

# CENTRAL BANK OF IRELAND

## Annual Report

Report of the Central Bank of Ireland  
for the year ended 31 December 2000

*Printed by:*

Cahill Printers Ltd., East Wall Road, Dublin 3.

*Origination and Design by:*

Keystrokes Ltd., Brunswick House, Brunswick Place, Dublin 2.

Paper: 100% Chlorine Free Product.

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Central Bank of Ireland

27 April 2001

Dear Minister,

I have the honour to enclose herewith the Proceedings and Annual Accounts of the Central Bank of Ireland for the year ended 31 December 2000.

Yours faithfully,  
Maurice O'Connell,  
Governor.

The Minister for Finance

# Board of Directors



Maurice O'Connell  
*Governor*



David Begg



Donal Byrne



Gerard Danaher



Friedhelm Danz



Roy Donovan



John Hurley



Jim Nugent



Martin O'Donoghue



Eoin Ryan



Brian Halpin  
*Secretary*



Liam Barron  
*Director General*

# The Board of Directors of the Bank

	Maurice O'Connell, <i>Governor</i>	
David Begg	Donal Byrne	Gerard Danaher
Friedhelm Danz	Roy Donovan	John Hurley
Jim Nugent	Martin O'Donoghue	Eoin Ryan

## Management and Organisation

	<i>Director General</i> Liam Barron	
	<i>Function</i>	<i>Head of Function</i>
<i>Deputy Director General and Secretary</i> Brian Halpin	<ul style="list-style-type: none"> <li>– Financial Control</li> <li>– Financial Markets</li> <li>– Payments and Securities Settlements</li> </ul>	<ul style="list-style-type: none"> <li>– Pat Treanor</li> <li>– Tony Grimes</li> <li>– Dermot Maher</li> </ul>
<i>Assistant Director General</i> George Reynolds	<ul style="list-style-type: none"> <li>– European Monetary Affairs and International Relations</li> </ul>	<ul style="list-style-type: none"> <li>– John O'Leary</li> </ul>
<i>Assistant Director General</i> Gerry McGrath	<ul style="list-style-type: none"> <li>– Corporate Services</li> <li>– Human Resources and Planning</li> <li>– Information Systems</li> </ul>	<ul style="list-style-type: none"> <li>– Hugh O'Donnell</li> <li>– Jim Cummins</li> <li>– Pádraig Ó Conaill</li> </ul>
<i>Assistant Director General</i> Louis O'Byrne	<ul style="list-style-type: none"> <li>– Currency Issue</li> <li>– Currency Production</li> <li>– Engineering</li> </ul>	<ul style="list-style-type: none"> <li>– Michael Farren</li> <li>– Daragh Cronin</li> <li>– Declan O'Brien</li> </ul>
<i>Assistant Director General</i> Michael Casey	<ul style="list-style-type: none"> <li>– Economic Analysis, Research and Publications</li> <li>– Monetary Policy and Statistics</li> </ul>	<ul style="list-style-type: none"> <li>– Tom O'Connell</li> <li>– Frank Browne</li> </ul>
<i>Assistant Director General</i> Liam O'Reilly	<ul style="list-style-type: none"> <li>– Banking Supervision</li> <li>– Securities and Exchanges Supervision</li> <li>– IFSC and Funds Supervision</li> </ul>	<ul style="list-style-type: none"> <li>– Adrian Byrne</li> <li>– Pat Neary</li> <li>– Michael Deasy</li> </ul>
	<i>Internal Audit</i>	<ul style="list-style-type: none"> <li>– Donal Cahalane</li> </ul>



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# Foreword

The past year has been one of consolidation for the Central Bank of Ireland following the adoption of the euro as the single currency by eleven participating EU member states at the beginning of the previous year. The principal core objectives of the Bank have remained essentially unchanged. These objectives include contributing to the formulation and implementation of monetary policy in order to ensure stable prices, the promotion of financial stability through oversight of the Irish financial system and institutions and meeting the public's requirements of banknotes and coins. The adoption of the euro as the single currency has meant that, since the start of 1999, there is a single monetary policy for all countries in Economic and Monetary Union. Decisions on monetary policy are taken by the Governing Council of the European Central Bank which comprises the Executive Board of the ECB and the Governors of the participating National Central Banks.

Over the last year, the Central Bank participated fully in the activities that membership of the European System of Central Banks implies under the terms of the Maastricht Treaty. As Governor, I attended the twice-monthly meetings of the Governing Council of the European Central Bank where assessments and decisions are made regarding monetary policy for the euro area. Bank staff participated with staff from other National Central Banks and the ECB in the committee structure established by the Governing Council to assist it in its work. There are thirteen such committees and a number of sub-committees, working groups and task forces that span diverse fields pertinent to the activities of the Governing Council.

An important focus of attention for the past year and for this year is the production of euro banknotes and coin which will be introduced on 1 January 2002. All NCBs are charged with the task of supplying a sufficient quantity of euro banknotes and coin to replace their domestic currencies. Production of euro notes began here in April 2000; coin production has been under way since September 1999.

The Central Bank continued to manage actively its investment portfolio of almost €8 billion throughout the year. It also managed a medium-sized portfolio of foreign assets on behalf of the ECB on an agency basis. The Bank continued to operate the real-time gross settlement system for large-value interbank payments. This system is linked to similar systems in other EU Member States and to the ECB payments mechanism and constitutes the basic infrastructure for euro-area monetary policy; a number of administrative changes relating to the management of the linked system were implemented during the year. The main focus of economic research last year was inflation analysis, the transmission mechanism of monetary policy and econometric modelling with the object of improving the basis for informing monetary policy decisions.

The past year has also been quite challenging for the supervisory department of the Bank. The number of financial institutions supervised by the Bank at end-year was just over nine hundred, of which eighty-two were credit institutions. In addition, there were close to two thousand four hundred collective investment schemes authorised by the Bank.

The high level of credit growth continued to be the main prudential concern in 2000. The Bank strengthened its supervisory oversight by further refinement of stress testing and assessment of the exposure of the banking system to macro risks. The Bank's role in, and assessment of, financial stability in Ireland is set out later in this report. The Comptroller and Auditor General reported favourably on the Bank following an efficiency audit of the supervisory functions. The International Monetary Fund also reported that the overall framework of prudential regulation and supervision showed a high degree of observance of international standards and codes.

In February 2001 the Government approved proposals for restructuring arrangements for the supervision of the financial sector. These proposals envisage a single regulatory authority within the Central Bank framework. The priority now is to get the new arrangements working efficiently on the ground.

The Annual Accounts are presented later in this report. The Bank's profits from its operations during the year amounted to €520 million, €272 million more than in 1999. This large increase in profits was divided between higher income from monetary policy operations and interest and gains from portfolio investment activities. Operating costs increased by €9 million mainly due to increased staff numbers in the currency production and financial supervisory areas.

The Bank had a successful year in the management of its investment portfolio of €8 billion. The return on these assets was 6.84 per cent compared with 3.21 per cent in 1999. The return in 2000 was marginally in excess of that on the benchmark portfolio used for performance measurement.

During the year, the Central Bank's staff demonstrated its ability and commitment in meeting many and varied challenges at a time of great change. I would like to pay tribute to the entire staff for their diligence and dedication during the year and I look forward to their continuing support in the coming year.

Maurice O'Connell

Governor

# Economic Overview

Through the year 2000, Ireland's economic growth continued the robust performance that has been achieved since the mid 1990s. The growth in Gross National Product (GNP) is estimated to have been about 9<sup>3</sup>/<sub>4</sub> per cent in 2000. This represents an increase on the preceding years and compares with average growth of about 8 per cent a year since 1994. As capacity constraints begin to make an impact, economic growth this year is expected to fall back to a still high rate of 6 per cent. This prediction also assumes a sharp, but short-lived, slowdown in the US economy and no further worsening of the specific problems currently affecting the agricultural sector. If these assumptions prove to be too optimistic, economic growth could be significantly weaker.

As for previous years, a considerable part of growth last year was again due to increased employment. At the end of 2000, employment was about 40 per cent higher than in 1994. Strong investment growth over this period contributed to an expansion of the capital stock – about 3<sup>3</sup>/<sub>4</sub> per cent a year, with a stronger performance of about 6 per cent in 2000. While this represents a satisfactory rate of expansion of the capital stock over the past seven years, the larger employment increases imply a slight reduction in the degree of capital intensity in the economy. In addition, there has been a welcome rise in productivity growth, i.e. the increase in output per unit of labour and capital.

Consistently strong economic growth since 1994 has resulted in a large rise in the employment rate of the population between the ages of 15 and 64 – from around 54 per cent in 1994 to an estimated 65 per cent in 2000. This has been associated with a dramatic fall in unemployment from more than 14 per cent in 1994 to just over 3<sup>3</sup>/<sub>4</sub> per cent last year. Unemployment here is now significantly below the rate that would in the normal course be consistent with satisfactory price developments. The economy is operating above potential and this will not change while growth remains above the medium-term sustainable rate of around 5 per cent.

Against this background of strong economic growth, coupled with a number of other factors – high oil prices, a relatively weak euro and an increase in indirect taxes on tobacco in the December 1999 budget, inflation picked up strongly last year with consumer prices increasing by 5<sup>1</sup>/<sub>2</sub> per cent on average. This surge in inflation followed a three year period when the average inflation rate was less than 2 per cent a year. On the basis of the harmonised measure of price inflation that became available in 1998, Ireland's cumulative inflation rate since then has exceeded that of the euro area by 5.4 percentage points.

While inflation has accelerated strongly, the full extent of domestic inflationary pressures may not be captured in the measured inflation rate. Asset prices have continued to escalate at a disturbing rate. In addition, congestion problems have intensified as increasing demands are placed on the country's infrastructure. The rise in asset prices – housing and property prices generally – has been associated with a substantial increase in borrowing by the household and corporate sectors.

There is a risk of relying too much on automatic market mechanisms to correct overheating tendencies in the economy, especially as wages and prices may not be as flexible as they should

be. It is a fact of life that wages and prices tend to have a momentum of their own that can give rise to overshooting. This danger is particularly relevant, since the nominal exchange rate is no longer available as a corrective mechanism. It would be inadvisable to rely on a weakening of competitiveness to slow down growth. Over the past three years, about three quarters of economic growth has been due to strong domestic demand, with only about one quarter accounted for by net exports. It follows that policies which are intended to reduce the risk of overheating should be directed in particular towards limiting growth in domestic demand. In this respect, fiscal policy, in particular, should be seen as an appropriate means of slowing economic growth to a more sustainable rate.

### **Euro area**

Turning to the broader international scene, there was a strong expansion in economic activity in 2000 in the euro area with the growth in GDP for the year, at just under 3.5 per cent, the highest recorded in a decade. Economic activity, which had started to recover in the second half of 1999, remained relatively strong in the first half of 2000 before slowing slightly thereafter. While the initial impetus to growth in the autumn of 1999 came from an improvement in global economic and financial conditions, the strength of the euro area economy in 2000 was driven mainly by the growth in domestic demand. The low interest rate environment and strong growth in employment, which contributed to increases in income, combined to provide solid support to consumer spending. The strengthening of economic activity allied to relatively high levels of capacity utilisation also served to boost investment. Reinforced by the positive influence of external developments, consumer and business confidence indicators rose to record highs around the middle of the year. Following the strong growth of the first half of the year, however, there was a considerable slowdown in the pace of expansion in the second half of 2000. The loss of purchasing power associated with the prolonged and steep increase in oil prices dampened growth somewhat in the second half of the year. However, on the whole, the slowdown in activity was modest.

The year 2000 also saw a noticeable rise in euro area inflation which, measured on a harmonised basis, averaged 2.4 per cent last year, compared with 1.1 per cent in 1999. The upward pressure on prices came mainly from oil price developments and exchange rate changes rather than the increase in economic activity or domestic factors in general. It is estimated that the increase in energy prices contributed more than 1 percentage point to overall inflation in 2000.

The behaviour of the monetary aggregates added to concerns. The three-month average annual increase in the money stock M3 remained at around 6 per cent almost continuously throughout the first half of 2000. With private sector credit growing at around 10 per cent, money and credit data suggested that abundant liquidity was accumulating. The evidence from both pillars of the ECB's operating strategy suggested that there were increased risks to medium-term price stability over the course of 2000. Strong money supply and credit growth, significant oil price increases and a prolonged phase of depreciation of the exchange rate added, in a period of strong economic growth, to inflationary pressures over the medium term. Against this background, interest rates increased. Over the course of 2000, the Governing Council of the ECB reacted to

these perceived risks to price stability by raising interest rates on six occasions, leading to a cumulative increase in interest rates of 1.75 percentage points.

In the currency markets, the euro declined against the currencies of the euro area's major trading partners for most of 2000 before rebounding towards the end of the year. The declining trend of the euro was temporarily interrupted in early summer, but downward pressure resumed subsequently and persisted until the autumn. This brought the euro to new lows in September against other major currencies, despite evidence of continuing strong activity in the euro area and a narrowing of interest rate and bond yield differentials vis-à-vis the US.

As the weakness of the euro was well out of line with economic fundamentals, there was concern that this might lead to problems for the international economy generally. In recognition of this and at the ECB's initiative, the monetary authorities of the US, Japan, the UK and Canada joined the ECB in concerted intervention in the foreign exchange markets in September. Amid some concerns about the global and domestic repercussions of the exchange rate of the euro, the Eurosystem intervened again unilaterally in support of the euro in November. Towards the end of the year, the euro staged a recovery amid growing signs of economic slowdown in the US and Japan and relatively healthy growth prospects for the euro area. At the end of 2000, the nominal effective exchange rate index for the euro was only 2 per cent lower than at the beginning of the year.

In the early months of 2001 the main focus has been on the downturn in the US economy and the steps being taken by the US authorities to speed up recovery. In the new environment of increased uncertainty, the ECB adopted a wait-and-see policy before deciding to reduce interest rates. While the US downturn will affect growth in the euro area, this should not be unduly significant. Most official estimates of growth for this year are of the order of  $2\frac{1}{2}$  to  $2\frac{3}{4}$  per cent.



# Cuntas

Bliain comhdhlúthaithe ab ea an bhliain dheiridh seo do Bhanc Ceannais na hÉireann tar éis d'aon bhall stát déag den AE an euro a ghlacadh mar airgeadra aonair ag tús na bliana roimhe sin. Níl aon bhunathrú tagtha ar phríomhchuspóirí lárnacha an Bhainc. Ag díriú ar chuid de na cuspóirí seo, beidh an Banc ag cur le foirmlíú agus feidhmiú polasaí airgeadaíochta chun cobhsaíocht praghsanna a chinntiú, cobhsaíocht airgeadais a chur chun cinn trí mhaoirseacht a dhéanamh ar chóras agus institiúidí airgeadais na hÉireann agus riachtanais nótaí bainc agus monaí an phobail a shásamh. Mar thoradh ar an euro a roghnú mar airgeadra aonair, tá polasaí airgeadaíochta aonair i bhfeidhm anois sna tíortha uile san Aontas Eacnamaíochta agus Airgeadaíochta. Is é Comhairle Rialachais Bhanc Ceannais na hEorpa, a chuimsíonn Bord Feidhmiúcháin BCE agus Gobharnóirí na mBanc Ceannais Náisiúnta, a dhéanann cinntí maidir le polasaí airgeadaíochta.

Ceann de phríomhghnónna na bliana seo caite agus na bliana seo is ea táirgeadh na nótaí bainc agus na monaí euro a bheidh á gcur in úsáid ar 1 Eanáir 2002. Tá sé de dhualgas ar gach Banc Ceannais Náisiúnta dóthain nótaí bainc agus monaí euro a chur ar fáil in áit a n-airgeadraí intíre. Cuireadh tús le táirgeadh nótaí euro anseo in Aibreán 2000; tá monaí á dtáirgeadh ó Mheán Fómhair 1999.

Bliain dhúshlánach go maith a bhí sa bhliain seo caite freisin do rannóg mhaoirseachta an Bhainc. Bhí díreach os cionn naoi gcéad institiúid airgeadais faoi mhaoirseacht an Bhainc ag deireadh na bliana, agus ochtó a dó institiúid chreidmheasa ina measc. Chomh maith leis sin, d'údaraigh an Banc suas le dhá mhíle, ceithre chéad scéim chomhinfheistíochta.

I bhFeabhra 2001 d'fhaomhaigh an Rialtas moltaí do shocruithe athstruchtúraithe le haghaidh maoirseachta na hearnála airgeadais. Údarás aonair laistigh de dheilbh an Bhainc Ceannais atá ar intinn sna moltaí seo. Séard is tábhachtaí anois ná na socruithe nua a chur ag obair go héifeachtúil ó bhonn aníos.

Lean geilleagar na hÉireann ag fás go láidir ar feadh na bliana 2000, mar a bhí á dhéanamh ó lár na nóchaidí. Meastar gur fhás an Olltáirgeacht Náisiúnta (OTN) timpeall is 9<sup>3</sup>/<sub>4</sub>% in 2000. Méadú é seo ar fás na mblianta roimhe sin agus is féidir é a chur i gcomparáid le meánfhás timpeall 8% sa bhliain ó 1994 i leith. De réir mar a thosaíonn sriantachtaí acmhainne ag dul i bhfeidhm, táthar ag súil go dtitfidh an fás geilleagrach go ráta 6% i mbliana, ráta atá fós ard. Glactar sa réamhaisnéis seo le moilliú géar, ach gearrthréimhseach, i ngeilleagar na Stát Aontaithe agus nach rachaidh na fadhbanna sonracha atá san earnáil thalmhaíochta faoi láthair in olcas. Má táthar ródhóchasach agus talamh slán á dhéanamh den mhéid sin, d'fhéadfadh an fás geilleagrach a bheith roinnt mhaith níos laige.

I gcomhthéacs sin an fháis láidir sa gheilleagar, agus roinnt cúinsí eile á dtabhairt san áireamh – praghsanna arda ar ola, euro reasúnta lag agus ardú ar chánacha indéreacha ar thabac i gcáinainéis Nollaig 1999 – tháinig ardú suntasach ar an ráta boilscithe anuraidh; mhéadaigh praghsanna do thomhaltóirí faoi mheán de 5<sup>1</sup>/<sub>2</sub>%. Tharla an borradh seo sa bhoilsciú tar éis tréimhse trí bliana ina raibh an meánráta boilscithe níos lú ná 2% sa bhliain. Ar bhunús an tomhais chomhchuibhithe ar bhoilsciú praghsanna a cuireadh ar fáil i 1998, b'airde de 5.4 pointe faoin gcéad an ráta carnach boilscithe in Éirinn ná an ráta i réimse an euro.

Cé gur mhéadaigh luas an bhoilscithe go mór, b'fhéidir fós nach bhfuil brú iomlán an bhoilscithe intíre le feiceáil sa ráta tomhaiste boilscithe. Is cúis imní é an t-ardú leanúnach ar phraghsanna sócmhainní. Ghéaraigh fadhbanna brú tráchta de réir mar atá éileamh níos mó ag teacht ar bhonneagar na tíre. Feictear go bhfuil baint idir an t-ardú ar phraghsanna sócmhainní – praghsanna tithíochta agus maoinne go ginearálta – agus an méadú mór atá tagtha ar na hiasachtaí atá á bhfáil sna hearnála teaghlaigh agus corparáide.

Le trí bliana anuas, tá timpeall is trí cheathrú cuid den fhás geilleagrach ag brath ar éileamh láidir intíre, agus gan ach an ceathrú cuid de bunaithe ar ghlaneaspórtálacha. Leanann sé gur cheart polasaithe chun riosca an róthéimh a laghdú a dhíriú go háirithe ar theorainn a chur leis an bhfás ar an éileamh intíre. Sa chomhthéacs seo, ba chóir go bhféachfaí ar an bpolasaí fioscach, go háirithe, mar mhodh cúí chun an fás geilleagrach a mhoilliú go ráta níos inbhuanaithe.

# Activities of the Central Bank of Ireland

## Introduction

The Bank is required, in accordance with section 20 of the Central Bank Act, 1989, to prepare and send to the Minister for Finance, within six months of the end of the year, a report of its proceedings during the year. The report is laid by the Minister before each House of the Oireachtas.

*Reporting requirement*

The report of activities for 2000 opens with an account of the Governance and Management of the Bank. The Bank's role in the process of monetary policy formulation in Economic and Monetary Union (EMU) is then outlined; this is followed by an account of the Bank's continuing role in relation to Stage Three of EMU. Various aspects of monetary policy are reviewed and related operational functions are then described. These cover Monetary Policy operations, Management of the Official External Reserves, Economic Analysis and Research, Statistical Developments, Payments and Settlements activities. Currency Production and Issue matters are subsequently reviewed. The Bank's supervisory functions and activities are then described and are followed by a description of Management and Support Services.

*Structure of report*

## Governance

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.

*Statutory Basis*

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

*Objectives of the Bank*

"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.

(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.”

### *Supervisory Functions*

The Bank exercises supervisory functions over a range of financial entities. The legislative basis for these functions is set out in Appendix 1. Entities which the Bank supervises include credit institutions, both banks and building societies, International Financial Services Centre (IFSC) operations, stock exchange member firms and investment intermediaries. With effect from 1 April 2001, the Bank is also responsible for the supervision of insurance intermediaries.

### *Board*

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

### *Governor*

The Governor is appointed by the President on the advice of the Government for a term of seven years. Mr Maurice O’Connell, whose initial term of office expired in April 2001, has been re-appointed for a further term. The Governor is, ex-officio, a member of the Governing Council of the European Central Bank (ECB). Since the introduction of Stage Three of Economic and Monetary Union, 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. Total remuneration payable to the Governor during 2000 was €188,911. Superannuation benefits attaching to the Governor’s salary are in accordance with the terms of the Civil Service Superannuation Scheme. He received no additional benefit-in-kind.

### *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 paid to Directors in 2000 amounted to €50,790.

Members of the Board, as at 31 December 2000, were:

Name	Occupation	Date first Appointed
Maurice O'Connell	Governor	01.05.94
David Begg	Chief Executive of Concern	12.05.95
Donal Byrne	Company Chairman	28.06.94
Gerard Danaher	Senior Counsel	15.10.98
Friedhelm Danz	Company Chairman	01.02.96
Roy Donovan	Member of the Economic & Social Committee of the EU	01.12.89
John Hurley	Secretary General, Department of Finance	10.03.00
Jim Nugent	Company Chairman	12.02.98
Martin O'Donoghue	University Professor	01.07.98
Eoin Ryan	Senior Counsel	14.09.92

### 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*

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) Investment management of the official external reserves;
- (v) Substantial financial contracts to be placed by the Bank with suppliers;
- (vi) General management and budgetary issues.

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

*Powers Delegated to Governor*

Governor's position or which are specified to be Board responsibilities or which require the forming of an opinion by the Bank.

#### *Board Sub-Committees*

For the better governance of the Bank, and in line with international standards on the financial aspects of corporate governance, there are three Board Sub-Committees 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 2000, were as follows:

<b>Audit Committee</b>	<b>Investments Committee</b>	<b>Remuneration and Budget Committee</b>
David Begg (Chair)	Eoin Ryan (Chair)	Roy Donovan (Chair)
Roy Donovan	Gerard Danaher	Donal Byrne
Martin O'Donoghue	Jim Nugent	Friedhelm Danz

#### *Codes of Practice*

##### **Codes of Practice for Directors and Staff**

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.

Following consideration of guidelines for State Bodies, the Bank adopted the following Code of Practice for disclosure of interest by members of the Board on 23 April 1992:

- (a) On appointment to the Board, each Director shall furnish to the Secretary of the Bank details relating to his/her employment and all other business interests including share holdings (not quantified), professional relationships etc.;
- (b) If a Director has any doubt as to whether this code requires the disclosure of an interest he/she should consult the Governor;
- (c) Details of the above interests shall be kept by the Secretary in a special confidential register to be updated on a half-yearly basis. Changes in the interim should be notified to the Secretary as soon as possible. Only the Governor,

Director General and Secretary of the Bank shall have access to the register;

- (d) A Director should consult the Governor about absenting himself/herself or disclosing his/her interest and any other sources of conflict that he/she is aware of to the other Board members, when the Board is deliberating or deciding on matters in which the Director has an interest or connection.

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.

### *Statements of Interest*

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**

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, are laid before each House of the Oireachtas and published.

### *Report and Accounts*

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.

### *Attendance at Oireachtas Committees*

The Governor appeared before the Oireachtas Committees on a number of occasions during 2000. He appeared before the Joint

Committee on European Affairs on 23 February and 19 July and the Committee of Public Accounts (Sub Committee on Certain Revenue Matters) on 20 June, 11 July and 28 November.

### *Management Board*

#### **Bank Management**

The Director General is the senior member of Management reporting to the Governor. Dr. Pádraig McGowan retired as Director General in December 2000 and was replaced by Mr. Liam Barron. The Director General chairs meetings of the Bank's Management Board which comprises the Deputy Director General/Secretary of the Bank and five Assistant Director Generals.

The Management Board co-ordinates the planning, budgeting, resourcing and management review processes of the Bank and the Director General reports to the Governor on these matters. 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.

### *Internal Audit*

#### **Internal Audit**

An Internal Audit Strategic Workplan for the three year period 2000 – 2002, prepared on the basis of a formal risk analysis exercise, was endorsed by the Management Board in March 2000. The plan for the first year was largely fulfilled despite some resource shortfalls and some significant modification to the internal audit work programme of the ESCB.

Audit work undertaken in regard to ESCB commitments was generally in accordance with the audit plan for 2000 established by the ESCB Internal Auditors Committee (IAC). In conjunction with the internal audit functions of other central banks in the System, an intensive programme of reviews was undertaken in the areas of Accounting, Foreign Reserve Management, Monetary Policy Operations – including Collateral Arrangements (CCBM), Banknotes, Statistics, IT, TARGET and SWIFT. The department is represented on the IAC and participates in Audit Task Forces (ATF) of that body. The Head of Internal Audit is chairman of the ATF on Bank Notes.

In addition to ESCB work assignments, work was also conducted on audits of the various activities within the Central Bank. Internal Audit Department formally reported to the Audit Committee of the Board on three occasions during the year. Senior Internal Audit staff also had regular briefing meetings with the Governor. Close contact was maintained with the Bank's external auditors – The Comptroller and Auditor General and PricewaterhouseCoopers.

## European System of Central Banks

The Bank is a member of the European System of Central Banks (ESCB), which comprises the European Central Bank (ECB) and the National Central Banks (NCBs) of the fifteen member states. In pursuit of the primary objective of the maintenance of price stability, the Eurosystem – the ECB and the twelve euro area NCBs – carry out the basic tasks prescribed in the Treaty. These relate to monetary policy formulation and implementation, foreign exchange operations, official foreign reserves management and promoting the smooth operation of payment systems; an additional task is to contribute to the smooth conduct of policies relating to prudential supervision and the stability of the financial system. The Governor is one of eighteen members of the Governing Council, which is the central decision-making body of the ECB and is responsible for ensuring the performance of these tasks. Under the Central Bank Act, 1998, 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.

The Bank participates fully in the committee structure established by the Governing Council. It is also represented on a range of related sub-committees, working groups and task forces, designed to assist the Governing Council in its work. The Director General is the chairperson of the Budget Committee. The main functions undertaken by the thirteen ESCB Committees during 2000 were as follows:

**Accounting & Monetary Income Committee (AMICO):** revision and updating of the legal framework for accounting and reporting in the ESCB, implementation of a security framework for accounting operations and a netting procedure for TARGET balances, development of a mechanism to counter the potential effect of banknote migration and pursuit of a satisfactory system for the pooling and redistribution of monetary income in future years.

**Banking Supervision Committee (BSC):** exploration of macro-prudential issues, review of co-operation between EU banking supervisors and payment system overseers, review of new developments in banking and financial systems and exchange of views on supervisory policies and practices.

**Banknote Committee (BANCO):** completion of the general specification for each denomination in the euro banknote series, completion of security inspections and quality and production audits and preparation of contingency arrangements in relation to the launch and logistical stocks required at end 2001.

**Budget Committee (BUCOM):** monitoring of budgeted expenditure and evaluation of budgetary plans.

## Objectives of the ESCB

### Bank Participation



**External Communications Committee (ECCO):** preparation for major publicity campaign on the introduction of the euro notes and coin and co-ordination of media relations and publications of the ECB and NCBs, with a view to enhancing public understanding of monetary policy and related activities.

**Information Technology Committee (ITC):** co-ordination of the development of the Counterfeit Monitoring System, enhancement of the overall communications infrastructure, and maintenance and technical support activities for the network infrastructure which interconnects the ECB and NCBs.

**Internal Audit Committee (IAC):** implementation of planned audit work and other investigations at the request of the Governing Council or the President – assignments were carried out on the main risk areas of the ESCB, including banknotes, TARGET and foreign reserve management.

**International Relations Committee (IRC):** preparation of Eurosystem positions on issues of particular relevance to EMU, which are being discussed in international institutions or fora reviewing the functioning of the international monetary system and international financial markets, including the international role of the euro, assessing developments in the International Financial Architecture and preparing Eurosystem positions on the implementation of internationally agreed standards and codes.

**Legal Committee (LEGCO):** preparation of and amendments to legal instruments relating to such issues as the 2002 cash changeover, the monetary policy implementation framework, protection of the euro against counterfeiting, integration of Greece into the Eurosystem and the transfer of settlement to Euroclear.

**Market Operations Committee (MOC):** completion of the first review of the instruments and procedures of the Eurosystem's monetary policy operational framework, studies of structural developments in the gold market and the euro area money, bond and equity markets, preparation for the adoption of the euro by Greece on 1 January 2001, commencement of an examination of the financial market structure of applicants for EU membership and of an analysis of the liquidity implications of the introduction of euro cash in 2002.

**Monetary Policy Committee (MPC):** review of the monetary policy strategy of the Eurosystem; assessment of the operational framework for the implementation of monetary policy, preparation of the bi-annual economic forecasts of the euro area, production of an annual structural issues report and preparation of a public finance report for the euro area.

**Payment and Settlement Systems Committee (PSSC):** consideration of the long-term strategy for the TARGET system, further development of the framework for the oversight of payment systems, monitoring progress in the improvement of cross-border retail payment systems and commencement of a further assessment of securities settlement systems used in ESCB credit operations.

**Statistics Committee (STC):** continuation of the development of the statistical framework for the Eurosystem, including money and banking statistics and statistics on financial markets, balance of payments, international reserves and international investment position.



## Economic and Monetary Union

During 2000, the second year of EMU, the Bank grew increasingly into its role as a member of the system responsible for the formulation and implementation of euro area monetary policy. The Bank was also involved in domestic issues arising from the introduction of the euro, as well as preparing for and starting production of euro banknotes and coin which will be launched on 1 January 2002.

The Governing Council of the ECB met twice monthly during 2000 to discuss the overall economic, monetary and financial situation and to take monetary policy decisions for the euro area. Background documentation was provided by the Executive Board and the relevant ESCB Committees. The Governing Council also initiated concerted intervention in foreign exchange markets, reflecting its views on the external value of the euro and shared concerns regarding the potential international economic implications of movements in the exchange rate of the euro.

*Bank Role*

*Governing Council  
Activities*

Other work of the Governing Council in relation to the framework of **monetary policy implementation** included the publication of revised general documentation on Eurosystem monetary policy instruments and procedures, a review of the quantitative reference value for broad money supply growth and a revision of the sanctions regime for compliance with minimum reserve requirements.

In relation to **euro banknotes and coin** the Governing Council approved the overall framework for the **EURO 2002 Information Campaign** to familiarise citizens with euro notes and coins, decided on the number of euro banknotes to be printed in advance of 1 January 2002 and agreed the general principles of the framework for the 2002 cash changeover, including the timing and modalities for the frontloading of euro notes and coins.

The Governing Council was also involved in monitoring the performance of the ECB **foreign reserve management** and reviewing the strategic benchmark portfolio. In relation to international and European cooperation on monetary, economic and financial matters, the Governing Council continued to discuss the role of the Eurosystem in global financial stability, the international role of the euro, the Eurosystem involvement in proposals to strengthen the International Financial Architecture and the observance of standards and codes on monetary and payment system policies in the euro area.

### *Euro Changeover*



### **Domestic focus**

The foundations for the changeover to the euro were laid in 2000 against the background of the need to sustain public interest during the lengthy period between the introduction of the single currency and the launching of euro banknotes and coin. On domestic preparations, the Bank worked closely with the **Euro Changeover Board of Ireland** (ECBI), of which the Bank's representative is Vice-Chairperson. Most of the detailed discussion on issues relating to the cash changeover took place in the ECBI **Cash Changeover Working Group**. This group drew up **Ireland's Cash Changeover Plan for 2002**, which was endorsed by the ECBI and published in April 2000. This plan recommended that legal tender status should be withdrawn from Irish notes and coins at midnight on Saturday **9 February 2002**, thus establishing a dual circulation period of six weeks. In the plan, the Central Bank gave a commitment that it will:

- ensure that sufficient quantities of euro notes and coins for the changeover are made available to be put into circulation;
- continue to put Irish notes and coin in all denominations into circulation up to the end of 2001;
- continue indefinitely to give value in euro for Irish notes and coin.

## Banking and Financial Issues

With the changeover to the euro in wholesale financial markets working successfully since 1999, the **Irish Bankers' Federation/Irish Mortgage and Savings Association EMU Steering Committee** switched its attention to retail banking matters and, in particular, to the changeover of accounts and the frontloading of euro notes and coins. After careful consideration of the various options and of approaches in other Eurosystem countries, Irish banks decided that they would convert their customers accounts to euro in a "big bang" at the end of 2001. With regard to frontloading, the Central Bank has agreed to deliver the required quantities of euro notes and coin directly to banks and also to An Post, and to deliver coin to bank branches and to banks' larger retail customers. The Bank will bear the cost of this frontloading, which will be performed by a cash-in-transit company.

*Retail Matters*

## Legal Issues

Legal preparation for the changeover to euro banknotes and coin, ongoing refinement and adaptation of the ESCB's legal framework and increasing the public availability of ECB legal instruments were the principal focus of legal activity in 2000. A comprehensive review of the Eurosystem's framework for monetary policy instruments and procedures was undertaken, which resulted in a revision of the Bank's contractual documentation for counterparties. The general provisions which will apply to the distribution (frontloading and sub-frontloading) of euro banknotes and coin to credit institutions and the retail sector were adopted.

## Monetary Policy

### Overview

Monetary policy in the euro area is determined by the Governing Council of the European Central Bank (ECB). 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) of below 2 per cent. The Council has adopted a monetary policy strategy which has two key pillars. The first of these assigns an important role to money: in December 2000, the Council reaffirmed a reference value of a 4.5 per cent annual growth rate for the broad money stock (M3). The second pillar is a broadly based assessment of the outlook for price developments and the risks to price stability in the euro area.

*Policy Determined by  
Governing Council*

The Governing Council increased interest rates on six occasions in 2000 by a cumulative 1.75 percentage points. These increases reflected concerns about perceived upside risks to price stability in the euro area derived from analyses based on both pillars of the monetary policy strategy. The increases also reflected the fact that, associated with the earlier weak state of the euro area economy and the absence of inflationary pressures, interest rates had been unusually low. Retail

interest rates in Ireland rose as a result of the ECB's actions. The standard variable mortgage rate rose from an average level of 4.19 per cent at end-1999 to 5.99 per cent at the end of 2000. The personal overdraft rate of the main clearing banks, which was in a range of 10.5 to 11 per cent at end-1999, had risen to a range of 12.15 to 12.75 per cent by the year end. The clearing banks' prime lending rate, on which the cost of borrowing for much commercial lending is based, rose from an average of a little over 4 per cent at end-December 1999 to around 5.5 per cent at the end of 2000.

### *Credit Growth Remained Strong*

#### **Money and Credit in Ireland**

Money and credit growth in Ireland remained strong in 2000 but showed some signs of slowing. Ireland's contribution to the euro area broad money stock (M3) – which accounts for about 2 per cent of the total – grew by 14.7 per cent in the year to December 2000. This compares with an annual growth rate of 20 per cent at the start of last year. Private-sector credit growth exceeded 20 per cent throughout 2000 but appeared to decelerate in the closing months of the year. The underlying annual growth rate<sup>1</sup> averaged 24.6 per cent in the year as a whole but it fell to 21.3 per cent in December, which compares with a peak of close to 29 per cent in the spring. This rate of credit growth should be viewed in the context of the pace of economic activity (with nominal GNP expanding by an estimated 16.5 per cent last year) and wholesale interest-rate levels which, despite recent increases, remain relatively low by historical Irish standards and are also, given the domestic rate of inflation, negative in real terms.

More than a quarter of private-sector credit in Ireland is accounted for by residential mortgages. The strength of the latter reflects a housing market characterised by excess demand and large price increases. The level of residential mortgage lending on the balance sheets of credit institutions does not fully reflect the amount of mortgage debt in the economy due to the increasing prevalence of mortgage securitisations. The latter involves a lending institution bundling a portion of its mortgages into marketable securities which are then sold via a Special Purpose Vehicle (SPV). This has the effect of removing the mortgages from the balance sheet of the original lender as they become assets of the holder of the security. From December 1996 to end-2000, in excess of €3.5 billion worth of residential mortgages was securitised by Irish credit institutions. Adjusted for securitisations (i.e., adding back the outstanding level of securitised mortgages for each month), the annual rate of growth in residential mortgage lending averaged 25.3 per cent in 2000, with a slight deceleration from a rate of around 26 per cent at the start of the year to 24.3 per cent in December.

<sup>1</sup> i.e., excluding lending to non-MFI IFSC entities and adjusting for valuation effects due to exchange rate movements and the impact of the Irish Life & Permanent merger. The latter, for technical reasons, boosted the annual growth for private-sector credit rate from April 1999 to March 2000.

Apart from residential mortgage lending, other property-related lending also contributed significantly to credit growth in 2000, although there were some signs of a slowdown as the year progressed. Lending to the construction sector and to real estate activities each grew by around 50 per cent in the twelve months to end-December 2000 and accounted for almost 20 per cent of the increase in private-sector credit during the year. Lending for speculative activities grew less strongly than advances for projects carried out under contract or with a rental income. There was a clear slowdown in lending to the 'hotels and restaurants' category last year. This was mainly due to a sharp drop in the rate of advances to hotels: this type of lending increased by under 5 per cent in 2000 compared with a 46 per cent increase in the thirteen months to December 1999.

### Monetary Policy Implementation

The implementation of monetary policy in the euro area is conducted on a decentralised basis (i.e. by the individual NCBs), which means that the scale of the Bank's money market operations is largely unchanged from pre-EMU days. Thus, institutions in Dublin submit tenders for Main Refinancing Operations (MROs) and Longer – Term Refinancing Operations (LTROs) 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. Standing deposit and lending facilities are available from the Bank with the minimum reserve deposits of credit institutions in Ireland also maintained at the Bank.

*Decentralised Basis*

In addition, the Bank continues to forecast the liquidity requirements of the domestic market and these forecasts are taken into account in the ECB's liquidity allotment decisions. The views of the domestic market are also transmitted to the ECB on a daily basis and, together with the views of the rest of the euro area market, play a part in the ECB's management of the euro money market. The Bank also participates in foreign-exchange intervention *vis-à-vis* the euro, as and when this arises.

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.

*Policy Instruments*

#### 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 liquidity 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 minimum reserve deposits with their respective national central banks. The purpose of these reserve requirements is to create (or enlarge) a structural liquidity shortage and to stabilise money market interest rates by smoothing the effect of day-to-day liquidity fluctuations. The latter is facilitated by way of an averaging provision, which means that institutions in effect can draw on their minimum reserve holdings on a day-to-day basis if they are short of liquidity, provided they offset these drawings by ensuring that *on average* their daily holdings meet the reserve requirement. Institutions can also add to their holdings on a day-to-day basis if they have surplus liquidity. Where an institution fails to meet its minimum reserve obligations, sanctions may be imposed by the ECB.

## Monetary Policy Operations in 2000

### Main Refinancing Operations (MROs)

MROs continued to provide the bulk of the refinancing needs of the euro area financial sector during the year. On average, the

*Tender System*

Eurosystem provided €80 billion each week through MROs. The fixed rate tender system was used for MROs in the first half of 2000 but this was replaced by a variable rate tender procedure in the second half of the year.

As at the end of 2000, a total of thirty-six domestic institutions had signed documentation to be eligible to participate in Eurosystem operations with the Bank. Eighteen of these institutions participated in the MROs in 2000, compared with seventeen in 1999. However, the mix of institutions was somewhat different with five banks participating for the first time in MROs in 2000.

### **Longer Term Refinancing Operations (LTROs)**

In the first half of 2000, the Eurosystem provided €20 billion to the financial sector each month through LTROs. This amount was reduced to €15 billion per operation in the second half of the year reflecting the expected decline in the liquidity needs of the euro area. The variable rate tender procedure with a multiple rate allotment system<sup>2</sup> continued to be used for LTROs.

*Longer Term Refinancing*

The lowest rate at which funds were allotted was on average 4 to 5 basis points below the prevailing three-month Euribor<sup>3</sup>. However, the LTRO rate fell to 11 basis points below the prevailing Euribor in December against the background of growing market expectations that a reduction in euro official interest rates was imminent.

