	—	Bermuda Trust (Dublin) Limited
Fleming Private Fund plc	—	AIB/BNY Trust Company Limited
Fondo Santander Doble Asegurado plc	Santander International Fund Advisory Ireland Limited	AIB/BNY Trust Company Limited
FPK Financial Funds plc	—	Citibank International plc, Ireland Branch
Frank Russell Investment Company II plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Frank Russell Investment Company III plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Frank Russell Investment Company plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Fresh Korea Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
GAM Star Fund plc	GAM Fund Management Limited	J. P. Morgan Bank (Ireland) plc
Gemini Strategy plc	—	Crédit Agricole Indosuez Luxembourg S.A., Dublin Branch
GeneralCologne Re Capital Investment Trust	General & Cologne Re Fund Managers (Ireland) Limited	Citibank International plc, Ireland Branch
GLG Emerging Markets Fund plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Investments III plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
GLG Investments IV plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited

Name of UCITS	Name of Management Company	Name of Trustee
GLG Investments plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
Global Capital Markets Portfolio	Salomon Brothers Management Company (Ireland) Limited	Investors Trust & Custodial Services (Ireland) Limited
Global Enhanced Income Fund	Salomon Brothers Management	PFPC Trustee and Custodial Services Limited
Global Funds Management plc	Lazard Investment Funds Limited	The Governor & Company of the Bank of Ireland
Global Property Fund	GPA Fund Managers (Ireland) Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited
Global SCAP Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Securities Trust & Banking Europe plc
Global Treasury Funds plc	The Royal Bank of Scotland Funds (Dublin) Limited	AIB/BNY Trust Company Limited
GMO Funds plc	—	Northern Trust Custodial Services (Ireland) Limited
Goldman Sachs Funds plc	—	AIB/BNY Trust Company Limited
Govett Investment Funds plc	AIB Fund Management Limited	AIB/BNY Trust Company Limited
Green Effects Investment plc	—	Barings (Ireland) Limited
Griffin Umbrella Fund plc	—	Barings (Ireland) Limited
Group One International Trust	Group One International Trust Managers Limited	J. P. Morgan Bank (Ireland) plc
Gulf International Investment Company plc	—	Barings (Ireland) Limited
Hambros Global Investment Fund plc	Hambros Fund Managers (Ireland) Limited	Barings (Ireland) Limited
Hamon Asian Funds	Hamon Ireland Limited	Bermuda Trust (Dublin) Limited
Hansard Global Funds plc	—	AIB/BNY Trust Company Limited
Hausmann International Fund plc	—	The Governor & Company of the Bank of Ireland
Helios Portfolio	Bank of Ireland Unit Managers Limited	The Governor & Company of the Bank of Ireland
Henderson Crosthwaite Investment Company plc	Henderson Crosthwaite Investment Management (Ireland) Limited	Dexia Banque Internationale à Luxembourg, Dublin Branch
Henderson Liquid Assets Fund plc	Henderson Global Investors (Ireland) Limited	J.P. Morgan Bank (Ireland) plc
Herald Investment Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
HighMark World Funds plc	—	SEI Investments Trustee and Custodial Services (Ireland) Limited

Annual Report 2002		
Name of UCITS	Name of Management Company	Name of Trustee
HSBC Global Liquidity Funds plc	—	AIB/BNY Trust Company Limited
HSBC Global Reserve Funds plc	—	AIB/BNY Trust Company Limited
HSBC International Capital Secured Growth Funds plc	—	HSBC Global Investor Services (Ireland) Limited
HSBC Republic World Funds plc	—	Investors Trust & Custodial Services (Ireland) Limited
HVB / Multi Manager Funds plc	HVB Fund Services Limited	Mellon Trustees (Dublin) Limited
Insight Liquidity Funds plc	—	Northern Trust Custodial Services (Ireland) Limited
INVESCO Bond Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT Emerging Markets Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT India Fund	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT Pathfinder Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT Small Companies Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT World Bond Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO GT World Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
INVESCO Series	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
Investec Liquidity Funds plc	Investec Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
Investec Select Funds plc	Investec Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
io Universal Fund plc	io Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
iShares plc	Barclays Global Investors Ireland Limited	The Governor & Company of the Bank of Ireland
J O Hambro Capital Management Umbrella Fund plc	—	Dexia Banque Internationale à Luxembourg, Dublin Branch
Janus World Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Korea Active	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited

Name of UCITS	Name of Management Company	Name of Trustee
Korea Open Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Korea Twenty-First Century Investment Company plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Korean Growth Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Lares Funds	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Latin America Fund	Baring Mutual Fund Management (Ireland) Limited	Daiwa Europe Trustees Ireland Limited
Lazard Global Active Fund plc	Lazard Investment Funds Limited	PFPC Trustee and Custodial Services Limited
Lazard Global Bond Fund plc	Lazard Investment Funds Limited	PFPC Trustee and Custodial Services Limited
Lazard Global Liquidity Fund plc	Lazard Investment Funds Limited	Deutsche International Custodial Services (Ireland) Limited
LDRS I plc	—	AIB/BNY Trust Company Limited
LDRS II plc	—	AIB/BNY Trust Company Limited
LDRS III plc	—	AIB/BNY Trust Company Limited
LDRS IV plc	—	AIB/BNY Trust Company Limited
LDRS IX plc	—	AIB/BNY Trust Company Limited
LDRS V plc	—	AIB/BNY Trust Company Limited
LDRS VI plc	—	AIB/BNY Trust Company Limited
LDRS VII plc	—	AIB/BNY Trust Company Limited
LDRS VIII plc	—	AIB/BNY Trust Company Limited
LDRS X plc	—	AIB/BNY Trust Company Limited
LDRS XI plc	—	AIB/BNY Trust Company Limited
LDRS XII plc	—	AIB/BNY Trust Company Limited
LDRS XIII plc	—	AIB/BNY Trust Company Limited
Legg Mason Global Funds plc	—	PFPC Trustee & Custodial Services Limited
Lehman Brothers Alpha Fund plc	Lehman Brothers Asset Management (Ireland) Limited	AIB/BNY Trust Company Limited
Leopold Joseph Umbrella Fund plc	—	BNP Paribas Securities Services, Dublin Branch
Lotus Fund plc	—	Bermuda Trust (Dublin) Limited

Annual Report 2002		
Name of UCITS	Name of Management Company	Name of Trustee
Magna Europa Fund plc	—	PFPC Trustee & Custodial Services Limited
Marathon Global Fund	Marathon Asset Management (Ireland) Limited	The Governor & Company of the Bank of Ireland
Marriott Singer International Funds plc	—	Barings (Ireland) Limited
Mediolanum Defender Funds	Mediolanum International Funds Limited	Dexia Banque Internationale à Luxembourg, Dublin Branch
Mellon Global Funds plc	Mellon Global Management Limited	Mellon Trustees (Dublin) Limited
Merrill Lynch Global Selects Portfolios plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Merrill Lynch Institutional Liquidity Funds plc	Merrill Lynch Investment Managers (Dublin) Limited	The Governor & Company of the Bank of Ireland
Metzler International Investments plc	Metzler Ireland Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Metzler Strategic Investments plc	Metzler Ireland Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Metzler/Payden Global Funds plc	Metzler Ireland Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Minster Trust International Umbrella Fund plc	—	AIB/BNY Trust Company Limited
Montanaro European Smaller Companies plc	—	Deutsche International Custodial Services (Ireland) Limited
Montpelier Funds plc	—	Bermuda Trust (Dublin) Limited
Morley Liquidity Funds plc	—	PFPC Trustee and Custodial Services Limited
Multi-Style, Multi-Manager Funds plc	SG\Russell Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
NCL Investment Company plc	—	Investors Trust & Custodial Services (Ireland) Limited
New Star Global Investment Funds plc	New Star Investment Funds (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
NextTracker plc	—	AIB/BNY Trust Company Limited
Nicholas-Applegate International Umbrella Fund plc	—	Bermuda Trust (Dublin) Limited
NOK Strategies Fund	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
NPI Portfolio Fund plc	NPI International Dublin Limited	J. P. Morgan Bank (Ireland) plc
Nucleus Funds plc	—	Investors Trust & Custodial Services (Ireland) Limited
Odey European Growth Fund	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited

Name of UCITS	Name of Management Company	Name of Trustee
Odey Investment Funds plc	—	Dexia Banque Internationale à Luxembourg, Dublin Branch
Old Mutual Dublin Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
OMAM Global Investments plc	OMAM Management Company Limited	The Governor and Company of the Bank of Ireland
One Group Global Funds	One Group Asset Management (Ireland) Limited	The Governor & Company of the Bank of Ireland
Oppenheimer Millennium Funds plc	Oppenheimer Funds International Limited	PFPC Trustee and Custodial Services Limited
Orbitex Investment Funds plc	—	Bermuda Trust (Dublin) Limited
Orchard Funds plc	—	Credit Agricole Indosuez Luxembourg S.A., Dublin Branch
PALLMALL Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Payden & Rygel Global Funds plc	—	Mellon Trustees (Dublin) Limited
Pegasus Strategic Investment Company plc	Dresdner International Management Services Limited	The Governor & Company of the Bank of Ireland
Peregrine Premier Funds plc	—	Bermuda Trust (Dublin) Limited
PIMCO Funds: Global Investors Series plc	Pimco Global Advisors (Ireland) Limited	Investors Trust & Custodial Services (Ireland) Limited
Pioneer America Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Emerging Europe Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Euro Reserve Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer European Equity Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Global Bond Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Global Equity Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Greater Asia Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer U.S. High Yield Fund plc	Pioneer Global Investments Limited	Brown Brothers Harrimann Trustee Services (Ireland) Limited
Pioneer US Growth Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trust Services (Ireland) Limited
Pioneer US Real Estate Fund plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited

