Statistical information about derivatives markets

Derivatives markets have grown rapidly in recent years to play a crucial role in the management and intermediation of risk by the financial system. But obtaining useful information about derivatives activity poses a number of difficulties. This article focuses primarily on over-the-counter (OTC) derivatives. It outlines the main accounting problems they raise, explains current initiatives to encourage firms to disclose information about their derivatives business and describes recent steps to improve the aggregate statistics available on OTC derivatives markets.

The derivatives markets—particularly those in over-the-counter (OTC) contracts, which are negotiated privately between the counterparties, as distinct from those traded openly on organised exchanges—have been at the forefront of financial debate for some time.

What first attracted interest was their novelty, their rapid growth—perhaps exaggerated by the ways in which the size of the market was measured—and the fact that they were bringing the methods and attitudes of trading (as well as complex mathematical techniques) to the core of banking in a way that more traditional trading, for example in the foreign exchange market, had not.

Derivatives markets now play a vital role in the intermediation of risk by the financial system. It is therefore important for any analysis of the contribution that the financial system makes to the economy more generally, or for an understanding of how the financial system now functions and an assessment of its vulnerability to shocks, that information about the derivatives markets should be available to the authorities, market participants and the public at large.

A more recent impetus to the demands for information about derivatives markets has been the experience both of the problems that can arise when participants misjudge or misunderstand the risks they are taking, and of the speed with which loss-making positions can be built up. Such problems are by no means confined to the OTC markets, nor to derivatives. But there have been a number of well-publicised cases of substantial losses by end-users in derivatives dealings, and it has become evident that the nature and extent of many traders' involvement in derivatives trading—and their reliance on it for profit—is often far from clear to their counterparties or to investors.

These problems have highlighted how difficult it can be to value and account for the more sophisticated products now available, and how little firms are required to disclose about their derivatives dealings in their statutory accounts. They have also drawn attention to the lack of comprehensive and reliable information about the scale and structure of dealings in the OTC markets, and the risk exposures that they represent. As a result, informed public debate is difficult and prominence is given to anecdotal or partial information.

This article outlines the steps being taken to fill these information gaps. It begins by explaining the accounting issues raised by derivatives in general—and OTC derivatives in particular—which have made it difficult to accommodate them within the standard accounting framework; a box briefly summarises the work now under way to resolve these difficulties. It then discusses the initiatives being taken by the central banks of the Group of Ten (G10) countries and others to promote fuller disclosure of derivatives business by financial firms. Finally, it sets out what is currently known about the scale of the markets and the risks they represent, and describes the steps being taken to add to the aggregate statistics available on OTC derivatives markets—in particular, the recent survey of these markets co-ordinated by the Bank for International Settlements (BIS), the results of which should be available later this year.

Accounting issues

Accounting for derivatives is not straightforward. They are typically 'off balance sheet': entering into a derivatives contract generally does not—as does granting a loan or taking a deposit—give rise to immediate cash flows to the extent of the contract's face value, and it therefore creates no corresponding balance-sheet asset or liability. Instead (initial premium or fees aside), it simply creates future rights or obligations. How those should be valued and reflected in accounting statements remains a matter of debate.

Although no national accounting authority has issued a comprehensive standard on derivatives accounting, there are nonetheless some basic principles which are widely accepted—and applied in practice in many countries. These include:

- recognition that the accounting treatment should reflect the purpose for which the transactions are entered into—in particular, whether that purpose is trading or risk management;
- consensus that derivatives positions should be treated as trading positions unless they are demonstrably held for hedging purposes;

- acceptance that trading positions should be recognised at 'fair value'; and

- agreement that hedging positions should be accounted for on the same basis as the items they hedge.

Although these principles have been widely accepted, that acceptance has not been universal or unqualified. It is probably so-called *hedge accounting* that has given rise to most concern. The main difficulty here is how to distinguish trading from dynamic hedging, because the latter may involve frequent adjustment of derivatives positions to maintain a hedged book. Sophisticated treasury operations hedge on a portfolio basis rather than transaction by transaction so, as a firm's underlying cash portfolio changes and its management's view of likely market or economic developments evolves, existing hedges may be closed out or offset and new hedges put on. Such dynamic hedging may be difficult to distinguish objectively—either in scale or in pattern—from trading.