Fifteen domestic counterparties participated in LTROs during 2000 compared with twelve the previous year. The mix of counterparties changed somewhat during 2000 as three institutions that had taken part in at least one operation in 1999 ceased participation while six participated for the first time. Irish financial institutions' average share of the total euro area LTRO allocation in 2000 was higher than their share of the total euro area MRO allocation.

### **Other Operations**

Two fine-tuning operations were carried out in 2000. No structural operations were conducted. Recourse to standing facilities for the most part was minimal. Larger than normal usage of standing facilities tended to arise at the end of the monthly minimum reserve maintenance periods but this is to be expected with averaging systems.

### **Minimum Reserves**

The average level of minimum reserve requirements of credit institutions in the euro area amounted to €111.8 billion in 2000. The

*Fluctuations in Liquidity*

<sup>2</sup> In a multiple rate allotment, participants pay the rate at which they bid; in a single rate allotment, participants pay only the lowest accepted rate, regardless of the level of their own bid.

<sup>3</sup> Euro Interbank Offered Rate.

actual daily reserve holdings of credit institutions fluctuated between €78.7 billion and €137.8 billion in the course of the year, reflecting credit institutions' use of the averaging facility to smooth their liquidity fluctuations. While there were no changes to the main features of the minimum reserves requirement system, some amendments were made to a regulation of the ECB<sup>4</sup> on the application of minimum reserves to reflect more clearly how mergers and separation of institutions affect their reserve requirements and to improve procedures regarding the exchange of information between credit institutions and NCBs on reserve requirement figures. On behalf of the ECB, the Bank continued to monitor compliance with the minimum reserve requirement system and applied 16 sanctions for breaches of the obligations under the system.

### *Eligible Assets*

#### **Eligible Collateral**

All ECB money market operations must be fully collateralised by assets approved by the ECB. There are two categories of asset eligible for the monetary policy operations of the Eurosystem. Tier One collateral consists of marketable debt instruments fulfilling uniform euro area eligibility criteria specified by the ECB. Tier Two collateral consists of assets which are of particular importance for national financial markets and banking systems and for which eligibility criteria are established by the NCBs subject to ECB approval. In the event of a default of a counterparty, the Eurosystem as a whole bears the risk in relation to Tier One collateral; exposure arising from Tier Two collateral, however, rests with the sponsoring NCB.

During 2000 Tier One assets were used by credit institutions in Ireland to collateralise the bulk of refinancing through Eurosystem operations. Irish government bonds, which dominate eligible Irish Tier One assets, were again widely used while the use of Tier One assets on a cross border basis (Tier One assets issued in other Member States) was also significant. The importance to the local market of Irish mortgage-backed promissory notes, which are included on the Tier Two list, was underlined by an increase in their usage during the year.

### *Market Integration*

#### **Interbank Market Developments**

The second year of Stage Three of Economic and Monetary Union has seen the consolidation of the integration process of the euro money market with negligible differences in interbank rates across the euro area financial centres, including Dublin. While unsecured transactions accounted for the bulk of activity in the money market, the value of secured transactions continued to increase. In addition, interest rate swaps, in particular EONIA<sup>5</sup> swaps, played an increasing role in the Dublin centre for both hedging and speculative purposes.

<sup>4</sup> (EC) No. 2818/98

<sup>5</sup> Euro Overnight Index Average

Foreign exchange swaps, which traditionally were actively traded in Dublin, continued to remain an important instrument in satisfying liquidity requirements.

The continuing successful operation of TARGET also positively influenced the development of cross-border transactions. The range of counterparties utilised by domestic banks for cross-border transactions expanded as domestic institutions nurtured relationships with other euro area market participants through marketing programmes, thereby increasing the awareness of mutual services available.

### New tender system for MROs

The phenomenon of bidding in fixed-rate tenders for amounts greatly in excess of the expected allotment volume (“overbidding”) continued and even intensified into 2000 (Table 1 and Chart 1).

*Switch to Variable  
Rate Tenders*

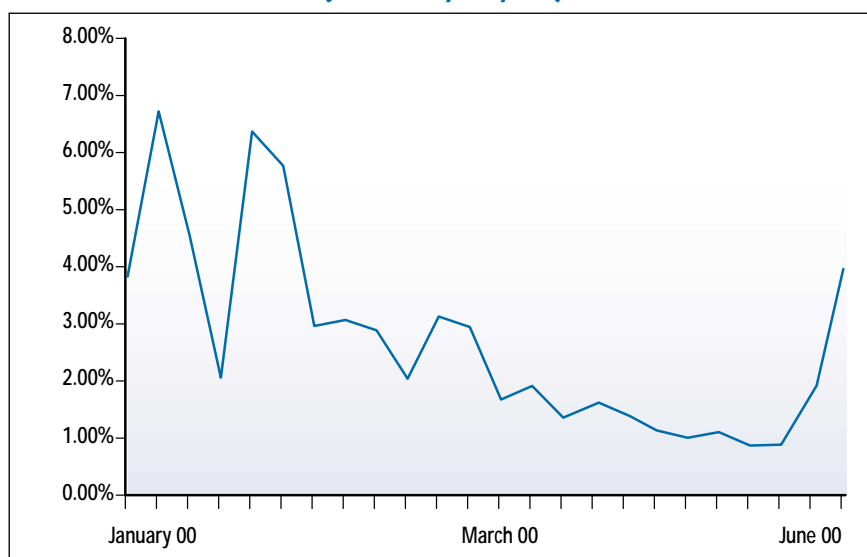
**Table 1: Main Refinancing Operations 2000 – Euro Area**

€ million

Procedure	Average amount bid	Average amount allotted	Percentage
<b>Fixed-rate</b>	3,613,691.83	67,875.00	1.88
<b>Variable-rate</b>	160,692.43	90,703.70	56.45

The problem of overbidding was exacerbated by ongoing market expectations of increases in official interest rates in the first half of 2000. In the event, the ECB increased rates on four occasions during this time by a total of 1.25 percentage points. In this environment, market participants bid for Eurosystem liquidity in ever-increasing amounts, culminating in the allotment ratio falling to a record low of 0.87 per cent in May 2000.

**Chart 1:  
MRO Allotment Ratio under Fixed Rate Tenders  
(until 20/06/00)**



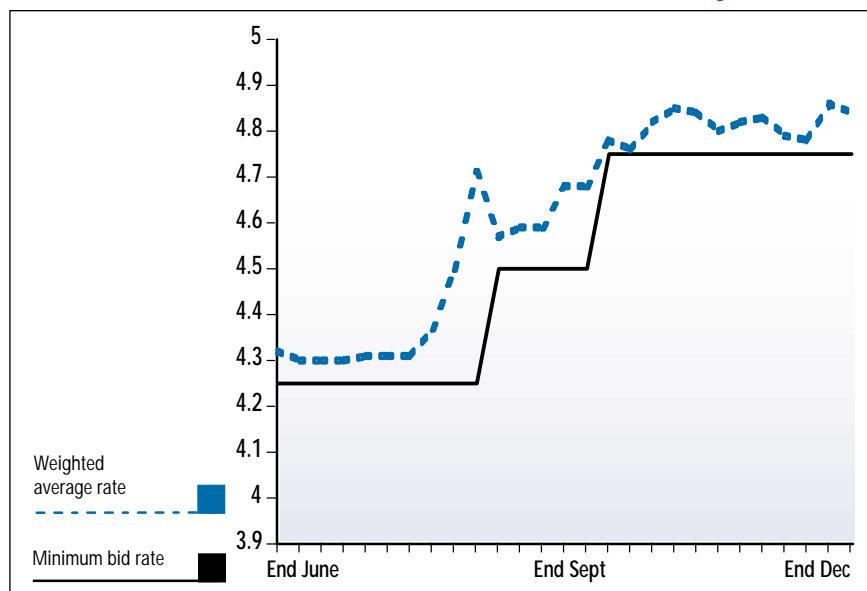
Against this background, the Governing Council of the ECB at its meeting on 8 June 2000 decided to switch to variable rate tenders for MROs. Under this procedure participants bid for the amount of liquidity they require as well as the rate they are prepared to pay for funds. Bids in excess of the lowest (“marginal”) rate accepted by the ECB in a given MRO *are satisfied in full*, while bids at the lowest rate accepted are filled on a pro-rata basis. As with LTRO variable rate tenders, a multiple rate allotment procedure is applied (see Footnote 2, p. 31).

An additional feature of this new variable-rate procedure is that a minimum acceptable rate is pre-announced by the ECB. The intention of the minimum rate is to signal the Eurosystem’s monetary policy stance which previously was indicated by the pre-announced interest rate under the fixed rate tender procedure. The ECB retains the option of reverting to fixed rate tenders if and when this is considered appropriate.

*Institutions Adapted  
Rapidly*

Credit institutions’ bidding behaviour was quick to adapt to the new variable rate system. Thus, the average amount bid dropped sharply (Table 1) as credit institutions realised that by bidding slightly above the going rate, their bids would be satisfied in full. This compares with the average allotment ratio in fixed rate tenders of under 2 per cent in the first half of 2000. The cost of funds (i.e. the weighted average interest rate for successful bids) under the new variable rate tender was, up to the end of the year, on average 0.09 per cent above the minimum acceptable rate (Chart 2). This gap, however, all but disappeared in the early months of 2001 amid growing market expectations that euro official interest rates would be reduced. Domestic institutions on average paid similar rates for variable rate MRO funds as the rest of the euro area.

**Chart 2:**  
**Minimum Bid Rate and Weighted Average Rate of MROs  
since Introduction of Variable Rate Tender System**



The switch to the variable rate tender system for MROs was followed by a significant fall in the number of bidders across the euro area. This appears, in part at least, to reflect the loss of the arbitrage opportunities that existed under fixed rate MROs where some participants bid for funds with a view to on-lending them at higher money market rates. A feature of the new variable rate system is that MRO rates are now much closer to market rates, thus largely eliminating arbitrage opportunities. In Ireland, however, the number of bidders remained constant. Overall, the impact of the switch to a variable rate tender resulted in Irish counterparties obtaining a significantly larger *share* of MRO liquidity. The difference in response to the new system reflects the relative scarcity of collateral in Ireland which, in the environment of severe overbidding, had restricted the capacity of institutions in Ireland to obtain liquidity through fixed rate tenders.

### Liquidity Forecasts

As stated earlier, the Bank provides forecasts of the liquidity requirements of the domestic market as an input to the ECB's liquidity management decisions. The most volatile factor in the Bank's forecast was the Exchequer deposit account. At the beginning of May new arrangements for managing the Exchequer account were implemented whereby the balance would be stabilised around a target level. Since then, the volatility in the Exchequer account has been comparatively low and this has facilitated much more accurate forecasting of domestic money market liquidity conditions.

*Domestic Liquidity  
Forecast*

The switch to variable rate MROs was also accompanied by an ECB decision to publish liquidity forecasts at the time of announcement of weekly tenders. The provision of this information is aimed at assisting credit institutions in preparing their bids.

### First Fine-Tuning Operations

The first fine-tuning money-market operation since the introduction of the euro was conducted on 5 January 2000. This was a liquidity-absorbing operation which involved the collection of fixed-term deposits, with a pre-announced maximum bid rate and a maturity of one week. The purpose of the operation was to absorb liquidity surpluses that had arisen over the year end due to the ECB's concern to provide ample liquidity during the transition to the year 2000. About €14.4 billion of the intended liquidity withdrawal of €33 billion was absorbed by the operation.

*Fine-Tuning*

On 21 June 2000, the Eurosystem conducted a second fine-tuning operation. This was a liquidity-providing operation by way of repos with an overnight maturity. The purpose of this operation was to restore appropriate liquidity conditions after an amount of €11.2 billion was unexpectedly withdrawn from the money market and placed on deposit with the Eurosystem. Total bids for this operation amounted to €18.8 billion while the amount allotted was €7.0 billion.

*Interventions***Foreign-Exchange Intervention**

The first foreign-exchange intervention since the introduction of the euro was conducted on 22 September 2000. On the initiative of the ECB, the monetary authorities of the United States, Japan, the United Kingdom and Canada joined the ECB in a concerted intervention to support the euro. This was followed by unilateral intervention by the Eurosystem on a number of occasions in November. The ECB and the NCBs of the Eurosystem, including the Bank, participated in this intervention.

**Review of the Bank's Documentation**

The Bank's Documentation on Monetary Policy Instruments and Procedures was revised following a review at ECB level of the operational and legal arrangements for the decentralised implementation of monetary policy. As at end-2000, 36 institutions had completed the necessary documentation to become monetary policy counterparties of the Bank.

*Portfolio Management***Management of External Reserves****Bank's Official Reserves**

The Bank's investment portfolio (both foreign currency and euro denominated) amounted to almost €8 billion at end December 2000. These assets comprise the Bank's foreign currency reserves, amounting to €5,807 million and its euro-denominated assets which amount to €2,070 million. The Bank's euro portfolio derived from its holdings, prior to January 1999, of EMU legacy currencies. At end-December 1999, foreign currency reserves and euro-denominated assets amounted to €5,355 million and €2,000 million respectively.

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 limits and procedures.

- An Investments Committee of the Board reviews investment policy and performance.
- 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, consists of senior staff of the Financial Markets Department.
- A Standing Investment Strategy Committee, comprising departmental management, senior dealers and senior analysts, meets 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 ensure that the reserves are fully invested. Risk monitoring and performance measurement are carried out independently of the dealing function.

The framework within which the Bank's investment portfolio is managed changed with the establishment of the European System of Central Banks (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 Eurosystem's reserves. In addition, the ECB holds foreign reserve assets which were contributed by NCBs in January 1999. Each NCB's contribution to the ECB reserves was in proportion to its shareholding in the ECB which, in turn, was in proportion to each Member State's shares of the euro area's GDP and population. The assets transferred to the ECB continue to be managed by the NCBs under agency arrangements. At end-2000 the Bank managed €464 million on behalf of the ECB. Moreover, under the EU Treaty, further calls of foreign assets may be effected by the ECB from NCBs' foreign-exchange reserves.

### **Portfolio Restructuring in EMU**

As mentioned in the last annual report, the Bank is no longer required to maintain a highly liquid short-term portfolio for possible foreign-exchange intervention. In recognition of this reduced liquidity requirement, the Bank continued its programme of portfolio restructuring during the year. This involved changes to the composition of the Bank's foreign currency reserves including the introduction of a Danish krone portfolio and an extension of duration in the dollar and sterling portfolios. The credit risk profile of the portfolio was modified by increasing holdings of bonds issued by US Federal Agencies and by a number of quasi-sovereign issuers. The duration of the Bank's euro portfolio was also extended; furthermore, the euro portfolio now includes bonds issued by virtually all euro area governments and by a number of quasi-government agencies. The objective of these changes is to use the somewhat greater risk tolerance, in the changed environment, to enhance the return on the portfolio.

Over the year, the Bank managed its investment portfolio (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 restructuring undertaken during the year. These portfolios reflected the Bank's preferences for liquidity, risk and return. Total earnings (income and capital gains) on the investment portfolios amounted to €493.2 million in 2000 by comparison with €204.7 million in 1999. In rate of return terms, earnings on the investment portfolios in 2000 were 6.84 per cent compared with 3.21 per cent in 1999. A number of factors contributed to this outcome.

*Portfolio Restructuring  
Continued.....*

*.....and Contributed to a  
Higher Rate of Return*

The main influence was the sharp increase in bond prices in the US, UK and euro capital markets in 2000 which produced significant capital gains. In addition, the portfolio restructuring undertaken during the year contributed significantly to the higher rate of return. Finally, active portfolio management in 2000 produced results marginally in excess of the return on the benchmark.

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 here 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 to take advantage of opportunities to enhance returns in the international money and capital markets.

### **Risk Management**

#### *Risk Control*

The risk control framework governing the Bank's operations in the money, foreign exchange and bond markets is approved by the Board of the Bank and is reviewed regularly. A separate Risk Management Unit within the Financial Markets Department, which is independent of the dealing function, is responsible for the measurement, monitoring and reporting of the Bank's risk exposures. The Unit also measures performance against the investment benchmarks. During the year the measurement of performance was refined to facilitate the attribution of return across the increased number of portfolio sectors.

The main risks that the Bank incurs in its investment portfolio activity are currency risk, market risk, credit risk, liquidity risk and operational risk. Currency risk is managed by pursuing a policy of portfolio diversification; market risk is managed by limits on the duration of individual portfolios; credit risk is limited by confining exposures to approved instruments, counterparties and issuers of securities; and liquidity risk is managed by maximum exposure limits and by ensuring that the major part of the portfolio is invested in instruments for which deep and active markets exist. Operational risks that arise in relation to both investment and foreign-exchange operations are managed by a system of controls and procedures.

## ECB Pooled Reserves

The Maastricht Treaty provided for the initial transfer of up to €50 billion of foreign reserve assets to the ECB. 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. 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. A complex management framework is in place to implement this policy. When intervention takes place, as happened in 2000, the foreign reserve assets of the ECB are used. At the end of 2000, the ECB's net foreign reserve assets amounted to €43.5 billion as compared with €46.8 billion at the end of 1999. This change reflects various factors such as the interest income earned on the ECB's foreign reserves, foreign exchange intervention carried out by the ECB during the year and the revaluation at market prices of the foreign reserve assets.

*ECB Foreign Reserves*

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 as well as performing 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 Bank enters trades onto the ECB reserve management system, which permits the ECB to monitor positions and exposures and to carry out performance measurement. The Bank's share of the ECB portfolio was €464 million at the end of 2000.

*Reserves Transferred are  
Managed by NCBs*

## Participation in other International Activities

### EU Economic and Financial Committee (EFC)

This was the second year of operation of the EFC, which is the successor to the Monetary Committee. One of the major tasks of the Committee, which comprises representatives from national administrations of Member States, NCBs, the Commission and the ECB, is the surveillance of the economic and financial situation of the Member States and of the Community. An ongoing element of this work is the assessment of updates of Stability and Convergence Programmes, prior to their examination by the Council of Ministers. Work in this area is also focussing on the quality and sustainability of

*European Union*

public finances. The Committee makes a significant contribution to preparatory work on the Broad Economic Policy Guidelines, which is assuming a central role in EU economic policy co-ordination. Other ongoing work of the Committee includes euro-coin issues, the overall monitoring of the practical aspects of the introduction of the euro and exchange rate aspects of EU enlargement. The Committee was also engaged in preparatory work relating to the adoption by Greece of the single currency, oversaw the preparation of the Brouwer Report on financial stability and addressed the issue of the use of Qualified Majority Voting in the EMU Chapter of the Treaty.

### *International Monetary Fund*

#### **International Monetary Fund (IMF)**

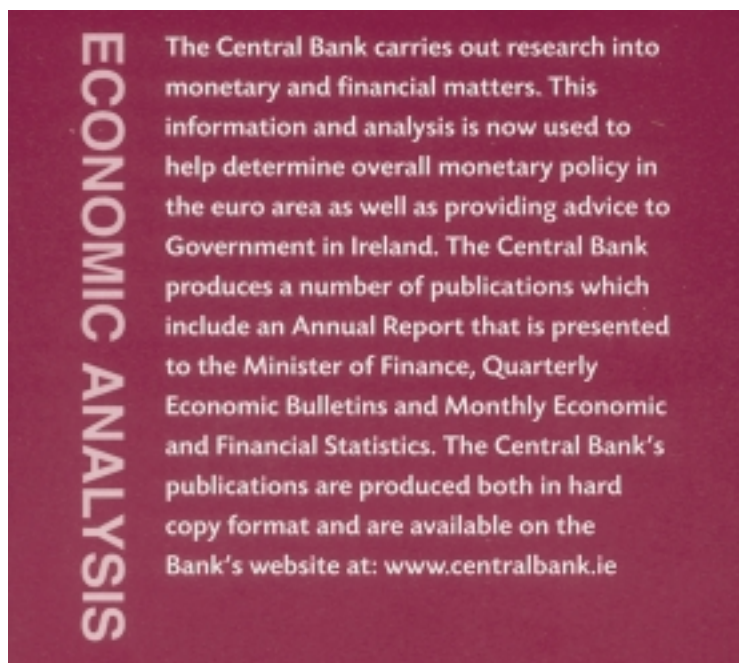
The role of the International Monetary Fund is to promote international monetary co-operation and to facilitate international financial stability. At present 183 countries, including Ireland, are members of the Fund. Its financial activities include the provision of financial resources to member countries that require balance of payments assistance, drawing in the main for this purpose on contributions, such as quota (i.e. membership) subscriptions, supplied by other IMF member countries. In addition, the IMF undertakes various monitoring, research and surveillance functions, including published reports on trends and developments in the world economy and periodic reports on topical issues.

Individual country surveillance occurs primarily through "Article IV" missions. IMF staff visit a member country, usually annually, to monitor economic performance and review fiscal, monetary and regulatory policy. Subsequently, the staff, in consultation with the member's authorities, draft a formal report to the Executive Board summarising the member's economic situation and identifying policy issues. In addition to the Article IV process, the IMF has recently introduced the Financial Sector Assessment Programme (FSAP) to enhance its ability to monitor financial sector stability in member countries.

The Central Bank administers all financial transactions and operations between Ireland and the IMF, e.g. the payment of quota subscriptions, the supply of financial resources, when required, to assist other IMF members, and the receipt from the IMF of remuneration in respect of the use of Irish currency. Regarding surveillance, the most recent mission to Ireland took place in May 2000. In addition, Ireland along with twelve other countries participated in a pilot scheme under the Financial Sector Assessment Programme; this concluded that Ireland has a sound and highly developed financial sector.

Within its constituency at the IMF, Ireland provides the Alternate Executive Director, who plays an important role in representing the interests of member governments and in providing a source of communication between them and IMF Management.

## Economic, Research and Statistics



### Economics and Research

In the course of 2000, economic analysis and research continued to be focussed on two major areas: the Irish economy and the euro area economy. Various studies and analyses on diverse aspects of the Irish economy were directed to informing the Bank on those matters and the public and to supplying data and analysis to the European Central Bank. Work in regard to the euro area economy was aimed at informing and supporting the Bank in the monetary policy discussions of the ECB.

*Focus Remained Unchanged*

During the year, work focussed on a number of broad areas: analysis and forecasting of economic conditions, inflation, economic growth, monetary policy issues, econometric modelling, public finance and economic statistics.

### Economic Intelligence and Forecasting

Four projections of the economy were produced during the year. Together with assessments of the current economic situation, these were published in the Bank's Quarterly Bulletins. Two comprehensive forecasts, based on agreed assumptions, were also produced separately as an input to the ECB's forecasts for the euro area.

*Four Projections Produced*

### Inflation and Price Stability

Inflation was monitored closely during the year with assessments published in the Bank's Quarterly Bulletins. Four separate inflation assessments were also conducted for the ECB, as well as a further number of exercises, including forecasts for five sub-aggregates of the Harmonised Index of Consumer Prices.

*Inflation Assessments*

Research work in the inflation area included a review of recent forecast performance, continuing refinement of forecasting methods and

analyses of core inflation and traded/non-traded inflation. Work continued in the area of assessing the economy's growth potential and related measures of the output gap, i.e., the gap between potential and actual output in the economy. An assessment of the effect of the "new economy" on productivity growth was also conducted.

### *Monetary Policy Research*

#### **Monetary Issues**

Work in the area of monetary policy dealt with a number of themes during the year. The principal focus was on assessing the transmission mechanism of monetary policy; this work was conducted in parallel with other NCBs and the ECB. Employing advanced econometric techniques has revealed that, based on historic patterns, a 1 percentage point increase in interest rates gives rise to a fall of  $\frac{1}{4}$  of a percentage point in GNP over a one-year horizon with a smaller effect on inflation. This closely mirrors the effects in the Bank's structural econometric model.

Further monetary policy work examined the term structure of interest rates, confirming the expectation hypothesis linking short to long rates. A study was also undertaken of the level of interest rates appropriate to particular economic circumstances; this rule-based exercise established that, given present economic conditions in Ireland, interest rates ideally should be significantly higher than their recent levels.

An assessment of the evolution of asset prices, housing and commercial property, was completed during the year and published in the Autumn Quarterly Bulletin. Related to this, an examination was also undertaken of the risks of over-investment in the Irish economy.

### *The Irish Model*

#### **Econometric Modelling**

All fifteen EU central banks are participating in a project to establish a series of linked econometric models under the auspices of the ECB. Development of the first Irish sub-model was completed in early 2000.

The Irish model is relatively small, based on aggregated quarterly data and consists of seventy-five equations, of which twenty are estimated behavioural equations. It contains sufficient detail to estimate the main components of aggregate demand and prices. The model allows one to assess the short-term dynamics of the economy. However, as no long historical quarterly data on most national accounts variables are available, these have to be estimated in the Bank using related indicators.

The model is being used for a variety of purposes. A first group of applications relates to ESCB projects; in particular the model is being used as an input to euro area economic projections. It is also used for the examination of "scenario analyses", namely the impact on the Irish economy of changes in external circumstances. These hypothetical scenarios cover such events as interest rate increases,

exchange rate changes, US economy “hard landing” scenarios and subsequent fall-offs in the levels of world trade. The model was also used during the year for generating consistent scenarios to analyse the stability of the Irish banking system by means of stress-testing. The current version of the model takes the traditional backward-looking view of expectations but it is planned to extend the model to incorporate a forward-looking approach.

### **Public Finance**

Fiscal policy is of more significance in the single currency regime since higher public borrowing does not now increase interest sales and ‘crowd out’ private spending and since monetary policy is no longer available for domestic stabilisation purposes. As part of economic intelligence work during the year, fiscal developments were kept under review. Research work focussed on a number of areas: measurement and assessment of the structural budgetary position, i.e., the budgetary position adjusted for the state of the business cycle and fiscal sustainability regarding the ageing of the population.

*Fiscal Policy  
Significance*

### **Economic Statistics**

Considerable time was devoted to the refinement and adaptation of statistical data pertaining to general economic and public finance areas in order to meet ECB demands. These data are being delivered in efficient electronic form to the ECB. Substantial effort was also devoted to the construction and interpolation of quarterly economic time-series for the Bank’s econometric model. Until recently, quarterly National Accounts data have not been available for Ireland.

### **Other Work**

The economic and research function also participated in the work of the Economic Policy Committee (EPC) of the European Union. The EPC dealt with a wide range of issues pertaining to the improved functioning of goods, labour and capital markets. It contributed to the formulation of the structural aspects of the Broad Economic Policy Guidelines of the EU and conducted the multilateral reviews of progress with structural reform in all fifteen EU Member States.

### **Monetary and Financial and Balance-Of-Payments Statistics**

The Bank also continued to ensure the collection and processing of data to fulfil its statistical obligations at national and international level.

*Statistics*

The main developments during the year were:

- meeting ECB data requirements by introducing in April a new monthly and quarterly reporting scheme for over 100 money market funds (MMFs);
- working with other NCBs to develop further the monthly and quarterly statistical requirements and to introduce new requirements for interest-rate data;

- collecting and transmitting additional data on positions of Irish MFIs vis-à-vis Greece;
- changing the Prudential Return in August 2000;
- publishing new data on credit cards and on the breakdown of mortgages by fixed or floating interest rate. Additional data on securitisations was also collected for the first time;
- improving and expanding the collection of international banking statistics in conjunction with the BIS;
- preparation and transmission to the ECB of detailed monthly balance-of-payments statistics and ongoing revisions to the historical series. The required detail was expanded significantly in early 2000 to include greater breakdowns of direct investment flows and investment income;
- implementation of the IMF's Special Data Dissemination Standards (SDDS) for Ireland relating to reserve assets and foreign-currency liquidity. These data are now provided on the Bank's website;
- and provision of quarterly data to CSO on interest flows and capital stock positions of the Bank and the banking sector for inclusion in official balance-of-payments statistics.

## PAYMENTS SYSTEMS

The arrival of the euro currency saw the introduction of a new electronic trans-European payments settlements system called TARGET (Trans-European Automated Real Time Gross Settlement Transfer System). This links together the payments systems of all 15 EU Member States and makes it possible to transfer large amounts of money between bank accounts from one end of the continent to the other within a matter of seconds.

The TARGET system is operated in Ireland by the Central Bank.



## Payments and Settlements

### RTGS/TARGET

Settlements  
RTGS/TARGET

Since March 1997, the Bank has operated the Real-Time Gross Settlement (RTGS) system. The RTGS system, which is known as IRIS (Irish Real-time Interbank Settlement), has 23 participating institutions and processes and settles payments between participants in real time throughout the day. Such payments, which can be made either on behalf of customers or on an institution's own behalf, are effected across institutions' settlement accounts in the Central Bank. The technical system is owned by the participating institutions and the Bank.

IRIS is linked to the domestic RTGS systems of the 14 other EU Member States and to the ECB Payment Mechanism so as to facilitate real-time processing of large-value cross-border payments in euro. This extended system is known as TARGET (Trans-European Automated Real-time Gross settlement Express Transfer) and has been operating since 4 January 1999. TARGET is accessible by over 34,000 banks (including branches and subsidiaries) across the EU. The system operates from 6.00am until 5.00pm with payments on behalf of customers processed until 4.00pm while interbank payments may be processed until closedown at 5.00pm.

Table 2 shows the value and volume of IRIS payments (both cross-border and domestic) on a quarterly basis over 1999 and 2000.

*Volume and  
Value Increased*

**TABLE 2: Payments via IRIS**

	1999				2000			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Number of Payments (000)</b>								
<b>Total</b>	103	105	108	108	118	123	118	126
<b>Daily Average</b>	1.6	1.6	1.6	1.7	1.8	2.0	1.8	2.0
<b>Value of Payments (€ billion)</b>								
<b>Total</b>	883	799	886	1,027	1,053	943	907	911
<b>Daily Average</b>	14.1	12.3	13.5	15.8	16.2	15.2	13.9	14.5

The number of domestic and cross-border payments processed in IRIS averaged 1,900 per day during 2000 while the daily value processed averaged €15.0 billion. The 'market share' of IRIS in total TARGET payments during 2000 was 1.0 per cent by value and 1.4 per cent by volume. For domestic and cross-border payments, the percentages were 0.8 and 1.72 by value and 1.9 and 1.3 by volume, respectively.

On 23 October 2000, the TARGET Information System was introduced by the ESCB. This is an information tool which allows all TARGET participants simultaneous access to up-to-date data on the availability of national RTGS systems (including IRIS). The information is accessed by participants via Bloomberg, Reuters and Telerate/Bridge and advises on whether individual systems are functioning or not, and the expected duration of any 'downtime'.

During the last quarter of 2000, the ECB announced the introduction of a TARGET Reimbursement Scheme, which came into effect on 1 January 2001 and which will apply whenever same-day processing of payment orders within TARGET cannot be completed. The scheme is intended to compensate participating institutions for higher costs they may incur as a result of having recourse to the Eurosystem standing facilities should TARGET malfunction.

The Bank participates in the ESCB's TARGET Management Working Group where technical developments in the system are considered and ongoing monitoring of performance takes place.

*RTGS System used to Settle  
Eurosystem Facility*

### **Credit Operations**

Credit institutions wishing to borrow from or deposit with the Bank on an overnight basis under the Eurosystem's standing facilities (the overnight Marginal Lending and Deposit Facilities) must notify the Bank of their requirement by 5.30pm. The associated transactions are processed across the settlement accounts used for RTGS payment processing.

All credit, i.e., monetary policy and intra-day operations conducted by counterparties with the Bank, must be based on adequate collateral provided by the 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 and certain bonds issued by the Housing Finance Agency and the European Investment Bank for which the Bank acts as Registrar. The Tier Two list includes Irish mortgage-backed promissory notes.

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. A mechanism has been developed by the ESCB to ensure that all eligible assets may be used on a cross-border basis. This is the Correspondent Central Banking Model (CCBM) under which central banks act as custodians ("correspondents") for each other in respect of securities accepted in their local depository or settlement system. The CCBM has been operated by the Bank and its European counterparts since 4 January 1999. There has been extensive usage of the CCBM by counterparties of the Bank availing of the opportunity to use foreign collateral in monetary policy and intra-day liquidity operations and the level of usage continues to increase.

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.

### Registrar Function

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

As shown in Table 3 below, Government bonds issued on the domestic market showed a net decrease of €1,794.4 million for the year. This compares with a net increase of €3,280.7 million in the previous year. A total of 24,785 transfers (including CBISSO transfers) were processed during 2000 compared with 38,914 for 1999.

The number of accounts on the bond register decreased to 7,189 at end-2000 from 12,190 at end-1999. This reduction can be attributed to the redemption of four bonds (5,000 accounts – €2,869.2 million) and the transfer in 2000 of some institutional account holdings to Euroclear – see below. There were 48 dividend issues in 2000 with approximately 15,500 individual payments.

### *Register of Domestic Bonds*

**Table 3: Issues and Redemptions of Government Bonds**

€ million	1999	2000
Bonds Issued	8,664.5	-
Bonds Created	12,622.8	2,128.9
<b>Total</b>	<b>21,287.3</b>	<b>2,128.9</b>
Bonds Redeemed	1,851.9	2,869.2
Bonds Cancelled	16,154.7	1,054.1
<b>Total</b>	<b>18,006.6</b>	<b>3,923.3</b>
Net Stock Increase (+) Decrease (-)	+3,280.7	-1,794.4

*Transfer to Euroclear***Central Bank of Ireland Securities Settlements Office**

In Quarter 1 2000, the Bank and the NTMA, in consultation with a study group, which was established to conduct a strategic review of the Central Bank of Ireland Securities Settlements Office (CBISSO), decided that the settlement function provided by CBISSO for transactions in Irish Government bonds (and other bonds for which the Bank acts as registrar) should be transferred to Euroclear. Following resolution of the necessary legal, operational and technical issues, the transfer to Euroclear was effected on 4 December 2000 without any disruption of service.

Following the transfer of the settlement function to Euroclear, 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 have to be notified between the Bank and Euroclear.

*Regulation of  
Payment Systems***Payment Systems Policy and Regulation**  
**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 general objectives of the regulatory regime are to ensure that payment systems in the State are safe, effective, efficient and open and that the systems themselves do not cause, or add to, instability in the operation of financial markets. 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.

**Systemic risk**

Because of its systemic importance, the Bank's primary concern is the domestic Real-Time Gross Settlement (RTGS) system

which is known as IRIS. This system is operated and managed by the Bank. The reduction/elimination of systemic risk in the payment system is addressed by requiring that all large-value interbank payments in Ireland, both on own account and on behalf of customers, be settled in real-time (i.e., continuously throughout the day), gross (i.e., on an individual basis) and in central bank money via IRIS.

All liquidity provided to participating banks in IRIS is fully collateralised in accordance with ECB regulations. The system does not permit negative balances. Payments, which would result in a negative balance if settled, are queued in the system. Unsettled payments are rejected by the system at the end of the day.

Monetary policy operations are settled via IRIS with no funds advanced prior to 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 between each counterparty and the Bank.

Participation by a credit institution in IRIS requires the approval of the Bank. In deciding whether to issue such approval, the Bank will have regard to an applicant's financial strength and also to its technical ability to meet the requirements of the system.

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

### **Domestic Clearing Arrangements**

Work continued during 2000 in relation to the legal and organisational arrangements of the three clearing companies (i.e., Irish Paper Debit Clearing Company Limited, Irish Paper Credit Clearing Company Limited and Irish Retail Electronic Payments Clearing Company Limited) which have been set up to replace the Dublin Bankers' Clearing arrangements.

### **Electronic Money Projects**

There are no multi-purpose prepaid card (or 'e-money') schemes operating in Ireland at present. Two small e-money pilot schemes in operation during 1999-2000 have now ceased operations.

### **Review of Organisation of Retail Payment Systems**

The Bank is carrying out research in relation to the organisation of the retail payment system. This arises from Recommendation 3 of the "Report of the Department of Finance/Central Bank Working Group on Strategic Issues facing the Irish Banking Sector" (published in August 2000) which recommends that:

*“The Central Bank should carry out a full review of the organisation of the retail payments system and its report on this matter should be provided to the Minister for Finance and published.”*



## Currency Production and Issue

### Introduction

The main task of the Currency Function is to provide the public with banknotes and coin of adequate quality and quantity and in denominations which best suit their needs. The Function is also responsible for the receipt, processing and re-issue of banknotes, as well as the destruction of banknotes deemed unfit for re-issue. During 2000, the Bank supplied the retail banks with 253 million banknotes and 277 million coins. The production of euro banknotes and coin increased significantly during 2000 in preparation for the euro changeover on 1 January 2002. A service provider for the distribution of the euro currency was selected towards the end of 2000.

ISO 9002 quality accreditation was achieved in 2000 for both the Printing Works and for the Mint.

### Banknote Production – Euro

#### *Euro Banknotes Produced*

Production of euro banknotes commenced in April 2000. At end-December, 9.8 million of the €10 denomination had been produced. Other euro banknote denominations were also in the course of production at that time.

### Banknote Production – Irish

#### *Production Increased*

Production of banknotes continued to increase in 2000. Output was 194.9 million notes in 2000 compared to 155.6 million in 1999, an increase of 25.3 per cent. A comparison of banknote production by denomination in 1999 and 2000 is given in Table 4.

**Table 4: Number of Irish Notes Produced**

million	£5	£10	£20	£50	£100	Total
1999	24.3	42.2	75.2	13.9	–	155.6
2000	27.1	52.9	101.9	13.0	–	194.9

Figures may not sum to total due to rounding.

### Banknote Issue and Redemption

Issues of new notes to banks decreased by 11.7 million (7.8 per cent) in 2000. Issues of reissuable notes increased by 7.1 million (6.6 per cent) as a result of a higher level of lodgements by the banks. Issues of new and reissuable banknotes were down by 4.6 million or 1.8 per cent on 1999.

*Issues and Redemptions*

Lodgements of banknotes in 2000, at 249.7 million, represented an increase of 19.4 million or 8.4 per cent over 1999.

A third high-speed banknote processing machine was installed. During 2000, used banknotes authenticated and sorted by machine amounted to 249.8 million compared with 249.5 million in 1999.

### Banknote Circulation

The total number of banknotes in circulation increased by 3.2 per cent from 193.3 to 199.5 million during 2000. In terms of value, the note circulation increased by £372.7 million or 10.5 per cent to £3,935.5 million in the same period. The £20 denomination accounted for 52.5 per cent in number and 53.2 per cent in value of the note circulation at end-2000. The value of the circulation of the £50 banknote rose by 45.8 per cent from £892.5 to £1,301.6 million in 2000. Table 5 gives a breakdown by number and value of the different denominations of notes at end-year.

*Increase in Volume  
and in Value*

**Table 5: Banknotes in Circulation by Denomination: End-2000**

Denomination	Number Million	% of Total	Value £ Million	% of Total
10/-	1.2	0.6	0.6	–
£1	13.5	6.8	13.5	0.3
£5	24.1	12.1	120.4	3.1
£10	28.9	14.5	288.8	7.3
£20	104.7	52.5	2,094.5	53.2
£50	26.0	13.0	1,301.6	33.1
£100	1.2	0.6	116.2	3.0
<b>Total</b>	199.5	100.0	3,935.5	100.0

Figures may not sum to total due to rounding.

## Counterfeits

In 2000, the Currency Issue Department acquired additional equipment for use in the future analysis of euro counterfeits. The Bank continued to liaise with the Garda Bureau of Fraud Investigation, particularly in relation to combating counterfeits of euro banknotes and coins. Bank staff underwent extensive counterfeit detection and analysis training during 2000. The Bank is currently developing a comprehensive presentation designed to assist financial institutions to train their professional cash handlers in counterfeit euro detection. Development of a Counterfeit Monitoring System Database by the ECB is at an advanced stage and a user group on which the Bank will be represented will be established in due course.

## Coin Production

### Mint Output

During 2000, coin production increased significantly mainly as the result of the double shift working arrangements in the Mint. 6.8 million Irish coins were produced during 2000 and 420.2 million euro coins were struck, which represents an overall increase of 17.4 per cent over 1999. As at end-December, a total of 548.2 million euro coins had been struck.

A comparison of 1999 and 2000 output is shown in Tables 6 & 7.



**Table 6: Number of Coins Struck – Euro**

Million	1 cent	2 cent	5 cent	10 cent	20 cent	50 cent	€1	Total
1999	128.0	–	–	–	–	–	–	128.0
2000	147.0	37.8	105.1	49.7	69.9	1.0	9.7	420.2

Figures may not sum to total due to rounding.

**Table 7: Number of Coins Produced – Irish**

Million	1p	2p	5p	10p	20p	50p	€1	Total
1999	86.6	54.1	91.0	–	3.8	–	0.3	235.8
2000	–	–	–	–	–	–	6.8	6.8

Figures may not sum to total due to rounding.

## Coin Issue and Circulation

### Coin in Circulation

The Bank issued 276.9 million coins in 2000, an increase of 40.8 million or 17.3 per cent over the previous year. Of the total number of coins issued in 2000, the 1p and 5p coins accounted for 30.9 per cent and 22.4 per cent, respectively.

The value of coin in circulation increased by £40.1 million or 15.7 per cent to £295.1 million in 2000. The 1p and 2p coins accounted for 58.0 per cent in number, but only 7.1 per cent in value, of coin circulation at end-2000. At the end of the year there were 698 coins issued per head of population. A breakdown of the number and value of the different denominations of coins in circulation at end-2000 is given in Table 8:

**Table 8: Coin Circulation by Denomination: End-2000**

Denomination	Number		Value	
	Million	% of Total	£ Million	% of Total
1p	980.5	37.1	9.8	3.3
2p	553.4	20.9	11.1	3.8
5p	444.4	16.8	22.2	7.5
10p	243.2	9.2	24.3	8.2
20p	191.6	7.2	38.3	13.0
50p	88.6	3.3	44.3	15.0
£1	145.1	5.5	145.1	49.2
<b>Total</b>	<b>2,646.7</b>	<b>100.0</b>	<b>295.1</b>	<b>100.0</b>

Figures may not sum to total due to rounding.