Annual Report 2002

Name of UCITS	Name of Management Company	Name of Trustee
PLURIMA Funds	EPTA Global Investments Limited	Deutsche International Custodial Services (Ireland) Limited
Polar Capital Funds plc	—	Baring (Ireland) Limited
Premier Protected Assets Funds plc	—	AIB/BNY Trust Company Limited
Principal Investment Funds	Principal Capital Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Prudential Global Umbrella Fund plc	Prudential Global Managers Company Limited	J. P. Morgan Bank (Ireland) Limited
Prumerica Funds plc	—	The Governor and Company of the Bank of Ireland
Putnam New Flag Euro High Yield Fund plc	—	Barings (Ireland) Limited
Putnam World Trust	Putnam Investments Limited	J.P. Morgan Bank (Ireland) plc
Putnam World Trust II	Putman Investments Limited	J.P. Morgan Bank (Ireland) plc
Quantitative Equities Fund plc	—	Société Générale
Rothschild Private Investor Funds plc	—	The Governor and Company of the Bank of Ireland
Royal London Asset Management Liquidity Funds plc	Royal London Asset Management (Ireland) Limited	The Governor and Company the Bank of Ireland
Salomon Brothers Global Horizons Funds	Salomon Brothers Management Company (Ireland) Limited	PFPC Trustee and Custodial Services Limited
Salomon Smith Barney Umbrella Trust	Salomon Brothers Management Company (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Sanpaolo Invest Funds	Sanpaolo Invest Ireland Limited	AIB/BNY Trust Company Limited
Santander Central Hispano Latin America Coupon Fund plc	—	AIB/BNY Trust Company Limited
Scottish Mutual International Investment Fund plc	Scottish Mutual International Fund Managers Limited	Barings (Ireland) Limited
Scottish Value Portfolio Fund	Scottish Value Management (Ireland) Limited	J.P. Morgan Bank (Ireland) plc
SEI Global Assets Fund plc	SEI Investments Global, Limited	SEI Investments Trustee & Custodial Services (Ireland) Limited
SEI Global Investments Fund plc	SEI Investments Global, Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
SEI Global Master Fund plc	SEI Investments Global Limited	Brown Brothers Harriman Trustee Services (Ireland)
Sella Fund	Sella Fund Management Ireland Limited	Northern Trust Custodial Services (Ireland) Limited
SG Emerging Markets Fund plc	—	J. P. Morgan Bank (Ireland) plc
SG Select Fund	SGAM (Ireland) Limited	Société Générale

Name of UCITS	Name of Management Company	Name of Trustee
Short-Term Investments Company (Global Series) plc	AIM Global Management Company Limited	AIB/BNY Trust Company Limited
Singer & Friedlander ‘ ‘ Roll-Up ’ ’ Funds plc	Singer & Friedlander Total Asset Management Limited	HSBC Global Investor Services (Ireland) Limited
Singer & Friedlander Investment Funds plc	Singer & Friedlander Total Asset Management Limited	HSBC Global Investor Services (Ireland) Limited
Skandia Global Funds plc	Skandia Fund Management (Ireland) Limited	SEI Investments Trustee & Custodial Services (Ireland) Limited
Smith & Williamson Investment Funds plc	Smith & Williamson Investment Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
SPDR Europe plc	—	AIB/BNY Trust Company Limited
SSgA Cash Management Fund plc	—	The Governor and Company of the Bank of Ireland
Standard Chartered Global Liquidity Funds plc	—	PFPC Trustee & Custodial Services Limited
Standard Life Investments (Global Liquidity Funds) plc	—	J. P. Morgan Bank (Ireland) plc
Standard Master Funds plc	—	Brown Brother Harriman Trustee Services (Ireland) Limited
Standish Funds plc	—	Investors Trust & Custodial Services (Ireland) Limited
Stryx International Funds plc	Seilern Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Summit Investment Funds plc	EBS Asset Managers Limited	Northern Trust Custodial Services (Ireland) Limited
Summit Mutual Funds plc	EBS Asset Managers Limited	Northern Trust Custodial Services (Ireland) Limited
SWIP Global Liquidity Fund plc	—	The Governor & Company of the Bank of Ireland
Swiss Life Funds (IRL) plc	Swiss Life Investment Management Limited	BNP Paribas Securities Services, Dublin Branch
Swiss Re Funds	Swiss Re Funds Management (Ireland) Limited	Citibank International plc, Ireland Branch
Thames River Traditional Funds plc	—	Barings (Ireland) Limited
The Access to Asset Allocation (AAA) International Fund plc	—	Dexia Banque Internationale a Luxembourg, Dublin Branch
The Baring Capitalisation Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Baring Emerging Markets Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited

Annual Report 2002

Name of UCITS	Name of Management Company	Name of Trustee
The Baring Global Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Baring International Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Concord Group International Funds plc	—	Barings (Ireland) Limited
The Franklin Templeton Global Fund	Fiduciary International Ireland Limited	Investors Trust & Custodial Services (Ireland) Limited
The Halal Mutual Investment Company plc	—	AIB/BNY Trust Company Limited
The International Investment Portfolios plc	—	The Governor & Company of the Bank of Ireland
The Knight Williams International Portfolio	Knight Williams Portfolio Management International Limited	Barings (Ireland) Limited
The Nasdaq ETF Funds plc	Nasdaq Financial Product Services (Ireland) Limited	AIB/BNY Trust Company Limited
The Sagitta Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
The Sagitta II Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
The Wanger Investment Company plc	—	The Governor & Company of the Bank of Ireland
The World Emerging Markets Umbrella Fund plc	—	Mellon Trustees (Dublin) Limited
The Worldwide Financial Services Fund Plc	—	Bermuda Trust (Dublin) Limited
Thema International Fund plc	—	Bermuda Trust (Dublin) Limited
Threadneedle Liquid Assets Fund plc	—	J. P. Morgan Bank (Ireland) plc
Tilney Ireland Collective Funds plc	Tilney (Ireland) Limited	Mellon Trustees (Dublin) Limited
TimesSquare Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
TimesSquare Global Funds	TimesSquare Funds Management Limited	Deutsche International Custodial Services (Ireland) Limited
Tokai Umbrella Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
TOP MANAGERS Funds	Mediolanum International Funds Limited	Dexia Banque Internationale à Luxembourg, Dublin Branch
Trackindex Fund plc	Dexia Asset Management Alternative Dublin Limited	AIB/BNY Trust Company Limited
TT International Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited

Name of UCITS	Name of Management Company	Name of Trustee
UAM Funds plc	—	SEI Investments Trustee and Custodial Services (Ireland) Limited
UBS (Irl) Fund plc	—	J. P. Morgan Bank (Ireland) plc
UNIPOL FUNDS	Unipol Fondi Limited	Citibank International plc, Ireland Branch
Unitfond plc	Unitfond Limited	PFPC Trustee & Custodial Services Limited
Universal Liquidity Funds plc	Mellon Global Management Limited	Mellon Trustees (Dublin) Limited
UOB Global Strategies Funds plc	UOB Global Capital (Dublin) Limited	The Governor & Company of the Bank of Ireland
Vanguard Investment Series plc	Vanguard Group (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Veritas Funds plc	—	Bermuda Trust (Dublin) Limited
Voyager Investments plc	Bank of Ireland Unit Managers Limited	J.P. Morgan Bank (Ireland) plc
W & W Global Strategies Fund	W & W Asset Management Dublin Limited	Deutsche International Custodial Services (Ireland) Limited
W.P. Stewart Funds plc	W.P. Stewart Fund Management Limited	Bermuda Trust (Dublin) Limited
WA Fixed Income Funds plc	—	PFPC Trustee & Custodial Services Limited
Warburg Pincus Funds plc	Warburg Pincus Asset Management (Dublin)	PFPC Trustee & Custodial Services Limited
Wellington Management Portfolios (Dublin) plc	—	The Governor & Company of the Bank of Ireland
Wellington Management Portfolios (Ireland) Plc	—	The Governor and Company of the Bank of Ireland
Wells Fargo Worldwide Funds plc	Wells Fargo Fund Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Weser EMS Investment Company plc	—	The Governor & Company of the Bank of Ireland
Western Asset Debt Securities Fund plc	—	PFPC Trustee & Custodial Services Limited
Western Asset Funds plc	—	PFPC Trustee & Custodial Services Limited
WJB Chiltern Global Investment Fund plc	—	AIB/BNY Trust Company Limited
Yamaichi Samsung Dynamic Korea Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Yuki Umbrella Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Zenith Investment Fund plc	—	Bermuda Trust (Dublin) Limited

Appendix 5

Authorised Unit Trust Schemes

The unit trusts listed below are authorised by the Central Bank of Ireland, as at 31 December 2002, under the Unit Trusts Act, 1990. Unit trusts established before 26 December 1990 and registered under the Unit Trusts Act, 1972, which is repealed, were automatically authorised by the new legislation.