This issue matters because profits may be materially different if derivatives positions are classified as hedging rather than trading positions. If they are treated as trades, any profits or losses realised when the position is closed out or terminated (as well as unrealised revaluation gains or losses) will be recognised as they arise. But if they are viewed as hedges for items included in the balance sheet at cost, realised profits and losses may properly be deferred to the accounting period in which the income or expense being hedged is recognised. And unrealised revaluation gains or losses will not be recognised at all.

The subjective element inherent in basing the accounting for derivatives—and indeed for other financial instruments—on management intent has led to 'fair value' accounting being actively considered for all financial instruments, or at least for all free-standing derivatives. 'Fair value' is, loosely speaking, an extension of 'mark-to-market' accounting to positions for which—as for many OTC contracts—there is no readily-available market price. But it too raises a number of difficult issues:

- 'fair value' valuation is costly and potentially unreliable for financial instruments which are not actively traded;

- transitory changes in fair value are, arguably, irrelevant when a firm intends and is able to hold a position to maturity;

- it may be appropriate to take some changes in fair value directly to reserves rather than recognising them in earnings; and

- it would not be possible to recognise unrealised, but economically related, gains and losses in the same period as the change in fair value.

Disclosure initiatives

Accountants are still grappling with these and other issues, which makes it difficult to agree universally applicable rules for including comprehensive information on derivatives in published accounts; and in any case, the risks may change rapidly—which limits the value of accounts relating to a specific reporting date. So attention is also being given to other ways—outside the formal framework of statutory accounts—in which firms might be able to disclose more about their derivatives business and the risks to which it exposes them. Such information should help counterparties and investors to make better-informed judgments about firms engaged in derivatives business, and would improve market transparency more generally.

Voluntary disclosure of this kind has so far been patchy. Many firms argue that disclosure of their trading risks could reveal to competitors their appetite for risk or their position-taking strategy. There is an additional concern—

Accountancy bodies' current work-in-progress

The UK Accounting Standards Board began a project on accounting for derivatives in 1994. The project will cover both disclosure and measurement; the first document likely to be published from it is a discussion paper on disclosure. In addition, the British Bankers' Association's 1991 Statement of Recommended Accounting Practice on off balance sheet instruments is currently being revised.

The US Financial Accounting Standards Board announced in February that it had decided to adopt a basic model for derivatives accounting that was significantly different from current US methods. Under the new proposal:

- all derivatives would be recognised in the balance sheet at fair value;

- realised gains and losses on all derivatives would be recognised in earnings when they occur; and

- all derivatives would be classified in one or two categories—trading and other than trading. Revaluation gains and losses on derivatives in the trading category would be recognised in earnings; those arising on derivatives not classified as trading would be excluded from earnings and reported as a separate component of equity until realised.

The International Accounting Standards Committee is working towards two international standards on financial instruments—one to cover disclosure, and one recognition and measurement. The disclosure standard (IAS 32) is expected to be applied from the start of 1996.

justified by experience—that the information revealed might be misunderstood, or that it might not be meaningful unless it was at a level of detail that would clearly be commercially sensitive. The lack of agreement on techniques for measuring market risk, in particular, leads many firms to conclude that disclosure would require a standardised measurement framework to be imposed, adding to the reporting burden. Some also believe that firms that are prepared to disclose will be seen as riskier than those that do not disclose at all. But it is generally accepted that greater disclosure, if widely supported and followed, should make the markets more stable and so would be in the industry's longer-term interests.

Perhaps the biggest obstacle to fuller disclosure is the lack of consensus on the basis on which it should be done. Accounting standards do not attempt to tackle issues relating to forward-looking risk exposures, which are now typically measured and managed using sophisticated model-based methods founded on concepts such as value at risk and stress tests.(1) The accounting profession, as mentioned above, is working to improve the quality and accuracy of information contained in balance-sheet and income statements to reflect the exposures incurred in firms' trading activities. But the main proposals for greater disclosure have come from other sources and do not depend on further development of the relevant accounting concepts.

The G30 report

The first set of recommendations for greater disclosure of firms' trading risks was contained in a report by the Group of 30 (G30), issued in July 1993.(2) Its recommendations were mainly for *qualitative* disclosure, pending the introduction of consistent international accounting standards. It recommended that the financial statements of dealers and end-users should provide enough information to allow investors and counterparties to understand the purposes for which transactions were undertaken, their extent, the degree of risk involved and how the transactions had been accounted for. Specifically, it recommended that they should give:

- information about the management's attitude to financial risks, how instruments were used, and how risks were monitored and controlled;
- a statement of their accounting policies;
- an analysis of positions at the balance-sheet date;
- an analysis of the credit risk inherent in those positions;

and, for dealers only:

- additional information about the extent of their activities in financial instruments.