### Millennium Coin

More than 38,000 of the special design £1 silver proof coins based on the Brighter Boat, issued in November 1999 to commemorate the millennium, were sold by end-2000. Five million circulating £1 coins with the same design were issued during the year. A 2000-dated circulating coin set, including the millennium £1, was released in April; the issue which was limited to 10,000 sets was sold out by August 2000.

*Special Issues*



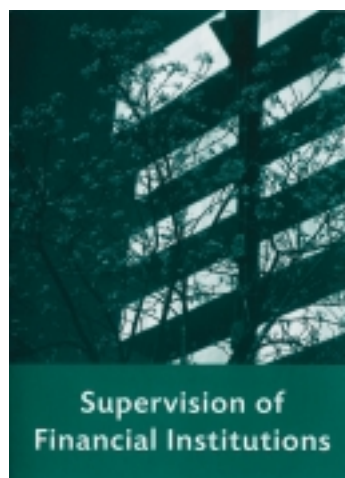
### Banknote Exchange

Arrangements for the exchange of euro area national banknotes, provided for under Article 52 of the ESCB Statute, continued in 2000. The Bank paid £39.88 million to other Eurosystem countries for Irish banknotes exchanged by them and exchanged other Eurosystem banknotes to the value of £0.92 million during the year.

*Euro Area Notes Exchanged*

## Supervision of Financial Institutions

Since 1 January 2000, there are three departments responsible for the supervision of financial institutions – Banking Supervision, IFSC and Funds Supervision and Securities and Exchanges Supervision.



A number of reviews of supervision have taken place in recent times. A multi-disciplinary team of specialists from the International Monetary Fund (IMF) carried out a large scale assessment of the Bank's performance as a supervisor in early 2000. Their report concluded that the overall framework of prudential regulation and supervision was well developed and showed a high degree of observance of international standards and codes. The IMF report entitled – "Report on the Observance of Standards and Codes (ROSC) Ireland" – has been published recently and is available on the IMF website as follows: [www.imf.org/external/np/rosc/irl/index.htm](http://www.imf.org/external/np/rosc/irl/index.htm)

In February 2000, the Comptroller and Auditor General published a report on the Bank's role in relation to financial regulation following an examination which took place in 1999. This report was discussed by the Public Accounts Committee at which the Comptroller and Auditor General stated "the system of financial regulation operated by the Central Bank in recent years is sound in that it conforms in all material respects to the international norms laid down for the sector" and that "the recommendations should be viewed as referring to desirable refinements to an already sophisticated system rather than to intrinsic shortcomings". He further stated that the Bank "has taken on the thrust of the recommendations in a way which addresses the concerns expressed".

### Scope of the Bank's Supervisory Remit

The number of financial institutions for which the Bank was responsible as at 31 December 2000 was 922 comprising :

<b>Credit Institutions</b>	82 <sup>6</sup>
<b>Financial Institutions</b>	
<i>Investment Intermediaries</i>	
RAIPs	401
Moneybrokers	7
Other Investment Intermediaries	131
Administrators of Collective Investment Schemes	55
Trustees of Collective Investment Schemes	25
Agency Fund Managers	136
Firms Supervised under Chapter VII of the Central Bank Act, 1989	3
Finex Related Entities (incl. 2 Exchanges)	63

<sup>6</sup> This figure includes 28 branches of EEA credit institutions.

*Institutions Supervised*

The Irish Stock Exchange	1
Stockbrokers	13
Approved Professional Bodies	5
	-----
	<b>922</b>

In addition, at end-December 2000, there were **2,355** authorised collective investment schemes (including sub-funds).

The Bank's statutory supervisory responsibilities, which are set out in various Acts of the Oireachtas and EU Directives listed in Appendix 1, cover a wide range of institutions including banks and building societies, investment intermediaries, securities exchanges and collective investment schemes.

#### *Statutory Responsibilities*

The objectives of supervision can be classified as follows:

#### *Objectives of Supervision*

- (i) protecting the stability of the banking and financial system as a whole, and
- (ii) providing a degree of protection to the consumers of financial services.

The rationale for (i) is that structures are required to help limit runs on financial institutions where the cost to the general public of institutional failure would exceed any losses borne by the shareholders and creditors of that institution. Financial institutions provide the only source of finance for a large number of borrowers and they also provide the mechanism through which payments throughout the economy are made. The basis for (ii) is the need for public intervention to ensure to a reasonable degree that financial institutions are safe repositories for depositors' and investors' funds and that consumers will be treated fairly and openly by an institution that is in a sound financial position.

The Bank carries out its supervisory responsibilities under two distinct headings: authorisation of new entities and ongoing supervision of existing entities.

### **Authorisation**

The licensing and authorisation function is a vitally important part of regulation. This is based on the principle that prevention is better than cure; hence, the emphasis on integrity, standing, financial soundness and proven experience in relation to any would-be owner of a bank or investment firm.

#### *Authorisation Criteria*

The legislation sets out criteria in relation to authorisation and, in the case of credit institutions, these are augmented by non-statutory conditions and standards in its *Licensing and Supervision Requirements and Standards for Credit*

*Institutions.* The licensing or authorisation of a financial institution, therefore, involves a comprehensive and rigorous examination of each application, including its financial position, main shareholders, directors and senior managers, internal controls and systems and its ability to comply with supervisory requirements. If, having completed that process, the Bank is not satisfied with the application and the applicant is not in a position to rectify the situation, the entity is not authorised. In most cases applicants choose to withdraw their applications for authorisation on receiving negative signals from the Bank, rather than proceed to a formal refusal. Where considered appropriate at the time of authorisation, the Bank imposes detailed requirements on the entity in accordance with the relevant legislation.

### *Supervisory Techniques*

#### **Ongoing Supervision**

The Bank's approach to ongoing supervision is to employ a range of techniques which vary from one type of institution to another and from activity to activity.

This is effected through a combination of both off-site surveillance and on-site inspections. The supervisory process is interactive in nature and usually entails dialogue between the Bank and supervised institutions. The techniques employed by the Bank are both quantitative and qualitative in nature. The principal quantitative measures for banks are requirements relating to minimum capital and liquidity levels, limits on large exposures to individual borrowers or to an associated group of borrowers, lending to connected parties (e.g. directors) and to individual economic sectors, concentration of deposits and acquisitions by banks in other entities or by other entities in banks. The calculation of minimum capital also takes account of the risks arising from exposures to foreign exchange rate and interest rate movements. Many of these requirements are also relevant for larger non-bank firms. For other firms, the emphasis is more specifically tailored to the nature of their business and, where appropriate, requirements in relation to client money are included in the quantitative techniques.

Qualitative assessment is by its nature subjective. However, an informed basis for qualitative judgements, particularly as regards corporate policy and its implementation, is provided by having access to an institution's books, records and key personnel at regular review meetings and in the course of on-site inspections.

In practice, a range of complementary on- and off-site approaches are adopted by the Bank. Off-site surveillance involves the examination of detailed returns received by the

Bank from supervised entities on a monthly, quarterly or six monthly basis, regular review meetings with senior management of the institutions and dealing with supervision issues as they arise on a day-to-day basis. On-site inspections consist of examination by the Bank's supervisory staff of the books and records of individual institutions. Inspections focus, as appropriate, on asset quality, large exposures, capital, earnings, liquidity, corporate governance, internal controls and compliance with the Bank's requirements in respect of client money and investments and its conduct of business requirements.

### **Approval and Supervision of Exchanges**

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 process described above. 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 Cotton Exchange 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.

*Focus is on Approval of Rules*

### **Authorisation and Supervision of Collective Investment Schemes**

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 and trustee 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.

*Detailed Assessment*

### **Public Registers**

As part of its supervisory role, the Bank maintains a register of authorised entities. This is available for inspection by the public on the Bank's premises or may be queried by phoning the Bank's Lo-call number.

*Register of Authorised Entities*

### **Unauthorised Activities and Complaints**

The Bank carries out prompt investigations whenever there is reason to believe a firm is carrying out unauthorised activities. Any complaints relating to firms under its supervision are dealt with by the Bank or referred to the appropriate ombudsman, where necessary.

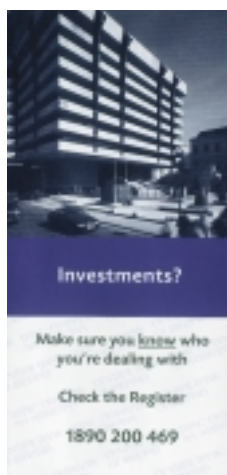
The Bank launched a **Lo-call line** on 31 March 1999 (**1890 200 469**) providing a facility to the public to enquire whether or not a firm which has offered investment services is authorised. During 2000 a

*Lo-call line*

total of 456 calls were received in addition to those received through the Bank's switchboard.

Whenever there is any doubt, consumers of financial products are urged to avail of the Lo-call number to ascertain whether or not a firm is authorised to carry out investment business. Failure to seek this information could result in the consumer becoming a victim of fraud.

### *Advice to Consumers*



### *Standards Constantly Reviewed*

#### **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: **Lo-call 1890 200 469**

#### **Supervision Standards**

The Bank's current supervisory standards and requirements are constantly reviewed to ensure that they continue to be in line with the best international practice and that they strike the right balance between providing a well-regulated environment on the one hand and not imposing undue costs to end users of financial services on the other. The full text of the Bank's standards and requirements in the above areas is available on the Bank's website: [www.centralbank.ie](http://www.centralbank.ie)

### *All Firms Must be Authorised*

#### **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 means that EEA investment firms or banks authorised in their home jurisdiction may provide services in Ireland without the need to obtain a further authorisation from the Bank. A notification procedure is in place whereby the authorities in other Member States notify the Bank when an institution intends to provide services into Ireland. The Bank maintains registers of EU investment firms, banks and collective investment schemes for this purpose. If in any doubt, consumers are advised to contact the Bank to ascertain the status of any institution or scheme.

### *Disclosure of Material Information*

#### **Consumer Requirements – Investment Products**

Requirements in respect of advertising and conduct of business have been in place since the introduction of the Investment

Intermediaries Act, 1995. The most important means of ensuring consumer protection is the requirement of full disclosure of any information which is material to the consumer's investment decision. In this way, consumers are better able to protect their own interests. Conduct of Business rules developed by the Bank require firms to disclose all relevant information. They seek to ensure that consumers are dealt with in a just and equitable manner according to the standards set out in the Code. For example, firms are required to draw up terms of business which, inter alia, provide an outline of the services to be provided, an outline of the investment firm's understanding of the consumer's objectives and investment restrictions and details of the firm's charges. Where a consumer is entering into a contract in relation to certain more risky investments, the Bank requires that these risks are highlighted and, in order to focus the consumer's mind further, he/she must sign a statement acknowledging these risks before the firm can deal for him/her. Firms are also required to disclose details of the relevant compensation scheme. If a firm is acting on a discretionary basis for a client (i.e., the firm can make investment decisions without reverting to the consumer) it is required to send regular statements to the client; the required content of such statements is set out in detail in the Code of Conduct.

Disclosure requirements are also included in the Bank's advertising requirements. In general, advertisements must be designed in such a way as to make them easily understood and statements relating to risk warnings must not be obscured. For example, if an advertisement claims that a product is guaranteed then details of both the guarantee and the guarantor must be provided. If comparisons are used in an advertisement, any assumptions on which they are based must also be disclosed. Advertisements must also contain a warning that past performance is not necessarily a guide to future performance. Where there are unusual risks in the product being advertised or where it relates to a high volatility investment or one which carries a contingent liability, these matters must be disclosed and explained to the consumer.

### **Supervision of Credit Institutions**

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) established in Ireland.

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).

*Institutions Licensed and Supervised*

*European Economic Area Institutions*

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 During the Year*

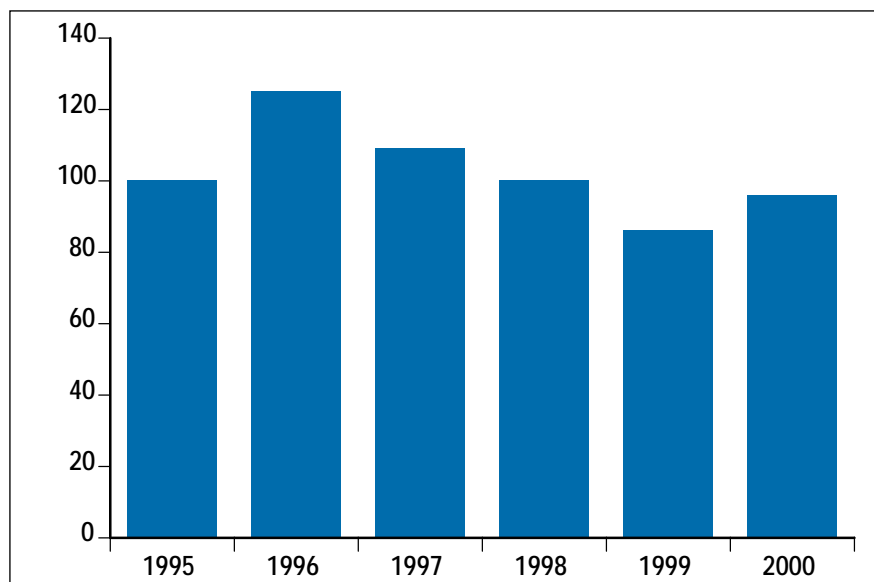
#### **Inspections and Reviews**

The work of supervising credit institutions is carried out in the Banking Supervision Department. During 2000, nine routine inspections and 53 reviews of credit institutions and related entities were completed; 22 theme inspections (on-site) of institutions' lending criteria and provisioning policy relating to their residential and commercial property portfolios were conducted and 21 theme inspections (on-site) of institutions' adherence to the anti-money laundering procedures were undertaken.

All necessary inspections and reviews were conducted during 2000 and the planned work programme was substantially completed. In addition, there were a number of unplanned events, which absorbed significant resources. These included:

- preparation of material for the IMF – Financial Sector Assessment Program initiated in 1999;
- submission to the Review Group on Auditing; and
- preparation of material for Oireachtas Committees and Tribunals.

**Chart 3:  
Onsite Inspections and Reviews of Credit Institutions**



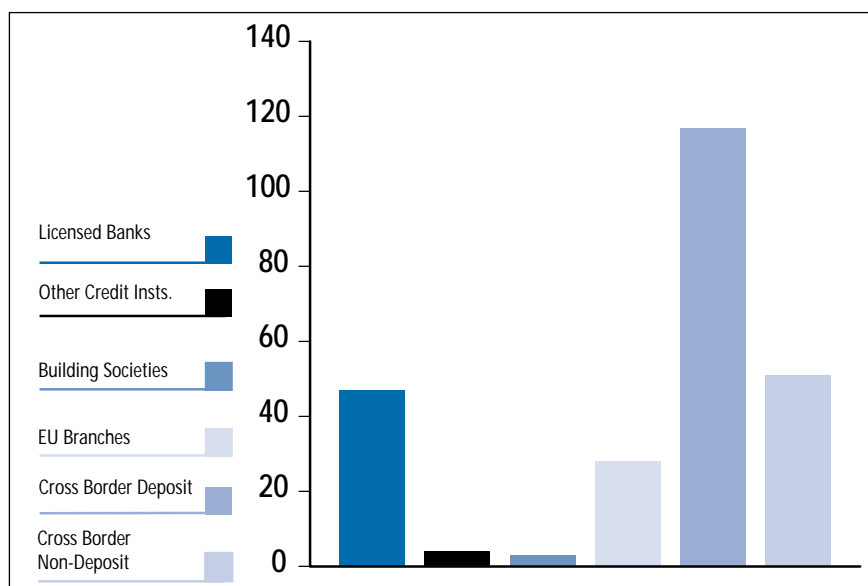
## Licence Changes

Five banking licence applications were approved by the Bank in 2000 (of these, three were issued) and five banking licences were surrendered. The total number of credit institutions supervised by the Bank at end-2000 was 82 – comprising 54 domestic credit institutions and 28 branches of EEA credit institutions. Four bureaux de change applications were authorised bringing the total to 12 at end-2000. In 2000 notifications were received by the Bank in respect of:

- Three EEA credit institutions which intended to establish branches in Ireland. Two commenced operations in 2000 and the third on 2 January 2001.
- 38 EEA credit institutions which intended to provide cross-border services into Ireland (23 of those notifications concerned deposit-taking and 15 concerned services other than deposit-taking).

*Changes in Licences*

**Chart 4:**  
**Authorised Credit Institutions at end 2000**



## Codes of Conduct and Questionnaires

During 2000, codes of conduct for the banking industry were issued for consultation. It is now proposed to issue the following:

- Code of Conduct for the Investment Business of Credit Institutions – outlining requirements governing any investment business conducted by credit institutions. This code is analogous to the Code for investment firms described earlier;
- Advertising Requirements applicable to Credit Institutions – this is divided into different sections applicable to different types of product being advertised by credit institutions. The section dealing with advertising of investment products is again analogous to the Advertising Requirements applicable to investment and stockbroking firms; and
- Code of Practice for Credit Institutions – outlining standards of good banking practice to be complied with in providing general banking services to consumers.

*Codes of Conduct*

A detailed application form, which standardises the Bank's assessment of the probity and competence of proposed directors and senior management of credit institutions, was finalised during the year and became effective in August 2000. All current directors and senior management of credit institutions completed this form.

#### *Main Prudential Concern*

### **Credit Growth: Prudential Concerns**

The high rate of credit growth remained the principal prudential concern in 2000. Focused on-site inspections were carried out to examine both residential and commercial property lending. In addition, a survey was carried out in late 2000 to ascertain the maximum amount that financial institutions were prepared to lend to three hypothetical home mortgage loan applicants. Finally, a detailed comparison of institutions' lending practice with stated policy was carried out. These exercises culminated in the identification by the Bank of some additional characteristics of prudent home mortgage lending policy and practice, which it would consider as best practice. A letter was issued to credit institutions in February 2001 detailing these characteristics and requesting them to confirm the consistency of their home mortgage lending policies with these characteristics.

Banking Supervision also strengthened its assessment of the macroprudential situation, through more detailed analysis of trends in the financial sector, refinement of the regular stress testing exercises, deeper examination of the financial fragility of borrowers and assessment of the exposure of the banking system to macroeconomic risks.

### **Supervision of Entities other than Credit Institutions**

Supervision of entities other than credit institutions is carried out by Securities and Exchanges Supervision Department and IFSC and Funds Supervision Department.

#### *Monitoring Continued*

### **Inspections and Reviews**

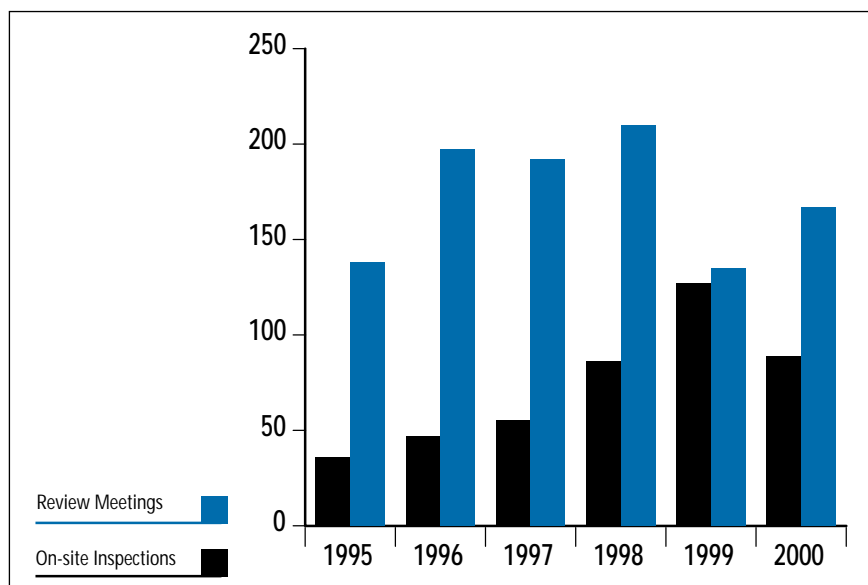
As in the case of credit institutions, monitoring of firms throughout the period comprised on-site inspections, formal review meetings, correspondence and communications on specific issues. During the year, 89 inspections and 167 review meetings were held. In addition, resources were directed to deal with an increased level of new applications, the emergence of unanticipated challenges in the stockbroking industry related to unprecedented volumes of business and a number of issues relating to particular stockbroking and investment firms.

#### *Authorisation of Investment Intermediaries*

### **Investment Intermediaries**

Forty nine firms were authorised under Section 10 of the Investment Intermediaries Act, 1995 (IIA) during 2000 to provide investment services. Seven authorisations were revoked by the Bank at the request of the firms concerned, resulting in a total of 240 firms being included on the register maintained by the Bank at year end. Eighteen applications were under review at 31 December 2000.

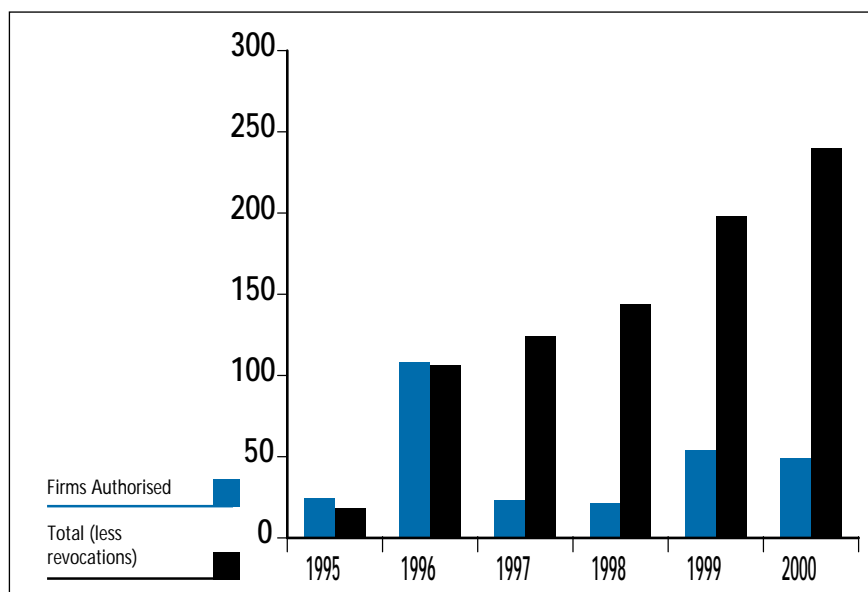
**Chart 5:**  
**Review Meetings with and Inspections of Regulation**  
**Entities other than Credit Institutions**



### Restricted Activity Investment Product Intermediaries (RAIPs)

A restricted activity investment product intermediary (RAIPI) is a limited form of investment business firm which typically acts as a deposit agent or broker for a client or receives and transmits orders from/to a product producer from whom it holds a valid letter of appointment. Twenty seven authorisations were issued during the year while 133 appointments were discontinued resulting in 401 RAIPs on the register maintained by the Bank at 31 December 2000. Twenty five applications were under consideration at year end.

**Chart 6:**  
**Authorisations under Section 10 of the**  
**Investment Intermediaries Act, 1995**



*Five Accountancy Bodies  
are Approved*

### 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* which allows them to carry on investment business services or provide investment advice on an incidental basis. Such a person is deemed to be an authorised investment business firm for the purposes of the Investment Intermediaries Act, 1995.

*Publication of  
Warning Notices*

### Unauthorised Firms

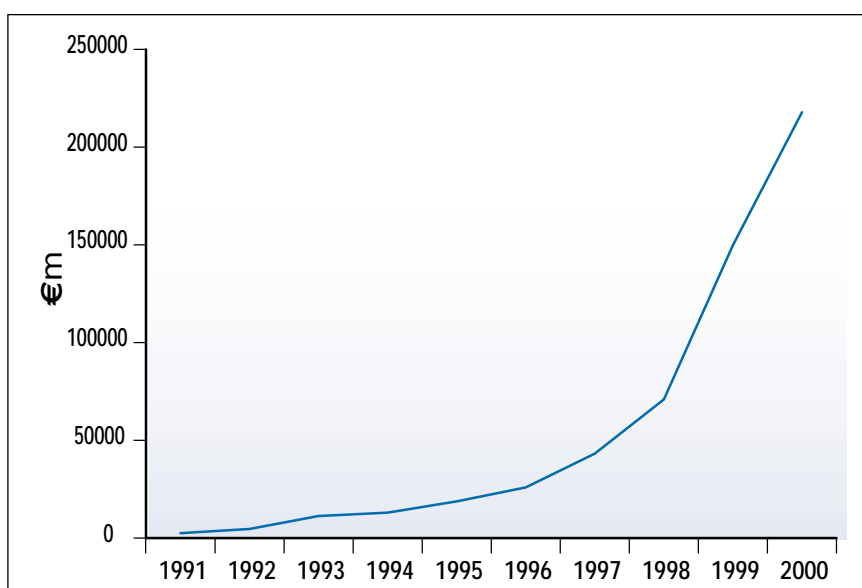
It is an offence for any person to provide investment business services without an appropriate authorisation. During the year ended 31 December 2000, ten warning notices concerning 18 firms carrying on unauthorised investment business were published bringing the total since the power to publish such notices was given to the Bank in August 1998 to 28 notices concerning 57 firms.

*Authorisation Process*

### Collective Investment Schemes – Authorisation Process

Collective Investment Schemes are established for the purpose of investing the pooled funds of investors (held as units or shares in the schemes) in investment assets in accordance with investment objectives published in a prospectus. During the year, 126 schemes (563 including sub-funds) were authorised, compared with 117 schemes (404 including sub-funds) in the corresponding period in 1999. The number of schemes being processed at end-December 2000 was 45 (220 including sub-funds). An average of 613 amendments to existing funds were being received per month during the period under review.

**Chart 7:**  
**Net Asset Value of Collective Investment Schemes**



*Guidance Notes*

### Policy Developments – Collective Investment Schemes

Guidance notes are issued by the Bank from time to time to provide direction on issues relating to the funds industry. A guidance note

was issued in November 2000 on the valuation of assets of collective investment schemes.

The Bank participated in discussions in relation to the European Commission's two proposals to amend Directive 85/611 regarding Undertakings for Collective Investment in Transferable Securities (UCITS). Agreement at EU Council level was reached on the first proposal in October (this proposal seeks to extend the range of instruments in which a UCITS can invest and also to interpret some of the existing provisions of the original directive). Agreement on the second proposal was reached in early 2001 (this proposal deals with the authorisation of management companies of UCITS and extends the range of their permitted activities).

### **Extension of supervisory responsibilities – insurance intermediaries**

Arising from the signing into law on 20 December 2000 of the Insurance Act, 2000, responsibility for the supervision of insurance intermediaries will transfer to the Bank on 1 April 2001. A consultation paper setting out the Bank's proposed approach to the regulation of insurance intermediaries was issued for public and industry comment in December. The Bank requested all insurance companies to provide details of their appointed intermediaries in order to facilitate construction of the required registers.

*Supervision of Insurance Intermediaries Transferred to the Bank*

### **Handbook for Investment and Stockbroking Firms**

A review of the conduct of business regime for authorised firms was completed. In September 2000, a Handbook for Investment and Stockbroking Firms (including general supervisory and reporting requirements, a code of conduct, and advertising requirements) was issued to all members of the Irish Stock Exchange and all firms authorised under Section 10 of the Investment Intermediaries Act, 1995, as well as those firms passporting investment services into Ireland.

*Handbook Issued*

During the year the Bank also issued separate revised codes of conduct for deposit agents and other RAIPs as well as comprehensive supervisory and reporting requirements for these firms.

## **General Supervisory Issues**

### **Financial Supervision Policy Committee**

A Financial Supervision Policy Committee (FSPC), comprising management of the three supervision departments and chaired by the Assistant Director General responsible for financial services regulation, considers issues of common concern to the three departments and ensures, to the extent appropriate, that a standard approach is adopted in relation to such issues. Reporting into the FSPC are a number of sub-committees as follows:

*Supervision Policy Committees*

- Financial Supervision Policy Sub-Committee on Legislation;

- Review of Supervisory Practices Sub-Group;
- FSPC Training Sub-Group;
- FSPC Technology Sub-Group; and
- FSPC Money Laundering Sub-Group.

Each of these sub-committees is comprised of senior staff members from each of the supervisory departments and considers various issues with a view to bringing forward proposals to the FSPC for consideration.

During the year, the FSPC Committee largely focused on the review of supervisory practices. This has resulted in the Bank developing a risk-based approach to its supervisory function. Under this approach, resources will be concentrated on entities in accordance with their risk profile.

A Financial Stability Co-Ordination Committee, chaired by the Bank's Director General, monitors issues relating to financial stability. This requires input from the Supervision Division and the Monetary Policy and Economic areas of the Bank, which enables it to identify areas of fragility within the economy and the financial system which could impact on stability.

#### *Capital Adequacy*

##### **Capital Review**

Proposals by the Basle Committee on Banking Supervision and the EU Commission for a new capital adequacy framework to replace existing capital requirements will have a considerable impact on supervisory practices over the coming years. The Bank participated in a number of EU working groups to consider in greater detail the proposed new framework and the responses from both industry and supervisory authorities to the consultative document. The Basle Committee and the EU Commission issued second consultative papers in January 2001 with a closing date for responses of end-May 2001. It is expected that the present proposals will be finalised and that work on an EU Directive will commence in 2001.

#### *Money Laundering*

##### **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 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.

Money laundering is broadly defined as the concealment, disguise, conversion or removal from the State of any property including money which is or represents the proceeds of drug trafficking or other criminal activity (including tax evasion), for the purpose of avoiding prosecution or the making or enforcement of a confiscation order. Providing assistance to a person engaged in money laundering is also an offence. The 1994 Act places an obligation on the Bank to

report its suspicions that a financial institution under the Bank's supervision may have committed an offence. In addition, institutions, their directors, employees and officers have specific obligations to report to the Garda Síochána where they suspect that an offence of money laundering has been or is being committed in relation to their business or where an offence dealing with customer identification and record retention has been, or is being, committed.

The Supervision Departments are involved in a review of the Money Laundering Guidance Notes for credit and financial institutions originally issued in April 1995. The revised Guidance Notes are expected to be approved by the Money Laundering Steering Committee, chaired by the Department of Finance, in 2001 and issued to the relevant institutions.

At end-December 2000, the Bank had made 27 reports to the Garda Síochána in respect of firms under its supervision, 5 of which were made during 2000. 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.

### **Deposit Protection**

A deposit protection scheme, funded by credit institutions (banks and building societies), is administered by the Bank. The level of protection available to a depositor, in the event of a credit institution being unable to repay deposits, is 90 per cent of the total amount of deposits held by that depositor with the credit institution in question up to a maximum of €20,000. Thus, a depositor with deposits totalling €5,000 would be entitled to compensation of €4,500 while a depositor with deposits totalling €22,222 or more would receive the maximum compensation available of €20,000. The level of the Deposit Protection fund at 31 December 2000 was €201 million. No compensation has been paid to date under this scheme.

*Deposit Protection Scheme*

### **Investor Compensation**

The Investor Compensation Act, 1998 provides a system of compensation in the event of an investment firm (i.e., a stockbroker, investment intermediary, insurance intermediary or bank carrying on investment business) being unable to meet its financial obligations to clients. Under this scheme, payout is available only to private clients with the maximum compensation being 90 per cent of the amount invested, up to a €20,000 maximum. As is the case with the deposit protection scheme, the compensation fund is funded by the investment firms concerned.

*Investor Compensation Scheme*

The Bank is the supervisory authority for the purposes of the Investor Compensation Act. Its functions 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.

#### *Claims for Compensation*

As a result of the liquidation of the stockbroking firm MMI Stockbrokers Limited, the Investor Compensation Company Limited (ICCL) received 305 claims for compensation. The liquidator had certified 179 of these claims prior to 31 December 2000 and is currently assessing the balance.

In October 1999, following an investigation, the Bank made a determination in relation to Mr. Andrew Casey (a Cork-based insurance intermediary trading as Andrew Casey Life & Pensions) that the firm was unable to meet its obligations to its clients and had no reasonable foreseeable opportunity of being able to do so. The ICCL subsequently received eight claims for compensation – one claim was certified to the ICCL; five claims were found to have no compensatable loss as the losses referred to transactions prior to the Investor Compensation Act, 1998, while a further claim was disallowed as it did not relate to investment business. The only remaining claim was being assessed at year-end.

### **Supervision Co-Operation Internationally**

#### *Globalisation of Financial Services*

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*

### **EU and other 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; and

- (v) the Enlarged Contact Group on the supervision of collective investment schemes which deals with the supervision of the funds industry.

Bank representatives also participate in European Central Bank Committees and working groups and in a number of EU working groups.

## FESCO/IOSCO

The Forum of European Securities Commissions (FESCO) 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. The Bank is an active member of FESCO.

The Bank is also a member of the International Organisation of Securities Commissions (IOSCO) which is the international representative body for securities regulators with in excess of 100 members.

## Memoranda of Understanding

Co-operation with other supervisory authorities is organised by establishing working relations through bilateral Memoranda of Understanding.

## Management and Support Services

### Human Resources

Staff turnover during 2000 was 12.9 per cent which was a little below the 14.4 per cent recorded in 1999. Staff numbers increased by 39 to reach 707 at end December 2000. This increase mainly reflects the continued expansion of the Bank's supervisory responsibilities. The preparations for the rollout of the euro notes and coins were also a factor in the increase. The majority of Bank staff are permanent full-time employees. Of the total staff at end 2000, 486 were banking and professional officials and 221 industrial, craft and service staff. 10 staff were on secondment to the ECB.

*Staff Turnover Fell*

### Staff Training and Development

Under the Bank's Academic and Professional Training Scheme, 12 staff successfully completed professional or university degree courses by attendance at evening lectures and by home study. This scheme will continue to cover a wide range of courses for university degrees and qualifications of professional bodies. A further 5 staff were successful in various stages of the Institute of Bankers in Ireland examinations. During the year a combination of internal and external courses in management, interpersonal, technical and language skills was provided.

*Training*

Bank staff attended courses/seminars at the Federal Reserve Bank of New York, the International Monetary Fund, the Banque de France, the Deutsche Bundesbank, the Swiss National Bank and participated in the International Banking Summer School and joint training programmes involving the European Central Bank and the central banks of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Italy and the Netherlands.

#### *Remuneration*

### **Remuneration Policies**

The remuneration policy for staff is on the basis of appropriate comparators in the Public Sector or by reference to relevant industry norms. The Bank applies the terms of national pay agreements to all categories of staff. Agreements have been concluded with all groups of staff on changes in working arrangements related to ESCB activities and on changes in work practices related to the changeover to euro notes and coin.

#### *Equal Opportunities*

### **Equal Employment Opportunities**

The Bank is an equal opportunities employer and recruitment and employment policies are administered on this basis. Training programmes, academic training facilities, promotion competitions, job-sharing and career break schemes are available to all staff serving in grades to which the schemes are applicable. 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 working arrangements such as job-sharing, part-time work, career break, special leave and short-term contracts. The Bank provides facilities for the provision of work experience and temporary work placements for a small number of students.

### **Safety, Health and Welfare at Work Act, 1989**

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

### **Technical Assistance**

During the year, staff participated in IMF technical assistance programmes for Kosovo and South Africa and provided bi-lateral technical assistance to the Central Bank of Malta. The Bank hosted study and information visits by officials from the Bank of England, the South African Reserve Bank, the Central Bank of Malta, the Hungarian Financial Services Authority, the National Bank of Poland and the Bank of Botswana. Information visits were also organised for the Ministries of Finance and National Banks of the Czech Republic, Hungary, Poland and Slovakia.

#### *Planning Process*

### **Strategic Planning and Organisation Structure**

The Bank's planning and budgeting processes incorporate 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 processes. In this context, the major issues impacting on the planning processes at present are the Bank's evolving role within the Eurosystem and the developing and future responsibilities of the Bank in the area of financial regulation and supervision.

### Media and External Communications

The Bank's Press Office provided an ongoing information service to the domestic and international media. Press-related activities included regular press briefings, interviews by the Governor and other senior personnel and media events including the launch of euro banknote production. Press releases are published on the Bank's website – [www.centralbank.ie](http://www.centralbank.ie)

As part of its role with the ECB's External Communications Committee, the Press Office co-ordinated and managed media relations on a domestic basis for the ECB and the ESCB. The Bank also participated in the start-up of the ESCB's **EURO 2002 Information Campaign**. This campaign will continue throughout the coming year. ESCB euro information is updated on the website – [www.euro.ecb.int](http://www.euro.ecb.int)

The Bank was also involved in a range of educational and other external communication activities. A series of new public information leaflets was published, the Bank participated in the Money 2000 Exhibition and also hosted a number of visits from schools and colleges.

### Publications

Financial statistics and other economic information were published by the Bank and circulated to the financial, business, public administration and political communities as well as to universities, research centres and international institutions. The Bank's publications in 2000 included the Annual Report, Quarterly Bulletins and Monthly Statistics.

### Information Systems

The Bank began a review in 2000 of its Information Technology Strategy with assistance from external consultants. The main areas covered by the review are the Bank's Application and Information needs, Technology issues and the Management and Organisation of information technology in the Bank.

Following a detailed assessment of new and changing business needs in the Supervision area, a major upgrade of systems was undertaken. Database systems were enhanced to cater for new requirements and to improve access to data. A new system for Investment and Insurance Intermediaries is being developed and will be implemented by mid-2001. Statistics provided by the ECB were added to the Bank's statistics database for use by various departments.

#### Media Activities



A significant effort was concentrated on systems in the Currency Centre. A schedule of projects was developed with the aim of improving controls, administration and the dissemination of production information. The timing of the projects is aligned with the launch of euro banknotes and coins and so extends to the end of 2001.

Major enhancements were made to the Bank's core technology infrastructures. The main applications server, an IBM Multiprise Server, was upgraded to increase processing power and data storage capacity and links to PC clients were enhanced. The process of upgrading PC clients to Pentium level hardware with Windows 2000 and Office 2000 software continued. In conjunction with this, additional network management procedures were implemented and e-mail and internet services were expanded.

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

The 27th day of April, 2001.

Maurice O'Connell, Governor

Brian Halpin, Secretary

# Financial Operations

## Accounting Policies

It has always been the Bank's policy in preparing its financial statements to follow, as far as possible, accounting standards generally accepted in Ireland. A statement of the Bank's accounting policies is provided in the standard way 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. Following a tender procedure in accordance with the EU rules, PricewaterhouseCoopers was appointed as independent external auditor of the Bank.

Since the first working day of its membership of the Eurosystem, the Bank has been obliged to comply with 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 and then redistributed according to each NCB's share in the capital of the ECB subject to any decision taken by the Governing Council of the ECB pursuant to powers vested in the Governing Council under the Treaty. During the initial years of monetary union, the net effect of this pooling and redistribution of monetary income is designed so as not to have a material impact on National Central Banks' profits. For 2000 the Bank received a net €252,028 from the pool.

## Prompt Payment of Accounts 2000

The Bank is listed in the schedule to the Prompt Payment of Accounts Act, 1997 and is therefore obliged to comply with the terms of that Act. In reporting under the requirements of Section 12 of the Act, the Bank has taken account of the Guidelines issued by the Minister for Enterprise, Trade and Employment.

During the year the Bank continued to operate and refine as required its monitoring procedures which are designed to reduce the incidence of late payments. In March, the Bank was advised by the Department of Enterprise, Trade and Employment that the Act did not apply to payments due to foreign suppliers. The Department also confirmed, as the Bank already understood, that there is no minimum interest amount or threshold below which interest paid on individual late payments may be waived by the Bank or the supplier. The rate of interest applied on late payments during the year was 10 per cent per annum.

Details of interest payments made to suppliers during 2000 in compliance with the provisions of the Prompt Payments of Accounts Act, 1997, were as follows:

• Total number of late payments in excess of €300	40
• Total value of late payments in excess of €300	€109,904
• Total value of all late payments (A)	€114,612
• Total value of all payments (B)	€11,255,365
• A as % of B	1.02%
• Total amount of interest paid on late payments	€509

## Financial Results

Profit for the year to 31 December 2000 before unrealised gains on investments amounted to €520.5 million, an increase of €272.5 million over the 1999 figure. There was an increase in **net interest income** of €133.6 million mainly attributable to increases in interest receivable on securities of €99.1 million and monetary policy operations of €185.8 million. This was offset by a decrease of €30.7 million in interest received on intra-Eurosystem balances. The increase in interest payable of €152.9 million is mainly attributable to the rise in interest rates during the year resulting in an increase in interest payable on government deposits of €39.6 million and interest payable to credit institutions of €72.6 million. The net result of financial operations, write downs and risk provisions increased by €127.7 million. Income from equity shares and participating interests increased by €19.5 million due mainly to the distribution of ECB profits.

Total operating costs, that is pay, non-pay, banknote raw materials and depreciation, charged against profit increased by €9.0 million or 23.5 per cent in 2000. Pay costs increased by €4.3 million (18.2 per cent), while other operating costs increased by €4.8 million (31.8 per cent).