Name of Unit Trust	Name of Management Company	Name of Trustee
A.I.B Capital Growth Fund	AIB Fund Management Limited	Allied Irish Banks plc
ABN AMRO Alternative Investments Fund	ABN AMRO Fund Managers (Ireland) Limited	Daiwa Europe Trustees Ireland Limited
AIB Capital Markets Unit Trust	AIB Fund Management Limited	AIB/BNY Trust Company Limited
AIB Select Portfolio	AIB Fund Management Limited	AIB/BNY Trust Company Limited
AIMIC Asian Capital Growth Fund	AIG Global Investment Fund Management Limited	The Governor and Company of the Bank of Ireland
Alban Gate Investment Fund	J.P. Morgan Administration Services (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Altius Fund	SGAM (Ireland) Limited	Société Générale
Apollon Europe Equity Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Asian Equity Pioneer Fund	Bank of Ireland Unit Managers Limited	The Governor & Company of the Bank of Ireland
ASO II (Ireland) Fund	Goldman Sachs Funds Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
ASO III (Ireland) Fund	Goldman Sachs Funds Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
ASO I (Ireland) Fund	Goldman Sachs Fund Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Asset Korea Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Atlantis Korean Smaller Companies Fund	Atlantis Investment Management (Ireland) Limited	Barings (Ireland) Limited
Auda Trust	Auda Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
AXA Alternative Investments	AXA Investment Managers Ireland Limited	PFPC Trustee & Custodial Services Limited
AXA Currency and Managers Fund	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
AXA Rosenberg Market Neutral Strategies Trust	AXA Rosenberg Management Ireland Limited	PFPC Trustee & Custodial Services Limited

		Annual Report 2002
Name of Unit Trust	Name of Management Company	Name of Trustee
B,H&S Residential Property Fund	B,H&S Asset Management (Ireland) Limited	Barings (Ireland) Limited
Bank of Ireland Asset Management Bond Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Asset Management EIRI Mutual Funds	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Asset Management Mutual Fund Unit Trust	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Bank of Ireland Asset Management Mutual Fund Unit Trust II	Bank of Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
Bank of Ireland Private Banking Fitzwilliam Portfolio	Bank of Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Barclays Global Investors Active Selection Fund	Barclays Global Investors Ireland Limited	The Governor and Company of the Bank of Ireland
Barclays Global Investors Advanced Active Strategies Funds	Barclays Global Investors Ireland Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Barclays Global Investors Diversified Alpha Plus Funds	Barclays Global Investors Ireland Limited	PFPC Trustee and Custodial Services Limited
Barclays Global Investors Selection Fund	Barclays Global Investors Ireland Limited	The Governor & Company of the Bank of Ireland
Barep Achillea	Barep Asset Management (Ireland) Limited	Société Générale
Barep Alize USD	Barep Asset Management (Ireland) Limited	Société Générale
Barep Commodity Arbitrage Fund	Barep Asset Management (Ireland) Limited	Société Générale
Barep Convertible Arbitrage	Barep Asset Management (Ireland) Limited	Société Générale
Barep Emerging Markets	Barep Asset Management (Ireland) Limited	Société Générale
Barep Fixed Income Arbitrage	Barep Asset Management (Ireland) Limited	Société Générale
Barep Global Arbitrage	Barep Asset Management (Ireland) Limited	Société Générale
Barep Hedgefocus	Barep Asset Management (Ireland) Limited	Société Générale
Barep Insight Equity	Barep Asset Management (Ireland) Limited	Société Générale
Barep Kappa Europe	Barep Asset Management (Ireland) Limited	Société Générale
Barep Long Short Equity	Barep Asset Management (Ireland) Limited	Société Générale

Annual Report 2002		
Name of Unit Trust	Name of Management Company	Name of Trustee
Barep Multi Hedge	Barep Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Barep Protea M & A USD	Barep Asset Management (Ireland) Limited	Société Générale
Barep Protea M&A EURO	Barep Asset Management (Ireland) Limited	Société Générale
Baring Global Opportunities Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
Baring Infrastructure Fund	Baring Mutual Fund Management (Ireland) Limited	Barings (Ireland) Limited
Baring Toshin Toshikomom Umbrella Fund	Baring Mutual Fund Management (Ireland) Limited	Barings (Ireland) Limited
Bear Stearns Explorer	Bear Stearns Asset Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Bear Stearns Explorer II	Bear Stearns Asset Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Bloom Asset Holdings Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
CIBC Eyres Reed Australian Resources Fund	Investor Fund Services (Ireland) Limited	Investors Trust & Custodial Services (Ireland) Limited
Commerzbank ZGS Fund	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Coronation Retail Fund 2	Coronation Fund Managers (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Coronation Universal Fund	Coronation Fund Managers (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
CR Alternative Funds	CR Management Limited	Dexia Banque Internationale à Luxembourg, Dublin Branch
Daiwa Bond Fund Series	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustee Ireland Limited
Daiwa Gaika MMF	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Daiwa Giga Fund (Daiwa/Goldman Sachs Global Trading Strategies Fund)	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Daiwa Liberty Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Daiwa Mega Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Davy Equity Trust	Davy International Financial Services Limited	Daiwa Europe Trustees Ireland Limited
Davy Growth Trust	Davy International Financial Services Limited	Daiwa Europe Trustees Ireland Limited

		Annual Report 2002
Name of Unit Trust	Name of Management Company	Name of Trustee
Davy High Yield Trust	Mulroy Investment Services Limited	The Governor & Company of the Bank of Ireland
Defined Asset Trust	Group One International Trust Managers Limited	J. P. Morgan Bank (Ireland) plc
Deutsche Asset Management International Bond Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche Asset Management International Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche UK Managed Property Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche UK Property Ventures Fund No. 1	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche UK Property Ventures Fund No.2	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Dexia Alternative	Dexia Asset Management Alternative Dublin Limited	PFPC Trustee & Custodial Services Limited
Dexia World Access	Dexia Asset Management Alternative Dublin Limited	Dexia Banque Internationale à Luxembourg Dublin Branch
DFD Fund of Hedge Funds Umbrella Trust	DFD Select Group Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
DFD Select Group Umbrella Trust	DFD Select Group Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Dolmen Irish Equity Fund	Dolmen Securities Limited	Barings (Ireland) Limited
Epsilon	Barep Asset Management (Ireland) Limited	Société Générale
Euro Digital Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Euro Leaders	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Euromeister	CICM Fund Management Limited	AIB/BNY Trust Company Limited
Europe Futures 2004	Barep Asset Management (Ireland) Limited	Société Générale
Framlington Maghreb Fund	Framlington Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Futures Investments	Barep Asset Management (Ireland) Limited	Société Générale
Gartmore Umbrella Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
GE Dublin Fund	GE Asset Management (Ireland) Limited	The Governor and Company of Bank of Ireland
Gemstone Global Equity Ex — Asia Fund	SGAM (Ireland) Limited	Société Générale

Annual Report 2002		
Name of Unit Trust	Name of Management Company	Name of Trustee
Global Alternative	Barep Asset Management (Ireland) Limited	Société Générale
Global Futures	Barep Asset Management (Ireland) Limited	Société Générale
Global Investment Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Global Protection Advantage Fund	Brown Brothers Harriman Fund Administration Services (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Global Super Select Fund	Baring Mutual Fund Management (Ireland) Limited	Barings (Ireland) Limited
GN Absolute Return Target Umbrella Fund	GN Asset Managers (Ireland) Limited	PFPC Trustee & Custodial Services Limited
GN First Umbrella Fund	GN Asset Managers (Ireland) Limited	The Governor & Company of the Bank of Ireland
Goldman Sachs Global Currency Fund — Dollar Plus	Goldman Sachs Fund Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Goldman Sachs Global Currency Fund — Euro Plus	Goldman Sachs Funds Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Goldman Sachs Global Funds	Goldman Sachs Funds Management (Ireland) Limited	The Governor & Company of the Bank of Ireland
Goldman Sachs Global Multi Manager Funds	Goldman Sachs Funds Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Money Market Funds	Goldman Sachs Funds Management (Ireland) Limited	AIB/BNY Trust Company Limited
Goldman Sachs Qualified Investor Unit Trust	Goldman Sachs Funds Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Goldrings Group of Funds	AGF International Advisors Company Limited	The Governor and Company of the Bank of Ireland
GT Asian Warrants and Derivatives Fund	Invesco Asset Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Hanmi Korea Venture Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Hedgefocus Enterprise Selection	Barep Asset Management (Ireland) Limited	Société Générale
Hibernian Alternative Strategies Trust	Hibernian Investment Finance Limited	PFPC Trustee & Custodial Services Limited
Hibernian Equity Unit Trust	Hibernian Investment Finance Limited	The Governor & Company of the Bank of Ireland
Hibernian Irish Property Unit Trust	Hibernian Investment Finance Limited	The Governor & Company of the Bank of Ireland
HIRAMEKI	Barep Asset Management (Ireland) Limited	Société Générale

		Annual Report 2002
Name of Unit Trust	Name of Management Company	Name of Trustee
IBJI Delta Neutral Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
IBM Global Strategy Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
International Resources & General Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Invesco J Series Funds	AIM Global Management Company Limited	AIB/BNY Trust Company Limited
Investec International Funds	Investec Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
Investec International Private Equity Funds	Investec Private Equity Management (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Irish Life Charite Unit Trust	Irish Life Unit Fund Managers Limited	Citibank International plc, Ireland Branch
Irish Life Mixed Irish and International Equity Unit Trust	Irish Life Unit Fund Managers Limited	Citibank International plc, Ireland Branch
Janus Selection	Janus Capital Trust Manager Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
KBC Global Institutional Funds	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
KBC Life Alternative Investments Trust	KBC Life Fund Management Ireland Limited	PFPC Trustee & Custodial Services Limited
KBC Umbrella Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
KEB Rose Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
KEB Shamrock Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Korea Domestic Convertible Bond Fund	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Korea Preferred Share Fund	AIB/BNY Fund Management (Ireland) Limited	Allied Irish Banks plc
Korea Prime Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Korea Restructuring Fund	Deutsche International Funds Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Korea Twin Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
La Vie en Rose	Barep Asset Management (Ireland) Limited	Société Générale
Latin American Extra Yield Fund	Bank of Ireland Unit Managers Limited	Bank of Ireland Trust Services Limited

