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Registered No. 48839

This document contains certain forward-looking statements within the meaning of section 21E of the US Securities Exchange Act of 1934, as amended and section 27A of the US Securities Act of 1933, as amended with respect to certain of the Group's plans and its current goals and expectations relating to its future financial condition and performance.

The Group may also make forward-looking statements in other written materials, including other documents filed with or furnished to the SEC. In addition, the Group's senior management may make forward-looking statements orally to analysts, investors, representatives of the media and others. In particular, among other statements, certain statements in the Financial Review and Business Description with regard to management objectives, trends in results of operations, margins, costs, return on equity, risk management, and competition are forward looking in nature. These forward-looking statements can be identified by the fact that they do not relate only to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning.

By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future. The Group's actual future results may differ materially from those set out in the Group's forward-looking statements. There are many factors that could cause actual results and developments to differ materially from those expressed or implied by these forward-looking statements. Any forward-looking statements made by or on behalf of the Group speak only as of the date they are made. Barclays does not undertake to update forward-looking statements to reflect any changes in the Group's expectations with regard thereto or any changes in events, conditions or circumstances on which any such statement is based. The reader should, however, consult any further disclosures Barclays may make in documents it files with the SEC.

Risk management and control – overview

Barclays aims to employ superior risk practices to optimise financial performance and value.

Risk governance
Barclays manages a variety of risks through various control mechanisms consistent with the requirements of the 'Internal control: Guidance for Directors on the Combined Code' issued by the Institute of Chartered Accountants in England and Wales.

Barclays approach to risk management and control continues to evolve to reflect best practice, informed by new developments derived from risk management research. Barclays seeks to take risks that are commensurate with the returns and within its overall risk appetite. Risk management's objective is to ensure that the variability of the results is within the range anticipated in the business strategy.

Barclays governance framework has been further developed during 2002. The framework is based on the following four principles:

Shareholder value based:

» Internal controls should focus on risks that could prevent the Group achieving its business objectives and the desired shareholder value-added.

» Responsibility for internal controls must be clearly defined and documented.

Embedded in the culture:

» The culture of the Group should reflect the risk appetite approved by the Board at all levels in the organisation.

» Training should be given to staff to ensure that risks can be regularly monitored and that corrective action can be taken in a timely manner.

Assurance:

» Risk management systems should be able to provide management with assurance that risks are being managed appropriately and the system of internal controls over risk systems is adequate.

Board review:

» The Board should undertake an annual review of the effectiveness of the risk management processes and systems of internal control.

» The Group's risk profile should be reviewed on a regular basis.

During 2002, the Board established requirements (Board Governance Standards – 'Standards') for the management of Barclays most significant areas of risk. From 2003, adherence to these Standards is monitored by the Board through reports that include key risk indicators.

Responsibilities for risk management and control
The responsibilities for risk management and control within the overall governance framework rest with:

» The Board, which ensures that management maintain an effective system of internal control and reviews its effectiveness;

» The Group Risk Director, under delegation from the Group Chief Executive, who has responsibility for the adequacy of risk management and control;

» Business leaders, who are responsible for the identification of the risks in their businesses and for the management of them;

» Business Risk Directors and their teams in the businesses, who are responsible for assisting business leaders in the identification and management of their business risk profile;

» Group Risk Type Heads and their teams in the Group Centre, who are responsible for the risk control oversight of credit risk, operational risk, regulatory compliance risk and market risk; and

» Other Function Heads in the Group centre, who are responsible for the risk control oversight of other risk types.

The leaders who execute these responsibilities are guided and monitored by:

» The Group's management committees. The main committees and their principal risk management and control responsibilities are shown in the risk governance structure chart on page 56. The committees' roles have been reviewed and updated during 2002.

» Business and regional governance and control committees. These committees report to the Group Governance and Control Committee. Together, they are responsible for ensuring that business risk governance and control frameworks have been established in each business, consistent with the Group's risk governance and control framework. They also review and assess the completeness and effectiveness of, and compliance with, internal controls within each business.

Risk management in the businesses is the responsibility of business management, who are assisted by Business Risk Directors, with a functional reporting line to the Group Risk Director. The key role of Business Risk Directors and their teams is to assist the businesses to maximise value by:

- performing high quality risk analysis;
- ensuring that risks are properly controlled;
- evaluating economic trade-offs between risk and return;
- designing cost-effective ways of mitigating and transferring risks;
- generating alternative risk strategies; and
- ensuring that Group level policies are properly implemented in their business line.

Specialist risk teams led by Group Risk Type Heads and other risk specialists report to the Group Risk Director. Their role is to:

- measure aggregate risk by type;
- set high level policies and controls within the overall risk governance framework;
- perform research, development and quality assurance;
- provide analytical support to businesses;
- provide comprehensive reports to all levels of management and the Board to enable them to make effective risk management decisions; and
- run risk limit setting systems.

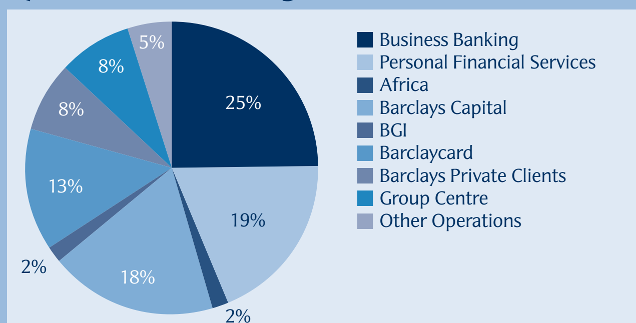
Risk management and measurement
The following are the principal risks managed by Barclays:

- Credit risk;
- Market risk;
- Asset and liability, liquidity and pricing mismatch risks; and
- Other risks (including Operational, Legal and Tax risks, and the risk of non-compliance with the many regulatory regimes applicable to Barclays around the world).

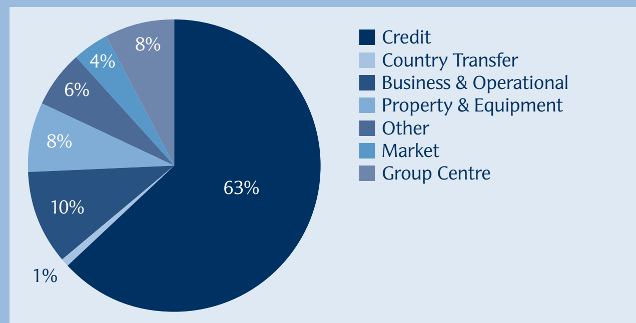
Barclays uses a common metric to ensure that the returns throughout the Group are commensurate with the associated risks. Under this methodology, it allocates economic capital to each business based on its risks. The businesses are expected to optimise the return on the economic capital allocated to them.

The following charts show the relative amounts of capital allocated to the various risks and businesses. The major risks are discussed in subsequent sections of this report.

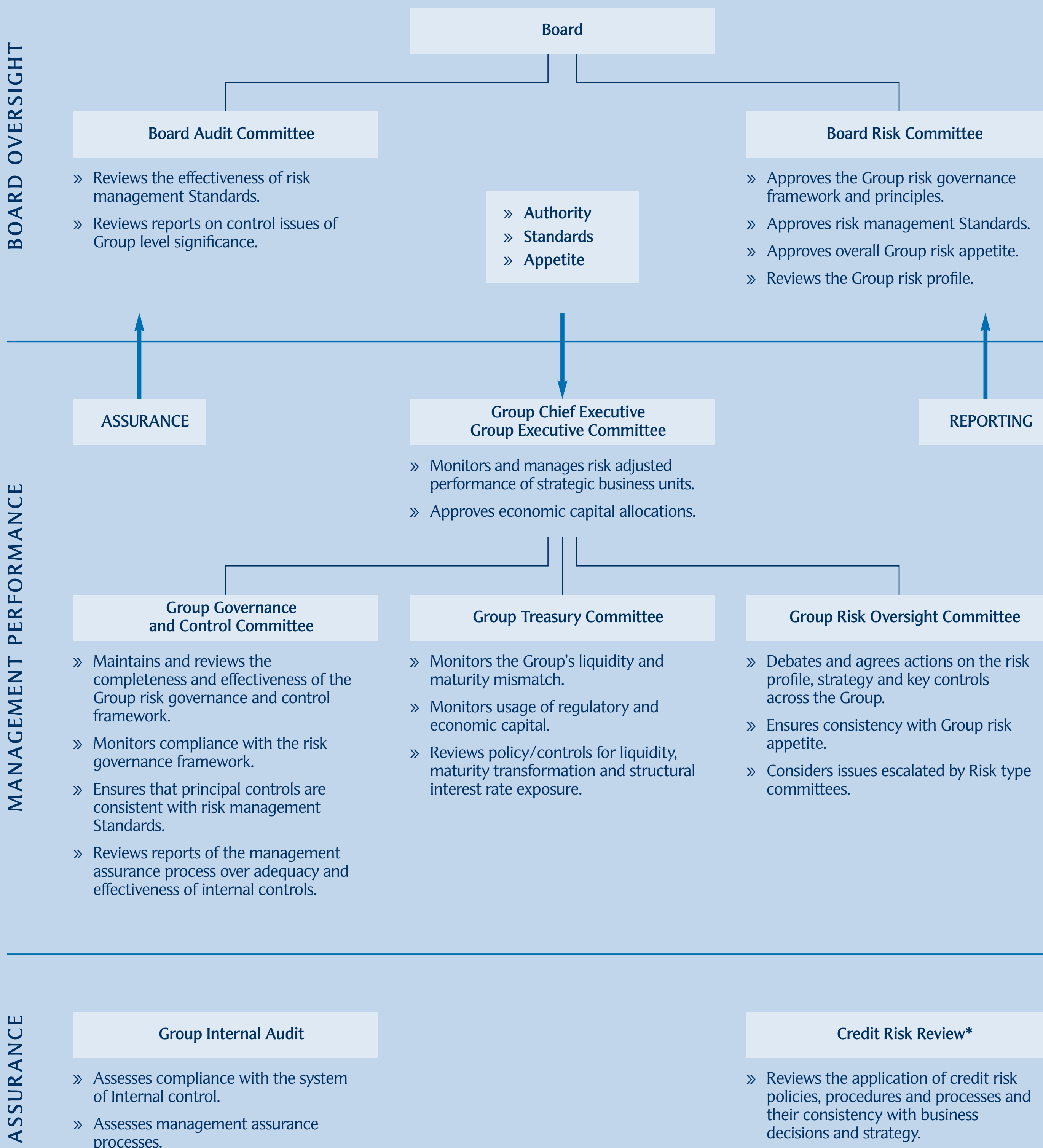
Average economic capital allocation by business during 2002



Average economic capital allocation by risk type during 2002



Group Risk Governance Structure



*Team to commence activities during 2003.

Credit risk management

Credit risk arises because the Group's customers, clients or counterparties may not be able or willing to fulfil their contractual obligations.

Credit risk control
Credit is the Group's most significant risk and its approach to managing credit risk varies according to the nature of the business.

In consumer businesses, such as Barclaycard where there are large numbers of accounts, a systems driven environment prevails. Credit decisions are made with the aid of statistically based scoring systems and account management is likewise automated.

Mid-range credits are approved and reviewed according to a hierarchy of discretions, whereby discretionary limits are set according to the skills, experience and seniority of the sanctioning teams, in addition to the quality of the borrower as measured by the credit grading structure.

Large value wholesale loans are referred to the Group Credit Committee or are sanctioned within business risk management departments. Besides loans, these include significant credit exposures arising from money market, foreign exchange, derivatives, securities dealing and other similar products.

The Group Credit Risk Director provides central credit risk review and oversight.

Functional areas assist the Group Credit Risk team and line businesses in setting policy and standards, defining the Group's risk appetite and providing the capability for effective risk management, including the regular review and challenge of business credit risk positions. These central risk functions add value by undertaking reporting, analysis, strategy and portfolio activities that support corporate governance, overall portfolio management, capital allocation for risk, Basel II implementation and credit decisions within business areas.