These increases reflect, in particular, increased staff numbers in the Supervisory departments and the Currency Centre. A detailed analysis of the Bank's operating costs is given in Note 7 of the Statement of Accounts.

After transfers to reserves the Bank's Surplus Income of €451.3 million accrues to the Exchequer. The corresponding figure for 1999 was €213.4 million.

**Table 1. Summary Profit and Loss Account**

€million	31 Dec 2000	31 Dec 1999	Change
Interest Income	724.0	437.5	286.5
Interest Expense	(339.6)	(186.7)	(152.9)
<b>Net Interest Income</b>	<b>384.4</b>	<b>250.8</b>	<b>133.6</b>
Net result of financial operations, write downs and risk provisions	161.8	34.1	127.7
Income from fees and commissions	2.3	2.9	(0.6)
Income from equity shares and participating interests	19.0	(0.5)	19.5
Net Result of Pooling of Monetary Income	0.3	(1.0)	1.3
Other Income	0.4	0.2	0.2
<b>Total Net Income</b>	<b>568.1</b>	<b>286.6</b>	<b>281.5</b>
Total Administration Costs	(43.2)	(35.0)	(8.2)
Depreciation	(4.4)	(3.6)	(0.8)
<b>Total Operating Costs</b>	<b>47.6</b>	<b>38.6</b>	<b>9.0</b>
<b>Profit (income less expenses and operating costs)</b>	<b>520.5</b>	<b>248.0</b>	<b>272.5</b>

Figures may not sum due to rounding

**Table 2. History of Profit 1996-2000**

	1996	1997	1998	1999	2000
€m	152.6	146.5	224.7	248.0	520.5

## Balance Sheet Developments

The total value of the balance sheet increased by €3,155 million in 2000. Banknotes in circulation increased by €479 million. Liabilities to euro area credit institutions related to monetary policy operations in euro increased by €352 million mainly due to higher average minimum reserve requirements. Liabilities to other euro area residents denominated in euro, essentially government deposits, decreased by €1,419 million. The decrease was mainly due to the repayment of a short-term deposit of €1,016 million which was held over the year-end 1999 on behalf of the Eircom pension fund. Intra-Eurosystem net liabilities to the ECB were €4,000 million at end-2000 compared to €373 million on the same basis at end-1999. Changes in this item reflect cross-border payments made by financial

institutions in euro through the ESCB's large-value payments system – TARGET<sup>1</sup>. There was an increase of €268 million in Revaluation Accounts, mainly reflecting valuation gains in foreign assets as a result of the depreciation of the euro over the period. Capital and Reserves increased by €104 million mainly as a result of appropriations from profits of €66 million to the General Reserve, €4 million to the Superannuation Reserve and transfers to the Currency Reserve of €34 million arising from the issue of coin.

Claims on non-euro area residents denominated in foreign currency increased by €922 million due mainly to capital and exchange rate appreciation and portfolio investment activities. Lending to euro area credit institutions related to monetary policy operations in euro increased by €3,345 million. This was mainly due to an increase in short-term advances to domestic credit institutions – reflecting the impact of ESCB monetary policy operations. General government debt in euro decreased by €167 million. This was due to (i) the maturing in June 2000 of a Global Certificate of Indebtedness of €40 million with the National Treasury Management Agency and (ii) the maturity in September 2000 of a loan to the Minister of Finance of €127 million in respect of funding of the Administration of Insurance Corporation of Ireland. The Bank's claim on the ECB arising from the transfer of foreign reserve assets to the ECB remains unchanged at €425 million. The foreign reserve assets involved continue to be managed by the Bank on behalf of the ECB.

<sup>1</sup> *Trans-European Automated Real-time Gross settlement Express Transfer system*

# Statement of Accounts of the Central Bank of Ireland for the year ended 31 December 2000

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## 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.

Maurice O'Connell, Governor

David Begg, Director

30 March 2001

## Accounting Policies

### (a) Form of Presentation of Accounts

In preparing the accounts, the Bank as a participating member of the ESCB<sup>1</sup> 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 provisions<sup>2</sup> 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 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.

<sup>1</sup> 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 eleven national central banks of the participating Member States, plus the ECB, who entered into monetary union on 1 January 1999.

<sup>2</sup> 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 32 (vi)). In addition, staff superannuation contributions to the Spouses' and Children's Pension Scheme are credited to the Superannuation Reserve (Note 32 (vii)).

**(e) Coin Production 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.

**(f) Foreign Currency Transactions**

Transactions denominated in foreign currency are converted 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**

Gold is valued at the closing market price and securities at mid-market closing prices at year-end. 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 31). The exchange rate valuation of assets and liabilities is performed on a currency-by-currency basis. The valuation of securities is performed on a security-by-security basis.

**(i) Recognition of Gains and Losses**

Realised gains and losses arising from dealings in foreign exchange, gold and securities are accounted for through the profit and loss account.

At the end year, all assets and liabilities are valued as per Accounting Policy (h). Unrealised gains arising from fluctuations in exchange rates and prices of gold and securities are accounted for through the profit and loss account and transferred therefrom to a revaluation account as specified under ESCB requirements.

Unrealised losses incurred in a financial year are accounted for through the profit and loss account to the extent that they exceed revaluation gains brought forward from previous years. Unrealised losses accounted for through the profit and loss account in this manner may not be reversed in subsequent years against future unrealised gains.

All gains and losses are recognised through the profit and loss account. Therefore it is not considered necessary to include a separate Statement of Total Recognised Gains and Losses.

**(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 and also lead to an interest expense in the profit and loss account. 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, 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.

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

**(k) Intra-Eurosystem Claims**

All NCBs of the Eurosystem maintain accounts with each other for the purpose of making bilateral payments including cross-border payments through the TARGET<sup>3</sup> 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-2000 the four non-participating countries (U.K., Denmark, Sweden and Greece) were included in the multilateral netting process. This multilateral netting process commenced on 30 November 2000 and is therefore reflected for the first time in the end-2000 accounts. The comparative figures for 1999 are not restated on the face of the balance sheet.

**(l) 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. 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. There were no off-balance sheet instruments traded during the year or outstanding at 31 December 2000.

**(m) Reclassification of Accounting Items**

Due to a reclassification of the balance sheet by the ECB some items appear under different headings. In other instances, it was considered appropriate to reclassify some items to improve presentation. Where accounting items have been reclassified in the current year the corresponding comparative items for the previous year are identified and have been restated, with one exception (see (k) above), on the face of the accounts and/or in the notes to the accounts.

<sup>3</sup> Trans-European Automated Real-time Gross settlement Express Transfer system.

## Profit and Loss and Appropriation Account for year ended 31 December 2000

		2000	1999
	Note	€000	€000
Interest Income	1	723,977	437,540
Interest Expense	2	(339,557)	(186,697)
<b>NET INTEREST INCOME</b>		<b>384,420</b>	<b>250,843</b>
Realised gains (losses) arising from financial operations	3	162,501	78,121
Write-downs on financial assets and positions	3	(724)	(43,997)
<b>Net result of financial operations, write-downs and risk provisions</b>		<b>161,777</b>	<b>34,124</b>
Income from fees and commissions	4	2,304	2,913
Income from equity shares and participating interests	5	18,971	(533)
Net result of pooling of Monetary Income	6	252	(1,013)
Other income		419	243
<b>TOTAL NET INCOME</b>		<b>568,143</b>	<b>286,577</b>
Staff costs	7	(27,916)	(23,622)
Administrative expenses	7	(10,554)	(8,982)
Depreciation	7	(4,430)	(3,588)
Banknote raw materials	7	(4,736)	(2,390)
<b>PROFIT FOR THE YEAR BEFORE UNREALISED GAINS</b>		<b>520,507</b>	<b>247,995</b>
Unrealised gains	31	268,160	648,199
Transfers to revaluation account	31	(268,160)	(648,199)
Transfers to Other Reserves	32	(69,204)	(34,558)
<b>SURPLUS INCOME PAYABLE TO THE EXCHEQUER</b>	<b>8</b>	<b>451,303</b>	<b>213,437</b>

The accounting policies together with Notes 1 to 41 form part of these accounts

Banc Ceannais na hÉireann

30 March 2001

Maurice O'Connell, Governor

Brian Halpin, Deputy Director General

## Balance Sheet as at 31 December 2000

		2000	1999
	Note	€000	€000
<b>ASSETS</b>			
Gold and gold receivables	9	56,691	55,335
Claims on non-euro area residents in foreign currency		6,242,930	5,321,130
<i>Receivables from the IMF</i>	10	405,100	453,383
<i>Balances with banks and security investments, external loans and other external assets</i>	11	5,837,830	4,867,747
Claims on euro area residents in foreign currency	12	315,318	93,910
Claims on non-euro area residents in euro	13	21,533	23,452
Lending to euro area credit institutions related to monetary policy operations in euro	14	8,406,680	5,062,087
Other Claims on euro area credit institutions in euro	15	303	116
Securities of euro area residents in euro	16	2,048,007	1,941,128
General government debt in euro	17	–	167,216
Intra-Eurosystem claims		467,280	1,396,377
<i>Participating interest in ECB</i>	18	42,480	42,480
<i>Claims equivalent to the transfer of foreign reserves</i>	19	424,800	424,800
<i>Other claims within the Eurosystem (net)</i>	20	–	929,097
Items in course of settlement	21	5,778	344,851
Other assets	22,23	362,235	366,020
<b>TOTAL ASSETS</b>		<b>17,926,755</b>	<b>14,771,622</b>

The accounting policies together with Notes 1 to 41 form part of these accounts

Banc Ceannais na hÉireann

30 March 2001

Maurice O'Connell, Governor

Brian Halpin, Deputy Director General

## Balance Sheet as at 31 December 2000

		2000	1999
	Note	€000	€000
<b>LIABILITIES</b>			
Banknotes in circulation	24	4,992,746	4,513,429
Liabilities to euro area credit institutions related to monetary policy operations in euro	25	2,426,327	2,074,226
Liabilities to other euro area residents in euro	26	2,139,055	3,558,210
Liabilities to non-euro area residents in euro	27	27,589	1,319,461
Liabilities to non-euro area residents in foreign currency	28	588,165	63,677
Counterpart of special drawing rights allocated by the IMF	29	122,183	119,114
Intra-Eurosystem liabilities (net)	20	4,000,008	-
Other liabilities	30	748,998	613,630
Revaluation accounts	31	1,418,858	1,150,698
Capital and reserves	32	1,462,826	1,359,177
<b>TOTAL LIABILITIES</b>		<b>17,926,755</b>	<b>14,771,622</b>

The accounting policies together with Notes 1 to 41 form part of these accounts

Banc Ceannais na hÉireann

30 March 2001

Maurice O'Connell, Governor

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## Notes to the Accounts

### Note 1 Interest Income

	2000	1999
	€000	€000
Deposit Income	104,838	96,214
Coupons on Securities	273,769	174,666
Reverse Repurchase Agreements (i)	4,402	6,203
Premiums/Discounts on Securities	33,388	15,675
Monetary Policy Operations (ii)	278,194	92,436
Intra-Eurosystem Balances (iii)	11,979	42,667
Income from Transfer of Assets to ECB (iv)	14,800	9,827
Other	2,607	(148)
<b>Total</b>	<b>723,977</b>	<b>437,540</b>

(i) See Accounting Policy (j).

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

(iii) 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.

(iv) In 1999, this item was included in the category 'Income from Equity Shares and Participating Interests' (Notes 5 & 19).

### Note 2 Interest Expense

	2000	1999
	€000	€000
Government	122,228	82,594
Credit Institutions	149,294	76,739
Intra-Eurosystem Balances (Note 1(iii))	51,928	17,815
Repurchase Agreements (i)	10,111	5,310
Other	5,996	4,239
<b>Total</b>	<b>339,557</b>	<b>186,697</b>

In 1999, the 'Net Result of Pooling of Monetary Income' was included under this item. For 2000, it is classified separately on the face of the profit and loss account (Note 6).

(i) See Accounting Policy (j).

### Note 3 Realised Gains/(Losses) arising from Financial Operations

	2000	1999
	€000	€000
Net Realised Price Gains/(Losses) on Securities	4,952	(3,103)
Net Realised Exchange Rate Gains	157,549	81,224
<b>Total</b>	<b>162,501</b>	<b>78,121</b>

#### Write Downs on Financial Assets and Positions

	2000	1999
	€000	€000
Unrealised Price Losses on Securities	724	43,862
Unrealised Exchange Rate Losses	-	135
<b>Total</b>	<b>724</b>	<b>43,997</b>

**Note 4 Income from Fees and Commissions**

	<b>2000</b>	<b>1999</b>
	<b>€000</b>	<b>€000</b>
Service Fees and Charges	804	910
Security Lending	1,095	838
BIS Commission (i)	315	1,058
Other	90	107
<b>Total</b>	<b>2,304</b>	<b>2,913</b>

- (i) This item is commission on the participation in the lending facility by the Bank for International Settlements (BIS) to the Central Bank of Brazil. The Bank's share of the loan facility amounts to approximately USD12 million and is fully guaranteed by the Minister for Finance under the Bretton Woods Agreements (Amendment) Act, 1999. This facility terminated on 12 April 2000.

**Note 5 Income from Equity Shares and Participating Interests**

	<b>2000</b>	<b>1999</b>
	<b>€000</b>	<b>€000</b>
Share of ECB Profits (i)	17,222	–
Direct Charge due to Loss of ECB (ii)	–	(1,988)
BIS Dividend (iii)	1,749	1,596
Other (iv)	–	(141)
<b>Total</b>	<b>18,971</b>	<b>(533)</b>

In 1999, 'Income from Transfer of Assets to ECB' was included under this heading but is now shown under 'Interest Income' (Note 1).

- (i) This item represents the Bank's percentage share of the ECB's distributable profit for 2000.  
(ii) This item represents the Bank's share of the loss of the ECB for 1999 which could not be met by the ECB's own reserves and the monetary income of the Eurosystem for the year. The total loss of the ECB for 1999 was €247.3 million.  
(iii) Dividend received on shares in the Bank for International Settlements (Note 22).  
(iv) The figure for 1999 refers to the Bank's share of losses incurred on the liquidation of the European Monetary Institute (EMI) – the forerunner of the ECB.

**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. The calculation is based on a formula determined by the Governing Council of the ECB to be used during the transitional period 1 January 1999 to 31 December 2001. In 1999, this item was included in 'Interest Expense' (Note 2).

## Note 7 Expenses

€000	Dame Street		Currency Centre (Excl. Coin) (i)		Total (Excl. Coin) (i)		Coin(i)		Total(i)	
	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999
Pay	18,065	15,088	6,383	5,520	24,448	20,608	773	628	25,221	21,236
PRSI	743	529	257	208	1,000	737	60	40	1,060	777
Pensions	1,649	1,476	819	801	2,468	2,277	101	27	2,569	2,304
<b>Staff Expenses</b>	<b>20,457</b>	<b>17,093</b>	<b>7,459</b>	<b>6,529</b>	<b>27,916</b>	<b>23,622</b>	<b>934</b>	<b>695</b>	<b>28,850</b>	<b>24,317</b>
Training, Recruitment & Other Staff Costs	906	888	285	227	1,191	1,115	8	42	1,199	1,157
Maintenance of Premises	633	636	1,037	655	1,670	1,291	3	5	1,673	1,296
Energy	361	347	382	350	743	697	–	–	743	697
Rates	398	380	356	297	754	677	–	–	754	677
Equipment, Stationery and Requisites	1,065	962	168	98	1,233	1,060	14	3	1,247	1,063
Post and Telecommunications	357	337	83	85	440	422	2	–	442	422
Investment Services and Bank Charges	710	736	2	3	712	739	–	1	712	740
Business Travel	1,106	924	276	162	1,382	1,086	37	35	1,419	1,121
Publishing & Media Relations	375	339	42	12	417	351	25	13	442	364
Professional Fees (ii)	677	593	116	27	793	620	63	50	856	670
Works Machine Maintenance	–	–	727	379	727	379	269	97	996	476
RTGS System Costs	274	327	–	–	274	327	–	–	274	327
Miscellaneous	199	168	19	50	218	218	2	16	220	234
<b>Other Operating Expenses</b>	<b>7,061</b>	<b>6,637</b>	<b>3,493</b>	<b>2,345</b>	<b>10,554</b>	<b>8,982</b>	<b>423</b>	<b>262</b>	<b>10,977</b>	<b>9,244</b>
<b>Raw Materials (iii)</b>	<b>–</b>	<b>–</b>	<b>4,736</b>	<b>2,390</b>	<b>4,736</b>	<b>2,390</b>	<b>15,957</b>	<b>8,082</b>	<b>20,693</b>	<b>10,472</b>
<b>Depreciation</b>	<b>1,061</b>	<b>933</b>	<b>3,369</b>	<b>2,655</b>	<b>4,430</b>	<b>3,588</b>	<b>274</b>	<b>231</b>	<b>4,704</b>	<b>3,819</b>
<b>Total Expenses</b>	<b>28,579</b>	<b>24,663</b>	<b>19,057</b>	<b>13,919</b>	<b>47,636</b>	<b>38,582</b>	<b>17,588</b>	<b>9,270</b>	<b>65,224</b>	<b>47,852</b>

- (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) Auditors fees for 2000 in respect of both the Comptroller and Auditor General and PricewaterhouseCoopers amounted to €107,515 (1999: €86,850).
- (iii) The total cost of materials used in the production of euro currency in the year was €10.9 million. This comprises expenditure of €1.8 million on notes and €9.1 million on coin.

**Note 8 Surplus Income**

Surplus Income of €451.3 million (1999: €213.4 million) was payable to the Exchequer in respect of the profit earned by the Bank in the year ended 31 December 2000.

A payment on account of €40.6 million (1999: €40.6 million) of Surplus Income was made during 2000 leaving a balance of €410.7 million (1999: €172.8 million) (Note 30). 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 9 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 10 Receivables from the International Monetary Fund (IMF)**

	2000	1999
	€000	€000
Quota	1,173,933	1,144,240
Less IMF Holdings of Euro	(820,599)	(730,756)
<b>Reserve Position in IMF (i)</b>	<b>353,334</b>	<b>413,484</b>
<b>SDR Holdings (ii)</b>	<b>51,766</b>	<b>39,899</b>
<b>Total</b>	<b>405,100</b>	<b>453,383</b>

(i) *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 Irish pounds/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.

(ii) *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 the four major currencies (US dollar, sterling, yen and euro).

**Note 11 Balances with Banks and Security Investments, External Loans and Other External Assets**

	2000	1999
	€000	€000
Balances with Banks	1,646,593	1,977,115
Security Investments	4,134,352	2,826,955
Reverse Repurchase Agreements (i)	56,885	63,677
<b>Total</b>	<b>5,837,830</b>	<b>4,867,747</b>

(i) See Accounting Policy (j).

	2000	1999
	€000	€000
Maturity Profile		
0-3 months	1,703,478	2,444,333
3 months – 1 year	266,307	144,902
Over 1 year	3,868,045	2,278,512
<b>Total</b>	<b>5,837,830</b>	<b>4,867,747</b>

**Note 12 Claims on Euro Area Residents in Foreign Currency**

	2000	1999
	€000	€000
Balances with Banks	153,030	89,018
Security Investments	162,288	4,892
<b>Total</b>	<b>315,318</b>	<b>93,910</b>
	<b>2000</b>	<b>1999</b>
	€000	€000
Maturity Profile		
0- 3 months	153,030	89,018
3 months – 1 year	–	–
Over 1 year	162,288	4,892
<b>Total</b>	<b>315,318</b>	<b>93,910</b>

**Note 13 Claims on Non-Euro Area Residents in Euro**

	2000	1999
	€000	€000
Balances with Banks	517	23,452
Security Investments	21,016	–
<b>Total</b>	<b>21,533</b>	<b>23,452</b>
	<b>2000</b>	<b>1999</b>
	€000	€000
Maturity Profile		
0- 3 months	517	23,452
3 months – 1 year	–	–
Over 1 year	21,016	–
<b>Total</b>	<b>21,533</b>	<b>23,452</b>

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

	2000	1999
	€000	€000
Main Refinancing Operations (i)	3,195,562	883,087
Longer Term Refinancing Operations (ii)	5,211,118	4,179,000
<b>Total</b>	<b>8,406,680</b>	<b>5,062,087</b>

These consist of advances to local credit institutions and reflect the Bank's participation in Eurosystem monetary policy operations. All the advances are made at rates close to short-term market rates and 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.

(ii) The Longer Term Refinancing Operations comprise monthly tenders with a maturity of three months.

In 1999, 'Other Claims on Euro Area Credit Institutions in Euro' was included under this item. It is now classified separately (Note 15).

**Note 15 Other Claims on Euro Area Credit Institutions in Euro**

This includes working balances on correspondent accounts with institutions in the euro area. In 1999, this item was described as 'Other Lending' and was included in the balance sheet category 'Lending to Euro Area Credit Institutions related to Monetary Policy Operations in Euro' (Note 14).

**Note 16 Securities of Euro Area Residents in Euro**

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

	2000	1999
	€000	€000
Maturity Profile		
0- 3 months	–	260,073
3 months – 1 year	397,631	734,106
Over 1 year	1,650,376	946,949
<b>Total</b>	<b>2,048,007</b>	<b>1,941,128</b>

**Note 17 General Government Debt in Euro**

	2000	1999
	€000	€000
Global certificate of indebtedness (i)	–	40,242
Certificate of indebtedness (ii)	–	126,974
<b>Total</b>	<b>–</b>	<b>167,216</b>

(i) This debt is represented by advances of €40.2 million to the Irish Government in respect of payments to international organisations. This certificate matured in June 2000.

(ii) As part of the arrangements for the financing of the administration of ICAROM plc (formerly Insurance Corporation of Ireland plc), the Bank advanced a sum of €127.0 million in 1985 to the Minister for Finance, of which €88.9 million was provided by Allied Irish Banks plc by way of a deposit with the Bank. This certificate matured in September 2000.

**Note 18 Participating Interest in ECB**

This represents the Bank's contribution to the capital of the European Central Bank.

**Note 19 Claims Equivalent to the Transfer of Foreign Reserves**

The Treaty on European Union, 1992, provides for the transfer of a proportion of foreign reserve assets of participating NCBs to the ECB. Under this provision 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 is remunerated at rates based on the short-term refinancing rates of the Eurosystem.

**Note 20 Other Claims within the Eurosystem (net)**

At end-2000, there was a net liability position due to the ECB (Accounting Policy (k)). In 1999, this item represented the net claim on Eurosystem NCBs as a result of cross-border payments transacted over the TARGET system. The non-participating countries (U.K., Denmark, Sweden and Greece) were not included under this item in 1999 (Accounting Policy (m)).

**Note 21 Items in Course of Settlement**

Cheques in the course of clearing 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 22 Other Assets

	2000	1999
	€000	€000
Shares in the Bank for International Settlements (i)	10,433	9,663
Loan to Irish Realtime Interbank Settlement Co. Ltd (ii)	54	97
Stocks of Materials for Note Production (iii)	3,714	1,828
AIB plc/ICAROM Interest Bearing Loan (iv)	80,986	182,434
Accrued Interest Income (v)	143,390	85,754
Prepayments (v)	250	316
Fixed Assets (Note 23)	56,867	56,131
Other (vi)	66,541	29,797
<b>Total</b>	<b>362,235</b>	<b>366,020</b>

- (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 increase in the book value of the BIS holding is due to valuations (Note 31).
- (ii) This is a non-interest bearing loan and relates to the Bank's contribution to the costs associated with the project managed by Irish Realtime Interbank Settlement Company Limited (IRIS Co.) to install a Real Time Gross Settlement (RTGS) system in Ireland. The loan is due to be repaid by 2003. The Bank as a participant in the RTGS system has a 7 per cent shareholding in IRIS Co. Ltd.
- (iii) The increase in 2000 over 1999 reflects increased production of banknotes to accommodate final Irish pound banknote requirements and stockpiling of euro banknotes for the currency changeover in January 2002.
- (iv) 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. The matching back-to-back deposit is shown in Other Liabilities (Note 30).
- (v) In 1999, these items were not shown separately but totalled together under the description 'Accrued Income'.
- (vi) In 1999, notes held abroad were included in this item but are now shown under 'Banknotes in Circulation' (Note 24).

## Note 23 Fixed Assets

EUR 000	Premises		Plant and Machinery		Computer Equipment		Other Equipment		Furniture Fixtures & Fittings		Total Fixed Assets	
	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999	2000	1999
At Cost - 1 January	27,354	23,524	40,792	30,360	5,354	4,755	4,015	3,572	5,146	4,844	82,661	67,055
Acquisitions (+)	444	3,830	3,189	10,432	960	599	520	470	327	302	5,440	15,633
Disposals (-)	-	-	-	-	-	-	-	(27)	-	-	-	(27)
At Cost - 31 December	27,798	27,354	43,981	40,792	6,314	5,354	4,535	4,015	5,473	5,146	88,101	82,661
Accumulated Depreciation at 1 January	6,127	5,656	10,133	8,125	3,611	3,131	2,270	1,765	4,389	4,061	26,530	22,738
Depreciation for Year (i)	523	471	2,719	2,008	570	480	586	532	306	328	4,704	3,819
Depreciation on Disposal (-)	-	-	-	-	-	-	-	(27)	-	-	-	(27)
Accumulated Depreciation at 31 December	6,650	6,127	12,852	10,133	4,181	3,611	2,856	2,270	4,695	4,389	31,234	26,530
<b>Net Book Value at 31 December</b>	<b>21,148</b>	<b>21,227</b>	<b>31,129</b>	<b>30,659</b>	<b>2,133</b>	<b>1,743</b>	<b>1,679</b>	<b>1,745</b>	<b>778</b>	<b>757</b>	<b>56,867</b>	<b>56,131</b>

- (i) Of the total of €4.7 million (1999: €3.8 million) depreciation charge, €0.3 million (1999: €0.2 million) in respect of Mint machinery was charged to the Currency Reserve (Accounting Policy (e)).

## Note 24 Banknotes in Circulation

	2000	1999
	€000	€000
LTN Circulation	4,997,070	4,523,839
Notes Held Abroad (Under Article 52) (i)	(4,324)	(10,410)
<b>Total</b>	<b>4,992,746</b>	<b>4,513,429</b>

- (i) Notes held abroad under Article 52 of the ESCB statute refer to Irish pound banknotes held by other NCBs for repatriation. This item was included in 'Other Assets' (Note 22) in 1999.

**Note 25 Liabilities to Euro Area Credit Institutions related to Monetary Policy Operations in Euro**

	2000	1999
	€000	€000
Minimum Reserves (i)	2,384,327	2,074,226
Deposit Facility (ii)	42,000	–
<b>Total</b>	<b>2,426,327</b>	<b>2,074,226</b>

These items have a maturity of less than one year.

- (i) 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 system are settled.
- (ii) The deposit facility is one of the standing facilities of the Eurosystem which credit institutions may use to deposit surplus funds overnight.

**Note 26 Liabilities to Other Euro Residents in Euro**

	2000	1999
	€000	€000
General Government (i)	1,954,873	2,540,548
Other (ii)	184,182	1,017,662
<b>Total</b>	<b>2,139,055</b>	<b>3,558,210</b>

These items have a maturity of less than one year.

- (i) Included under this heading are deposits totalling €392,218 held by the Official Assignee in Bankruptcy under the provisions of the Bankruptcy Act, 1988.
- (ii) At end-2000 the Bank held €184.1 million on behalf of Trustees of Coillte No. 2 Pension Fund. For a short period over the year-end 1999, the Bank held funds totalling €1,016 million on behalf of the Eircom pension fund.

**Note 27 Liabilities to Non-Euro Area Residents in Euro**

	2000	1999
	€000	€000
Central Banks (i)	63	1,301,714
International Financial Institutions	480	690
EU Agencies	27,046	17,057
<b>Total</b>	<b>27,589</b>	<b>1,319,461</b>

These items have a maturity of less than one year.

- (i) The decrease in this item from the previous year reflects the multilateral netting of intra-ESCB balances that was in place at the end of 2000 (Accounting Policy (k)). In 1999, this item principally represented balances of NCBs participating in the TARGET system who were not members of the Eurosystem (U.K., Denmark, Sweden and Greece).

**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 Other Liabilities**

	<b>2000</b>	<b>1999</b>
	<b>€000</b>	<b>€000</b>
AIB plc/CAROM Deposit (Note 22)	80,986	271,315
Profit & Loss Appropriations (Note 8)	410,672	172,805
Deposit Protection Accounts (i)	201,732	140,802
Interest Accruals	48,078	20,401
Other Accruals (ii)	1,587	5,577
Other (ii)	5,943	2,730
<b>Total</b>	<b>748,998</b>	<b>613,630</b>

(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.

(ii) In 1999, these items were not shown separately but were totalled together under the description 'Other'.

**Note 31 Revaluation Accounts**

	<b>2000</b>	<b>1999</b>
	<b>€000</b>	<b>€000</b>
Opening Balance	1,150,698	502,499
Transfer from Profits (i)	268,160	648,199
<b>Total</b>	<b>1,418,858</b>	<b>1,150,698</b>

(i) This arises from unrealised gains on assets and liabilities following their valuation at year-end. The following is the breakdown of the valuation changes recorded in the year.

	<b>2000</b>	<b>1999</b>
	<b>€000</b>	<b>€000</b>
Gold (Note 9)	1,323	7,750
Shares in Bank for International Settlements (Note 22)	770	1,343
Foreign Investment Assets	256,893	591,105
Net Assets in the International Monetary Fund	9,174	48,001
<b>Total</b>	<b>268,160</b>	<b>648,199</b>

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

	<b>2000</b>	<b>1999</b>
<b>Currency</b>	<b>Rate</b>	<b>Rate</b>
US dollar	0.9305	1.0046
Japanese yen	106.92	102.73
Australian dollar	1.6770	1.5422
Sterling	0.6241	0.6217
Swiss franc	1.5232	1.6051
Norwegian krone	8.2335	8.0765
Danish krone	7.4631	7.4433
Swedish krona	8.8313	8.5625
Cypriot pound	0.5737	0.5767
Canadian dollar	1.3965	1.4608
SDR	0.7142	0.7326
The gold prices used were:		
US dollars per fine ounce	272.95	287.80

## Note 32 Capital and Reserves

	2000		1999	
	€000	€000	€000	€000
<b>Capital (i)</b>		30		30
<b>General Reserve</b>				
Opening Balance	698,619		667,172	
Transfer from Profits (ii)	65,617	764,236	31,447	698,619
<b>Currency Reserve (iii)</b>				
Opening Balance	614,970		583,513	
Net Proceeds of Coin Issue (iv)	34,049		31,557	
Transfer to Superannuation Reserve (v)	(124)	648,895	(100)	614,970
<b>Superannuation Reserve (Note 34)</b>				
Opening Balance	45,558		42,033	
Transfer from Profits (vi)	3,587		3,111	
Transfer from Currency Reserve (v)	124		100	
Pension Contributions (vii)	396	49,665	314	45,558
<b>Total</b>		<b>1,462,826</b>		<b>1,359,177</b>

(i) The authorised capital of the Bank is fixed under Section 9(1) of the Central Bank Act, 1942 at €40,000 (€50,790). Issued and paid up capital is €24,000 (€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 approved a transfer to the General Reserve of €65.6 million (1999: €31.4 million).

(iii) Under section 36 (3)(c) of the Central Bank Act, 1942, the Bank is obliged to redeem Consolidated Bank Notes presented to it. The liability to redeem these notes represents a claim on the Currency Reserve. No notes were redeemed in 2000 and €133,640 remained outstanding at 31 December 2000. The closing balance includes an amount of €297.4 million relating to cumulative net proceeds from the issue of coin.

(iv) Net Proceeds of Coin Issue

	2000	1999
	€000	€000
Circulating Coin	50,879	40,695
Specimen Coin Sets	758	132
<b>Total</b>	<b>51,637</b>	<b>40,827</b>
<b>Less Operating Costs (Note 7)</b>	<b>(17,588)</b>	<b>(9,270)</b>
<b>Net Proceeds</b>	<b>34,049</b>	<b>31,557</b>

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 7).

(v) Under the Central Bank of Ireland (Surplus Income) Regulations, 1943, the Board approved a transfer of €124,000 (1999: €100,000), 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.

(vi) Under Central Bank of Ireland (Surplus Income) Regulations, 1943, the Board approved a transfer of €3.6 million (1999: €3.1 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)).

(vii) Pension contributions were transferred to the Superannuation Reserve during the year as follows:

	2000	1999
	€000	€000
Contributions by staff to the Spouses' and Children's Pension Scheme	252	224
Purchase of Pension Rights	8	7
Pension Contributions by Staff recruited after April 1995	136	83
<b>Total</b>	<b>396</b>	<b>314</b>

#### Note 33 Contingencies

Shares in the Bank for International Settlements are one quarter paid up with a contingent liability to pay the balance (Note 22 (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 19) by a maximum of twenty per cent.

Subject to quality control decisions by the ECB on notes produced to facilitate the public introduction of the euro from 1 January 2002, it is expected that all stocks of euro banknote denominations will be available for issuance in 2002.

#### Note 34 Superannuation Liabilities

The pension entitlements of past and current permanent employees of the Central Bank arise under an internally 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 of 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. Under current Central Bank legislation the Bank does not have the basis to establish and maintain a fully-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 7). In this regard the Bank's accounts do not comply with Statement of Standard Accounting Practice 24 – Accounting for Pension Costs – 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 actuarial valuation was carried out by Coyle Hamilton at 31 December 1999 using the Projected Unit Credit Method. The principal assumption in the review was that the annual rate of return on investments would be 2 per cent higher than the rate of salary and pension increases. The actuarial review assumes that the Superannuation Reserve represents assets of the pension fund with an initial value equivalent to the reserve balance at 31 December 1999, which would need to be invested to achieve a suitable real rate of investment return. The actuarial report indicates that the capitalised value of accrued superannuation liabilities was €53.0 million (without making allowance for salary inflation) and €113.0 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.

The balance in the Superannuation Reserve at 31 December 2000 was €49.7 million.

On the basis that the current deficit of €113.0 million is funded immediately by the Bank, the actuarial report estimates a regular cost to the Bank for the year of €2.9 million. This compares with €3.6 million which was charged to the profit and loss and appropriation account this year.

#### Note 35 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 holdings of foreign currency assets which represent part of the external reserves of the Eurosystem.

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 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 a portfolio of investment assets are managed by a comprehensive system of limits and procedures. An Investments 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 chairmanship of the Deputy Director General, consists of senior staff of the Financial Markets Department. A Standing Investment Strategy Committee, comprising departmental management, senior dealers and a representative of the Bank's economic services, meets 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 ensure that the reserves are fully invested. Risk monitoring and performance measurement are carried out independently of the dealing function.

The Bank is exposed to operational risk through unexpected losses arising from human error, systems failures, fraud or inadequate internal controls and procedures. A framework of internal controls, including contingency arrangements for both business processes and IT systems is in place. Each business area has responsibility for management of its operational risk. In late 2000, the Bank established a high-level committee to oversee the management of operational risk in the Bank.

**Note 36 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.

**Note 37 Unmatured Contracts in Foreign Exchange**

There were no unmaturing foreign exchange contracts.

**Note 38 Unmatured Contracts in Foreign Securities**

As a result of commitments made in December 2000 there were unmaturing net forward purchases of foreign securities of nominal US dollar 520.8 million and nominal sterling 5.4 million.

All contracts had matured by 5 January 2001.

Total net forward purchases valued at mid-market closing exchange rates of 31 December had a nominal value of €568.4 million.

**Note 39 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 2000 were:

- provision of banking services including holding the principal accounts of Government;
- issue of coin;
- hold and maintain 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 40 Post Balance Sheet Events**

There were no adjusting post-balance sheet events.

**Note 41 Approval of Accounts**

The Board of Directors approved the Statement of Accounts on 30 March 2001.



# Report of the Comptroller and Auditor General

I have audited the Statement of Accounts on pages 77 to 97.

## **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 78. It is my responsibility, under Section 19 (2) of the Central Bank Act, 1989, 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.

## **Basis of Opinion**

In the exercise of my function as Comptroller and Auditor General, I plan and perform my audit in a way which takes account of 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, consistently applied and adequately disclosed.

My audit was conducted in accordance with auditing standards which embrace the standards issued by the Auditing Practices Board and in order to provide 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. I obtained all the information and explanations that I required to enable me to fulfil my function as Comptroller and Auditor General and, in forming my opinion, I also evaluated the overall adequacy of the presentation of information in the Statement of Accounts.

## **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 2000 and of its surplus income for the year then ended.

**John Purcell**  
**Comptroller and Auditor General**  
**30 March 2001**

# Report of PricewaterhouseCoopers

## **Auditors' report to the Board of Directors of the Central Bank of Ireland.**

We have audited the Statement of Accounts on pages 77 to 97.

### **Respective responsibilities of directors and auditors**

The directors, as described on page 78, 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.

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 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 2000 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**  
**30 March 2001**



# Financial Stability in Ireland: Overview and Current Risks

## Introduction

Under the Central Bank Act, 1998, which sets out the objectives to be achieved by the Bank, it is mandated to contribute to maintaining price stability, to contribute to the stability of the financial system, to promote the efficient and effective operation of the payment and settlement systems and to support the general economic policies in the (European) Community. This last objective is with a view to contributing to the achievement of the objectives of the Community as laid down in Article 2 of the (Maastricht) Treaty.

The Central Bank is now responsible for the bulk of financial regulation and supervision in Ireland. In conducting its supervisory function, the Bank endeavours to ensure that individual financial institutions are well run and controlled. A detailed account of the procedures used by the Bank in carrying out its supervisory functions is set out in last year's Annual Report and further developments in 2000 are described in the Activities article of this year's Annual Report.

In pursuing its mandate to contribute to the stability of the financial system, the Bank intends to publish regular biannual reports on the current state of systemic health of the financial system in Ireland. This is the first such report. It is structured as follows. Part A of the paper is devoted to a discussion of financial stability in Ireland. Within this, section 1 gives a brief synopsis of the international background against which the risks to financial stability in Ireland are evaluated. Section 2 is devoted to an assessment of the risks to financial stability coming from imbalances and misalignments in the macroeconomy in Ireland. Section 3 reviews the state of health of the banking system in Ireland. Section 4 of the paper reviews developments in the systemically important payments system in Ireland, i.e., the IRIS RTGS.

Part B of the paper assesses systemic financial health at the international level in more depth as it forms the background to the assessment of systemic financial stability in Ireland. Within this, section 5 reviews developments and prospects for the US economy. Section 6 looks at Japan, section 7 emerging markets and section 8 the euro area. Section 9 summarises the results of the assessment and makes some concluding remarks.

## Part A: Financial Stability in Ireland

### 1. Summary of the World Financial Environment

This section is a summary of the material discussed in greater depth

in Part B of the paper below. The possibility of a recession in the US economy currently overshadows thinking on the threats to financial stability not only in the US itself but also in the global economy. Possibly the biggest worry in the current situation is that the imbalances that have been built into the US economy after such a sustained period of exceptional economic growth could translate into significant financial fragility in the case of a slowdown in the growth rate below the level of potential growth and possibly systemic weakness in the case of an outright recession. Experience suggests, somewhat paradoxically, that these systemic vulnerabilities tend to build up when the macroeconomy is at its strongest. They normally occur during the expansionary phase of the business cycle and, apparently, the more robust the expansion the greater the imbalances and misalignments, which are at the heart of these vulnerabilities, are likely to be.

A number of fairly reliable forward-looking indicators are currently showing some pessimistic readings for the US economy going forward. Moreover, signs of financial market fragility have begun to appear with a growing incidence of corporate bankruptcies, a fairly rapid increase in household debt service ratios and a quite high level of charge-off rates for consumer loans. However, financial turbulence has to date been largely confined to the high-tech sector and to the below investment grade bond market, although there are disturbing signs that it may now be spreading to the broader markets.

Recent data for Japan show household consumption slowing from already sluggish growth rates and industrial production showing its biggest drop (between December of last year and January of this year) since the mid-1990s. The outlook is also gloomy as revealed in the Bank of Japan's "tankan" report for March of this year. The economy is already financially fragile and would appear to be in a poor state to cope with any further shocks generated either internally or externally. Despite a significant improvement in the performance of many of the Asian emerging markets since the 1997-98 crisis these economies remain vulnerable to slowdowns in the US and Japan. Their financial systems may be particularly vulnerable in the light of what appears to be rather slow progress in the area of structural reforms in many of these economies since the crisis.

Although the consensus seems to be that the growth rate in the euro area will slow somewhat for this year from the commendable estimated 3.5 per cent growth rate last year, the overall macroeconomic picture within the euro area remains quite favourable. On the financial side, the large fall in share prices has, to date, been largely confined to the high-tech sector much as in the US, but again, as in the US, there are worrying signs that it may be spreading to the broader markets.

## **2. An Analysis of the Risks to the Financial Market Environment in Ireland**

### **2.1 Introduction**

By any standard, Ireland is one of the most open economies in the world. Although there are many economic advantages that derive from this, the downside is that the economy is highly exposed to contagion from a large range of shocks arising in the rest of the world economy. This places a particular premium on having a financial system, and indeed an overall economy, that is flexible and adaptable so as to be able to absorb these shocks without systemic consequences. This need is more acutely felt now than at any time in the past for a number of reasons. Firstly, Ireland now lacks the key policy instruments, particularly a monetary policy or an exchange rate instrument, which it could deploy to cushion the economy in the event of some major shock occurring. Secondly, the possibility of such a shock occurring has increased with the sharp slowdown of the US economy. And, in light of the fact that trade links of the Irish economy with that of the US have strengthened significantly over the last number of years, such a shock would be the source of some concern for the systemic health of the Irish financial system.