Annual Report 2002		
Name of Unit Trust	Name of Management Company	Name of Trustee
LibertyView Investment Fund	CPR Investment Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Mega II (Daiwa) Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Monthly Dividend High Yield Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Morgan Stanley Strategic Alternatives Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
NatWest/IFC Latin American Index Fund	Bank of Ireland Unit Managers Limited	J. P. Morgan Bank (Ireland) plc
New Ireland Charity Fund Unit Trust	New Ireland Unit Trust Managers Limited	The Governor & Company of the Bank of Ireland
Nomura Asset Management Global Investment Funds	Nomura Asset Management Ireland Limited	The Governor and Company of the Bank of Ireland
North American Property Securities Trust	GPA Fund Managers (Ireland) Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited
Northern Trust Managed Funds	Northern Trust Fund Managers (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Norwich Irish Managed Unit Trust	Hibernian Investment Finance Limited	The Governor & Company of the Bank of Ireland
Orient Express Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Pacific 21st Century Fund	AIB Fund Management Limited	Allied Irish Banks plc
Pacific Asian Ex-Japan Fund	SGAM (Ireland) Limited	Société Générale
Pareto Alternative Investments Umbrella Trust	Pareto Asset Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Paribas Emerging Markets Index Allocation Fund	BNP Paribas Asset Management (Ireland) Limited	Barings (Ireland) Limited
Pioneer Convertible Bond Arbitrage	Pioneer Alternative Investment Management Limited	Deutsche International Custodial Services (Ireland) Limited
Pioneer Global Equity Arbitrage	Pioneer Alternative Investment Management Limited	Deutsche International Custodial Services (Ireland) Limited
Pioneer Global Macro	Pioneer Alternative Investment Management Limited	Deutsche International Custodial Services (Ireland) Limited
Pioneer Long/Short European Equity	Pioneer Alternative Investment Management Limited	PFPC Trustee & Custodial Services Limited
Principal Protected Fund (Euro)	Barep Asset Management (Ireland) Limited	Société Générale
Principal Protected Fund (Euro) II	Barep Asset Management (Ireland) Limited	Société Générale

		Annual Report 2002
Name of Unit Trust	Name of Management Company	Name of Trustee
Principal Protected Fund (Euro) III	Barep Asset Management (Ireland) Limited	Société Générale
Principal Protected Fund (USD)	Barep Asset Management (Ireland) Limited	Société Générale
Principal Protected Fund (USD) II	Barep Asset Management (Ireland) Limited	Société Générale
Principal Protected Fund (USD) IV	Barep Asset Management (Ireland) Limited	Société Générale
Principal Protected Fund (USD) V	Barep Asset Management (Ireland) Limited	Société Générale
Principle Protected Fund (USD) III	Barep Asset Management (Ireland) Limited	Société Générale
Putnam Private Equity Fund	Putnam Investment Limited	J. P. Morgan Bank Ireland plc
RMB Global Fund	RMB Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Robusta Fund	Robusta Asset Management Limited	Northern Trust Custodial Services (Ireland) Limited
Rouge	Barep Asset Management (Ireland) Limited	Société Générale
Rouge ' 99	Barep Asset Management (Ireland) Limited	Société Générale
Salomon Brothers Qualified Investor Portfolio	Salomon Brothers Management Company (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Schwab Tokio Marine Trust	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
SGAM Alternative Currency Fund	SGAM (Ireland) Limited	Société Générale
SGAM Alternative Global Alpha Fund	SGAM (Ireland) Limited	Société Générale
SGAM Alternative Multi Manager Diversified Fund	SGAM (Ireland) Limited	Société Générale
SGAM Alternative Statistical Arbitrage Fund	SGAM (Ireland) Limited	Société Générale
SGAM Alternative Volatility Arbitrage Fund	SGAM (Ireland) Limited	Société Générale
SGAM Convertible Arbitrage Fund	SGAM (Ireland) Limited	Société Générale
SGAM Currency Performer Fund	SGAM (Ireland) Limited	Société Générale
SGAM Long Short Euro Equity Fund	SGAM (Ireland) Limited	Société Générale
SGAM Long Short Japan Equity Fund	SGAM (Ireland) Limited	Société Générale
SingleHedge Umbrella Fund	BNP Paribas Asset Management (Ireland) Limited	SEI Investment Trustee & Custodial Services (Ireland) Limited

Annual Report 2002		
Name of Unit Trust	Name of Management Company	Name of Trustee
Southern Selections Development Capital Fund	Southern Investment Services Limited	Northern Trust Custodial Services (Ireland) Limited
Sovereign Value Trust I	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Sovereign Value Trust II	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
SSgA Global Index Umbrella Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
SSgA Market Neutral Funds	State Street Global Advisors Ireland Limited	The Governor and Company of the Bank of Ireland
Strategic Global Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Strategic Investment Service	IPAC Portfolio Management (Dublin) Limited	Dexia Banque Internationale á Luxembourg, Dublin Branch
SUMISEI ABN AMRO Umbrella Fund	Sumisei ABN AMRO Fund Managers (Ireland) Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited
Super Hedge Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Super Phoenix Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Super Phoenix Fund II	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Super Venture Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Systeia Event Driven Euro Fund	Systeia Capital Management (Ireland) Limited	BNP Paribas Securities Services, Dublin Branch
Systeia Statistical Arbitrage Euro Fund	Systeia Capital Management (Ireland) Limited	BNP Paribas Securities Services, Dublin Branch
The Alphagen Selector Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services Limited
The Baring Currency Umbrella Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Baring Europe Select Feeder Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Baring Korea Feeder Fund	Baring International Fund Managers (Ireland) Limited	Barings (Ireland) Limited
The Etron Fund	Dolmen Securities Limited	Barings (Ireland) Limited
The ICC Venture Trust Fund	ICC Venture Capital Managers Limited	The Governor & Company of the Bank of Ireland
The Nomura Asset Management Institutional Global Trusts	Nomura Asset Management Ireland Limited	The Governor and Company of The Bank of Ireland

Name of Unit Trust	Name of Management Company	Name of Trustee
The Salomon Euro Bond Fund	Salomon Brothers Asset Management (Ireland) Limited	Citibank International plc, Ireland Branch
The Taj Performance Fund	Fortis Fund Services (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Ulster Bank Fixed Interest Portfolios	Ulster Bank Investment Funds Limited	Northern Trust Custodial Services (Ireland) Limited
Ulster Bank Global Strategy Portfolios	Ulster Bank Investment Funds Limited	Northern Trust Custodial Services (Ireland) Limited
YMR Umbrella Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Yume	Barep Asset Management (Ireland) Limited	Société Générale

Appendix 6

Authorised Designated Investment Companies

Under the powers conferred on the Central Bank of Ireland by the Companies Act, 1990 Part XIII the Bank has authorised, up to 31 December 2002, the following schemes as investment companies designated under Section 256(5) of the Act as companies, which may raise capital by promoting the sale of their shares to the public as follows.

Name of Company	Name of Management Company	Name of Trustee
Abbey National Dublin Investment Fund II plc	Scottish Mutual International Fund Managers Limited	Citibank International plc, Ireland Branch
Abbey National Dublin Investment Fund III plc	Scottish Mutual International Fund Managers Limited	Citibank International plc, Ireland Branch
Abbey National Dublin Investment Fund IV plc	Scottish Mutual International Fund Managers Limited	Citibank International plc, Ireland Branch
Abbey National Dublin Investment Fund plc	Scottish Mutual International Fund Managers Limited	Citibank International plc, Ireland Branch
ABN AMRO Emerging Europe Private Equity Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
ABN AMRO Institutional Funds plc	ABN AMRO Fund Managers (Ireland) Limited	SEI Investments Trustee & Custodial Services (Ireland) Limited
ACM European Enhanced Income Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
ACTA International Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Advance Equity Linked No. 1 plc	—	Citibank International plc, Ireland Branch
AIG International Funds plc	AIG Global Investment Fund Management Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited
AIG Multistrategy Investments plc	AIG Global Investment Fund Management Limited	AIG Global Investment Trust Services Limited
AIG-Hyperion EURIBOR ABS Fund plc	AIG Global Investment Fund Management Limited	J. P. Morgan Bank (Ireland) plc
Al Meezan Commodity Fund plc	—	J. P. Morgan Bank (Ireland) plc
Albion Alternative Strategies plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Alpha Portfolio plc	GT Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
ALPRO Emerging Markets Fund plc	—	PFPC Trustee & Custodial Services Limited
ALPRO Opportunity Fund plc	—	PFPC Trustee & Custodial Services Limited