Credit risk measurement
As part of its credit risk measurement system, the Group uses a model-based methodology to assess the quality of credit across different customer categories. The approach is termed Risk Tendency and applies to all credit exposures in both wholesale and retail sectors, and it provides a statistical estimate of the average losses looking one year ahead based on the current performing loan portfolio. It estimates the average in the range of possible losses from the current performing loan portfolio and as such the actual outcome in any one year is likely to be different. Thus it is not a prediction of specific provisions but it gives management a clear view of the evolution of the quality of the credit portfolio.

Risk Tendency reflects the results of a set of model based calculations, the models having been created using historical data. The models are designed to estimate the loss over the forthcoming 12 months for the current performing loan portfolio, given the current composition and current risk characteristics of the portfolio. Significant variation around this value can occur, due to changes in the economic environment or the business conditions in specific sectors or countries during the year. This applies especially in wholesale portfolios where the default of a small number of large exposures can have a significant impact on the outcome. However, for retail portfolios consisting of a very large number of small exposures, the variation from Risk Tendency is usually much smaller.

In addition to enhancing the understanding of the average credit quality of the portfolio, Risk Tendency is one of the measures used by the Group to inform a wider range of decisions, such as:

» Setting exposure limits to any single counterparty or borrower;

» Establishing the desired aggregate exposure levels to individual sectors;

» Determining pricing policy; and

» Setting the level of the general provision for loan losses.

Barclays Internal Rating	Probability of Default (PD)			S&P Equivalent Rating	Moody's Equivalent Rating
	Minimum	Maximum	Mid Point		
1.2	0.02%	0.04%	0.025%	AAA/AA+/AA	Aaa/Aa/A1
1.5	0.05%	0.09%	0.075%	AA-/A+	A2
1.8	0.10%	0.14%	0.125%	A/A-	A3
2.1	0.15%	0.19%	0.175%	BBB+	Baa1
2.5	0.20%	0.24%	0.225%	BBB+	Baa1
2.8	0.25%	0.29%	0.275%	BBB	Baa2
3	0.30%	0.59%	0.450%	BBB/BBB-	Baa2/Baa3
4	0.60%	1.19%	0.900%	BB+/BB/BB-	Ba1/Ba2
5	1.20%	2.49%	1.850%	B+/B	Ba3
6	2.50%	4.99%	3.750%	B-	B1
7	5.00%	9.99%	7.500%	CCC-	B2/B3
8	10.00%+	–	15.000%	CC/C	Caa/Ca/C

The models assess the probability of customer default, severity, and exposure in the event of default. These terms are explained below. A consistent approach is used across the organisation. Decision support model outputs are a way of assessing what might happen in the future based on past experience. An increase in the size of the portfolio and/or a decrease in the credit quality will be highlighted to management by an increase in Risk Tendency.

A number of different models are used in the Risk Tendency calculation reflecting the diversity of the portfolio. They are being improved constantly as the Group collects more data and deploys more sophisticated techniques. The Group believes that each change will have a minor impact on the total result but should lead to better estimates over time.

Since Risk Tendency is a point in time calculation looking one year ahead, it does not make any allowance for growth or change in the composition of the loan book after the reporting date nor take account of write-backs and recoveries from specific provisions taken in previous years. In contrast, the provisions process is dynamic where provisions are assessed and allocated throughout the year.

Risk Tendency is used when allocating general provisions for the existing portfolio of fully performing credits as at the calculation date. Excluded from this portfolio is the subset of credit exposures relating to non-performing loans against which specific provisions are held.

Internal ratings

Internal ratings are used to assess the credit quality of borrowers. Each internal rating corresponds to a probability of default (PD), which is the statistical probability of a customer defaulting within a 12-month period. This internal rating is derived from different sources depending upon the borrower, e.g. internal model or credit rating agency. The table on page 57 shows Barclays internal rating and the associated expected probability of default, together with comparisons with credit rating agency ratings. The rating agency comparisons shown are indicative only and, in practice, will vary over time depending on the position within an economic cycle.

Where internal models are used they are based upon up-to-date account, market and financial information. The models are reviewed regularly to monitor their robustness relative to actual performance and revised as necessary to optimise their effectiveness.

Severity

Severity is the estimated amount of loss expected if a loan defaults, calculated as a percentage of the exposure at the date of default. It recognises that the loss is usually substantially less than the exposure. The value depends on the collateral, if any, seniority or subordination of the exposure, work-out expenses relative to the loan value and other considerations. The outcome is heavily dependent on economic conditions that determine prices that can be realised for assets or whether businesses can be refinanced.

Exposure

Exposure in the event of default represents the expected level of usage of the credit facility when default occurs. For example, the customer may not have drawn the loan up to the approved limit or may already have repaid some of it.

For derivative instruments, exposure in the event of default is the estimated cost of replacing contracts with a positive value if counterparties fail to perform their obligations. This cost is monitored on an ongoing basis.

As shown in the table below, based upon the composition of the lending portfolio as at 31st December 2002, Risk Tendency is £1,375m (31st December 2001: £1,245m). The increase is primarily in Barclays Capital (total increase £65m), a reflection of the grade migration of a small number of larger corporate clients, principally in the US, partially offset by some managed exposure reduction in the loan book; and a £35m increase in Barclaycard (total increase £55m) attributable to the acquisition of the UK Providian credit card business. Risk Tendency in Personal Financial Services has fallen by £10m to £370m during 2002 as a result of actions taken to improve the asset quality within the book and an improved collection process.

Risk mitigation

Barclays uses mechanisms such as credit derivatives and securitisations to reduce the uncertainty of returns from the credit portfolio. The cost of these transactions is treated as a deduction from the related category of income. The benefits are reflected in reduced credit risk provisions, reduced volatility of earnings and consequently an improved return on economic capital.

Risk Tendency by Business Cluster

	2002 £m	2001 £m	2000 £m
Personal Financial Services	**370**	380	335
Barclays Private Clients	**45**	45	45
Barclaycard	**435**	380	300
Business Banking	**280**	260	215
Barclays Africa	**30**	30	20
Barclays Capital	**210**	145	115
South American Corporate Banking	**5**	5	–
Total	**1,375**	1,245	1,030

Analysis of loans and advances

Loans and advances grew strongly during 2002. The following section analyses Barclays outstanding credit exposures at the year end. We review the main points, then present more detailed information in a separate section, beginning on page 61.

Loans and advances overview

As indicated in the table below, loans and advances grew over the year increasing by £32.5bn (14%) to £264bn at 31st December 2002.

	2002 £m	2001 £m
Retail businesses		
Customers	**90,625**	80,557
Banks	**1,748**	2,588
Total retail businesses	**92,373**	83,145
Wholesale businesses		
Customers	**114,767**	102,675
Banks	**56,508**	45,353
Total wholesale businesses	**171,275**	148,028
Total	**263,648**	231,173

The analysis above is based on the business unit in which the loans are booked. Those businesses that deal primarily with personal customers, such as Personal Financial Services and Barclaycard, are included under retail businesses, even though they have some business customers. Similarly, businesses that deal primarily with corporate, institutional and sovereign clients are included in wholesale businesses, even though they may have some small business customers.

	2002 £m	2001 £m
Banking book	**175,667**	161,240
Trading book	**87,981**	69,933
Total	**263,648**	231,173

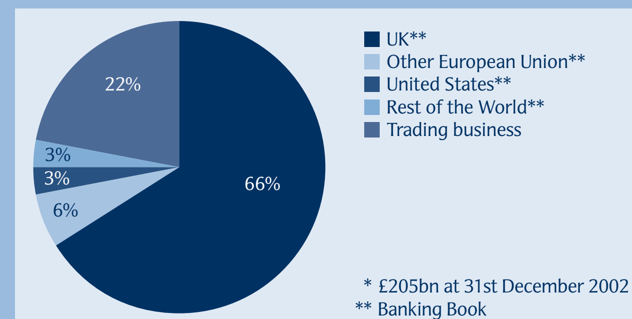
The amounts shown in the tables above are before deduction of provisions and interest in suspense.

Loans and advances to customers

Geographical analysis
The geographical analysis is based on the location of the office recording the transaction.

The chart below shows that about two thirds of loans and advances to customers have been booked in the UK on the banking book.

Geographic analysis of loans and advances to customers*



Industry analysis
Barclays tracks its global exposure by industry, paying particular attention to industries that might be volatile or pose higher risk. Over recent years it has been apparent that industries are often synchronised globally. For example, when oil prices rise or fall, customers sensitive to such changes will be affected regardless of their location.

A critical element of risk management is to ensure adequate diversification of credit exposures. As the following chart shows, (for banking book only) Barclays largest sectoral exposures are to home loans, other personal loans and business and other services. These categories overwhelmingly comprise small loans, have lower volatility of credit risk outcomes, and are intrinsically highly diversified.

Loans and advances to the energy and utility sector were of special interest in 2002 due to financial stress experienced by several companies on both sides of the Atlantic. The majority of Barclays exposure in this sector is to companies that the Group believes remain financially strong, with three-quarters having an investment grade rating at year end.

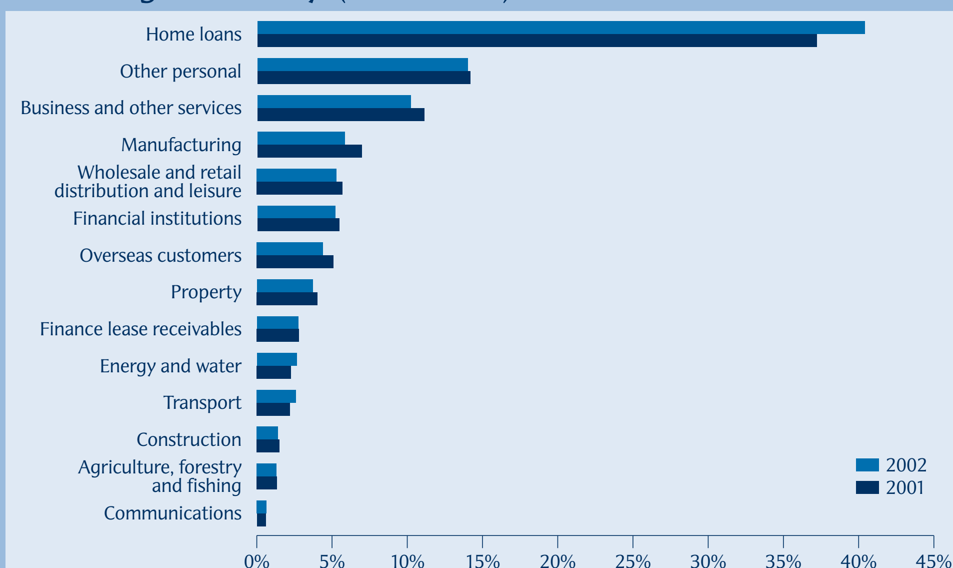
The communications sector continued to experience stress in 2002. In addition to the lendings categorised as communications, exposure to this sector is also included in the category of overseas customers.

Industry classifications have been prepared at the level of the borrowing entity. This means that a loan to the subsidiary of a major corporation is classified by the industry in which the subsidiary operates, even though the parent's predominant business may be in a different industry.

Loans to customers domiciled outside the country where the office recording the transaction is located are shown in the chart below under 'Overseas customers' and not by industry.

More detail on loans and advances to customers appears on pages 61 to 63.

Global loans and advances to customers by industry[1] – banking book only (% of total)



[1]Industry classifications are as defined on page 59

Loans and advances to banks

Credit exposures to banks for the most part arise in the course of providing services to customers or capital markets trading for profit and may be reciprocal in nature.

The majority of loans and advances to banks are placings, amounting to £48,093m at 31st December 2002 (2001: £39,528m) and includes reverse repo transactions. Also included are loans to banks and building societies, balances with central banks (excluding those balances that can be withdrawn on demand), inter-bank settlement accounts and federal funds sold. Total loans and advances to banks increased £10bn to £58bn at 31st December 2002.

Loans and advances to banks

At 31st December

	2002 £m	2001 £m
Banking business:		
UK	**11,510**	7,116
Other European Union	**2,154**	2,278
United States	**256**	930
Rest of the World	**1,531**	1,924
Total banking business	**15,451**	12,248
Total trading business	**42,805**	35,693
	58,256	47,941

The amounts shown in the table above are before deductions of provisions and interest in suspense.

More detail on loans and advances to banks appears on page 64.