Indeed, from a US trade perspective, Ireland contrasts quite sharply with the rest of the euro area: it is a very open economy and the US is its second largest trading partner. Also, the capital market links with the US are very strong, with much of Ireland's strength in high-tech businesses founded on long-term capital inflows by US corporations. The Irish economy would therefore suffer much more than the rest of its partners in the euro area from any systemic weakness originating in the US. Bearing in mind the composition of its trade, Ireland would also be affected disproportionately by any sudden pronounced appreciation of the euro. Both of these issues are taken up and discussed in more detail below.

Apart from exposure to contagion from financial fragility abroad, there is an additional source of concern to the Bank at the moment. This relates to endogenous, or homegrown, vulnerabilities to which the banking system in Ireland is currently exposed. For the most part, these relate to credit growth and property prices. Indeed, it is the interaction of these two aspects, the macro fragility from abroad on the one hand, and the homegrown vulnerabilities on the other, which is currently the focus of attention. If the worst of the prospects for the world economy were to materialise, then these domestic vulnerabilities could begin to translate into real financial fragility. However, simulations performed by the banks as part of their stress-testing exercise would suggest that the overall banking and financial system would remain quite robust in the face of fairly substantial adverse shocks to the economy. Nevertheless, there is little room for

complacency particularly when encountering what could be deemed to be somewhat uncharted waters given the radical structural changes to the Irish economy over the last decade or so. It should also be flagged, of course, that these stress-testing exercises cannot, because of their somewhat mechanical nature, cover all eventualities<sup>1</sup>.

Recent IMF research relating to the global economy has identified some common patterns affecting the relationship between the macro-economy and subsequent experience with financial distress and financial crises. The macroeconomy indicators mostly relate to various types of imbalances and misalignments affecting the economy. The research concluded that banking distress is generally associated with the following types of macroeconomic disturbance: a large fall in real GDP growth with the adverse effects occurring in the same year; boom-bust cycles in inflation, credit expansion and capital inflows; rising real interest rates and a declining efficiency of investment; a sharp decline in the real exchange rate; and an adverse trade shock. In the light of this wide international experience, there are a number of factors relating to the macro economy in Ireland at the moment that could pose a threat to systemic stability going forward.

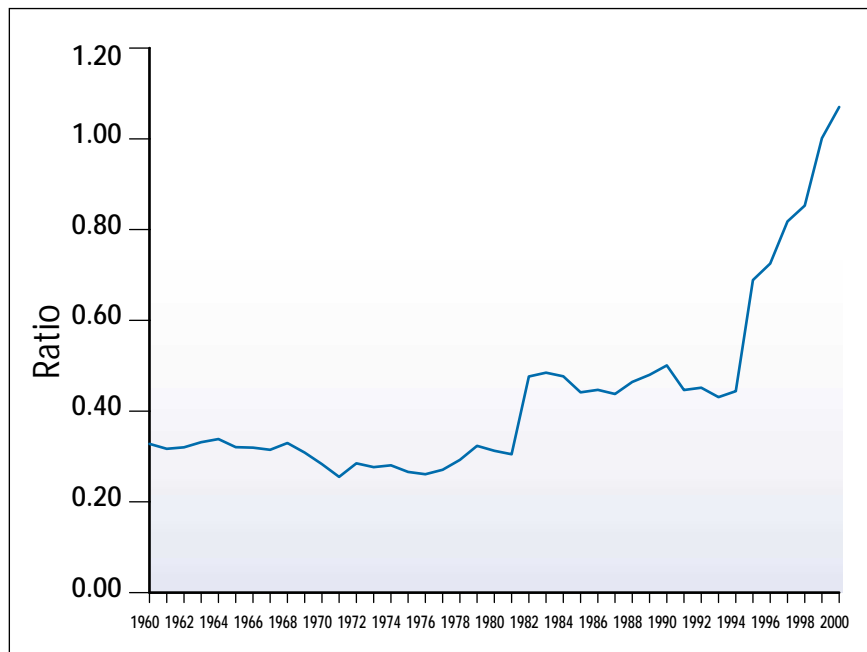
## **2.2 Credit Market Exposures**

Among the bank-related macro variables, which can under certain scenarios contribute to financial fragility, private-sector credit growth has been a source of concern to the Bank for some time. As indicated in Figure 1, after a long period of stagnation during the 1980s and early 1990s, private-sector credit growth accelerated in the 1990s. It increased from about 50 per cent to over 100 per cent of GDP between 1994 and 2000. The corresponding figures for personal-sector credit were 30 per cent in 1994 and 36 per cent in 2000. Such a rapid build up in credit would be a cause for concern for the stability of the whole system if borrowers were to find themselves unable to service these higher levels of debt. The ability to service debt commitments is reflected in debt service payments as a percentage of household disposable income. Figure 2 shows what has been happening to this for personal mortgages. Throughout the 1980s and for approximately the first half of the 1990s, mortgage debt service payments as a percentage of disposable income was subject to a trend decline, except for the early years of the 1990s when there was a slight increase. This reflected the depressed state of the housing market over most of this period. From a low level of about 23 per cent in the mid-1990s, the ratio has increased fairly modestly to stand at an estimated 28 per cent in 2000. Another important consideration to note here is that the debt service ratio for non-mortgage personal loans has been increasing fairly consistently over

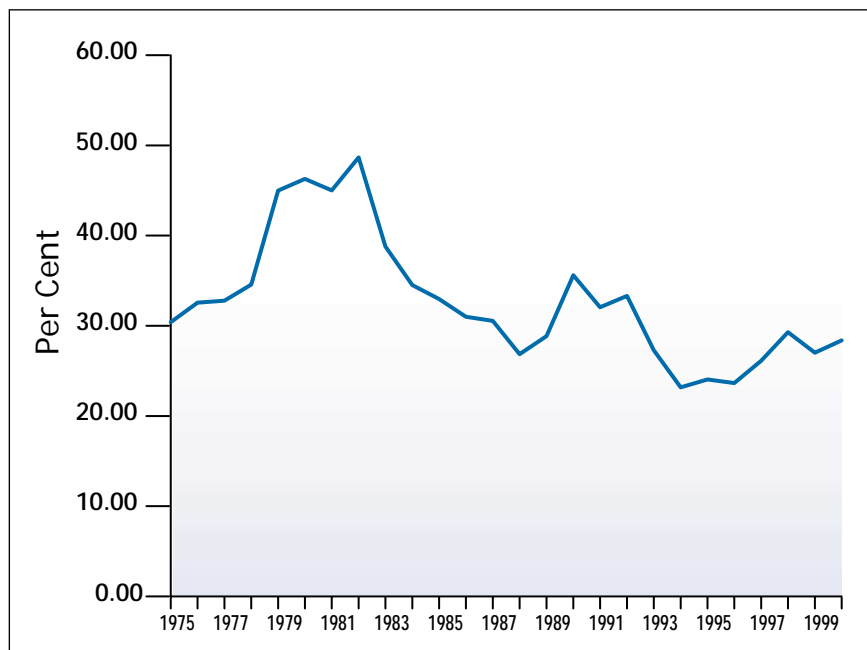
<sup>1</sup> *In particular the possibility that the relationships between some macroeconomic variables may differ significantly under conditions of financial fragility relative to those in more normal times.*

recent times. The rate of increase in the ratio has, however, slowed in the year 2000 relative to 1999 to reach a level of about 6.5 per cent (see Figure 3).

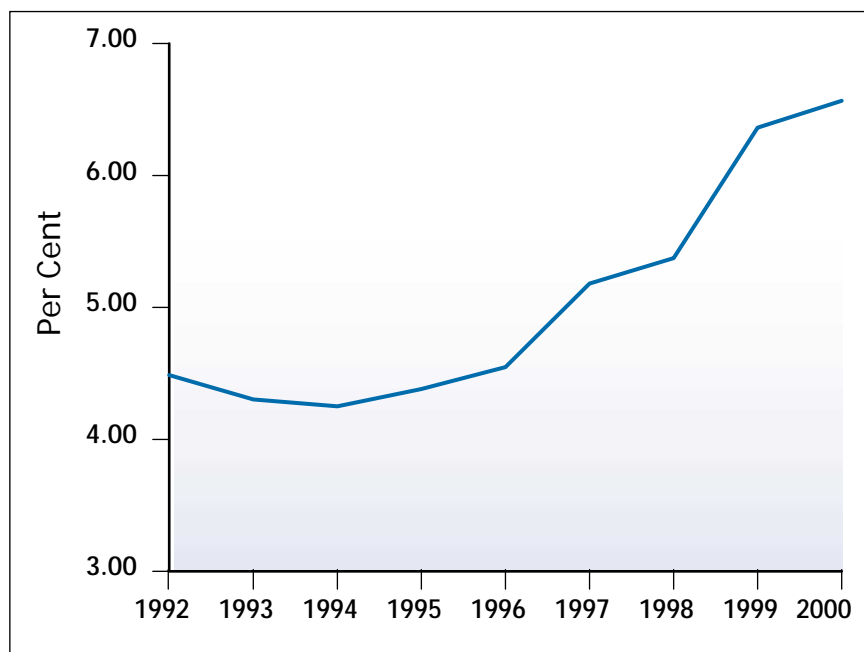
**Figure 1: Private-Sector Credit as a Share of GDP  
(1960 to 2000) – Ireland**



**Figure 2: Average Mortgage Repayment Burden as a percentage of Average Household Disposable Income  
(1975 to 2000) – Ireland**



**Figure 3: Average Monthly Repayment Burden of Personal Non-Mortgage Credit as a percentage of Average Monthly Disposable Income (1992 to 2000) – Ireland**



It must be stressed that these debt service ratios are averages and do not therefore convey a reliable picture of the conditions being faced by new mortgagees who are borrowing for the first time and for whom debt service ratios are much higher than the average. Although starting from a relatively low position, and notwithstanding the fact that private-sector credit growth has slowed consistently from an annualised growth rate of 28.9 per cent to 20.6 per cent between August and December 2000, there is no doubt but that rates of credit growth well in excess of rates of growth in disposable income, which themselves have been very high, has resulted in private debt-to-GDP ratios in Ireland increasing relative to other European countries. Ireland now ranks fifth highest (at 1.14) among its euro area partners<sup>2</sup>. Nevertheless, robust growth in real disposable income and low interest rates has meant that debt service ratios for both mortgage and non-mortgage loans remain fairly comfortable. It should also be stressed that even a moderate drop in the growth rate of the Irish economy would paint a less favourable picture for both the average but more particularly the new, or marginal, borrower.

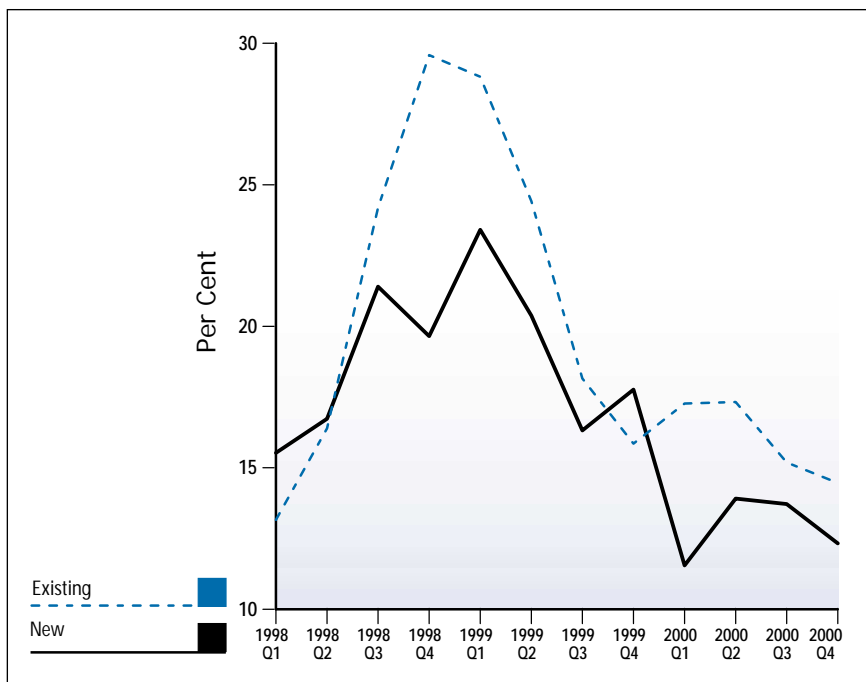
### **2.3 Property Prices**

The second major source of vulnerability affecting the Irish financial system is house price inflation. A number of outside observers (e.g.,

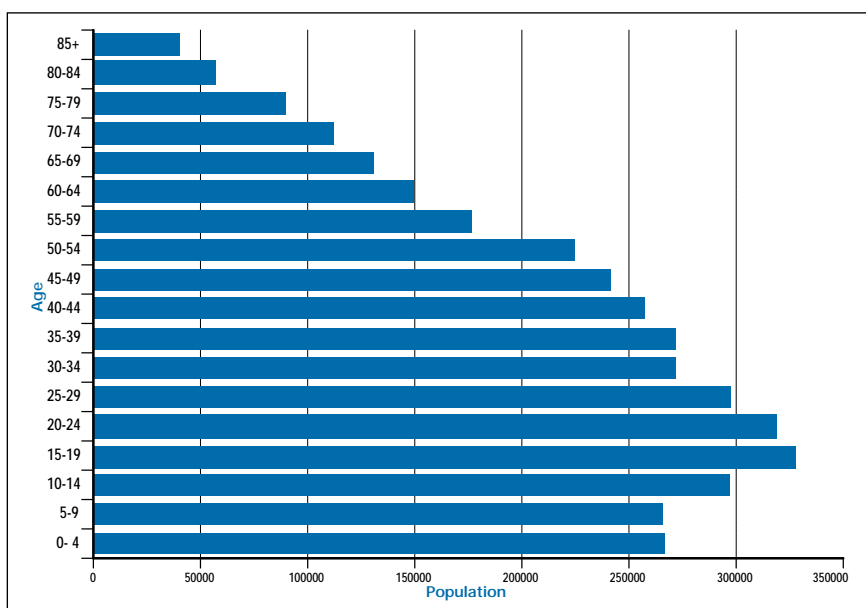
<sup>2</sup> Data relating to end-October 2000 indicates that Ireland is now behind only four of its euro area partner countries (excluding Greece since the data were drawn up before Greece adopted the euro), i.e., Portugal (at 1.47), the Netherlands (at 1.37), Germany (at 1.19) and Luxembourg (at 1.17). Source ECB.

the IMF and Standard and Poor's) have focused strongly on this issue. House price inflation is one of the main driving forces behind the first source of vulnerability noted above, i.e., high levels of credit growth. The real annual percentage rates of change in new and existing house prices<sup>3</sup> since the first quarter in 1998 are displayed in Figure 4.

**Figure 4: Irish Permanent House Price Index (Real Annual Percentage Changes – 1998Q1 to 2000Q4)**



**Figure 5: Population of Ireland by Age**



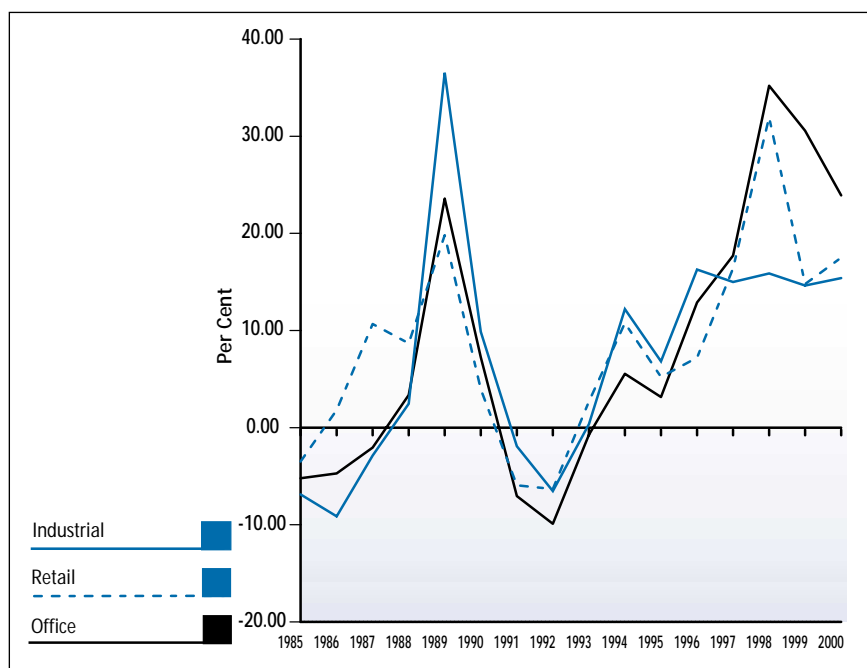
3 The index on which the commentary in the text is based is the Irish Permanent House Price Index (produced in conjunction with the ESRI).

House price inflation accelerated sharply from the beginning of this period reaching a peak in the fourth quarter of 1998 before decelerating to more moderate growth rates of between 12.5 per cent and 14.5 per cent in real terms by the third quarter of last year. The main influence behind these accelerating house price increases were rates of growth in real disposable income in the region of 9 per cent annually, strong employment growth, increases in the share of the population in the household formation group (see Figure 5) and a low interest rate regime dictated by the monetary policy needs of the slow-growing euro area with all of these influences sustained over a fairly prolonged period of time. Although, loan-to-value ratios remain at fairly moderate levels on average, affordability has been deteriorating with mortgage loan-to-income multiples increasing by almost 50 per cent since the mid-1990s. Also, there is a danger that the figures for the average borrower do not convey an accurate picture of the dangers because new, or marginal, borrowers are much more exposed. Moreover, if some of these driving forces are not sustained into the future, then house prices could again begin to fall as they did in the early 1990s with, potentially, significant repercussions for the balance sheets of those credit institutions involved in mortgage lending.

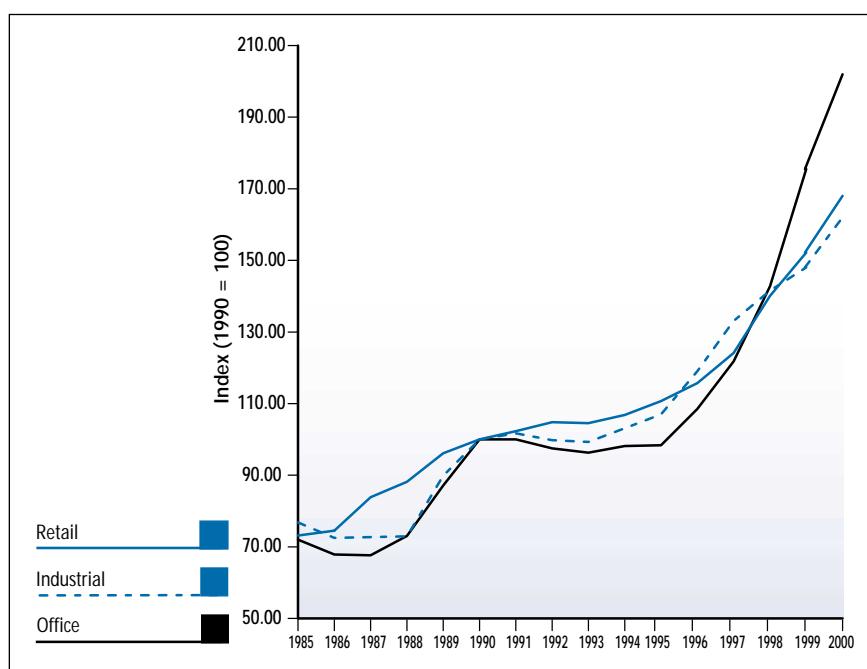
Another potential danger area for the Irish economy relates to commercial property prices<sup>4</sup>. The data displayed in Figure 6 distinguish between the inflation rates of office, retail and industrial property over the last 15 years. The data indicate clearly a fairly strong cycle in commercial property prices, with all three indices moving strongly pro-cyclically. There has been some divergence in these inflation rates over the last two years with the rate of increase in industrial property prices levelling off at about 14 per cent while office property prices continued to accelerate but slowed to about 24 per cent in 2000. These sharp accelerations in property prices are at least partly explicable in terms of the way rental values have evolved over the same period. As can be seen from Figure 7, these have also accelerated sharply since the mid-1990s with office rents in particular roughly doubling since 1995. Although these higher rental values provide some fundamental support for the sharp property price increases of recent years, the possibility that a substantial speculative element has crept into property values cannot be easily dismissed.

<sup>4</sup> *These have been reviewed in a recent paper in the Central Bank's Winter 2000 Quarterly Bulletin.*

**Figure 6: Capital Values of Jones Lang LaSalle Irish Commercial Property Index (1985 to 2000, Annual Percentage Changes)**



**Figure 7: Rental Values of Jones Lang LaSalle Irish Commercial Property Index (1985 to 2000)**



If the optimistic outlook for future rental income which current property values seem to imply does not, in the event, materialise, and commercial property prices fall significantly, then the danger point would be the extent to which these prices had been inflated by firms leveraging themselves in the loan market. The total level of credit extended to the construction and real estate sectors of the economy has risen significantly as a percentage of GDP over recent years. There

are, therefore, significant dangers. These relate to the likelihood, albeit small, that the economy would start growing at well below its potential growth rate or would even go into recession. If this were to transpire, then firms may be unable to pay the high rents they are currently paying. In this case, the sharply increased level of leverage might result in financial strains with knock-on effects for the banking sector.

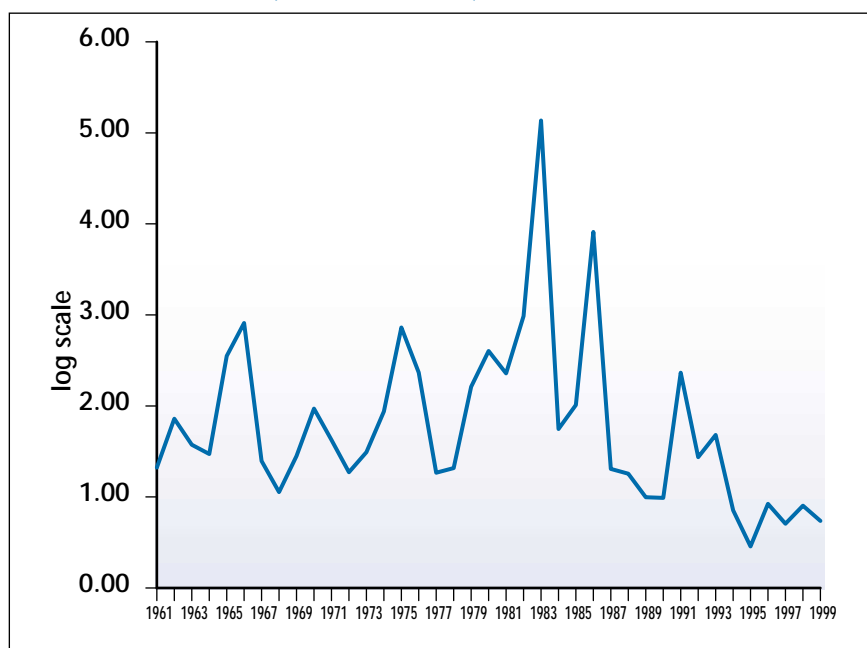
Despite the fact that debt service ratios remain moderate and that rapid credit growth in the past did not result in any subsequent serious financial fragility, the Bank's concern in this matter originates from the fact that boom-bust cycles in credit growth seem to precede many, if not most, of the episodes of systemic collapse that have occurred throughout the world over the last few decades. The worry is that Ireland, currently experiencing a boom in private-sector credit growth, may not be an exception to this well-established pattern.

#### **2.4 The Efficiency of Investment**

It is, arguably, as much the use to which new bank loans are put as the overall growth rate of loans, or level of indebtedness, that is the cause for concern. This is especially so with respect to corporate borrowing. If assigned to productive and profitable projects, then these loans can be self-financing. In this respect, the investment ratio for the overall economy (expressed as a fraction of the growth rate of GDP) is often viewed as an indicator of the efficiency of investment<sup>5</sup>. A sizeable increase in the numerator of this ratio sustained over a fairly long period of time (i.e., an increasing proportion of output devoted to investment), but without any response in the growth rate of output (the denominator of the ratio), would tend to indicate an inefficient allocation of investment resources. This could reflect over-investment in, for example, real estate, whether commercial or industrial, a development that could harbour systemic dangers. A sharp fall in the ratio could also signal financial fragility in the banking system. This is because, despite the fact that the economy can be doing well at any point in time (as reflected in a high growth rate), the corporate sector's sentiment about the medium term prospect for the economy can rapidly become more negative resulting in a retrenchment in investment.

<sup>5</sup> This is technically known as the incremental capital output ratio.

**Figure 8: Incremental Capital Output Ratio  
(1961 to 1999) – Ireland**



The escalating real estate prices in Ireland of recent years could be seen in this light. The sharp spikes in the incremental capital output ratio in 1983 and 1986 (see Figure 8) reflect the combined effects of high levels of public sector investment, generous investment tax incentives and negative real interest rates rather than inefficient allocation of investment. Indeed, the pattern in the ratio does not conform to either of these danger patterns. It trended downwards steadily over time between the mid-1980s and 1999 reflecting the high levels of investment by US multinationals in particular in the new economy technologies. This suggests, at least by this measure, that there has not been a misallocation of investment resources and that this factor is not now acting as a threat to systemic stability.

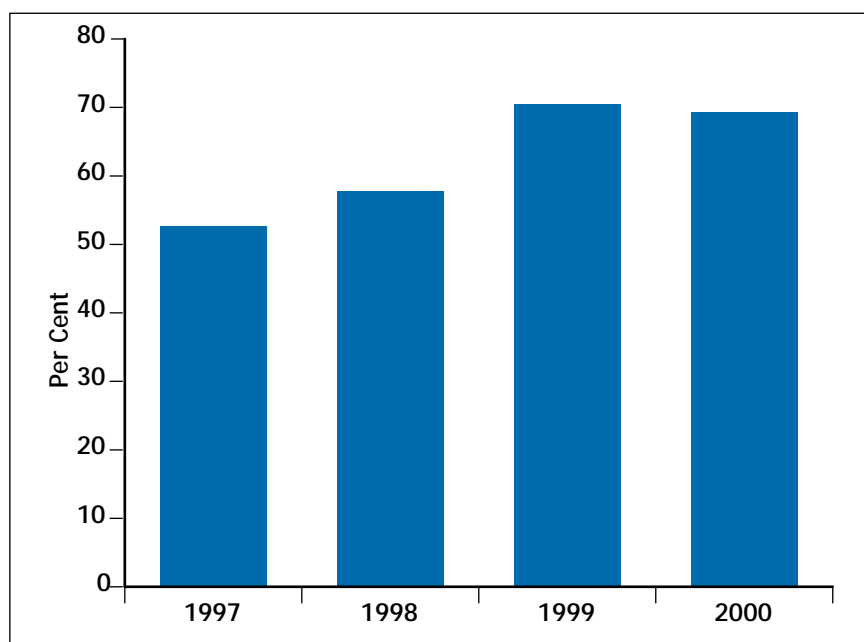
### **2.5 Capital Withdrawal**

Gross foreign liabilities of the banking system (relative to GDP) is considered to be a factor which could, under certain circumstances, contribute to increasing the probability of a financial crisis especially when subject to sharp increases. The higher it is the more vulnerable is the economy to a reversal of previous capital inflows.

When the relevant figures are adjusted for the activities of IFSC banks, banks located in Ireland for the purposes of transacting with non-bank IFSC entities and with non-residents, the pattern that emerges with respect to gross foreign liabilities expressed as a percentage of GDP is displayed in Figure 9. It has risen from 53 per cent in 1997 to fractionally less than 70 per cent in 2000. In light of the fact that the bulk of the capital inflow into Ireland in recent years has been initiated by multinational companies, particularly US multinationals, to fund long-term capital investment, the current reading for this macro-

prudential indicator would suggest that it is not a source of concern for financial stability.

**Figure 9: Gross Foreign Liabilities (of Non-IFSC Banks) as percentage of GDP (1997 to 2000)**



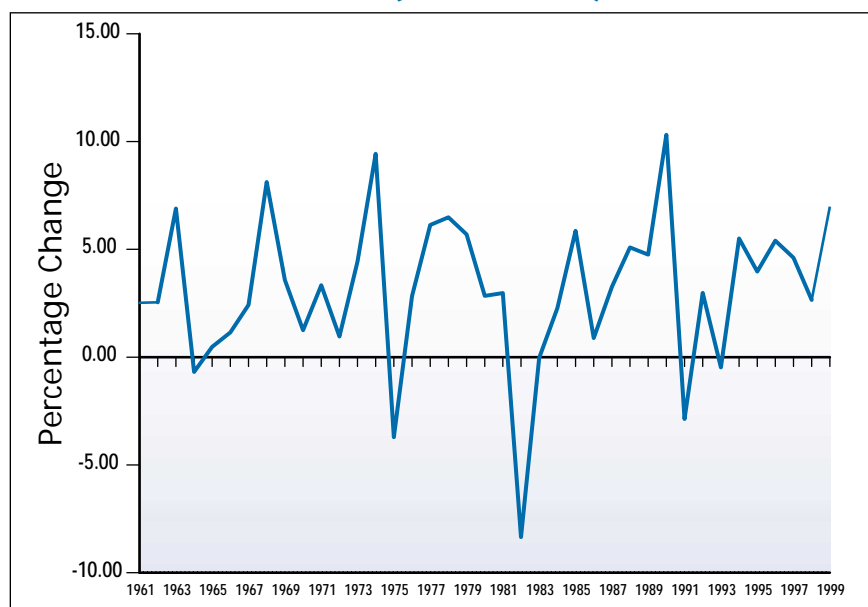
## 2.6 Inflation-Disinflation Cycles

Overall inflation-disinflation cycles place considerable strains on bank balance sheets and this is suggested as one of the most reliable indicators of future difficulties in the banking sector. It would appear that the reasons have to do largely with the way inflation and expected inflation affect the relationship between long- and short-term interest rates in capital markets and how this in turn affects the margins of intermediation (i.e., loan rates relative to deposit rates) in banking. Expected inflation tends to increase long relative to short rates in capital markets and, through competitive pressures, widen interest rate margins in banking. By making loans a more attractive investment, this may result in excess lending by banks. Disinflation, on the other hand, results in a narrowing of interest rate margins rendering the variable interest rate component of the existing loan portfolio, as well as new loans, less profitable. A sharp dis-inflationary environment is also typically associated with a high incidence of non-financial corporate insolvencies resulting in many of these loans becoming non-performing. The inflation-disinflation pattern in Irish inflation is clearly evident in the data, with a long period of rising inflation starting in the 1960s and peaking in the late 1970s followed by a steady disinflation throughout the 1980s. Inflation has been relatively stable since then and this undoubtedly has made a positive contribution to financial stability throughout much of the period in question. However, it cannot be taken for granted that this benign environment will endure given the recent increase in inflation in Ireland relative to the low inflationary environment experienced internationally.

## 2.7 Consumption Booms

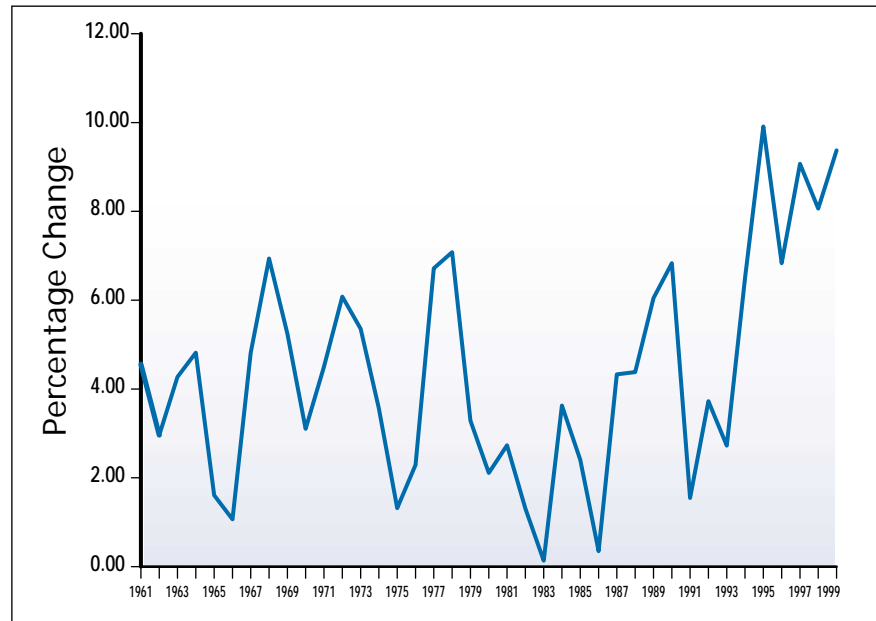
Experience of financial crises elsewhere in the world would also tend to suggest that consumption booms are deleterious to financial stability, since, other things being equal, they tend to be inversely related to the repayment capacity of borrowers. The current consumption boom in Ireland has therefore to be seen in this light. However, the average rate of growth in real personal consumption for the “boom” years (i.e., 1994 to 2000) was in the region of 5 per cent, which is not greatly in excess of the average for the previous three and a half decades at roughly 3 per cent (see Figure 10). In fact, the household savings ratio has remained fairly stable and is now only fractionally below its level at the start of the 1990s.

**Figure 10: Rate of Growth of Private Consumption in Ireland (1961 to 1999)**



## 2.8 Growth in Disposable Income

So long as the economy continues to grow close to its potential growth rate, the dangers of a systemic collapse are lowered because borrowers can sustain the higher repayments to which they are committed. Figure 11 depicts real annual GDP growth in Ireland over the last four decades. Several stages of growth can be identified over this period. The first of these was the period 1961 to 1972 when the average annual growth rate was more than double that in the 1950s resulting from a sustained inflow of foreign direct investment. The second stage (1973 to 1981) encompassed the two oil price crises in 1973 and 1979 resulting in a relatively mild economic slowdown. The period from 1981 to 1986 saw growth decline significantly with GDP stagnating in 1983 and 1986. The fourth stage commenced in 1987 and was marked by a radical shift in fiscal policy combined with a favourable external environment and yielded a growth rate of 4 per cent. The final stage identified is currently underway where the average annual GDP growth rate is 8 per cent.

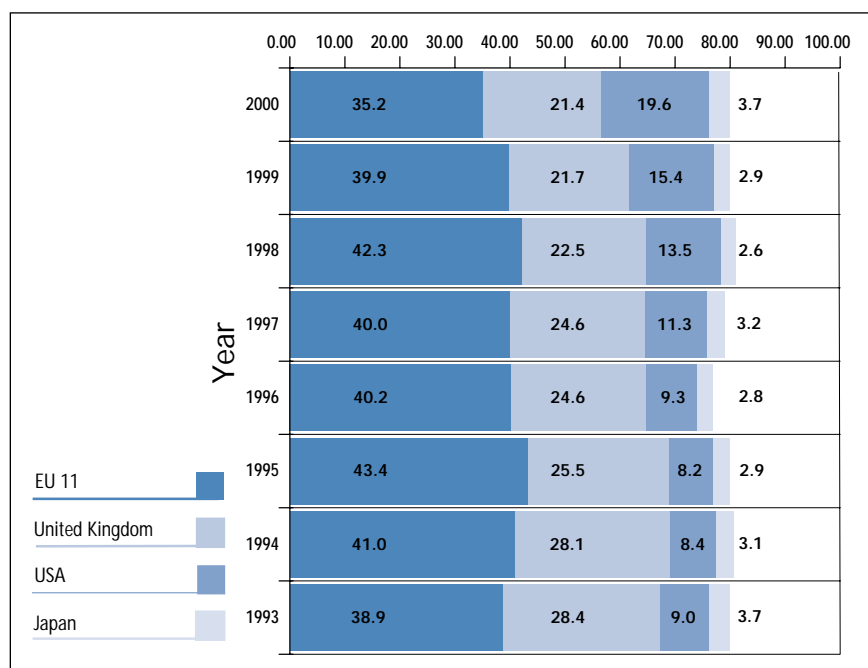
**Figure 11: Rate of Growth of GDP in Ireland (1961 to 1999)**

There can be no doubt but that this current stage of high growth is now an important factor contributing to financial stability in Ireland. This fact only serves to underline the risks to the Irish economy that might stem from an abrupt slowdown in this growth rate when the strong mitigating forces coming from robust income growth would no longer be present. However, the stress testing, which has been conducted by the Bank, in conjunction with the commercial banks, suggests (subject to the strong caveats noted later in the text) that the banking sector could cope in the context of a fairly substantial adverse external shock hitting the economy.

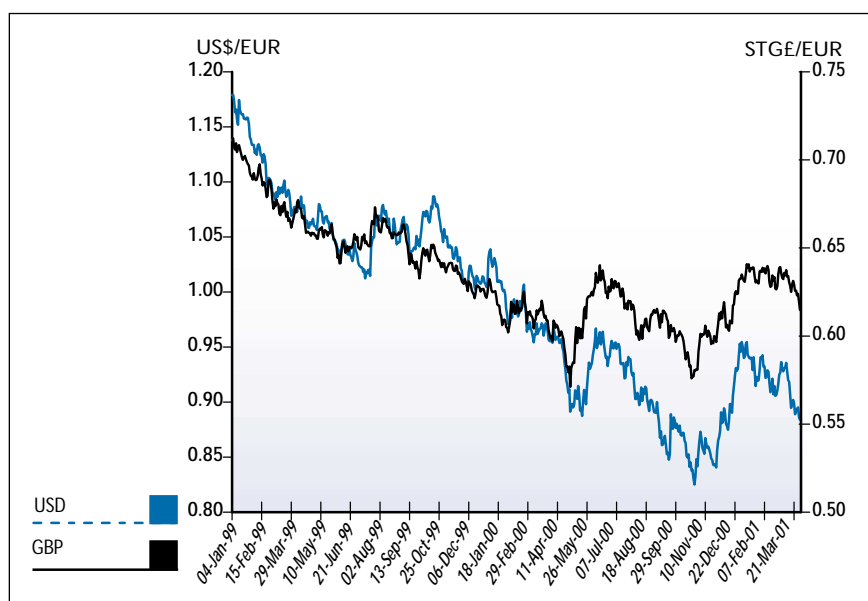
### **2.9 The Exchange Rate**

The last time the US dollar was as strong against the (synthetic) euro was in September 1985 when the dollar had depreciated somewhat following a substantial period of rapid appreciation before the Louvre Accord. This, combined with the recent abrupt slowing of the growth rate in the US, have given rise to growing speculation recently that the conditions are now in place for a sudden sharp depreciation of the dollar which would correct what some perceive to be a substantial overvaluation. Such a depreciation would adversely affect the competitive position of that part of Irish industry selling into the US market. As indicated in Figure 12, the proportion of Irish exports going to the US has more than doubled since the mid-1990s, a trend that is no doubt assisted by the depreciation of the euro vis-à-vis the dollar since the launch of the euro (see Figure 13).

**Figure 12: Destination of Irish Exports – Share of Total (1993 to 2000)**



**Figure 13: Exchange Rate of the Euro vis-à-vis the US\$ and STG£ (4 January 1999 to 30 March 2001)**



There is an additional consideration that might lead one to suspect an even more unfavourable scenario. The dollar and the pound sterling have tended to move quite closely together in foreign exchange markets, despite a slight decoupling in the middle of last year, as can be seen in Figure 13. A sudden sharp depreciation of the dollar could therefore be accompanied by a significant depreciation of the pound sterling. The US and the UK together account for nearly 40 per cent of Irish exports. The international competitiveness of the Irish economy could be further aggravated by the well-known tendency for nominal exchange rates (and therefore real exchange rates) to

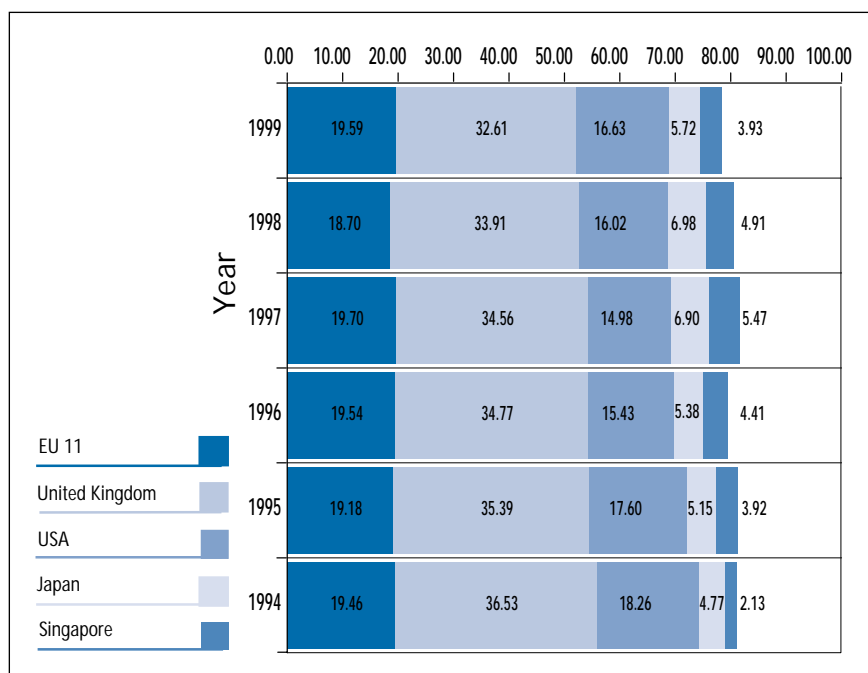
overshoot their equilibrium values which would result in a more substantial depreciation of the dollar and the pound sterling than would be warranted by fundamentals.