Name of Company	Name of Management Company	Name of Trustee
ALPRO Technology Fund plc	—	PFPC Trustee & Custodial Services Limited
Alternative Global Investment Opportunities Fund plc	—	J. P. Morgan Bank (Ireland) plc
Alternative Investment Managers Selection plc	—	Bermuda Trust (Dublin) Limited
Alternative Strategies Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Amerindo Investment Advisors International Umbrella Fund plc	—	Barings (Ireland) Limited
AMI Value Protected Fund plc	Cresvale International Asset Management (Dublin) Limited	The Governor & Company of the Bank of Ireland
Andrea Investments plc	—	HSBC Global Investor Services (Ireland) Limited
Andrea/EUR Investments plc	—	HSBC Global Investor Services (Ireland) Limited
Apollo Fund plc	—	Barings (Ireland) Limited
Arbat Arbitrage Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Asian Gateway Fund plc	—	AIB/BNY Trust Company Limited
ASM Alternative Multistrategy Fund plc	—	Bermuda Trust (Dublin) Limited
Aspect Capital Funds plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Athena Investment Capital I plc	—	AIB/BNY Trust Company Limited
Atlantis China Fund plc	—	Barings (Ireland) Limited
Atlantis KOSDAQ Fund plc	Atlantis Investment Management (Ireland) Limited	Barings (Ireland) Limited
Attica 360 Funds plc	—	Dexia Banque Internationale à Luxembourg, Dublin Branch
Auda Classic plc	Auda Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Aureus Fund (Ireland) plc	—	Investor Trust & Custodial Services (Ireland) Limited
AXA First Korean Fund plc	—	Bermuda Trust (Dublin) Limited
AXA New Horizon Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Axent Long Short Quantitative Fund plc	—	Daiwa Europe Trustees Ireland Limited
Axent Long/Short Macro Fund plc	—	Daiwa Europe Trustees (Ireland) Limited

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
Baltics Small Equity Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
Bank of Ireland Liquidity Funds plc	—	Bank of Ireland Trust Services Limited
Banorte Money Market Fund plc	—	PFPC Trustee & Custodial Services Limited
Barclays Global Investors Alternative Investment Funds plc	—	PFPC Trustee & Custodial Services Limited
Barclays Global Investors Secured Equity Fund II plc	—	AIB/BNY Trust Company Limited
Bas — Ex Currency Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
Bear Stearns Funds plc	—	Bear Stearns Bank plc
Benchmark Alternative Investment Fund plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Berkshire KITC Growth Fund plc	—	Bermuda Trust (Dublin) Limited
Berkshire Korea Fund plc	—	Bermuda Trust (Dublin) Limited
BFS Traded Endowment Fund plc	—	The Governor and Company of the Bank of Ireland
BFT Alternative plc	—	Credit Agricole Indosuez Luxembourg S.A., Dublin Branch
BIAM Investments plc	—	J. P. Morgan Bank (Ireland) plc
Blevins Franks International Investments plc	Blevins Franks Managers Ireland Limited	AIB/BNY Trust Company Limited
Bordier Invest Korea Fund plc	Bordier Invest (Ireland) Limited	Clydesdale Trustee and Custodial Services (Ireland) Limited
BT & T Focus 1 Fund plc	BT&T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT & T Focus 3 Fund plc	BT&T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT & T Focus 4 Fund plc	BT&T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT & T LIFE Fund plc	BT&T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT&T Investment Fund plc	BT&T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
CABEI Central American Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
Calfund plc	—	Deutsche International Custodial Services (Ireland) Limited
Capital Balanced Fund plc	—	KEB (Ireland) Custodial Services Limited

Name of Company	Name of Management Company	Name of Trustee
Castle Alternative Invest (International) plc	LGT Fund Managers (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Castle Private Equity (International) plc	LGT Fund Manager (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
CB Vermögensverwaltung plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CDC Alternative Investment Fund plc	—	Daiwa Europe Trustees Ireland Limited
CDC Long/Short European Equity Fund plc	—	PFPC Trustee & Custodial Services Limited
Census Investments plc	—	Citibank International plc, Ireland Branch
Census Investments 3 plc	—	Citibank International plc, Ireland Branch
Census Investments 4 plc	—	Citibank International plc, Ireland Branch
Census Investments 5 plc	—	Citibank International plc, Ireland Branch
Census Investments 6 plc	—	Citibank International plc, Ireland Branch
Census Investments 7 plc	—	Citibank International plc, Ireland Branch
Census Investments 8 plc	—	Citibank International plc, Ireland Branch
Census Investments 9 plc	—	Citibank International plc, Ireland Branch
Census Investments 10 plc	—	Citibank International plc, Ireland Branch
Census Investments 12 plc	—	Citibank International plc, Ireland Branch
Census Investments 14 plc	—	Citibank International plc, Ireland Branch
Census Investments 15 plc	—	Citibank International plc, Ireland Branch
Census Investments 16 plc	—	Citibank International plc, Ireland Branch
Census Investments 18 plc	—	Citibank International plc, Ireland Branch
Census Investments 19 plc	—	Citibank International plc, Ireland Branch
Census Investments 20 plc	—	Citibank International plc, Ireland Branch

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
Census Investments 21 plc	—	Citibank International plc, Ireland Branch
Census Investments 22 plc	—	Citibank International plc, Ireland Branch
Census Investments 23 plc	—	Citibank International plc, Ireland Branch
Census Investments 24 plc	—	Citibank International plc, Ireland Branch
Census Investments 25 plc	—	Citibank International plc, Ireland Branch
Census Investments 28 plc	—	Citibank International plc, Ireland Branch
Census Investments 29 plc	—	Citibank International plc, Ireland Branch
Census Investments 30 plc	—	Citibank International plc, Ireland Branch
Central Asia Regional Growth Fund plc	Global Euro-Asia Investment Management Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
CERCI Fund plc	State Street Ireland Limited	The Governor and Company of the Bank of Ireland
Chesapeake Property Finance Fund II plc	Alex Brown Realty Management Limited	AIB/BNY Trust Company Limited
CICM Global Portfolios plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CICM Midas plc	CICM Fund Management Limited	AIB/BNY Trust Company Limited
CIPM Global Fund plc	—	Barings (Ireland) Limited
CITC Select Fund plc	—	BT Trustee Company (Ireland) Limited
Clarion Fund plc	—	Barings (Ireland) Limited
Close FTSE 100 Income and Growth Fund plc	—	AIB/BNY Trust Company Limited
Controlfida Base Fixed Income Fund plc	Controlfida Management Company Limited	Barings (Ireland) Limited
Controlfida Equity Fund plc	Controlfida Management Company Limited	Barings (Ireland) Limited
Controlfida Investment Fund plc	Controlfida Management Company Limited	Barings (Ireland) Limited
Controlfida SuperSwiss Fund plc	Controlfida Management Company Limited	Barings (Ireland) Limited
Cowen Enterprise Global Healthcare Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
CPR Multi-Fonds plc	—	AIB/BNY Trust Company Limited

Name of Company	Name of Management Company	Name of Trustee
Crown Global Private Equity plc	LGT Fund Managers (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
CTC Global Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Daiwa Alternative Investments plc	—	Daiwa Europe Trustees Ireland Limited
Delfin Global Funds plc	Emerging World Asset Management Limited	Baring (Ireland) Limited
Delphi Funds plc	—	Citibank Trustees (Ireland) Limited
Delta Investment Capital 1 plc	—	AIB/BNY Trust Company Limited
Derivative Market Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Deutsche Balanced Asset Allocation Sterling Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
Deutsche Cash and Money Market Fund plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche Equity Asset Allocation Sterling Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
Deutsche Fixed Income Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche Profunds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
DFD Swan Fund of Funds plc	—	Bermuda Trust (Dublin) Limited
Diamond Sentinel One plc	—	Citibank International plc, Ireland Branch
Dijon Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale
Discovery Fund plc	—	SEI Investments Trustee and Custodial Services (Ireland) Limited
DITC Balanced Fund plc	—	Northern Trust Custodial Services (Ireland) Limited
DKR Funds (Ireland) plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
dSAM Global Value Fund II plc	—	BT Trustee Company (Ireland) Limited
Eastern Gate Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
EDM Investment Funds plc	EDM Asset Management Limited	Northern Trust Custodial Services (Ireland) Limited
Eligis Investments 1 plc	—	Citibank International plc, Ireland Branch

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
Eligis Investments 2 plc	—	Citibank International plc, Ireland Branch
Eligis Investments 3 plc	—	Citibank International plc, Ireland Branch
Espirito Santo Funds of Funds plc	Espirito Santo Capital Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Europe/America Select Private Equity (Ireland) plc	—	Investors Trust & Custodial Services (Ireland) Limited
Europe/Americas Select Private Equity (Ireland) II plc	—	Investors Trust & Custodial Services (Ireland) Limited
European Financial Equities plc	—	J. P. Morgan Bank (Ireland) plc
Falcon Investment Company plc	—	Barings (Ireland) Limited
Faraday Investments 10 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 2 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 21 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 3 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 4 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 5 plc	—	Citibank Trustees (Ireland) Limited
Faraday Investments 6 plc	—	Citibank Trustees (Ireland) Limited
Faraday Investments 7 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 8 plc	—	Citibank International plc, Ireland Branch
Faraday Investments 9 plc	—	Citibank International plc, Ireland Branch
Faraday Investments plc	—	Citibank International plc, Ireland Branch
Fedsure International Global Funds plc	Fedsure International Fund Management Limited	PFPC Trustee & Custodial Services Limited
FFTW Emerging Market Debt Fund plc	—	Investors Trust and Custodial Services (Ireland) Limited
FFTW Global Debt Fund plc	—	Investors Trust and Custodial Services (Ireland) Limited
FFTW Mortgage Libor Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited