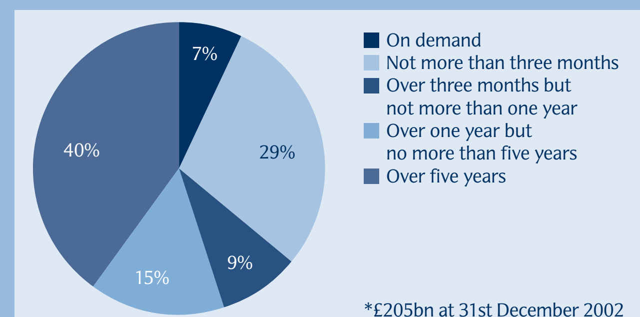
Further information and statutory disclosures on loans and advances

This section presents more detailed information on loans and advances and includes disclosures that Barclays is required to make. For an overview of loans and advances, see the preceding section.

Loans advances to customers – further information

Maturity analysis
The analysis by maturity, shown in the accompanying tables and chart, show that approximately 40% of lendings to customers have a maturity of more than five years, the majority of which are mortgages.

Maturity analysis of loans and advances to customers*



*£205bn at 31st December 2002

Maturity analysis of loans and advances to customers

At 31st December 2002	On demand (a) £m	Not more than three months £m	Over three months but not more than one year £m	Over one year but not more than five years £m	Over five years £m	Total £m
Banking business:						
UK						
Corporate lending (b)	**8,340**	**7,047**	**5,604**	**14,251**	**10,519**	**45,761**
Other lending from UK offices	**2,416**	**6,693**	**6,135**	**10,919**	**63,976**	**90,139**
Total UK	**10,756**	**13,740**	**11,739**	**25,170**	**74,495**	**135,900**
Other European Union	**856**	**1,976**	**2,187**	**2,945**	**4,615**	**12,579**
United States	**–**	**768**	**1,227**	**2,451**	**1,692**	**6,138**
Rest of the World	**439**	**2,859**	**1,370**	**605**	**326**	**5,599**
Total banking business	**12,051**	**19,343**	**16,523**	**31,171**	**81,128**	**160,216**
Total trading business	**2,409**	**41,247**	**1,392**	**91**	**37**	**45,176**
	14,460	**60,590**	**17,915**	**31,262**	**81,165**	**205,392**
At 31st December 2001						
Banking business:						
UK						
Corporate lending (b)	8,335	6,344	7,165	11,522	9,588	42,954
Other lending from UK offices	2,533	6,447	6,559	10,155	55,606	81,300
Total UK	10,868	12,791	13,724	21,677	65,194	124,254
Other European Union	1,251	2,475	1,550	2,277	3,155	10,708
United States	–	1,237	1,541	2,348	1,488	6,614
Rest of the World	1,089	1,820	2,670	823	1,014	7,416
Total banking business	13,208	18,323	19,485	27,125	70,851	148,992
Total trading business	1,977	29,733	2,398	132	–	34,240
	15,185	48,056	21,883	27,257	70,851	183,232

Notes
(a) Overdrafts are included in the 'on demand' category.

(b) In the UK, finance lease receivables are included in Other Lending although some leases are to corporate customers.

Interest rate sensitivity of loans and advances to customers

At 31st December 2002	Fixed rate £m	Variable rate £m	Total £m
Banking business:			
UK	**41,332**	**94,568**	**135,900**
Other European Union	**2,876**	**9,703**	**12,579**
United States	**314**	**5,824**	**6,138**
Rest of the World	**4,351**	**1,248**	**5,599**
Total banking business	**48,873**	**111,343**	**160,216**
Total trading business	**20,204**	**24,972**	**45,176**
	69,077	**136,315**	**205,392**

Geographic and industry analysis

In the analyses below, overseas customers are customers resident outside the country in which the lending business is based.

Loans and advances to customers in offices in the UK – banking business

At 31st December	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Financial institutions	**6,158**	5,616	4,215	4,118	1,839
Agriculture, forestry and fishing	**1,747**	1,626	1,689	1,693	1,612
Manufacturing	**6,435**	6,766	7,573	6,954	6,840
Construction	**1,825**	1,779	1,666	1,331	1,227
Property	**5,695**	5,600	5,130	3,689	3,205
Energy and water	**1,290**	1,153	1,120	613	668
Wholesale and retail distribution and leisure	**7,858**	7,571	7,531	6,455	6,778
Transport	**2,366**	1,894	1,353	1,270	1,164
Communications	**694**	368	180	345	261
Business and other services	**11,693**	10,581	9,894	8,415	7,549
Home loans	**58,436**	50,945	47,235	18,316	16,580
Other personal	**21,357**	19,678	18,200	15,673	14,376
Overseas customers	**6,201**	6,472	5,024	4,711	3,056
	131,755	120,049	110,810	73,583	65,155
Finance lease receivables	**4,145**	4,205	4,504	5,094	5,279
	135,900	124,254	115,314	78,677	70,434

The majority of the growth in the UK occurred in home loans, where balances increased 15% to £58.4bn. Other personal loans in the UK increased in part due to the acquisition of the UK card business of Providian (£470m).

Loans and advances to customers in offices in other European Union countries – banking business

At 31st December	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Financial institutions	**371**	500	436	178	220
Agriculture, forestry and fishing	**165**	240	303	223	109
Manufacturing	**1,422**	1,317	1,420	1,322	975
Construction	**314**	298	261	193	148
Property	**137**	241	182	144	182
Energy and water	**367**	282	372	145	114
Wholesale and retail distribution and leisure	**215**	283	140	207	323
Transport	**252**	318	172	119	133
Communications	**173**	185	83	37	9
Business and other services	**1,648**	1,679	1,284	918	1,433
Home loans	**6,243**	3,871	4,436	1,029	932
Other personal	**721**	661	582	505	500
Overseas customers	**384**	685	381	462	358
	12,412	10,560	10,052	5,482	5,436
Finance lease receivables	**167**	148	151	494	503
	12,579	10,708	10,203	5,976	5,939

Loans and advances to customers in offices in the United States – banking business

At 31st December	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Financial institutions	**1,036**	1,053	616	320	527
Agriculture, forestry and fishing	**3**	–	–	1	1
Manufacturing	**842**	1,553	1,123	727	592
Construction	**31**	24	–	–	12
Property	**15**	21	30	69	80
Energy and water	**2,229**	1,567	1,440	1,168	645
Wholesale and retail distribution and leisure	**141**	160	214	138	323
Transport	**1,248**	931	580	356	53
Communications	**46**	66	88	166	383
Business and other services	**441**	901	2,174	1,000	1,471
Home loans	**–**	–	1	1	1
Other personal	**–**	267	6	58	7
Overseas customers	**62**	23	56	–	27
	6,094	6,566	6,328	4,004	4,122
Finance lease receivables	**44**	48	48	44	42
	6,138	6,614	6,376	4,048	4,164

Loans and advances to customers in offices in the Rest of the World – banking business

At 31st December	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Loans and advances	**5,566**	7,384	8,920	8,316	2,883
Finance lease receivables	**33**	32	30	28	28
	5,599	7,416	8,950	8,344	2,911

£1.4bn of the reduction in the Rest of the World balance arose from the reorganisation of the Group's Caribbean business.

Total loans and advances to customers

At 31st December	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Banking business	**160,216**	148,992	140,843	97,045	83,448
Trading business	**45,176**	34,240	23,198	21,562	13,611
	205,392	183,232	164,041	118,607	97,059

Of the total loans and advances to customers, reverse repos were £42.5bn (31st December 2001: £29.7bn).

Loans and advances to banks – further information

Maturity analysis of loans and advances to banks

At 31st December 2002	On demand £m	Not more than three months £m	Over three months but not more than one year £m	Over one year but not more than five years £m	Over five years £m	Total £m
Banking business:						
UK	423	2,742	648	7,518	179	11,510
Other European Union	222	1,689	84	31	128	2,154
United States	14	110	118	14	–	256
Rest of the World	262	890	376	3	–	1,531
Total banking business	921	5,431	1,226	7,566	307	15,451
Total trading business	1,052	38,693	3,060	–	–	42,805
	1,973	44,124	4,286	7,566	307	58,256

At 31st December 2001	On demand £m	Not more than three months £m	Over three months but not more than one year £m	Over one year but not more than five years £m	Over five years £m	Total £m
Banking business:						
UK	723	1,244	1,302	3,766	81	7,116
Other European Union	535	1,397	59	49	238	2,278
United States	12	342	489	87	–	930
Rest of the World	490	1,202	230	2	–	1,924
Total banking business	1,760	4,185	2,080	3,904	319	12,248
Total trading business	2,357	31,808	1,517	11	–	35,693
	4,117	35,993	3,597	3,915	319	47,941

Interest rate sensitivity of loans and advances to banks

At 31st December 2002	Fixed rate £m	Variable rate £m	Total £m
Banking business:			
UK	6,493	5,017	11,510
Other European Union	1,830	324	2,154
United States	30	226	256
Rest of the World	1,212	319	1,531
Total banking business	9,565	5,886	15,451
Total trading business	24,929	17,876	42,805
	34,494	23,762	58,256

Country risk

Exposure to countries subject to International Monetary Fund liquidity support programmes
The table below provides data on total country exposure, which includes both cross-border and local currency obligations. Exposure includes amounts outstanding plus commitments, and is net of provisions. The sample of countries is based on those that make significant use of IMF liquidity support programmes, i.e. those drawing more than Special Drawing Rights 2bn.

At 31st December	2002 £bn	2001 £bn	2000 £bn
Europe			
Turkey	**0.1**	0.2	*
Asia			
Indonesia	**0.1**	0.1	0.1
South Korea	*	*	0.2
Thailand	*	*	0.1
	0.1	0.1	0.4
Latin America			
Argentina	**0.1**	0.3	0.9
Brazil**	**0.2**	0.7	*
	0.3	1.0	0.9
Total	**0.5**	1.3	1.3
Comprising of:			
Banks	**0.2**	0.7	0.8
Governments/sovereigns	**0.1**	0.1	0.1
Corporates and project financings	**0.2**	0.5	0.4
	0.5	1.3	1.3

* Did not make significant use of IMF Liquidity support programmes at the end of the period.
** £0.1 billion of this total relates to local currency exposure.

Loans and advances to borrowers in currencies other than the local currency of the borrower
The world-wide operations of the Group involve significant exposures in non-local currencies. These cross-border exposures are controlled through a well-developed system of country limits, which are frequently reviewed to avoid concentrations of transfer, economic or political risks.

The US SEC requires that Barclays report those exposures denominated in currencies other than the borrower's local currency. These outstandings exclude finance provided within the Group, and are based on the country of domicile of the borrower or guarantor of ultimate risk. They comprise loans and advances to customers and banks (including placings), finance lease receivables, interest bearing investments, acceptances, other monetary assets and on-balance sheet amounts arising from off-balance sheet financial instruments.

At 31st December 2002, the countries where these outstandings exceeded 1% of total Group assets were United States, Germany and France. Exposures to these countries amounted to £32,105m at 31st December 2002 (2001: £20,715m). Further detail is provided in the table below.

Loans and advances to borrowers in currencies other than the local currency of the borrower for countries where this exceeds 1% of total Group assets

	As % of assets %	Total £m	Banks and other financial institutions £m	Governments and official institutions £m	Commercial industrial and other private sector £m
At 31st December 2002					
United States	**4.2**	**17,140**	**9,672**	**1**	**7,467**
Germany	**2.5**	**10,094**	**9,841**	**7**	**246**
France	**1.2**	**4,871**	**4,484**	**24**	**363**
At 31st December 2001					
United States	2.3	8,294	4,878	–	3,416
Germany	2.3	8,218	8,031	1	186
France	1.2	4,203	3,088	22	1,093
At 31st December 2000					
Germany	2.4	7,505	6,829	554	122
United States	1.9	6,104	3,125	5	2,974
Japan	1.1	3,493	2,721	96	676

Loans and advances to borrowers in currencies other than the local currency of the borrower for countries where this is between 0.75% and 1% of total Group assets.
At 31st December 2002, Netherlands and Ireland had cross-currency outstanding of between 0.75% and 1% of total Group assets, amounting to £7,552m. At 31st December 2001, Japan and Netherlands had cross-currency outstandings of between 0.75% and 1% of total Group assets, amounting to £5,774m. At 31st December 2000, Netherlands and France had cross-currency outstandings of between 0.75% and 1% of total Group assets, amounting to £5,745m.