These recommendations were intended to apply to all financial instruments, not just derivatives, because many of the risks—and management's risk management policies—can only be properly understood in the context of a firm's trading activities as a whole.

The *quantitative* information that the G30 recommended should be disclosed included the notional amounts of off balance sheet positions, a firm's current credit exposure, and (for dealers only) an analysis of revenue by source, in sufficient detail to enable an understanding of the extent of a firm's activities. But it did not include a quantitative measure of market risk (that is, a firm's exposure to loss in the event of movements in market prices), on the grounds that none of the existing measures of market risk seemed to provide a meaningful, objective measure that was comparable between firms without creating an unreasonable reporting burden. The G30 acknowledged, however, that more work should be undertaken to develop such a measure.

The Institute of International Finance report

The proposals by the Institute of International Finance (IIF)—developed by a core group of active market dealers and published in August 1994(3)—were aimed at major banks and securities houses, rather than at smaller banks and other financial intermediaries. Like the G30, the IIF's report advocated disclosure of information on the current replacement cost of a firm's derivatives book. Such information is produced routinely by many major dealers as part of their reporting to supervisors, and should therefore be relatively easy for firms to prepare.

The current replacement cost of a derivatives book provides a measure of its credit risk (although it does not capture the potential future credit exposure, which supervisors also take into account in setting capital requirements). In addition, as the IIF recognised, the proposed disclosures (like the G30's) would provide only a snapshot of a firm's derivatives positions on the reporting date. The concern would remain, therefore, that such information would not adequately convey a sense of how stable the risks had been—or were likely to be in future.

The IIF recommended that exposures should be broken down by counterparty type (using either credit rating agencies' scorings, an internal credit rating or the Basle Accord's credit risk categories) and that activity levels should be further analysed by product type, notional amount, maturity structure and market value. This quantitative disclosure would be supported by qualitative disclosure: statements of accounting and netting policies, and information about the tools used by management to manage and control risks, and about the sectoral profile of activity (eg between foreign exchange, interest rates and equities).

The IIF's report recognised that further progress needed to be made on disclosure, particularly of market risks.

(1) These models are discussed in the article on risk measurement and capital requirements for banks on pages 177–84.
(2) The report was entitled: 'Derivatives: practices and principles'.
(3) In 'A preliminary framework for public disclosure of derivatives activities and related credit exposures'.

However, it argued that the lack of consensus over the measurement of market risk precluded greater public disclosure at present. It also suggested that the authorities might improve the functioning of derivatives markets by publishing quarterly aggregate statistics.

The Fisher report

The Governors of the G10 central banks also recognised the benefits that greater disclosure might bring, and set up a working party under the chairmanship of Peter Fisher, of the Federal Reserve Bank of New York, to consider ways in which this might be brought about. This group's recommendations—published in a consultative paper in September 1994[1]—went beyond the disclosure of credit exposures and proposed in addition the disclosure of quantitative information on market risk.

Like the G30 and IIF reports, the Fisher report acknowledged the current lack of consensus on methods of calculating market risk, and recognised that as a result it was not yet possible to ensure comparability between firms in what they disclosed. Instead, the report recommended that what was disclosed should be based on each firm's own assessment of its risk, measured against its performance in managing that risk. So although taking the form of quantitative disclosure, the report's recommendations would if adopted permit a qualitative assessment of each firm's capacity to manage and control risk.

One suggestion in the report was that firms could use as the measures of market risk the high, low and average 'values at risk' (over one-day and two-week horizons) that occurred during the reporting period; alternatively, they might disclose the histogram (frequency distribution) of daily changes in portfolio value over the period. Other, more sophisticated, forms of disclosure were also discussed.

Although the Fisher report's main innovation was in the area of market risk, it also recommended disclosure of credit risk at least to the extent provided for by the IIF model. It suggested too that firms might disclose: a measure of actual losses over the reporting period; a measure of losses relative to the capital supporting the activity in which those losses occurred; and the variability of credit exposures over time (high, low and average gross or net replacement values over the reporting period). The clear advantage of these forms of disclosure is that they move a step beyond the 'snapshot' recommended by the IIF, and would give some indication of the exposures incurred during a period as well as those on the reporting date.