Name of Company	Name of Management Company	Name of Trustee
FFTW Mortgage Total Return Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
Fiduciary Emerging Markets Bond Fund plc	Fiduciary International Ireland Limited	Investors Trust & Custodial Services (Ireland) Limited
Financial Equity Plus I plc	—	The Governor & Company of the Bank of Ireland
Financial Equity Plus II plc	—	The Governor & Company of the Bank of Ireland
Financial Equity Plus III plc	—	The Governor & Company of the Bank of Ireland
Focus Absolute Alpha Fund plc	—	PFPC Trustee & Custodial Services Limited
Focus Absolute Return Fund plc	—	Bermuda Trust (Dublin) Limited
Foreign & Colonial Emerging High Yield Investment Company plc	—	The Governor & Co. of the Bank of Ireland
Foreign & Colonial Romanian Investment Company plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
ForexConcept Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
Forsyth Funds plc	—	Bermuda Trust (Dublin) Limited
Fortis Alternative (Dublin) Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Frank Russell Alternative Investment Funds plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Frank Russell Institutional Funds plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Frank Russell Multi-Manager Funds plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Frank Russell Qualifying Investor Fund plc	Frank Russell Investments (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Franklin Floating Rate Fund plc	—	J. P. Morgan Bank (Ireland) plc
Franklin US Long-Short Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
Gamma Capital Funds plc	—	Investors Trust & Custodial Services (Ireland) Ltd
Gartmore Liquidity Fund plc	Northern Trust Investor Services (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Gem International Fund plc	FG Asset Management (Ireland) Limited	Dexia Banque Internationale a Luxembourg, Dublin Branch
Gemini Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
Gensec Umbrella Fund plc	io Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
GLG First Portuguese Investments plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
GLG Global Convertible Fund plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
GLG Global Opportunity Fund plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
GLG Investments II plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
Global Balanced Strategies plc	GLG Partners Asset Management Limited	AIB/BNY Trust Company Limited
Global Trading Fund I plc	Barep Asset Management (Ireland) Limited	Societe Generale
GMO Overseas Funds plc	—	Brown Brothers Harriman Trustee Services (Ireland) Limited
Goldman Sachs Global Alpha Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
Goldman Sachs Global Equity Long/Short plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Global Event Driven plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Global Relative Value plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Global Tactical Trading plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Hedge Fund Portfolio plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Goldman Sachs Institutional Funds plc	—	J. P. Morgan Bank (Ireland) plc
Gordon House Optimal Services Fund plc	—	Bermuda Trust (Dublin) Limited
Green Way Select Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
GROUPAMA Special Opportunities Fund plc	—	PFPC Trustee & Custodial Services Limited
Hambros Commodities Fund plc	Hambros Fund Managers (Ireland) Limited	Barings (Ireland) Limited
Hamilton Lane Private Equity Fund plc	—	Barings (Ireland) Limited
Harmel Investment Fund plc	—	Deutsche International Custodial Services (Ireland) Limited

		Annual Report 2002
Name of Company	Name of Management Company	Name of Trustee
HSBC Equity Growth 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 4 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 5 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 6 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 7 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 8 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Equity Growth 9 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 4 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 5 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 6 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 7 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 8 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus 4 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus 5 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited

Annual Report 2002		
Name of Company	Name of Management Company	Name of Trustee
HSBC International Equity Plus 6 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus 7 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus 8 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Equity Plus I plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC International Technology 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus 111 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus IV plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus V plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus VI plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus VII plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus VIII plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services Limited
HSBC UK Income 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Income 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Income 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
Hunter Hall International Ethical Fund plc	—	Bermuda Trust (Dublin) Limited
I — cap private equity fund plc	—	Daiwa Europe Trustees Ireland Limited
ICFI Corporate Securities Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
ICMOS Pangaea Global Hedge Fund plc	ICMOS Ireland Limited	J.P. Morgan Bank (Ireland) plc
IIBU Fund II plc	—	Barings (Ireland) Limited
IIU Convertible Fund plc	IIU Asset Strategies Limited	Barings (Ireland) Limited
Independent Strategy European Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited

Name of Company	Name of Management Company	Name of Trustee
INVESCO Absolute Return Fund plc	INVESCO Asset Management Ireland Limited	PFPC Trustee & Custodial Services Limited
INVESCO Absolute Return Master Fund plc	INVESCO Asset Management Ireland Limited	PFPC Trustee & Custodial Services Limited
INVESCO AsiaNET Fund plc	INVESCO Asset Management Ireland Limited	J. P. Morgan Bank (Ireland) plc
Investment Strategies Fund plc	F G Asset Management Ireland Limited	Dexia Banque Internationale a Luxembourg, Dublin Branch
InvestmentPlus plc	—	The Governor and Company of the Bank of Ireland
io Global Multi-Manager Fund plc	io Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
io Investors Alternative Investment Strategies plc	io Asset Management Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Irish Iberian Fund plc	AIG Global Investment Fund Management Limited	The Governor & Company of the Bank of Ireland
Irish Life International Global Funds plc	Irish Life International Fund Managers Limited	PFPC Trustee and Custodial Services Limited
J.P. Morgan Fleming Liquidity Funds plc	—	J. P. Morgan Bank (Ireland) plc
JPMF Capital Protection plc	—	HSBC Global Investor Services (Ireland) Limited
KBC Alpha Fund plc	—	PFPC Trustee & Custodial Services Limited
KDA Investment Fund 1 plc	—	Deutsche International Custodial Services (Ireland) Limited
KIME Far East Fund plc	—	Northern Trust Custodial Services (Ireland) Limited
Kleinwort Benson Libor Plus 200 Fund plc	Kleinwort Benson Capital Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Kleinwort Benson Libor Plus Fund plc	Kleinwort Benson Capital Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Kleinwort Benson Symmetric Strategy Fund plc	—	J. P. Morgan Bank (Ireland) plc
Korea Bond Fund Plc	—	Deutsche International Custodial Services (Ireland) Limited
Korea CB Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
Korea Special Opportunities Fund plc	Oriens Capital (Ireland) Limited	Barings (Ireland) Limited
Laredo Umbrella Fund plc	—	Fortis Global Custody Management and Trustee Services (Ireland) Limited

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
Lazard Diversified Strategies Fund plc	—	PFPC Trustee & Custodial Services Limited
Lazard Emerging Managers Fund plc	—	PFPC Trustee & Custodial Services Limited
Lazard Strategic Yield Fund plc	Lazard Investment Funds Limited	The Governor and Company of the Bank of Ireland
Legal & General European Extra Growth III plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General European Extra Growth IV plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General European Extra Growth plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General European Growth II plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General Fixed Rate 2 plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General Fixed Rate plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General Income and Growth plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General International Growth plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General U.K. Performance II plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Performance V plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Extra Growth II plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Extra Growth III plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Extra Growth plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Performance III plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Performance IV plc	—	HSBC Global Investor Services (Ireland) Limited
Legal & General UK Performance plc	—	HSBC Global Investor Services (Ireland) Limited
LeggMason Investors 20/20 Hindsight plc	—	Deutsche International Custodial Services (Ireland) Limited
LeggMason Investors Fixed Income plc	—	Deutsche International Custodial Services (Ireland) Limited

Name of Company	Name of Management Company	Name of Trustee
LeggMason Investors Safeguard plc	—	Deutsche International Custodial Services (Ireland) Limited
LeggMason Investors Superchip plc	—	Deutsche International Custodial Services (Ireland) Limited
MAN AHL Alpha plc	Man Fund Management Limited	J. P. Morgan Bank (Ireland) plc
MAN AHL Diversified plc	Man Fund Management Limited	J. P. Morgan Bank (Ireland) plc
Man-Fidex Diversified plc	Man Fund Management Limited	J. P. Morgan Bank (Ireland) plc
Marriott Singer Investment Funds plc	Singer & Friedlander Total Asset Management Limited	Barings (Ireland) Limited
Matrix Fund Company plc	—	Bermuda Trust (Dublin) Limited
Maxime Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale
MCIV Multicurrency Funds plc	State Street Ireland Limited	The Governor & Company of the Bank of Ireland
Medinvest plc	—	Fortis Global Custody Management and Trustee Services (Ireland) Limited
MeesPierson Gonet Absolute Return Fund of Funds plc	MeesPierson Gonet Fund Management Limited	Fortis Global Custody Management & Trustee Securities (Ireland) Limited
Meliora Umbrella Fund plc	Meliora Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Mellon Global Alternative Investments Fund plc	Mellon Global Management Limited	Daiwa Europe Trustees (Ireland) Limited
Merrill Lynch Defined Income and Growth plc	—	Citibank International plc, Ireland Branch
Merrill Lynch Defined Returns II plc	—	Citibank International plc, Ireland Branch
Merrill Lynch Defined Returns plc	—	Citibank International plc, Ireland Branch
Merrill Lynch Japan Enhanced Performance plc	—	Citibank International plc, Ireland Branch
Millennium Arbitrage Fund plc	—	KEB (Ireland) Custodial Services Limited
Millennium Global Equity Funds plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Millennium Master Fund plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
MIO Compass (Ireland) Investment Funds plc	—	Barings (Ireland) Limited
Mont Blanc Trading plc	Barep Asset Management (Ireland) Limited	Societe Generale