Potential credit risk lendings

Potential credit risk lendings (PCRL's) comprise non-performing loans (NPL's) and potential problem loans (PPL's). NPL's are loans where the customers have failed to meet their commitments, either in part or in whole. PPL's are loans which are current as to payment of principal and interest, but where there exists serious doubt as to the ability of the borrowers to comply with repayment terms in the near future.

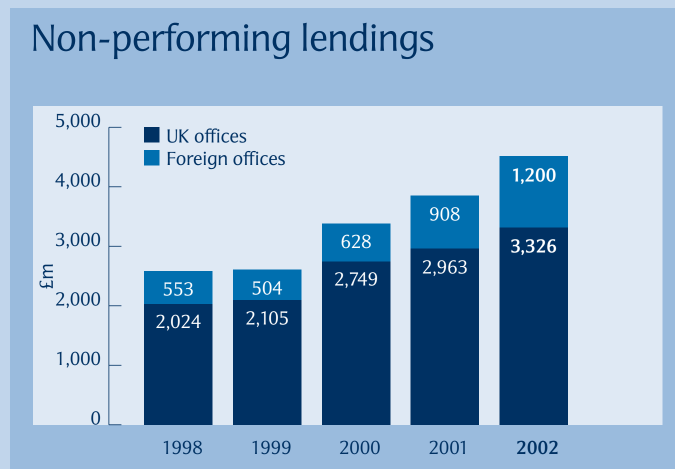
The tables and charts that follow present an analysis of potential credit risk lendings consistent in total with UK guidelines and practice, although more detail is provided to meet SEC guidelines. Further disclosure is made to record loans where interest is accrued but is being suspended or where specific provisions have been raised. Normal US banking practice would be to place such loans on non-accrual status. The amounts are stated before deduction of the value of security held, the specific provisions carried or interest suspended, all of which might reduce the impact of an eventual default, should it occur. The geographical presentation is based on the location of the office recording the transaction.

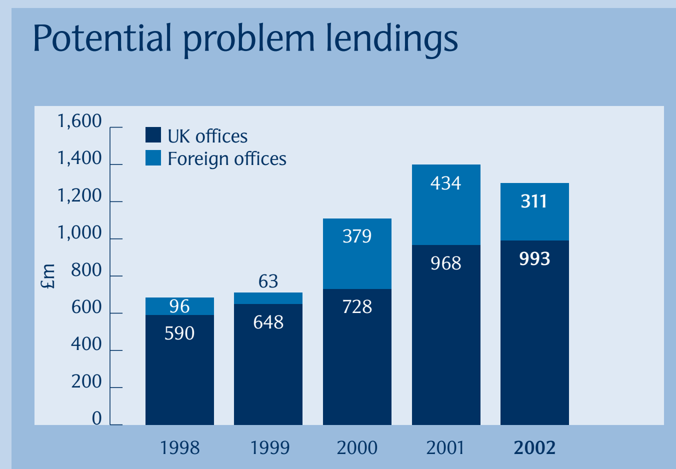
Non-performing loans

	2002 £m	2001 restated £m	2000 restated £m	1999 £m	1998 £m
Non-accrual lendings:					
UK	**1,557**	1,292	1,223	1,007	985
Other European Union	**108**	90	96	122	208
United States	**744**	306	119	47	38
Rest of the World	**133**	235	101	75	36
Accruing lendings where interest is being suspended:					
UK	**472**	386	351	326	266
Other European Union	**44**	30	36	19	26
United States	**–**	–	–	–	–
Rest of the World	**95**	145	109	91	92
Other accruing lendings against which provisions have been made:					
UK	**606**	660	474	423	457
Other European Union	**27**	20	71	42	74
United States	**–**	11	2	38	10
Rest of the World	**44**	43	76	50	50
Subtotals:					
UK	**2,635**	2,338	2,048	1,756	1,708
Other European Union	**179**	140	203	183	308
United States	**744**	317	121	85	48
Rest of the World	**272**	423	286	216	178
Accruing lendings 90 days overdue, against which no provisions have been made:					
UK	**687**	621	695	343	309
Other European Union	**3**	–	1	–	2
United States	**–**	–	–	–	–
Rest of the World	**–**	27	17	18	17
Reduced rate lendings:					
UK	**4**	4	6	6	7
Other European Union	**–**	–	–	–	–
United States	**–**	–	–	–	–
Rest of the World	**2**	1	–	2	–
Total non-performing loans:					
UK	**3,326**	2,963	2,749	2,105	2,024
Other European Union	**182**	140	204	183	310
United States	**744**	317	121	85	48
Rest of the World	**274**	451	303	236	195
Total	**4,526**	3,871	3,377	2,609	2,577

Potential problem loans

	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
UK	**993**	968	728	648	590
Other European Union	**2**	2	2	23	24
United States	**241**	369	313	5	4
Rest of the World	**68**	63	64	35	68
Total	**1,304**	1,402	1,107	711	686





UK non-performing loans increased by £363m to £3,326m primarily reflecting increases in the large corporate sector. These included loans to foreign borrowers made in the UK and were spread across a number of sectors, with telecommunications and energy being prominent. There were also additions from UK middle market business customers.

US non-performing loans increased by £427m to £744m reflecting the continued difficult economic conditions faced by the telecommunications and energy sectors. US potential problem loans fell by £128m to £241m primarily due to the reclassification of balances into the non-performing categories.

Other European Union non-performing loans increased from £140m to £182m. In the Rest of the World they fell to £274m, a decrease of £177m, primarily reflecting the reorganisation of the Group's Caribbean business in October 2002.

Interest forgone on non-performing loans
The total interest income that would have been recognised under the original contractual terms of the non-performing loans in 2002 was £275m (2001: £279m) of which £209m (2001: £210m) related to domestic lending and £66m (2001: £69m) related to foreign loans.

Interest income of approximately £22m (2001: £50m) from such loans was included in profit, of which £21m (2001: £33m) related to domestic lending and the remainder to foreign lending.

Ratios of provisions to non-performing loans and PCRL's appear in the next section, following the discussion of provisions.

Provisions for bad and doubtful debts

Barclays policy is to provide for credit losses when it considers that recovery is doubtful. The provision is made up of two components, a specific provision and a general provision. Risk managers continuously review the quality of the exposures based on their knowledge of the customer or counterparty, and developments in the industry and country of operation.

During 2002, credit conditions were less favourable than for several years and some sectors experienced difficulties. These circumstances are reflected in the bad debt charge for the year as set out in the table below. The net charge rose by 29% to £1,484m, an increase of £335m. New and increased specific provisions were 19% higher at £1,719m. Releases and recoveries together decreased by 15% at £233m.

The greater part of this increase occurred in Barclays Capital (£231m) and in the South American Corporate Banking (£96m) portfolios. The increase in provisions at Barclays Capital reflected difficult economic conditions, mainly in the telecommunications and energy sectors, particularly in the US. The deterioration in the second half of 2002 was largely in existing non-performing loans. The increase in South American Corporate Banking mainly related to Argentina.

Business Banking sustained an 8% increase in its bad debt provision charge, broadly in line with expectations. The charge for Barclaycard was £402m, 7% higher reflecting the acquisition of Providian UK and organic growth in average extended credit balances of 9%. Within Personal Financial Services, the provision charge fell by 13%, reflecting in part improvements in risk management.

Analysis of provision charges for bad and doubtful debts

	As at 31st December				
	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Net specific provision charge / (release)*					
UK	**1,041**	964	688	568	501
Other European Union	**14**	20	12	1	(4)
United States**	**385**	136	17	34	(10)
Rest of the World	**46**	45	60	32	5
Total net specific provision charge	**1,486**	1,165	777	635	492
General provision charge / (release)	**(2)**	(16)	40	(14)	–
	1,484	1,149	817	621	492

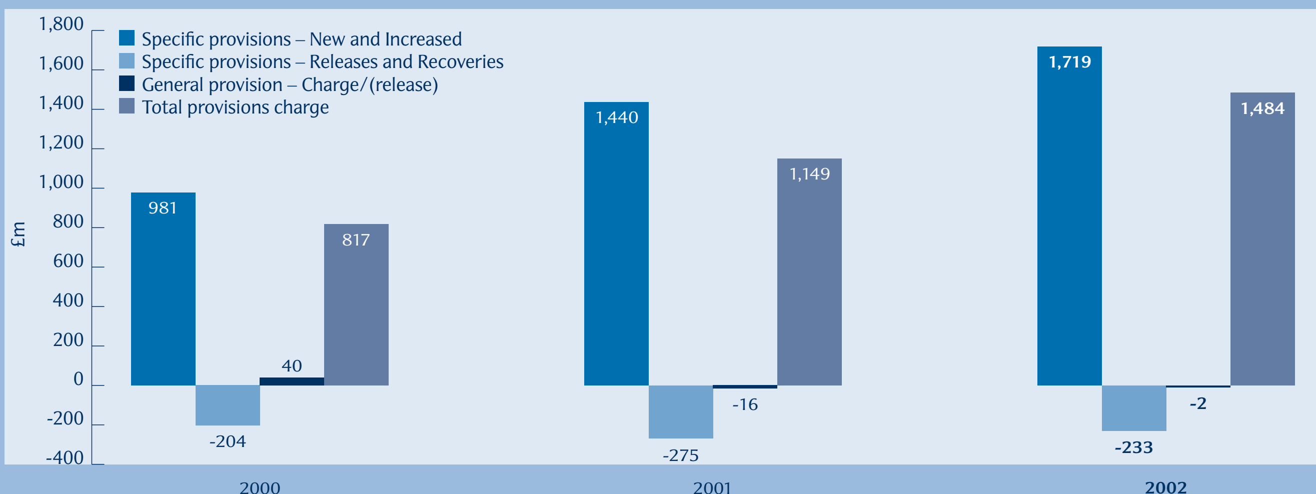
* The geographical analysis of provisions is based on the location of the office recording the transaction.
** The US charge includes provisions raised against Argentinean exposures booked in the US.

Analysis of provision balances for bad and doubtful debts

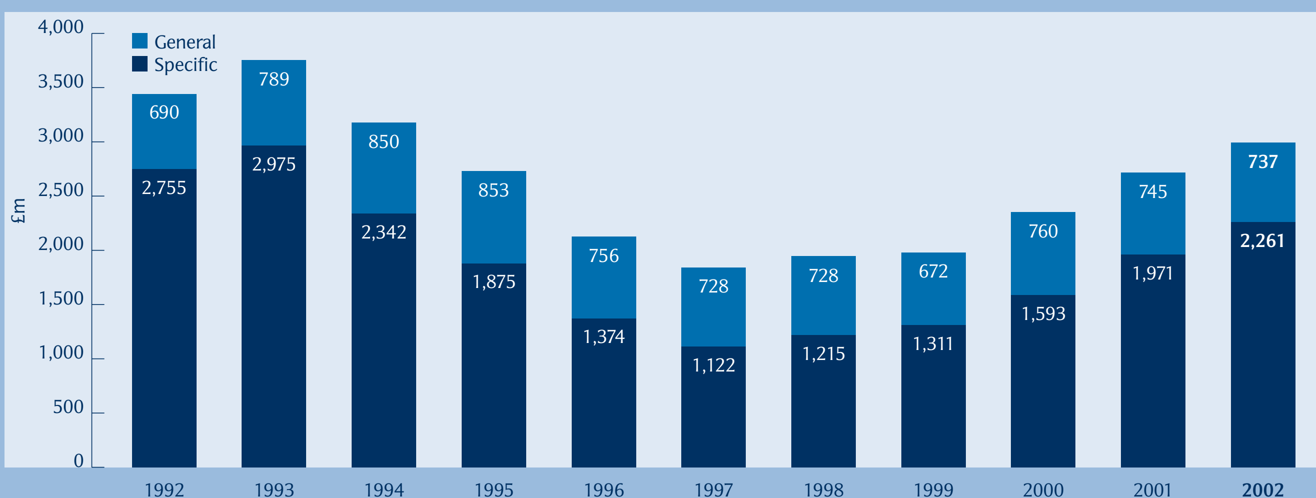
	As at 31st December				
	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Specific provision*					
UK	**1,790**	1,605	1,343	1,083	937
Other European Union	**84**	89	112	131	220
United States**	**257**	89	20	23	23
Rest of the World	**130**	188	118	74	35
Total specific provision	**2,261**	1,971	1,593	1,311	1,215
General provision	**737**	745	760	672	728
	2,998	2,716	2,353	1,983	1,943
Average loans and advances for the year (excluding trading business)	**174,764**	157,904	122,333	106,488	101,338
(including trading business)	**256,789**	223,221	176,938	147,139	145,749

* The geographical analysis of provisions is based on the location of the office recording the transaction.
** The US balance includes provisions held against Argentinean exposures booked in the US.