Although this is a worrying possibility, there may be a silver lining to such an eventuality, which would attenuate the consequences suggested above. Firstly, a high proportion of what is exported from Ireland by multinational companies is also imported as intermediate inputs or raw materials. A depreciation of the dollar and the pound would make these inputs cheaper in euro terms. It would also make the cost of oil cheaper since this is denominated in dollars. An additional attenuating consideration relates to the fact that Ireland imports more from the US and considerably more from the UK than it exports respectively to these countries. To this extent, a depreciation of these currencies could have favourable effects on the Irish economy. Overall, therefore, the competitiveness losses may not be as great as might be suggested by just looking at exports alone and their composition<sup>6</sup>. Secondly, the factors that are supposed by some to be the driving forces behind the strong dollar are mostly long term and structural in nature and therefore probably immune, for the most part, to the effects of the business cycle<sup>7</sup>. This would tend to suggest that what appears to be a temporary setback to US growth would not substantially undermine long-term capital inflows into the US economy. This, in turn, would tend to suggest that, if the dollar does indeed depreciate, the depreciation would be of a fairly moderate size and therefore not too disruptive for the overall competitiveness of the Irish economy. However, if the downturn in the US proves to be steep, and/or prolonged, then cyclical considerations may start to dominate structural considerations in which case the dollar could fall steeply.

<sup>6</sup> This is not to deny that many individual firms could be badly affected.

<sup>7</sup> Among these long-term influences are: the business friendly environment in the US which is more amenable to risk taking than is the euro area; the easier availability of risk capital; the fact that the US has been at the frontier of scientific and technological innovation with the result that the only way European-based firms can catch up quickly is by buying into the new technology in the US; the fact that the overall fiscal environment is more friendly to business than it is in Europe and the fact that labour markets are more flexible with only a small (about 10 per cent) of the labour force unionised.

**Figure 14: Share of Irish Imports  
(by Country of Origin, 1993 to 1999)**



However, there may indeed be yet another element to the silver lining mentioned above. If the structural factors noted above (see footnote 7) are indeed the ones responsible for the dollar's current high value, then for the euro to appreciate substantially vis-à-vis the dollar might require that the euro area to suddenly assume a business friendly environment to rival that of the US. This seems somewhat unlikely in the near future. If, in the unlikely case that it were to happen, and the euro area economy were to respond with a growth rate similar (both in terms of the level of the growth rate and in its composition, i.e., new-economy related) to that experienced by the US since the mid-1990s, the euro could appreciate substantially relative to the dollar. But this would then present a mixed picture for the Irish economy. On the one hand, competitiveness would be adversely affected but, on the other, an acceleration in euro area growth would be disproportionately beneficial to the Irish economy, given Ireland's head start and growing concentration in the production of the new information and communication technologies.

This is not to dismiss either the likelihood of a sudden sharp depreciation of the dollar or the likely consequences which would, on balance, be adverse, that would ensue from a depreciation. But it must be borne in mind that, in such circumstances, there are also likely to be countervailing forces at work which would help to attenuate the direct adverse competitiveness effects of a substantial and abrupt fall in the value of the dollar.

### **2.10 Strong Wage Pressures**

What might be particularly problematical for the Irish economy going forward, however, would be a two-sided squeeze on corporate profitability in the traded sector of the economy coming from a depreciation of the dollar and the pound sterling and a simultaneous pick-up in domestic nominal wages. Recent labour market developments would suggest that the latter now appears to be a realistic threat.

However, cognisance should be taken of the fact that substantial productivity growth in the traded sector of the Irish economy over the 1990s has resulted in a significant improvement in its level of international competitiveness. Nevertheless, if these current wage pressures were to coincide with a sudden and precipitous fall in the dollar, the consequences for competitiveness, output and employment could, conceivably, contain the seeds of macro and financial fragility.

### **3. The Irish Banking Industry**

The Irish banking system is characterised by a high degree of stability. It is also fairly highly concentrated with a small number of banks accounting for the bulk of deposits and loans. It has benefited strongly from the robust growth of the Irish economy over the last number of years. Despite this, there would seem to be little room for complacency. The banking industry has been subject to new competitive pressures following the entry into the market of foreign banks competing on both the loan, mortgage and deposit markets. Despite the continuing high level of concentration, the industry is now more contestable overall. This trend of increasing competition is one which Ireland shares with not only its euro area partners but with other countries as well. The arrival of the euro has also increased transparency in the prices of banking services being offered internationally and this is also likely to act as a catalyst for more competition and structural change in the banking industry. Indeed, this source of competition is likely to intensify in the years ahead as the banking industry in the euro area becomes more fully integrated and, in addition, as the new electronic delivery channels for bank services render location less of an obstacle to competition.

The lower structure of interest rates following the introduction of the euro is exerting pressure on interest rate margins already under pressure from increased competition from both within the banking industry and from securities markets. This competitive pressure has intensified with the introduction of the euro, which has eliminated the exchange-rate risk attaching to deposits and other retail investment instruments offered by banks and collective investment vehicles in the euro area.

Interest margin income has been the dominant source of income in the past but now income coming from fees and off-balance-sheet sources (e.g., commission income and income coming from trading on own account) is growing rapidly as a proportion of total income. In attempting to diversify their income sources, banks have been driven to rely increasingly on off-balance-sheet income, which is not without risks since banks may be venturing into new financial territory with which they may not be that familiar. In addition, there is always a danger, in such an environment, that banks will try to compensate for falling margins by increasing their share of the deposit and loan markets and, in the process, take on too much risk at the margin, leading to an overall deterioration in the quality of the loan portfolio. This danger would tend to be reinforced in the event of either a modest or sharp slowdown in the Irish economy since the degree of competition would tend to intensify as banks sought to hold on to market share putting pressure on profits.

Another source of risk for some of the larger Irish banks relates to developments in those foreign financial markets where these banks have a significant presence. Macro or financial fragility in these locations would adversely affect the overall health of these banks and, given their dominant position in the Irish market, could spill over to their operations in Ireland and have adverse effects for financial stability in Ireland. And, of course, these locations would not be immune to the fallout from a world economic slowdown.

In the new increasingly competitive banking environment, the Bank is monitoring the behaviour of the lending institutions very closely to ensure that undue risks are not being taken. Thematic inspections carried out during the year 2000 identified some weaknesses in home mortgage lending practices, which are the subject of supervisory action by the Bank. Overall, there is little question but that the banking system remains stable. And although, as already noted, increased competition in the banking market has eroded the net interest margins, banks remain highly profitable by European standards. Strong profits and high capital ratios along with loan loss provisioning are providing the system with adequate buffers to weather any reasonable increase in loan losses. However, this good performance does not seem to be fully reflected in share prices when performance is compared with that of European peers.

On the macro side, there are a number of unknowns. The first relates to the US economy and whether it will go into recession and, if so, how long and how deep such a recession would be. Secondly, there are the largely non-quantifiable knock-on effects on corporate and household confidence in the other major economies, which would tend to magnify the direct effects of a US slowdown on the Irish economy. The capacity of the Irish banking system to weather any

likely turbulence has been demonstrated in the stress-testing exercise carried out by the banks at the initiative of the Bank in recent years. It shows that the integrity of the banking system could be maintained in the face of adverse shocks to economic activity and asset prices. However, caution should be exercised before rushing to premature conclusions about the degree of robustness of the Irish economy. In this respect, it should be borne in mind that the models used to conduct the stress testing may not fully incorporate the changes that have occurred in the Irish economy over the last decade or so and therefore may not be a fully accurate guide to the extent to which shocks might be propagated. It should also be noted that stress tests performed do not encapsulate the full range of likely shocks.

#### **4. The Large Value Payments System in Ireland**

Payments systems are vital to the smooth running and overall health of the economic and financial infrastructure. Modern-day market economies process huge amounts of payments on a daily basis. The payments system infrastructures, which are needed to do this, are highly sophisticated networks involving complex meshes of interrelated financial claims. Banks are at the core of this network. A failure at any point of these networks could, in principle, spread very rapidly to other parts of the network or, in the extreme case, to the whole network leading to a breakdown of the whole payments system with potentially catastrophic consequences for the overall economy.

The Bank's oversight of the large-value wholesale payments system, which is an integral part of its broader mandate for overall financial stability, is carried out within the context of the Irish Real-Time Interbank Gross Settlement system (the IRIS RTGS system). This is a systemically important payments system. In the final quarter of last year, for example, it processed an average of over two thousand payments daily with a total daily average value of 14.5 billion euro. The 'market value' of IRIS payments in total TARGET payments during 2000 was 1.0 per cent by value and 1.4 per cent by volume.

The IRIS RTGS adheres to ECB minimum common features for RTGS systems connected to TARGET. It also adheres to the G-10 Core Principles for Systemically Important Payment Systems and is a dedicated system under the EU Settlement Finality Directive. Notwithstanding these safeguards, and the fact that the Bank provides its own liabilities, i.e., central bank money, as a risk-free settlement medium to the system, there are a number of risks to which the system is exposed. These, if they were to materialise, might have systemic consequences. Therefore, strong risk mitigation measures have been introduced to further strengthen the system.

This liquidity provided by the Bank to participants in the Irish RTGS system is fully collateralised in accordance with ECB requirements. In

addition, risk control measures, in the form of initial margins and 'valuation haircuts', are applied to assets underlying monetary policy and intra-day operations. Moreover, it is not technically possible to have a negative balance and payments are only made from credit balances. Payments are queued until funds become available and are rejected at the end of the day if still in the queue. The Bank is also conscious of operational risks in the payments system and has implemented a number of risk mitigation features in the RTGS to cope with these risks. The Irish large-value payments system therefore conforms to the highest international standards and complies with the core principles that have been elaborated internationally.

## Part B: Assessment of Current Risks Affecting the World Financial Environment

### 5. Prospects for the US Economy

The major worry about the US economy is that the imbalances that have built up over the prolonged period of rapid growth could mean that a sharp downturn might harbour systemic dangers. A simultaneous and rapid unravelling of a number of macroeconomic imbalances and asset price misalignments could, under certain scenarios, threaten systemic health<sup>8</sup>.

The most notable imbalance in the economy until recently has been growth in demand well in excess of capacity growth, despite the fact that the latter has been revised upwards to around 4 per cent (from around 3 per cent) in light of what many commentators consider to be permanent productivity gains which have been achieved mostly in the new economy industries. Other imbalances (such as the private savings rate, which in the third quarter of 2000 was running at close to minus 1 per cent of GDP and an overall current account deficit running at about 4.5 per cent of GDP) are, at least in part, symptomatic of this underlying imbalance<sup>9</sup>. With the growth rate of GDP slowing to 2.2 per cent and 1.1 per cent annualised in the third and final quarters of last year, respectively, the imbalance arising from growth in excess of sustainable levels has been eliminated.

It is also widely believed that these imbalances are related to, or even in part driven by, macroeconomic asset price misalignments. The most notable of these to date has been in share prices, especially

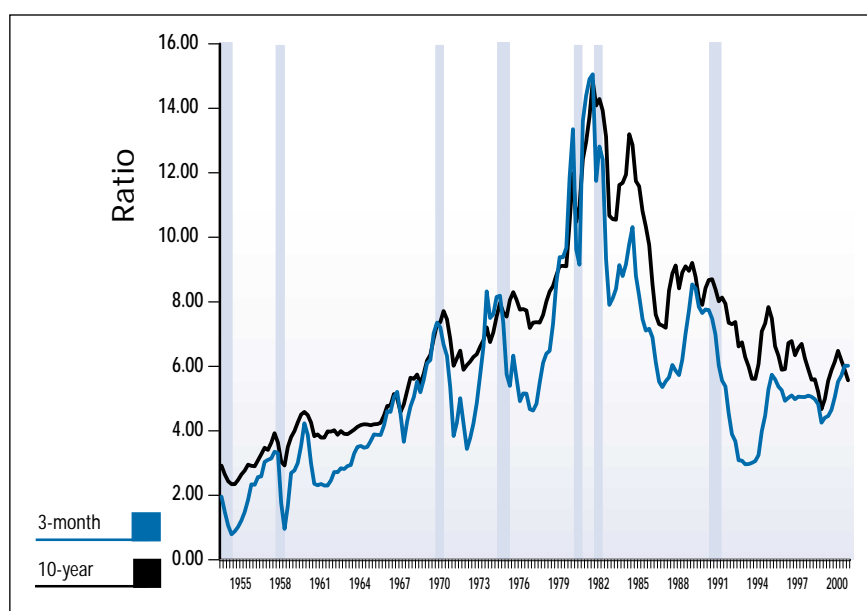
<sup>8</sup> However, it should be noted that the average duration of recessions in the US economy has, in recent times, been quite short. In the five recessions experienced since 1970, it varied from 3 to 4 quarters. Furthermore, research on the US business cycle suggests that the amplitude of the cycle has become more damped and that both the frequency and durations of recent recessions have also become less.

<sup>9</sup> Although there would appear to be serious problems relating to the measurement of both savings and the current account of the balance of payments, few commentators seem to dispute the view that the current magnitudes of these variables represent fairly significant macroeconomic imbalances.

those of the new economy high-tech companies, as represented in the Nasdaq index. However, the latter has fallen by about 66 per cent in recent times and is now, arguably, more consistent with realistic prospects for productivity increases achievable in the computer, computer-related and other high-tech industries.

Some forward-looking financial indicators are currently suggesting that the growth rate of the economy will not only undershoot its sustainable growth rate but will, or may already have, become negative. One such indicator is the term structure of interest rates. This has been a consistently good leading indicator of the business cycle in the US (see Figure 15). Data on this indicator at the end of last year were signalling a pessimistic outlook<sup>10</sup>.

**Figure 15: Term Structure of Interest Rates as Leading Indicator of Recession in the US (1953Q3 to 2000Q4)**



Over approximately the last 40 years or more, the difference between the 10-year Treasury rate and the 3-month Treasury rate has been consistently positive (i.e., upward-sloping yield curve) with the only exceptions being periods more or less immediately preceding the recessions in 1970, 1976, 1980, 1981/1982, and 1990<sup>11</sup>. The reading for this indicator for the final quarter of last year suggested that the bond market was of the view that a recession had already started or was expected at the time to start soon. The 10-year Treasury interest rate fell below the 3-month Treasury rate in August of 2000 for the first time in many years and subsequently the spread continued to widen further. However, this inversion started to be corrected in mid-January of this year and since then the yield curve has continued to

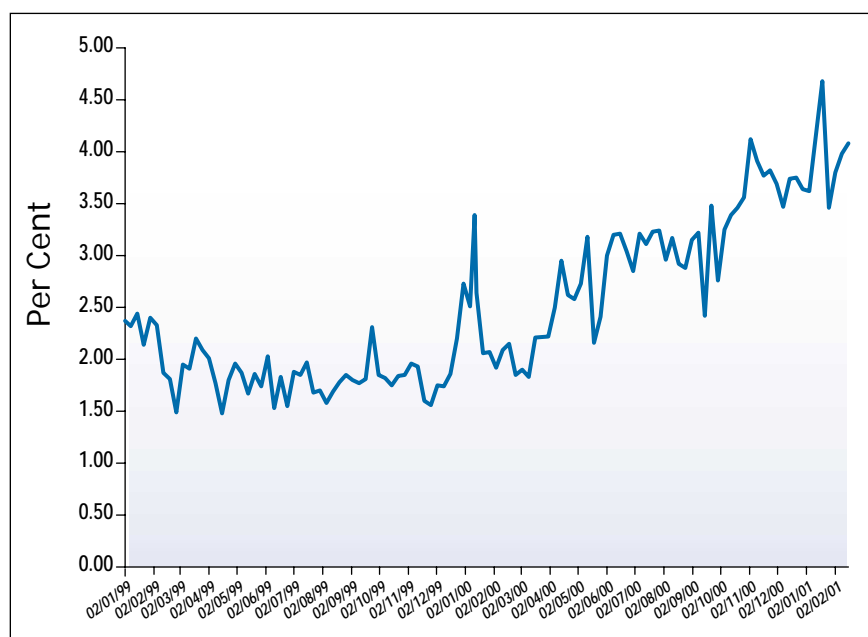
<sup>10</sup> However, the government's bond buyback programme may affect comparability with earlier periods.

<sup>11</sup> It appears that the one time where the term structure did not predict a recession was in 1966Q4.

steepen with the long-short differential reaching 94bps on the 4th of April. This has occurred mostly on the back of the recent monetary easing by the Fed. This steepening of the yield curve suggests that the bond market is now more optimistic about the future prospects for the economy.

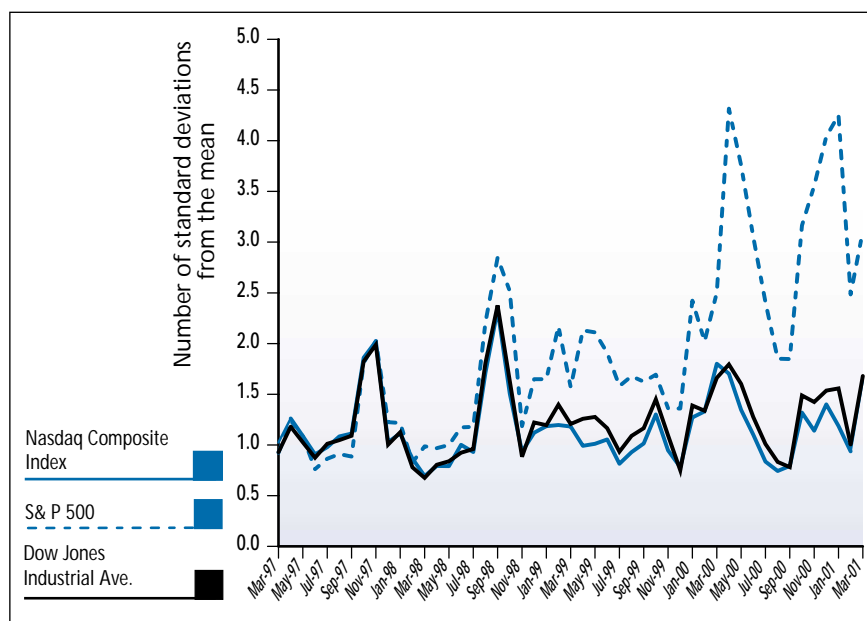
Another indicator which displayed pessimistic readings throughout the whole of last year is so-called quality spreads in the corporate bond market, i.e., the difference between the yields on bonds issued by investment grade<sup>12</sup> and below investment grade firms; this is a good indicator of deteriorating credit risk in the corporate bond market and may also reflect, in part, increased risk aversion on the part of investors. The spread doubled from 2 per cent to 4 per cent from roughly the beginning to the end of last year (see Figure 16). The big drop in the differential in early January 2001 was interpreted by some as signalling an improvement in investor confidence. However, much of this improvement in the differential has subsequently been unwound, as the incidence of overall corporate defaults has increased.

**Figure 16: The Spread of Sub-Investment Grade Corporate Bonds over Investment Grade Corporate Bonds (i.e., BB/BB – over AAA, Start of 1999 to February 2001)**



<sup>12</sup> Investment grade companies refer to those companies that have been given a credit rating of BBB (e.g., Standard & Poor's) or above. Below investment grade companies are all those companies that are rated but do not get an investment grade rating.

**Figure 17: Volatility<sup>13</sup> in US Equity Markets  
(24 March 1997 to 30 March 2001)**



Uncertainty about the prospects for the US economy is reflected in the volatility of share prices. Average volatility for the Nasdaq index (of high-tech new economy stocks for the most part) has increased quite dramatically for the year 2000 relative to the immediately preceding years (as indicated in Figure 17). However, the volatility of the more broadly based stock index (also depicted in Figure 17) would suggest that this uncertainty has been largely confined to the new economy high-tech stocks. However, more recently, there seem to be signs that this volatility might be starting to spread to the broader indices.

Household debt outstanding has increased at a moderately fast rate over the last few years to 2000 from a very slow pace of 4 per cent per annum coming out of the last recession in the early 1990s (see Figure 18). Debt service payments as a percentage of disposable income, however, have increased fairly sharply during the same period from about 11.5 per cent in 1993 to over 14 per cent in the final quarter of 2000 (also displayed in Figure 18). Data from the Federal Reserve<sup>14</sup> indicate that the incidence of problem loans has begun to edge slightly upwards by end-year 2000 having fallen almost consistently since the last recession in 1991 (see Figure 19). The picture with respect to charge-off rates is mixed (see Figure 20)<sup>15</sup>. Those for consumer loans rose in the latter half of the 1990s and in the final quarter of last year were at about the same level as they were

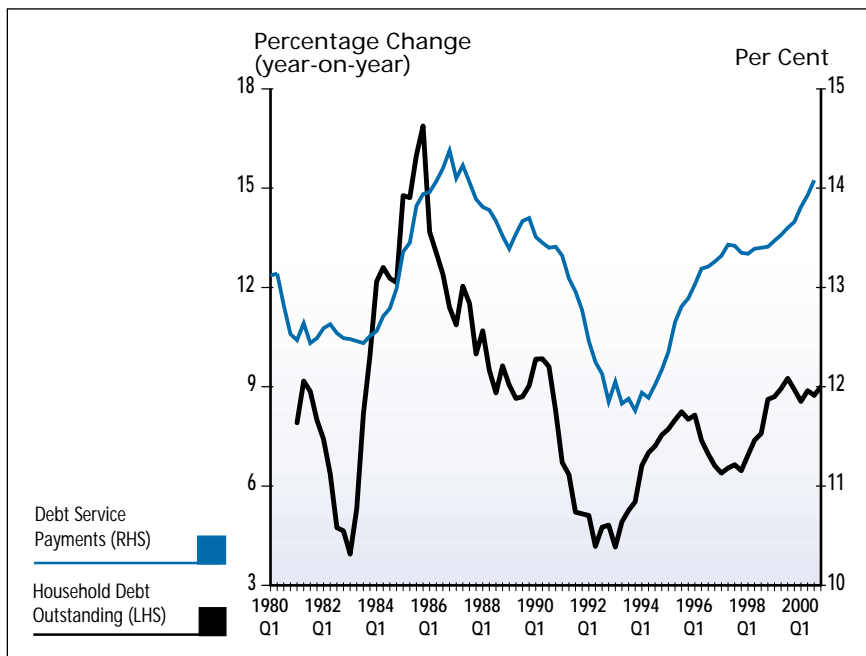
<sup>13</sup> Volatility is measured as a rolling (i.e., moving 30-day) standard deviation of daily percentage changes in each price index.

<sup>14</sup> Reported in *Monetary Trends*, published by the Federal Reserve Bank of St. Louis, November 2000.

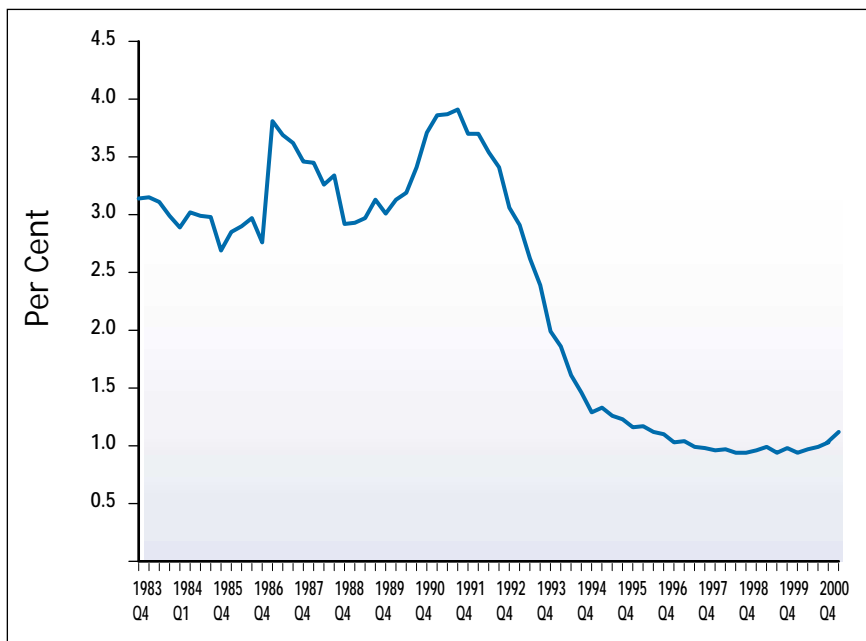
<sup>15</sup> Defined as loans charged off as losses, minus recoveries by banks on loans previously charged off, as a percentage of total loans (see *Monetary Trends*, op. cit.).

in the last recession in 1991. However, charge-off rates for real estate loans have fallen sharply since the 1991 recession and remain at quite low levels.

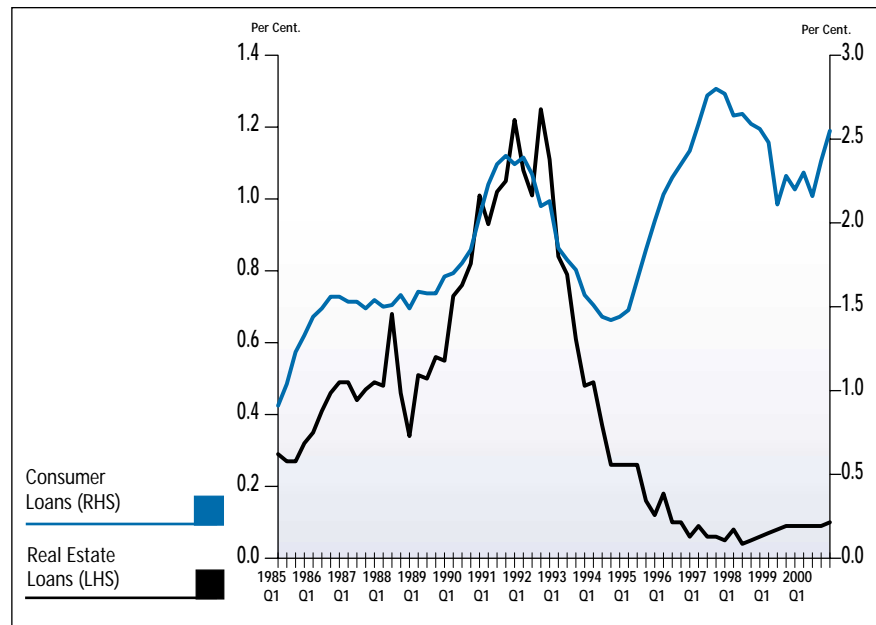
**Figure 18: Debt Service Payments as a percentage of Disposable Income and Change in Household Debt Outstanding (1980Q1 to 2000Q4) – USA**



**Figure 19: Ratio of Non-Performing Loans to Total Loans in US, All Banks (1983Q4 to 2000Q4, Seasonally Adjusted)**



**Figure 20: Charge-off Rates in the US, All Banks  
(1985Q1 to 2000Q4, Seasonally Adjusted)**



Bank loan standards have tightened for many corporate entities and the bond market has effectively been closed for smaller borrowers with lower credit rating. The depressed state of the market for technology shares has meant that many initial public offerings (IPOs) have now been postponed or even cancelled. The first quarter of this year was the worst in the last three years with only 25 IPO deals completed. This compares with 120 for the corresponding period in 2000<sup>16</sup>. The upshot of this is that there is something approaching a sharp squeeze in funding for this segment of the market. The market for investment grade bonds, on the other hand, seems not to have been affected to any great extent so far, with the spread between investment grade corporates and Treasuries and maturity-matched swap rates only modestly affected.

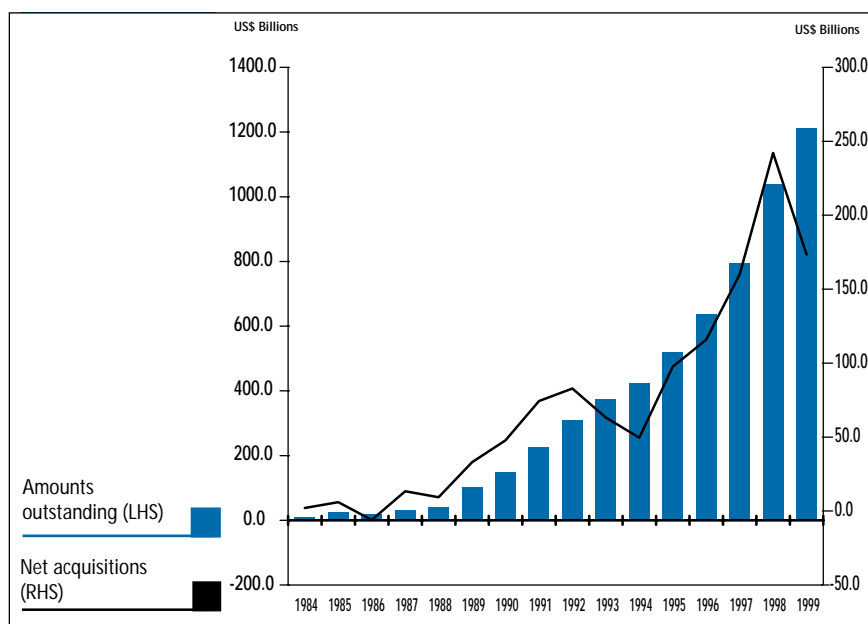
There are a number of factors now in place that would suggest that the banking system in the US is currently in a better position to deal with a substantial slowdown in the growth rate, or even a recession, than it was in previous recessions. There has been a very substantial growth in loan securitisation (see Figure 21), which is favourable from a systemic perspective since it permits a de-concentration of risk relative to a situation in which all the risk was held on the banks' own balance sheets<sup>17</sup>. In addition, the buffers against loan losses (i.e., capital ratios) are now considerably in excess of what they were when the US economy entered its last brief recession in the early 1990s. So, despite the recent deterioration in loan quality and the increase in

<sup>16</sup> As reported in the *Financial Times* on the 5th of April 2001.

<sup>17</sup> However, it is worth noting that the Federal Reserve has recently issued a letter to certain banking organisations supervised by the Federal Reserve underscoring the importance of sound risk management practices in all aspects of asset securitisation.

charge-offs for consumer loans, the Chairman of the Fed was able to state that the current problems “remain historically modest relative to assets and capital”.

**Figure 21: Securitisation Activity in the US:  
Outstanding Amounts and Net Acquisitions of Bank Loans  
(1984 to 1999, Billions of US\$)**



Inflation in consumer prices declined between January and February from 4.1 to 3.5 per cent. However, the picture for core inflation, which accelerated from 1.8 to 2.7 per cent in the same period, is less benign and suggests that past energy price increases are beginning to feed into consumer prices more generally. If this development were to persist, it would present the Fed with an unpleasant combination of rapidly slowing output growth and accelerating underlying inflation. Such a combination would restrict the Fed's scope to shore up consumer confidence, and economic activity more generally, by further loosening the stance of monetary policy. However, if the February figure proves to be a temporary blip in the inflation rate, and bearing in mind that core inflation remains fairly low and the fact that market indicators of inflation expectations also remain low, then the Fed would still have more room for manoeuvre on interest rates. Indeed, it has substantially more room for manoeuvre on interest rates than it had on the eve of the last three recessions in the US, when inflation was 11.3 per cent in 1979, 11 per cent in 1981 and 5 per cent in 1990. The fiscal surplus would also seem to afford some scope for tax cuts, a policy favoured by the new Administration. Therefore, the scope and willingness of both the monetary and fiscal authorities to react promptly to the situation, combined with the fact that the financial turbulence manifested to date has been fairly narrowly based, may help to inspire confidence that the deteriorating macroeconomic situation will not develop into a systemic event.

However, as noted by the Fed itself at the time of its last interest rate reduction, the emergence of excess productive capacity and the prospect that this may last for some time, may also keep demand and production soft for some time.

## **6. Prospects for the Japanese Economy**

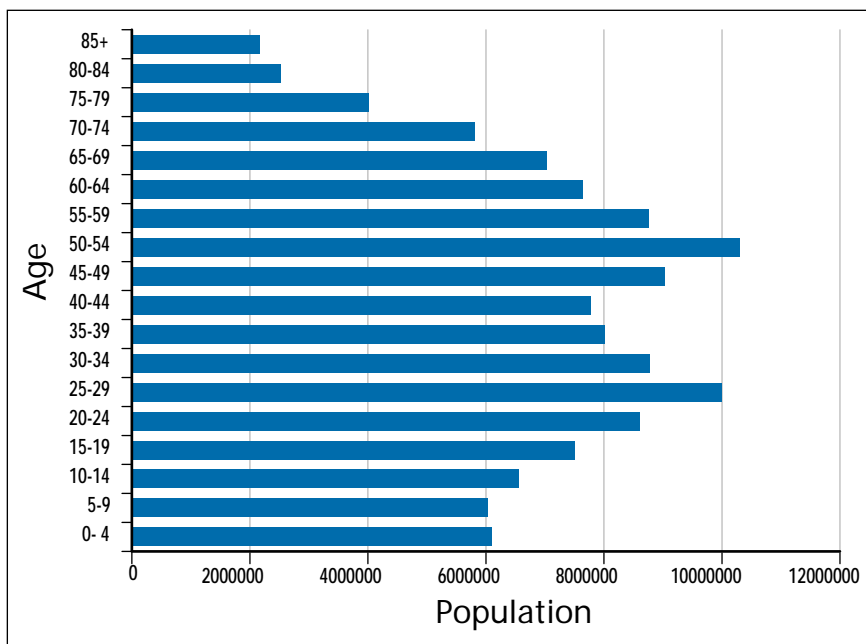
Japan would appear to be in a fairly weak position to cope with any substantial shock from outside. Indeed, it could itself be the source of a shock to the global economy. It faces poor prospects for the domestic economy with recent indicators showing a slowing from an already sluggish growth rate and may now be in, or close to, recession. In addition to this, it has to cope with falling share prices, a banking system that continues to have a large overhang of bad debts and that remains weak, a government bond market which, it has been argued, is dramatically overvalued particularly in the light of a very high and growing debt/GDP ratio and, according to some commentators, in danger of collapse<sup>18</sup>. The knock-on effect of such a collapse could have significant effects both within Japan and beyond. It would imply an additional and substantial negative wealth effect, which would overlay the negative wealth effect coming from the collapse of the Japanese equity market about a decade ago, which continues to have systemic repercussions for the economy.

An ageing population (see Figure 22) that has suffered substantial wealth losses, following the asset price meltdown of the late 1980s/early 1990s, and that is endeavouring to save for retirement, is keeping consumer expenditure depressed. Falling consumer prices throughout the year 2000 (see Figure 23) is no doubt also contributing to consumer apathy. The current deflationary environment in Japan is increasing the burden on debtors especially in the corporate sector for which (wholesale) prices have fallen by approximately 20 per cent, in cumulative terms, since the middle of the 1980s (see Figure 23). This is also contributing to the depressed state of overall expenditure in the economy since debtors have a greater propensity to consume than have creditors. The current relatively high rate of unemployment (for Japan) combined with the ongoing uncertainty associated with the restructuring of the economy may be further serving to undermine consumer confidence. Therefore, depressed consumer expenditure, which over the last few years has grown at only about 1 per cent per annum in real terms (see Figure 24) with the most recent data for retail sales (for December 2000) indicating a 0.9 per cent fall in expenditure relative to

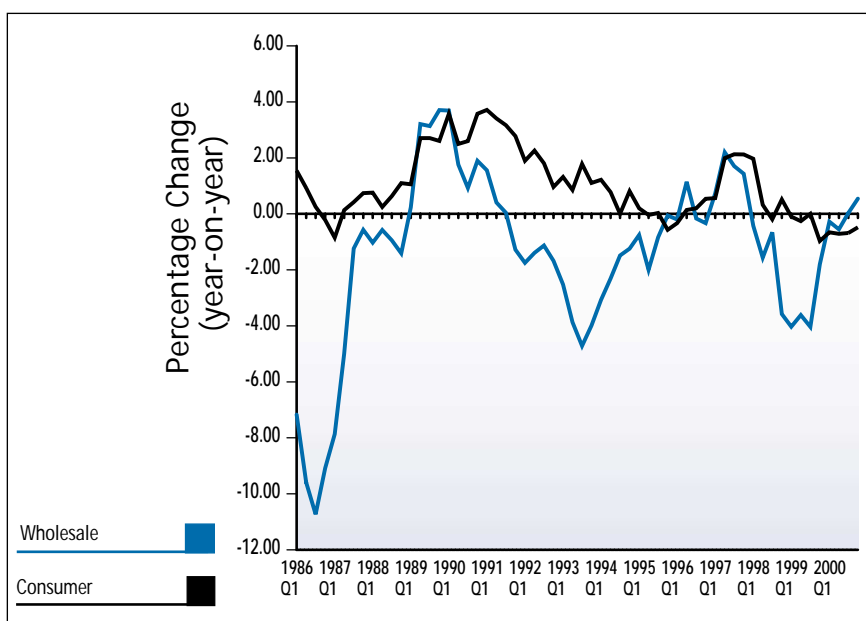
*18 A consideration that should be factored into this prospect is the fact that the government's gross public debt position includes all debts of quasi-government agencies with the net debt position being about 45 per cent as estimated by the OECD. It should also be borne in mind that the Bank of Japan is also a major purchaser of JGBs. However, if all contingent liabilities were to be factored in, both the gross and net debt situations would be significantly bigger. It is surprising, in such circumstances, that investors have apparently not built in any significant risk premium into Japanese government bond yields.*

November, would seem to be the main drag on the Japanese economy. The most recent Bank of Japan quarterly “tankan” survey has revealed a sharp deterioration in Japanese business sentiment in March of this year – the first time it has worsened in over two years. It seems, yet again, that the Japanese economy is failing to gain any robust momentum despite strongly supportive fiscal and monetary policies and, at least until very recently, a quite favourable international environment.

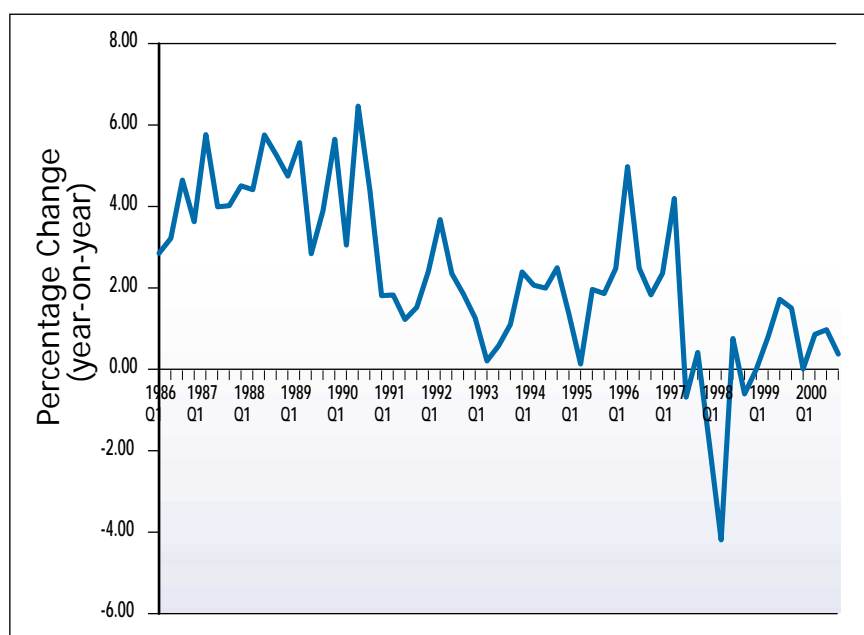
**Figure 22: Population of Japan by Age**



**Figure 23: Wholesale and Consumer Price Indices (1985Q1 to 2000Q4) – Japan**



**Figure 24: Real Private Consumption Growth  
(1986Q1 to 2000Q3) – Japan**



Weak performance under such favourable circumstances might suggest an increase in overall financial sector fragility and even systemic dangers were one or more of these supporting factors to be removed. A particular danger to which the Japanese economy has been exposed for some time is falling prices, which bloats the real value of debt causing normally high-spending borrowers to retrench further on expenditure. This, combined with substantial existing excess capacity in industry (much of which needs to be disposed of with a possible write-off of any corresponding debts), is making the corporate sector reluctant to borrow. And, given their overhang of bad debts, banks are reluctant to lend. Against this deflationary background, the Bank of Japan has recently switched from an interest rate to a reserves target. This could have the effect of strengthening the banking system and diminishing its apparent reluctance to lend, thereby boosting consumption and helping to achieve the objective of stabilising the price level.