Annual Report 2002		
Name of Company	Name of Management Company	Name of Trustee
Morgan Stanley Multi-Strategy Fund plc	—	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Multinvest plc	—	HSBC Global Investor Services (Ireland) Limited
New Energy and Power Investment Company plc	—	AIB/BNY Trust Company Limited
North American Income Fund plc	—	Investors Trust & Custodial Services (Ireland) Limited
North Stock Company plc	—	Deutsche International Custodial Services (Ireland) Limited
Northern Trust Global Funds plc	Northern Trust Fund Managers (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Northern Trust Multi-Manager Fund plc	Northern Trust Fund Managers (Ireland) Limited	Northern Trust Custodial Services (Ireland) Limited
Omam Alternative Strategies plc	Omam Management Company Limited	The Governor and Company of the Bank of Ireland
Omega Trust Umbrella Fund plc	—	Bermuda Trust (Dublin) Limited
Optimal Multiadvisors Ireland plc	—	Bermuda Trust (Dublin) Limited
Oriens Korea Bond Fund plc	Oriens Capital (Ireland) Limited	Barings (Ireland) Limited
PAM Alternative Investments plc	Petercam Management Ireland Limited	Deutsche International Custodial Services (Ireland) Limited
Paragon Income & Growth 2 plc	—	HSBC Global Investor Services (Ireland) Limited
Paragon Income and Growth 1 plc	—	HSBC Global Investor Services (Ireland) Limited
Pareto Partners Umbrella Fund plc	Pareto Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Parus Fund plc	—	Barings (Ireland) Limited
Payden & Rygel Professional Funds plc	—	Mellon Trustees (Dublin) Limited
Pioneer DM CashFonds plc	Pioneer Global Investments Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Global Opportunities plc	Pioneer Alternative Investments Limited	Investors Trust & Custodial Services (Ireland) Limited
Poalim Global Multi-Manager 20 plc	Poalim Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Poalim Global Multi-Manager 35 plc	Poalim Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Poalim Global Multi-Manager 50 plc	Poalim Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited

Name of Company	Name of Management Company	Name of Trustee
Poalim Global Multi-Manager 70 plc	Poalim Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Poalim Global Multi-Manager 90 plc	Poalim Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Premier Equity and Growth Fund 2 plc	—	Citibank International plc, Ireland Branch
Premier Equity and Growth Fund plc	—	Citibank International plc, Ireland Branch
Premier Pacific Income Fund plc	—	J. P. Morgan Bank (Ireland) plc
Prime Korea Fund plc	—	AIB/BNY Trust Company Limited
Prudential-Bache International Futures Fund F plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund A plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund B plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund C plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund D plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund E plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Quaich Investments 2 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 3 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 4 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 5 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 6 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 7 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 8 plc	—	Citibank International plc, Ireland Branch
Quaich Investments 9 plc	—	Citibank International plc, Ireland Branch
Quaich Investments plc	—	Citibank International plc, Ireland Branch

Annual Report 2002		
Name of Company	Name of Management Company	Name of Trustee
Quetzal High Yield Fund plc	Emerging World Asset Management Limited	Barings (Ireland) Limited
RBE Ijara Fund plc	—	Barings (Ireland) Limited
Reims Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale
Relative Value Fund plc	Scottish Value Management (Ireland) Limited	AIB/BNY Trust Company Limited
Romanian Growth Fund plc	Global Euro-Asia Investment Management Limited	Bermuda Trust (Dublin) Limited
Roy G Niederhoffer Fund (Ireland) plc	R G Niederhoffer Capital Management (Ireland) Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited
Salomon Brothers Funds plc	—	PFPC Trustee and Custodial Services Limited
Santander Selection plc	—	Bermuda Trust (Dublin) Limited
SBC CAPM Strategies plc	—	The Governor & Company of the Bank of Ireland
Schroder Cumulative Private Equity Funds plc	Schroder Investment Management (Ireland) Limited	Barings (Ireland) Limited
Schroder Private Equity Funds plc	Schroder Investment Management (Ireland) Limited	Barings (Ireland) Limited
Schroder Russian Region Fund plc	Schroder Investment Management (Ireland) Limited	J. P. Morgan Bank (Ireland) plc
Schroder Structured Income and Growth plc	Schroder Investment Management (Ireland) Limited	Citibank International plc, Ireland Branch
Scottish Widows Stock Market Growth 2 plc	—	HSBC Global Investor Services (Ireland) Limited
Scottish Widows U.K. Stock Market Growth plc	—	HSBC Global Investor Services (Ireland) Limited
Selected European Equities Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
SelectHedge Diversified Umbrella Fund plc	—	BNP Paribas Securities Services, Dublin Branch
Singer & Friedlander High Income Fund plc	Singer & Friedlander Total Asset Management Limited	HSBC Global Investor Services (Ireland) Limited
Skandia Transparent Investment Management Funds plc	Skandia Fund Management (Ireland) Limited	AIB/BNY Trust Company Limited
Smith Barney Campbell Financial, Metals, and Energy Fund plc	Smith Barney (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Smith Barney Sheridan Interestplus Fund plc	Smith Barney (Ireland) Limited	PFPC Trustee & Custodial Services Limited

Name of Company	Name of Management Company	Name of Trustee
Smith Barney SJÖ Global Diversified Fund plc	Smith Barney (Ireland) Limited	Investors Trust & Custodial Services (Ireland) Limited
Smith Barney Stonebrook FX Fund plc	—	PFPC Trustee & Custodial Services Limited
South American Income Fund plc	Deutsche International Corporate Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
St Andrew ' s Investment Company plc	—	Citibank International plc, Ireland Branch
St. Andrew ' s Investment Company 2 plc	—	Citibank International plc, Ireland Branch
St. Andrew ' s Investment Company 3 plc	—	Citibank International plc, Ireland Branch
Star MM Funds plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
Stryx Funds plc	Seilern Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Sunrise Fund plc	—	Barings (Ireland) Limited
SVM Highlander Fund plc	Scottish Value Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
SVM Saltire Fund plc	Scottish Value Management (Ireland) Limited	PFPC Trustee & Custodial Services Limited
Swiss Bank Corporation Derivative Portfolios plc	—	J. P. Morgan Bank (Ireland) plc
Talorcan Equity Pairs Plus Fund plc	—	Barings (Ireland) Limited
Talorcan Forex Fund plc	—	Barings (Ireland) Limited
Talorcan Global Fund plc	—	Barings (Ireland) Limited
Technology 2000 Fund plc	—	Investor Trust & Custodial Services (Ireland) Limited
Templeton Global Long-Short Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
The 3D Fund plc	—	J. P. Morgan Bank (Ireland) plc
The Antiope Alpha Fund plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
The Baring Umbrella Fixed Income Fund plc	Baring Mutual Fund Management (Ireland) Limited	Barings (Ireland) Limited
The East Europe Frontiers Fund plc	AIM Global Management Company Limited	Barings (Ireland) Limited
The Emerging Markets New Economy Fund Plc	—	Dexia Banque Internationale a Luxembourg, Dublin Branch

Annual Report 2002

Name of Company	Name of Management Company	Name of Trustee
The GNI Global Financial Fund Ireland plc	GNI Fund Management (Ireland) Limited	Barings (Ireland) Limited
The Golden Gate Fund plc	Kyte Fund Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
The Hansberger Global Fund plc	Hansberger Global Investors Limited	J. P. Morgan Bank (Ireland) plc
The Investec Global Investment Portfolios plc	Investec Asset Management Ireland Limited	J.P. Morgan Bank (Ireland) plc
The London Market Fund plc	Aberdeen International Management Ireland Limited	The Governor and Company of the Bank of Ireland
The Paribas Multi-Manager Global Fund plc	—	Deutsche International Custodial Services (Ireland) Limited
The Philippe Fund plc	—	Northern Trust Custodial Services (Ireland) Limited
The Siberian Investment Company plc	—	Barings (Ireland) Limited
The Stryx Global Fund plc	Seilern Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
The US\$ Global Currency Fund plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management & Trustee Services (Ireland) Limited
The Yellow Sea Investment Company plc	SEI Investments-Global Fund Services Limited	SEI Investments-Trustees and Custodial Services (Ireland) Limited
Themis Global Index Funds plc	Aberdeen International Management Ireland Limited	The Governor and Company of the Bank of Ireland
Topiary Fund (Ireland) plc	—	Fortis Global Custody Management & Trustee Services (Ireland) Limited
UAL International Funds plc	—	J. P. Morgan Bank (Ireland) plc
Ulsan Fund plc	—	KEB (Ireland) Custodial Services Limited
US Value Investment Company plc	Singer & Friedlander Total Asset Management Limited	J. P. Morgan Bank (Ireland) plc
W.P. Stewart (Distributor) Funds plc	W.P. Stewart Fund Management Limited	Bermuda Trust (Dublin) Limited
Waverley Stock Market Growth 2 plc	—	HSBC Global Investor Services (Ireland) Limited
Waverley Stock Market Growth 3 plc	—	HSBC Global Investor Services (Ireland) Limited
Waverley Stock Market Growth plc	—	HSBC Global Investor Services (Ireland) Limited
West AM Navigation Multi-Strategy Fund plc	—	PFPC Trustee & Custodial Services Limited
World Equity Fund Portfolio (Ireland) plc	—	Investors Trust & Custodial Services (Ireland) Limited

Name of Company	Name of Management Company	Name of Trustee
Worldwide Opportunity Fund plc	—	AIB/BNY Trust Company Limited
WP Stewart Global Funds plc	WP Stewart Fund Management Limited	Bermuda Trust (Dublin) Limited
Yamaichi International Investments plc	—	BT Trustee Company (Ireland) Limited
Yasuda Portfolio Fund plc	—	Citibank International plc, Ireland Branch

Appendix 7

Authorised Non-Designated Investment Companies

Under the powers conferred on the Central Bank of Ireland by the Companies Act, 1990, Part XIII, the Bank has authorised, up to 31 December 2002, the following schemes as non-designated investment companies under Section 256 of the Act. These companies may not raise capital by promoting the sale of their shares to the public.