Provision charge analysis



Provision balances



Provisioning approach
General provisions reflect losses that, although not specifically identified, are known from experience to be present in the lending portfolio at the balance sheet date.

These provisions are adjusted at least half yearly by an appropriate charge or release of general provisions based on statistical estimates. The general provisions take Risk Tendency (statistically expected losses) into account, based on models that are systematically updated to reflect evolving loss experience.

See Credit risk management on pages 57 to 58 for a fuller description of Risk Tendency.

Specific provisions are raised for:

» Individual counterparties when the Group considers that the creditworthiness of a borrower or counterparty has undergone deterioration such that the recovery of the whole or part of an outstanding advance is in serious doubt.

» Homogeneous portfolios comprised of large numbers of individually small lendings, where the characteristics of the portfolio permit statistical models to be used in estimating specific provisions. These statistical models are consistent with the Group's policy of raising provision when recovery is doubtful. These provisions are raised in parts of Personal Financial Services, Woolwich, Barclays Private Clients, Barclaycard and Business Banking.

Write-off occurs immediately to the extent that the whole or part of the debt is considered unrecoverable.

Treatment of interest on debts that have specific provisions
If the collection of interest is doubtful, it is credited to a suspense account and excluded from interest income in the profit and loss account. Although interest continues to be charged to the customer's account, the amount suspended is netted against the relevant loan. Loans on which interest is suspended are not reclassified as accruing interest until interest and principal payments are up-to-date and future payments are reasonably assured. If the collection of interest is considered remote, interest is no longer applied.

Treatment of collateral assets acquired in exchange for advances
Assets acquired in exchange for advances in order to achieve an orderly realisation continue to be reported as advances. The assets acquired are recorded at the carrying value of the original advance as at the date of the exchange. Any impairment is accounted for as a specific provision.

Bad debt provisions charge ratios

	Year ended 31st December				
	2002 %	2001 %	2000 %	1999 %	1998 %
Provisions charge as a percentage of average loans and advances for the year (excluding trading business):					
Specific provisions	**0.85**	0.74	0.64	0.60	0.49
General provisions	**–**	(0.01)	0.03	(0.02)	–
	0.85	0.73	0.67	0.58	0.49
Amounts written off (net of recoveries)	**0.64**	0.53	0.47	0.52	0.40
Provisions charge as a percentage of average loans and advances for the year (including trading business):					
Specific provisions	**0.58**	0.52	0.44	0.43	0.34
General provisions	**–**	–	0.02	(0.01)	–
	0.58	0.52	0.46	0.42	0.34
Amounts written off (net of recoveries)	**0.43**	0.37	0.32	0.38	0.28

Provisions balance ratios

	As at 31st December				
	2002 %	2001 %	2000 %	1999 %	1998 %
Provisions balance at end of year as a percentage of loans and advances at end of year (excluding trading business):					
Specific provision	**1.29**	1.22	1.06	1.19	1.17
General provision	**0.42**	0.46	0.51	0.61	0.70
	1.71	1.68	1.57	1.80	1.87
Provisions balance at end of year as a percentage of loans and advances at end of year (including trading business):					
Specific provision	**0.86**	0.85	0.79	0.83	0.90
General provision	**0.28**	0.32	0.38	0.42	0.54
	1.14	1.17	1.17	1.25	1.44

Movements in provisions for bad and doubtful debts

	Year ended 31st December				
	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m
Provisions balance at beginning of year	**2,716**	2,353	1,983	1,943	1,850
Acquisitions and disposals	**(11)**	46	119	(10)	–
Exchange and other adjustments	**(77)**	(1)	4	(13)	6
Amounts written off:					
UK	**(950)**	(814)	(595)	(546)	(520)
Other European Union	**(31)**	(36)	(45)	(44)	(45)
United States	**(215)**	(94)	(26)	(40)	(7)
Rest of the World	**(24)**	(29)	(17)	(21)	(9)
	(1,220)	(973)	(683)	(651)	(581)
Recoveries (analysed below)	**106**	142	113	93	176
Subtotal	**1,514**	1,567	1,536	1,362	1,451
Provisions charged against profit					
New and increased specific provisions:					
UK	**1,210**	1,157	843	768	753
Other European Union	**33**	35	35	27	32
United States	**404**	173	27	45	11
Rest of the World	**72**	75	76	47	23
	1,719	1,440	981	887	819
Releases of specific provisions:					
UK	**(81)**	(87)	(55)	(115)	(96)
Other European Union	**(12)**	(10)	(17)	(22)	(32)
United States	**(10)**	(10)	(6)	(7)	(8)
Rest of the World	**(24)**	(26)	(13)	(15)	(15)
	(127)	(133)	(91)	(159)	(151)
Recoveries:					
UK	**(88)**	(106)	(100)	(85)	(156)
Other European Union	**(7)**	(5)	(6)	(4)	(4)
United States	**(9)**	(27)	(4)	(4)	(13)
Rest of the World	**(2)**	(4)	(3)	–	(3)
	(106)	(142)	(113)	(93)	(176)
Net specific provisions charge	**1,486**	1,165	777	635	492
General provision charge/(release)*	**(2)**	(16)	40	(14)	–
Net charge to profit	**1,484**	1,149	817	621	492
Provisions balance at end of year	**2,998**	2,716	2,353	1,983	1,943

* An analysis of the movement in general provisions is shown in note 17 to the accounts.

Provisions charge for bad and doubtful debts by industry

	Net specific provision for the year					Specific provisions at 31st December				
	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m	**2002 £m**	2001 £m	2000 £m	1999 £m	1998 £m
UK:										
Banks and other financial institutions	**1**	(2)	7	10	11	**1**	5	7	9	14
Agriculture, forestry and fishing	**(1)**	6	6	4	(5)	**7**	13	11	7	4
Manufacturing	**80**	62	8	4	15	**98**	49	43	48	41
Construction	**41**	12	7	4	(7)	**35**	6	8	7	10
Property	**8**	3	1	(5)	(20)	**9**	8	8	8	12
Energy and water	**22**	1	8	–	–	**28**	10	8	2	2
Wholesale and retail distribution and leisure	**37**	44	21	34	(10)	**54**	60	42	42	18
Transport	**7**	6	2	4	(1)	**7**	6	4	4	2
Communications	**16**	1	–	–	1	**15**	1	1	1	1
Business and other services	**62**	75	27	14	(7)	**92**	77	40	34	43
Home loans	**4**	8	10	5	(4)	**53**	60	61	39	35
Other personal	**748**	782	577	504	376	**1,343**	1,252	1,041	830	664
Overseas customers (a)	**13**	(34)	6	(22)	152	**39**	52	58	41	88
Finance lease receivables	**3**	–	8	12	–	**9**	6	11	11	3
	1,041	964	688	568	501	**1,790**	1,605	1,343	1,083	937
Foreign	**445**	201	89	67	(9)	**471**	366	250	228	278
	1,486	1,165	777	635	492	**2,261**	1,971	1,593	1,311	1,215

Analysis of amounts written off and recovered by industry

	Amounts written off for the year					Recoveries of amounts previously written off				
	2002 £m	2001 £m	2000 £m	1999 £m	1998 £m	**2002 £m**	2001 £m	2000 £m	1999 £m	1998 £m
UK:										
Banks and other financial institutions	**2**	3	13	14	16	**–**	3	4	2	12
Agriculture, forestry and fishing	**4**	7	6	6	2	**2**	2	2	3	7
Manufacturing	**72**	65	30	20	28	**22**	11	16	12	12
Construction	**15**	16	8	12	12	**3**	2	2	3	5
Property	**10**	5	5	9	17	**2**	1	3	7	22
Energy and water	**4**	1	2	–	–	**1**	–	–	–	–
Wholesale and retail distribution and leisure	**53**	35	34	35	25	**11**	9	12	17	45
Transport	**7**	4	3	4	2	**1**	–	1	1	1
Communications	**2**	–	–	1	–	**–**	–	–	–	–
Business and other services	**65**	57	33	43	36	**13**	9	11	12	27
Home loans	**11**	14	15	3	8	**1**	4	3	2	4
Other personal	**692**	599	435	363	254	**31**	29	28	24	21
Overseas customers (a)	**9**	2	7	31	120	**–**	35	17	1	–
Finance lease receivables	**4**	6	4	5	–	**1**	1	1	1	–
	950	814	595	546	520	**88**	106	100	85	156
Foreign	**270**	159	88	105	61	**18**	36	13	8	20
	1,220	973	683	651	581	**106**	142	113	93	176

Note
(a) includes amounts in 1998 in respect of Russian counterparties recorded in the UK.

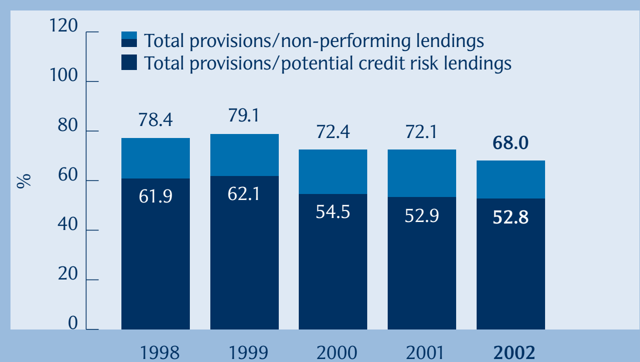
Total provision coverage of total non-performing loans

	2002 %	2001 %	2000 %	1999 %	1998 %
UK	**73.5**	74.9	72.9	81.1	78.4
Other European Union	**71.4**	78.6	72.1	94.5	95.2
United States	**43.7**	61.8	81.0	74.1	104.2
Rest of the World	**65.0**	59.2	64.7	50.4	45.1
Total	**68.0**	72.1	72.4	79.1	78.4

Total provision coverage of total potential credit risk lendings (NPL's and PPL's)

	2002 %	2001 %	2000 %	1999 %	1998 %
UK	**56.6**	56.4	57.7	62.0	60.7
Other European Union	**70.7**	77.5	71.4	84.0	88.3
United States	**33.0**	28.6	22.6	70.0	96.2
Rest of the World	**52.0**	51.9	53.4	43.9	33.5
Total	**52.8**	52.9	54.5	62.1	61.9

Geographically, the specific provision is allocated according to the location of the office recording the transaction. Similarly, the general provision is allocated according to the characteristics of the loans in each geographic area.



Another useful way of assessing provision balances is to recognise that specific provisions are created to cover non-performing loans, whereas general provisions relate to as yet unidentified losses on performing lendings. The following table provides an analysis of provision balances on this basis.

Ratios of general and specific provision balances

	2002 %	2001 %	2000 %	1999 %	1998 %
Specific provisions coverage of non-performing loans					
Specific provisions/Non-performing loans	**50.0**	50.9	47.2	50.2	47.1
General provisions coverage of performing loans					
General provisions/Performing loans	**0.28**	0.33	0.38	0.43	0.55

The ratio of general provisions to performing loans declined in 2001 with the acquisition of Woolwich plc, a portfolio consisting predominantly of secured residential mortgage loans needing comparatively low general provisions. These ratios include both trading and banking books. Performing loans comprise gross loans and advances to banks and customers (banking and trading) less non-performing loans.

Market risk management

Market risk is the risk that the Group's earnings or capital, or its ability to meet business objectives, will be adversely affected by changes in the level or volatility of market rates or prices such as interest rates including credit spreads, foreign exchange rates, equity prices and commodity prices.

Market risk management and control responsibilities
The market risk management policies of the Group are determined by the Group Risk Oversight Committee, which also recommends overall market risk appetite to the Board Risk Committee. The Group's policy is that exposure to market risk arising from trading activities is concentrated in Barclays Capital and that residual market risk in other parts of the bank is tightly controlled and significantly limited.