Another factor working in the same direction relates to a convention unique to the Japanese banking system whereby banks have been allowed to treat part of their equity portfolio as "capital" for the purposes of fulfilling the Basle capital ratios. Falling share prices are currently putting an additional squeeze on bank capital, so defined, making it increasingly difficult for banks to write off bad loans without infringing the required capital ratios. Therefore, despite the very loose stance of monetary policy, there appears to be something approaching a credit crunch in the loan market. A further negative shock to the Japanese economy coming from, say, a recession in the US (resulting in even stronger downward pressure on the price level in Japan) or a further fall in share prices, would probably reinforce the

effects of an increasing debt burden in real terms with obvious systemic implications. A dilemma facing the authorities in Japan is that the type of radical restructuring programme, which is widely advocated as a solution to Japan's longer-term economic problems, would probably adversely affect growth in the short run.

## **7. Prospects for Emerging Economies**

The marked improvement in the performance of many Asian emerging economies since the Asian crisis of 1997-98 has seen growth rates rebound to the region of 7 to 8 per cent. This has stemmed from the boost to competitiveness following sharp exchange rate depreciations. The robust performance of the US economy, especially since the mid-1990s, has also played a very substantial part in the revival of these emerging markets. With the prospects for the US economy having deteriorated somewhat and the outlook for Japan, also an important export market for these countries, remaining quite gloomy, emerging markets are likely to be quite adversely affected. This is expected to result in a significant slowdown in the growth rates of these countries. However, to date, there is no identifiable pattern of contagion impinging on these countries from the ongoing turbulence affecting Argentina and Turkey.

Slower growth could pose particular difficulties for those countries in this group that have failed to make substantial inroads into reducing non-performing loans since the 1997-98 Asian crisis or more generally failed to make significant progress with reform of their banking and financial systems. It seems that important structural weaknesses remain especially in the banking and financial sectors. The realisation of some pessimistic scenarios for the US and Japanese economies could pose a serious systemic threat to many of these countries, even if they continue to grow. The most important channel through which any contagion might spread to Europe, and Ireland in particular, is through the banking system. Although European banks have cut back their exposure to Asian countries since the crisis, their exposure is still greater than that of banks from the US or Japan. Banks in some of the Southern European countries are also significantly exposed to Latin America, whose overall performance will be significantly adversely affected by the slowdown in the US. Nevertheless, the prevailing view seems to be that the risk of contagion from these sources is quite limited. Ireland's banking system has no exposure to Latin America and its exposure to the Asian region is minimal.

## **8. The Euro Area**

While from a trade perspective, the euro area is a fairly closed economy (with exports and imports of goods and services as a percentage of GDP averaged 16 per cent over the period 1997 to

1999)<sup>19</sup>, financial linkages between the US and the euro area are far stronger. One could not, therefore, dismiss the possibility of a substantial effect of a US recession operating through this channel. However, some of the main effects operating through this channel are likely to offset each other (a net capital inflow into the euro area would reduce the cost of capital but the accompanying appreciation of the exchange rate would have an adverse effect on competitiveness), with the result that it is difficult to say what the direction of the overall international capital market effects might be, never mind the magnitude. Nevertheless, the overall effect of the slowdown in the US is expected to have a negative effect on overall economic performance in the euro area. So contagion, if any, through the trade link is likely to be small while contagion through capital markets is more difficult to assess.

The overall macroeconomic picture within the euro area remains quite favourable with the prospects for only a modest slowdown in the growth rate relative to what was anticipated before the abrupt slowdown in the US. Much as in the US, the large fall in share prices has, to date, been confined to the high-tech sector. Although there are currently no obvious signs of any imminent fragility in the euro area financial system, some countries in the euro area are vulnerable to some particular risks mostly having to do with the possibility of a significant correction in asset prices in the broader equity market as well as in commercial and residential property.

## Conclusions

1. The financial situation in Ireland is stable. The banking system is highly profitable, well capitalised, well diversified and it is well supported by the very favourable state of the overall economy.
2. The extreme openness of the Irish economy makes it exceptionally vulnerable to shocks from abroad and to international propagation of systemic weakness. The emergence of imbalances and misalignments in the US economy over the last number of years has increased the risks of systemic weakness at the international level. On the positive side, it is now clear that, with the fall in the US growth rate and in high-tech share prices, some of these imbalances and misalignments are working themselves through. On the negative side, there is a danger that this correction process might be occurring too quickly and too abruptly adding to uncertainty in financial markets. Moreover, there is also the unwelcome prospect of over-adjustment to these imbalances and misalignments, which could, in itself, also contain the seeds of systemic weakness.

<sup>19</sup> The percentage of this trade accounted for by the US on average over the same period was 13.6 per cent. See: "The external trade of the euro area economy: stylised facts and recent trends", ECB Monthly Bulletin, August 2000.

3. There are a number of perceptible homegrown vulnerabilities. One of the main vulnerabilities arises from the very rapid growth in bank credit, notwithstanding the recent moderate deceleration over the last number of quarters. Private sector credit has grown very rapidly even in comparison with GDP. However, household debt service ratios seem to be manageable for the time being.
4. The economy is somewhat vulnerable to asset price developments but these are not excessive. There has recently been some deceleration in the rate of increase in property prices, both residential and commercial, albeit from quite fast rates. If the support for property prices, which has been afforded by the good underlying performance of the economy, were to be removed, it is not inconceivable that a correction in property prices, and possibly a substantial one, might occur.
5. Labour market developments pose a realistic threat of a strong acceleration. If a simultaneous sharp and sudden depreciation of the dollar were to occur, possibly accompanied by a weakening of sterling, it would exert considerable pressure on the profit margins of firms in the traded sector of the economy. The upshot could be a fall in the rate of output growth and a reversal of the recent very favourable trend in unemployment. There could be significant repercussions for the ability of some highly leveraged borrowers to continue servicing their loans.
6. It should also be noted that the current situation with respect to foot and mouth disease has the potential to cause a significant negative shock to the overall economy. This is a situation which the Bank is monitoring closely.
7. As a general rule, the level of gross foreign liabilities of the banking system has a potential to pose systemic problems. Because the level of these in the Irish banking system is not excessive, the possibility of a capital withdrawal is not a source of concern for systemic stability.
8. The short- to medium-term prospects for maintaining the high level of systemic stability of the financial system in Ireland will depend on whether the combination of forces that have been evident over roughly the last decade will be maintained. Some of the main forces concerned here are favourable demographics, robust long-term capital inflows and low interest rates. Prospects for these factors are not as favourable in the future but not to a degree that would give rise to systemic concerns:
  - Despite the prospects of continued immigration, it is unlikely that labour force growth will continue to make the same contribution to overall growth as in recent years suggesting, in itself, a slowdown in the growth rate.
  - A recession in the US might adversely affect both long-term capital inflows by US multinationals as well as investment plans by those US multinationals already present in Ireland. This would create a downside risk for growth.

- Given the growing evidence of a mild slowdown in growth in the euro area, oil prices which have fallen by more than 25 per cent from their recent highs and a euro which has strengthened, until recently, from its lows vis-à-vis the dollar, it seems unlikely that either short- or long-term interest rates will increase in the near- to medium-term future in the euro area.
9. The Irish Real-time Interbank Gross Settlement system (the IRIS RTGS system) is a systemically important payments system. It processes very large volumes of payments on a daily basis. It is an efficient and systemically stable system and it adheres to the G-10 Core Principles for Systemically Important Payment Systems and is a dedicated system under the Settlement Finality Directive.
  10. Overall, the Irish banking system has been and continues to be quite stable. Despite the fact that increased competition in banking has progressively eroded interest rate margins to the benefit of the overall non-financial sector of the economy, Irish banks are fairly well diversified and remain quite profitable by international comparison.
  11. The capacity of the banking system to weather a substantial adverse shock has been demonstrated by the stress tests that have been carried out by the banking industry at the request of the Bank. However, it should be borne in mind that the models used to conduct the stress testing may not fully incorporate the profound structural changes that have occurred in the Irish economy over the last decade or so. Nor, given their somewhat mechanical nature, can stress-testing exercises cover all eventualities.
  12. The Bank is aware of the need to continually review, develop and refine its tools of analysis so as to improve its understanding of the mechanisms giving rise to financial fragility. It is also seeking to develop a system of indicators that will forewarn of the danger of financial fragility ahead. This will combine both micro-prudential indicators relating to individual banks and macro-prudential indicators relating to the overall economy.
  13. To conclude, the Irish financial situation is quite favourable and no significant risks to the system's stability are evident. Areas that need close monitoring are developments in wages, credit growth and the evolution of asset prices.

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# Appendix 1

## Legislative Basis for Bank's Supervisory Functions

### Principal Irish Statutes

Central Bank Acts, 1942-1998  
 Building Societies Act, 1989  
 Trustee Savings Bank Act, 1989  
 Companies Act, 1990  
 Unit Trust Act, 1990  
 ACC Bank Act, 1992  
 ICC Bank Act, 1992  
 Investment Limited Partnerships Act, 1994  
 Criminal Justice Act, 1994  
 Criminal Justice (Miscellaneous Provisions) Act, 1997  
 Investment Intermediaries Act, 1995 (IIA)  
 Stock Exchange Act, 1995 (SEA)  
 Investor Compensation Act, 1998  
 Insurance Act, 2000

### 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 and 88/220/EEC)  
 Investor Compensation Schemes Directive (97/9/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  
 S.I. No. 396 of 1992  
 Administrative Notices

S.I. No. 294 of 1992  
 S.I. No. 294 of 1992  
 Criminal Justice Act, 1994 and Criminal Justice (Miscellaneous Provisions) Act, 1997  
 IIA and SEA  
 IIA, SEA and Administrative Notices

S.I. No. 168 of 1995 and S.I. No. 468 of 1999 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

# Appendix 2

## Credit Institutions Operating in the State Credit Institutions Authorised to Carry on Banking Business in the State under Irish Legislation

### Holders, as at 31 December 2000 of Banking Licences issued under Section 9 of the Central Bank Act, 1971

AIB Capital Markets plc  
 AIB Finance Limited  
 Allied Irish Banks plc  
 Anglo Irish Bank Corporation plc  
 Banca Commerciale Italiana (Ireland) plc  
 Bankgesellschaft Berlin (Ireland) plc  
 Bank of America NT and SA  
 Bank of Ireland, The Governor and Company of the  
 Bank of Montreal Ireland plc  
 Bank of Scotland (Ireland) Limited  
 Bear Stearns Bank plc  
 BW Bank Ireland plc  
 Chase Manhattan Bank (Ireland) plc  
 CIBC World Markets Ireland Limited  
 Citibank NA  
 CNH Capital plc  
 Commerzbank Europe (Ireland)  
 Commerzbank International (Ireland)  
 DePfa-Bank Europe plc  
 Deutsche Bank/DB Ireland plc  
 Dresdner Bank (Ireland) plc  
 First Active plc  
 Garras Bank – Naspa Dublin  
 Guinness and Mahon (Ireland) Limited  
 GZ-Bank Ireland plc  
 Helaba Dublin Landesbank Hessen-Thüringen International  
 Hewlett-Packard International Bank plc  
 HypoVereinsbank Ireland  
 Investment Bank of Ireland Limited  
 IIB Bank Limited  
 Irish Life and Permanent plc  
 Irish Trust Bank Limited (in liquidation)\*  
 K B Luxembourg Finance Dublin  
 LGT Bank in Liechtenstein (Ireland) Limited  
 Lombard and Ulster Banking 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 Markets Limited  
UniCredito Italiano Bank (Ireland) plc  
Westdeutsche Landesbank (Ireland) plc  
WGZ-Bank Ireland plc

\* 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:

ACCBank plc  
ICC Bank plc  
ICC Investment Bank Limited  
Post Office Savings Bank  
TSB 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)

**Building Societies, as at 31 December 2000, 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

ABN AMRO Bank NV  
 Artesia Banking Corporation  
 Associates Capital Corporation plc  
 Bankers Trust International plc (BTI)  
 Bankinter SA  
 Banque Bruxelles Lambert  
 Banque Internationale à Luxembourg  
 BNP Paribas  
 Barclays Bank plc  
 Caja de Ahorros Y Monte de Piedad de Madrid (Caja de Madrid)  
 Citco Bank Nederland N.V.  
 Crédit Local de France  
 Daiwa Securities Trust and Banking (Europe) Plc  
 DePfa Bank AG  
 Europäische Hypothekenbank S.A.  
 FCE Bank plc  
 Fimat International Banque  
 HFC Bank plc  
 HSBC Bank Plc  
 ING Bank NV  
 Investec Bank (UK) Ltd  
 KBC Bank NV Dublin Branch  
 Marks and Spencer Financial Services Ltd  
 MBNA International Bank Ltd  
 Northern Rock plc  
 Rabobank Nederland  
 Société Générale SA  
 Ulster Bank Limited

### Member State of Origin

Netherlands  
 Belgium  
 United Kingdom  
 United Kingdom  
 Spain  
 Belgium  
 Luxembourg  
 France  
 United Kingdom  
 Spain  
 Netherlands  
 France  
 United Kingdom  
 Germany  
 Luxembourg  
 United Kingdom  
 France  
 United Kingdom  
 United Kingdom  
 Netherlands  
 United Kingdom  
 Belgium  
 United Kingdom  
 United Kingdom  
 United Kingdom  
 Netherlands  
 France  
 United Kingdom

### Cross Border Basis

#### Deposit-Taking and Other Services

ABN AMRO Bank N.V.  
 ABN AMRO Bouwfonds Nederlandse Gemeenten N.V.  
 ABN AMRO Lease Holding NV  
 Allied Trust Bank Limited  
 Artesia Bank Luxembourg S.A.  
 Banamex Investment Bank plc  
 Banca Commerciale Italiana (France) S.A.  
 Banco Essi SA  
 Bank Austria Aktiengesellschaft  
 Bank for Europe Ltd  
 Bank of China International (UK) Ltd  
 Bankers Trust International plc  
 Bankgesellschaft Berlin AG  
 Bank Labouchere N.V.  
 Banque AIG  
 Banque De Bretagne  
 Banque De La Cité  
 Banque et Caisse d'Epargne de L'Etat, Luxembourg

### Member State of Origin

Netherlands  
 Netherlands  
 Netherlands  
 United Kingdom  
 Luxembourg  
 United Kingdom  
 France  
 Portugal  
 Austria  
 Luxembourg  
 United Kingdom  
 United Kingdom  
 Germany  
 Netherlands  
 France  
 France  
 France  
 Luxembourg

## Cross Border Basis

### Deposit-Taking and Other Services – continued

Banque Generale du Luxembourg S.A.	Luxembourg
Banque General Du Phenix Et Du Credit Chimique (Banque Du Phenix)	France
Banque Lehman Brothers	France
Banque Leu (Luxembourg) S.A.	Luxembourg
Banque Nationale De Paris S.A.	France
Banque Nationale De Paris Guyane	France
Banque Nationale De Paris Intercontinentale	France
Banque Pour L'Expansion Industrielle (BANEXI)	France
Banque Sofirec	France
Barclays Bank PLC	United Kingdom
Barclays Private Bank Limited	United Kingdom
Bayerische Hypotheken-und Wechsel-Bank AG (Hypo-Bank)	Germany
Bayerische Landesbank International S.A.	Luxembourg
BHF-Bank Aktiengesellschaft	Germany
Bouwfonds Hypotheken B.V.	Netherlands
BNP Finance	France
Bouwfonds Property Finance B.V.	Netherlands
CDC Finance	France
Chang Hwa Commercial Bank (Europe) NV	Netherlands
Charterhouse Bank Limited	United Kingdom
Chase Investment Bank Limited	United Kingdom
Chase Manhattan International Limited	United Kingdom
Chiao Tung Bank Europe NV	Netherlands
Christiania Bank OG Kreditkasse ASA	Norway
CIBC World Markets plc	United Kingdom
Citibank España S.A.	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 (Union Europeenne De CIC)	France
Coöperatieve Centrale Raiffeisen-Boerenleenbank BA (Rabobank Nederland)	Netherlands
Crédit Européen S.A.	Luxembourg
Credit Lyonnais	France
Credit Suisse (Luxembourg) S.A.	Luxembourg
Credit Universel	France
Creditanstalt - Bankverin Aktiengesellschaft	Austria
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 (DSL Bank)	Germany
DG Bank Deutsche Genossenschaftsbank AG	Germany
Dornbirner Sparkasse	Austria
Dresdner Bank Luxembourg S.A.	Luxembourg
Erste Bank der oesterreichischen Sparkassen AG	Austria
Finansbank (Holland) NV, Amsterdam	Netherlands
Fortis Bank (Nederland) N.V	Netherlands
Fuji Bank Nederland NV	Netherlands
Goldman Sachs Paris Inc et Cie	France
Halifax plc	United Kingdom
Havana International Bank Ltd.	United Kingdom

## Cross Border Basis Deposit-Taking and Other Services – continued

Helaba Luxembourg Landesbank Hessen-Thüringen International S.A.	Luxembourg
Henry Ansbacher and Co. Ltd	United Kingdom
HSBC Republic Bank (Luxembourg) S.A.	Luxembourg
HSBC Equator Bank plc	United Kingdom
HSBC Investment Bank plc	United Kingdom
Internationale Nederlanden Bank NV (ING Bank)	Netherlands
Investec Bank (UK) Ltd	United Kingdom
JP Morgan International Bank Limited	United Kingdom
Kas-Associatie NV (Kas-Netbank)	Netherlands
Kredietbank S.A. Luxembourgeoise	Luxembourg
Landesbank Schleswig-Holstein Girozentrale	Germany
Lehman Brothers Bankhaus Aktiengesellschaft	Germany
Leonia Bank plc	Finland
Marks and Spencer Financial Services Ltd	United Kingdom
Merrill Lynch International Bank Limited	United Kingdom
Midland Bank plc	United Kingdom
Morgan Stanley Dean Witter Bank Ltd	United Kingdom
NationsBank Europe Limited	United Kingdom
NM Rothschild and Sons Limited	United Kingdom
NV Bank Nederlandse Gemeenten	Netherlands
BNP Paribas (Luxembourg)	Luxembourg
Paribas	France
P-H Bank A/S	Denmark
Prudential – Bache International	United Kingdom
Rabo Robeco Bank (Luxembourg) S.A.	Luxembourg
Raiffeisen Zentralbank Österreich AG	Austria
RBS Trust Bank Limited	United Kingdom
Rheinhyp Rheinische Hypothekenbank AG, Frankfurt	Germany
Royal Bank of Canada Europe Limited	United Kingdom
Royal Bank of Scotland plc	United Kingdom
Sabancı Bank plc	United Kingdom
Samuel Montagu and Co. Ltd	United Kingdom
Scotiabank (UK) Ltd	United Kingdom
Societe Europeenne de Banque SA Luxembourg	Luxembourg
Société Générale	France
Societe Nanceienne Varin – Bernier – (Banque SNVB)	France
State Street Banque SA	France
3i Group plc	United Kingdom
Toronto Dominion Bank Europe Limited	United Kingdom
Westdeutsche Immobilienbank	Germany
Westdeutsche Landesbank Girozentrale	Germany
Westland/Utrecht Hypotheekbank NV	Netherlands
West Merchant Bank	United Kingdom
Yorkshire Building Society	United Kingdom

### Services Other Than Deposit-Taking

ABN AMRO Bank (Luxembourg) S.A.	Luxembourg
Alliance and Leicester Group Treasury plc.	United Kingdom
Assemblies of God Property Trust	United Kingdom
Banco Bilbao Vizcaya Argentaria S.A.	Spain
Banco Central Hispanoamericano S.A.	Spain
Banca Popolare di Sondrio	Italy
Banco Popular Español S.A.	Spain
Banco Santander S.A.	Spain
Bank of America International Ltd	United Kingdom
Bank of America SA Madrid	Spain
Bank of Scotland	United Kingdom

### Member State of Origin

Luxembourg
United Kingdom
United Kingdom
Spain
Spain
Italy
Spain
Spain
United Kingdom
Spain
United Kingdom

## Cross Border Basis

### Deposit-Taking and Other Services – continued

Bank of Tokyo-Mitsubishi (Holland) N.V.	Netherlands
Banque Privée Edmond de Rothschild Luxembourg S.A.	Luxembourg
Banque Sanpaolo	France
Baring Brothers Limited (BBL)	United Kingdom
CDC Marchés	France
Citibank Belgium	Belgium
County NatWest Limited	United Kingdom
Credit Agricole Indosuez	France
Credit Communal de Belgique SA	Belgium
Credit 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
Europäische Hypothekenbank SA, Luxembourg	Luxembourg
First National Bank plc "FNB"	United Kingdom
First Personal Bank plc	United Kingdom
Goldman, Sachs and Co.oHG	Germany
GE Sovac	France
Gudme Raaschou Bankaktieselskab	Denmark
Hamburgische Landesbank Girozentrale	Germany
IKB Deutsche Industriebank AG	Germany
JP Morgan and CIE SA	France
Landesbank Rheinland-Pfalz Girozentrale	Germany
Mediofactoring SpA	Italy
Merrill Lynch Capital Markets (France) S.A.	France
Merrill Lynch Finance S.A.	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 (S.A.)-Centrale de Cotation et de Contrepartie	France
Schroder Munchmeyer Hengst AG	Germany
SNVB Financements	France
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 2000, 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).

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Aberdeen International Fund plc	Aberdeen International Management Ireland Limited	The Governor and Company of the Bank of Ireland
Aberdeen Umbrella Cash Fund plc	Aberdeen International Management Ireland Limited	The Governor and Company of the Bank of Ireland
ABN AMRO Global Liquidity Funds plc	–	Deutsche International Custodial Services (Ireland) Limited
Advanced Capital Fund plc	–	PFPC Trustee and Custodial Services Limited
AIB Investment Fund	AIB Fund Management Limited	Allied Irish Banks plc
AIG American Equity Trust	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Asia Balanced Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Balanced World Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Central and Eastern Europe Growth Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Emerging Markets Bond Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Euro-Optimizer Fund	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Europe Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Europe Small Companies Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG European Opportunities Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Global Bond Fund	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Global Emerging Markets Fund Plc	AIG/SunAmerica Asset Management Limited.	The Governor and Company of the Bank of Ireland

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
AIG Global Equities Growth Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Global Equities Value Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Japan Small Companies Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Latin America Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Liquidity Fund	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG Multicurrency Bond Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG New Asia Capital Opportunities Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG South East Asia Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG South East Asia Small Companies Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIG/SunAmerica International Funds	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
AIM Capital Funds plc	AIM Global Management Company Limited	The Governor and Company of the Bank of Ireland
AIMIC Japan New Horizon Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and 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	Chase Manhattan Bank (Ireland) plc
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	Allied Irish Banks plc
AON International Funds plc	–	The Governor and Company of the Bank of Ireland
Area Asset Advisor Funds plc	Area International Management (Ireland) Limited	Banque Internationale à Luxembourg S.A., Dublin Branch

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Arlecchino Investment plc	Mantovana Management Limited	Allied Irish Banks plc
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	–	Banque Internationale à Luxembourg S.A., Dublin Branch
AXA Asian Funds	Citibank Investment Services Ireland Limited	Citibank Trustees (Ireland) Limited
AXA Rosenberg Equity Alpha Trust	AXA Rosenberg Management Ireland Limited	PFPC Trustee and Custodial Services Limited
Bank of Ireland Asset Management Equity Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
Bank of Ireland Asset Management Managed Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
Bank of Ireland Funds plc	–	Chase Manhattan Bank (Ireland) plc
Barclays Global Investors Fixed Income Selection Fund plc	Barclays Global Investors Ireland Limited	The Governor and Company of the Bank of Ireland
Barclays Global Investors Index Selection Fund	Barclays Global Investors Ireland Limited	The Governor and Company of the Bank of Ireland
Belinvest Realty Fund plc	–	Bermuda Trust (Dublin) Limited
BG Bolsa Crecimiento plc	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited
BiscayneAmericas Euro Fund plc	–	The Governor and Company of the Bank of Ireland
BlackRock Global Series plc	–	PFPC Trustee and Custodial Services Limited
Blevins Franks International Select Funds plc	Blevins Franks Managers Ireland Limited	BNY Securities Services (Ireland) Limited
BNL Global Funds plc	–	Banque Internationale à Luxembourg S.A., Dublin Branch
BNY Hamilton Funds plc	–	Allied Irish Banks plc
BOC International Fund	BOC International Fund Management Limited	The Governor and Company of the Bank of Ireland
BT and T Telecommunications and Technology Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and 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

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Buchanan Performance Funds plc	Buchanan Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Cardinal Funds plc	–	Allied Irish Banks plc
Cash Reserve Funds plc	–	Northern Trust Custodial Services
Cazenove International Fund plc	–	Brown Brothers Harriman Trustee Services (Ireland) Limited
CB Clients plc	CICM Fund Management Limited	Allied Irish Banks plc
CB Global Sector Fund plc	CICM Fund Management Limited	Allied Irish Banks plc
CHALLENGE Funds	Mediolanum International Funds Limited	Banque Internationale à Luxembourg S.A., Dublin Branch
Charles Schwab Worldwide Funds plc	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Charles Schwab Worldwide Trust	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Christows Investments plc	Christows Investments (Dublin) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
CICM International Investments plc	CICM Fund Management Limited	Allied Irish Banks plc
CICM International Portfolios plc	CICM Fund Management Limited	Allied Irish Banks plc
Close Finsbury Global Investment Funds plc	–	Chase Manhattan Bank (Ireland) plc
CMG First State Global Umbrella Fund plc	–	Bermuda Trust (Dublin) Limited
COBA Clients plc	CICM Fund Management Limited	Allied Irish Banks plc
Comgest Growth plc	–	Banque Internationale à Luxembourg S.A., Dublin Branch
Conseq Invest plc	–	Citibank Trustees (Ireland) Limited
Coutts Liquidity Fund plc	Coutts Fund Managers Limited	Northern Trust Custodial Services
Daiwa TAA Japan Fund plc	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
DBLA-Dresdner RCM Latin American Selections Funds plc	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
DekaTeam – BioTech	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam – EM Bond	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam-Emerging Markets	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam-Global Resources	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam-GlobalBond	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
DekaTeam-GlobalSelect	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam-Immoflex USA	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
DekaTeam-PharmaTech	Deka International (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Deutsche Direkt Funds plc	CICM Fund Management Limited	Allied Irish Banks plc
Deutsche euroSpectrum Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) 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
Deutsche Global Select 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
Dicam Japan Fund plc	–	Daiwa Europe Trustees Ireland Limited
DIT- Dresdner Global Opportunities Fund	Dresdner International Management Services Limited	Chase Manhattan Bank (Ireland) plc
DIT-Dresdner Bond Strategies Fund	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
DIT-Dresdner Cashplus 12/96	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
DIT-Dresdner Global Strategies Fund	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
DIT-Dresdner Laufzeitfonds 3/99	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
Dresdner RCM India Fund plc	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
Dresdner Thornton Asian Selection Funds plc	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
Dresdner Thornton India Fund plc	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
dSAM Investment Fund plc	–	BT Trustee Company (Ireland) Limited
Dublin International Funds	BPM Fund Management (Ireland) Limited	Citibank Trustees (Ireland) Limited
Eaton Vance Umbrella Fund plc	Eaton Vance Advisors (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited
Edinburgh Investment Company (Ireland) plc	Edinburgh Unit Trust Managers (Ireland) Limited	Bermuda Trust (Dublin) Limited

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Edinburgh Umbrella Fund	Edinburgh Unit Trust Managers (Ireland) Limited	Bermuda Trust (Dublin) Limited
Egerton Capital European Fund plc	–	Daiwa Europe Trustees Ireland Limited
Ell 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
Equator Investment Programmes	Coutts Fund Managers Limited	Northern Trust Custodial Services
European Exchange – Traded Fund Company plc	Merrill Lynch Investment Managers (Dublin) Limited	Allied Irish Banks, plc
F.I.T. Asian Fund	F.I.T. Investment Trust Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
F.I.T. Czech Investment Fund	F.I.T. Investment Trust Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
F.I.T. Delta Growth Fund	F.I.T. Investment Trust Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
F.I.T. Frontier Fund	F.I.T. Investment Trust Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
F.I.T. Japan Fund	F.I.T. Investment Trust Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Federated International Funds plc	Federated International Management Limited	Allied Irish Banks plc
Federated Unit Trust	Federated International Management Limited	Chase Manhattan Bank (Ireland) plc
Fidelity Institutional Cash Fund plc	–	Chase Manhattan Bank (Ireland) plc
Findlay Park US Smaller Companies Fund plc	–	Brown Brothers Harriman Trustee Services (Ireland) Limited
Finter Investment Fund plc	Finter Fund Management (Ireland) Limited	Allied Irish Banks plc
Five Arrows International Fund plc	Rothschild Asset Management (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
Fleming Private Fund plc	–	BNY Securities Services (Ireland) Limited
Fondo Santander Doble Asegurado plc	Santander International Fund Advisory Ireland Limited	BNY Securities Services (Ireland) Limited
Formosa High-Tech Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
FPK Financial Funds plc	–	Citibank Trustees (Ireland) Limited
Frank Russell Investment Company II plc	Frank Russell Investments Limited	Deutsche International Custodial Services (Ireland) Limited

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
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
Fuji-Lord Abbett Global Fund	Fuji-Lord Abbett International (Dublin) Limited	Chase Manhattan Bank (Ireland) plc
GAM Asia Funds	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Columbus	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Europa Funds	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Orient Funds	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Star Fund plc	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Tokyo Funds	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Total Bond Fund (DM)	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
GAM Universal D.Mark Fund	GAM Fund Management Limited	Chase Manhattan Bank (Ireland) plc
General and Cologne Re Investment Trust	General and Cologne Re Fund Managers (Ireland) Limited	Citibank Trustees (Ireland) Limited
GLG Emerging Markets Fund plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Investments III plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Investments IV plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Investments plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
Global Capital Markets Portfolio	Salomon Brothers Management Company (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited
Global Enhanced Income Fund	Salomon Brothers Management Company (Ireland) Limited	PFPC Trustee and Custodial Services Limited
Global Funds Management plc	Lazard Investment Funds Limited	The Governor and Company of the Bank of Ireland
Global Property Fund	GPA Fund Managers (Ireland)Limited	Clydesdale Trustee and Custodial Services (Ireland) Limited
Global Resources Stock Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Global SCAP Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Bank plc
Global Treasury Funds plc	The Royal Bank of Scotland Funds (Dublin) Limited	Allied Irish Banks plc
Goldman Sachs Funds plc	–	Allied Irish Banks plc
Green Effects Investments plc	–	Barings (Ireland) Limited

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Griffin/Partners Umbrella Fund plc	–	Barings (Ireland) Limited
Group One International Trust	Group One International Trust Managers Limited	Chase Manhattan Bank (Ireland) plc
GROUPAMA International Umbrella Fund plc	–	BNY Securities Services (Ireland) Limited
GT Latin America Fund plc	GT Asset Management Ireland Limited	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
Hardy and Co Strategy Fund	Dresdner International Management Services Limited	The Governor and Company of the Bank of Ireland
Hausmann International Fund plc	–	The Governor and Company of the Bank of Ireland
Helios Portfolio	Bank of Ireland Unit Managers Limited	The Governor and Company of the Bank of Ireland
Henderson Crosthwaite Investment Company plc	Henderson Crosthwaite Investment Management (Ireland) Limited	Banque Internationale à Luxembourg S.A., Dublin Branch
Herald Investment Fund plc	–	Deutsche International Custodial Services (Ireland) Limited
HighMark World Funds plc	–	Clydesdale Trustee and Custodial Services (Ireland) Limited
HSBC Global Liquidity Funds plc	–	Allied Irish Banks plc
HSBC Global Reserve Funds plc	–	Allied Irish Banks plc
HSBC International Capital Secured Growth Funds plc	–	HSBC Global Investor Services (Ireland) Limited
INVESCO GT Emerging Markets Series	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
INVESCO GT India Fund	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
INVESCO GT Pathfinder Series	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
INVESCO GT Small Companies Series	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
INVESCO GT World Bond Series	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
INVESCO GT World Series	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
Investec Select Funds plc	Investec Guinness Flight Fund Managers (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
iShares plc	Barclays Global Investors Ireland Limited	The Governor and Company of the Bank of Ireland
Janus Universal Funds	Janus Capital Trust Manager Limited	The Governor and Company of the Bank of Ireland

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Janus World Funds plc	–	The Governor and Company of the Bank of Ireland
John Hancock Umbrella Fund	John Hancock Advisers International (Ireland) Limited	The Governor and the Company of the Bank of Ireland
Korea Active	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
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 and 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 Bond Fund plc	Lazard Investment Funds Limited	Deutsche International Custodial Services (Ireland) Limited
Lazard Global Equity Fund plc	Lazard Investment Funds Limited	Deutsche International Custodial Services (Ireland) Limited
Lazard Global Liquidity Fund plc	Lazard Investment Funds Limited	Deutsche International Custodial Services (Ireland) Limited
LG Japan Fund plc	Lloyd George Investment Management (Ireland) Limited	Barings (Ireland) Limited
LG Korea Fund plc	Lloyd George Investment Management (Ireland) Limited	Barings (Ireland) Limited
Loomis Sayles International Funds plc	–	The Governor and Company of the Bank of Ireland
Lotus Fund plc	–	Bermuda Trust (Dublin) Limited
Marathon Global Fund	Marathon Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Marriott Singer International Funds plc	–	Barings (Ireland) Limited
Mediolanum Defender Funds	Mediolanum International Funds Limited	Banque Internationale à Luxembourg S.A., Dublin Branch
Merrill Lynch Institutional Liquidity Funds plc	Merrill Lynch Investment Managers (Dublin) Limited	The Governor and 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

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Metzler/Payden Global Funds plc	Metzler Ireland Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Montanaro European Smaller Companies plc	–	Deutsche International Custodial Services (Ireland) Limited
Multi-Link Global Funds plc	Skandia Fund Management (Ireland) Limited	SEI-Investments Trustee and Custodial Services (Ireland) Limited
Multi-Style, Multi-Manager Funds plc	SG\Russell Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
Murray Global Accumulation Funds plc	Murray Johnstone (Dublin) Limited	Bermuda Trust (Dublin) Limited
NCL Investment Company plc	–	Investors Trust and Custodial Services (Ireland) Limited
New Flag Euro High Yield Fund plc	–	Barings (Ireland) Limited
Nicholas-Applegate International Umbrella Fund plc	–	Bermuda Trust (Dublin) Limited
NPI Portfolio Fund plc	NPI International Dublin Limited	Chase Manhattan Bank (Ireland) plc
Nucleus Funds plc	–	Investors Trust and Custodial Services (Ireland) Limited
Odey European Growth Fund	BT Fund Managers (Ireland) Limited	BT Trustee Company (Ireland) Limited
Oppenheimer Millennium Funds plc	Oppenheimer Funds International Limited	PFPC Trustee and Custodial Services Limited
Orbitex Investment Funds plc	–	Bermuda Trust (Dublin) Limited
PaineWebber Offshore Funds plc	BISYS Fund Services (Ireland) Limited	Clydesdale Trustee and Custodial Services (Ireland) Limited
PALLMALL Funds plc	–	Brown Brothers Harriman Trustee Services (Ireland) Limited
Payden and Rygel Global Funds plc	–	BNY Securities Services (Ireland) Limited
Payden and Rygel Improved Liquidity Fund	–	Northern Trust Custodial Services
Pegasus Strategic Investment Company plc	–	The Governor and 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 and Custodial Services (Ireland) Limited
Pioneer America Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Emerging Europe Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Pioneer Euro Reserve Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer European Equity Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Global Bond Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Global Equity Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer Greater Asia Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer US Growth Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer US High Yield Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Pioneer US Real Estate Fund plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Premier Protected Assets Funds plc	–	BNY Securities Services (Ireland) Limited
Principal Investment Funds	Principal Capital Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Putnam World Trust	Putnam Investments Limited	The Governor and Company of the Bank of Ireland
Putnam World Trust II	Putnam Investments Limited	The Governor and Company of the Bank of Ireland
Regent Magna Europa Fund plc	–	Bermuda Trust (Dublin) Limited
Rothschild Private Investor Funds plc	–	The Governor and Company of the Bank of Ireland
Salomon Brothers Global Horizons Funds	Salomon Brothers Management Company (Ireland) Limited	PFPC Trustee and Custodial Services Limited
Sanpaolo Invest Funds	Sanpaolo Invest Ireland Limited	Allied Irish Banks plc
Saudi International Investment Company plc	–	Barings (Ireland) 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	BNY Securities Services (Ireland) Limited
SEB (Ireland) Umbrella Fund	SEB Fund Managers (Ireland) Company Limited	Deutsche International Custodial Services (Ireland) Limited
SEI Global Master Fund plc	SEI Investments Global Limited	SEI Investments Trustee and Custodial Services (Ireland) Limited

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Sella Fund	Sella Fund Management Ireland Limited	Northern Trust Custodial Services
SG Emerging Markets Fund plc	–	Chase Manhattan Bank (Ireland) plc
SG Select Fund	SGAM (Ireland) Limited	Societe Generale
Short-Term Investments Company (Global Series) plc	AIM Global Management Company Limited	Allied Irish Banks, plc
Singer and Friedlander "Roll-Up" Funds plc	Singer and Friedlander Total Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Singer and Friedlander Investment Funds plc	Singer and Friedlander Total Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Smith and Williamson Investment Funds plc	Smith and Williamson Investment Management (Ireland) Limited	BNY Securities Services (Ireland) Limited
SSgA Cash Management Fund plc	–	The Governor and Company of the Bank of Ireland
Standish Funds plc	–	Investors Trust and Custodial Services (Ireland) Limited
Strategic Value Advisors plc	–	PFPC Trustee and Custodial Services Limited
Stryx International Funds plc	Seilern Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Summit Investment Funds plc	EBS Asset Managers Limited	Citibank Trustees (Ireland) Limited
Swiss Life Investment Fund plc	Swiss Life Investment Management Limited	Citibank Trustees (Ireland) Limited
Swiss Re Funds	Swiss Re Funds Management (Ireland) Limited	Citibank Trustees (Ireland) Limited
Thames River Traditional Funds plc	–	Barings (Ireland) Limited
The Access to Asset Allocation (AAA) International Fund plc	–	Banque Internationale à Luxembourg S.A., 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
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 Fiduciary Trust Global Fund	Fiduciary International Ireland Limited	Investors Trust and Custodial Services (Ireland) Limited
The Global Navigator	Dresdner International Management Services Limited	Chase Manhattan Bank (Ireland) plc

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
The Halal Mutual Investment Company plc	–	BNY Securities Services (Ireland) Limited
The International Investment Portfolios plc	–	The Governor and Company of the Bank of Ireland
The Knight Williams International Portfolio	Knight Williams Portfolio Management International Limited	Barings (Ireland) 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 and Company of the Bank of Ireland
The World Emerging Markets Umbrella Fund plc	–	Barings (Ireland) Limited
The Worldwide Financial Services Fund plc	–	Bermuda Trust (Dublin) Limited
Thema International Fund plc	–	Bermuda Trust (Dublin) Limited
Threadneedle Liquid Assets Fund plc	–	Chase Manhattan Bank (Ireland) plc
Tilney Ireland Collective Funds plc	Tilney (Ireland) Limited	BNY Securities Services (Ireland) Limited
Tilney Umbrella Fund	Tilney (Ireland) Limited	BNY Securities 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	Banque Internationale a Luxembourg S.A., Dublin Branch
UAM Funds plc	–	Chase Manhattan Bank (Ireland) plc
UBZ Liquidity Fund – Swiss Franc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
UBZ Liquidity Fund – US Dollar	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
UNIPOL FUNDS	Unipol Fondi Limited	Citibank Trustees (Ireland) Limited
Unitfond plc	Unitfond Limited	PFPC Trustee and Custodial Services Limited
Universal Liquidity Global Funds plc	Mellon Global Management Limited	Mellon Trustees (Dublin) Limited
UOB Global Strategies Funds plc	UOB Global Capital (Dublin) Limited	The Governor and Company of the Bank of Ireland
Valoris	Europlus Funds Management Limited	The Governor and Company of the Bank of Ireland

<b>Name of UCITS</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Vanguard Investment Series plc	Vanguard Group (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Voyager Investments plc	Bank of Ireland Unit Managers Limited	The Governor and Company of the Bank of Ireland
W and W Global Strategies Fund	W and W Asset Management Dublin Limited	Deutsche International Custodial Services (Ireland) Limited
Warburg Pincus Funds plc	Warburg Pincus Asset Management (Dublin)	PFPC Trustee and Custodial Services Limited
Wellington Management Portfolios (Dublin) plc	–	The Governor and Company of the Bank of Ireland
Wellington Management Portfolios (Ireland) plc	–	The Governor and Company of the Bank of Ireland
Weser EMS Investment Company plc	–	The Governor and Company of the Bank of Ireland
WP Stewart Funds plc	WP Stewart Fund Management Limited	Bermuda Trust (Dublin) Limited
Yamaichi Samsung Dynamic Korea Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Yuki Korea Fund	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Zenith Investment Fund plc	–	Bermuda Trust (Dublin) Limited

# Appendix 5

## 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	Five Arrows Portfolio Fund
Aberdeen Atlas Fund	Fleming Funds
Aberdeen Global	Fleming Series II Funds
AIB Govett American General Fund	Guinness Flight Blue Chip Portfolio Trust
AIB Govett UK Equity General Fund	Guinness Flight Emerging Companies Trust
AIB Govett European General Fund	Henderson Horizon Fund
AIB Govett Corporate Bond Fund	HSBC Global Investment Funds
AIB Govett Japan General Fund	INVESCO European Warrant Fund
AIB Govett FTSE Mid 250 Index Fund	INVESCO GT
AIB Govett American Strategy Fund	INVESCO Maximum Income Fund
AIB Govett European Strategy Fund	JPM Lux
AIB Govett Pacific Strategy Fund	J.P. Morgan Investment Fund
AIB Govett Greater China Fund	J.P. Morgan Luxembourg Funds
AIB Govett International Growth Fund	Mercury Selected Trust
AIB Govett UK Smaller Companies Fund	Mercury World Bond Fund
AIB Govett Global Strategy Fund	Nippon Warrant Fund
AIB Govett Latin America Fund	Premier International Investments
AIB Govett Asia Pacific Fund	Save and Prosper American Income and Growth Fund
Asia Super Growth Fund	Save and Prosper American Smaller Companies Fund
Asia Tiger Warrant Fund	Save and Prosper Capital Units
Baillie Gifford UK and Balanced Funds ICVC	Save and Prosper Commodity Share Fund
Baillie Gifford Overseas Growth Fund ICVC	Save and Prosper Eastern Discovery Fund
Barclays Investment Funds (Luxembourg)	Save and Prosper Energy Industries Fund
Baring American Growth Trust	Save and Prosper European Growth Fund
Baring American Smaller Companies Trust	Save and Prosper European Income and Growth Fund
Baring Convertibles Trust	Save and Prosper Financial Securities Fund
Baring Eastern Trust	Save and Prosper Gilt and Fixed Interest Income Fund
Baring Equity Income Trust	Save and Prosper Gold and Exploration Fund
Baring Europe Trust	Save and Prosper International Bond Fund
Baring European Growth Trust	Save and Prosper Japan Growth Fund
Baring German Growth Trust	Save and Prosper Japan Smaller Companies Fund
Baring Global Bond Trust	Save and Prosper New Technology Fund
Baring Global Growth Trust	Save and Prosper Scotbits
Baring Japan Growth Trust	Save and Prosper Select International Fund
Baring Japan Sunrise Trust	Save and Prosper South East Asia Growth Fund
Baring Korea Trust	Save and Prosper US Growth Fund
Baring Portfolio Fund	Save and Prosper Universal Growth Fund
Baring UK Growth Trust	Templeton Global Strategy SICAV
Baring UK Smaller Companies Trust	Von Ernst Global Portfolio
CMI Global Network Fund	
CMI Managed International Fund	
Fidelity Funds	
Fidelity Funds II	

# Appendix 6

## Foreign Collective Investment Schemes (other than UCITS) Marketing in Ireland

The following collective investment schemes have been approved by the Bank to market in Ireland under Section 256(8) of the Companies Act, 1990 and Section 9 of the Unit Trusts Act, 1990.