Name of Company
Aesthetic Investments Fund plc
Asia Ultra Fund plc
DB Foreign Lease Limited
KI Limited
Korea Gearing Fund plc
Korea Index Fund plc
Korea Plus Fund plc
Lauterberg Securities Trading Company Limited
Vega Invest Fund plc

Appendix 8

Authorised Investment Limited Partnerships

Under the powers conferred on the Central Bank of Ireland by the Investment Limited Partnerships Act, 1994 the Bank has authorised, up to 31 December 2002, the following schemes as investment limited partnerships under Section 8 (6) of the Act.

Name of Partnership	Name of General Partner	Name of Custodian
Hibernia Development Capital Partners I	Hibernia GP Limited	Deutsche International Custodial Services (Ireland) Limited
Hibernia Development Capital Partners II	Hibernia GP Limited	Deutsche International Custodial Services (Ireland) Limited

Appendix 9

Undertakings for Collective Investment in Transferable Securities (UCITS) Authorised in Other Member States of the European Union and Marketing in Ireland

The following schemes, which have been authorised in other Member States of the European Union, have notified the Central Bank of Ireland of their intention to market in Ireland. They have complied with Part X of the European Communities (Undertakings for Collective Investment in Transferable Securities) Regulations, 1989 (the Regulations). At least two months have elapsed since that compliance and they are, therefore, entitled to market shares or units of their schemes in this country.

UCITS

ABN AMRO Funds	Fidelity Funds
Aberdeen Atlas Fund	Fidelity Funds II
Aberdeen Global	Fidelity Investment Funds
AIB Govett American General Fund	Fidelity Institutional Funds ICVC
AIB Govett UK Equity General Fund	Five Arrows Portfolio Fund
AIB Govett European General Fund	Fleming Funds
AIB Govett Corporate Bond Fund	Fleming Series II Funds
AIB Govett Japan General Fund	Franklin Templeton Investment Funds
AIB Govett FTSE Mid 250 Index Fund	Guinness Flight Blue Chip Portfolio Trust
AIB Govett American Strategy Fund	Guinness Flight Emerging Companies Trust
AIB Govett European Strategy Fund	Henderson Horizon Fund
AIB Govett Pacific Strategy Fund	HSBC Asset Management Investment Funds SICAV
AIB Govett Greater China Fund	HSBC Global Investment Funds
AIB Govett International Growth Fund	INVESCO European Warrant Fund
AIB Govett UK Smaller Companies Fund	INVESCO GT SICAV
AIB Govett Global Strategy Fund	INVESCO Maximum Income Fund
AIB Govett Latin America Fund	JPMorgan Fleming Lux Funds
AIB Govett Asia Pacific Fund	JP Morgan Fleming Investment Funds
Asia Super Growth Fund	JPMorgan Fleming Liquidity Funds
Asia Tiger Warrant Fund	Merrill Lynch International Investment Funds
Baillie Gifford UK and Balanced Funds ICVC	Mercury World Bond Fund
Baillie Gifford Overseas Growth Fund ICVC	Morgan Stanley SICAV
Balzac Umbrella Index	Save and Prosper American Income and Growth Fund
Barclays Investment Funds (Luxembourg)	Save and Prosper American Smaller Companies Fund
Baring American Growth Trust	Save and Prosper Capital Units
Baring Convertibles Trust	Save and Prosper Commodity Share Fund
Baring Eastern Trust	Save and Prosper Eastern Discovery Fund
Baring Equity Income Trust	Save and Prosper Energy Industries Fund
Baring Europe Trust	Save and Prosper European Growth Fund
Baring European Growth Trust	Save and Prosper European Income and Growth Fund
Baring German Growth Trust	Save and Prosper Financial Securities Fund
Baring Global Bond Trust	Save and Prosper Gilt and Fixed Interest Income Fund
Baring Global Growth Trust	Save and Prosper Gold and Exploration Fund
Baring Japan Growth Trust	Save and Prosper International Bond Fund
Baring Japan Sunrise Trust	Save and Prosper Japan Growth Fund
Baring Korea Trust	Save and Prosper Japan Smaller Companies Fund
Baring Portfolio Fund	Save and Prosper New Technology Fund
Baring Sterling Corporate Bond Trust	Save and Prosper Scotbits
Baring UK Growth Trust	Save and Prosper Select International Fund
Baring UK Smaller Companies Trust	Save and Prosper South East Asia Growth Fund
CMI Managed International Fund	Save and Prosper US Growth Fund
DB Funds	Save and Prosper Universal Growth Fund
DB Portfolio	Universe, The CMI Global Network Fund
Dresdner Global Distributor Fund	Von Ernst Global Portfolio
Dresdner Global Strategies Fund	

Appendix 10

Foreign Collective Investment Schemes (other than UCITS) Marketing in Ireland

The following collective investment schemes have been approved by the Central Bank to market in Ireland under Section 256(8) of the Companies Act, 1990 and Section 9 of the Unit Trusts Act, 1990.

NAME	
AHL Guaranteed Capital Markets Limited	MAP Guaranteed Limited
AIB Grofund Currency Funds Limited	Mellon Newton Universal Growth Funds Limited
Alliance & Leicester International Fund plc	Mercury Sterling Fund
Athena Guaranteed Currencies Limited	Mercury World Trader Fund
Bank of Ireland British Overseas Trust	— European Equity Bull Trader Fund
Bank of Ireland Capital Growth Trust	Mercury World Trader Fund
Bank of Ireland Global Funds Limited	— Japanese Equity Bull Trader Fund
Bank of Ireland International Portfolio	Mercury World Trader Fund
Bank of Ireland Worldwide Opportunity Trust	— UK Equity Bull Trader Fund
Barclays Investment Funds (Channel Islands) Limited	Mercury World Trader Fund
Barclays Unicorn Multicurrency Fund Limited	— US Equity Bull Trader Fund
Emerald Equity Company plc	Merrill Lynch International Bond Fund
Fidelity Currency Funds Limited	Merrill Lynch Offshore Balanced Portfolio Fund
Five Arrows Currency Fund Limited	Merrill Lynch Offshore Growth Portfolio
Five Arrows International Bond Fund Limited	Mint Guaranteed Currencies 2001 Limited
Five Arrows International Investment Funds	(Mint Guaranteed Currencies 2001)
Five Arrows International Reserves Limited	Mint Guaranteed Global Financial 2003 Limited
Gartmore Capital Strategy Fund Limited	Old Mutual International Funds Limited
Govett Securities & Investments Limited	Old Mutual International Total Income Fund Limited
Investec Global Strategy Fund	The Royal Bank of Scotland International Money Market Funds Limited
Investec International Accumulation Fund Limited	Ulster Bank Global Funds plc
Irish Permanent International Funds plc	
Lloyds TSB Money Fund Limited	

Appendix 11

Moneybrokers, as at 31 December 2002, which have been authorised under Section 110 of the Central Bank Act, 1989

Addano Limited (trading as Davy Moneybrokers)
Caradas Currency Brokers Limited
Davy International
EBS Service Company Limited
Money Markets International Limited
NCB Moneybrokers Limited
Reuter Transaction Services Limited

Appendix 12

Bureaux De Change Authorised in the State

Listed hereunder are all entities authorised under Section 29 of the Central Bank Act, 1997, to carry on bureau de change business as at end December 2002.

- 1. AIB CURRENCY BUREAUX LIMITED
- 2. FEXCO
- 3. THOMAS COOK RETAIL LIMITED
- 4. JOE WALSH TOURS BUREAU DE CHANGE (FOREX) LIMITED
- 5. FIRST RATE ENTERPRISES LIMITED
- 6. AMERICAN EXPRESS INTERNATIONAL INC
- 7. CITIBANK NA (LONDON BRANCH)
- 8. EMEX-CHANGE
- 9. ALISON RICE
- 10. BOLAND KINSALE
- 11. INTERNATIONAL CURRENCY EXCHANGE PLC
- 12. LINHILL LIMITED
- 13. MARGARET BURNS
- 14. EUROSTER EXCHANGES LIMITED

Appendix 13

Memoranda of Understanding to which the Bank is a Signatory as at 31 December 2002

- Authority**
- The Banking and Finance Commission (Belgium)
 - Finanstilsynet (Denmark)
 - The Commission Bancaire and the Comite des Etablissements de Credit (France)
 - Bundesaufsichtsamt für das Kreditwesen (Germany)
 - Banca d'Italia (Italy)
 - Institut Monetaire Luxembourgeois (Luxembourg)
 - De Nederlandsche Bank NV (Netherlands)
 - Financial Services Authority (United Kingdom)
 - The Hong Kong Securities and Futures Commission
 - The Members of the Forum of European Securities Commissions (FESCO)*
 - The Isle of Man Financial Supervision Commission

**Subsequently replaced by the Committee of European Securities Regulators (CESR).*