In these ways, the Fisher report sought to avoid the difficulty of achieving comparability between firms' market risk disclosures by focusing instead on a comparison of each firm's own estimate of its risks with the outturn. So comparison between firms would be possible only in relation to their ability to manage and control risks, not in terms of the absolute scale of those risks. Extending quantitative comparison into that area will depend on achieving greater convergence of risk measurement concepts and techniques. It is possible that the package of proposals currently being developed by the Basle Supervisors Committee[2] may provide a basis for this.

Information about risk exposures

For all the reasons outlined above, firms' published accounts and other disclosures do not yet provide a reliable source from which aggregate statistics about risk can be compiled. But a range of information about the risks created by firms' derivatives activities is available to supervisors and other responsible bodies, such as futures exchanges and clearing houses. Much of it is necessarily confidential and cannot be made publicly available; much also—for example, that available to exchanges—may give an incomplete picture of firms' exposure to risk. It is possible, however, to derive a certain amount of information about risk at an aggregate level from prudential returns.

Supervisors are of course principally interested in data which enable them to assess the financial strength of individual institutions and their ability to honour their obligations. As a result, their reporting requirements concentrate on the risk-related—rather than product-specific—information that is necessary to assess the current adequacy of a firm's capital resources or that casts light on the structure of a firm's balance sheet.

Most of the data reported to UK banking supervisors are of the first type: they help measure current risk and capital. Given the different ways in which banks organise their business, the varied markets in which they may be involved and their differing levels of expertise, standardised reporting on, for example, changes in business profile is rarely appropriate. Such information is obtained instead through routine prudential interviews, discussion of banks' own management accounts or specially commissioned reports, and so does not lend itself to quantification or aggregation.

The predominant risk in banking business typically arises from credit exposures rather than market risk. UK-incorporated banks are currently required to hold adequate capital to cover all their credit exposures—off and on balance sheet—and these are measured in accordance with internationally agreed standards, such as those in the 1988 Basle Accord and the 1989 EU Solvency Ratio Directive (which came into effect at the end of 1992). They are also required to cover foreign exchange risk, but—until the implementation of the EU Capital Adequacy Directive in January 1996—this is the only type of market risk that is covered systematically.

Because the emphasis is on risk, prudential returns contain little product-specific information; as a result, exposures arising from derivatives contracts usually cannot be identified separately from them. In addition, in the case of exchange-traded products, the payment of daily variation

(1) The paper, issued by the Bank for International Settlements, was entitled: 'Public disclosure of market and credit risks by financial intermediaries'.
(2) The Basle Committee is a committee of banking supervisory authorities set up by the G10 central banks.

margin means that counterparty exposures (other than to the clearing house) do not arise. But the credit risk on OTC derivatives, and the methodology which has been developed by supervisors to measure it and convert it into equivalent on balance sheet exposures, requires the submission of data which cast some light on the scale of OTC activity. The supervisors' current rules require banks to distinguish between interest rate and foreign exchange rate related OTC derivatives (the latter category in fact includes *all* non interest rate contracts, eg equity-related and commodity-related derivatives); and to differentiate between those with less than a year to maturity and those that are longer-term. In the United Kingdom, banks active in derivatives markets are expected to measure credit exposures using methods which require them to calculate both the notional principal of the contracts and their current replacement cost.

The requirements are reflected in the standard reporting forms and make it possible to derive the aggregate statistics shown in Table A. As can be seen, at recent reporting dates the replacement cost of these contracts has amounted overall to only 2%–3% of their face value; and the credit risk (which also takes account of potential future exposure and the creditworthiness of counterparties) has accounted for some 5%–6% of banks' total credit risk.

Table A
OTC derivatives

Active UK banks' credit exposures at end period (£ billions)

Percentages in italics

	1993		1994	
	H1	H2	H1	H2
Interest rate related contracts:				
Notional principal	1,849	2,333	3,300	3,356
Replacement cost (a)	34	44	37	38
as a percentage of notional principal	*1.8*	*1.8*	*1.1*	*1.1*
Credit equivalent exposure (b)	39	49	46	47
as a percentage of balance sheet	*4.9*	*6.6*	*5.3*	*5.6*
Credit risk (c)	10	12	11	12
as a percentage of risk weighted assets	*2.3*	*2.9*	*2.5*	*2.6*
Foreign exchange related contracts:				
Notional principal	1,141	1,066	1,447	1,400
Replacement cost (a)	31	23	39	27
as a percentage of notional principal	*2.7*	*2.2*	*2.7*	*1.9*
Credit equivalent exposure (b)	48	40	62	50
as a percentage of balance sheet	*6.1*	*5.3*	*7.2*	*6.0*
Credit risk (c)	12	11	15	12
as a percentage of risk weighted assets	*2.9*	*2.5*	*3.4*	*2.8*

(a) The current market value of contracts (when positive).
(b) The sum of the replacement cost and the potential future exposure.
(c) The credit equivalent exposure weighted according to counterparty risk weighting.