### NAME

AIB Grofund Currency Funds Limited	Hill Samuel Offshore High Yield Fund Limited
AHL Guaranteed Capital Markets Limited	Hill Samuel Sterling Fixed Interest Fund Limited
Alliance & Leicester International Fund plc	Investec International Accumulation Fund Limited
Allied Dunbar International Funds Limited	Irish Permanent International Funds plc
Athena Guaranteed Currencies Limited	Lloyds TSB Money Fund Limited
Bank of Ireland British Overseas Trust	MAP Guaranteed Limited
Bank of Ireland Capital Growth Trust	Mellon Newton Universal Growth Funds Limited
Bank of Ireland Global Funds Limited	Mercury International Bond Fund
Bank of Ireland International Portfolio	Mercury Offshore Balanced Portfolio
Bank of Ireland Worldwide Opportunity Trust	Mercury Offshore Growth Portfolio
Barclays Investment Funds (Channel Islands) Limited	Mercury Sterling Fund
Barclays Unicorn Multicurrency Fund Limited	Mercury World Trader Funds
Davy Growth Trust	– UK Equity Bull Trader Fund
Dresdner RCM Emerging Markets Fund Limited	Mercury World Trader Funds
Dresdner RCM International Income Bond Fund Limited	– US Equity Bull Trader Fund
Emerald Equity Company plc	Mercury World Trader Fund
Fidelity Currency Funds Limited	– Japanese Equity Bull Trader Fund
Five Arrows Currency Fund Limited	Mercury World Trader Fund
Five Arrows International Bond Fund Limited	– European Equity Bull Trader Fund
Five Arrows International Investment Funds	Mint Guaranteed Currencies 2001 Limited
Five Arrows International Reserves Limited	(Mint Guaranteed Currencies 2001)
Gartmore Capital Strategy Fund Limited	Mint Guaranteed Global Financial 2003 Limited
Govett Securities & Investments Limited	Old Mutual International Funds Limited
Guinness Flight Global Strategy Fund	Old Mutual International Total Income Fund Limited
Hill Samuel Offshore Funds Limited	Ulster Bank Global Funds plc

# Appendix 7

## Authorised Unit Trust Schemes

The unit trusts listed below are authorised by the Central Bank of Ireland, as at 31 December 2000, 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.

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
ABN AMRO Alternative Investments Fund	ABN AMRO Fund Managers (Ireland) Limited	Daiwa Europe Trustees Ireland Limited
AIB Capital Growth Fund	AIB Fund Management Limited	Allied Irish Banks plc
AIB Capital Markets Unit Trust	AIB Fund Management Limited	Allied Irish Banks plc
AIB Global Funds Unit Trust	AIB Fund Management Limited	Allied Irish Banks plc
AIB Guaranteed Growth Funds	AIB Fund Management Limited	Allied Irish Banks plc
AIB Select Portfolio	AIB Fund Management Limited	Allied Irish Banks plc
AIB Umbrella Trust	AIB Fund Management Limited	Allied Irish Banks plc
AIMIC Asian Capital Growth Fund	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
Al Silaa Fund	Barep Asset Management (Ireland) Limited	Societe Generale
Alban Gate Investment Fund	Chase Funds Management Services (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Altius Fund	SGAM (Ireland) Limited	Societe Generale
Apollon Europe Equity Fund	Apollon Asset Management Company Limited	Deutsche International Custodial Services (Ireland) Limited
Asia Access 2000 Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
Asia Landmark Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
Asian Equity Pioneer Fund	Bank of Ireland Unit Managers Limited	The Governor and Company of the Bank of Ireland
ASO II (Ireland) Fund	Goldman Sachs Funds Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
ASO III (Ireland) Fund	Goldman Sachs Funds Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
ASO I (Ireland) Fund	Goldman Sachs Fund Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Asset Korea Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Atlantis Korean Smaller Companies Fund	Atlantis Investment Management (Ireland) Limited	Barings (Ireland) Limited
AXA Currency and Managers Fund	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
AXA Rosenberg Market Neutral Strategies Trust	AXA Rosenberg Management Ireland Limited	PFPC Trustee and Custodial Services Limited
B,HandS Residential Property Fund	B,HandS Asset Management (Ireland) Limited	Barings (Ireland) Limited
Bank of Ireland Asset Management Bond Mutual Fund	Bank of Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
Bank of Ireland Asset Management EIRI Mutual Funds	Bank of Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
Bank of Ireland Asset Management Mutual Fund Unit Trust	Bank of Ireland Unit Trust Managers Limited	The Governor and 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
Barclays Global Investors Advanced Active Strategies Funds	Barclays Global Investors Ireland Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Barclays Global Investors Selection Fund	Barclays Global Investors Ireland Limited	The Governor and Company of the Bank of Ireland
Barep Alize USD	Barep Asset Management (Ireland) Limited	Societe Generale
Barep Dynamique	Barep Asset Management (Ireland) Limited	Societe Generale
Barep Emerging Markets	Barep Asset Management (Ireland) Limited	Societe Generale
Barep Investissements Alternatifs	Barep Asset Management (Ireland) Limited	Societe Generale
Barep Kappa Europe	Barep Asset Management (Ireland) Limited	Societe Generale
Barep Sigma Fund	Barep Asset Management (Ireland) Limited	Societe Generale
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 and Custodial Services Limited
Bear Stearns Explorer II	Bear Stearns Asset Management (Ireland) Limited	PFPC Trustee and Custodial Services Limited
Capital Growth Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
CIBC Eyres Reed Australian Resources Fund	Investor Fund Services (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Coronation Retail Fund	Coronation Fund Managers (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Coronation Universal Fund	Coronation Fund Managers (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
CR Alternative Funds	CR Management Limited	Banque Internationale à Luxembourg Dublin Branch
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 High Yield Trust	Mulroy Investment Services Limited	The Governor and Company of the Bank of Ireland
Defined Asset Trust	Group One International Trust Managers Limited	Chase Manhattan 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
Dolmen Irish Equity Fund	Dolmen Securitates Limited	Barings (Ireland) Limited
Dynamic Futures Fund	Barep Asset Management (Ireland) Limited	Societe Generale
Dynamic Futures II	Barep Asset Management (Ireland) Limited	Societe Generale
Dynamic Futures III	Barep Asset Management (Ireland) Limited	Societe Generale
Dynamic Futures V	Barep Asset Management (Ireland) Limited	Societe Generale
Edgehill Select Group Umbrella Trust	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Epsilon	Barep Asset Management (Ireland) Limited	Societe Generale
Euro Digital Fund	Daiwa Europe Fund Managers Ireland Limited	Daiwa Europe Trustees Ireland Limited
Euro Leaders	CICM Fund Management Limited	Allied Irish Banks plc
Euromeister	CICM Fund Management Limited	Allied Irish Banks plc
Europe Futures 2004	Barep Asset Management (Ireland) Limited	Societe Generale

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Finter Fund Ireland	Finter Fund Management (Ireland) Limited	Allied Irish Banks plc
Framlington Maghreb Fund	Framlington Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Futures Investments	Barep Asset Management (Ireland) Limited	Societe Generale
Futures Trust of the World	Barep Asset Management (Ireland) Limited	Societe Generale
Galaxy Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Gartmore Global Index Umbrella Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
GE Dublin Funds	GE Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Global Alternative	Barep Asset Management (Ireland) Limited	Societe Generale
Global Futures	Barep Asset Management (Ireland) Limited	Societe Generale
Global Futures FRF	Barep Asset Management (Ireland) Limited	Societe Generale
Global Investment Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
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
Goldman Sachs Global Currency Fund – Dollar Plus	Goldman Sachs Funds Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Goldman Sachs Global Currency Fund – Euro Plus	Goldman Sachs Funds Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Goldman Sachs Global Multi Manager Funds	Goldman Sachs Funds Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Goldman Sachs Money Market Funds	Goldman Sachs Funds Management (Ireland) Limited	Allied Irish Banks plc
Goldman Sachs Qualified Investor Unit Trust	Goldman Sachs Funds Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
GT Asian Warrants and Derivatives Fund	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
Hamon Institutional Funds	Hamon Ireland Limited	Bermuda Trust (Dublin) Limited
Hanmi Korea Venture Fund	KEB (Ireland) Fund Services Limited	KEB (Ireland) Custodial Services Limited
HIRAMEKI	Barep Asset Management (Ireland) Limited	Societe Generale
IBJI Delta Neutral Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
International Resources and General Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Investec International Funds	Investec Asset Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Investec International Private Equity Funds	Investec Private Equity Management (Ireland) Limited	Northern Trust Custodial Services
Irish Life Charite Unit Trust	Irish Life Unit Fund Managers Limited	Citibank Trustees (Ireland) Limited
Irish Life Mixed Irish and International Equity Unit Trust	Irish Life Unit Fund Managers Limited	Citibank Trustees (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
KIM Europe Worldwide Fund	Korea Investment Management Ireland Limited	Deutsche International Custodial Services (Ireland) Limited
Korea Balanced Return Fund	Deutsche International Fund Services (Ireland) Limited.	Deutsche International Custodial Services (Ireland) Limited
Korea Blue Chip Fund	Deutsche International Fund Services (Ireland) Limited.	Deutsche International Custodial Services (Ireland) Limited
Korea Capital Growth Fund	Deutsche International Fund Services (Ireland) Limited.	Deutsche International Custodial Services (Ireland) Limited
Korea Domestic Convertible Bond Fund	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management and 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
La Vie en Rose	Barep Asset Management (Ireland) Limited	Societe Generale
Latin American Corporate Bond Fund	Bank of Ireland Unit Managers Limited	The Governor and Company of the Bank of Ireland
Latin American Extra Yield Fund	Bank of Ireland Unit Trust Managers Limited	Bank of Ireland Trust Services Limited
LibertyView Investment Fund	CPR Investment Management (Ireland) Limited	PFPC Trustee and 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

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Morgan Stanley Dean Witter Strategic Alternatives Fund	Fortis Fund Services (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
NatWest Umbrella Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
NatWest/IFC Latin American Index Fund	Bank of Ireland Unit Managers Limited	Chase Manhattan Bank (Ireland) plc
New Ireland Charity Fund Unit Trust	New Ireland Unit Trust Managers Limited	The Governor and Company of the Bank of Ireland
New Oriental Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
Nikko East Asia Fund	Chemical Ireland Fund Administrators Limited	Chemical Ireland Custody and Trustee Services Limited
Nomura Asset Management Global Investment Fund	Nomura Asset Management Ireland Limited	The Governor and Company of the Bank of Ireland
North American Property Securities Trust	GPA Fund Managers (Ireland) Limited	Clydesdale Trustee and Custodial Services (Ireland) Limited
Norwich Irish Managed Unit Trust	Norwich Union Finance (Ireland) Limited	The Governor and Company of the Bank of Ireland
Norwich Irish Property Unit Trust	Norwich Union Finance (Ireland) Limited	The Governor and Company of the Bank of Ireland
Norwich Irish Unit Trust	Norwich Union Finance (Ireland) Limited	The Governor and 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	Societe Generale
Pareto Alternative Investments Umbrella Trust	Pareto Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Paribas Emerging Markets Index Allocation Fund	Paribas Asset Management (Ireland) Limited	Barings (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
Principal Protected Fund (Euro)	Barep Asset Management (Ireland) Limited	Societe Generale
Principal Protected Fund (USD)	Barep Asset Management (Ireland) Limited	Societe Generale
Principal Protected Fund (USD) 11	Barep Asset Management (Ireland) Limited	Societe Generale
Protea M&A	Barep Asset Management (Ireland) Limited	Societe Generale
Putnam Private Equity Fund	Putnam Investment Limited	Chase Manhattan Bank (Ireland) plc

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
RMB Global Fund	RMB Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Rouge	Barep Asset Management (Ireland) Limited	Societe Generale
Rouge'99	Barep Asset Management (Ireland) Limited	Societe Generale
S.L. Umbrella Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Sapphire Global Equity Ex-Asia Fund	SGAM (Ireland) Limited	Societe Generale
Schwab Tokio Marine Trust	Charles Schwab Asset Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
SG Prinvest Alternative	Barep Asset Management (Ireland) Limited	Societe Generale
SGAM Alternative Currency Fund	SGAM (Ireland) Limited	Societe Generale
SIIM Asia Growth Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Southern Selections Development Capital Fund	Southern Investment Services Limited	Northern Trust Custodial Services
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
Strategic Global Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Strategic Investment Service	IPAC Portfolio Management (Dublin) Limited	Chase Manhattan Bank (Ireland) plc
Summit Umbrella Trust	EBS Asset Managers Limited	Citibank Trustees (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
Synthetic Korea Income Fund	KEB (Ireland) Fund Management Limited	KEB (Ireland) Custodial Services Limited
The Alphagen Selector Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
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

<b>Name of Unit Trust</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
The ICC Venture Trust Fund	ICC Venture Capital Managers Limited	The Governor and Company of the Bank of Ireland
The Nomura Asset Management Institutional Global Trusts	Bank of Ireland Unit Managers Limited	The Governor and Company of the Bank of Ireland
The Salomon Euro Bond Fund	Salomon Brothers Asset Management (Ireland) Limited	Citibank Trustees (Ireland) Limited
The Taj Performance Fund	Fortis Fund Services (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Ulster Bank Fixed Interest Portfolios	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
Ulster Bank Global Institutional Funds	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
Ulster Bank Global Strategy Fund	Northern Trust Fund Services (Ireland) Limited	Northern Trust Custodial Services
Yuki Taiwan Fund	Deutsche International Fund Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Yume	Barep Asset Management (Ireland) Limited	Societe Generale

# Appendix 8

## 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 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.

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Abbey National Dublin Investment Fund II plc	Scottish Mutual International Fund Managers Limited	Citibank Trustees (Ireland) Limited
Abbey National Dublin Investment Fund III plc	Scottish Mutual International Fund Managers Limited	Citibank Trustees (Ireland) Limited
Abbey National Dublin Investment Fund IV plc	Scottish Mutual International Fund Managers Limited	Citibank Trustees (Ireland) Limited
Abbey National Dublin Investment Fund plc	Scottish Mutual International Fund Managers Limited	Citibank Trustees (Ireland) Limited
ABN AMRO Emerging Europe Private Equity Fund plc	–	Deutsche International 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) Ltd
Advance Equity Linked No. 1 plc	–	Citibank Trustees (Ireland) Limited
Aequilibrium Absolute Return Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
AHL Alpha Fund plc	ED&F MAN Fund Management Limited	Chase Manhattan Bank (Ireland) plc
AHL Diversified plc	ED&F MAN Fund Management Limited	Chase Manhattan Bank (Ireland) plc
AIG International Funds plc	AIG/SunAmerica Asset Management Limited	Deutsche International Custodial Services (Ireland) Limited
AIG Multistrategy Investments plc	AIG/SunAmerica Asset Management Limited	AIG Global Investment Trust Services Limited
AIG-Hyperion EURIBOR ABS Fund plc	AIG/SunAmerica Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Al Meezan Commodity Fund plc	–	Chase Manhattan Bank (Ireland) plc
Alpha Portfolio plc	GT Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
Alternative Investment Managers Selection plc	–	Bermuda Trust (Dublin) Limited
Alternative Strategies Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Amerindo Investment Advisors International Umbrella Fund plc	–	Barings (Ireland) Limited
AMI Value Protected Fund plc	Cresvale International Asset Management (Dublin) Limited	The Governor and Company of the Bank of Ireland
Apollo Fund plc	–	Barings (Ireland) Limited
Arbat Arbitrage Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Argenta European Hedge Fund plc	–	Barings (Ireland) Limited
Asian Gateway Fund plc	–	Allied Irish Banks plc
Athena Investment Capital I plc	–	BNY Securities Services (Ireland) Limited
Atlantis KOSDAQ Fund plc	Atlantis Investment Management (Ireland) Limited	Barings (Ireland) Limited
AXA New Horizon Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Axent Long/Short Macro Fund	–	Daiwa Europe Trustees (Ireland) Limited
Baltics Small Equity Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
Bank of Ireland Liquidity Funds plc	–	Bank of Ireland Trust Services Limited
Barclays Global Investors Secured Equity Fund II plc	–	BNY Securities Services (Ireland) Limited
Barclays International Korea Fund plc	–	The Governor and Company of the Bank of Ireland
Bas-Ex Currency Fund plc	–	Deutsche International Custodial Services (Ireland) Limited
Bas-Ex US\$ Currency Fund plc	–	Deutsche International Custodial Services (Ireland) Limited
Bear Stearns Funds plc	–	PFPC Trustee and Custodial Services 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
BIAM Investments plc	–	Chase Manhattan Bank (Ireland) plc
Blevins Franks International Investments plc	Blevins Franks Managers Ireland Limited	BNY Securities Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Bordier Invest Korea Fund plc	Bordier Invest (Ireland) Limited	Clydesdale Trustee and Custodial Services (Ireland) Limited
BSCH Multiadvisors Ireland plc	–	Bermuda Trust (Dublin) Limited
BT and T Focus 1 Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT and T Focus 2 Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT and T Focus 3 Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT and T Focus 4 Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
BT and T Investment Fund plc	BT and T Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
CABEI Central American Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
Calfund plc	–	Deutsche International Custodial Services (Ireland) Limited
Capital Balanced Fund plc	–	KEB (Ireland) Custodial Services Limited
Capital Investment Group plc	–	Deutsche International Custodial Services (Ireland) Limited
CB Vermögensverwaltung plc	CICM Fund Management Limited	Allied Irish Banks plc
Census Investment 6 plc	–	Citibank Trustees (Ireland) Limited
Census Investments 3 plc	–	Citibank Trustees (Ireland) Limited
Census Investments 4 plc	–	Citibank Trustees (Ireland) Limited
Census Investments 5 plc	–	Citibank Trustees (Ireland) Limited
Census Investments 7 plc	–	Citibank Trustees (Ireland) Limited
Census Investments 8 plc	–	Citibank Trustees (Ireland) Limited
Census Investments plc	–	Citibank Trustees (Ireland) Limited
Central Asia Regional Growth Fund plc	Global Euro-Asia Investment Management Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
CERCI Fund plc	State Street Ireland Limited	The Governor and Company of the Bank of Ireland
Chase Institutional Investment Funds plc	–	Investors Trust and Custodial Services (Ireland) Limited
Chase Manhattan Vista Funds plc	–	Chase Manhattan Bank (Ireland) plc
Chesapeake Property Finance Fund II plc	Alex Browne Realty Management Limited	Allied Irish Banks plc

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
CICM Global Portfolios plc	CICM Fund Management Limited	Allied Irish Banks plc
CIPM Global Fund plc	–	Barings (Ireland) Limited
CITC Balanced Fund plc	–	BT Trustee Company (Ireland) Limited
CITC Select Fund plc	–	BT Trustee Company (Ireland) Limited
CITI Institutional Liquidity Fund plc	–	Citibank Trustees (Ireland) Limited
CL Managed Futures Fund plc	–	Bermuda Trust (Dublin) Limited
Close FTSE 100 Income and Growth Fund plc	–	BNY Securities Services (Ireland) Limited
Commodities Corporation International plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Compass (Ireland) Investment Funds plc	–	Barings (Ireland) 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 and Trustee Services (Ireland) Limited
CPR Multi-Fonds plc	–	Allied Irish Banks plc
CTC Global Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Daiwa Alternative Investments plc	–	Daiwa Europe Trustees Ireland Limited
DB Brazil Investment Fund plc	Deutsche International Corporate Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Delfin Global Funds plc	Emerging World Asset Management Limited	Barings (Ireland) Limited
Delphi Funds plc	–	Citibank Trustees (Ireland) Limited
Delta Investment Capital 1 plc	–	BNY Securities Services (Ireland) Limited
Derivative Market Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Deutsche Cash and Money Market Fund plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Deutsche Fixed Income Funds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Deutsche Profunds plc	Deutsche Asset Management (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
Diamond Sentinel One plc	–	Citibank Trustees (Ireland) Limited
Dijon Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale
Discoverer Umbrella Fund plc	–	Bermuda Trust (Dublin) Limited
DITC Balanced Fund plc	–	Northern Trust Custodial Services
Dresdner RCM Global Investment Fund plc	Dresdner International Management Services Limited	Chase Manhattan Bank (Ireland) plc
dSAM Global Value Fund II plc	–	BT Trustee Company (Ireland) Limited
Eastern Gate Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
EDM Investment Funds plc	EDM Asset Management Limited	Northern Trust Custodial Services
Eligis Investments 1 plc	–	Citibank Trustees (Ireland) Limited
Eligis Investments 2 plc	–	Citibank Trustees (Ireland) Limited
Eligis Investments 3 plc	–	Citibank Trustees (Ireland) Limited
Espirito Santo Funds of Funds plc	Espirito Santo Capital Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Europe / America Select Private Equity (Ireland) plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Europe/Americas Select Private Equity (Ireland) II plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
European Financial Equities plc	–	Chase Manhattan Bank (Ireland) plc
Europlus Global Opportunities plc	Pioneer Alternative Investments Limited	Investors Trust and Custodial Services (Ireland) Limited
Falcon Investment Company plc	–	Barings (Ireland) Limited
Falcon Market Fund plc	–	Barings (Ireland) Limited
Faraday Investments 2 plc	–	Citibank Trustees (Ireland) Limited
Faraday Investments plc	–	Citibank Trustees (Ireland) Limited
Fedsure International Global Funds plc	Irish Life International Fund Managers Limited	PFPC Trustee and Custodial Services Limited
FTW – Freddie Mac Gold PC Mortgage LIBOR Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
FTW Emerging Market Debt Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
FFTW Global Debt Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
FFTW Mortgage Libor Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
FFTW Mortgage Total Return Fund plc	–	Investors Trust and Custodial Services (Ireland) Ltd
Fiduciary Emerging Markets Bond Fund plc	Fiduciary International Ireland Limited	Investors Trust and Custodial Services (Ireland) Limited
Financial Equity Plus I plc	–	The Governor and Company of the Bank of Ireland
Financial Equity Plus II plc	–	The Governor and Company of the Bank of Ireland
Financial Equity Plus III plc	–	The Governor and Company of the Bank of Ireland
Focus Absolute Return Fund plc	–	Bermuda Trust (Dublin) Limited
Foreign and Colonial Emerging High Yield Investment Company plc	–	The Governor and Company of the Bank of Ireland
Foreign and Colonial Romanian Investment Company plc	–	Brown Brothers Harriman Trustee Services (Ireland) Limited
ForexConcept Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
Forsyth Funds plc	–	Bermuda Trust (Dublin) Limited
Fortis Alternative (Dublin) Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Frank Russell Institutional 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	–	Chase Manhattan Bank (Ireland) plc
Gamma Capital Funds plc	–	Investors Trust and Custodial Services (Ireland) Ltd
Gartmore Korea Fund plc	–	Northern Trust Custodial Services
Gartmore Liquidity Fund plc	Northern Trust Investor Services (Ireland) Limited	Northern Trust Custodial Services
Gem International Fund plc	FG Asset Management (Ireland) Limited	Banque Internationale à Luxembourg S.A., Dublin Branch
Gemini Fund plc	Barep Asset Management (Ireland) Limited	Societe Generale

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Gensec Global Multi-Manager Fund plc	Gensec Asset Management (Dublin) Limited	Deutsche International Custodial Services (Ireland) Limited
Gensec Umbrella Fund plc	Gensec Asset Management (Dublin) Limited	Deutsche International Custodial Services (Ireland) Limited
Gensec Universal plc	Gensec Asset Management (Dublin) Limited	Deutsche International Custodial Services (Ireland) Limited
GLG First Portuguese Investments plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Global Convertible Fund plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
GLG Investments II plc	GLG Partners Asset Management Limited	Allied Irish Banks plc
Global Trading Fund I plc	Barep Asset Management (Ireland) Limited	Societe Generale
GMO Overseas Fund plc	–	Brown Brothers Harriman Trustee Services (Ireland) Limited
Goldman Sachs Institutional Funds plc	–	Chase Manhattan Bank (Ireland) plc
Gordon House Optimal Services Fund plc	–	Bermuda Trust (Dublin) Limited
Green Way Select Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
GROUPAMA Special Opportunities Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
GT Emerging Markets Bond Fund plc	GT Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Hambros Commodities Fund plc	Hambros Fund Managers (Ireland) Limited	Barings (Ireland) Limited
Hamilton Lane Private Equity Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
HSBC Equity Growth 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC Fixed Income 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC Fixed Income 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC Fixed Income 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC Fixed Income 4 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors 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 International Equity Plus 1 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
HSBC International Equity Plus 2 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 4 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 5 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 6 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 7 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC International Equity Plus 8 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 II plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC UK Equity Plus III plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited
HSBC UK Equity Plus IV plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) Limited
HSBC UK Equity Plus plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors 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 (Ireland) Limited
HSBC UK Equity Protector II plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investor Services (Ireland) 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 Investors Services (Ireland) Limited
HSBC UK Income 3 plc	HSBC Fund Administration (Ireland) Limited	HSBC Global Investors Services (Ireland) Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
ICFI Corporate Securities Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
IIBU Fund II plc	–	Barings (Ireland) Limited
IIU Convertible Fund plc	IIU Asset Strategies Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Independent Strategy European Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Indosuez Korea Fund plc	–	Citibank Trustees (Ireland) Limited
INVESCO AsiaNET Fund plc	INVESCO Asset Management Ireland Limited	Chase Manhattan Bank (Ireland) plc
Investment Plus plc	–	Clydesdale Trustee and Custodial Services (Ireland) Limited.
Investment Strategies Fund plc	FG Asset Management Ireland Limited	Banque Internationale à Luxembourg S.A., Dublin Branch
Irish Iberian Fund plc	AIG/SunAmerica Asset Management Limited	The Governor and Company of the Bank of Ireland
Irish Life International Global Funds plc	Irish Life International Fund Managers Limited	PFPC Trustee and Custodial Services Limited
KDA Investment Fund 1 plc	–	Deutsche International Custodial Services (Ireland) Limited
KIME Far East Fund plc	–	Northern Trust Custodial Services
Kleinwort Benson Bond Arbitrage Fund plc	–	Barings (Ireland) Limited
Kleinwort Benson Derivative Products Fund plc	–	Barings (Ireland) Limited
Kleinwort Benson Libor Plus 200 Fund plc	Kleinwort Benson Capital Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Kleinwort Benson Libor Plus Fund plc	Kleinwort Benson Capital Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc
Kleinwort Benson Symmetric Strategy Fund plc	–	Chase Manhattan Bank (Ireland) plc
Korea Bond Fund Plc	–	Deutsche International Custodial Services (Ireland) Limited
Korea CB Fund plc	–	Deutsche International Custodial Services (Ireland) Limited
Korea Growth Yield Fund plc	–	KEB (Ireland) Custodial Services Limited
Korea Leverage Fund plc	–	KEB (Ireland) Custodial Services Limited
Korea Select Bond Fund plc	–	KEB (Ireland) Custodial Services Limited

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Korea Special Opportunities Fund plc	Oriens Capital (Ireland) Limited	Barings (Ireland) Limited
Korea Super Fund plc	–	Barings (Ireland) Limited
Lazard Strategic Yield Fund plc	Lazard Investment Funds Limited	The Governor and Company of the Bank of Ireland
Legal and General European Extra Growth II plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General European Extra Growth III plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General European Extra Growth IV plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General European Extra Growth plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General Fixed Rate 2 plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General Fixed Rate plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General International Growth plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General UK Extra Growth II plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General UK Extra Growth III plc	–	HSBC Global Investor Services (Ireland) Limited
Legal and General UK Extra Growth 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
LeggMason Investors Safeguard plc	–	Deutsche International Custodial Services (Ireland) Limited
LeggMason Investors Superchip plc	–	Deutsche International Custodial Services (Ireland) Limited
Lince Hedge Fund plc	Emerging World Asset Management Limited	Barings (Ireland) Limited
Man-Fidex Diversified plc	ED&F MAN Fund Management Limited	Chase Manhattan Bank (Ireland) plc
Marriott Singer Investment Funds plc	Singer and 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

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
MCIIV Multicurrency Funds plc	State Street Ireland Limited	The Governor and Company of the Bank of Ireland
Medinvest plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Merrill Lynch Defined Income and Growth plc	–	Citibank Trustees (Ireland) Limited
Merrill Lynch Japan Enhanced Performance plc	–	Citibank Trustees (Ireland) Limited
Millennium Arbitrage Fund plc	–	KEB (Ireland) Custodial Services Limited
Millennium Global Equity Funds plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Millennium Master Fund plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Mont Blanc Trading plc	Barep Asset Management (Ireland) Limited	Societe Generale
Muscovy Frontiers Fund plc	–	Barings (Ireland) Limited
NatWest Korea Fund plc	Northern Trust Investor Services (Ireland) Limited	Northern Trust Custodial Services
New Energy and Power Investment Company plc	–	Allied Irish Banks plc
New Target Fund plc	–	Bermuda Trust (Dublin) Limited
NM First Korean Fund plc	–	Bermuda Trust (Dublin) Limited
North American Income Fund plc	–	Investors Trust and 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
Omega Trust Umbrella Fund plc	–	Bermuda Trust (Dublin) Limited
Oriens Korea Bond Fund plc	Oriens Capital (Ireland) Limited	Barings (Ireland) Limited
Panda International plc	Panda Management (Ireland) Limited	Allied Irish Banks plc
Pareto Partners Umbrella Fund plc	Pareto Asset Management (Ireland) Limited	The Governor and Company of the Bank of Ireland
Parex First Umbrella Fund plc	Parex Asset Management Company Limited	Investors Trust and Custodial Services (Ireland) Limited
Payden and Rygel International Bond Fund plc	–	Northern Trust Custodial Services
Payden and Rygel International Short Bond Fund plc	–	Northern Trust Custodial Services

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Payden and Rygel Professional Funds plc	–	BNY Securities Services (Ireland) Limited
Petercam Growth Fund plc	Petercam Management Ireland Limited	Deutsche International Custodial Services (Ireland) Limited
Pioneer DM CashFonds plc	Pioneer Management (Ireland) Limited	Brown Brothers Harriman Trustee Services (Ireland) Limited
Portuguese Equities Fund plc	–	Bermuda Trust (Dublin) Limited
Premier Pacific Income Fund plc	–	Chase Manhattan Bank (Ireland) plc
Prime Korea Fund plc	–	Allied Irish Banks plc
Prodigy International Ireland plc	–	Northern Trust Custodial Services
Prudential-Bache International Futures Fund F plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund A plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund B plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund C plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund D plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Prudential-Bache International Futures Fund E plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
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	BNY Securities Services (Ireland) 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	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Salomon Brothers Funds plc	–	Chase Manhattan Bank (Ireland) plc
Samsung Yamaichi Asia Growth Fund plc	–	Chemical Ireland Custody and Trustee Services Limited
SBC CAPM Strategies plc	–	The Governor and Company of the Bank of Ireland
Schroder Russian Region Fund plc	Schroder Investment Management (Ireland) Limited	Chase Manhattan Bank (Ireland) plc

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
Scottish Widows Stock Market Growth 2 plc	–	HSBC Global Investor Services (Ireland) Limited
Scottish Widows U.K. Stock Market Growth plc	–	HSBC Global Investors Services (Ireland) Limited
Selected European Equities Fund plc	–	Deutsche International Custodial Services (Ireland) Limited
Singer and Friedlander High Income Funds plc	Singer and Friedlander Total Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Skandia Transparent Investment Management Funds plc	Skandia Fund Management (Ireland) Limited	Allied Irish Banks plc
Smith Barney Campbell Financial, Metals, and Energy Fund plc	Smith Barney (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited
Smith Barney Overview Fund plc	Smith Barney (Ireland) Limited	Chemical Ireland Custody and Trustee Services Limited
Smith Barney Sheridan Interestplus Fund plc	Smith Barney (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited
Smith Barney SJÖ Global Diversified Fund plc	Smith Barney (Ireland) Limited	Investors Trust and Custodial Services (Ireland) Limited
Smith Barney Stonebrook FX Fund plc	–	Investors Trust and Custodial Services (Ireland) Limited
South American Income Fund plc	Deutsche International Corporate Services (Ireland) Limited	Deutsche International Custodial Services (Ireland) Limited
SSgA GAMMA Fund plc	State Street Global Advisors Ireland Limited	The Governor and Company of the Bank of Ireland
St Andrew's Investment Company plc	–	Citibank Trustees (Ireland) Limited
Star MM Funds plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Stryx Funds plc	Seilern Investment Management (Ireland) Limited	Bermuda Trust (Dublin) Limited
Sunrise Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
SVM Highlander Fund plc	Scottish Value Management (Ireland) Limited	BNY Securities Services (Ireland) Limited
Swiss Bank Corporation Derivative Portfolios plc	–	Chase Manhattan Bank (Ireland) plc
Technology 2000 Fund plc	–	Investor Trust and Custodial Services (Ireland) Limited
TEI Fund plc	–	The Governor and Company of the Bank of Ireland

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
The 3D Fund plc	–	Chase Manhattan Bank (Ireland) plc
The Antiope Alpha Fund plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
The Baring Umbrella Fixed Income Fund plc	Baring Mutual Fund Management (Ireland) Limited	Barings (Ireland) Limited
The CFP Interest Rate Arbitrage Fund plc	–	Barings (Ireland) Limited
The East Europe Frontiers Fund plc	AIM Global Management Company Limited	Barings (Ireland) Limited
The GNI Foreign Exchange Fund plc	GNI Fund Management (Ireland) Limited	Barings (Ireland) Limited
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 and Trustee Services (Ireland) Limited
The Hansberger Global Fund plc	Hansberger Global Investors Limited	Chase Manhattan Bank (Ireland) plc
The Investec Global Investment Portfolio plc	–	Barings (Ireland) Limited
The Korea Growth Geared Fund plc	Korea Investment Management Ireland Limited	Northern Trust Custodial Services
The London Market Fund plc	Aberdeen International Management Ireland Limited	BNY Securities Services (Ireland) Limited
The Paribas Multi-Manager Global Fund plc	–	Deutsche International 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 Swiss Franc Global Currency Fund plc	Millennium Asset Management (Ireland) Limited	Chemical Ireland Custody and Trustee Services Limited
The Swiss Market Index Quant Fund plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
The US\$ Global Currency Fund plc	Millennium Asset Management (Ireland) Limited	Fortis Global Custody Management and Trustee Services (Ireland) Limited
The Yellow Sea Investment Company plc	SEI Investments-Global Fund Services Limited	SEI Investments-Trustee and Custodial Services (Ireland) Limited
Topiary Fund (Ireland) plc	–	Fortis Global Custody Management and Trustee Services (Ireland) Limited
Turkish Smaller Companies Fund plc	Global Euro-Asia Investment Management Limited	Bermuda Trust (Dublin) Limited
UAL International Funds plc	–	Chase Manhattan Bank (Ireland) plc
Ulsan Fund plc	–	KEB (Ireland) Custodial Services Limited
US Financial Equities plc	–	Chase Manhattan Bank (Ireland) plc

<b>Name of Company</b>	<b>Name of Management Company</b>	<b>Name of Trustee</b>
US Value Investment Company plc	Singer and Friedlander Total Asset Management Limited	Chase Manhattan Bank (Ireland) plc
Waverley Stock Market Growth plc	–	HSBC Global Investor Services (Ireland) Limited
World Equity Fund Portfolio (Ireland) plc	–	Investors Trust and Custodial Services (Ireland) Limited
Worldwide Opportunity Fund plc	–	Allied Irish Banks plc
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 Trustees (Ireland) Limited
Zurich Global Umbrella Fund plc	Zurich Investment Management (Dublin) Limited	The Governor and Company of the Bank of Ireland

# Appendix 9

## 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 2000, 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  
 Ashdowne Investment Company Ireland Limited  
 Asia Growth Fund plc  
 Asia Pacific Highlight Fund plc  
 Asia Ultra Fund plc  
 Clare Institutional Investments Limited  
 DB Foreign Lease Limited  
 Dedalus Securities Trading Company Limited  
 Dragon Korea Fund plc  
 Ecurent I Securities Trading Company Limited  
 Emerging Market Growth Fund plc  
 Europa Re International Limited  
 Evergreen Korea Fund plc  
 Galway Institutional Investments Limited  
 Gulfstream Securities Trading Company Limited  
 KI Limited  
 Korea Gearing Fund plc  
 Korea Index Fund plc  
 Korea Plus Fund plc  
 Lauterberg Securities Trading Company Limited  
 Liffey Securities Trading Company Limited  
 Limerick Institutional Investments Limited  
 Mayo Institutional Investments Limited  
 Meininger Securities Trading Company Limited  
 Nordinvest Securities Trading Company Limited  
 Olearius Securities Trading Company Limited  
 Orient Balanced Fund plc  
 Pacific Growth Fund plc  
 Rhein II Securities Trading Company Limited  
 Rheinboden Investment Company Limited  
 Roscommon Institutional Investments Limited  
 Starlight Securities Trading Company Limited  
 The Asia Emerging Market Fund plc  
 The First Chesapeake Property Finance Fund plc  
 The Second Chesapeake Property Finance Fund plc  
 The Third Chesapeake Property Finance Fund plc  
 Vega Invest Fund plc  
 Wexford Institutional Investments Limited  
 WHI Securities Trading Company Limited  
 Wuerttembergische Investment Co (Ire) Limited

# Appendix 10

## 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 the following schemes as investment limited partnerships under Section 8(6) of the Act.

<b>Name of Partnership</b>	<b>Name of General Partner</b>	<b>Name of Custodian</b>
Hibernia Development Capital Partners I	Hibernia GP Limited 88 St Stephen's Green Dublin 2	Deutsche International Custodial Services (Ireland) Limited George's Dock House IFSC Dublin 1
Hibernia Development Capital Partners II	Hibernia GP Limited 88 St Stephen's Green Dublin 2	Deutsche International Custodial Services (Ireland) Limited George's Dock House IFSC Dublin 1

# Appendix 11

## Moneybrokers, as at 31 December 2000, which have been authorised under Section 110 of the Central Bank Act, 1989

Addano Limited (trading as Davy Moneybroking)  
Caradas Currency Brokers Limited  
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 31 December 2000.

1. AIB CURRENCY BUREAUX LIMITED
2. FEXCO
3. THOMAS COOK OVERSEAS 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 LIMITED
11. INTERNATIONAL CURRENCY EXCHANGE PLC
12. LINHILL LIMITED

# Appendix 13

## Memoranda of Understanding to which the Bank is a Signatory as at 31 December 2000

### Authority

The Banking and Finance Commission (Belgium)  
 Finanstilsynet (Denmark)  
 The Commission Bancaire and the Comité des Etablissements de Crédit (France)  
 Bundesaufsichtsamt für das Kreditwesen (Germany)  
 Banca d'Italia (Italy)  
 Institut Monétaire Luxembourgeois (Luxembourg)  
 De Nederlandsche Bank NV (Netherlands)  
 Financial Services Authority and Building Societies Commission (United Kingdom)  
 The Hong Kong Securities and Futures Commission  
 The Forum of European Securities Commissions (FESCO)