The Group Market Risk Director is responsible for the effectiveness and efficiency of the Group's market risk control framework, and is assisted by risk management departments in the Group's businesses and a central market risk management team.

The Group Risk Oversight Committee allocates a total Daily Value at Risk (DVaR) limit for the Group and delegates the day to day control and monitoring of market risk to the Group Market Risk Director, who sets limits for each business area. To assist this process, a market risk report is produced daily which summarises the Group's market risk exposures against agreed limits. Data for this report is supplied by the business areas. This daily report is sent to the Group Risk Director, the Group Market Risk Director, the Group Finance Director and the appropriate Business Risk Directors.

A more detailed market risk report is presented each month by the Group Market Risk Director to the Group Risk Oversight Committee. This report brings to the attention of all Committee members current Group market risk exposures and issues along with relevant background information.

Each business area of the Group is accountable for identifying, measuring and managing all market risks associated with its activities. In managing market risk, businesses must consider asset liquidity risk and funding liquidity risk where these issues are relevant.

Market risk measurement
Barclays uses the DVaR measure as the primary mechanism for controlling market risk. DVaR is an estimate, with a confidence level of 98%, of the potential loss which might arise if the current positions were to be held unchanged for one business day. Daily losses exceeding the DVaR figure are likely to occur, on average, only twice in every one hundred business days.

Where DVaR does not adequately measure the risk, alternative methods are used such as Annual Earnings at Risk. Annual Earnings at Risk measures the sensitivity of annual earnings to shocks in market rates at the 99th percentile for change over a one year period. This rate shock is consistent with the standardised rate shock recommended by the Basel II framework for assessing banking book interest rate risk.

To facilitate the identification, measurement, control and reporting of market risk, Barclays has categorised market risk into three broad categories as described below:

(i) Trading market risk
Trading includes transactions where Barclays Capital acts as principal with clients or with the market. A detailed analysis of this risk is provided below.

(ii) Asset and liability management
The Group encounters risks in managing its assets and liabilities. A detailed analysis of these risks is covered in the Treasury Asset and Liability Management section on pages 81 to 84.

(iii) Other market risks
In some instances, the Group incurs market risks that do not fit into the above categories. The principal risks of this type are Asset Management Structural Market Risk and Defined Benefit Pension Scheme Risk. These are covered below.

Trading market risk

As mentioned earlier, the Group's policy is to concentrate trading activities in Barclays Capital. Trading includes transactions where Barclays Capital acts as principal with clients or with the market. For maximum efficiency, Barclays manages client and market activities together. In Barclays Capital, trading risk occurs in both the Trading book and the Banking book as defined for regulatory purposes.

In anticipation of future customer demand, the Group maintains access to market liquidity by quoting bid and offer prices with other market makers and carries an inventory of capital market and treasury instruments, including a broad range of cash, securities and derivatives. Trading positions and any offsetting hedges are established as appropriate to accommodate customer or Group requirements. Barclays Capital takes principal positions in the interest rate including credit spread, foreign exchange, equity and commodity markets based on expectations of customer demand or a change in market conditions.

Derivatives entered into for trading purposes include swaps, forward rate agreements, futures, credit derivatives, options and combinations of these instruments. For a description of the nature of derivative instruments, see pages 79 to 80.

Risk control

In Barclays Capital, the formal process for the management of risk is through the Barclays Capital Risk Management Committee. Day to day responsibility for managing exposure to market risk lies with the senior management of Barclays Capital, supported by the Global Market Risk Management Unit that operates independently of the trading areas. Daily DVaR utilisation reports are produced across the main business areas and the five main risk factor categories, namely interest rate, credit spread, foreign exchange, equity and commodity risk.

Any DVaR excess at the business level, risk factor level or total level, along with the relevant background information and proposed way forward, is reported to the senior management of Barclays Capital and the Group Market Risk Director. The Group Market Risk Director will present these DVaR excesses to the Group Risk Oversight Committee.

As DVaR does not provide a direct indication of the potential size of losses that could arise in extreme conditions, Barclays Capital uses a number of complementary techniques for controlling market risk. These include revenue loss triggers and stress tests. The latter are based on both historical and hypothetical extreme movements of market prices and are reviewed as part of the detailed market risk presentation at the fortnightly Traded Products Risk Review meeting. The attendees at this meeting include the senior management of Barclays Capital, the Group Risk Director, the Group Market Risk Director and the Group Treasurer. The meeting is chaired by the Chief Executive of Barclays Capital.

If the potential loss indicated by a stress test exceeds an agreed trigger level, then the positions captured by the stress test are reviewed and discussed by Barclays Capital Market Risk and the respective Business Head(s). The minutes of the discussion, including the merits of the position and the appropriate course of action, are then sent to the Group Market Risk Director.

Risk measurement

Barclays Capital calculates DVaR using the historical simulation method with an historical sample of two years. As stated above, the calculation assumes a one-day holding period and is performed to the 98% level of confidence.

The interest rate DVaR methodology maps interest rate exposures into government and non-governments (six credit grades and interest rate swaps). This allows the measurement process to discriminate between the market risk of holding bonds with different credit qualities, for example AAA securities as against non-investment grade securities. In particular, it shows the effectiveness of hedging strategies such as shorting government bonds or swaps against non-government bond portfolios.

For a non-government interest rate instrument, the total interest rate is separated into the government interest rate for the equivalent maturity and the credit spread. The credit spread is the premium for holding non-government paper, and is the difference between the total interest rate and the appropriate government interest rate. This approach allows the interest rate risk (due to changes in the government interest rates) to be measured separately from credit spread risk (due to changes in credit spreads).

The DVaR numbers shown in the table below are all based on the above methodology.

Analysis of market risk exposures

Barclays Capital's market risk exposure increased in 2002 compared to 2001, due mainly to interest rate opportunities taken in the second half of 2002. The year-end DVaR for 2002 was £25.8m (2001: £21.3m).

Barclays Capital DVaR: Summary table for 2002 and 2001

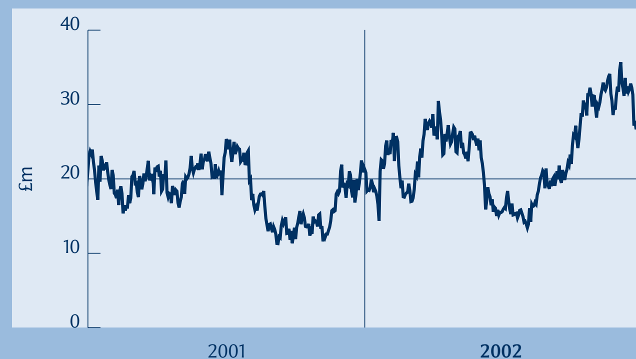
	Twelve months to 31st December 2002			Twelve months to 31st December 2001 (a)		
	Average £m	High (b) £m	Low (b) £m	Average restated £m	High (b) restated £m	Low (b) restated £m
Interest rate risk	**21.7**	**34.5**	**10.0**	14.9	24.1	7.6
Credit spread risk	**9.4**	**12.5**	**6.0**	8.8	14.7	4.6
Foreign exchange risk	**2.9**	**4.4**	**1.9**	2.3	6.2	0.6
Equities risk	**3.6**	**5.4**	**2.1**	3.3	6.4	2.1
Commodities risk	**1.8**	**3.3**	**0.8**	1.7	4.3	0.6
Diversification effect	**(16.2)**			(12.5)		
Total DVaR	**23.2**	**35.7**	**13.4**	18.5	25.4	11.3

Notes

(a) Restatements of interest rate DVaRs, total DVaRs and diversification effect reflect the move to a methodology that identifies credit spread risk separately.

(b) The high (and low) DVaR figures reported for each category did not necessarily occur on the same day as the high (and low) DVaR reported as a whole. A corresponding diversification effect cannot be calculated and is therefore omitted from the above table.

Total DVaR Daily exposures in 2001 and 2002



Trading revenue and back-testing
The histogram below shows the distribution of market risk daily trading revenue for Barclays Capital in 2002. Market risk daily trading revenue includes all primary (net fees and commissions) and secondary (net interest income and dealing profits) income. The average daily revenue was £8.7m. There were 238 positive revenue days out of 252.

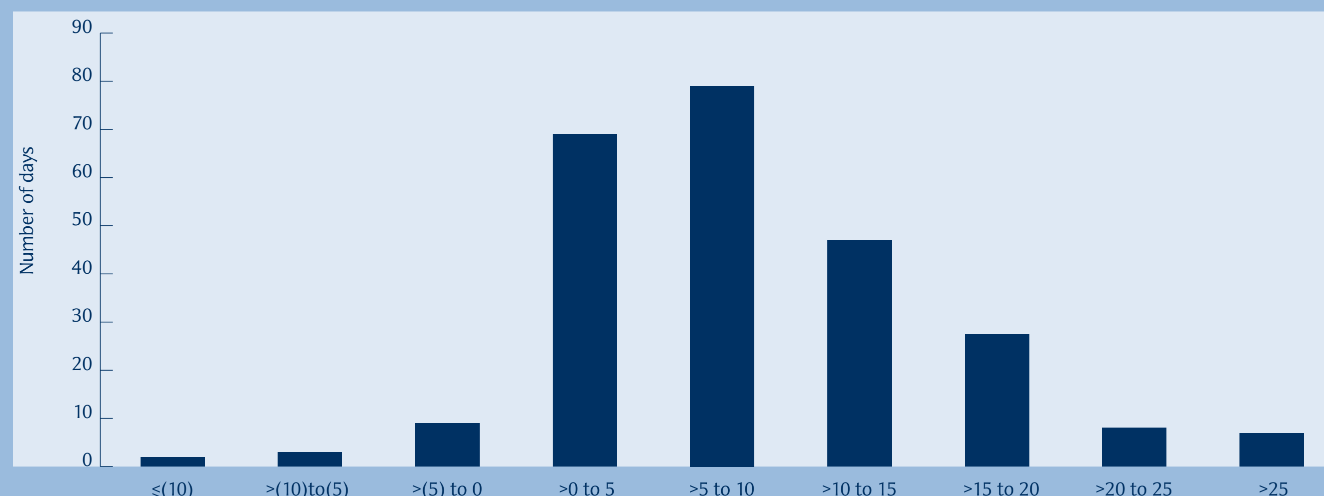
Barclays recognises the importance of assessing the effectiveness of DVaR. The main approach employed is the technique known as back-testing, which counts the number of days when trading related losses are bigger than the estimated DVaR figure. The regulatory standard for back-testing is to measure DVaR assuming a one day holding period with a 99% level of confidence. For Barclays Capital's regulatory trading book, there were two instances in 2002 of a daily trading revenue loss exceeding the corresponding back-testing DVaR. This is the same result as recorded for 2001.

Other market risks

Asset management structural market risk
Asset management structural market risk is the risk that fee and commission income is affected by a change in equity market levels. It affects Barclays Private Clients' assets under management, Barclays Life, Woolwich Life and Barclays Global Investors. This risk is measured using Annual Earnings at Risk (AEaR) where the potential reduction in income is measured over a year. For more detail on AEaR, see market risk measurement on page 74. As at end 2002, the AEaR relating to UK indices was £120m, while the AEaR relating to non-UK indices was £60m. In both cases, a 25% reduction in stock market prices was assumed. These AEaR numbers were broadly unchanged from the end 2001 AEaR numbers.

Defined benefit pension scheme risk
Defined benefit pension scheme risk arises if the Group has to increase its level of funding for the final salary schemes. This would occur if the value of the assets was insufficient over time to cover the projected liabilities. Information on the current position is given in notes 5 and 62.

Barclays Capital Trading Revenue 2002 (GBP in millions)



Disclosures about certain trading activities including non-exchange traded contracts

The US Securities and Exchange Commission requires disclosures to be provided in relation to certain trading activities, particularly energy trading and commodity trading which covers non-exchange traded contracts.

The Group delivers a fully integrated service to clients for base metals, precious metals, energy products (covering gas, oil and oil-related products) and UK Power through Barclays Capital. The base and precious metals business enters into outright metal purchase and sales transactions as well as the associated 'over the counter' (OTC) and exchange traded derivatives. The energy business deals in commodity derivative contracts but does not maintain any physical exposures. Structured products are also developed and offered in respect of energy, base and precious metal commodities. In August 2002, the UK Power team commenced trading in power physical forward contracts.