Two conflicting factors affect the likely future availability of such data. The Basle Accord's treatment of OTC derivatives is soon to be more finely differentiated: separate risk weightings are being introduced for equity-related and commodity-related contracts; and longer-term contracts are being divided into those with less and those with more than five years to maturity. That will in turn require more detailed reporting. But the credit-reducing benefit of netting agreements is also to be recognised. Because netting can be effective across maturities and across product types, this will disguise the gross, unnetted positions banks run. UK supervisors have yet to determine how these new rules will be reflected in reporting requirements.

Information about market size

The information available to supervisors and presented above is not available routinely to the markets or the public at large; in any case, its specific purposes mean that it is not especially illuminating about the overall scale of derivatives trading in the markets.

Information on exchange-traded contracts

Data on exchange-traded derivatives activity are, however, published by the exchanges themselves. Exchanges tend to emphasise the number of contracts traded—an indication of the liquidity of the market—and open interest, which gives some sense of the risks being traded through the market and position-taking in it. Such data can (for futures contracts, at least) be converted into 'cash equivalents' to allow comparison with cash-market dealings. Tables B and C provide a comparison of both measures in recent years.

Table B
Exchange-traded derivatives

Annual turnover (US$ billions)

Contract	Exchange	1992	1993	1994
Three-month interest rate futures:				
Eurodollar	CME	60,531	64,411	104,823
Sterling	LIFFE	9,975	9,087	12,713
Euromark	LIFFE	7,812	12,883	18,080
Paris interbank	MATIF	6,045	10,506	11,909
Euroyen	TIFFE	11,844	21,043	36,631
Eurolire	LIFFE	325	953	2,173
Government bond futures:				
US T-bond	CBOT	7,000	7,948	9,996
Long gilt	LIFFE	777	886	1,455
Bund	DTB	848	1,149	2,191
	LIFFE	2,177	3,085	5,754
French government bond	MATIF	2,937	3,249	4,529
Equity index futures:				
Standard & Poor's 500	CME	2,567	2,970	4,273
FT-SE 100	LIFFE	293	345	505
Nikkei 225	Osaka	1,604	1,376	1,145
	Simex	222	421	536

Sources: FIA, Bank of England.

Table C
Exchange-traded derivatives

Open interest at year end (US$ billions)

Contract	Exchange	1992	1993	1994
Three-month interest rate futures:				
Eurodollar	CME	1,325	2,117	2,384
Sterling	LIFFE	152	294	313
Euromark	LIFFE	248	405	452
Paris interbank	MATIF	91	254	187
Euroyen	TIFFE	321	894	1,103
Eurolire	LIFFE	7	59	62
Government bond futures:				
US T-bond	CBOT	30	32	35
Long gilt	LIFFE	8	7	8
Bund	DTB	5	14	16
	LIFFE	15	14	32
French government bond	MATIF	18	8	9
Equity index futures:				
Standard & Poor's 500	CME	34	42	48
FT-SE 100	LIFFE	5	9	7
Nikkei 225	Osaka	20	11	21
	Simex	4	7	10

Sources: FIA, Bank of England.

Information on OTC markets

Aggregate information on OTC derivatives markets is, by the nature of the business, somewhat less accessible: they are markets in bilaterally negotiated, rather than in publicly quoted and traded, contracts; and the data which are available tend to be less timely and less reliable than those for exchange-traded derivatives. There are also differences between the various reporting systems, in terms of the breakdown by instrument type and counterparty, which hamper the full aggregation of reported data. Furthermore, existing published data focus almost exclusively on notional amounts outstanding, and provide only limited information on the patterns of participation and liquidity in derivatives markets.

The principal source of data on OTC derivatives markets is the survey carried out every six months by the International Swaps and Derivatives Association. This relies on voluntary reporting by its members, and its main focus is the interest rate and currency swap markets. The survey provides useful information both on turnover (every six months) and amounts outstanding (at year-ends)—both expressed in terms of notional principal amounts. But the reporting population varies and there are questions about how comprehensive its coverage is; it also provides very little product-specific detail.

It was because of the lack of comprehensive and consistent data on the OTC markets that the G10 central banks set up a working party—chaired by Jan Brockmeijer of the Netherlands Central Bank—to agree the information on derivatives markets that central banks needed to perform their functions. Specifically, the group was commissioned:

- to identify the macroeconomic and macroprudential requirements for statistical information on derivatives markets; and

- to develop the necessary measurement concepts to meet those needs on an internationally consistent basis.

The Brockmeijer Group's report,(1) which was published in February, outlined: the general lack of transparency in derivatives markets; the lack of information on market liquidity and the market linkages produced by derivatives transactions; and the need for statistics on market size, disaggregated into the underlying market risk categories (foreign exchange, interest rate, equity and commodity price), by contract maturity and counterparty type.

It recommended that occasional surveys of derivatives activity should be conducted. This recommendation was endorsed by the G10 Governors last May and the first such survey was carried out with the well-established triennial central bank survey of foreign exchange market activity this April. Each of the 26 participating central banks has surveyed its own market, on the basis of an agreed 'core' survey format, and the results will be aggregated by the BIS to provide global statistics on the OTC markets. The Bank of England has been closely involved, and invited some 450 banks and securities firms in London to participate.

The survey questionnaires were sent to UK market participants early in December, after consultation with relevant trade associations, other industry regulators, and some banks and securities firms identified as particularly active in derivatives markets. UK participants have been asked to return the completed questionnaires by 5 June and aggregate results should be available for publication in the autumn.

The survey will provide data on turnover during April (notional principal) and on stocks outstanding at the end of March (notional principal *and* gross positive and negative market values). In each case, the data will be disaggregated by market risk category, instrument, counterparty type and maturity. In addition, foreign exchange and interest rate data will be disaggregated by currency.

It is likely that surveys of this type will become a regular triennial exercise. But the Brockmeijer Group also recommended regular reporting (perhaps on a semi-annual basis) by a fairly small number of major intermediaries in global derivatives markets. It suggested that this reporting should be on a consolidated basis for each participant, rather than location by location, and should be restricted to outstandings. But no decisions have yet been taken on this recommendation, and the value of—and framework for—more regular reporting will be considered in the light of the experience and information gained from this spring's survey.

Derivatives in the national accounts

The growing significance of derivatives activities makes it important to capture them fully in national accounts. UN and IMF guidelines for both national accounts and balance of payments statistics recommend that derivatives positions (at market value) should be included in balance-sheet data and that the associated financial flows should be included in financial accounts.

Work is currently being undertaken jointly by the Bank and the Central Statistical Office (CSO) with the aim that derivatives markets should, for the first time, be identified explicitly within the United Kingdom's national accounts and balance of payments. This will allow the financial flows (particularly cross-border flows) associated with their use to be recorded in a way that will ease comparison with other markets and instruments; it will provide more information on the economic sectors holding and using derivative contracts; and, by specifying a framework for the recording of derivatives business, it should help to improve the overall reliability and coherence of the macroeconomic statistics to which these activities contribute. The work is given added impetus by a wider European programme to harmonise the presentation of macroeconomic data within the European Union.

(1) The report was entitled: 'Issues of measurement related to market size and macroprudential risks in derivatives markets'.

The needs of national accounts and balance of payments statisticians do not, however, align well with those of financial supervisors or others concerned with the monitoring and regulation of global markets. The national accounts do not, for example, seek to measure risk, but instead are concerned with the current value of the contingent assets and liabilities. They do not require a detailed classification by instrument or market risk, but do seek to classify counterparties by broad economic sectors. They are not concerned with global positions, but instead record assets held and transacted within and across national borders. And they are less concerned with market turnover than with the financial flows to which this gives rise.

Further consultation with market practitioners and end-users will be needed before statistics can begin to be collected regularly for this purpose. The aim will be to see how UK statistical needs (and commitments under the European programme of statistical harmonisation) can be met in a way which is least burdensome to reporters.

Conclusion

Much remains to be done to make the statistical data on derivatives markets as comprehensive and reliable as that on more traditional business, and to make firms' dealings in derivatives markets more transparent to investors and to their counterparties. But progress is being made and, although it is unlikely to be rapid, worthwhile additional data—including the results of the first central bank survey of the OTC derivatives markets—can be expected to be made available in the coming year.