The Group's commodity business has continued to expand as market conditions allow, both through the addition of new products in the UK Power market, and the continuing growth in the existing metals and energy trading volumes. In 2002, the total commodities business (including exchange trading) contributed £89m to dealing profits (2001: £38m) and resulted in assets of £844m in respect of physical commodity positions as at 31st December 2002 (2001: £1,257m) and net assets of £40m (2001: net liabilities of £45m) relating to the fair value of derivative contracts.

The Group's principal commodity related derivative contracts are swaps, options, forwards and futures, which are similar in nature to such non-commodity related contracts. Commodity derivatives contracts are specified in terms of commodity specification and delivery location as well as forward date and notional values.

The fair values of commodity physical and derivative positions are determined through a combination of recognised market observable prices, exchange prices and established inter commodity relationships. In common with all derivatives, the fair value of OTC commodity derivative contracts is either determined using a quoted market price or by using valuation models. Where a valuation model is used, the fair value is determined based on the expected cash flows under the terms of each specific contract, discounted back to present value. The expected cash flows for each contract are either determined using market parameters such as commodity price curves, commodity volatilities, interest rate yield curves and foreign exchange rates, or derived from historical or other market prices.

Fair values generated by models are independently validated with reference to market price quotes, or price sharing with other institutions. However, where no observable market parameter is available then instrument fair value will include a provision for the uncertainty in that parameter based on sale price or subsequent traded levels.

Discounting of expected cash flows back to present value is achieved by constructing discount curves from the market price of observable interest rate products, such as deposits, interest rate futures and swaps. In addition, the Group maintains fair value adjustments reflecting the cost of credit risk (where this is not embedded in the fair value), future administration costs associated with ongoing operational support of products, the cost of exiting illiquid or significant positions, as well as the cost of trading out of a position (all positions are marked to mid-market and hence the bid/offer cost would be incurred).

The tables on page 78 analyse the fair value of the commodity derivative contracts at 31st December 2002 by movement over time, source of fair value and investment grade of counterparty.

Movement in fair value of commodity positions

	Total £m
Fair value of contracts outstanding at 31st December 2001	(45)
Contracts realised or otherwise settled during the period	25
Fair value of new contracts entered into during the period	50
Other changes in fair value	10
Fair values of contracts outstanding at 31st December 2002	40

Source of fair value – commodities

	Fair Value of Contracts at 31st December 2002				
	Maturity less than one year	Maturity one to three years	Maturity four to five years	Maturity over five years	Total fair value
Prices actively quoted	(17)	13	15	(1)	10
Prices provided by other external sources	–	1	–	–	1
Prices based on models and other valuation methods	8	–	–	–	8
Prices based on other valuation methods	–	–	–	21	21
Total	(9)	14	15	20	40

Analysis of fair value by counterparty investment grade – commodities

	Total value 2002 £m
A- to AAA	(9)
BBB to BBB+	68
Below investment grade	(19)
Total	40

Derivatives

The use of derivatives and their sale to customers as risk management products is an integral part of the Group's trading activities. These instruments are also used to manage the Group's own exposure to fluctuations in interest and exchange rates as part of its asset and liability management activities.

Barclays Capital manages the trading derivatives book as part of the market risk book. This includes foreign exchange, interest rate, equity, commodity and credit derivatives. The policies regarding market risk management are outlined in the market risk management section on pages 74 to 76.

The policies for derivatives that are used to manage the Group's own exposure to interest and exchange rate fluctuations are outlined in the treasury asset and liability management section on pages 81 to 84.

Derivative instruments are contracts whose value is derived from one or more underlying financial instruments or indices defined in the contract. They include swaps, forward rate agreements, futures, options and combinations of these instruments and primarily affect the Group's net interest income, dealing profits, commissions received and other assets and liabilities. Notional amounts of the contracts are not recorded on the balance sheet.

The Group participates both in exchange traded and OTC derivatives markets.

Exchange traded derivatives
The Group buys and sells financial instruments that are traded or cleared on an exchange, including interest rate swaps, futures and options on futures. Holders of exchange traded instruments provide margin daily with cash or other security at the exchange, to which the holders look for ultimate settlement.

OTC traded derivatives
The Group buys and sells financial instruments that are traded over the counter, rather than on a recognised exchange. These instruments range from commoditised transactions in derivative markets, to trades where the specific terms are tailored to the requirements of the Group's customers. In many cases, industry standard documentation is used, most commonly in the form of a master agreement, with individual transaction confirmations. The existence of a signed master agreement is intended to give the Group protection in situations where a counterparty is in default, including the ability to net outstanding balances where the rules of offset are legally enforceable. For further explanation of the Group's policies on netting, see Accounting policies on pages 128 to 134.

Foreign exchange derivatives
The Group's principal exchange rate related contracts are forward foreign exchange contracts, currency swaps and currency options. Forward foreign exchange contracts are agreements to buy or sell a specified quantity of foreign currency, usually on a specified future date at an agreed rate. A currency swap generally involves the exchange, or notional exchange, of equivalent amounts of two currencies and a commitment to exchange interest periodically until the principal amounts are re-exchanged on a future date.

Currency options provide the buyer with the right, but not the obligation, either to purchase or sell a fixed amount of a currency at a specified exchange rate on or before a future date. As compensation for assuming the option risk, the option writer generally receives a premium at the start of the option period.

Interest rate derivatives
The Group's principal interest rate related contracts are interest rate swaps, forward rate agreements, basis swaps, caps, floors and swaptions. Included in this product category are transactions that include combinations of these features.

An interest rate swap is an agreement between two parties to exchange fixed rate and floating rate interest by means of periodic payments based upon a notional principal amount and the interest rates defined in the contract. Certain agreements combine interest rate and foreign currency swap transactions, which may or may not include the exchange of principal amounts. A basis swap is a form of interest rate swap, in which both parties exchange interest payments based on floating rates, where the floating rates are based upon different underlying reference indices. In a forward rate agreement, two parties agree a future settlement of the difference between an agreed rate and a future interest rate, applied to a notional principal amount. The settlement, which generally occurs at the start of the contract period, is the discounted present value of the payment that would otherwise be made at the end of that period.

Equity derivatives
The Group's principal equity related contracts are equity and stock index swaps and options (including warrants, which are options listed on an exchange).

An equity swap is an agreement between two parties to exchange periodic payments, based upon a notional principal amount, with one side paying fixed or floating interest and the other side paying based on the actual return of the stock or stock index. No principal amounts are exchanged.

An equity option provides the buyer with the right, but not the obligation, either to purchase or sell a specified stock or stock index at a specified price or level on or before a specified date.

Credit derivatives
The Group's principal credit derivative related contracts include credit default swaps and total return swaps. A credit derivative is an arrangement whereby the credit risk of an asset (the reference asset) is transferred from the buyer to the seller of protection.

A credit default swap is a contract where the protection seller receives premium or interest related payments in return for contracting to make payments to the protection buyer upon a defined credit event. Credit events normally include bankruptcy, payment default on a reference asset and downgrades by a rating agency.

A total return swap is an instrument whereby the seller of protection receives the full return of the asset, including both the income and change in the capital value of the asset. The buyer in return receives a predetermined amount.

A description of how credit derivatives are used within the Group is provided on page 122.

Commodity derivatives
The Group's principal commodity related derivative contracts are swaps, options, forwards and futures. The main commodities transacted are oil, base metals, precious metals, US and UK natural gas, and UK electricity.

A description of commodity derivatives is provided on page 77.

Treasury asset and liability management

The financial risks relating to the Group's assets and liabilities, comprising liquidity, funding and concentration risks, interest rate risks and exchange rate risks, are actively managed by Group Treasury.

Group policies are set by the Group Treasury Committee, chaired by the Group Finance Director, which also provides governance and oversight of Group Treasury. Group policy is to centralise asset and liability management within Group Treasury to minimise earnings volatility and meet Group control standards. The Group Treasury Committee sanctions Liquidity and Structural Interest Rate risk limits across the Group and ensures compliance via a limit and control monitoring structure in collaboration with the local asset and liability committees.

Liquidity risk management
Liquidity risk is the risk that the Group is unable to meet its payment obligations when they fall due and to replace funds when they are withdrawn; in particular, its failure to meet obligations to repay depositors and fulfil commitments to lend.

The Group's overall liquidity policy and control is the responsibility of Group Treasury and is managed to ensure that the Group can meet its current and future re-financing needs at all times and at acceptable costs. The Group's liquidity position was strong at 31st December 2002.

Barclays is currently unaware of any terms, conditions or circumstances that could significantly impair the Group's ability to raise short or long-term funding. Where investors have the right to put, or Barclays has the right of call, on debt securities in issue at certain dates, the maturity date is taken to be the first date. Investors do not have the ability to initiate the redemption of undated or dated loan capital or other capital instruments, except where stated in note 35.

Liquidity management within the Group has two main strands. The first is day to day funding, managed by monitoring future cash flows to ensure that requirements can be met. This includes replenishment of existing funds as they mature or are withdrawn to satisfy demands for additional borrowings by customers. The second is maintaining a portfolio of highly marketable assets that can easily be liquidated as protection against any unforeseen interruption to cash flow.

In order to avoid reliance on a particular group of customers or market sectors, the distribution of sources and maturity profile of deposits are also carefully managed. Important factors in assuring liquidity are competitive rates and the maintenance of depositors' confidence. Such confidence is based on a number of factors including the Group's reputation, the strength of earnings and the Group's financial position.

An important source of liquidity is our core UK retail deposits, mainly current accounts and savings accounts. Although current accounts are repayable on demand and savings accounts are repayable at short notice, maintaining a broad base of customers, both numerically and by depositor type, helps to protect against unexpected fluctuations. Such accounts form a stable deposit base for the Group's operations and liquidity needs.

Sources of liquidity are regularly reviewed to maintain a wide diversification by currency, geography, provider and product. There have been a number of significant market events over recent years including corporate scandals in the United States and the turmoil of the dotcom bubble, all resulting in a short-term flight to quality in financial markets. The Group's liquidity has benefited in all cases. The ability to raise funds is in part dependent on maintaining the bank's credit rating, although, except at extremes, a credit downgrade is likely to affect only the price at which funding is available rather than the volume that can be raised.

Many factors contribute to the credit rating process including assessment of management capability, and the quality of the corporate governance and risk management processes. The Group considers one of the most important factors in preserving its strong credit rating, which is a core ambition, is maintaining a strong capital base and strong regulatory ratios.

Monitoring and reporting take the form of cash flow measurement and projections for the next day, week and month as these are key periods for liquidity management. This is based on principles agreed by the UK Financial Services Authority. Each operation is required to maintain sufficient access to funds, in terms of maturing assets and proven capacity to borrow in the money markets.

Additionally, in evaluating the Group's liquidity position, Group Treasury monitors unmatched medium-term assets and the level and type of undrawn lending commitments, the usage of overdraft facilities and the impact of contingent liabilities such as standby letters of credit and guarantees.

In overseas markets, day to day liquidity is the responsibility of local treasury management in each territory within the parameters set by Group Treasury and subject to regular reports to Group Treasury in order to maximise the benefits of knowledge gained. Local asset and liability management committees comprising senior local executives and Group Treasury representatives also review liquidity management depending on the size and complexity of the treasury operation.

For further details see contractual cash obligations and commercial commitments of the Group on page 84.

Interest rate risk management
Interest rate risk is the risk of loss arising from adverse movements in the level or volatility of market interest rates. The interest rate risk arising from the UK banking operations is aggregated and managed by Group Treasury, which is also responsible for the overall Group position.

Overall mismatches of fixed rate assets and liabilities are managed in the aggregate by Group Treasury through the use of interest rate swaps and other derivatives. Care is taken to ensure that the management of the portfolio is flexible, as market circumstances and customer requirements can rapidly change the desired portfolio structure. Group Treasury can exercise some discretion within limits prescribed by Group Market Risk with respect to the risk management of these positions and flows.

The exposure is then passed to the market mainly via independently managed dealing units within Barclays Capital who treat these transactions as part of their normal trading activities, and also via third parties. Risks arising in the Group's other banking operations are managed in a similar way.

Retail market risk is the risk to earnings from retail products (generally in personal and corporate banking), which can be adversely affected by movements in the level or volatility of market rates and prices and/or customer behaviour. The retail market risk embedded within retail contracts is measured using behavioural models and then converted into wholesale swap and option exposure which is transferred to Group Treasury at an appropriate market rate transfer price. This leaves residual risk within the business to the extent that the wholesale contract does not replicate the customer product behaviour. This risk is controlled by limits set by Group Market Risk.

Management of the non-trading positions inherent in the Group's balance sheet include the structural interest rate risk associated with interest free deposits, other interest free or fixed rate liabilities as well as the Group's shareholders' funds. The positions arising from these balances are managed by the maintenance of assets with fixed interest rates over several years, including loans and advances to customers and debt securities, and also variable rate assets.

International banking operations also incur market interest rate risk. Policies for managing this risk are agreed between Group Treasury and Group Market Risk and are applied through Asset and Liability Management Committees (ALCOs). Guidance on the scope and constitution of ALCOs is provided by Group Treasury, who maintain regular contact with the businesses on treasury issues. Compliance with the policy is controlled via a comprehensive financial risk reporting framework including interest rate gap limits or value at risk limits issued by Group Market Risk. These limits allow banking books to be managed by local treasury operations in an orderly fashion, either through Barclays Capital or, where necessary, through local markets.

The total Group exposure is shown in the form of an interest rate repricing table. This summarises the repricing profile of the Group's assets, liabilities and off-balance sheet exposures at 31st December 2002. It includes non-trading hedges. However, Barclays Capital interest rate risk is disclosed within Trading Market Risk and is therefore excluded.

This table provides the basis for assessment of the sensitivity of the Group's earnings to interest rate movements. Based on the Group balance sheet as at 31st December 2002, the Group's expected earnings in 2003 would not be significantly affected either by a hypothetical immediate and sustained 1% increase or decrease in interest rates.

Group risk management activities employing interest rate swaps, currency swaps, basis swaps and other derivatives that are designated as hedges are summarised below. The disclosure relates to derivative components of the Group's hedging programme transferred to the market via internal or external counterparties.

Activity	Risk	Type of hedge
Fixed rate lending and fixed rate investment.	Reduced earnings due to an increase in interest rates.	Pay fixed interest rate swaps and buy interest rate caps.
Fixed rate funding (e.g medium-term note issuance).	Reduced earnings due to a fall in interest rates.	Receive fixed interest rate swaps and buy interest rate floors.
Variable rate assets.	Reduced earnings due to a fall in interest rates.	Receive fixed interest rate swaps and buy interest rate options.
Firm foreign currency commitments (e.g. asset purchases and sales).	Reduced earnings due to changes in exchange rates between arranging a transaction and completion.	Foreign currency transactions.
Managing the Group's risk asset ratios.	Reduced risk asset ratio due to strengthening of foreign currency against sterling.	Currency swaps.

Interest rate swaps and cross currency interest rate swaps that are used in the management of the non-trading exposures (excepting those within Barclays Capital, where the risk is managed by DVaR) are shown in the table below. These figures are the weighted average pay fixed rates and receive fixed rates by maturity date and nominal amount at 31st December 2002. The nominal amounts below include £2,994m and £317m, in respect of sterling and non-sterling basis swaps respectively. Basis swaps are swaps where both payable and receivable legs are variable. In managing the non-trading exposures relating to capital balances and demand deposits, both on-balance sheet and derivative positions are held.

The reported figures do not take account of underlying balance sheet items being hedged, the net interest income thereon or their mark to market values.

The weighted-average receive fixed and pay fixed rates by reset maturity date and nominal amount at 31st December 2002 were as follows:

	Sterling denominated contracts				Non-sterling denominated contracts			
	Pay fixed		Receive fixed		Pay fixed		Receive fixed	
	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %
Maturity date								
Not more than three months	2,383	6.42	3,945	5.15	1,238	3.79	779	3.81
Over three months but not more than six months	3,344	5.99	1,300	6.19	175	5.86	607	5.50
Over six months but not more than one year	3,543	6.20	2,251	5.71	1,020	3.73	355	4.59
Over one year but not more than five years	8,645	5.68	18,504	5.86	2,464	6.22	2,327	4.56
Over five years	2,259	6.02	6,177	6.11	1,105	5.07	4,385	6.84
	20,174	5.95	32,177	5.82	6,002	5.07	8,453	5.74

The weighted-average receive variable and pay variable rates by reset maturity date and nominal amount at 31st December 2002 were as follows:

	Sterling denominated contracts				Non-sterling denominated contracts			
	Receive variable		Pay variable		Receive variable		Pay variable	
	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %	Nominal amount £m	Average rate %
Reset maturity date								
Not more than three months	15,020	3.90	25,075	4.12	5,065	2.99	8,104	2.91
Over three months but not more than six months	8,148	4.00	10,096	4.13	1,254	3.30	666	2.56
	23,168	3.94	35,171	4.12	6,319	3.05	8,770	2.89

The net effect of the derivative positions, in isolation, on net interest income was a credit of £246m (2001: credit of £122m). This included credits of £242m (2001: £93m) and £4m (2001: £29m) for interest rate and exchange rate derivatives respectively.

Foreign exchange risk management
Corporate and retail banking businesses incur foreign exchange risk in the course of providing services to their customers. The part of this risk that arises in UK operations is transferred directly to and managed by Barclays Capital. In the case of the international operations, Group Market Risk allocates modest foreign exchange open position limits to facilitate the management of customer originated flows. Exposures are reported daily to Group Market Risk. As at 31st December 2002, aggregate DVaR of these businesses for foreign exchange rate risk was immaterial.

Management of foreign currency investments
Non-trading positions in foreign currencies arise from the currency investments that the Group makes in its overseas businesses. The Group's policy is to manage the currency balance of the funding, financing these investments so as to limit the effect of exchange rate movements on the Group's risk asset ratios. The management of funding investments in overseas branches, subsidiaries, associated undertakings and joint ventures is carried out and reviewed by Group Treasury. The principal structural currency exposures of the Group are set out on page 175.

These positions, together with the currency composition of tiers 2 and 3 capital and minority interests in tier 1 and tier 2 capital, ensure that movements in exchange rates have little impact on the Group's risk asset ratios. However, exchange rate movements do have an impact on reserves (see Consolidated statement of changes in reserves on page 140). With the positions in place at 31st December 2002, a hypothetical increase of 10% in the value of sterling against all currencies would have led to a fall of some £36m in reserves (2001: £146m).

Additional information on liquidity management
The tables below give details of the contractual obligations and commercial commitments of the Group as at 31st December 2002.

Contractual cash obligations

	Payments due by period				
	Less than one year	One to three years	Four to five years	After five years	Total
Long-term debt	206	–	–	4,653	4,859
Capital lease obligations	18	20	47	55	140
Operating leases	176	361	318	2,014	2,869
Unconditional obligations to purchase goods and services obligations	176	312	76	61	625
Total contractual cash obligations	576	693	441	6,783	8,493

The table above excludes deposits and other liabilities taken in the normal course of banking business and short-term and undated liabilities. The maturity of deposits by banks is given in note 27, customer accounts in note 28, and debt securities in issue in note 29.

Other commercial commitments

	Amount of commitment expiration per period				
	Less than one year £m	One to three years £m	Four to five years £m	After five years £m	Total amounts committed £m
Acceptances and endorsements	2,375	90	124	–	2,589
Guarantees and assets pledged as collateral security	12,081	2,245	1,135	582	16,043
Other contingent liabilities	5,884	983	668	379	7,914
Documentary credits and other short-term trade related transactions	311	27	1	1	340
Forward asset purchases and forward forward deposits placed	20	–	–	–	20
Undrawn note issuance and revolving underwriting facilities	–	–	–	–	–
Undrawn formal standby facilities, credit lines and other commitments to lend	79,518	12,454	7,358	1,688	101,018
Total	100,189	15,799	9,286	2,650	127,924

Further information on guarantees is provided in note 63 on page 216.

Management of other risks

In addition to credit, market and treasury risk, Barclays faces a number of other risks. These risks are managed within the overall risk management framework.

Non-financial risk management
Non-financial risk, which is inherent in all business activities, is the direct or indirect loss resulting from inadequate or failed internal processes, people and systems or from external events. It can occur in any of the Group's businesses and includes errors, omissions, natural disasters and deliberate acts such as fraud. This risk is commonly called operational risk, but Barclays uses the term 'Non-financial risk' to emphasise the breadth of issues encompassed by this risk category.

The Group has established a comprehensive non-financial risk framework to manage the risks included in this broad category. The framework and policies implement the Non-Financial Risk Governance Standards approved by the Board Risk Committee.

Responsibility for managing non-financial risk is divided between the businesses and the corporate centre. The main responsibility rests with the business units and functional service areas where the risks exist. Business Risk Directors are accountable for the implementation of and compliance with Group standards and policies.

In the corporate centre, the Group Non-Financial Risk unit, which incorporates Group IT Security, Group Operational Risk, Group Business Continuity Management, Group Insurance and Group Security, have the responsibility through the delegated authority of the Non-Financial Risk Director to establish, maintain and exercise governance over the policies and processes that are encompassed in the framework.

Measures of performance (key risk indicators) have been established that give the Group Non-Financial Risk unit the ability to monitor the risks against agreed thresholds and challenge business performance where appropriate. This is enhanced by comprehensive reporting from businesses to the corporate centre of both periodic and event-driven data. Specific quarterly reports are prepared and submitted to the Group Risk Oversight Committee and Board Risk Committee.

The information also feeds into a risk scorecard for each business. During 2003, this will form the basis of an allocation of Economic Capital for non-financial risk, giving each business an incentive to improve its risk control.

Coupled with the non-financial risk framework, this approach forms the basis of the Group's response to the requirements of the Basel II Capital Accord. In this respect, as in others, Barclays aims to qualify for the Advanced Measurement Approach and the lower level of regulatory capital that this implies.

It is recognised that non-financial risk cannot be eliminated and that thresholds can be reached where the cost of minimising these risks outweighs the potential benefits. The Group will continue to assess the risks and invest in appropriate management and mitigation systems.

Assessment of the management of non-financial risk is undertaken by the Group Internal Audit function. This provides executive management and the Board with a view of the adequacy and effectiveness of non-financial risk management, through an avenue outside the hierarchical organisation structure.

Compliance risk management
Compliance or regulatory risk arises from a failure or inability to comply with the laws, regulations or codes applicable specifically to the financial services industry. Non-compliance can lead to fines, public reprimands, enforced suspension of operations or, in extreme cases, withdrawal of authorisation to operate.

The Group is subject to extensive supervisory and regulatory regimes in the UK, Europe, the USA, the Asia-Pacific region and in the other countries around the world in which it operates. In these many jurisdictions, specific resources and expertise are needed to assist the Group Chief Executive, the Business Heads and others in management to comply with financial services regulation. This is the responsibility of the Group Compliance Director, the Compliance Directors in each of the businesses and the Group Compliance function.

Legal risk management
The purpose of the legal function is to identify and, in conjunction with business management, manage the legal risks of Barclays. In this context, "Legal risk" includes any of the following types of risk:

» The risk that Barclays businesses will not be conducted in accordance with applicable laws and regulations;

» The risk that contractual arrangements will either not be enforceable as intended or will be enforced against Barclays in an unexpected and adverse way;

» The risk that the tangible and intangible property of Barclays (such as its trade names and copyrights) will not be adequately protected from infringement; and

» The risk that Barclays will be liable for damages to third parties harmed by the conduct of its business.

The Group identifies and manages legal risk through the effective use of its internal and external legal advisers. The Group General Counsel has responsibility for providing the support necessary to identify, manage and control legal risk across the Group.

Tax risk management
This is the risk of loss or increased charges associated with changes in, or errors in the interpretation of, taxation rates or law. Responsibility for control of this lies with the Group Taxation Director, reporting to the Group Finance Director, and systems are in place to identify and manage this risk. This includes taking external advice as necessary. The businesses are advised of their obligations to comply with these requirements and also of their tax reporting obligations. Whilst managed centrally, taxation staff are co-located with business areas, in the UK and overseas, where this adds to the effectiveness of risk management.